



# KERGER

Electrical Marine Products

## Catalogue

Your reliable partner

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# KERGER

Electrical Marine Products

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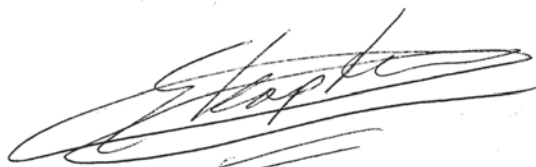


### Introduction

As Kerger's managing director, I proudly present you our catalogue while taking the opportunity to tell you a little bit more about our company.

Over the last century, Kerger has built a solid foundation of expertise and experience in electrotechnical marine products. We uphold the values our company stands for; top level quality and client oriented services. In order to make good on that promise, we pro-actively follow technological developments. This allows us to supply our customers with top range products. At the same time, we strongly believe in personal contact with both our clients and suppliers. By knowing as well our clients situation and their requirements as our manufacturers, we can provide time saving services and custom made solutions. This allows our clients to keep a focus on their own expertise at all times.

The products you'll find in this catalogue are frequently ordered and delivered from stock. Furthermore, our worldwide network and contacts allow us to quickly supply high-end electrotechnical parts also when they are hard to come by. In accordance with our clients we always aim for the best and most cost effective solution. When it comes to electrotechnical marine products, we can provide anything. Would you like to know more? Please feel free to contact us. We will gladly assist you.



**Kerger, your reliable partner**



Left Mr. Leendert Kaptein. Right standing Mr. Jan Verwater. Sitting Mr. Jan Kerger.

# KERGER

Electrical Marine Products

## Our history

In 1919 Kerger was founded as a family business by 25 year old Jan Kerger. His father, Kees Kerger provided the investment capital to facilitate the start of Kerger & Co N.V. Marine Electrical Engineers. The company employed 12 people, most of whom were technicians, and was located at the West Zeedijk in Rotterdam.

In 1950 Mr Kaptein Sr. started his career at Kerger as an administrative assistant. The company focused on the installation and repairment of electrotechnical parts in the shipping industry. It distinguished itself by building strong customer relations, an aspect which would develop into a genuine Kerger trademark. As the company developed and grew, the decision was made to concentrate on sale and whole sale.

In 1959, Mr Kaptein was promoted to director, giving him decision-making power. The company grew steadily. Mr Kerger appointed Leendert Kaptein and Jan Verwater as his successors upon his retirement. The company continued to grow. The customer base had a more international character now. In 1980 Kerger opened a branch office in Houston, Texas.

Today's managing director, Evert Kaptein, knows every aspect of both the market and the company; he grew up helping his father prepare orders during the weekends and holidays from school. He is proud of the company, its strong traditions and expertise. While Kerger modernized business operations, technology and means of transportation over the last century, its mission of going the extra mile to facilitate every client is as distinctive now as it was one hundred years ago. "Kerger is ready for its new century!"

## Content

LAMPS	8
FLUORESCENT LIGHTING LAMPS	39
FLUORESCENT LIGHTING SPARES	43
FLUORESCENT LIGHTING FIXTURES	44
FLUORESCENT LIGHTING OUTDOOR	45
FLUORESCENT FIXTURE SPARES	48
LED LAMPS	50
LED INDICATOR LAMPS	50
LED LAMPS, MAKE KERLED	51
LED LAMPS TUBE	53
LED INDOOR LIGHTING	55
LED OUTDOOR LIGHTING	56
GAS-DISCHARGE LAMPS AND ACCESSORIES	57
LEAD ACID STORAGE BATTERIES AND ACCESSORIES	60
BATTERIES AND ACCESSORIES	62
FLASHLIGHTS AND ACCESSORIES	65
ANTENNAS AND ACCESSORIES	70
ALARM EQUIPMENT	72
CABLES	75
CABLE GLANDS	84
CABLE MOUNTING MATERIAL	87
CABLE CONNECTION MATERIAL AND ACCESSORIES	91
CABLE SHOES AND ACCESSORIES	94
ELECTRICIANS TOOLS AND ACCESSORIES	99
WIRING ACCESSORIES	111
LAMPHOLDERS	125
PILOT LIGHTS	129
RELAYS AND CONTACTORS	132
LIMIT SWITCHES AND MICRO SWITCHES	140
TRANSFORMERS	145
INSULATING TAPE	147
INSULATING SLEEVING AND ACCESSORIES	149
INSULATING MATERIALS AND ACCESSORIES	153
INSULATING MATERIAL IN SHEETS AND RODS	154



WINDING WIRE	156
CAPACITORS	157
TERMINAL BOARDS	157
CLEANING PRODUCTS	158
CARBON BRUSHES	160
COMMUTATOR STONES AND ACCESSORIES	169
FAN IMPELLERS (PVC) FOR MOTOR COOLING	170
BALL BEARINGS	171
MEASURING INSTRUMENTS	173
INDOOR LIGHTING	180
OUTDOOR LIGHTING	182
NAVIGATION LIGHTS	190
WIRING ACCESSORIES FOR MARINE USE	191
EXPLOSION-PROOF EQUIPMENT	203
FUSES	206
CIRCUIT BREAKERS	223
PRESSURE CONTROLS	227
THERMOSTATS, RESISTANCE THERMOMETERS AND THERMOCOUPLES	229
DOMESTIC EQUIPMENT	235
HEATING CABLES AND HEATING ELEMENTS	240
FANS, BLOWERS AND ELECTRICAL TOOLS	243

## LAMPS

### Lamps with B22 base for general lighting



Cat.No.	Volt	Watt	Diam.	Length	
100104	110	40	60	108	clear
100106	110	60	60	108	clear
100110	110	100	60	108	
100126	220	60	60	108	
100130	220	100	60	108	clear
100202	110	25	60	106	
100204	110	40	60	106	frosted
100206	110	60	60	106	frosted
100208	110	75	60	106	
100214	110	200	80	165	
100222	220	25	60	106	
100228	220	75	60	106	frosted
100230	220	100	60	106	frosted
100234	220	200	80	155	
100504	110	150	65	120	
100512	125	40	55	106	
100514	125	60	55	106	
100516	130	75	60	106	
100540	230	75	60	108	clear
100542	230	100	55	106	frosted, Philips
100544	230	150	65	122	
102004	12	25	50	106	
102006	12	40	60	106	
102012	24	15	60	106	
102014	24	25	60	106	
102017	24	40	60	106	
102018	24	60	60	106	Philips
102019	24	60	60	106	frosted
102021	24	100	60	106	
102024	42	25	65	106	
102029	42	60	60	106	

## LAMPS

### Lamps with E27 base for general lighting



Cat.No.	Volt	Watt	Diam.	Length	
100604	130	25	55	108	
100618	130	300	90	183	
100622	220	15	60	108	
100627	230	40	55	96	
100166	220	60	60	108	
100170	220	100	60	108	
100242	130	25	60	108	frosted
100244	130	40	60	108	
100254	130	200	80	170	
100262	220	25	60	108	
102052	12	25	60	108	
102054	12	40	60	108	
102056	12	60	60	108	
102060	24	15	60	108	
102063	24	25	60	108	
102064	24	40	60	108	
102066	24	60	60	108	
102068	24	100	60	108	Philips
102069	24	100	60	108	frosted
102076	42	40	60	108	Philips
102077	42	40	60	108	
102079	42	60	60	108	

## LAMPS

### Reinforced construction lamps with B22 base



Cat.No.	Volt	Watt	Diam.	Length
100706	120	60	60	106
100707	110	75	55	96
100708	110	100	70	124
100710	110	150	80	144
100716	220	25	60	106
100718	220	40	60	106
100720	230	60	60	106
100722	220	75	60	106
100724	230	100	65	116

### Reinforced construction lamps with E27 base



Cat.No.	Volt	Watt	Diam.	Length
100744	130	40	60	108
100746	120	60	60	108
100748	110	75	60	104
100750	110	100	60	104
100758	230	25	60	108
100760	230	40	60	108
100762	230	60	60	108
100764	220	75	60	104
100766	230	100	65	118

### Lamps with E40 base



Cat.No.	Volt	Watt	Diam.	Length
100184	130	300	88	180
100186	130	500	88	180
100190	220	300	88	180
100192	220	500	88	180

## LAMPS

### Coloured lamps with B22 base, standard shape



Cat.No.	Volt	Watt	Diam.	Length	Colour
102180	110	40	60	103	red
102182	110	40	60	103	green
102194	220	40	60	103	red
102196	220	40	60	103	green
102198	220	40	60	103	blue
102220	220	40	60	103	yellow
102222	220	40	60	103	orange

### Coloured lamps with E27 base, standard shape



Cat.No.	Volt	Watt	Diam.	Length	Colour
102230	130	40	60	108	yellow
102231	130	40	60	108	orange
102232	130	40	60	108	red
102233	130	40	60	108	blue
102234	130	40	60	108	green
102425	220	25	60	108	yellow
102426	220	25	60	108	orange
102427	220	25	60	108	red
102428	220	25	60	108	green
102429	220	25	60	108	blue
102246	220	40	60	108	yellow
102248	220	40	60	108	orange
102250	220	40	60	108	red
102252	220	40	60	108	green
102254	220	40	60	108	blue

### Daylight-blue lamps, standard shape



Cat.No.	Volt	Watt	Diam.	Length	Base
102288	220	60	60	108	E27

## LAMPS

### Bowl reflector lamps



Cat.No.	Volt	Watt	Diam.	Length	Base
102319	220	60	60	108	E27

### Reflector lamps



Cat.No.	Volt	Watt	Diam.	Length	Base	
102342	220	25	50	84	E14	
102343	230	30	39	67	E14	
102344	220	28/40	50	84	E14	eco halogen
102348	220	40	64	104	B22	
102354	220	25	64	104	E27	
102356	220	40	64	104	E27	
102358	220	60	64	104	E27	
102362	220	100	95	136	E27	
102366	220	40	64	104	E27	yellow
102367	220	40	64	104	E27	red
102368	220	40	64	104	E27	green
102369	220	40	64	104	E27	blue



### Candle lamps



Cat.No.	Volt	Watt	Diam.	Length	Base
102392	130	25	35	99	E14
102398	220	15	35	99	E14
102400	220	25	35	99	E14
102402	220	40	35	99	E14
102408	220	40	35	91	B22
102412	220	40	35	99	E27

### Lustre (spherical) lamps with E14 base



Cat.No.	Volt	Watt	Diam.	Length
102502	24	25	45	79
102508	130	25	45	79
102510	130	40	45	72
102511	220	15	45	79
102512	220	25	45	79
102514	220	40	45	79

## LAMPS

### Lustre (spherical) lamps with B22 base



Cat.No.	Volt	Watt	Diam.	Length
102522	110	25	45	77
102524	110	40	45	77
102532	220	15	45	77
102534	220	25	45	77
102536	220	40	45	77

### Lustre (spherical) lamps with E27 base



Cat.No.	Volt	Watt	Diam.	Length
102542	24	15	45	79
102544	24	25	45	79
102546	24	40	45	72
102548	130	25	45	79
102550	130	40	45	75
102554	220	15	45	79
102556	220	25	45	79
102558	220	40	45	79
102560	220	60	45	73

### Pygmy lamps with E14 base



Cat.No.	Volt	Watt	Diam.	Length
102602	24	15	28	66
102604	24	25	25	66
102606	24	40	25	71
102610	120	15	22	60
102612	120	25	25	58
102615	220	15	28	64
102618	220	25	26	57
102619	220	25	28	64

### Pygmy lamps with B15 base



Cat.No.	Volt	Watt	Diam.	Length
102622	24	15	28	64
102624	24	25	28	56
102628	110	15	25	64
102631	220	15	28	64
102636	220	25	28	64

## LAMPS

### Pygmy lamps with B22 base



Cat.No.	Volt	Watt	Diam.	Length
102642	24	15	30	61
102644	24	25	30	61
102652	110	15	28	62
102654	110	25	25	61
102658	130	15	28	60
102663	220	15	28	64
102664	220	15	28	62
102666	220	25	28	62
102670	280	15	28	62

Philips

### Pygmy lamps with E27 base



Cat.No.	Volt	Watt	Diam.	Length
102678	130	15	30	64
102681	220	15	28	64
102684	220	25	28	60

### Tubular lamps with E14 base



Cat.No.	Volt	Watt	Diam.	Length
102706	130	25	25	66
102710	130	25	30	90
102714	220	25	25	66
102715	220	25	30	90
102716	220	25	25	85
102718	220	40	29	85
102719	220	40	30	90
102720	220	40	25	68

for rotating beacon

### Tubular lamps with B15 base



Cat.No.	Volt	Watt	Diam.	Length
102732	24	40	25	70
102738	110	40	25	70
102748	220	25	25	60
102752	220	40	28	85

for compass



## LAMPS

### Tubular lamps with B22 base



Cat.No.	Volt	Watt	Diam.	Length
102762	110	15	30	60
102774	130	40	30	90
102780	220	25	25	60
102783	220	25	30	90
102787	220	40	30	90

### Tubular lamps with E27 base



Cat.No.	Volt	Watt	Diam.	Length
102790	130	25	30	90
102792	130	40	30	90
102795	220	25	30	90
102799	220	40	30	90

### Oven lamps 300 degrees Celsius



Cat.No.	Volt	Watt	Diam.	Length	Base
102902	220	15	22	49	E14



102910	220	60	60	108	E27
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### Pressed-glass lamps Par 38 with E27 base



Cat.No.	Volt	Watt	Diam.	Length	
102932	24	120	121	136	spot
102941	220	80	121	134	flood
102946	220	120	121	136	flood

## LAMPS

### Sealed beam lamps with end-prong base



Cat.No.	Volt	Watt	Diam.	Length	Type
102962	24	60	147	90	spot
102968	24	75/75	178	138	3 lug
102972	120	300	178	134	flood
102982	220	300	178	134	flood

### Japanese reflector lamps with E26 base, RF (flood)



Cat.No.	Volt	Watt	Diam.	Length	Type
103016	110	180	110	146	outdoor
103019	110	270	120	162	indoor
103026	220	180	110	146	outdoor
103028	220	270	120	162	indoor

### Japanese reflector lamps with E39 base, RF (flood)



Cat.No.	Volt	Watt	Diam.	Length	Type
103042	110	270	130	220	outdoor
103044	110	450	150	240	outdoor
103046	110	900	180	315	outdoor
103052	220	270	130	220	outdoor
103054	220	450	150	240	outdoor
103056	220	900	180	315	outdoor

### Low voltage lamps with BA15d and BA15s base



Cat.No.	Volt	Watt	Diam.	Length	Base
103204	6	5	18	34	BA15d
103210	12	3	18	35	BA15s
103214	12	5	18	35	BA15d
103216	12	10	19	35	BA15d
103217	12	10	18	35	BA15s
103218	12	15	18	35	BA15d
103220	12	25	18	35	BA15d
103228	12	45	35	60	BA15s *
103234	24	5	19	34	BA15d
103238	24	5	18	33	BA15s
103240	24	10	18	33	BA15d
103241	24	10	18	35	BA15s
103242	24	15	18	35	BA15d
103244	24	25	18	38	BA15d
103252	24	45	35	59	BA15s *

\* for rotating beacon

## LAMPS

### Low voltage lamps with B22 base



Cat.No.	Volt	Watt	Diam.	Length
103276	24	5	23	48
103282	24	15	40	62
103284	24	25	40	62

### Pilot lamps for use in series with navigation lamps



Cat.No.	Ampere	Diam.	Length	Base
103302	0.09-0.15	16	54	E14
103304	0.13-0.22	16	54	E14
103306	0.18-0.31	16	54	E14
103308	0.28-0.45	16	54	E14
103310	0.40-0.65	16	54	E14
103312	0.58-0.95	16	54	E14
103314	0.85-1.40	16	54	E14
103316	1.25-2.00	16	54	E14
103318	1.80-3.00	16	54	E14
103332	0.09-0.15	27	54	B22
103334	0.13-0.22	27	54	B22
103336	0.18-0.31	27	54	B22
103338	0.28-0.45	27	54	B22
103340	0.40-0.65	27	54	B22
103342	0.58-0.95	27	54	B22
103344	0.85-1.40	27	54	B22
103346	1.25-2.00	27	54	B22
103348	1.80-3.00	27	54	B22
103362	0.18-0.31	28	53	E27
103364	0.28-0.45	28	53	E27

## LAMPS

### Navigation lamps with BAY15d base



Cat.No.	Volt	Cd	Diam.	Length	
103390	12	10	25	68	
103402	12	12	25	68	K.N.M.I. approved
103405	12	40	25	68	
103404	12	40	25	68	K.N.M.I. approved
103408	24	12	25	68	K.N.M.I. approved
103410	24	40	25	68	K.N.M.I. approved
103411	24	40	25	68	
103392	28	40	25	68	
103414	110	40	25	69	
103418	220	40	25	69	

### Navigation lamps with B22 base



Cat.No.	Volt	Cd	Diam.	Length	
103424	24	26	39	100	
103426	24	35	38	110	
103428	24	65	45	128	
103504	24	65	45	128	cheap brand
103434	110	26	39	100	
103506	110	26	39	100	cheap brand
103438	110	65	45	128	
103508	110	65	45	128	cheap brand
103442	220	13	39	100	
103509	220	13	39	100	cheap brand
103444	220	26	39	100	
103512	220	26	39	100	cheap brand
103446	220	35	38	110	
103450	220	60	39	108	Italian type
103452	220	65	45	128	

### Navigation lamps with E27 base



Cat.No.	Volt	Cd	Diam.	Length	
103464	24	26	39	100	
103518	24	26	39	100	cheap brand
103468	110	26	39	100	
103472	110	65	45	128	
103476	220	26	39	100	
103480	220	65	45	128	

## LAMPS

### Navigation lamps with P28s base (24, 110 and 220V K.N.M.I. approved)



Cat.No.	Volt	Watt	Cd	Diam.	Length
103492	24	40	50	39	108
103496	110	60	50	39	108
103498	230	65	50	39	108

#### Not approved type

Cat.No.	Volt	Watt	Cd	Diam.	Length
103368	24	65	50	46	108
103494	48	65	60	39	108
103370	110	65	50	46	108
103372	220	65	50	46	108

### Buoy lamps with P30d base (double filament)



Cat.No.	Volt	Ampere	Diam.	Length
103380	12	1A/1A	35	57

### Wedge base lamps



Cat.No.	Volt	Watt/mA	Diam.	Length	Base
104102	6/7	30mA	5.5	18	T5
104106	12/15	30mA	5.5	18	T5
104110	24	1W	5.5	18	T5
104113	24	80mA	5	20	T5
104120	24	2W	10	24	T10

## LAMPS

### Indicator lamps with BA5s base



Cat.No.	Volt	Watt/mA	Diam.	Length
104140	14	80mA	5.7	16

### Indicator lamps with BA7s base



Cat.No.	Volt	Watt/mA	Diam.	Length
104204	6	0.6W	6	19
104208	6	40mA	6	19
104212	6	2W	7	23
104218	12	50mA	7	23
104222	12	1.2W	7	23
104226	12	2W	7	20
104232	24	50mA	7	20
104234	24	80mA	7	20
104236	24	3W	7	20
104242	30	2W	7	23
104246	30	3W	7	23
104252	36	50mA	7	23
104258	48	100mA	7	20
104262	60	20mA	7	23

### Indicator lamps with MT base



Cat.No.	Volt	mA	Diam.	Length
104282	28	40	6	18

### Indicator lamps H shape for Terasaki equipment



Cat.No.	Volt	Type	Diam.	Length
104292	28	OL4089	6	20



### Indicator lamps with BA9s base



Cat.No.	Volt	Watt/mA	Diam.	Length
104304	2	60mA	10	28
104308	2.5	300mA	10	28
104314	4	300mA	9	28
104320	6	100mA	9	23
104321	6	1W	9	23
104322	6	200mA	9	23
104324	6	3W	9	26
104330	6	180mA	10	28

## LAMPS

### Indicator lamps with BA9s base (continuation)

	Cat.No.	Volt	Watt/mA	Diam.	Length	
	104332	6	2W	10	28	
	104336	6.3	1.2W	9	23	
	104328	6.3	150mA	10	28	
	104338	6.3	250mA	10	28	
	104340	7	300mA	10	28	
	104342	12	50mA	9	23	
	104346	12	2W	10	23	
	104350	12	2W	10	28	
	104354	12	3W	9	22	
	104357	14	80mA	10	28	
	104360	18	110mA	9	28	
	104366	24	50mA	9	22	
	104367	24	50mA	10	28	
	104370	24	2W	9	22	
	104374	24	2W	9	28	
	104378	24	3W	9	22	
	104380	24	3W	10	28	
	104381	24	5W	9	23	
	104382	26	1W	9	23	
	104383	28	60mA	9	23	
	104384	28	50mA	9	28	
	104387	30	1.2W	9	23	
	104388	30	40mA	11	24	round shape
	104390	30	2W	9	23	
	104392	30	2W	10	28	
	104394	30	3W	9	22	
	104398	30	3W	10	28	
	104404	36	2W	9	23	
	104408	36	2W	9	28	
	104412	48	40mA	9	23	
104414	48	3W	10	28		
104420	60	20mA	9	23		
104424	60	30mA	10	28		
104426	60	20mA	10	28		
104428	60	3W	9	24		
104440	130	20mA	9	22		
104446	130	20mA	10	28		
104456	220	3W	9	23		
104458	220	3W	10	28		
104461	220	5W	10	28		
104453	240	2.4W	10	28		

## LAMPS

### Indicator lamps with BA15d base



Cat.No.	Volt	Watt	Diam.	Length
104504	6	2	16	35
104508	12	2	15	30
104512	24	2	13	30
104516	24	5	14	32
104520	30	5	16	35
104524	48	5	15	34
104528	60	5	16	35
104532	110	5	16	35
104536	160	5	16	35
104540	260	5	16	35
104544	6	4	16	52
104548	12	4	16	52
104552	24/30	3/5	16	54
104556	24	10	16	45
104560	30	5	16	54
104564	48	5	16	52
104568	60	10	16	54
104572	130	6	16	45
104576	110	10	16	54
104580	220	5/7	16	45
104584	220	10	16	45
104588	220	10	16	52
104589	220/260	5/7	16	54
104590	220/260	6/10	16	54
104591	220/260	10/15	16	54
104592	380	10	16	54

### Indicator lamps with E5.5 base





Cat.No.	Volt	Watt/mA	Diam.	Length
104606	6	60mA	5	15
104610	6	200mA	5	15
104614	12	1.5W	6	16
104618	14	40mA	5	14
104622	14	80mA	5	14
104626	24	2W	5.5	17.5
104630	28	40mA	6	16




## LAMPS

### Indicator lamps with E10 base

	Cat.No.	Volt	Watt/mA	Diam.	Length	
	104636	4	2W	10	28	
	104642	6	50mA	10	23	7121D
	104643	6	1W	9	23	
	104644	6	3W	10	23	
	104646	6	2W	10	28	
	104648	6.3	150mA	9	23	
	104649	8	100mA	10	28	
	104651	10	50mA	10	23	
	104650	12	3W	10	28	
	104654	18	1.8W	10	28	
	104662	24	3W	9	22	
	104664	24	3W	11	24	round shape
	104666	24	50mA	10	28	
	104667	24	2W	9	23	
	104668	24	2W	10	28	
	104670	24	3W	10	28	
	104671	28	2W	10	28	
	104672	28	100mA	10	28	
	104673	30	1.2W	9	23	
	104674	30	3W	10	28	
	104675	30	2W	9	23	
	104676	30	1.2W	10	28	
	104677	30	2W	10	28	
	104678	36	2W	9	23	
	104682	48	3W	10	28	
	104686	60	3W	10	28	
	104692	110	3W	10	28	
	104698	220	3W	10	28	

### Indicator lamps with E12 base

	Cat.No.	Volt	Watt/mA	Diam.	Length
	104703	6	3W	16	45
	104706	12	3W	15	45
	104710	18	0.11A	13	34
	104714	24	0.11A	13	34
	104718	24	0.11A	16	45
	104720	28	0.11A	13	34
	104722	30	2W	13	34
	104723	30	5W	16	45

## LAMPS

### Indicator lamps with E12 base (continuation)



Cat.No.	Volt	Watt	Diam.	Length
104724	48	5	16	45
104726	60	2	16	43
104732	130	6	13	33
104736	110/140	6/10	16	45
104740	130	20	19	50
104746	220	6	13	33
104750	220	10	17	48

### Indicator lamps with E14 base



Cat.No.	Volt	Watt	Diam.	Length
104806	6	2	16	35
104810	12	2	14	30
104816	24	3	14	29
104820	24/30	3/5	16	32
104824	24	5	14	30
104830	30	5	16	35
104836	48	5	14	33
104842	60	5	14	30
104848	110	5	16	35
104854	260	5	16	35
104860	6	4	17	52
104864	12	4	16	52
104870	24/30	3/5	16	52
104874	24	10	16	54
104880	24/30	6/10	16	45
104883	24	15	16	54
104886	48	6	16	52
104889	48	10	16	54
104892	60	6	16	52
104898	110	5	16	45
104904	110/130	6/10	16	52
104908	220/260	5/7	16	54
104910	220/260	6/10	16	44
104914	220/260	6/10	16	52
104917	230	15	16	52
104920	380	10	16	54



## LAMPS

### Indicator lamps with B22 base Lumen lamps



Cat.No.	Volt	Watt / Lm	Diam.	Length
104952	130	± 7W 10Lm	27	60
104958	220	± 7W 10Lm	22	60

### Indicator lamps with Midget flanged-base



Cat.No.	Volt	mA	Diam.	Length
105110	28	24	3.9	8.9
105122	28	25	4.5	12
105140	6	100	6	15
105144	6	200	6	15
105150	12	40	6	15
105162	12	100	6	15
105168	14	80	6	15
105180	18	40	6	15
105192	28	24	6	15
105198	28	40	6	15
105226	36	30	6	15
105242	48	25	6	15
105244	48	30	6	15
105256	60	20	6	15

327/387

### Indicator lamps with Midget grooved-base



Cat.No.	Volt	mA	Diam.	Length
105266	1.35	60	6	15
105272	6	200	6	15
105278	14	80	6	15
105284	28	40	6	15
105288	36	30	6	15
105296	60	20	6	15

388

### Indicator lamps with Bi-pin base








Cat.No.	Volt	mA	Diam.	Length
105309	24	40	5	13
105312	28	24	3.8	9
105336	28	24	6	15
105342	28	40	6	15
105349	28	40	6	16
105356	32	33	6	15
105360	32	33	6	16

relampable type


relampable type

## LAMPS

### Neon indicator lamps

	Cat.No.	Volt	Base	Diam.	Length
	105420	110	BA7s	6	20
	105422	220	BA7s	6	22
	105428	110	BA9s	10	28
	105430	220	BA9s	10	28
	105432	380	BA9s	9	26
	105438	110	E10	10	28
	105440	220	E10	10	28
	105442	380	E10	10	28
	105446	110	E14	13	29
	105448	110	E14	16	54
	105450	220	E14	14	30
	105452	220	E14	16	54
	105454	380	E14	12	30
	105456	380	E14	14	52
	105458	110	B15d	15	51
	105460	220	B15d	16	31
	105462	220	B15d	16	52
	105466	220	B15s	16	52
	105468	380	B15d	16	52
	105472	110	B22	27	60
	105474	220	B22	28	61
	105480	220	E27	26	56

### Telephone indicator lamps with T4.5 base

	Cat.No.	Volt	mA	Diam.	Length
	105506	6	40	4.5	16
	105518	12	40	4.5	16
	105530	24	20	4.5	16
	105536	24	40	4.5	16
	105542	24	50	4.5	16
	105550	30	20	4.5	16
	105554	30	40	4.5	16

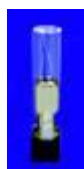
## LAMPS

### Telephone indicator lamps with T4.6 base



Cat.No.	Volt	mA	Diam.	Length
105606	6	40	4.6	22
105618	12	20	4.6	22
105622	12	40	4.6	22
105634	24	20	4.6	22
105638	24	40	4.6	22
105642	24	50	4.6	22
105645	28	40	4.6	22
105654	30	20	4.6	22
105658	30	40	4.6	22
105670	36	20	4.6	22
105682	48	20	4.6	22
105694	60	20	4.6	22

### Telephone indicator lamps with PSB base



Cat.No.	Volt	mA	Diam.	Length
105732	28	40	7.2	28
105756	120	25	7.2	28

### Telephone indicator lamps with T5.5 base



Cat.No.	Volt	mA	Diam.	Length	
105820	24	20	5.5	22	T5.5K base
105824	24	50	5.5	22	T5.5K base
105830	28	50	5.5	22	T5.5K base
105832	30	20	5.5	22	T5.5K base
105834	30	40	5.5	22	T5.5K base
105842	6	40	5.5	30	
105848	6	200	5.5	30	
105854	12	20	5.5	30	
105858	12	40	5.5	30	
105862	12	100	5.5	30	
105868	24	20	5.5	30	
105870	24	25	5.5	30	
105872	24	40	5.5	30	
105876	24	50	5.5	30	
105880	24	80	5.5	30	
105883	28	20	5.5	30	
105886	28	40	5.5	30	
105890	28	50	5.5	30	
105896	30	20	5.5	30	

## LAMPS

### Telephone indicator lamps with T5.5 base (continuation)



Cat.No.	Volt	mA	Diam.	Length
105900	30	40	5.5	30
105904	30	50	5.5	30
105908	36	20	5.5	30
105914	36	40	5.5	30
105920	48	20	5.5	30
105924	48	25	5.5	30
105928	48	40	5.5	30
105934	60	20	5.5	30
105938	60	40	5.5	30
105952	220	neon	5.5	30

### Telephone indicator lamps with T6.8 base



Cat.No.	Volt	mA	Diam.	Length
106006	6	20	6.8	45
106010	6	40	6.8	45
106008	6	50	6.8	45
106014	6	200	6.8	45
106016	12	20	6.8	45
106020	12	50	6.8	45
106026	12	100	6.8	45
106032	24	20	6.8	45
106034	24	25	6.8	45
106038	24	40	6.8	45
106042	24	50	6.8	45
106046	24	100	6.8	45
106052	28	25	6.8	45
106056	28	45	6.8	45
106062	30	20	6.8	45
106066	30	40	6.8	45
106070	30	50	6.8	45
106076	36	20	6.8	45
106080	36	40	6.8	45
106082	36	50	6.8	45
106088	48	20	6.8	45
106094	60	20	6.8	45
106098	60	40	6.8	45
106110	220	neon	6.8	45

### NH type indicator lamps for Terasaki



Cat.No.	Volt	mA	Diam.	Length
106150	28	22	4.85	21

## LAMPS

### Lamp pullers



Cat.No.	Description	
108996	Puller for (telephone) lamps	5.5-6.8 mm diam.
108992	Puller for lamps.	9-10 mm diam.
108994	Puller for lamps	14-16 mm diam.
108998	Lamp puller, set of 9 pieces	3-13 mm diam.

### Festoon lamps



Cat.No.	Volt	Watt	Diam.	Length	Base
106206	6	5	8	39	S7
106214	12	3	8	29	S7
106218	12	3	8	38	S7
106224	12	5	11	39	S8.5
106230	24	1.2	6	31	S5.5
106238	24	3	8	31	S7
106240	24	3	7	36	S7
106244	24	3	6	39	S7
106252	24	5	11	44	S8.5
106256	24	5	11	39	S8.5
106260	24	10	11	44	S8.5
106264	24	15	14	42	S8.5
106268	24	20	10	45	S8.5
106274	26	1	6	24	S6
106277	28	2	6	24	S6
106282	48	5	10	42	S8.5
106290	60	3	14	43	S8.5

### Compass and repeater lamps



1

2

Cat.No.	Volt	Watt	Diam.	Length	Base		Fig.
106714	24	3	18	35	E14		1
106738	45	8	16	43	E10	Sallog	2
106746	70	8	16	43	E10	Sallog	2

## LAMPS

### Exit lamps with P15s base



Cat.No.	Volt	Amp	Diam.	Length	
108032	4	0.75	16	48	7253 C/00

### Top mirror 'Aldis' signalling lamps with P15d base



Cat.No.	Volt	Watt	Diam.	Length
108006	12	60	40	63
108008	24	60	40	63

### Side mirror 'Nife' signalling lamps with BA20d base



Cat.No.	Volt	Watt	Diam.	Length
108014	12	100	59	82

### Lamps for smoke detectors with P30d base



Cat.No.	Volt	Watt	Diam.	Length
108055	12	25	35	58

### Projection lamps with P28s base



Cat.No.	Volt	Watt	Diam.	Length	Fig.	
108092	120	1000	39	140	1	black-top
108094	220	500	56	135	2	375C
108098	220	750	38	140	2	6153 C/05

1

2



## LAMPS

### Projection and searchlight lamps with E27 base



Cat.No.	Volt	Watt	Diam.	Length	
108116	110	500	76	146	375E

### Searchlight lamps with BA20d base



Cat.No.	Volt	Watt	Diam.	Length	
108138	24	100	48	75	top mirror

### Searchlight lamps with P40s base



Cat.No.	Volt	Watt	Diam.	Length	
108182	220	1000	64	235	

### Searchlight lamps with top mirror and E40 base



Cat.No.	Volt	Watt	Diam.	Length	
108204	24	250	80	130	566B, kv
108208	220	500	120	175	521B, kv
108214	220	1000	130	211	579B, kv

### Searchlight lamps with side mirror with hole and E40 base



Cat.No.	Volt	Watt	Diam.	Length	
108234	115	1000	110	175	
108240	220	1000	125	175	



### Searchlight lamps with side mirror with hole and G19/54 base



Cat.No.	Volt	Watt	Diam.	Length	
108270	115	2000	150	260	
108274	115	3000	200	331	
108278	220	2000	150	260	
108282	220	3000	200	331	

## LAMPS

### Halogen lamps for general lighting

	Cat.No.	Volt	Watt	Diam.	Length	Base	
	108416	24/28	200	11	118	R7s	
	108420	30	375	11	78	R7s	
	108425	42	300	12	118	R7s	
	108427	42	500	11	118	R7s	
	108432	110/130	300	11	78	R7s	
	108434	110/120	300	11	118	R7s	
	108436	110/120	500	11	118	R7s	
	108440	110/120	1000	11	192	R7s	
	108444	110/120	1500	11	254	R7s	
	108445	240	35	51	53	GU10	36°
	108446	230	50	64	88	E27	PAR20
	108447	240	50	51	53	GU10	25°
	108449	240	50	51	53	GU10	50°
	108450	230	75	68	63	GU10	25°
	108448	230	75	15.5	86	B15d	
	108451	230	80	11	78	R7s	
	108452	220	100	11	78	R7s	
	108454	220	150	11	78	R7s	reinforced
	108455	230	160	11	118	R7s	
	108457	230	230	11	118	R7s	
	108458	220	250	11	78	R7s	
	108460	230	300	8	118	R7s	reinforced
	108461	230	400	11	118	R7s	Radium, reinforced
	108463	230	400	11	118	R7s	
	108464	230	500	11	118	R7s	reinforced
	108466	220	500	11	189	R7s	
	108472	220	750	11	189	R7s	
	108476	220	1000	11	189	R7s	Philips
	108477	230	1000	11	189	R7s	reinforced
	108478	240	1000	11	189	R7s	
	108480	220	1500	11	254	R7s	
	108484	220	2000	11	332	R7s	
	108488	220	2000	11	335	FA4	

## LAMPS

### Double envelope (lode) halogen lamps



Cat.No.	Volt	Watt	Diam.	Length	Base
108502	125	300	41	197	E40
108504	110	500	38	215	E40
108508	120	1000	38	255	E40
108511	230	150	31	105	E27
108514	220	250	31	105	E27
108526	220	500	38	215	E40
108530	220	1000	38	255	E40

### Halogen lamps with E11 and E14 base



Cat.No.	Volt	Watt	Diam.	Length	Base
108550	110	100	12	70	E11x24
108554	110	150	14	70	E11x18
108560	110	500	14	93	E11x24
108584	220	250	14/17	85	E14x24
108572	220	500	14	93	E11x24

# LAMPS

## Low voltage halogen lamps

	Cat.No.	Volt	Watt	Diam.	Length	Base		Fig.
1	108596	12	5	9	31	BA9s		1
	108603	28	5	11	31	BA9s		1
	108620	12	20	38	41	B15d	32° GBF	2
	108622	12	50	15	35	B15s		3
2	108624	12	50	15	43	B15s	for 110/220V rotating beacon	3
	108694	24	50	15	43	B15s	for 24V rotating beacon	3
	108602	12	10	9	31	G4		4
	108604	12	20	9	31	G4		4
	108606	12	35	9	31	G4		4
	108610	24	20	9	31	G4		4
	108712	12	50	11	44	G6.35		4
	108722	24	100	11	44	G6.35		4
	108724	24	150	11	44	G6.35		4
	108680	24	60	18	42	GX6.35	SPS-10A for 'Aldis'	5
6	108625	12	20	11	44	GY6.35		4
	108627	12	35	11	44	GY6.35		4
	108634	12	75	11	44	GY6.35		4
	108636	12	100	11	44	GY6.35		4
	108676	24	35	11	44	GY6.35		4
	108678	24	50	11	44	GY6.35		4
	108681	24	150	11	44	GY6.35		4
	108682	24	250	11	44	GY6.35	for Wolf Turbo-lite	4
7	108660	12	55	9	67	P14.5s	H1	6
	108684	24	70	9	67	P14.5s	H1	6
	108670	6	55	11	42	PK22s	H3	7
	108672	12	55	11	42	PK22s	H3	7
8	108690	24	70	11	42	PK22s	H3	7
	108644	12	55	36	49	P36	Thorn 450 for air turbo lamp	8
	108626	12	20	35.3	41	GU4		9
	108613	12	20	50	46	GU5.3	36° BAB	9
9	108615	12	35	50	46	GU5.3	8° FRB	9
	108617	12	45	50	46	GU5.3	36° EXN	9
	108621	28	20	50	46	GU5.3	38° BAB	9
	108736	24	250	50	45	GX6.35	EMM A1/258	10

## LAMPS

### Halogen lamps with P28s base



Cat.No.	Volt	Watt	Diam.	Length	Type
108764	220	500	22	125	6800C

### Halogen lamps with GY9,5 base



Cat.No.	Volt	Watt	Diam.	Length
108770	120	600	24	64
108778	220	650	24	64

### Halogen lamps with GX9,5 base



Cat.No.	Volt	Watt	Diam.	Length	Type
108786	120	1000	35	110	T11
108790	230	650	22	110	T12
108798	220	1000	35	110	T11

### Halogen lamps with G38 base



Cat.No.	Volt	Watt	Diam.	Length	Type
108812	110	2000	40	210	CP41
108816	220	2000	40	210	CP41
108822	120	3000	40	210	HX48
108828	240	3000	40	210	HX48

### Halogen lamps with GY16 base



Cat.No.	Volt	Watt	Diam.	Length	Type
108850	110	2000	45	134	CP43
108858	220	2000	50	139	CP43

## LAMPS

### Infra-red heating lamps with E27 base



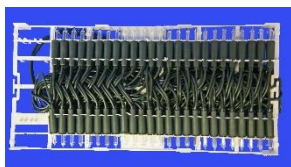
Cat.No.	Volt	Watt	Diam.	Length
108908	130	250	125	185
108912	130	375	125	185
108916	220	250	125	185

### Philinea (Linestra) lamps with S14s base



Cat.No.	Volt	Watt	Diam.	Length
108940	130	35	30	300

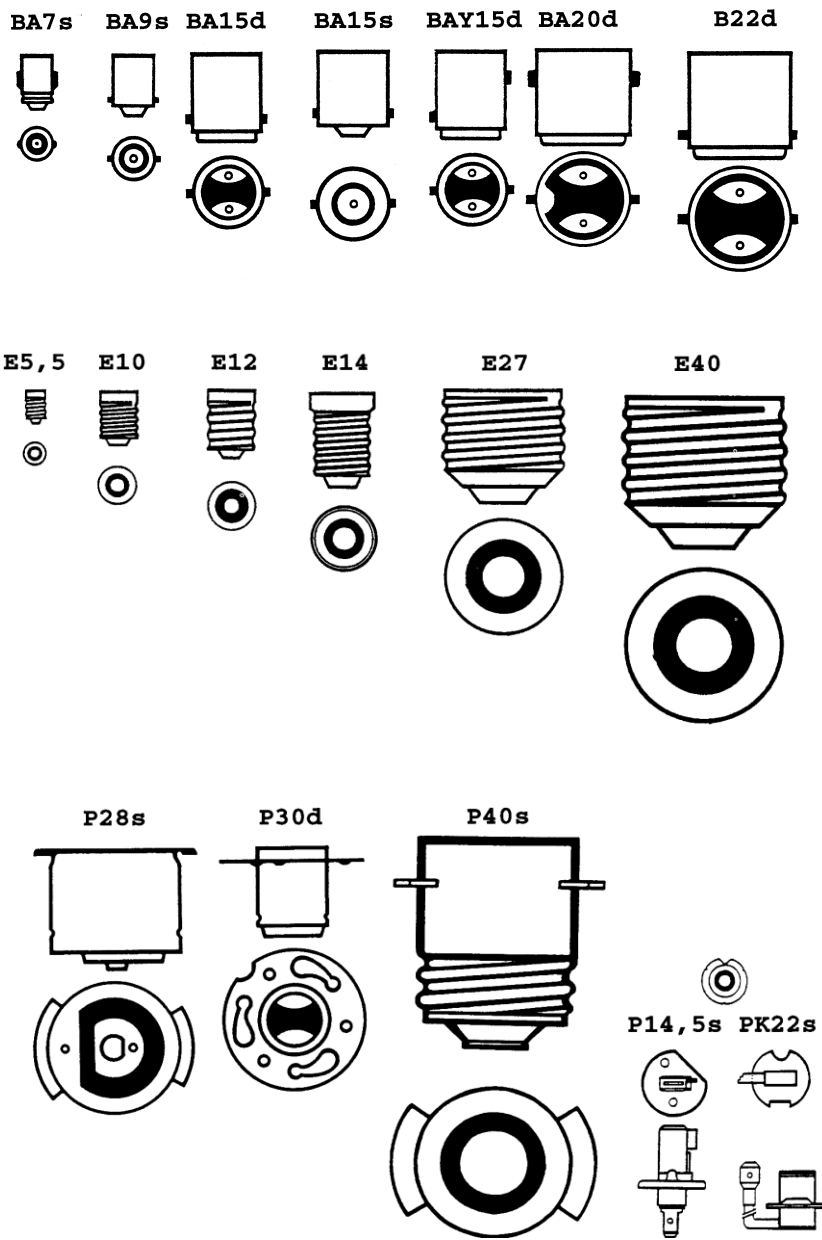
### Christmas lightings



Cat.No.	Description	
108950	Christmas lighting	230V 100 lamps clear

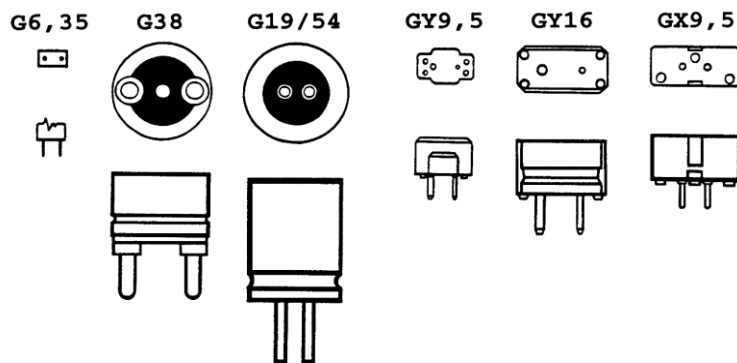
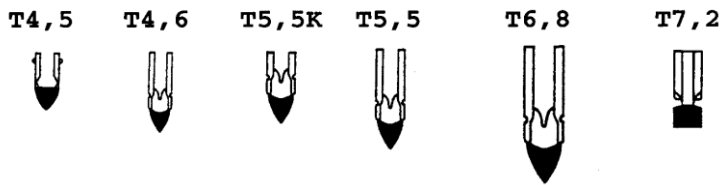
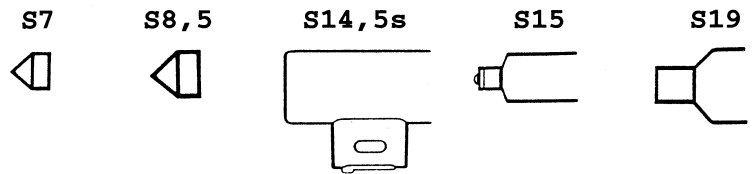
# LAMPS

## Base designations

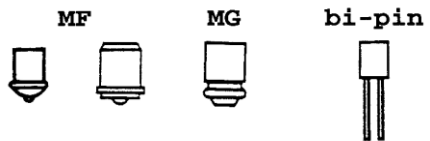
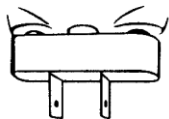


# LAMPS

## Base designations






moguel end prong







## FLUORESCENT LIGHTING LAMPS

### Fluorescent lamps


	Cat.No.	Watt	Colour	Length excl. pins	Diam.	
	125106	4	white	136	16	
	125132	6	white	212	16	
	125133	6	33	212	16	
	125158	8	white	288	16	
	125160	8	33	288	16	
	125164	8	827	288	16	
	125170	8	830	288	16	
	125176	8	840	288	16	
	125202	10	white	329	26	
	125228	13	white	516	16	
	125231	13	830	516	16	
	125254	14	white	360	26	
	125280	15	white	437	26	
	125286	15	827	437	26	
	125292	15	830	437	26	
	125294	15	840	437	26	
	125336	18	827	590	26	
	125342	18	830	590	26	
	125348	18	840	590	26	
	125352	18	865	590	26	
	125406	18	red	590	26	
	125408	20	white	590	32	
	125410	20	daylight	590	32	
	125380	20	daylight	580	32	Japanese
	125454	30	cw	630	32	Japanese
	125463	30	827	894	26	
	125465	30	830	894	26	
	125468	30	840	894	26	
	125502	36	827	1200	26	
	125508	36	830	1200	26	
	125514	36	840	1200	26	
	125518	36	865	1200	26	
	125534	36	red	1200	26	
	125540	40	white	1200	32	
	125544	40	daylight	1200	32	
	125546	40	white	590	38	for coldroom fixtures
	125584	58	827	1500	26	
	125587	58	830	1500	26	
	125590	58	840	1500	26	
	125592	58	865	1500	26	
	125604	60	white	1166	38	F48 T12 CW/HO

## FLUORESCENT LIGHTING LAMPS


### Fluorescent lamps, rapid start, colour white (33)

	Cat.No.	Watt	Length excl. pins	Diam.	
	125650	20	580	32	Japanese
	125662	20	590	38	TLM RS
	125698	40	1200	38	TLM RS
	125710	40	1184	38	TLS cap R18s
	125720	65	1500	38	TLM RS
	125736	115	1200	38	TLM RS


### Circline fluorescent lamps

	Cat.No.	Watt	Colour	Diam.	Lamp diam.
	125806	20	daylight	29	205
	125816	22	840	28	216
	125822	30		32	229
	125832	32	840	32	311
	125842	40	840	32	413

### Single pin instant-start safety fluorescent lamps type TLX, colour white (33)

	Cat.No.	Watt	Length	Diam.
	125850	20	571	38
	125862	40	1180	38

### 2D lamps

	Cat.No.	Watt	Colour	Dimensions	
	122304	16	827	140x140x27	2 pins
	122307	16	827	140x140x27	4 pins
	122312	28	827	205x205x35	4 pins
	122317	38	827	205x205x35	4 pins




### Light colour characteristics






Colour	Colour temp. K	Description
29	2900	warm white
32	3000	warm white
33	4100	(cool) white
34	3900	(cool) white
54	6250	daylight
827	2650	extra-warm white
830	3000	warm white
840	4000	extra white
865	6500	(cool) daylight
930	3000	warm white

## FLUORESCENT LIGHTING LAMPS


### UV lamps for sterilization purposes (germicidal)

	Cat.No.	Watt	Diam.	Length excl. pins	Base	
	125956	8	16	288	bi-pin	Clear
	125959	8	16	288	bi-pin	08 UV-A black light/blue
	125962	10	25	330	bi-pin	
	125968	15	25	437	bi-pin	
	125973	18	26	590	bi-pin	08 UV-A black light/bleu
	125978	30	25	892	bi-pin	
	125985	36	26	1200	bi-pin	08 UV-A black light/blue
	125992	36	19	840	single-pin	G36 T6

### Energy savers

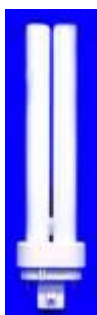
	Cat.No.	Volt	Watt	Diam.	Length	Base	Colour
	122090	230	11	32	110	B22	827
	122102	230	5	38	84	E14	827
	122104	230	9	38	95	E14	827
	122106	230	11	42	108	E14	827
	122110	230	5	38	83	E27	827
	122111	230	7	48	100	E27	827
	122113	230	8	45	107	E27	827 PH genie
	122112	230	8	39	111	E27	827
	122117	230	11	45	117	E27	827 PH genie
	122118	230	11	42	106	E27	827
	122125	230	14	45	132	E27	827 PH genie
	122127	230	5	44	88	E14	827 PH Tornado
	122128	230	8	48	97	E14	827 PH Tornado
	122129	230	12	48	104	E14	827 PH Tornado
	122130	230	5	44	78	E27	827 PH Tornado
	122131	230	8	48	87	E27	827 PH Tornado
	122132	230	12	48	94	E27	827 PH Tornado
	122133	230	15	52	108	E27	827 PH Tornado
	122134	230	20	57	116	E27	827 PH Tornado
	122135	230	23	62	119	E27	827 PH Tornado
	122194	120	14	46	112	E27	827 PH-PLE-R
	122200	220	15	54	124	E27	827 PH PLE-R
	122206	220	20	54	143	E27	827 PH PLE-R
	122212	220	23	54	158	E27	827 PH PLE-R

### Energy savers, classic

	Cat.No.	Volt	Watt	Diam.	Length	Base	Colour
	122214	230	5	44	101	E27	827
	122216	230	8	49	94	E27	827
	122218	230	11	60	118	E27	827
	122220	230	15	61	120	E27	827
	122222	230	20	70	152	E27	827

## FLUORESCENT LIGHTING LAMPS

### Energy savers, PLC type



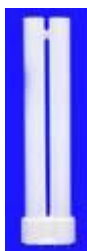
Cat.No.	Watt	Diam.	Length	Base		Colour
122136	10	28	118	G24d-1	2 pins	827
122137	10	28	118	G24d-1	2 pins	830
122138	10	28	118	G24d-1	2 pins	840
122140	13	28	140	G24d-1	2 pins	827
122143	13	28	140	G24d-1	2 pins	830
122144	13	28	140	G24d-1	2 pins	840
122141	18	28	152	G24d-2	2 pins	827
122146	18	28	152	G24d-2	2 pins	830
122147	18	28	152	G24d-2	2 pins	840
122149	26	28	173	G24d-3	2 pins	827
122150	26	28	173	G24d-3	2 pins	830
122151	26	28	173	G24d-3	2 pins	840
122226	13	28	132	G24q-1	4 pins	830
122228	18	28	144	G24q-2	4 pins	827
122229	18	28	144	G24q-2	4 pins	830
122231	18	28	144	G24q-2	4 pins	840
122233	26	27	164	G24q-3	4 pins	827
122235	26	27	164	G24q-3	4 pins	830
122237	26	27	164	G24q-3	4 pins	840

### Energy savers, PLS type



Cat.No.	Watt	Diam.	Length	Base		Colour
122156	5	27	108	G23	2 pins	827
122158	7	27	138	G23	2 pins	827
122159	7	27	138	G23	2 pins	830
122160	7	27	138	G23	2 pins	840
122164	9	27	168	G23	2 pins	827
122165	9	27	168	G23	2 pins	830
122166	9	27	168	G23	2 pins	840
122170	11	27	238	G23	2 pins	827
122167	11	27	238	G23	2 pins	830
122168	11	27	238	G23	2 pins	840
122240	11	28/13	215	2G7	4 pins	827
122242	11	28/13	215	2G7	4 pins	840

### Energy savers, PLL type



Cat.No.	Watt	Diam.	Length	Base		Colour
122178	18	38	225	2G11	4 pins	827
122179	18	38	225	2G11	4 pins	830
122180	18	38	225	2G11	4 pins	840
122184	36	38	415	2G11	4 pins	827
122185	36	38	415	2G11	4 pins	830
122186	36	38	415	2G11	4 pins	840
122190	55	38	535	2G11	4 pins	840

## FLUORESCENT LIGHTING SPARES

### Starters



Cat.No.	Watt	Type
122402	4-22	Philips S2 bi-pin
122406	4-22	FS2 bi-pin
122410	4-65	Philips S10, bi-pin
122414	4-80	FSU bi-pin
122448	85-140	Philips S12 bi-pin
122508	4-6-8-10	FG 7E Japanese E17
122514	20	FG 1E Japanese E17



### Capacitors for fluorescent lighting



Cat.No.	$\mu$ F	Description
122594	3.4	connection with nut

### Electronic ballasts



Cat.No.	Watt	Volt
122622	2 x 20 or 1 x 40	24 DC
122611	1 x 18 or 2 x 18 or 1 x 36	110-240 AC/DC
122615	1 x 36 or 2 x 36	110-240 AC/DC
122619	2 x 58 or 1 x 115	220-240 AC

### Ballasts, 110 Volt 60Hz for fluorescent lamps



Cat.No.	Watt
122670	8
122678	15
122682	18/20
122688	36/40
122692	58/65

### Ballasts, 220 Volt 50Hz for fluorescent lamps



Cat.No.	Watt
122740	8
122754	18/20
122768	2 x 18/20 or 1 x 36/40
122774	58/65

## FLUORESCENT LIGHTING FIXTURES

### Ballasts, 220 Volt 60Hz for fluorescent lamps



Cat.No.	Watt	
122790	8	
122796	15	
122802	18/20	
122810	2 x 18	for Glamox fixtures
122816	32	
122822	36/40	
122828	58/65	

### Lighting fittings, 220 Volt 50Hz (without lamps) for indoor use



Cat.No.	Watt	Lenght	Width	Height
126110	1 x 18	620	62	85
126116	2 x 18	620	145	50
126122	1 x 36	1230	62	85
126128	2 x 36	1230	145	50

### Lighting fittings with shade and switch (without lamps) for indoor use



Cat.No.	Watt	Volt	Hz	Lenght	Width	Height
122848	1 x 8	110	60	327	85	40
122850	1 x 8	220	50/60	327	85	40

### Fluorescent hand lamps, complete with cord



Cat.No.	Watt	Description	
122878	1 x 8	12 Volt DC	
122884	1 x 7	24V AC/DC LED	with carplug
122888	1 x 11	42 Volt AC	with 2-pole CEE plug
122892	1 x 8	127 Volt 50/60Hz	
122898	1 x 8	220 Volt 50/60Hz	
122900	60 LEDS	220VAC/12VDC	rechargeable

### Watertight lighting fittings (IP65), base: reinforced polyester, shade clear methacrylic

#### 24 Volt DC



Cat.No.	Watt	Length	Width	Height
126150	1x18	667	100	110
126156	2x18	667	170	110
126162	1x36	1276	100	110
126168	2x36	1276	170	110

## FLUORESCENT LIGHTING OUTDOOR

Watertight lighting fittings (IP65), base: reinforced polyester, shade clear methacrylic  
**110 Volt DC**



Cat.No.	Watt	Length	Width	Height
126180	1X18	667	100	110
126186	2X18	667	170	110

Watertight lighting fittings (IP65), base: reinforced polyester, shade clear methacrylic  
**110 Volt 60Hz**



Cat.No.	Watt	Length	Width	Height
126200	1x18	667	100	110
126206	2x18	667	170	110
126212	1x36	1276	100	110
126218	2x36	1276	170	110

Watertight lighting fittings (IP65), base: reinforced polyester, shade clear methacrylic  
**220 Volt DC**



Cat.No.	Watt	Length	Width	Height
126260	1x18	667	100	110
126266	2x18	667	170	110
126272	1x36	1276	100	110
126278	2x36	1276	170	110

Watertight lighting fittings (IP65), base: reinforced polyester, shade clear methacrylic  
**220 Volt 50Hz**



Cat.No.	Watt	Length	Width	Height
126290	1x18	667	100	110
126296	2x18	667	170	110
126302	1x36	1276	100	110
126308	2x36	1276	170	110

Watertight lighting fittings (IP65), base: reinforced polyester, shade clear methacrylic  
**220 Volt 60Hz**



Cat.No.	Watt	Length	Width	Height
126350	1x18	667	100	110
126356	2x18	667	170	110
126362	1x36	1276	100	110
126368	2x36	1276	170	110

## FLUORESCENT LIGHTING OUTDOOR

Watertight lighting fittings IP67 220V 50Hz, stainless steel, make Glamox MIR-S67



Cat.No.	Watt	Length	Width	Height
126391	2x18	838	165	123
126675	2x36	1334	165	128

Watertight lighting fittings IP67 220V 60Hz, stainless steel, make Glamox MIR-S67



Cat.No.	Watt	Length	Width	Height
126392	2x18	838	165	123
126677	2x36	1334	165	128

Watertight lighting fittings IP67 220V 50/60Hz, stainless steel with electronic HF ballast make Glamox MIR-S67



Cat.No.	Watt	Length	Width	Height
126394	2x18	838	165	123
126680	2x36	1334	165	128

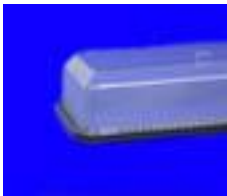
Shades for fluorescent fittings



1



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3

Cat.No.	L	W	H	For fitting	Fig	*
126506	658	95	52	126150, 126180, 126200, 126260, 126290, 126350	1	*
126530	658	165	52	126156, 126186, 126206, 126266, 126296, 126356	1	*
126544	690	165	90	Philips TN25, TCT011 2 x 20W opal	2	
126568	688	170	70	Aqua Signal shade type 9840005300 2 x 18W clear	3	
126580	675	142	68	Glamox MIR 2 x 18W clear also for MIX, MIL and MAX	3	
126610	1265	95	52	126162, 126212, 126272, 126302, 126362	1	*
126622	1265	165	52	126168, 126218, 126278, 126308, 126368	1	*
126648	1335	130	70	Aqua Signal shade type 9840005600 2 x 36W clear	3	
126666	1291	140	70	Glamox MIR 2 x 36W clear also for MIX, MIL and MAX	3	

\* clear, impact resistant



It's easy to upgrade to LED!



**Save on energy and maintenance**

We offer Glamox and Aqua Signal LED replacement kits that are easy to use due to the tray concept. All mechanical parts, fixing and cable glands remain unchanged in the luminaire. All you need to change is the gear tray, an easy solution for converting to LED.

From tubes to LEDs – step by step – in just a few seconds.

MIR LED upgrade kit from T8 to LED  
 is suitable for Cat.No's 126391-126680



Please refer to our website for information about our 5-year warranty.  
[www.glamox.com/gmo](http://www.glamox.com/gmo)



## FLUORESCENT FIXTURE SPARES

### Shade clamps for fluorescent fittings

Cat.No.	For fitting	Fig.
123010	126150....126368	1
123013	Stainless steel, 126150....126368	2
123050	A & S type 9840049600, stainless steel	3



1



2



3

### Starter holders for fluorescent lighting

Cat.No.	Description	Fig.
123100	Type H06 for bi-pin starters	4
123108	With mounting pins, for bi-pin starters	5
123115	For fixture K126392 Glamox 'MIR'	6



4



5



6

### Lamp holders for fluorescent lighting

Cat.No.	Description	Type	Fig.
123150	For FL lamps 4-6-8-13 Watt		1
123186	Rotary-lock type		2
123212	Without starter holder	V50 SM	3
123224	With starter holder	V10	4
123226	Without starter holder	V10	5
123238	Round lamp holder		6
123240	For 'Glamox'	68 E2	7
123244	For 'Glamox'	R78	8
123252	Without starter holder	1863B/1853B	9
123254	With starter holder	1863A/1853A	10
123278	Round lamp holder with spring		11
123284	For Glamox 'MIR' for 126392 and 126677		12
123285	W/spring f. Glamox 'MIR' for 126392 and 126677		13
123290	Japanese, turret type big		14



1



2

## FLUORESCENT FIXTURE SPARES

### Lamp holders for fluorescent lighting (continuation)



3

Cat.No.	Description	Type	Fig.
123302	Japanese, turret type small		14
123307	Japanese with spring	FL-M	15
123311	Japanese with spring	FL-L	16
123314	Watertight for 26 mm. diameter		17
123326	Watertight for 38 mm. diameter		17
123380	For Circline		18



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9



10



11



12



13



14



15



16




17







18

## LED LAMPS

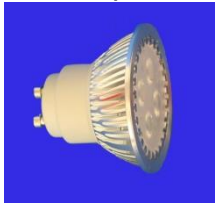
### LED energy savers, 230VAC, warm white

	Cat.No.	Watt	Diam.	Length	Lumen	Base	Fig.
	122320	5.3	58	108	470	E27	1
	122323	9.5	64	110	806	E27	1
	122326	3.7	60	105	470	E27	2
	122329	3.6	36	103	250	E14	3
	122332	3.5	46	80	250	E14	4
	122335	3.6	46	75	250	E27	5


  

			
2	3	4	5

### LED lamps with reflector, warm white

	Cat.No.	Volt	Watt	Diam.	Length	Lumen	Base	
	122340	230	5	50	56	375	GU10	38°
	122343	12	4	50	50	268	GU5.3	45°

	GU5.3
--	-------

### LED lamps with halogen look, warm white


	Cat.No.	Volt	Watt	Diam.	Length	Lumen	Base	
	122346	230	1.5	15	45	180	G9	2 pins
	122349	12	1.5	10	23	100	G4	2 pins

	G4
--	----

## LED INDICATOR LAMPS

### LED indicator lamps

	Cat.No.	Volt	mA	Diam.	Length	Base	Colour
	122370	24	20	10	23.5	BA9S	white
	122372	24	20	10	23.5	BA9S	red
	122374	24	20	10	23.5	BA9S	green
	122376	24	20	10	23.5	BA9S	yellow
	122378	230	3	10	23.5	BA9S	white
	122380	230	3	10	23.5	BA9S	red
	122382	230	3	10	23.5	BA9S	green
	122384	230	3	10	23.5	BA9S	yellow

## LED LAMPS, MAKE KERLED

### LED lamps GLS, warm white



Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
130010	100-240	AC	7	640	E27	60	105
130020	100-240	AC	10	810	E27	60	110
130030	100-240	AC	15	1150	E27	65	125
130110	12-60	AC/DC	4	320	E27	60	110
130120	12-60	AC/DC	7	550	E27	60	110
130130	12-60	AC/DC	10	810	E27	60	114

### LED lamps Candle, warm white



Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
130210	100-240	AC	3	250	E27	35	100
130220	100-240	AC	3	250	E14	35	100
130230	100-240	AC	5	400	E14	35	100

### LED lamps Spherical, warm white



Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
130310	100-240	AC	3.3	250	E27	45	78
130320	100-240	AC	5	400	E27	45	78
130330	100-240	AC	3.3	250	E14	45	78
130340	100-240	AC	5	400	E14	45	78
130410	12-60	DC	3	250	E27	45	78
130420	12-60	DC	3	250	E14	45	78
130430	12-60	DC	3	250	BA15D	45	78
130440	12-60	DC	3	250	BA22D	45	78

### LED lamps Tubular, warm white



Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
130510	95-265	AC	7	640	E27	38	108
130520	95-265	AC	9	810	E27	38	108
130530	95-265	AC	7	640	E14	38	108
130540	95-265	AC	7	640	BA22D	38	108
130550	95-265	AC	9	810	BA22D	38	108

### LED lamps Tubular indicator, warm white



1



2



3



4

Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm	Fig.
130610	100-240	AC/DC	4.5	550	E27	27	60	1
130620	200-240	AC	2.5	250	E14	14	47	2
130630	100-240	AC/DC	4.5	550	BA22D	27	58	3
130640	200-240	AC	2.5	250	BA15D	17	47	4
130710	24-30	AC/DC	4.5	550	E27	27	60	1
130720	10-30	AC/DC	2	190	E14	17	52	2
130730	24-30	AC/DC	4.5	550	BA22D	27	58	3
130740	10-30	AC/DC	2	190	BA15D	17	47	4

## LED LAMPS, MAKE KERLED

### LED lamps R50 Reflector, warm white



Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
130810	95-265	AC	5	400	E14	50	86

### LED lamps R63 Reflector, warm white



Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
130820	95-265	AC	8	640	E27	63	105

### LED lamps GU10 Reflector, warm white, MR16 36°



Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
130910	100-250	AC	4	250	GU10	50	54
130920	100-250	AC	7.5	460	GU10	50	54

### LED lamps Philinea, warm white



Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
131498	230	AC	5	405	S14s	30	300
131506	230	AC	8	675	S14s	30	500

## LED LAMPS TUBE

### LED Tube Philips white colour 840 with dummy starter



Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
134100	220-240	AC	8	800	G13	26	589
134120	220-240	AC	14.5	1600	G13	26	1198
134140	220-240	AC	20	2200	G13	26	1500

### LED tube Philips daylight colour 865 with dummy starter



Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
134110	220-240	AC	8	800	G13	26	589
134130	220-240	AC	14.5	1600	G13	26	1198
134150	220-240	AC	20	2200	G13	26	1500

### LED tube warm white colour 830 with dummy starter



Cat.no.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
134200	85-265	AC	9	830	513	26	589
134210	85-265	AC	18	1750	913	26	1198
134220	85-265	AC	24	2200	913	26	1500

### LED tube white colour 840 with dummy starter



Cat.No.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
134230	85-265	AC	9	850	913	26	589
134240	85-265	AC	18	1780	913	26	1198
134250	85-265	AC	24	2230	913	26	1500

### LED tube daylight colour 860 with dummy starter



Cat.No.	Volt	~/=	Watt	Lumen	Base	D mm	L mm
134260	85-265	AC	9	870	913	26	589
134270	85-265	AC	18	1800	913	26	1198
134280	85-265	AC	24	2250	913	26	1500

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## LED INDOOR LIGHTING

### LED Torches and Handlamp

Cat.no.	Description	Fig.
135010	Work Light LED 3W with magnet 210/150Lm 6000K IP20 3xAAA	1
135020	Work Light LED 5W with magnet 500/85Lm 6500K IP44 rechargeable 100-240VAC/12-24VDC	2
136010	Handlamp LED 2.2W 38 LED's 230V 250Lm 5000K IP44 with 5 mtr cable	3



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### LED Mirror/Bathroom Luminaire

Cat.no.	Description
135550	Luminaire LED 10W 850Lm 3000K 85-265VAC with switch and 2 round pins socket plus cover IP44, 473 x 57.5 x 105.5mm (L x W x H)



### LED Berth light

Cat.no.	Description
135560	Berth light LED 12W 830Lm 3000K 220-240VAC without switch adjustable reflector IP54 220 x 90 x 63mm (L x W x H)



## LED OUTDOOR LIGHTING

### LED Handlamp

Cat.no.	Description
136006	Handlamp LED 7W 700 Lm 2700K 24VAC/DC with 5 mtr cable and car plug



### LED Floodlights on rack, rechargeable

Cat.no.	Description	Watt	Lumen			Volt		Fig.
136050	Floodlight LED	10	750	6000K	IP65	100-240VAC	/ 12-24VDC	1
136060	Floodlight LED	20	1350	6000K	IP65	100-240VAC	/ 12-24VDC	2
136070	Floodlight LED	50	3500	6000K	IP65	230VAC	/ 12-24VDC	2



### LED Floodlights on rack with 5 mtr cable

Cat.no.	Description	Watt	Lumen			Volt	
136200	Floodlight Class 2	30	2250	4000K	IP65	230VAC	
136204	Floodlight Class 2	50	3750	4000K	IP65	230VAC	
136208	Floodlight Class 2	80	5600	4000K	IP65	230VAC	
136212	Floodlight Class 2	150	10500	4000K	IP65	230VAC	



### LED Luminaire with tube and polycarbonate diffuser (IK08)

Cat.no.	Description	Watt	Lumen			Volt	Length
136300	Luminaire with LED	1 x 9	900	4000K	IP65	230VAC	60cm
136308	Luminaire with LED	2 x 9	1800	4000K	IP65	230VAC	60cm
136316	Luminaire with LED	1 x 18	1800	4000K	IP65	230VAC	120cm
136324	Luminaire with LED	2 x 18	3600	4000K	IP65	230VAC	120cm
136340	Luminaire with LED	1 x 9	880	4000K	IP65	110-240VAC	60cm
136348	Luminaire with LED	2 x 9	1760	4000K	IP65	110-240VAC	60cm
136356	Luminaire with LED	1 x 18	1780	4000K	IP65	110-240VAC	120cm
136364	Luminaire with LED	2 x 18	3560	4000K	IP65	110-240VAC	120cm

## GAS-DISCHARGE LAMPS AND ACCESSORIES

### High-pressure mercury lamps for use with ballast



Cat.No.	Watt	Diam.	Length	Base
142216	80	70	156	E27
142234	250	100	242	E40
142240	300	115	290	E39
142243	400	116	280	E39 *
142246	400	115	290	E40
142250	700	140	370	E39 *
142258	1000	180	390	E40

\* Japanese type

### Japanese high-pressure mercury lamps with reflector type HRF for use with ballast



Cat.No.	Watt	Diam.	Length	Base
142310	300	165	305	E39
142316	400	180	315	E39
142322	700	280	410	E39
142328	1000	280	410	E39

### Blended-light lamps type BHF for use without external ballast (AC only)



Cat.No.	Volt	Watt	Diam.	Length	Base
142355	110	300	88	221	E40
142372	110/120	500	120	280	E40
142408	220	300	100	245	E40
142412	220	500	120	280	E40

### Blended-light lamps with reflector for use without external ballast (AC only)



Cat.No.	Volt	Watt	Diam.	Length	Base
142426	100/110	300	160	238	E39
142430	110/120	500	175	315	E39
142434	220/230	160	118	160	E26
142437	200/220	300	160	238	E39
142440	200/230	500	180	315	E39

## GAS-DISCHARGE LAMPS AND ACCESSORIES

### Blended-light lamps with reflector for use without external ballast (AC only)



Cat.No.	Volt	Watt	Diam.	Length	Base
142426	100/110	300	160	238	E39
142430	110/120	500	175	315	E39
142434	220/230	160	118	160	E26
142437	200/220	300	160	238	E39
142440	200/230	500	180	315	E39

### High-pressure sodium lamps for use with ballast



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Cat.No.	Watt	Diam.	Length	Base	Fig.
142452	70E	71	156	E27	1
142455	150	47	211	E40	3
142460	250	47	257	E40	3
142463	250	91	226	E40	1
142465	400	23	206	Fc2	4
142466	400 Ph.	122	292	E40	1
142468	400	47	283	E40	3
142473	600	47	283	E40	3
142475	700	150	375 NHF	E39	2
142478	1000	67	390	E40	3



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### Low-pressure sodium lamps for use with ballast



Cat.No.	Watt	Diam.	Length	Base
142504	18	52	216	BY22
142507	35	52	311	BY22
142508	55	52	425	BY22
142512	90	68	528	BY22

## GAS-DISCHARGE LAMPS AND ACCESSORIES

### Ballasts for high-pressure mercury lamps



Cat.No.	Volt	Watt	Hertz
142628	110	700	60
142636	220	125	60
142644	220	250	50
142652	220	250	60

### Ballasts for high-pressure mercury lamps



Cat.No.	Volt	Watt	Hertz
142660	220	400	50
142668	220	400	60
142676	220	700	60
142687	220	1000	60

also for sodium and metal halide lamps

### Ballasts for high-pressure sodium lamps



Cat.No.	Volt	Watt	Hertz
142704	110	400	60
142706	220	250	50
142718	220	250	60
142730	220	400	50
142742	220	400	60
142684	220	1000	60

also for metal halide lamps

also for metal halide lamps

also for metal halide lamps

### Ignition and starter devices for sodium lamps



**SN 58**

Cat.No.	Description
142818	Series ignitor type 126835/MZN 400
142849	Ignitor SN 58 for 150, 250 and 400W



**MZN 400**

### Metal Halide lamps for use with ballast



Cat.No.	Watt	Diam.	Length	Base	Type
142907	70	20	114	Rx7s	HRI-TS
142912	250	25	163	Fc2	HQI-TS
142921	250	47	257	E40	HPI-T
142924	400	46	283	E40	HPI-T
142930	400	46	270	E40	HQIV-T
142936	400	27	205	Fc2	HRI-TS
142950	1000	76	340	E40	HQI-T
142962	2000	102	430	E40	HPI-T

## LEAD ACID STORAGE BATTERIES AND ACCESSORIES

### Lead acid storage batteries



Cat.No.	Volt	Ah	Length	Width	Height	Int. code	
160176	6	180	390	175	240	18011	
160184	6	220	395	175	235	22013	
160192	6	240	244	190	275	24015	
160298	12	2.3	178	35	61		AGM battery
160301	12	7.2	151	65	98		AGM battery
160303	12	12	151	98	98		AGM battery
160305	12	20	181	77	167		AGM battery
160413	12	28	195	127	186	CA52815	maint. free
160320	12	30	187	130	170	53030	
160328	12	32	230	126	167	53211	
160356	12	38	243	136	202	53890	
160368	12	45	238	129	227	CA54524	maint. free
160376	12	40	175	175	190	CA54018	maint. free
160390	12	44	210	175	175	CA54465	maint. free
160416	12	50	200	170	221	CA55041	maint. free
160428	12	45	238	129	227	CA54523	maint. free
160436	12	60	246	175	190	CA55559	maint. free
160442	12	57	242	175	175	CA55716	maint. free
160458	12	60	242	175	175	CA56011	maint. free
160466	12	68	278	175	175	CA56822	maint. free
160474	12	70	272	173	223	CA57024	maint. free
160482	12	85	354	175	175	CA58515	maint. free
160498	12	110	350	175	235	AC61048	
160514	12	135	514	175	210	AC63539	
160522	12	120	513	189	223	62034	
160530	12	155	513	223	220	64317	
160544	12	140	513	189	220	64020	
160548	12	165	506	212	230		maint. free
160552	12	180	513	223	240	96351	
160558	12	200	509	274	238		maint. free
160572	12	230	514	275	242	96803	heavy duty
160576	12	185	518	276	242		AGM battery
160580	12	220	518	276	242		AGM battery



## LEAD ACID STORAGE BATTERIES AND ACCESSORIES

### Chargers for storage batteries



Cat.No.	Output DC Volt	Amps	Input AC Volt	
162118	12	10	230	Automatic
162120	6-12*	12	230	
162123	12-24	10	110	
162196	12-24	12	230	
162130	12-24	30-18	230	

\* also for gel and AGM batteries

### Connectors and service aids for storage batteries



Cat.No.	Description
162170	Battery clips 40A red
162172	Battery clips 40A black
162176	Battery clips 80A red
162178	Battery clips 80A black
162184	Barrels + with bolt for round poles
162186	Barrels - with bolt for round poles
162314	Hydrometer for lead acid batteries
162322	Battery syringe
162340	Petroleum gel (vaseline), cans of 0.5kg
162364	Automatic battery filler (2 litres)
162378	Battery/Cell tester 12V 100A / 6V 50A

### Liquids for storage batteries



Cat.No.	Description
160842	Sulphuric acid, s.g.1.28, can of 20 litres
160848	Sulphuric acid, s.g.1.28, bottle of 1 litre
160860	Electrolyte for alkaline batteries, s.g.1.2 can of 20 litres
160882	Deminerlized water, can of 20 litres

## BATTERIES AND ACCESSORIES

### Standard batteries 1.5 volt



Cat.No.	I.E.C.	Diam.	Length	Brand
182112	R 6	14.5	50.5	GP
182130	R14	26	50	Varta
182162	R20	34	61.5	Varta

### Alkaline batteries



Cat.No.	Volt	I.E.C.	Diam.	Length	Brand
182208	1.5	LR1	12	30.2	Camelion
182210	1.5	LR1	12	30.2	Duracell MN9100
182220	1.5	LR03	10.5	44.5	GP
182222	1.5	LR03	10.5	44.5	Duracell MN2400
182232	1.5	LR6	14.5	50.5	Camelion
182234	1.5	LR6	14.5	50.5	Duracell MN1500
182240	1.5	LR6	14.5	50.5	Varta
182250	1.5	LR14	26	5	Camelion
182252	1.5	LR14	26	50	Duracell MN1400
182258	1.5	LR14	26	50	Varta
182268	1.5	LR20	34	61.5	GP
182270	1.5	LR20	34	61.5	Duracell MN1300
182276	1.5	LR20	34	61.5	Varta

### Alkaline batteries



Cat.No.	Volt	I.E.C.	Width	Height	Length	Brand
182308	6	4LR25	67	105	67	lantern battery w. spring Duracell MN908
182310	9	6LF22	17.5	48	26.5	Camelion
182312	9	6LF22	17.5	48	26.5	Duracell MN1604
182318	9	6LF22	17.5	48	26.5	Varta
182532	12	A23		28	10	

### Batteries for general use

Cat.No.	Volt	I.E.C.	Width	Height	L / diam.	Type	Fig.
182436	4.5	3R12	22	66	62		1
182460	6	4R25	67	105	67	spring	2
182484	9	6F22	17.5	48.5	26.5		3



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## BATTERIES AND ACCESSORIES

### Button cells



Cat.No.	Volt	Diam.	Height	Type	I.E.C.
182674	1.5	7.87	3.63	AG3	LR41
182696	1.5	11.6	3.10	AG10	LR54
182698	1.5	11.6	2.15	AG8	LR55
182702	1.5	7.9	5.40	AG5	LR48
182705	1.5	9.5	2.65	AG7	LR57
182707	1.5	7.9	2.65	AG2	LR59
182718	1.5	11.6	4.06	AG12	LR43
182740	1.5	11.6	5.36	AG13	LR44
182748	1.55	6.8	1.65	V321	SR65
182754	1.55	11.6	3.60	V344	SR42
182757	1.5	7.9	2.15	AG11	LR58
182760	1.5	6.8	2.15	AG1	LR60
182763	1.5	9.5	2.15	AG6	LR69
182766	1.5	6.8	2.60	AG4	LR66

### Lithium batteries



Cat.No.	Volt	Diam.	Length	Type	
182912	3	12	2	CR1220	
182920	3	16	1.6	CR1616	
182924	3	16	2	CR1620	
182934	3	20	1.6	CR2016	
182956	3	20	2.5	CR2025	
182978	3	20	3.2	CR2032	
182983	3	23	2.5	CR2325	
182988	3	24	3	CR2430	
182993	3	24	5	CR2450	
183000	3	16.9	34	CR123A	
183008	3	16.9	34	CR123A	with solder tags
183090	3.6	14	25	1/2 AA	
183104	3.6	14.5	50.5	AA	
183108	3.6	26	50	C	
183112	3.6	34	61	D	
183170	6	13	25.1	PX28L	
183180	6	34	45	2CR5	17 Height

## BATTERIES ACCESSORIES

### Rechargeable batteries

Cat.No.	Volt	Diam.	Length			Type
184013	1.2	12	30.2	<b>NiMH</b>	2/3N	500mAh
184017	1.2	10.5	44.5	<b>NiMH</b>	AAA	1100mAh
184027	1.2	14.5	50.5	<b>NiMH</b>	AA	2700mAh
184033	1.2	26	50	<b>NiMH</b>	C	2500mAh
184041	1.2	34	61	<b>NiMH</b>	D	2500mAh
184049	8.4	26.5x17.5x48		<b>NiMH</b>	Block	250mAh

### Chargers for rechargeable batteries



Cat.No.	Description
184102	For NiCd-and NiMH batteries (input 220 Volt AC) cat. no: 184016 ... 184049
184104	Fast charger for 4 NiMH AA/AAA (input 100-240 Volt AC) cat. no: 184027


# FLASHLIGHTS AND ACCESSORIES

## Flashlights for general use

	Cat.No.	Description	Fig.
	202080	Maglite -SOLITAIRE- (1 x LR03)	1
	202082	-MINI- Maglite (2 x R6)	2
	202084	Maglite -S 2D010- (2 x R20)	3
	202186	Rechargeable Maglite LED complete with charger input 12VDC or 100-240VAC	4
	202187	Rechargeable LED flashlight 5W complete with charger 110-230V and Lithium battery	5
	202188	Rechargeable LED flashlight with charger 110/240V and NiMH battery	6
	202110	Pencil type flashlight (2 x AAA)	7
	202114	Flashlight LED (2xR6) with magnet complete with batteries	8
	202118	Flashlight with magnet (2 x R20)	9
	202126	Plastic flashlight (3 x R20) with morse button	10
	202128	Rubber flashlight (2 x R14) with morse <b>Solas appr.</b>	11
	202142	Bright Star 2618 (2 x R20)	12
	202143	Plastic flashlight (2 x R20) with batteries	13
	202174	Flashlight for flat 4.5V battery cat.no. 182436	14
	202176	Rubber flashlight LED (2 x R20) IP44	15
	202183	Rechargeable LED flashlight input 110/220VAC	16
	202190	Headlight 3-LED with 3xAAA alk. batteries, low and high beam	17

# FLASHLIGHTS AND ACCESSORIES

## Explosion proof flashlights

	Cat.No.	Description	Zone	Fig.
 <b>1</b>	202120	Mitylite 1900 (2 x R03)	2	1
	202122	Super Sabrelite 2000B (3 x LR14)	1 & 2	2
	202124	Sabrelite 2010Y (3 x LR14) LED	0	2
	202202	Bright Star 2217, 2-cells	1	
	202214	Bright Star 2224, 3-cells	1	
 <b>2</b>	202216	Wolf TS-26 Atex, 2-cells	1 & 2	3
	202226	Stabex, 2-cells, Atex approved	2	
	202230	Headlight Atex LED, high and low white beam, 2 red and 1 green LED, without batteries (3 x AA)	1	4
	 <b>3</b>	 <b>4</b>		

## Handlamps

	Cat.No.	Description	Fig.
 <b>1</b>	202246	PVC handlamp, water resist., 4 x R20 (UM1)	1
	202248	PVC handlamp, LED, 4 x R20 (UM1) or 1 x 4R25	2
	202406	Rechargeable handlamp LED c/w charger 220V/12V, light time approx. 3.5H	3
 <b>2</b>	 <b>3</b>		

## Explosion proof handlamps

	Cat.No.	Description	Fig.
 <b>1</b>	202400	Reed switch for Beamgun	
	203248	Sealed beam 4.75V type 4546	1
	202278	Wolf type 4DC for 4 x R20S (regular flashlight battery)	2
	202296	Bright Star type 2206 (battery K182460)	3
	202300	Bright Star type 2206 LED Atex zone 1 (battery K182460)	3
 <b>2</b>	 <b>3</b>		

## FLASHLIGHTS AND ACCESSORIES

### Accessories for Wolfliite rechargeable handlamp H-251/MK2, H251A



Cat.No.	Description	Type
202491	Magnetic switch for Wolfliite	H-251/03
202492	Reed switch for Wolfliite	H-251/09
202493	Fuse for Wolfliite	H-251/10
202494	Fuse contact for Wolfliite	H-251/12
202496	Batterypack for Wolfliite	H-251/16E
202497	Glass disc for Wolfliite	H-251/19
202498	Reflector (only) for Wolfliite	H-251/A21
202500	Reflectorunit complete	H-251/30
202501	Lanyard with fittings	H-251/35
202502	Diode lead positive	H-251/38E
202503	Diode lead negative	H-251/39E
202546	Charger for Wolfliite input voltage 110/220VAC	LC-251/HV
203224	Crypton lamp 3.6V with P13.5 base for Wolfliite	



### Wolfliite rechargeable handlamp, explosion proof, ATEX approved



**H66**

Cat.No.	Description
202481	Wolfliite rechargeable explosion proof handlamp ATEX type H251ALED, with battery
202505	Batterypack for Wolfliite ATEX type H66
202546	Charger for Wolfliite input voltage 110/220VAC type LC-251/HV for 251/MK2 and 251ALED
203302	Halogen lamp 3.75V PX13.5s for Wolfliite type H251A ATEX

## FLASHLIGHTS AND ACCESSORIES

### Signalling lights and accessories

Cat.No.	Description
202618	Long range signalling lamp in wooden carrying case, complete with 12 or 24V lamp and red colour filter
202640	Carrying case with receptacle, plug and 12V maintenance free batteryset for signalling lamp
203311	Carrying case with receptacle, plug and 24V maintenance free batteryset for signalling lamp



### Spare-parts for Bright Star flashlights



1

Cat.No.	Description
202714	Lenses for BS flashlights 48 mm diam., acrylate
202722	Lenses for BS flashlights 'shatterproof'
202802	Holder for 2D flashlights

Fig.

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### Flashlight lamps for Maglite, Mitylite and Super Sabrelite



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Cat.No.	Description	Dimensions	Fig.
202901	LK3A001 for Maglite SOLITAIRE	3 x 14	1
202903	LM2A001E for MINI Maglite	3 x 15.5	2
203133	KPR-102 (PR2) Krypton for Maglite 2SD010	11 x 29	3
202973	Lampunit 1904 for Mitylite Xenon		4
202977	Lampunit 2004 for Super Sabrelite 2000B		5
202981	Model LR00001U, part nbr. 107-000-389 for rechargeable Maglite K202185	7 x 16/24	6

## FLASHLIGHTS AND ACCESSORIES

### Halogen flashlight lamps with PX13.5s base



Cat.No.	Volt	Watt	Diameter	Length
203294	2.8	1.4	8	28
203300	2.8	2.38	11	28
203302	3.75	2.8	9	31
203304	3.8	2.8	11	28
203312	4.8	2.4	11	28

### Lens-end lamps with E10 base



Cat.No.	Volt	Diameter	Length
202906	1.2	11	23
202912	2.5	11	23
202918	3.8	11	23

### Flashlight lamps with E10 base



Cat.No.	Volt	Diameter	Length
202950	2.5	11	23
202956	3.5	11	23
202962	4	11	28
202968	6	11	28

### Lens-end lamps with P13.5s base



Cat.No.	Volt	Diameter	Length
203108	2.5	11	28
203114	3.7	11	28

### Prefocus flashlight lamps with P13.5s base



Cat.No.	Volt	Type	Diameter	Length
203130	2.4	PR 2	11	28
203136	3.6	PR 3	11	28
203142	4.8	PR 13	11	28
203148	6	PR 12	11	28
203154	7.2	PR 18	11	28
203160	8.6	PR 20	11	28

## ANTENNAS AND ACCESSORIES

### Antennas



Cat.No.	Description
222011	Digital Antenne 110V FM/VHF/UHF Omni-directional
222013	Digital Antenne 230V FM/VHF/UHF Omni-directional

### Antenna amplifiers



Cat.No.	Description
222074	Amplifier input 220V AC for 2 TV's/radio's
222076	Amplifier input 220V AC for 4 TV's/radio's

### Coaxial cables



Cat.No.	Type	Imp./Ohm	Diameter	Colour
220108	RG 58	50	5	black
220120	RG 213	50	10	black
220126	RG 214	50	10.5	black
			<b>with double screen</b>	
220132	domestic	75	6	white
220144	RG 59	75	6	black

### Antenna plugs and accessories



1



2



3

Cat.No.	Description	Fig.
222200	Banana plug, male, white	1
222202	Banana plug, male, yellow	1
222204	Banana plug, male, red	1
222206	Banana plug, male, green	1
222208	Banana plug, male, blue	1
222210	Banana plug, male, black	1
222226	Banana plug, female, red	2
222238	Banana plug, female, black	2
222250	Domestic coaxial plug male	3
222254	Domestic coaxial plug female	4
222258	Domestic coaxial connector	5
222260	F-connector	



4

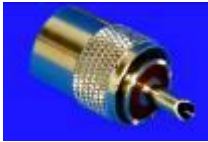


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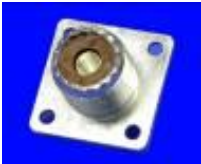





## ANTENNAS AND ACCESSORIES

### Antenna plugs and accessories (continuation)

	Cat.No.	Description	Type	Fig.
	222300	Coaxial plug	PL259	6
	222312	Coaxial line-connector	PL258	7
	222324	Coaxial ' T ' adaptor	M358	8
	222336	Coaxial square socket	SO239	9
	222348	Coaxial reducer	UG175	10
	222400	Receptacle for TV/Radio antenna, flush and surface mounting		11
	222440	Coaxial splitter with two outlets		12


	7			
	8			
	9			
	10			
	11			
	12			

### Antenna wire



Cat.No.	Description
220210	Antenna wire 6.3 mm diam.



### Antenna insulators and accessories

	Cat.No.	Description	Fig.
	222550	Galvanized bow shackle	13
	222580	Copper antenna clamp 10 mm <sup>2</sup>	14
	222586	Copper antenna clamp 25 mm <sup>2</sup>	14
	222592	Copper antenna clamp 38 mm <sup>2</sup>	14
	222610	Thimble 1" for antenna wire 4 mm	15
	222614	Thimble 1½" for antenna wire 6.3 mm	15

	14		
	15		

## ALARM EQUIPMENT

### Watertight bells, 150 mm gong diameter



Cat.No.	Volt	
242069	12 V/24V	DC *
242072	24 V/42V	DC *
242078	24V	AC *
242104	220/240V	AC *
242110	Watertight connection box IP44 for bells	

\* only watertight in combination with connection box for bells

### Watertight bells with pilot lamp, 200 mm gong diameter



Cat.No.	Volt
242131	24VDC
242133	110VAC
242135	220VAC

### Buzzers, surface mounting



Cat.No.	Volt		
242208	10 - 30VDC	92dB/1 mtr	IP43
242216	110 - 240VAC	106dB/1 mtr	IP65

### Buzzers, electronic, flush mounting



Cat.No.	Volt		
242250	10 - 30V AC/DC	90dB/1 mtr	IP30
242264	115 - 250VAC	95dB/1 mtr	IP33

### Buzzers Japanese with pilot light for outdoor use



1



2

Cat.No.	Volt	Fig.
242280	24VDC	1
242284	110VAC	2
242288	220VAC	1

## ALARM EQUIPMENT

### Hooters for indoor use



1

Cat.No.	Volt	IP	Sound Level	Fig.
242304	24VAC	IP54	110dB/1 mtr	1
242320	24VDC	IP33	95dB/1 mtr	2
242328	110VAC	IP54	105dB/1 mtr	1
242336	220VAC	IP33	95dB/1 mtr	2
242344	220VAC	IP54	105dB/1 mtr	1



2

### Hooters for outdoor use, 110 dB (A) 1 m, housing of ABS, IP55



Cat.No.	Volt
242406	24VDC
242414	110VAC
242422	220VAC

### Hooters with warning light, 92 dB, IP43



Cat.No.	Volt
242450	24VDC
242454	220VAC

### Motor driven sirens, metal, 100 dB at 3 meters



Cat.No.	Volt
242508	24V AC/DC
242520	110V AC/DC
242532	220V AC/DC

## ALARM EQUIPMENT

### Rotating beacons IP65



Cat.No.	Volt	Colour
242604	24VDC	amber
242608	24VDC	blue
242612	24VDC	red
242622	110VAC	amber
242626	110VAC	blue
242630	110VAC	red
242640	220VAC	amber
242644	220VAC	blue
242648	220VAC	red

### Globes for rotating beacons

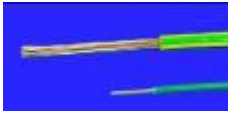


Cat.No.	Colour
242670	amber
242680	blue
242690	red

## CABLES

### PVC insulated wire, solid, single core

Cat.No.	mm2	Overall diameter	Colour	
260050	0.75	2	red	
260060	0.75	2	black	
260074	1	2	red	
260078	1	2	green/yellow	
260080	1	2	brown	
260082	1	2	blue	
260086	1	2	black	
260090	1.5	3	white	
260092	1.5	3	yellow	
260094	1.5	3	red	
260096	1.5	3	green	
260098	1.5	3	green/yellow	
260100	1.5	3	brown	
260102	1.5	3	blue	
260104	1.5	3	grey	
260106	1.5	3	black	
260116	2.5	3.5	green	
260118	2.5	3.5	green/yellow	
260120	2.5	3.5	brown	
260122	2.5	3.5	blue	
260126	2.5	3.5	black	
260140	4	4	black	7-strands
260156	6	5	black	7-strands




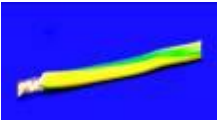

### PVC insulated flexible cable, single core

Cat.No.	mm2	Overall diameter	Colour	
260200	0.75	2	white	
260202	0.75	2	yellow	
260204	0.75	2	orange	
260206	0.75	2	red	
260208	0.75	2	green	
260210	0.75	2	green/yellow	
260212	0.75	2	brown	
260214	0.75	2	blue	
260216	0.75	2	grey	
260218	0.75	2	black	
260220	1	2	white	
260222	1	2	yellow	
260224	1	2	orange	
260226	1	2	red	
260228	1	2	green	
260230	1	2	green/yellow	
260232	1	2	brown	



## CABLES

### PVC insulated flexible cable, single core (continuation)

	Cat.No.	mm <sup>2</sup>	Overall diameter	Colour
	260234	1	2	blue
	260236	1	2	grey
	260238	1	2	black
	260240	1.5	3	white
	260242	1.5	3	yellow
	260244	1.5	3	orange
	260246	1.5	3	red
	260248	1.5	3	green
	260250	1.5	3	green/yellow
	260252	1.5	3	brown
	260254	1.5	3	blue
	260256	1.5	3	grey
	260258	1.5	3	black
	260260	1.5	7	sparkingplug cable
	260264	2.5	3.5	white
	260266	2.5	3.5	yellow
	260268	2.5	3.5	orange
	260270	2.5	3.5	red
	260272	2.5	3.5	green
	260274	2.5	3.5	green/yellow
	260276	2.5	3.5	brown
	260278	2.5	3.5	blue
	260280	2.5	3.5	grey
	260282	2.5	3.5	black
	260296	4	4.5	red
	260302	4	4.5	green/yellow
	260308	4	4.5	black
		260314	6	5
260320		6	5	green/yellow
260326		6	5	black
260330		10	6.5	red
260336		10	6.5	green/yellow
260342		10	6.5	black
260346		16	8	red
260352		16	8	green/yellow
260364		16	8	black
260368		25	10	green/yellow
260370	25	10	red	
260376	25	10	black	

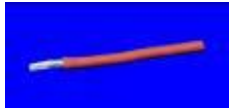
## CABLES

### Fibreglass/mineral silicon flexible cable, 350° C



Cat.No.	mm2	Overall diameter
260400	1.5	4.5
260402	2.5	4.5
260404	4.0	5.0

### Silicon insulated flexible cable, 180° C



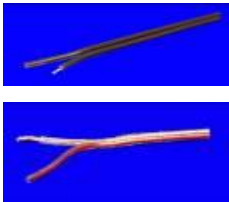
Cat.No.	mm2	Overall diameter
260450	1.5	2.5
260452	2.5	3.5
260454	4	4.0
260456	6	4.5
260458	10	7.0
260465	2 x 1.5	7.0
260470	3 x 1.5	7.5
260473	3 x 2.5	9.0

### Welding cable, neoprene insulated



Cat.No.	mm2	Overall diameter
260504	35	13
260506	50	15
260508	70	18
260510	95	20

### Parallel flexible cable, PVC



Cat.No.	mm2	Width	Height	Colour	
260008	2 x 0.35	4	2	grey	loudspeaker cable
260530	2 x 0.75	6	3	black	
260534	2 x 0.75	6	3	transparent	
260542	2 x 0.75	6	3	white	
260010	2 x 1.50	7	3	cl/red	loudspeaker cable

## CABLES

### PVC multicore flexible cable, colour black or white



Cat.No.	mm <sup>2</sup>	Overall diameter	Colour
260606	2 x 0.75	6.5	white
260608	2 x 0.75	6.5	black
260610	2 x 1	7	white
260612	2 x 1	7	black
260614	2 x 1.5	8	white
260616	2 x 1.5	8	black
260618	2 x 2.5	9	black
260620	2 x 2.5	9	white
260622	3 x 0.75	7	white
260624	3 x 0.75	7	black
260626	3 x 1	7.5	white
260628	3 x 1	7.5	black
260630	3 x 1.5	8.5	white
260632	3 x 1.5	8.5	black
260634	3 x 2.5	10.5	black
260636	3 x 2.5	10.5	white
260490	4 x 0.6	4.5	for telephone
260638	4 x 1.5	9.2	black
260640	4 x 2.5	11	black

### Rubber multicore flexible cable



Cat.No.	mm <sup>2</sup>	Overall diameter	
260702	2 x 0.75	6	
260704	2 x 1	7	
260706	2 x 1.5	8	
260708	2 x 2.5	10	
260710	2 x 2.5	13 x 5	flat type for illumination
260714	3 x 0.75	7.5	
260716	3 x 1	7.5	
260718	3 x 1.5	9	
260720	3 x 1.5	11	
260724	4 x 1.5	11	
260726	4 x 2.5	13	
260730	5 x 1.5	11	



## CABLES

### Neoprene (oil resistant) flexible cable



Cat.No.	mm <sup>2</sup>	Overall diameter
260814	2 x 1.5	9
260816	2 x 2.5	11.5
260820	3 x 1	9.5
260822	3 x 1.5	10.5
260824	3 x 2.5	12
260826	3 x 4	13.5
260828	3 x 6	15
260830	3 x 10	20
260832	3 x 16	25
260834	3 x 25	29
260836	3 x 35	31
260838	3 x 50	36
260842	4 x 1.5	11
260844	4 x 2.5	13
260846	4 x 4	15.5
260848	4 x 6	16
260850	4 x 10	26
260852	4 x 16	29
260854	4 x 25	33.5
260856	4 x 35	35
260858	4 x 50	40
260860	4 x 70	46
260862	4 x 95	51
260864	4 x 120	57
260868	5 x 1.5	12.5
260870	5 x 2.5	15
260871	5 x 4	17
260873	5 x 6	18
260875	5 x 10	26.5
260890	7 x 1.5	13

### Neoprene drum reeling cable NSHtou



Cat.No.	mm <sup>2</sup>	Overall diameter
260900	5 x 6	22
260910	5 x 10	26

### Flexible yarn covered cable



Cat.No.	mm <sup>2</sup>	Overall diameter
260014	3 x 0.75	6

## CABLES

PVC control cable, flexible, colour grey, -5° C / +80° C



Cat.No.	mm 2	Overall diameter
261010	3 x 1	7.1
261014	4 x 1	7.7
261018	5 x 1	8.6
261022	7 x 1	9.5
261026	12 x 1	12.4
261030	18 x 1	15
261034	25 x 1	18.4
261038	34 x 1	20.4
261042	48 x 1	24.2
261046	50 x 1	24.4
261050	3 x 1.5	7.6
261054	4 x 1.5	8.4
261058	5 x 1.5	9.4
261062	7 x 1.5	10.5
261066	12 x 1.5	14.1
261070	18 x 1.5	16.6
261074	20 x 1.5	17.3
261078	25 x 1.5	19.4
261082	34 x 1.5	20.6
261086	42 x 1.5	24.3
261090	50 x 1.5	26.1
261094	3 x 2.5	9.5
261098	4 x 2.5	10.6
261102	5 x 2.5	11.7
261106	7 x 2.5	12.7
261110	12 x 2.5	17.5
261114	18 x 2.5	20.1
261118	25 x 2.5	24.3

## CABLES

PVC control cable, flexible with copper screen and PVC  
outside cover, colour grey, -5° C / +80° C



Cat.No.	mm2	Overall diameter
261130	2 x 0.75	6.0
261134	4 x 0.75	7.9
261138	7 x 0.75	9.2
261142	18 x 0.75	14.0
261146	3 x 1	7.8
261150	4 x 1	8.1
261154	5 x 1	8.9
261158	7 x 1	9.4
261162	12 x 1	13.4
261166	18 x 1	15.5
261170	24 x 1	19.5
261174	40 x 1	22.9
261178	50 x 1	25.7
261182	61 x 1	27.3
261186	80 x 1	32.7
261190	2 x 1.5	7.6
261194	3 x 1.5	8.1
261198	4 x 1.5	9.3
261202	5 x 1.5	10.2
261206	7 x 1.5	11.0
261210	12 x 1.5	14.6
261214	18 x 1.5	17.0
261218	20 x 1.5	17.9
261222	24 x 1.5	20.7
261226	30 x 1.5	21.9
261230	40 x 1.5	24.3
261234	50 x 1.5	27.4
261238	61 x 1.5	29.1
261242	80 x 1.5	34.8
261246	3 x 2.5	10.6
261250	4 x 2.5	11.6
261254	5 x 2.5	13.2
261258	7 x 2.5	13.7
261262	10 x 2.5	18.5
261266	12 x 2.5	16.0

## CABLES

Silicon cable, flexible with galvanised steel wire outside cover

Test voltage 2000V, -50° C / +180° C



Cat.No.	mm2	Overall diameter
261304	3 x 1.5	9.8

Marine switchboard wire with PVC outside cover

Type VUV, rated voltage 600/1000V. Test voltage 2500, class CS85 (85°).

Approved by the major shipping classification bureaus



Cat.No.	mm2	Overall diameter
260018	1.5	3.8
260020	2.5	4.7
260023	4	6.0
260024	6	9.0

Marine cable with halogen free outer sheath

Rated voltage 600/1000V, flame retardant, 100° C. Main uses and features: rigid cables for installation in ships with special performances of non fire propagation and low emission of smoke and fumes.

Approved by the major shipping classification bureaus



Cat.No.	mm2	Overall diameter
260023	1 x 4	5.9
260025	1 x 6	6.5
261511	1 x 10	8.0
261513	1 x 16	9.5
262518	2 x 1.5	8.5
262519	2 x 2.5	9.5
262525	3 x 1.5	8.5
262527	3 x 2.5	10
262530	3 x 4	11.5
262533	3 x 6	12.5
262540	4 x 1.5	10
262541	4 x 2.5	11
262544	5 x 1.5	11
262556	7 x 1.5	13

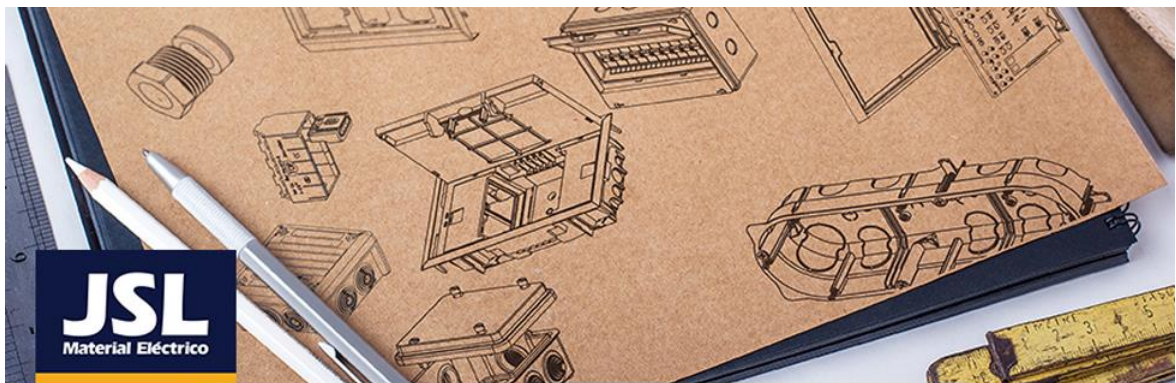
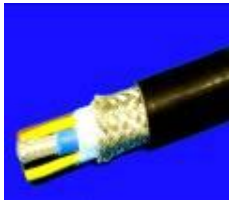
## CABLES

Marine cable with halogen free outer sheath

Rated voltage 600/1000V flame retardant, 100° C. Main uses and features: rigid copper screened cables for installation in ships with special fire propagation and low emission of smoke and fumes.

Approved by the major shipping classification bureaus

Cat.No.	mm2	Overall diameter
262711	2 x 1.5	9.5
262718	2 x 2.5	10
262720	3 x 1.5	9.5
262722	3 x 2.5	11
262724	3 x 4	12
262725	3 x 6	13.5
262726	3 x 10	16.5
262730	3 x 16	18.5
262734	3 x 25	22.5
262736	3 x 35	25
262778	3 x 70	33
262737	4 x 1.5	10.5
262738	4 x 2.5	12
262739	4 x 4	13
262740	4 x 6	15
262749	7 x 1.5	12.5
262753	10 x 1.5	16.5
262755	12 x 1.5	17
262760	16 x 1.5	18.5
262763	19 x 1.5	20



## CABLE GLANDS

### Cable glands, brass, nickel plated IP68

Cat.No.	Thread	For cable	Thread length
282104	R 3/8 "	5 – 10 mm	6 mm
282110	R 1/2 "	6 – 12 mm	7 mm
282120	R 3/4 "	11 – 17 mm	7 mm
282126	R 1	15 – 21 mm	7 mm

### Cable glands, brass, nickel plated IP54



Cat.No.	Thread	For cable	Thread length
282134	PG 7	4 – 6.5 mm	4 mm
282137	PG 9	6.5 – 9.5 mm	5 mm
282140	PG 11	10 – 12 mm	6 mm
282144	PG 13.5	12 – 14 mm	7 mm
282148	PG 16	14 – 16 mm	7 mm
282152	PG 21	17 – 21 mm	7 mm
282156	PG 29	22 – 28 mm	8 mm
282160	PG 36	29 – 35 mm	9 mm
282164	PG 42	36 – 41 mm	10 mm

### Lock nuts, brass, nickel plated



Cat.No.	Thread
282206	R 3/8 "
282208	R 1/2 "
282212	R 3/4 "
282214	R 1
282215	PG 7
282217	PG 9
282216	PG 11
282218	PG 13.5
282220	PG 16
282222	PG 21
282224	PG 29
282226	PG 36
282228	PG 42

### Cable glands, nylon IP65



Cat.No.	Thread	For cable	Thread length
282306	PG 7	3.5 – 6 mm	6 mm
282310	PG 9	4.5 – 7 mm	6 mm
282314	PG 11	6 – 9 mm	6 mm
282318	PG 13.5	9 – 12 mm	7 mm
282322	PG 16	11 – 14 mm	7 mm
282326	PG 21	14 – 18 mm	7 mm
282330	PG 29	18 – 25 mm	8 mm
282334	PG 36	25 – 32 mm	9 mm
282338	PG 42	30 – 38 mm	10 mm

## CABLE GLANDS

### Cable glands, nylon IP68



Cat.No.	Thread	For cable	Thread length
282340	PG 7	3.5 – 6 mm	6 mm
282341	PG 9	4.5 – 7 mm	6 mm
282342	PG 11	6 – 9 mm	6 mm
282343	PG 13.5	9 – 12 mm	7 mm
282344	PG 16	11 – 14 mm	7 mm
282345	PG 21	14 – 18 mm	7 mm
282346	PG 29	18 – 25 mm	8 mm
282347	PG 36	25 – 32 mm	9 mm
282348	PG 42	30 – 38 mm	10 mm

### Lock nuts, nylon



Cat.No.	Thread
282352	PG 7
282354	PG 9
282356	PG 11
282358	PG 13.5
282360	PG 16
282362	PG 21
282368	PG 29
282370	PG 36
282372	PG 42

### Plugs, brass, nickel plated



Cat.No.	Thread
282408	R 1/2"
282442	PG 16

### Cable glands, brass, nickel plated IP54



Cat.No.	Thread	For cable	Thread length
282701	M12 x 1.5	5 – 7 mm	5 mm
282705	M16 x 1.5	6 – 8 mm	5 mm
282714	M20 x 1.5	3 – 14 mm	6 mm
282718	M25 x 1.5	15 – 17 mm	7 mm
282723	M32 x 1.5	24 – 26 mm	8 mm
282728	M40 x 1.5	33 – 35 mm	8 mm
282733	M50 x 1.5	41 – 43 mm	9 mm
282738	M63 x 1.5	45 – 47 mm	10 mm
282750	M12 x 1.5	5 – 7 mm	10 mm
282755	M16 x 1.5	6 – 8 mm	10 mm
282764	M20 x 1.5	3 – 14 mm	10 mm
282769	M25 x 1.5	15 – 17 mm	12 mm
282774	M32 x 1.5	24 – 26 mm	12 mm
282779	M40 x 1.5	33 – 35 mm	14 mm
282784	M50 x 1.5	41 – 43 mm	14 mm
282789	M63 x 1.5	45 – 47 mm	14 mm

## CABLE GLANDS

### Lock nuts, brass, nickel plated



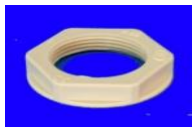
Cat.No.	Thread
282801	M12 x 1.5
282803	M16 x 1.5
282805	M20 x 1.5
282807	M25 x 1.5
282809	M32 x 1.5
282811	M40 x 1.5
282813	M50 x 1.5
282815	M63 x 1.5

### Cable Glands, thermoplastic, IP68



Cat.No.	Thread	For cable	Thread length
282902	M12 x 1.5	3.5 – 6.5 mm	8 mm
282904	M16 x 1.5	5 – 10 mm	8 mm
282906	M20 x 1.5	7 – 13 mm	9 mm
282908	M25 x 1.5	12 – 18 mm	11 mm
282910	M32 x 1.5	17 – 25 mm	11 mm
282912	M40 x 1.5	20 – 29 mm	18 mm
282914	M50 x 1.5	30 – 38 mm	18 mm
282916	M63 x 1.5	34 – 44 mm	18 mm

### Lock nuts, thermoplastic



Cat.No.	Thread
282925	M12 x 1.5
282926	M16 x 1.5
282927	M20 x 1.5
282929	M25 x 1.5
282931	M32 x 1.5
282933	M40 x 1.5
282935	M50 x 1.5
282937	M63 x 1.5



## CABLE MOUNTING MATERIAL

Cable clips, PVC with nail, in boxes of 100 pcs



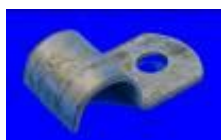
Cat.No.	For cable / mm	
302304	3.5	
302308	5	
302312	6	for flat cable
302316	7	
302320	9	
302324	11	
302352	2.5 – 4	
302356	5 – 7	
302360	8 – 10	
302364	11 – 15	
302368	16 – 19	
302372	23 – 29	

Cable saddles, PVC



Cat.No.	For cable / mm
302410	6 – 17
302414	15 – 29

Cable saddles, metal with 7 mm hole



Cat.No.	For cable / mm
302480	9 – 10
302484	11 – 12
302486	13 – 14
302496	Pressed steel saddle 5/8" for tube

Assembling strap, rolls of 10 meters



Cat.No.	Description	Width / mm
302560	Galvanized	12
302564	Galvanized	17
302572	Copper	12
302576	Copper	17
302584	PVC coated	12
302588	PVC coated	17

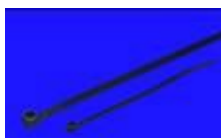
## CABLE MOUNTING MATERIAL

### Cable ties, selflocking, white



Cat.No.	Dimensions	Quantity
302620	100 x 2.5 mm	bag of 100 pcs
302628	200 x 2.5 mm	bag of 100 pcs
302636	140 x 3.6 mm	bag of 100 pcs
302644	200 x 3.6 mm	bag of 100 pcs
302652	160 x 4.8 mm	bag of 100 pcs
302660	200 x 4.8 mm	bag of 100 pcs
302668	300 x 4.8 mm	bag of 100 pcs
302676	368 x 4.8 mm	bag of 100 pcs
302684	368 x 7.6 mm	bag of 100 pcs
302687	360 x 4.8 mm green	per piece
302689	360 x 4.8 mm red	per piece
302692	775 x 9.0 mm	per piece

### Cable ties, selflocking, black



Cat.No.	Dimensions	Quantity
302720	100 x 2.5 mm	bag of 100 pcs
302728	200 x 2.5 mm	bag of 100 pcs
302736	140 x 3.6 mm	bag of 100 pcs
302744	200 x 3.6 mm	bag of 100 pcs
302752	160 x 4.8 mm	bag of 100 pcs
302760	200 x 4.8 mm	bag of 100 pcs
302768	300 x 4.8 mm	bag of 100 pcs
302776	368 x 4.8 mm	bag of 100 pcs
302784	368 x 7.6 mm	bag of 100 pcs
302792	775 x 9.0 mm	per piece

## CABLE MOUNTING MATERIAL

Cable ties, Thomas & Betts with steel locking barb, black, weather and UV resistant



Cat.No.	Dimensions	Type	Quantity (small)
302795	92 x 2.4 mm	TY523MXR	bag of 100 pcs
302796	203 x 2.4 mm	TY5232MXR	bag of 100 pcs
302797	104 x 3.6 mm	TY524MXR	bag of 100 pcs
302798	208 x 3.6 mm	TY5232MXR	bag of 100 pcs
302799	186 x 4.8 mm	TY525MXR	bag of 100 pcs
302800	295 x 4.8 mm	TY5253MXR	bag of 100 pcs
302801	360 x 4.8 mm	TY528MXR	bag of 100 pcs
302802	340 x 7.0 mm	TY527MXR	bag of 50 pcs
302803	771 x 7.6 mm	TY529MX	bag of 50 pcs
302804	300 x 13.2 mm	TYL300MX	bag of 50 pcs
302805	546 x 13.2 mm	TYL546MX	bag of 50 pcs

Cat.No.	Dimensions	Type	Quantity (large)
302806	92 x 2.4 mm	TYB23MX	bag of 1000 pcs
302807	203 x 2.4 mm	TY232MX	bag of 1000 pcs
302808	140 x 3.6 mm	TYB24MX	bag of 1000 pcs
302809	208 x 3.6 mm	TY242MX	bag of 1000 pcs
302810	186 x 4.8 mm	TYB25MX	bag of 1000 pcs
302811	295 x 4.8 mm	TY553MX	bag of 1000 pcs
302812	360 x 4.8 mm	TY28MX	bag of 1000 pcs
302813	340 x 7.0 mm	TY27MX	bag of 500 pcs
302814	771 x 7.6 mm	TY29MX	bag of 500 pcs

## CABLE MOUNTING MATERIAL

### Cable tie bases, self adhesive, per piece



Cat.No.	Description
302820	19 x 19 mm for cable ties 302620...302676 and 302720...302776
302840	28 x 28 mm for cable ties 302620... 302792

### Cable ties, selflocking (Colson), grey, per piece



Cat.No.	Dimensions
302909	123 x 9 mm
302910	185 x 9 mm
302914	262 x 9 mm
302918	357 x 9 mm
302926	Tool for same

### Cable ties, stainless steel, per piece



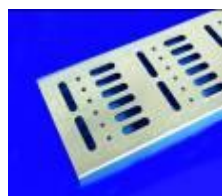
Cat.No.	Dimensions
302935	201 x 4.6 mm
302938	201 x 7.9 mm
302940	360 x 4.6 mm
302943	360 x 7.9 mm

### Cable trunking PVC with cover, colour white



Cat.No.	Height	Width	Length	
300100	10mm	15mm	2 mtrs	Self adhesive
300104	10mm	20mm	2 mtrs	Self adhesive
300108	10mm	30mm	2 mtrs	Self adhesive
300112	40mm	40mm	2 mtrs	
300116	40mm	60mm	2 mtrs	
300120	60mm	60mm	2 mtrs	

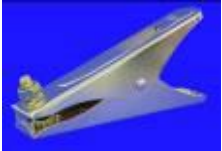
### Cable tray, galvanized



Cat.No.	Width	Length
300151	50 mm	3 mtrs
300153	75 mm	3 mtrs
300155	100 mm	3 mtrs
300157	150 mm	3 mtrs
300160	200 mm	3 mtrs

## CABLE CONNECTION MATERIAL AND ACCESSORIES

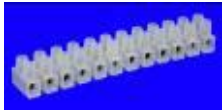
### Welding cable accessories



Cat.No.	Description
322104	Connector male and female 35/50 mm <sup>2</sup>
322106	Connector male and female 50/70 mm <sup>2</sup>
322108	Connector male and female 70/95 mm <sup>2</sup>
322124	Earthing clamp 400 amp.
322130	Electrode holder 300 amp., angle/straight type
322134	Electrode holder 400 amp., angle type



### Terminal connectors



Cat.No.	Description
322402	Nylon 12-pole max. 2.5 mm <sup>2</sup>
322404	Nylon 12-pole max. 4 mm <sup>2</sup>
322406	Nylon 12-pole max. 6 mm <sup>2</sup>
322408	Nylon 12-pole max. 10 mm <sup>2</sup>
322412	Nylon 12-pole max. 16 - 25 mm <sup>2</sup>
322422	Porcelain 1-pole max. 4 mm <sup>2</sup>
322424	Porcelain 2-pole max. 4 mm <sup>2</sup>
322426	Porcelain 3-pole max. 4 mm <sup>2</sup>

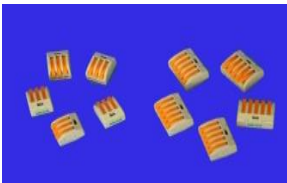
### Alligator clips, red or black



Cat.No.	Description
322480	Insulated, red
322490	Insulated, black
322510	Insulated for banana plug, red
322520	Insulated for banana plug, black



### Wire connectors



Cat.No.	Description
322610	Miniature type 2-5 mm <sup>2</sup> orange
322616	3 to 12 mm <sup>2</sup> green
322620	Wire plug-in connector 3 x 2.5 mm <sup>2</sup> in bag of 10 pcs
322624	Wire plug-in connector 5 x 2.5 mm <sup>2</sup> in bag of 10 pcs

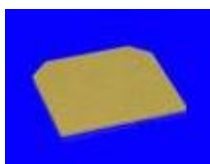
## CABLE CONNECTION MATERIAL AND ACCESSORIES

### Terminal blocks for TS 32 mounting



Cat.No.	Description			
322704	Terminal block	2.5 mm <sup>2</sup>	SAK 2.5	
322706	Terminal block	4 mm <sup>2</sup>	SAK 4	
322708	Terminal block	6 mm <sup>2</sup>	SAK 6	
322710	Terminal block	10 mm <sup>2</sup>	SAK 10	
322712	Terminal block	10 mm <sup>2</sup>	SAK-S3	with glassfuse holder for 32 x 6 mm 10A
322714	Terminal block	16 mm <sup>2</sup>	SAK 16	
322716	Terminal block	35 mm <sup>2</sup>	SAK 35	
322718	Terminal block	50/70 mm <sup>2</sup>	SAK 70	
322720	Terminal block	95/100 mm <sup>2</sup>	SAK 95	

### Accessories for terminal blocks



1



2

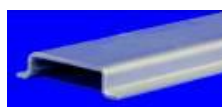


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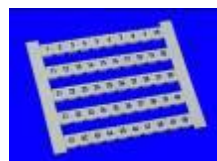
Cat.No.	Description	Fig.
322802	End barrier for SAK 2.5	1
322804	End barrier for SAK 4, SAK 6 and SAK 10	1
322806	End barrier for SAK S3	1
322808	End barrier for SAK 16	1
322810	End barrier for SAK 35	1
322812	End barrier for SAK 70	1
322814	End barrier for SAK 95	1
322850	End retainer for SAK 2.5, SAK4, SAK 6 and SAK 10	2
322852	End retainer for SAK 16 up to SAK 95	3
322854	End retainer for SAK 70 and SAK 95	3
320120	Mounting rail, width 32 mm, length 1 mtr, <b>TS 32</b>	4
320130	DIN rail (Omega rail) length 1 mtr, <b>TS 35</b>	5
322870	Markers 1 - 50 for SAK	6
322876	Markers 51 -100 for SAK	6



4



5



6

### Marking tapes



Cat.No.	Description
323750	Marking tape dispenser with 10 rolls tape (0/9)
323760	Assortment marking tape, 10 rolls (0/9)

## CABLE CONNECTION MATERIAL AND ACCESSORIES

### Code markers, sheets, adhesive



Cat.No.	Description
323500	0
323501	1
323502	2
323503	3
323504	4
323505	5
323506	6
323507	7
323508	8
323509	9
323525	0/9 set of 10 sheets
323200	1 till 33 (one sheet)
323301	A
323302	B
323303	C
323304	D
323305	E
323306	F
323307	G
323308	H
323309	I
323310	J
323311	K
323312	L
323313	M
323314	N
323315	O
323316	P
323317	Q
323318	R
323319	S
323320	T
323321	U
323322	V
323323	W
323324	X
323325	Y
323326	Z
323340	A/Z set of 10 sheets
323250	A till Z (one sheet)

## CABLE SHOES AND ACCESSORIES

### Solderless ring terminals, non-insulated DIN 46234



Cat.No.	Wire range	Bolt hole diam.
342220	1 – 2.5 mm <sup>2</sup>	4.5 mm
342222	4 - 6 mm <sup>2</sup>	5.5 mm
342224	10 mm <sup>2</sup>	6.5 mm
342226	16 mm <sup>2</sup>	7.5 mm
342228	25 mm <sup>2</sup>	11 mm
342230	35 mm <sup>2</sup>	11 mm
342232	50 mm <sup>2</sup>	11 mm
342234	70 mm <sup>2</sup>	11 mm
342236	95 mm <sup>2</sup>	13 mm
342238	120 mm <sup>2</sup>	13 mm

### Solderless ring terminals, insulated, in boxes







Cat.No.	Wire range	Bolt hole diam.	Colour	Quantity
342302	0.25 – 1.6 mm <sup>2</sup>	M 3	red	per 100 pcs
342304	0.25 – 1.6 mm <sup>2</sup>	M 4	red	per 100 pcs
342306	0.25 – 1.6 mm <sup>2</sup>	M 5	red	per 100 pcs
342308	0.25 – 1.6 mm <sup>2</sup>	M 6	red	per 100 pcs
342310	0.25 – 1.6 mm <sup>2</sup>	M 8	red	per 100 pcs
342312	0.25 – 1.6 mm <sup>2</sup>	M 10	red	per 100 pcs
342314	1 - 2.6 mm <sup>2</sup>	M 3	blue	per 100 pcs
342316	1 - 2.6 mm <sup>2</sup>	M 4	blue	per 100 pcs
342318	1 - 2.6 mm <sup>2</sup>	M 5	blue	per 100 pcs
342320	1 - 2.6 mm <sup>2</sup>	M 6	blue	per 100 pcs
342322	1 - 2.6 mm <sup>2</sup>	M 8	blue	per 100 pcs
342324	1 - 2.6 mm <sup>2</sup>	M 10	blue	per 100 pcs
342326	2.7 - 6.6 mm <sup>2</sup>	M 4	yellow	per 50 pcs
342328	2.7 - 6.6 mm <sup>2</sup>	M 5	yellow	per 50 pcs
342330	2.7 - 6.6 mm <sup>2</sup>	M 6	yellow	per 50 pcs
342332	2.7 - 6.6 mm <sup>2</sup>	M 8	yellow	per 50 pcs
342334	2.7 - 6.6 mm <sup>2</sup>	M 10	yellow	per 50 pcs
342336	2.7 - 6.6 mm <sup>2</sup>	M 13	yellow	per 50 pcs




## CABLE SHOES AND ACCESSORIES



### Solderless fork terminals, insulated, in boxes

	Cat.No.	Wire range	Bolt hole diam.	Colour	Quantity
	342406	0.25 – 1.6 mm <sup>2</sup>	M 4	red round	per 100 pcs
	342408	0.25 – 1.6 mm <sup>2</sup>	M 5	red round	per 100 pcs
	342410	0.25 – 1.6 mm <sup>2</sup>	M 3	red straight	per 100 pcs
	342412	0.25 – 1.6 mm <sup>2</sup>	M 4	red straight	per 100 pcs
	342416	1 - 2.6 mm <sup>2</sup>	M 4	blue round	per 100 pcs
	342418	1 - 2.6 mm <sup>2</sup>	M 5	blue round	per 100 pcs
	342420	1 - 2.6 mm <sup>2</sup>	M 6	blue round	per 100 pcs
	342422	1 - 2.6 mm <sup>2</sup>	M 3	blue straight	per 100 pcs
	342424	1 - 2.6 mm <sup>2</sup>	M 4	blue straight	per 100 pcs
	342426	1 - 2.6 mm <sup>2</sup>	M 5	blue straight	per 100 pcs
	342428	1 - 2.6 mm <sup>2</sup>	M 4	blue straight with hook	per 100 pcs
	342430	1 - 2.6 mm <sup>2</sup>	M 5	blue straight with hook	per 100 pcs
	342432	2.7 - 6.6 mm <sup>2</sup>	M 4	yellow round	per 50 pcs
	342434	2.7 - 6.6 mm <sup>2</sup>	M 5	yellow round	per 50 pcs
	342436	2.7 - 6.6 mm <sup>2</sup>	M 6	yellow round	per 50 pcs
	342438	2.7 - 6.6 mm <sup>2</sup>	M 8	yellow round	per 50 pcs


### Solderless hook terminals, insulated, in boxes

	Cat.No.	Wire range	Bolt hole diam.	Colour	Quantity
	342502	0.25 – 1.6 mm <sup>2</sup>	M 4	red	per 100 pcs
	342504	1 - 2.6 mm <sup>2</sup>	M 4	blue	per 100 pcs
	342506	2.7 - 6.6 mm <sup>2</sup>	M 5	yellow	per 50 pcs

### Solderless connectors, insulated, in boxes

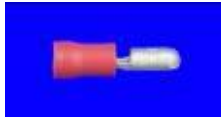
	Cat.No.	Wire range	Colour	Quantity
	342520	0.25 – 1.6 mm <sup>2</sup>	red / short	per 100 pcs
	342522	0.25 – 1.6 mm <sup>2</sup>	red / long	per 100 pcs
	342524	1 - 2.6 mm <sup>2</sup>	blue / short	per 100 pcs
	342526	1 - 2.6 mm <sup>2</sup>	blue / long	per 100 pcs
	342528	2.7 - 6.6 mm <sup>2</sup>	yellow / short	per 50 pcs
	342530	2.7 - 6.6 mm <sup>2</sup>	yellow / long	per 50 pcs

### Solderless pin terminals, insulated, in boxes

	Cat.No.	Wire range	Colour	Quantity
	342560	0.25 – 1.6 mm <sup>2</sup>	red	per 100 pcs
	342564	1 - 2.6 mm <sup>2</sup>	blue	per 100 pcs
	342568	2.7 - 6.6 mm <sup>2</sup>	yellow	per 50 pcs

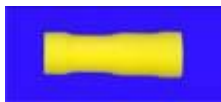
## CABLE SHOES AND ACCESSORIES

### Solderless terminal plugs, insulated, in boxes



Cat.No.	Wire range	Colour	Quantity
342602	0.25 – 1.6 mm <sup>2</sup>	red	per 100 pcs
342606	1 - 2.6 mm <sup>2</sup>	blue	per 100 pcs
342610	2.7 - 6.6 mm <sup>2</sup>	yellow	per 50 pcs

### Solderless terminal connector plugs, insulated, in boxes



Cat.No.	Wire range	Colour	Quantity
342652	0.25 – 1.6 mm <sup>2</sup>	red	per 100 pcs
342656	1 - 2.6 mm <sup>2</sup>	blue	per 100 pcs
342660	2.7 - 6.6 mm <sup>2</sup>	yellow	per 50 pcs

### Female snap-ons, Insulated, in boxes



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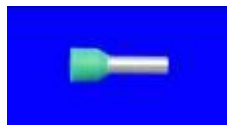
Cat.No.	Wire range	Colour		Quantity	Fig.
342702	0.25 – 1.6 mm <sup>2</sup>	red	/ small	per 100 pcs	2
342706	0.25 – 1.6 mm <sup>2</sup>	red	/ double	per 100 pcs	1
342710	1 - 2.6 mm <sup>2</sup>	blue	/ small	per 100 pcs	2
342714	1 - 2.6 mm <sup>2</sup>	blue	/ double	per 100 pcs	1
342718	1 - 2.6 mm <sup>2</sup>	blue	/ big	per 100 pcs	2
342722	2.7 - 6.6 mm <sup>2</sup>	yellow	/ small	per 50 pcs	2
342726	2.7 - 6.6 mm <sup>2</sup>	yellow	/ big	per 50 pcs	2
342728	2.7 - 6.6 mm <sup>2</sup>	yellow	/ double	per 50 pcs	1
342764	2.7 - 6.6 mm <sup>2</sup>	yellow	fully shrouded	per 50 pcs	3

### Terminal connector snap-ons, insulated, in boxes



Cat.No.	Wire range	Colour	Quantity
342752	0.25 – 1.6 mm <sup>2</sup>	red	per 100 pcs
342756	1 - 2.6 mm <sup>2</sup>	blue	per 100 pcs
342760	2.7 - 6.6 mm <sup>2</sup>	yellow	per 50 pcs




### Bootlace ferrules, in boxes of 100 pcs



Cat.No.	Wire range	Colour
342780	0.5 mm <sup>2</sup>	white
342781	0.75 mm <sup>2</sup>	blue
342782	1 mm <sup>2</sup>	red
342783	1.5 mm <sup>2</sup>	black
342784	2.5 mm <sup>2</sup>	grey
342785	4 mm <sup>2</sup>	orange
342786	6 mm <sup>2</sup>	green

## CABLE SHOES AND ACCESSORIES

Solderless ring tube terminals, non insulated with inspection hole, per piece

	Cat.No.	Wire range	Bolt hole
	342802	10 mm <sup>2</sup>	M 6
	342803	10 mm <sup>2</sup>	M 8
	342804	10 mm <sup>2</sup>	M 10
	342805	16 mm <sup>2</sup>	M 5
	342806	16 mm <sup>2</sup>	M 6
	342807	16 mm <sup>2</sup>	M 8
	342808	16 mm <sup>2</sup>	M 10
	342809	16 mm <sup>2</sup>	M 12
	342811	25 mm <sup>2</sup>	M 6
	342812	25 mm <sup>2</sup>	M 8
	342813	25 mm <sup>2</sup>	M 10
	342815	25 mm <sup>2</sup>	M 12
	342816	25 mm <sup>2</sup>	M 14
	342817	35 mm <sup>2</sup>	M 6
	342819	35 mm <sup>2</sup>	M 8
	342820	35 mm <sup>2</sup>	M 10
	342821	35 mm <sup>2</sup>	M 12
	342823	35 mm <sup>2</sup>	M 14
	342824	50 mm <sup>2</sup>	M 8
	342825	50 mm <sup>2</sup>	M 10
	342827	50 mm <sup>2</sup>	M 12
	342828	50 mm <sup>2</sup>	M 14
	342829	50 mm <sup>2</sup>	M 16
	342831	70 mm <sup>2</sup>	M 8
	342832	70 mm <sup>2</sup>	M 10
	342833	70 mm <sup>2</sup>	M 12
	342835	70 mm <sup>2</sup>	M 14
	342836	70 mm <sup>2</sup>	M 16
	342837	95 mm <sup>2</sup>	M 10
	342839	95 mm <sup>2</sup>	M 12
342840	95 mm <sup>2</sup>	M 14	
342841	95 mm <sup>2</sup>	M 16	
342842	120 mm <sup>2</sup>	M 10	
342843	120 mm <sup>2</sup>	M 12	
342844	120 mm <sup>2</sup>	M 14	
342845	120 mm <sup>2</sup>	M 16	

## CABLE SHOES AND ACCESSORIES

### Solderless connectors, per piece



Cat.No.	Wire range
342850	10 mm <sup>2</sup>
342854	16 mm <sup>2</sup>
342858	25 mm <sup>2</sup>
342862	35 mm <sup>2</sup>
342866	50 mm <sup>2</sup>
342870	70 mm <sup>2</sup>
342874	95 mm <sup>2</sup>
342878	120 mm <sup>2</sup>

### Crimping tool and accessories



1



2

Cat.No.	Description	Fig.
342908	Crimping tool for bootlace ferrules 0.5 - 6 mm <sup>2</sup> ratchet	1
342910	Crimping tool for cable shoes 0.75 - 6 mm <sup>2</sup>	2
342914	Crimping tool for cable shoes 0.75 - 6 mm <sup>2</sup> ratchet	
342920	Crimping tool for cable shoes 1.5 - 16 mm <sup>2</sup>	
342930	Crimping tool for cable shoes 10 - 120 mm <sup>2</sup>	3
342950	Box cont. assorted insulated terminals and crimping tool	4
342960	Box cont. large assortment insulated terminals and a heavy duty crimping tool	



3



4



## ELECTRICIANS TOOLS AND ACCESSORIES

### Temperature controlled soldering stations, 150-420°



Cat.No.	Description	Tip diam.
362308	Soldering station 110 Volt	5.3
362310	Soldering station 220 Volt	5.3
362315	Spare tip	1.2
362317	Spare tip	1.6
362319	Spare tip	3.2



### Soldering accessoires



Cat.No.	Description
362330	Tinsolder (bars) 40/60
362336	Resincore solder, diam. 1.5 mm rolls of 0.5 kg
362340	Resincore solder, diam. 3 mm rolls of 0.5 kg
362345	Soldering paste (Purine) cans of 50 gr
362352	Soldering liquid (S39) cans of 500 ml
362370	De-soldering gun
362378	Spare nozzles for cat.no. 362370
362384	De-solder wick (on cards)
362392	Holder with cleaning sponge for soldering irons



## ELECTRICIANS TOOLS AND ACCESSORIES

### Soldering irons



Cat.No.	AC/DC Volt	Watt
362112	110	15
362118	220	15
362124	110	30
362130	220	30
362136	110	60
362142	220	60
362148	220	80
362154	110	90
362160	110	100
362166	220	100
362186	110	150
362192	220	150
362198	110	200
362204	220	200
362210	110	300
362216	220	300
362222	110	400
362234	110	500
362240	220	500

### Soldering guns



Cat.No.	AC Volt only	Watt
362280	110	100
362290	220	100

### Cable knives and wire strippers



1



2

Cat.No.	Description	Fig.
323010	Cable knife	1
323020	Jokari cable knife	2
323030	Automatic wire stripper 0.5 - 6 mm <sup>2</sup>	3
365460	Wire stripper, insulated	4



3



4

## ELECTRICIANS TOOLS AND ACCESSORIES

### Screwdrivers, flat blade



Cat.No.	Description
365011	38 x 4 mm Stubby
365013	38 x 5 mm Stubby
365015	75 x 3 mm
365019	75 x 5 mm
365023	100 x 4 mm
365027	100 x 5 mm
365035	125 x 7 mm
365043	150 x 6 mm
365047	175 x 8 mm

### Screwdrivers, flat blade with gripping



Cat.No.	Description
365053	100 x 4.3 mm
365055	125 x 4.3 mm
365057	150 x 4.3 mm

### Screwdrivers, flat blade VDE 1000V



Cat.No.	Description
365075	75 x 2.5 mm
365079	100 x 4 mm
365085	125 x 5.5 mm
365087	150 x 6.5 mm
365091	175 x 8 mm
365100	Set electricians flat blade/Phillips screwdrivers



### Offset screwdrivers, flat blade



Cat.No.	Description
365060	110 x 5 mm
365062	120 x 6 mm
365064	140 x 8 mm

## ELECTRICIANS TOOLS AND ACCESSORIES

### Screwdrivers, Phillips



Cat.No.	Description
365109	38 mm x No. 1 Stubby
365111	38 mm x No. 2 Stubby
365113	60 mm x No. 0
365117	75 mm x No. 1
365118	100 mm x No. 2
365119	150 mm x No. 3
365123	200 mm x No. 4

### Screwdrivers, Phillips with gripping



Cat.No.	Description
365129	125 mm x No. 0
365131	175 mm x No. 2

### Screwdrivers, Phillips, VDE 1000 V



Cat.No.	Description
365137	60 mm x No. 0
365141	80 mm x No. 1
365145	100 mm x No. 2
365149	150 mm x No. 3
365153	200 mm x No. 4

Set electricians flat blade/Phillips screwdrivers



### Offset screwdrivers, Phillips

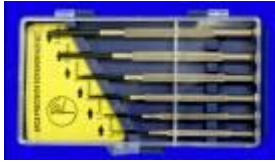


Cat.No.	Description
365110	100 mm x No. 1 and 2
365112	150 mm x No. 3 and 4



## ELECTRICIANS TOOLS AND ACCESSORIES

### Sets precision screwdrivers



Cat.No.  
365320

Description  
flat blade/Phillips

### Trimming knives



Cat.No.  
368359  
368361

Description  
fixed blade  
retractable blade



### Files



Cat.No.  
368370

Description  
files, 140 mm set of 10 pcs

### Tape rules



Cat.No.  
368385  
368388

Description  
2 mtrs  
8 mtrs

### Vernier calipers

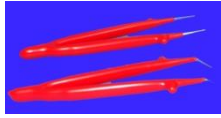


Cat.No.  
368393

Description  
150 mm

## ELECTRICIANS TOOLS AND ACCESSORIES

### Tweezers, insulated VDE 1000V



Cat.No.	Description
368351	straight
368354	curved

### Pliers



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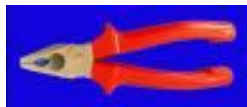
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Cat.No.	Description	Fig.
365402	Flat nose pliers 160 mm	1
365406	Round nose pliers 160 mm	2
365410	Long nose pliers straight 160 mm	3
365414	Long nose pliers bent 200 mm	4
365422	Diagonal cutting pliers 160 mm	5
365426	Diagonal cutting pliers 180 mm	5
365430	End cutters 160 mm	6
365434	Side-cutting pliers 160 mm	7
365438	Side-cutting pliers 180 mm	7
365442	Side-cutting pliers 200 mm	7
365446	Multigrip pliers 250 mm	8

## ELECTRICIANS TOOLS AND ACCESSORIES

### Pliers, insulated VDE 1000V



1

Cat.No.	Description	Fig.
365461	Flat nose pliers 160 mm	1
365465	Round nose pliers 160 mm	2
365469	Long nose pliers straight 160 mm	3
365471	Long nose pliers straight 200 mm	3
365473	Long nose pliers bent 200 mm	4
365477	Diagonal cutting pliers 160 mm	5
365485	Side-cutting pliers 160 mm	6
365489	Side-cutting pliers 200 mm	6
365493	Multigrip pliers 250 mm	7



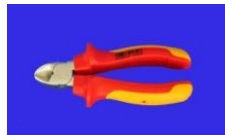
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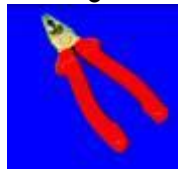
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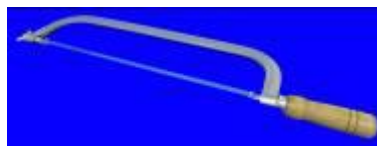


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### Hacksaws



Cat.No.	Description
365523	Junior hacksaw frame (150 mm)
365527	Spare blades for junior hacksaw (150 mm)
365532	Hacksaw frame adjustable (250mm – 300 mm)
365536	Spare blades for adjustable hacksaw (300 mm)



### Hole saws



Cat.No.	Description
368410	16 mm
368413	20 mm
368416	25 mm
368419	30 mm
368425	hole saw holder



## ELECTRICIANS TOOLS AND ACCESSORIES

### Hexagon allen screwdrivers with T-grip



Cat.No.	Description
365290	2.5 x 192.5 mm
365293	3 x 222.5 mm
365296	4 x 249 mm
365299	5 x 279 mm
365302	6 x 309 mm
365305	8 x 349 mm

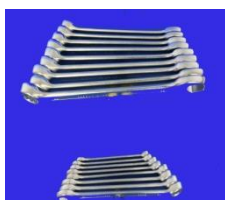
### Hexagon allen wrenches



Cat.No.	Description
365549	1.5 mm
365551	2 mm
365553	2.5 mm
365555	3 mm
365557	3.5 mm
365559	4 mm
365561	4.5 mm
365563	5 mm
365565	5.5 mm
365567	6 mm
365569	7 mm
365571	8 mm
365573	9 mm
365575	10 mm
365577	11 mm
365579	12 mm
365581	14 mm
365583	17 mm
365585	19 mm
365587	22 mm
365598	Set 1.5-10 mm

## ELECTRICIANS TOOLS AND ACCESSORIES

### Combination spanners



Cat.No.	Description
368451	6 mm
368453	7 mm
368455	8 mm
368456	9 mm
368457	10 mm
368458	11 mm
368461	12 mm
368463	13 mm
368465	14 mm
368467	15 mm
368469	16 mm
368471	17 mm
368473	18 mm
368475	19 mm
368477	20 mm
368479	21 mm
368481	22 mm
368483	23 mm
368485	24 mm
368487	25 mm
368498	Combination spanner set 6-22 mm, 17 pcs

### Adjustable wrenches



Cat.No.	Description
368509	6"
368513	8"
368517	10"

### Bearing pullers



Cat.No.	Description
368552	2-legs 200 x 150 mm
368554	3-legs 250 x 220 mm

## ELECTRICIANS TOOLS AND ACCESSORIES

### Twist drills, HSS, straight shank



Cat.No.	Description
368585	0.5 mm
368587	1 mm
368589	1.5 mm
368591	1.6 mm
368593	2 mm
368595	2.4 mm
368597	2.5 mm
368599	3 mm
368601	3.2 mm
368603	3.5 mm
368605	4 mm
368607	4.5 mm
368609	4.8 mm
368611	5 mm
368613	5.5 mm
368615	6 mm
368617	6.4 mm
368619	6.5 mm
368621	7 mm
368623	7.5 mm
368625	8 mm
368627	8.5 mm
368629	9 mm
368631	9.5 mm
368633	10 mm
368635	10.5 mm
368637	11 mm
368639	11.5 mm
368641	12 mm
368643	12.5 mm
368645	13 mm
368647	13.5 mm
368659	Set HSS twist drills 1.5 - 6.5 mm x 0.5 13 pcs
368665	Set HSS twist drills 1 - 10 mm x 0.5 19 pcs

## ELECTRICIANS TOOLS AND ACCESSORIES

### Set handtaps



Cat.No.	Description
368690	Tap and die set in box, M3-M12 HSS to DIN 352
365611	PG 11
365614	PG 13.5
365617	PG 16
365620	PG 21
365623	M 12 x 1.5
365630	M 16 x 1.5
365633	M 20 x 1.5
365636	M 25 x 1.5
365639	M 32 x 1.5
365642	M 40 x 1.5
365645	M 50 x 1.5
365648	M 63 x 1.5

### Electric tools



Cat.No.	Description		Volts
368006	Electric drill up	up to 10 mm	110
368011	Electric drill	up to 13 mm	110
368024	Cordless drill/driver 9.6V		110
368037	Bench grinder	150 mm	110
368059	Jig saw		110
368070	Angle grinder	178 mm	110
368090	Electric drill	up to 10 mm	220
368096	Electric drill	up to 13 mm	220
368105	Cordless drill/driver 12V	up to 10 mm	220
368114	Bench grinder	150 mm	220
368123	Jig saw		220
368135	Angle grinder	125 mm	220
368145	Power tool cord, neoprene 2 x 1.5 mm <sup>2</sup> with Schuko plug, length 5 mtr		



# ELECTRICIANS TOOLS AND ACCESSORIES

## Electric tools (continuation)



## Toolbox



Cat.No.	Description
368301	Leather toolbox

## Storage box



Cat.No.	Description
368337	Storage box with 18 compartments



## WIRING ACCESSORIES

### Cabin switches, surface mounting

Cat.No.	Description	Fig.
382110	Single pole on/off 10A	1
382116	Double-pole on/off 10A	1
382122	Two-way 10A	1
382128	Two-circuit 10A	2
382160	Double-pole on/off 5A (Japanese)	3
382166	Double-pole on/off 10A (Japanese)	3



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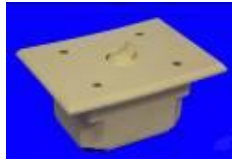
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### Cabin switches, flush mounting

Cat.No.	Description	Fig.
382210	Single-pole on/off 10A	1
382216	Double-pole on/off 10A	1
382242	Double-pole on/off 10A (Japanese)	2
382246	Double-pole on/off 10A double (Japanese)	3
382260	Cover plate for switches cat.no. 382210 and 382216	4



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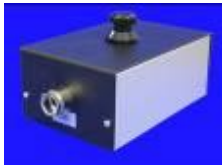
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### Dimmer switches

Cat.No.	Description	Fig.
382320	Surface mounting 110V AC/DC 60W (chartroom dimmer)	1
382328	Flush mounting 110V AC/DC 60W (chartroom dimmer)	2
382338	Surface mounting 220V AC/DC 60W (chartroom dimmer)	1
382346	Flush mounting 220V AC/DC 60W (chartroom dimmer)	2
382356	Cord dimmer 220V AC 150W max.	3
382368	Surface mounting 220V AC 200W max.	4
382376	Flush mounting 220V AC 400W max.	



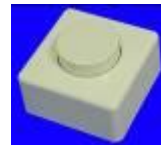
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## WIRING ACCESSORIES

Rotary switches (according to DIN standard) base mounting, 250V  
AC/DC, 16A



Cat.No.	Description
382452	Double-pole on/off pos. 0-1-0-1 type P16 A 1/2
382454	Three-pole on/off pos. 0-1-0-1 type P16 A 1/3

Rotary switches, base mounting 440VAC



Cat.No.	A.	Type	Pos.	Poles	Dim. x
382651	16	on/off	0-1-0-1	1	18
382655	25	on/off	0-1-0-1	1	18
382659	40	on/off	0-1-0-1	1	20
382663	63	on/off	0-1-0-1	1	30
382667	16	on/off	0-1-0-1	2	24
382671	25	on/off	0-1-0-1	2	24
382675	40	on/off	0-1-0-1	2	30
382679	63	on/off	0-1-0-1	2	40
382683	16	on/off	0-1-0-1	3	30
382687	25	on/off	0-1-0-1	3	30
382691	40	on/off	0-1-0-1	3	40
382695	63	on/off	0-1-0-1	3	50
382699	16	on/off	0-1-0-1	4	36
382703	25	on/off	0-1-0-1	4	36
382707	40	on/off	0-1-0-1	4	50
382711	63	on/off	0-1-0-1	4	60
382715	16	c/over	0-1-0-2	1	24
382719	25	c/over	0-1-0-2	1	24
382723	40	c/over	0-1-0-2	1	30
382727	63	c/over	0-1-0-2	1	40
382731	16	c/over	0-1-0-2	2	36
382735	25	c/over	0-1-0-2	2	36
382739	40	c/over	0-1-0-2	2	70
382743	63	c/over	0-1-0-2	2	70
382747	16	c/over	0-1-0-2	3	48
382751	25	c/over	0-1-0-2	3	48
382755	40	c/over	0-1-0-2	3	90
382759	63	c/over	0-1-0-2	3	90
382763	16	c/over	0-1-0-2	4	60
382767	40	c/over	0-1-0-2	4	110
382771	16	c/over	1-2-1-2	1	18
382775	25	c/over	1-2-1-2	1	18
382779	40	c/over	1-2-1-2	1	30
382783	63	c/over	1-2-1-2	1	30
382787	16	c/over	1-2-1-2	2	30

## WIRING ACCESSORIES

### Rotary switches, base mounting 440VAC (continuation)



Cat.No.	A.	Type	Pos.	Poles	Dim. x
382791	25	c/over	1-2-1-2	2	30
382795	40	c/over	1-2-1-2	2	70
382799	63	c/over	1-2-1-2	2	50
382803	16	c/over	1-2-1-2	3	42
382807	25	c/over	1-2-1-2	3	42
382811	40	c/over	1-2-1-2	3	90
382815	63	c/over	1-2-1-2	3	70
382819	16	c/over	1-2-1-2	4	54
382823	25	c/over	1-2-1-2	4	54
382827	40	c/over	1-2-1-2	4	110
382831	63	c/over	1-2-1-2	4	80

### Rotary switches, panel mounting 440VAC



Cat.No.	A.	Type	Pos.	Poles	Dim. x
382951	16	on/off	0-1-0-1	1	12
382955	25	on/off	0-1-0-1	1	12
382959	40	on/off	0-1-0-1	1	20
382963	63	on/off	0-1-0-1	1	30
382967	16	on/off	0-1-0-1	2	18
382971	25	on/off	0-1-0-1	2	18
382975	40	on/off	0-1-0-1	2	30
382979	63	on/off	0-1-0-1	2	40
382983	16	on/off	0-1-0-1	3	24
382987	25	on/off	0-1-0-1	3	24
382991	40	on/off	0-1-0-1	3	40
382995	63	on/off	0-1-0-1	3	50
382999	16	on/off	0-1-0-1	4	30
383003	25	on/off	0-1-0-1	4	30
383007	40	on/off	0-1-0-1	4	50
383011	63	on/off	0-1-0-1	4	60
383015	16	c/over	0-1-0-2	1	18
383019	25	c/over	0-1-0-2	1	18
383023	40	c/over	0-1-0-2	1	30
383027	63	c/over	0-1-0-2	1	40
383031	16	c/over	0-1-0-2	2	30
383035	25	c/over	0-1-0-2	2	30
383039	40	c/over	0-1-0-2	2	60
383043	63	c/over	0-1-0-2	2	70
383047	16	c/over	0-1-0-2	3	42
383051	25	c/over	0-1-0-2	3	42
383055	40	c/over	0-1-0-2	3	80
383059	60	c/over	0-1-0-2	3	90
383063	16	c/over	0-1-0-2	4	54
383067	40	c/over	0-1-0-2	4	54

## WIRING ACCESSORIES

### Rotary switches, panel mounting 440VAC (continuation)



Cat.No.	A.	Type	Pos.	Poles	Dim. x
383071	16	c/over	1-2-1-2	1	18
383075	25	c/over	1-2-1-2	1	18
383079	40	c/over	1-2-1-2	1	30
383083	60	c/over	1-2-1-2	1	30
383087	16	c/over	1-2-1-2	2	30
383091	25	c/over	1-2-1-2	2	30
383095	40	c/over	1-2-1-2	2	60
383099	60	c/over	1-2-1-2	2	50
383103	16	c/over	1-2-1-2	3	42
383107	25	c/over	1-2-1-2	3	42
383111	40	c/over	1-2-1-2	3	80
383115	60	c/over	1-2-1-2	3	70
383119	16	c/over	1-2-1-2	4	54
383123	25	c/over	1-2-1-2	4	54
383127	40	c/over	1-2-1-2	4	100
383131	60	c/over	1-2-1-2	4	80

### Rotary switches for cooking ranges (pos. 0-1-2-3)



1

Cat.No.	Description	Type	Fig.
383320	Base mounting, 16A 500VAC 380VDC	VBC 125J	
383334	Base mounting, 16A 440VAC 250VDC	BC 125J	
383348	Panel mounting, 16A 440VAC	RP 125J 90	
383378	Knobs for old type switch (K383370)	252 BM	
383388	Heater switch, 25A new type for obsolete (for Beha cooking range)	252 BM E43-24216-000	1
383390	Heater switch, 25/32A DP (for EGO cooking range)	E43-24232-000	1
383430	Base mounting, 40A 380VAC 250VDC	P 40 A 9/2	




### Cam on/off switches, 400V in polycarbonate enclosure IP65







Cat.No.	Description
383520	Three-pole 25A
383530	Three-pole 40A

## WIRING ACCESSORIES





### Miniature switches, panel mounting

	Cat.No.	Poles	Position	Ampere	Fig.
 <b>1</b>	383562	1	on/off	2	1
	383570	2	on/off	2	1
	383578	2	on/off	10	2
	383586	1	c/over	2	1
	383594	2	c/over	2	1
 <b>2</b>	383620	1	on/off	for Aqua Signal berth lights cat.no. 682210 and 682220	3
 <b>3</b>					

### Miniature pushbutton switches

	Cat.No.	Description	Fig.
 <b>1</b>	383710	Single-pole 2A	1
	383720	Double-pole, Japanese 6A	2
	383736	Bellpush for low-tension current	3
	383754	Cord pushbutton switch, single-pole	4
 <b>2</b>			
 <b>3</b>			
 <b>4</b>			

### Rotary and pushbutton switches, bore 22 mm diam. make Telemecanique

	Cat.No.	Description	Positions	Colour	Type	Fig.
 <b>1</b>	383780	Rotary switch 1NO, complete set	0-1	black	XB4BD21	1
	383781	Rotary switch 1NO+1NC, complete set	0-1	black	XB4BD25	1
	383782	Push button 1NO, complete set		green	XB4BA31	2
	383783	Rotary switch 2NO, complete set	1-0-2	black	XB4BD33	1
	383784	Push button 1NC, complete set		red	XB4BA42	3
	383785	Rotary switch 2NO, complete set, "spring return"	1-0-2	black	XB4BD53	1
	383787	Head selector switch	0-1	black	ZB4BD2	4
	383788	Head selector switch	1-0-2	black	ZB4BD3	4
	383789	Head selector switch, "spring return"	0-1	black	ZB4BD4	4
	383794	Head key switch	1-0-2		ZB4BG3	5
 <b>2</b>						
 <b>3</b>						
 <b>4</b>						
 <b>5</b>						

## WIRING ACCESSORIES

### Pushbutton switches with momentary contact, bore 22 mm diam, make Telemecanique



1



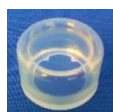
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Cat.No.	Description	Type	Fig.
384101	Mounting base 1NO	ZB4BZ101	1
384102	Mounting base 1NC	ZB4BZ102	1
384103	Mounting base 2NO	ZB4BZ103	1
384104	Mounting base 2NC	ZB4BZ104	1
384105	Mounting base 1NO + 1NC	ZB4BZ105	1
384111	Mounting base	ZB4-BZ009	2
384112	Contact block 1NO	ZBE-101	
384113	Contact block 1NC	ZBE-102	
384115	Contact block 2NO	ZBE-203	
384117	Contact block 2NC	ZBE-204	
384119	Contact block 1NO + 1NC	ZBE-205	3
384121	Button white	ZB4-BA1	4
384123	Button green	ZB4-BA3	4
384125	Button red	ZB4-BA4	4
384126	Button yellow	ZB4-BA5	4
384127	Button blue	ZB4-BA6	4
384129	Button grey	ZB4-BA8	4
384130	Button black	ZB4-BA2	4
384131	Transparent boot	ZBP0	5
384151	Adapter for hole diam. 30 mm	ZB2-BZ4	6

### Illuminated pushbutton switches with momentary contact, bore 22 mm diam, make Telemecanique



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Cat.No.	Description	Type	Fig.
384135	Mounting base, contact block 1 NO and lampholder Ba9s for direct connection <250V 2.4W	ZB4-BW061	1
384136	Mounting base, contact block 1 NC and lampholder Ba9s for direct connection <250V 2.4W	ZB4-BW062	1
384137	Mounting base, contact block 2 NC and lampholder Ba9s for direct connection <250V 2.4W	ZB4-BW063	1
384138	Mounting base, contact block 1NO + 1NC and lampholder Ba9s for direct connection <250V 2.4W	ZB4-BW065	1
384139	Mounting base, transformer 110/120V 6V with pilot lamp and contact block 1 NO	ZB4-BW031	2
384140	Mounting base, transformer 110/120V 6V with pilot lamp and contact block 1 NO + 1 NC	ZB4-BW035	2
384141	Mounting base, transformer 230/240V 6V with pilot lamp and contact block 1 NO	ZB4-BW041	2
384142	Mounting base, transformer 230/240V 6V with pilot lamp and contact block 1 NO + 1 NC	ZB4-BW045	2
384143	Mounting base, transformer 400V (380V) 6V with pilot lamp and contact block 1 NO	ZB4-BW051	2
384144	Mounting base, transformer 400V (380V) 6V with pilot lamp and contact block 1 NO + 1 NC	ZB4-BW055	2

## WIRING ACCESSORIES

Illuminated pushbutton switches with momentary contact, bore 22 mm diam,  
make Telemecanique (continuation)

	Cat.No.	Description	Type	Fig.
 <p>1</p>	384145	Button white	ZB4-BW11	1
	384146	Button green	ZB4-BW13	1
	384147	Button red	ZB4-BW14	1
	384148	Button yellow	ZB4-BW15	1
	384149	Button blue	ZB4-BW16	1
	384150	Button clear	ZB4-BW17	1
	384151	Adaptor for hole diam. 30 mm	ZB2-BZ4	2
	384152	Button green 1NO + 1NC, complete set, direct supply 250V max., BA9s, "spring return"	XB4-BW3365	3
	384153	Button red 1NO + 1NC, complete set, direct supply 250V max., BA9s, "spring return"	XB4-BW3465	4
	384131	Transparent boot	ZBP0	5



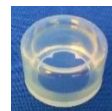
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Contact blocks for Telemecanique pushbuttons ZB..... (older serie)



Cat.No.	Description	Type
384520	Contact block 1NO	ZB2BE101
384521	Contact block 1NC	ZB2BE102

## WIRING ACCESSORIES

### Adaptor plugs

	Cat.No.	Description	Fig.
 <p>1</p>	385062	With two flat pins, American to European	1
	385072	With two round pins, European to American	2
	385077	With two round pins and earth rim/hole European/Belgian to British 3-pole 13A	3
	385090	With three flat pins, British 3-pole to European two round pins and rim	4
	385094	Travel adaptor 2-pole max. 3400W/250VAC	5
 <p>2</p>	 <p>3</p>	 <p>4</p>	 <p>5</p>

### Plugs, British



Cat.No.	Description
385120	2-pole and earth, fused, flat pins 13A

### Plugs, European



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Cat.No.	Description	Fig.
385204	2-pole euro plug	1
385206	2-pole	2
385212	2-pole and earth, 'Schuko' PVC	3
385218	2-pole and earth, 'Schuko' angle	4
385224	2-pole and earth, 'Schuko' rubber	5
385230	Multiway plug for 3 euro plugs	6
385234	Multiway plug for 2 euro plugs and 1 'Schuko' plug	7
385237	Multiway plug for 2 euro plugs and 1 'Schuko' plug	8

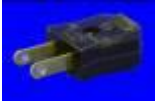






## WIRING ACCESSORIES

### Plugs, European (continuation)

	Cat.No.	Description	Fig.	
 <p style="text-align: center;"><b>9</b></p>	385243	Multiway plug, 2-pole and earth, 'Schuko'	9	
	385250	Multiway plug, 2-pole and earth, 'Schuko' rubber	10	
	385252	Plug-in switch 16A single 'Schuko'	11	
	385254	Plug-in switch 16A double 'Schuko'	12	
	385262	Belgian standard, 2-pole with rim and hole earth connection	13	
	385256	Timer switch 24H 230VAC 16A 'Schuko'	14	
 <p style="text-align: center;"><b>10</b></p>	 <p style="text-align: center;"><b>11</b></p>	 <p style="text-align: center;"><b>12</b></p>	 <p style="text-align: center;"><b>13</b></p>	 <p style="text-align: center;"><b>14</b></p>

### Plugs, Japanese/American

	Cat.No.	Description	Fig.
 <p style="text-align: center;"><b>1</b></p>	385290	2 flat pins	1
	385298	Multiway plug, 2 flat pins	2
	385306	3 flat pins	3
	385314	2 flat pins and U-pin, rubber	4
	385322	2 flat pins and U-pin	5
 <p style="text-align: center;"><b>2</b></p>	 <p style="text-align: center;"><b>3</b></p>	 <p style="text-align: center;"><b>4</b></p>	 <p style="text-align: center;"><b>5</b></p>

## WIRING ACCESSORIES

### Control stations (IP65)

Cat.No.	Description
384620	Control station with green and red button, 1NO and 1NC contact arrangement
384640	Control station with up, 0 and down button, 1NO, 1NC and 1NO contact arrangement
384660	Control station. emergency stop with red mushroom head button 40mm, stay put turn release, contact arrangement, 1NC + 1NO



### Pendant control stations (IP65)

Cat.No.	Description
384680	Control station with -up- and -down- button (1NO + 1NC per button) for control circuits
384683	Control station with -up- -down- -left- -right- -start- and -stop- button (1NO + 1NC per button) for control circuits
384687	Control station with -up and -down- button, 2.2kW-380V for power circuits, (2 x 2NO) 12A direct switching
384689	Control station with 3 black and 3 white buttons with -up- -down- -right- -left- -forward- -reverse- button, (5 x 2NO, 1 x 2NC) 12A direct switching



## WIRING ACCESSORIES

### Couplings, European

Cat.No.	Description	Fig.
385404	2-pole	1
385416	2-pole and earth, 'Schuko'	2
385420	2-pole and earth, 'Schuko' PVC	2
385430	2-pole and earth, 'Schuko' rubber	3
385542	appliance plug 2-pole and earth, acc. to CEE	4



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### Couplings, Japanese/American

Cat.No.	Description	Fig.
385460	For 2 flat pins	1
385480	For 2 flat pins and U-pin	2



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### Plugs and accessories for telephone

Cat.No.	Description	Fig.
385570	Plug 4-pole	1
385580	Receptacle 4-pole	2
385590	Junction box for low-tension current	3



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### Conduit tubing

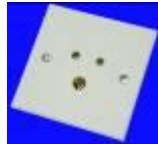


Cat.No.	Description
380110	PVC, 5/8" diam., 4 mtrs length

## WIRING ACCESSORIES

### Receptacles, British, for surface mounting

Cat.No.	Description	Fig.
386012	For 3 round pins, 5A surface/flush mounting	1
386024	With switch for 3 round pins 5A	2
386036	For 3 flat pins, 13A surface/flush mounting	3
386048	For 3 round pins, 15A	1
386060	With switch for 3 round pins, 15A	2



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### Receptacles, European, for surface mounting

Cat.No.	Description	Fig.
386110	2-pole	1
386124	2-pole with switch	2
386138	2-pole and earth, 'Schuko'	3
386166	2-pole and earth, 'Schuko' with switch	4
386180	German type for 3 flat pins	5



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### Receptacles, European, for flush mounting

Cat.No.	Description	Fig.
386210	2-pole	1
386224	2-pole and earth, 'Schuko'	2
386229	2-pole and earth, 'Schuko' two-way	3
382260	Cover plate for receptacles cat.no. 386210 and 386224	4



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## WIRING ACCESSORIES

### Multiway receptacles, European, for surface mounting

Cat.No.	Description
386306	Two-way 2-pole
386318	Two-way 2-pole and earth, 'Schuko'
386330	Four-way 2-pole and earth, 'Schuko'

Fig.  
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### Multiway receptacles, European, with cord (1.5 mtr) and plug

Cat.No.	Description
386410	Three-way 2-pole
386422	Four-way 2-pole
386564	Four-way 2-pole with 3 mtrs cable
386446	Three-way 2-pole and earth, 'Schuko'
386458	Four-way (square) 2-pole and earth, 'Schuko'
386470	Six-way with switch, 2-pole and earth, 'Schuko'



### Cable drums



Cat.No.	Description
387014	Cable drum 4 receptacles for 2 flat and U-pin with 20 mtrs rubber cable and plug 2 flat and U-pin (American/Japanese 110V)
387015	Cable drum 4 receptacles for 2 flat and U-pin with 30 mtrs rubber cable and plug 2 flat and U-pin (American/Japanese 110V)
387016	Cable drum 4 receptacles for 2 flat and U-pin with 50 mtrs rubber cable and plug 2 flat and U-pin (American/Japanese 110V)
387023	Cable drum 4 receptacles 2-pole and earth, 'Schuko' with 25 mtrs rubber cable and plug
387026	Cable drum 4 receptacles 2-pole and earth, 'Schuko' with 25 mtrs pvc cable and plug
387038	Cable drum 4 receptacles 2-pole and earth, 'Schuko' with 40 mtrs neoprene cable and plug
387034	Cable drum 4 receptacles 2-pole and earth, 'Schuko' with 50 mtrs rubber cable and plug
387046	Cable drum only
387050	Cable drum 4 receptacles 2-pole and earth, 'Schuko' (without cable)

## WIRING ACCESSORIES

### Receptacles, Japanese/American

Cat.No.	Description	Fig.
386540	For 2 flat pins, surface mounting	1
386558	For 3 flat pins, surface mounting	2
386576	For 2 flat pins and U-pin, surface mounting	3
386594	For 2 flat pins and U-pin, flush mounting	4



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### Multiway receptacles, Japanese/American

Cat. No.	Description	Fig.
386636	Two-way for 2 flat pins, surface mounting	1
386640	Three-way for 2 flat pins, surface mounting	2
386662	Two-way for 2 flat pins and U-pin, surface mounting	3
386670	Two-way for 2 flat pins and U-pin, flush mounting	4



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## LAMP HOLDERS

### Bayonet lampholders, B15

Cat.No.	Description	Fig.
402110	B15d, brass, with M10 inside thread	1
402114	B15d, brass, with 2 mounting lugs for K692198	2
402116	B15d, brass, with backplate	3
402124	B15d, brass, with bakelite backplate	4



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### Bayonet lampholders, B22

Cat.No.	Description	Fig.
402212	Brass, with M10 inside thread	1
402218	Bakelite, with M10 inside thread	
402236	Brass, with R3/8" inside thread	2
402248	Brass, with backplate	3
402254	Brass, with 2 mounting lugs	4
402260	Brass, with 3 mounting lugs	5
402266	Porcelain, back connection	6
402278	For handlamps	7
402284	Porcelain, FB22, Japanese	8



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### Mignon Edison screw lampholders

Cat.No.	Description	Fig.
402312	E10, bakelite, with backplate	1
402330	E12, bakelite, with backplate, Japanese	2
402350	E14, brass, with M10 inside thread	3
402356	E14, brass, with 2 mounting lugs	4
402362	E14, bakelite, with backplate	5



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# LAMP HOLDERS

## Edison screw lampholders, E26/E27

	Cat.No.	Description	Fig.
	402408	Brass, with M10 inside thread	1
	402412	Bakelite, with M10 inside thread	2
	402424	Porcelain, with R3/8" inside thread	3
<b>1</b>	402428	Brass, with backplate	4
	402432	Brass, with 2 mounting lugs for cat.no. 692206, 692209, 692210, 692214 and 692215	5
	402436	Bakelite, for flat illumination cable 13 mm	6
<b>2</b>	402440	Porcelain, back connection	7
	402454	For handlamps	8
	402470	Porcelain, type FE26. Japanese	9
	402476	Porcelain, with hole, without inside thread, type TE26, Japanese	10
	402510	Rubber weather proof lampholder with pigtail connection, American	11
<b>3</b>	402518	Bakelite, with 4 mounting holes, American	12
	402526	Bakelite, American	13

				
<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
				
<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>



## LAMPHOLDERS

### Mogul Edison screw lampholders, E39/E40

Cat.No.	Description	Fig.
402610	Brass with R3/8" inside thread	1
402620	Porcelain with R3/8" inside thread	2
402630	Porcelain with inside thread, Japanese	3
402640	Porcelain with 2 mountings lugs for Philips floodlight SNT001/003 and others	4
402650	Porcelain with brass backplate, Japanese	5



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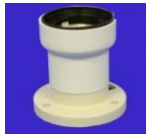


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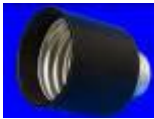
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### Medium prefocus lampholders



Cat.No.	Description
402710	Isolite P28s


### Adaptor lampholders



Cat.No.	Description
402760	E12-E10 for lamp E10
402768	E17-E14 for lamp E14
402788	E27-E40 for lamp E40
402798	E39-E27 for lamp E27

## LAMPHOLDERS

### Lampholders for halogenlamps

	Cat.No.	Description	Fig.
	402840	For GZ4, GX5.3, GX6.35 and GZ6.35 base, with cable	1
	402846	For GX9.5 and GY9.5 base, with cable	2
	402848	For GY16 base, with cable	3
	402850	For G38 base	4
	402860	R7s with connection cable	5
	402870	R7s for floodlight 500 W	6
	402874	R7s for floodlight 500 W for K695200	7
	402880	R7s, with connection cable and fastening clips for old type K695200	8
	402885	R7s, with connection cable and fastening clips for K695210	9



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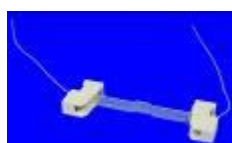
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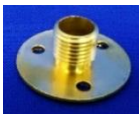


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### Accessories for lampholders and illumination cable

	Cat.No.	Description	Fig.
	402920	Fastening plate M10	1
	402940	Nipple M10, length 15 mm	2
	402950	Hexagonal nut M10	3
	402960	Nipple with collar M10	4
	402970	Nipple R3/8", length 20 mm	5
	402990	Rubber gasket for illumination lampholder K402436	6
	402992	European plug 2P for two core illumination cable 13 mm K260710, fits in 2P + E socket (Schuko)	7
	402994	End piece for two core illumination cable 13 mm K260710	8

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## PILOT LIGHTS

Pilot lights (Dialco), bore 7 mm, complete with lamp 28 Volt 40mA



Cat.No.	Colour
422112	red
422114	green
422116	blue
422118	yellow
422120	white

Pilot lights with round lens, bore 10 mm, complete with lamp 24 Volt 1W



Cat.No.	Colour
422160	clear
422162	green
422164	red
422166	blue
422168	yellow

Pilot lights with square lens, bore 10 mm, complete with lamp 24 Volt 1W



Cat.No.	Colour
422284	clear
422286	green
422288	red
422290	blue
422292	yellow

Pilot lights, bore 22 mm, with Ba9s lampholder, with or without transformer, make Telemecanique



Cat.No.	Description	Type
422450	Mounting base with lampholder for direct connection <250V 2,4W	ZB4-BV6
422451	Mounting base, lampholder, transformer 110/120V 6V with pilot lamp	ZB4-BV3
422452	Mounting base, lampholder, transformer 230/240V 6V with pilot lamp	ZB4-BV4
422453	Mounting base, lampholder, transformer 400 (380)V 6V with pilot lamp	ZB4-BV5
422454	Mounting base, lampholder, transformer 440/480V 6V with pilot lamp	ZB4-BV8
422455	Lens, white	ZB4-BV01
422456	Lens, green	ZB4-BV03
422457	Lens, red	ZB4-BV04
422458	Lens, yellow	ZB4-BV05
422459	Lens, blue	ZB4-BV06
422460	Lens, clear	ZB4-BV07
384151	Adapter for hole diam. 30 mm	ZB2-BZ4
104330	Pilotlamp 6 V 180 mA Ba9s 28x10 mm	



## PILOT LIGHTS

### LED, bore 22 mm, make Telemecanique



Cat.No.	Description	Colour	Type
384111	Mounting base		ZB4-BZ009
384151	Adaptor for hole diam. 30 mm		ZB2-BZ4
422470	Pilot light head, for LED	white	ZB4BV013
422472	Pilot light head, for LED	green	ZB4BV033
422474	Pilot light head, for LED	red	ZB4BV043
422476	Pilot light head, for LED	yellow	ZB4BV053
422478	Pilot light head, for LED	blue	ZB4BV063

### LED light blocks Telemecanique ZBV/ZAL/ZB4.. with screw clamp terminals



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Cat.No.	Description	Volt	Colour	Type	Fig
384160	Light block LED	24VAC/DC	white	ZBVB1	1
384162	Light block LED	24VAC/DC	green	ZBVB3	1
384164	Light block LED	24VAC/DC	red	ZBVB4	1
384166	Light block LED	24VAC/DC	yellow	ZBVB5	1
384168	Light block LED	24VAC/DC	blue	ZBVB6	1
384170	Light block LED	230VAC	white	ZBVM1	2
384172	Light block LED	230VAC	green	ZBVM3	2
384174	Light block LED	230VAC	red	ZBVM4	2
384176	Light block LED	230VAC	yellow	ZBVM5	2
384178	Light block LED	230VAC	blue	ZBVM6	2
384180	Light block LED	230VAC	white	ZALVM1	3
384182	Light block LED	230VAC	green	ZALVM3	3
384184	Light block LED	230VAC	red	ZALVM4	3
384186	Light block LED	230VAC	yellow	ZALVM5	3
384188	Light block LED	230VAC	blue	ZALVM6	3
384190	Pilot light LED	24VAC/DC	white	ZB4BVB1	4
384192	Pilot light LED	24VAC/DC	green	ZB4BVB3	4
384194	Pilot light LED	24VAC/DC	red	ZB4BVB4	4
384196	Pilot light LED	24VAC/DC	yellow	ZB4BVB5	4
384198	Pilot light LED	24VAC/DC	blue	ZB4BVB6	4
384200	Pilot light LED	230VAC	white	ZB4BVM1	5
384202	Pilot light LED	230VAC	green	ZB4BVM3	5
384204	Pilot light LED	230VAC	red	ZB4BVM4	5
384206	Pilot light LED	230VAC	yellow	ZB4BVM5	5
384208	Pilot light LED	230VAC	blue	ZB4BVM6	5

### LED light blocks Telemecanique ZBVM.. with spring clamp terminals



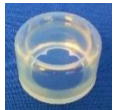
Cat.No.	Description	Volt	Colour	Type
384173	Light block LED	230VAC	green	ZBVM35
384175	Light block LED	230VAC	red	ZBVM45
384179	Light block LED	230VAC	blue	ZBVM65

## PILOT LIGHTS

### LED Pilot lights Telemecanique XB4BV..



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Cat.No.	Description	Volt	Colour	Type	Fig.
422463	Pilot light LED complete set	24VAC/DC	white	XB4BVB1	1
422464	Pilot light LED complete set	24VAC/DC	green	XB4BVB3	1
422465	Pilot light LED complete set	24VAC/DC	red	XB4BVB4	1
422466	Pilot light LED complete set	24VAC/DC	orange	XB4BVB5	1
422467	Pilot light LED complete set	24VAC/DC	blue	XB4BVB6	1
422480	Pilot light LED complete set	230VAC	white	XB4BVM1	1
422481	Pilot light LED complete set	230VAC	green	XB4BVM3	1
422482	Pilot light LED complete set	230VAC	red	XB4BVM4	1
422483	Pilot light LED complete set	230VAC	orange	XB4BVM5	1
422484	Pilot light LED complete set	230VAC	blue	XB4BVM6	1
422485	LED suppressor	230VAC		ZBZVM	2
384131	Transparent boot			ZBP0	3

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### Mounting bases Telemecanique for XB4



Cat.No.	Description	Type
384101	Mounting base, 1NO contact	ZB4BZ101
384102	Mounting base, 1NC contact	ZB4BZ102
384103	Mounting base, 2NO contacts	ZB4BZ103
384104	Mounting base, 2NC contacts	ZB4BZ104
384105	Mounting base, 1NC/1NO contact	ZB4BZ105

### Pilot lights, bore 25.3 mm, for indicator lamps 15 x 30/35 mm, E14 base



Cat.No.	Colour
422605	clear
422608	red
422616	green

## RELAYS AND CONTACTORS

### Relays, plug-in OMRON MY4IN(S) 4-pole c/over, 5A



Cat.No.	Description
442080	24VDC
442084	24VAC
442088	110VAC
442092	230VAC
442096	Socket PYF14A-N for MY4



### Relays, plug-in, with 8 pins (2-pole c/over), 10A



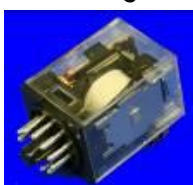
Cat.No.	Coil voltage
442100	6VDC
442104	6VAC 50/60Hz
442108	12VDC
442112	12 VAC 50/60Hz
442116	24VDC
442120	24VAC 50/60Hz
442124	110VDC
442128	110VAC 50/60Hz
442132	220VDC
442136	220VAC 50/60Hz

### Relays, plug-in, with 11 pins (3-pole c/over), 10A



Cat.No.	Coil voltage
442200	6VDC
442204	6VAC 50/60Hz
442208	12VDC
442212	12VAC 50/60Hz
442216	24VDC
442220	24VAC 50/60Hz
442224	110 VAC 50/60Hz
442228	220 VDC
442232	220 VAC 50/60Hz

### Relays, plug-in, with 8 pins (2-pole c/over), for series connection with navigation lamps



Cat.No.	For lamp
442260	24V 40W DC
442272	110V 60W AC
442284	220V 65W AC

## RELAYS AND CONTACTORS

### Sockets for plug-in relays



Cat.No.	Description
442410	For 8-pins relays
442420	For 11-pins relays

### Relays, plug-in, make MTI



Cat.No.	Description
442460	Type EP 371, 3-pole change-over 7A, coil voltage 24VDC

### Contactors, 3-pole, with 1NO and 1NC auxiliary contact, (AC3), make Telemecanique



Cat.No.	Volt	Hz	Ampere	Type
443098	24	50/60	9	LC1-D09B7
443102	110	50/60	9	LC1-D09F7
443106	230	50/60	9	LC1-D09P7
443110	400	50/60	9	LC1-D09V7
443114	440	50/60	9	LC1-D09R7
443208	24	50/60	12	LC1-D12B7
443212	110	50/60	12	LC1-D12F7
443216	230	50/60	12	LC1-D12P7
443220	400	50/60	12	LC1-D12V7
443224	440	50/60	12	LC1-D12R7
443268	24	50/60	18	LC1-D18B7
443272	110	50/60	18	LC1-D18F7
443276	230	50/60	18	LC1-D18P7
443280	400	50/60	18	LC1-D18V7
443284	440	50/60	18	LC1-D18R7
443298	24	50/60	25	LC1-D25B7
443322	110	50/60	25	LC1-D25F7
443330	230	50/60	25	LC1-D25P7
443334	400	50/60	25	LC1-D25V7
443338	440	50/60	25	LC1-D25R7

## RELAYS AND CONTACTORS

Contactors, 3-pole, with 1NO and 1NC auxiliary contact (AC3),  
make Telemecanique



Cat.No.	Volt	Hz	Ampere	Type
443378	24	DC	32	LC1-D32BD
443382	24	50/60	32	LC1-D32B7
443386	110	50/60	32	LC1-D32F7
443390	230	50/60	32	LC1-D32P7
443394	400	50/60	32	LC1-D32V7
443398	440	50/60	32	LC1-D32R7
443406	24	50/60	38	LC1-D38B7
443410	230	50/60	38	LC1-D38P7
443414	400	50/60	38	LC1-D38V7
443447	110	50/60	40	LC1-D40AF7
443451	230	50/60	40	LC1-D40AP7
443455	400	50/60	40	LC1-D40AV7
443459	440	50/60	40	LC1-D40AR7
443507	110	50/60	50	LC1-D50AF7
443511	230	50/60	50	LC1-D50AP7
443515	400	50/60	50	LC1-D50AV7
443519	440	50/60	50	LC1-D50AR7
443567	110	50/60	65	LC1-D65AF7
443571	230	50/60	65	LC1-D65AP7
443575	400	50/60	65	LC1-D65AV7
443579	440	50/60	65	LC1-D65AR7
443580	110	50/60	80	LC1-D80F7
443585	230	50/60	80	LC1-D80P7
443587	400	50/60	80	LC1-D80V7
443590	440	50/60	80	LC1-D80R7
443599	110	50/60	95	LC1-D95F7
443602	230	50/60	95	LC1-D95P7
443604	400	50/60	95	LC1-D95V7
443608	440	50/60	95	LC1-D95R7



## RELAYS AND CONTACTORS

Auxiliary relays, with 3NO and 2NC contacts, make Telemecanique



Cat.No.	Volt	Hz	Type
443704	24	DC	CAD-32BD
443708	24	50/60	CAD-32B7
443712	110	50/60	CAD-32F7
443716	230	50/60	CAD-32P7
443720	400	50/60	CAD-32V7
443724	440	50/60	CAD-32R7

Auxiliary relays, with 5NO contacts, make Telemecanique



Cat.No.	Volt	Hz	Type
443832	110	50/60	CAD-50F7
443836	230	50/60	CAD-50P7
443840	400	50/60	CAD-50V7
443844	440	50/60	CAD-50R7

Auxiliary relays, with 4 change over contacts, make Telemecanique



Cat.No.	Volt	Hz	Type
443850	24	DC	RXM4AB1BD without status LED
443854	24	DC	RXM4AB2BD with status LED

Coils for contactors LC1 D09/38 and auxiliary relays CAD, make Telemecanique



Cat.No.	Volt	Hz	Type
444009	24	50/60	LXD-1B7
444014	110	50/60	LXD-1F7
444018	230	50/60	LXD-1P7
444022	400	50/60	LXD-1V7
444026	440	50/60	LXD-1R7

## RELAYS AND CONTACTORS

### Coils for contactors LC1 D40/95, make Telemecanique



Cat.No.	Volt	Hz	Type
444134	110	50/60	LX1-D6F7 (old serie)
444135	110	50/60	LXD-3F7
444138	230	50/60	LX1-D6P7 (old serie)
444139	230	50/60	LXD-3P7
444142	400	50/60	LX1-D6V7 (old serie)
444143	400	50/60	LXD-3V7
444146	440	50/60	LX1-D6R7 (old serie)
444147	440	50/60	LXD-3R7

### Thermal overload relays for contactors, make Telemecanique



Cat.No.	Current setting range		Type	
444304	0,63	1 A	LRD-05	LC-1D09/38
444305	1	1.7 A	LRD-06	LC-1D09/38
444314	1,6	2.5 A	LRD-07	LC-1D09/38
444318	2,5	4 A	LRD-08	LC-1D09/38
444322	4	6 A	LRD-10	LC-1D09/38
444326	5,5	8 A	LRD-12	LC-1D09/38
444330	7	10 A	LRD-14	LC-1D09/38
444334	9	13 A	LRD-16	LC-1D12/38
444338	12	18 A	LRD-21	LC-1D18/38
444340	12	18 A	LRD-318	LC-1D40/65
444344	16	24 A	LRD-22	LC-1D25/38
444348	23	32 A	LRD-32	LC-1D25/38
444396	23	32 A	LRD-3353	LC-1D40/95
444397	23	32 A	LRD-332	LC-1D40/65
444400	30	40 A	LRD-3355	LC-1D40/95
444401	30	40 A	LRD-340	LC-1D40/65
444405	37	50 A	LRD-350	LC-1D40/65
444409	48	65 A	LRD-365	LC-1D50/65
444410	37	50 A	LRD-3357	LC-1D80/95
444412	55	70 A	LRD-3361	LC-1D80/95
444415	63	80 A	LRD-3363	LC-1D80/95
444418	80	104 A	LRD-3365	LC-1D80/95

### Support for separate mounting of thermal relays, make Telemecanique



Cat.No.	Description
444507	Type LAD-7B106 for thermal relay LRD-01...35 and LR3-D01 ...D35, cat.no. 444304...444348
444510	Type LA7 D3064 for thermal relay LRD-3353...LRD-3365, cat.no. 444396...444418
444514	Terminal Block LAD96560 for LRD340/350/365 Needed to connect with old type contactor or other maker contactor

## RELAYS AND CONTACTORS

Auxiliary contact blocks for contactors LC-1.. and auxiliary relays CAD...  
make Telemecanique



Cat.No.	Composition	Type
444572	1NO	LAD-N10
444576	1NC	LAD-N01
444580	1NO and NC	LAD-N11
444582	2NC	LAD-N02
444583	2NO	LAD-N20
444584	2NO and 2NC	LAD-N22
444586	1NO and 3NC	LAD-N13
444587	3NO and 1NC	LAD-N31
444588	4NO	LAD-N40
444592	4NC	LAD-N04

Time delay contact blocks with 1NO and 1NC contact for contactors LC1...  
and auxiliary relays CAD..., make Telemecanique



Cat.No.	Description	Type
444647	1 to 30s on energisation	LADS-2
444651	0.1 to 30s on energization	LADT-2
444657	10 to 180s on energization	LADT-4
444661	0.1 to 3s on energization	LADR-0
444663	0.1 to 30s on de-energisation	LADR-2
444669	10 to 180s on de-energisation	LADR-4

Thermistor relay, make Telemecanique



Cat.No.	Description
444680	Thermistor protection unit LT3SE00M 230VAC

Phase control relay, make Telemecanique



Cat.No.	Description
444690	Phase control relay RM22TG20

## RELAYS AND CONTACTORS

### Time relays, multifunctional



1



2

Cat.No.	Function	Fig.
444920	Electronic time relay with single pole change over contact (rating 1500VA), multifunctional, 0.05 sec..100 Hrs 24VAC/DC and 110-240VAC	1
444930	Electronic plug-in time relay with double pole c/o contacts max. 5A at 240VAC 11-pins 0.05 sec...5 days, 24...48VAC / 12...48VDC, type H3CR-A	2
444934	Electronic plug-in time relay with double pole c/o contacts max. 5A at 240VAC 8-pins 0.05 sec..300 Hrs 100-240VAC, type H3CR-A8	2
444937	Electronic plug-in time relay with double pole c/o contacts max. 5A at 240VAC 8-pins 0.05 sec...5 days 100-240VAC, type H3CR-A8E	2
444944	Electronic plug-in time relay with double pole c/o contacts max. 5A at 240VAC 11-pins 0.05 sec...5 days 100-240VAC, type H3CR-A	2

## RELAYS AND CONTACTORS

Motor start/protection switches, inserts with thermal/magnetic protection type PKZM, rotating button



Cat.No.	Current setting range		A
	0.10	0.16	
446004	0.10	0.16	A
446007	0.16	0.24	A
446010	0.24	0.40	A
446013	0.40	0.63	A
446016	0.63	1.0	A
446019	1.0	1.6	A
446022	1.6	2.5	A
446025	2.5	4.0	A
446028	4.0	6.3	A
446031	6.3	10	A
446032	8	12	A
446034	10	16	A
446037	16	20	A
446040	20	25	A
446042	25	32	A
446050	Enclosure IP55 CI-PKZ-GM, for above		

Motor start/protection switches, inserts with thermal/magnetic protection type GV2ME, push button

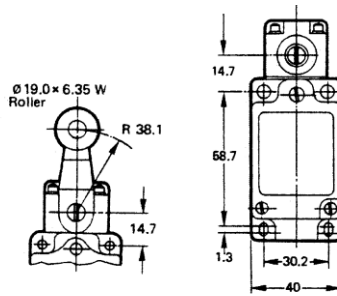


Cat.No.	Current setting range		A	
	0.10	0.16		
446060	0.10	0.16	A	
446063	0.16	0.25	A	
446066	0.25	0.40	A	
446069	0.40	0.63	A	
446072	0.63	1.0	A	
446075	1.0	1.6	A	
446078	1.6	2.5	A	
446081	2.5	4.0	A	
446084	4	6.3	A	
446087	6	10	A	
446090	9	15	A	
446093	13	18	A	
446096	17	23	A	
446099	20	25	A	
446102	24	32	A	
446104	Aux. contact	1NO/1NC	GVAE11	front side mounting
446105	Aux. contact	2NO	GVAE20	front side mounting
446106	Aux. contact	1NO/1NC	GVAN11	left side mounting
446108	Enclosure IP55 GV2MC02, for above			

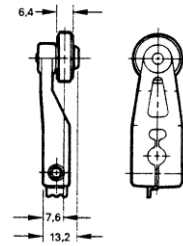
# LIMIT SWITCHES AND MICRO SWITCHES

## Limit switches and accessories

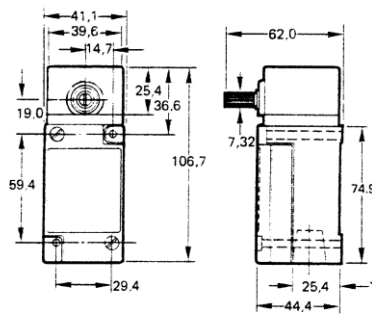
Cat.No.	Description	Fig.
462414	Limit switch with 1NO/NC contact 10A with PG13.5 entry, type 1LS1-4PG	1
462426	Limit switch with 1NO/NC contact 10A with M20 entry, type LSA1A	2
462433	Limit switch for Davits 3NO/3NC 25A IP67	3
462470	Roller lever, steel radius 38 mm, type LSZ51A	4
462478	Roller lever, nylon, radius 38 mm, type LSZ51B	4
462486	Roller lever, steel radius 40-90 mm, type LSZ52D	5
282714	Cable gland M20 for above limit switches	



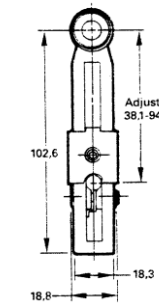
1



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## LIMIT SWITCHES AND MICRO SWITCHES

### Limit switches, make Siemens

Cat.No.	Description	Type	Fig.
462505	Limit switch with roller plunger, 1NO/1NC contact 6A Housing 0.5x78 mm with M20 entry, IP66/IP67	3SE5112-OCD02	1
462507	Limit switch with roller lever, 1NO/1NC contact 6 A Housing 40.5x78 mm with M20 entry, IP66/IP67	3SE5112-OCE01	2
462510	Limit switch with roller crank, 1NO/1NC contact 6A Housing 40.5x78 mm with M20 entry, IP66/IP67	3SE5112-OCH01	3
462516	Limit switch with adj.roller crank, 1NO/1NC contact 6A Housing 40.5x78 mm with M20 entry, IP66/IP67	3SE5112-OCH50	4
462525	Limit switch with roller lever, 1NO/1NC contact 6A. Housing 40.5x56 mm with M20 entry, IP66/IP67	3SE5122-OCE01	5
462536	Limit switch with adj.roller lever, 1NO/1NC contact 6A. Housing 56x78 mm with M20 entry, IP66/IP67	3SE5122-OCH50	6



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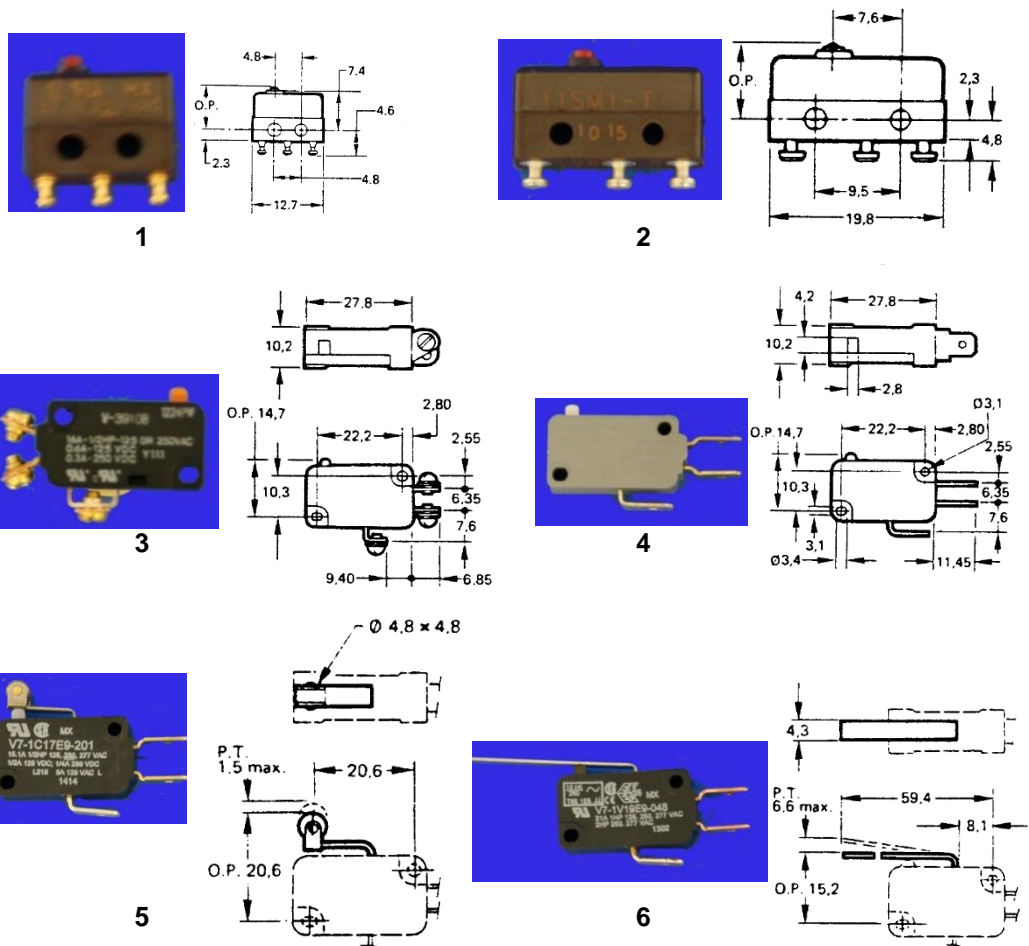


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# LIMIT SWITCHES AND MICRO SWITCHES

## Microswitches, with single pole change over contact

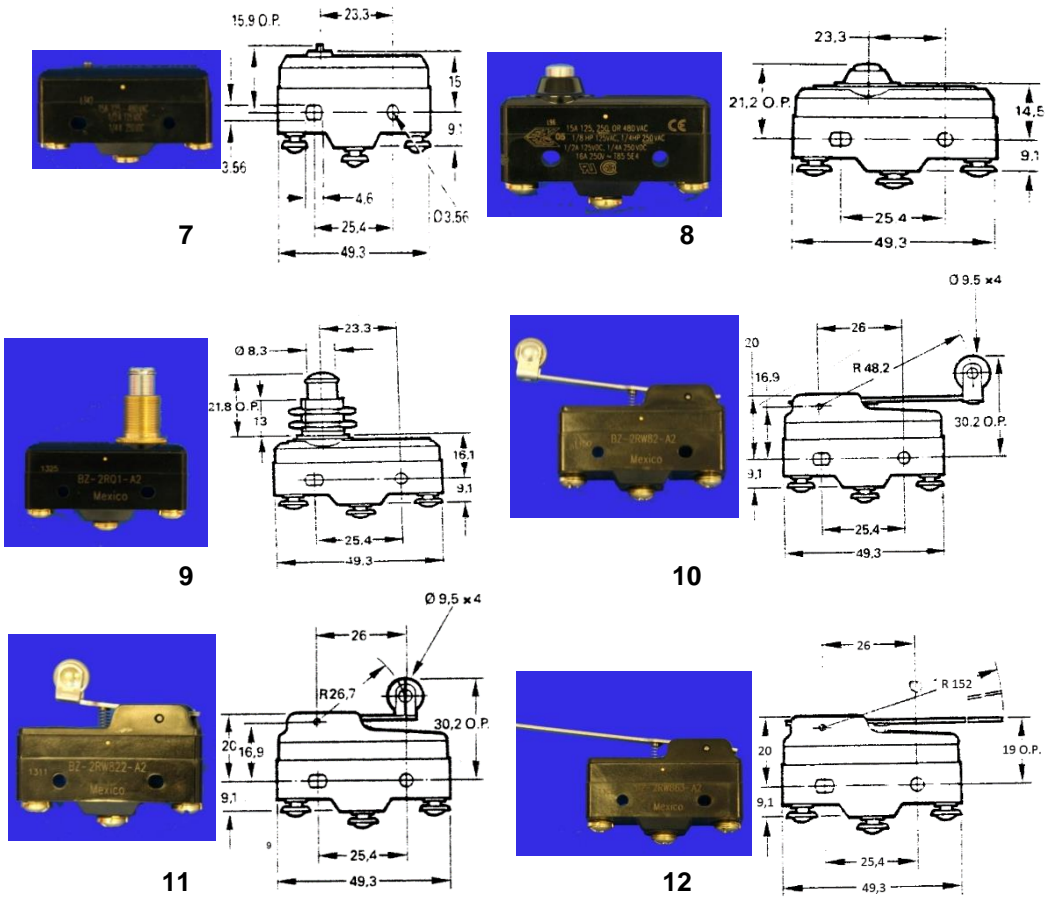
Cat.No.	Type	Ampere	Fig.
462560	1SX1-T	7AC	1
462576	11SM1-T	5AC	2
462592	V3-3910B	10AC	3
462608	V5C010BB3	10AC	4
462624	V7-1C17E9-201	10AC	5
462640	V7-1V19E9-048	10AC	6
462656	BZ-2R-A2	15AC	7
462672	BZ-2RD-A2	15AC	8
462688	BZ-2RQ1-A2	15AC	9
462704	BZ-2RW-82-A2	15AC	10
462720	BZ-2RW822-A2	15AC	11
462736	BZ-2RW863-A2	15AC	12





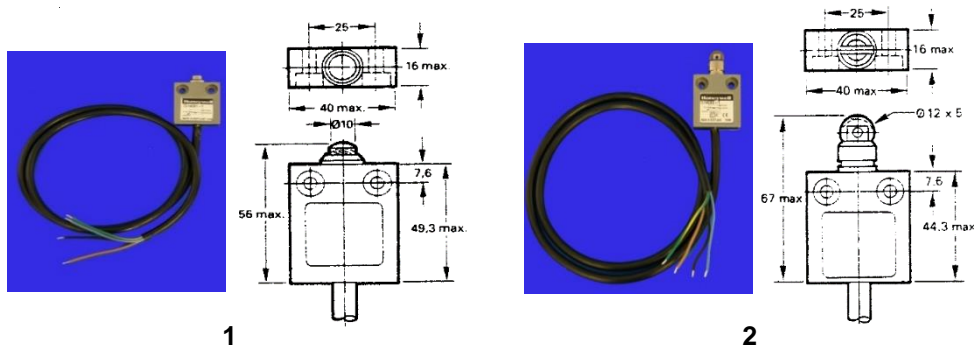
# LIMIT SWITCHES AND MICRO SWITCHES

## Microswitches, with single pole change over contact (continuation)



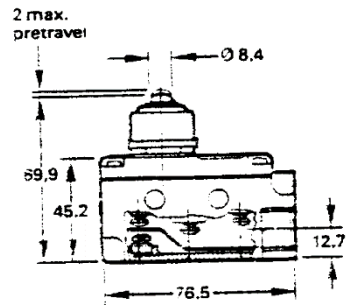
## Enclosed microswitches, with single pole change over contact

Cat.No.	Type	Ampere	Fig.
462830	14CE1-1	5AC	1
462842	14CE2-1	5AC	2
462854	BZE7-2RN-C with M20	15AC	3
462866	BZE7-2RN2-C with M20 entry	15AC	4
462878	BZE7-2RQ9-C with M20 entry	15AC	5

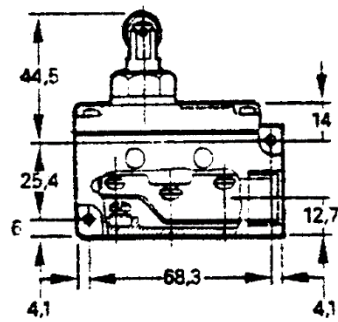


## LIMIT SWITCHES AND MICRO SWITCHES

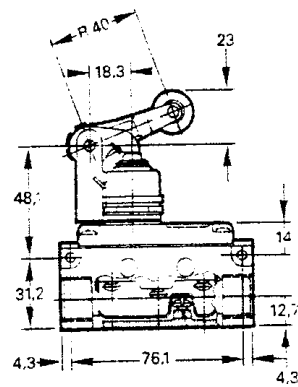
Enclosed microswitches, with single pole c/o over contact  
(continuation)



3



4



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# TRANSFORMERS

## Transformers, single phase


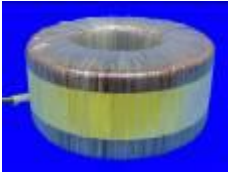



	Cat.No.	Pr. volt	Sec. Volt	VA	Fig.	
	482220	110 or 220	12	100	4	
	482242	110 or 220	24	100	4	
	482250	110 or 220	24	250	4	
	482258	110 or 220	24	500	4	
	482280	220	42	100	5	
	482288	220	42	250	5	
	482296	220	42	500	5	
	482304	220	42	800	5	
	482120	110 or 220	220 or 110	100/50	3	
	482130	110 or 220	220 or 110	200	1	
	482136	110 or 220	220 or 110	300/150	3	
	482148	110 or 220	220 or 110	500	4	
	482156	110 or 220	220 or 110	500/250	3	
	482176	110 or 220	220 or 110	750	2	
	482188	110 or 220	220 or 110	1000	1	
	482190	110 or 220	220 or 110	1000/500	3	
	482198	110 or 220	220 or 110	2000/1000	3	
	482194	110 or 220	220 or 110	2000	4	
	482214	110 or 220	220 or 110	2500	4	
	482217	110 or 220	220 or 110	3000	1	
	482219	110 or 220	220 or 110	3000/1500	3	
	482222	110 or 220	220 or 110	5000/2500	3	
	482324	110 or 220	220 or 110	1500/750	3	
	482353	380 or 440	12	100	4	
	482361	230 or 400 or 460	2X12	50	4	
	482369	230 or 400 or 460	2X12	100	4	
	482376	380 or 440	24	320	5	
	482385	230 or 400 or 460	2X12	500	4	
	482420	380 or 440	42	100	5	
	482428	380 or 440	42	250	5	
	482436	380 or 440	42	500	5	
	482511	230 or 400 or 460	2X115	63	4	
	482519	230 or 400 or 460	2X115	100	4	
	482527	230 or 400 or 460	110 or 230	150	4	
	482535	230 or 400 or 460	2X115	200	4	
	482543	230 or 400 or 460	2X115	250	4	
	482551	230 or 400 or 460	2X115	300	4	
	482559	230 or 400 or 460	2X115	500	4	
						

Fig.

2 Toroidal type

3 In box with receptacles, ready for use

4 DIN rail and screw mounting

## TRANSFORMERS

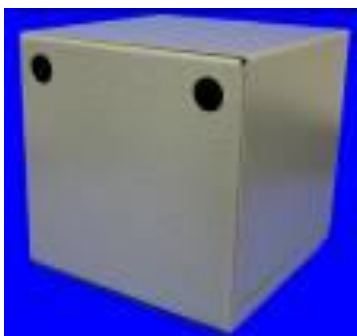
### Power supplies



Cat.No.	Description
482700	Input voltage 110/220VAC. output voltage 1.5-3-4.5-6-7.5-9-12V 1000mA DC, with spider connector
482706	Input voltage 220VAC, output voltage 1.5-3-4.5-6-7.5-9-12V 300mA DC, with spider connector

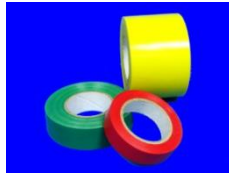
### Metal enclosures for transformers

Cat.No.	Description
482810	For transformers cat.no. 482220, 482234, 482242, 82360, 482368, 482510, 482518
482830	For transformers cat.no. 482130, 482250, 482526, 482534, 482542, 482550
482850	For transformers cat.no. 482148, 482188, 482217, 482258, 482384, 482558
482860	For transformers cat.no. 482194, 482214



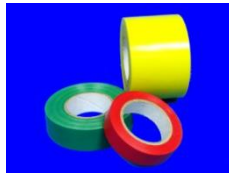
## INSULATING TAPE

### PVC insulating tape, 15 mm wide, rolls of 10 meters



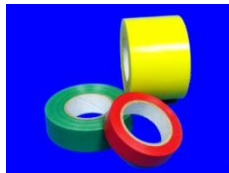
Cat.No.	Colour
502110	red
502112	black
502114	green
502116	white
502118	yellow
502120	blue
502122	grey
502124	yellow-green (roll of 4.5 mtrs)

### PVC insulating tape, 15 mm wide, rolls of 25 meters



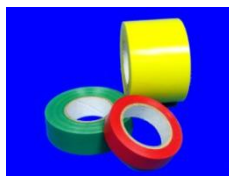
Cat.No.	Colour
502214	red
502216	black
502217	brown
502218	green
502220	white
502224	
502226	blue
502228	grey

### PVC insulating tape, 20 mm wide, rolls of 25 meters



Cat.No.	Colour
502308	red
502310	black
502312	green
502314	white
502316	yellow
502318	blue
502320	grey

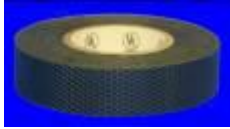
### PVC insulating tape, 50 mm wide, rolls of 25 meters



Cat.No.	Colour
502402	red
502404	black
502406	green
502408	white
502410	yellow
502412	blue
502414	grey

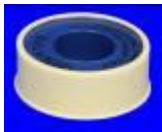
## INSULATING TAPE

### Armature binding tapes



Cat.No.	Description	Colour	Wide	Roll of
502552	Cotton tape	white	15 mm	100 mtrs
502588	Varnished cambric tape, 'Empire tape'		25 mm	50 mtrs
502610	Splicing compound tape, rubber		20 mm	5 mtrs

### Teflon tape



Cat.No.	Description
502650	12 mm wide, roll of 10 mtrs

### Scotch tapes, make 3M



Cat.No.	Description	Colour	Wide	Roll of
502708	No. 23, oil resistant Scotchfil	black	19 mm	9 mtrs
502720	No. 27, high-temperature 130°C	Glass	½ Inch	66 ft
502732	No. 33, vinyl electrical tape	black	¾ Inch	18 ft
502736	No. 33, vinyl electrical tape	black	¾ Inch	66 ft
502740	No. 35, vinyl electrical tape	red	¾ Inch	66 ft
502744	No. 35, vinyl electrical tape	yellow	¾ Inch	66 ft
502748	No. 35, vinyl electrical tape	green	¾ Inch	66 ft
502752	No. 35, vinyl electrical tape	blue	¾ Inch	66 ft
502756	No. 35, vinyl electrical tape	white	¾ Inch	66 ft
502771	No. 88, all-weather vinyl electrical tape	black	19 mm	13 mtrs
502780	No. 88, all-weather vinyl electrical tape	black	19 mm	66 ft
502792	Scotchfil electrical insulation putty rubber		1½ Inch	5 ft

**3M** Science. Applied to Life.™

**High-quality and reliable solutions.**

The advertisement features a yellow background with a large black pipe on the left. Below the pipe, there are several rolls of Scotchfil tape in various colors (black, white, red, yellow, green, blue). The text 'High-quality and reliable solutions.' is prominently displayed in the center.

## INSULATING SLEEVING AND ACCESSORIES

### Sleeving, PVC, different colours

Cat.No.	Inside diameter	Colour
512120	1 mm	white
512122	1 mm	yellow
512124	1 mm	red
512126	1 mm	green
512128	1 mm	blue
512130	1 mm	grey
512132	1 mm	black
512136	2 mm	white
512138	2 mm	yellow
512140	2 mm	red
512142	2 mm	green
512144	2 mm	blue
512146	2 mm	grey
512148	2 mm	black
512152	3 mm	white
512154	3 mm	yellow
512156	3 mm	red
512158	3 mm	green
512160	3 mm	green/yellow
512162	3 mm	blue
512164	3 mm	grey
512166	3 mm	black
512170	4 mm	white
512172	4 mm	yellow
512174	4 mm	red
512176	4 mm	green
512178	4 mm	green/yellow
512180	4 mm	blue
512182	4 mm	grey
512184	4 mm	black
512188	5 mm	white
512190	5 mm	yellow
512192	5 mm	red
512194	5 mm	green
512196	5 mm	green/yellow
512198	5 mm	blue
512200	5 mm	grey
512202	5 mm	black
512206	6 mm	white
512208	6 mm	yellow
512210	6 mm	red



## INSULATING SLEEVING AND ACCESSORIES

### Sleeving, PVC, different colours (continuation)

Cat.No.	Inside diameter	Colour
512212	6 mm	green
512214	6 mm	blue
512216	6 mm	grey
512218	6 mm	black
512222	7 mm	white
512224	7 mm	yellow
512226	7 mm	red
512228	7 mm	green
512230	7 mm	green/yellow
512232	7 mm	blue
512233	7 mm	grey
512234	7 mm	black
512236	8 mm	white
512238	8 mm	yellow
512240	8 mm	red
512242	8 mm	green
512244	8 mm	green/yellow
512246	8 mm	blue
512247	8 mm	grey
512248	8 mm	black
512252	9 mm	white
512254	9 mm	yellow
512256	9 mm	red
512258	9 mm	green
512260	9 mm	blue
512262	9 mm	grey
512264	9 mm	black
512268	10 mm	white
512270	10 mm	yellow
512272	10 mm	red
512274	10 mm	green
512276	10 mm	blue
512278	10 mm	grey
512280	10 mm	black
512284	12 mm	black
512288	16 mm	black
512307	18 mm	black





## INSULATING SLEEVING AND ACCESSORIES

### Varnished cotton sleeving, ' Empire sleeving '



Cat.No.	Inside diameter
512406	1 mm
512408	2 mm
512410	3 mm
512412	4 mm
512414	5 mm
512416	6 mm
512418	7 mm
512420	8 mm

### Glass sleeving, for high temperature (max. 450° C)



Cat.No.	Inside diameter
512450	3 mm
512452	4 mm
512454	5 mm
512456	6 mm
512458	7 mm
512460	8 mm
512462	10 mm

### Insulation beads, for high temperature



Cat.No.	Outside diam.	Inside diam.
512500	6 mm	3 mm
512506	9 mm	5 mm
512512	10 mm	6 mm

## INSULATING SLEEVING AND ACCESSORIES

### Shrinkable sleeving



Cat.No.	Diameter	Shrinking to:
512604	2.4 mm	1.2 mm
512608	3.2 mm	1.6 mm
512612	4.8 mm	2.4 mm
512616	6.4 mm	3.2 mm
512620	9.5 mm	4.8 mm
512624	12.7 mm	6.4 mm
512628	19.0 mm	9.5 mm
512632	25.4 mm	12.7 mm
512640	38.1 mm	19.0 mm
512644	51.0 mm	25.4 mm
512646	76.2 mm	38.1 mm
512650	Box shrinkable sleeving tubes mixed colours diameter 1-9 mm, length 100 mm, 170 pcs	

### Shrinkable sleeving with glue, length 1 mtr, type MDT-A, make 3M



Cat.No.	Diameter	Shrinking to:
512660	12 mm	3 mm
512662	19 mm	6 mm
512664	27 mm	8 mm
512666	32 mm	7.5 mm
512668	38 mm	12 mm
512670	50 mm	18 mm
512672	70 mm	26 mm
512674	90 mm	36 mm
512676	120 mm	40 mm

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**High-quality and  
reliable solutions.**

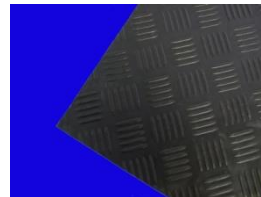


## INSULATING MATERIALS AND ACCESSORIES

### Electrical putty, binding wire and rubber gloves



Cat.No.	Description
513030	Electrical putty, Duct Seal, box of approx. 450gr
513050	Silicone sealant, tube of approx. 310 ml.
513060	Binding wire, 1.8 mm diam. impregnated, 200gr
513080	Rubber gloves, 1000/5000 Volt approved
513085	Insulating matting 20.000 Volt. 1200 x 3.5 mm (per meter)



### Air drying insulating varnishes



Cat.No.	Colour	Tins
522150	red	1 ltr
522152	red	5 ltr
522156	clear	1 ltr
522158	clear	5 ltr
522180	thinner for insulation varnish	5 ltr

### Insulating varnish (urethane) in spraytins



Cat.No.	Description
522210	Spraytin insulating varnish red 400ml
522230	Spraytin insulating varnish clear 400ml

## INSULATING MATERIAL IN SHEETS AND RODS

### Paper based phenolic impregnated sheets (Pertinax)



Cat.No.	Thickness	Sheet (in mm)		
535110	1 mm	530	x	510
535112	2 mm	570	x	530
535114	3 mm	560	x	525
535116	4 mm	560	x	525
535118	5 mm	560	x	525
535120	6 mm	570	x	530
535124	8 mm	570	x	530
535128	10 mm	570	x	530
535132	12 mm	560	x	525
535136	15 mm	570	x	530
535138	20 mm	570	x	530
535170	1 mm	1070	x	1040
535172	2 mm	1150	x	1070
535174	3 mm	1060	x	1130
535176	4 mm	1060	x	1130
535178	5 mm	1060	x	1130
535180	6 mm	1150	x	1070
535184	8 mm	1150	x	1070
535188	10 mm	1150	x	1070
535192	12 mm	1060	x	1130
535196	15 mm	1150	x	1070
535200	20 mm	1150	x	1070

# INSULATING MATERIAL IN SHEETS AND RODS

Presspahn, (insulating paper), sheets of 800 x 1300mm



Cat.No.	Thickness
535368	0.5 mm

Acrylic sheets, clear, sheets of 1250 x 1000 mm



Cat.No.	Thickness
535412	2 mm
535414	3 mm
535420	5 mm

Fabric based impregnated rods (Celeron), length 1000mm



Cat.No.	Diameter
535710	10 mm
535712	12 mm
535716	15 mm
535720	20 mm
535724	25 mm
535728	30 mm
535732	40 mm
535736	50 mm
535740	60 mm
535744	70 mm
535748	80 mm
535752	90 mm
535756	100 mm

## WINDING WIRE

Insulated copper wire, for (re-)winding motors, coils per reel/weight



Cat.No.	Diameter/mm
---------	-------------

542060	0.18
542068	0.20
542076	0.224
542084	0.25
542092	0.28
542108	0.355
542116	0.40
542132	0.45
542140	0.50
542156	0.56
542164	0.60
542172	0.63
542188	0.71
542196	0.75
542204	0.80
542212	0.90
542220	0.95
542228	1.0
542236	1.06
542244	1.12
542252	1.18
542260	1.25
542268	1.4
542276	1.5
542292	2.0

## CAPACITORS

### Motor run capacitors and accessories



Cat.No.	μF	Size (in mm)			Volt
562010	1	25	x	57	450
562014	1.5	25	x	57	450
562018	2	25	x	57	450
562022	2.5	25	x	57	450
562026	4	25	x	57	450
562030	5	30	x	57	450
562034	6	30	x	57	450
562038	8	30	x	70	450
562042	10	30	x	70	450
562046	12	35	x	70	450
562050	16	40	x	70	450
562054	20	40	x	70	450
562058	25	40	x	94	450
562062	30	40	x	94	450
562066	35	45	x	94	450
562070	40	45	x	94	450
562072	50	50	x	94	450
562074	60	50	x	120	450
562078	80	50	x	120	450
562082	100	60	x	120	450
562200	Connection cable 25 cm, with female fastons				
562300	Discharge resistor 1 Mohm 0.5 W				
562406	Protecting cap for capacitor 25 mm				
562410	Protecting cap for capacitor 30 mm				
562414	Protecting cap for capacitor 35 mm				
562418	Protecting cap for capacitor 40 mm				
562422	Protecting cap for capacitor 45 mm				
562426	Protecting cap for capacitor 50 mm				
562430	Protecting cap for capacitor 60 mm				



## TERMINAL BOARDS

### Terminal boards for electric motors, 3-pole, 6 connections

Cat.No.	Length	Width	Height	Center to center holes	Diam. hole	Bolt
582110	40	25	10	11-19 slide holes		M 4
582122	50	32	10	12-20 slide holes		M 4
582128	56	36	10	20	5.8	M 5
582140	64	40	12	23	6.2	M 5
582146	56	36	13	16-24 slide holes		M 5
582152	70	45	15	20-32 slide holes		M 6
582164	78	48	13	28	7	M 6
582176	95	60	20	30-40 slide holes		M 8
582182	95	60	15	35	9.5	M 8
582194	115	70	20	40-50 slide holes		M 10



## CLEANING PRODUCTS

### Electro cleaner

Cat.No.	Description
600100	Jerry-can of 20 liters

### Cleaning products, make CRC and others



Cat.No.	Description	
602120	<b>Co contact cleaner CRC</b> in spray can, for sensitive electrical/electronic equipment	250 ml
602130	<b>2/26 CRC</b> in spray can, improves electrical properties frees rusted parts, lubricates, stoppes corrosion displaces moisture	250 ml
602140	<b>Lectra clean II CRC</b> in spray can, heavy duty cleaner and degreaser for electric motors and equipment	500 ml
602150	<b>Lectra clean II CRC</b> in can	5 liters
602160	<b>3/36 CRC</b> in spray can, frees rusted parts. Lubricates stops corrosion, displaces moisture. Penetrates through rust and corrosion and seals out harmful moisture	250 ml
602170	<b>5/56 CRC</b> in spray can, stops squeaks, protecs metals, frees rusted parts and starts wet engines	200 ml
602810	<b>Industrial degreaser</b> , dissolves and removes greases.oils.lubricants and adhesives	500 ml
602180	<b>Zinc-it CRC</b> in spray can, cold galvanizing coating, protects iron and steel through sacrificial action, even when scratched or abraded	500 ml
602190	<b>Soft Seal SP400 CRC</b> in spray can, protects metals against rust and corrosion. Leaves a dry transparent film, easy to remove. Highly resistant to salt water and corrosive atmospheres	300 ml
602200	<b>Kontakt dust off</b> spray can, removes dust from electronic , photographic and office equipment	200 ml
602220	<b>Motor starter CRC</b> in spray can, quick start for diesel and petrol engines	200 ml
602780	<b>Kontakt Free spray</b> , is an inert coolant for locating thermal intermittent components on electronic equipment	200 ml
602784	<b>Brakleen CRC</b> in spray can, cleans and degreases brakes and clutches. Powerful and fast-working cleaner. Leaves no residue. Removes oil, brake fluid, grease and hardend deposits	500 ml
602750	<b>Kontakt Silicone 72</b> in spray can, contains silicon. It is used for different purposes of insulating in the TV, radio and electronic engineering. It prevents sputtering, jump sparks and leakage current	200 ml
602790	<b>Kontakt Tuner 600</b> in spray can, for cleaning tuners and other delicate electronic units and contacts	200 ml
602800	<b>Cramolin M</b> in spray can.cleaner for magnet heads	200 ml
602820	<b>Kontakt SK10</b> in spray can, is a protecting and coating lacquer.capable to be soldered. For printed circuits and bare metal parts.that are to be protected	200 ml
602830	<b>Cramolin A</b> in spray can, is a surface active antistaticum. It works antistatic with plastics, plastic fibers and all materials that load an electrostatic	200 ml



## CLEANING PRODUCTS

### Cleaning products



Cat.No.	Description	
602497	<b>WD-40</b> In spray can, lubricates, penetrates, prevents rust, displaces moisture	200 ml
602500	<b>WD-40</b> In spray can, lubricates, penetrates, prevents rust, displaces moisture	450 ml



### Testing equipment for smoke detectors, make Siemens

Cat.No.	Description	Fig.
602900	Test gas Ref. 8S for smoke detectors, 250 ml	1
602913	Testing unit type RE 6 for test gas(tins)	2
602917	Telescopic extension rod 4 mtrs	3



1



2



3

## CARBON BRUSHES

### How to order carbon brushes

#### Measurements

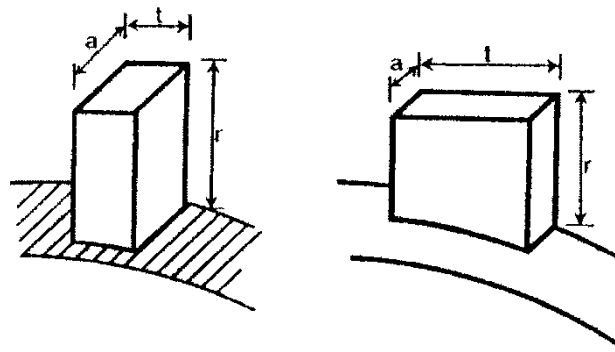
International Standard T x A x R (mm)

T= the size opposite the commutator/slip ring surface

A= the width measured in the shaft direction

R= the radial direction size (height)

Note if the brush is used on a slip ring or a commutator



#### CARBON GRADE:

IMPORTANT: all carbon brushes have a grade indication engraved. Supplying this indication can speed up delivery of the brushes.

If by any change the indication on the brush isn't readable then supply some other data of the machine (for example the motor name plate). For general information on grade classification see chapter TYPICAL GRAPHITE GRADES.

#### SHUNT LENGTH:

Length of the shunt is measured from the top of the brush to the center of the terminal. Also indicate whether the shunt is with or without insulation.

#### TERMINAL TYPE:

See illustrations and determine what type you need and specify the mounting hole diameter (example: bolt M4, M6, etc.)

## CARBON BRUSHES

### TYPICAL GRAPHITE GRADES

**Grade classification I**                      **Natural graphite**  
Mainly used on steel slip rings for high speed applications. Appears as **G4, G160, LFC3A, LFC557, TG111, TD931, HM6R, 634, RE50, F19**

**Grade classification II A**                      **Electro graphite**  
Grey coloured soft grades mainly used on slip rings and on commutators when low loads occur. Appears as **EH1, EH3, EG34D, E43, E46, G158, EG0, EG260, AY, RE92, RE54**

**Grade classification II B**                      **Electro graphite**  
Black relatively hard grades with good commutating abilities. Appears as **G151 G162, 6677, EG367, EG332, SA35, SA45, E49, E50, RE59W**

**Grade classification II C**                      **Electro graphite**  
Black, hard, general purpose DC motor and generator grades for high load applications. Appears as **G157, EH34, EG98B, 255, E27, RP5U**

**Grade classification III**                      **Resin bonded graphite**  
Mainly used on AC commutator motors and universal motors. Appears as **G141, G124, 621, BG469, BG530, RX65, RX90, IM102, IM23, F45, F46**

**Grade classification IV**                      **Amorphous carbon**  
Mainly used on small fractional HP motors. Appears as **H2, H4, H8, 450, AA, A, C4, RH30, A107**

**Grade classification V A**                      **Metal graphite**  
Grades with copper contents between 60-75%, mainly used on slip rings. Appears as **M63, M65, M70, CG65/35, CG75, MK65, EN1350, A12S, CM5H, C39, RC67, RC73**

**Grade classification V B**                      **Metal graphite**  
Grades with high copper contents, mainly used on slip rings high loads. Appears as **M87, M195, M291, CM0, CM1, OMC, MC79P, B91, B101, C151, RC87, RC95**

## CARBON BRUSHES

Cat.No.					Carbon type	Model	Terminal	Remarks
622100	3.5	x	5	x	12.5	Silver	E 6 (2x)	B 3 Tachobrush
622104	3.5	x	5	x	14	Silver	E 6 (2x)	B 3 Tachobrush
622108	4	x	4	x	20	IV	V	K56 several
622112	4	x	5	x	15	IV	V	Ebner a.o.
622116	4	x	5	x	16	II B	KVE	several
622120	4	x	5	x	20	II A	E14	B 3
622124	4	x	5	x	7	III	KVE	Makita
622128	5	x	5	x	18	IV	KVE	Bosch a.o.
622132	5	x	6	x	11	III	KVE	Tacho
622136	5	x	6	x	16	III	KVE	
622140	5	x	6	x	20	V A	E14	A 3 Tacho
622144	5	x	6.4	x	13	V A	E 3	A 3 Siemens 110.500
622148	5	x	8	x	12	III	KVE	Makita
622152	5	x	8	x	15	IV	KVE	Bosch/AEG
622156	5	x	8	x	15	II B	E14	B 3
622160	5	x	8	x	20	II B	E 6	B 3
622164	5	x	10	x	20	II A	E 3	B 3
622168	5	x	10	x	20	II B	E 3	B 3
622172	5	x	10	x	20	II C	E 3	B 3
622176	6	x	6	x	23	III	KVE	Siemens 802
622180	6	x	7	x	12.5	II A	KVE	
622184	6	x	8	x	25	IV	KVE	several
622188	6	x	9	x	25	II B	KVE	Electrolux
622192	6	x	9	x	25	II C	KVE	A&S
622196	6	x	9	x	28	II B	KVE	Progress
622200	6	x	10	x	18.5	III	KVE	Makita
622204	6	x	10	x	25	II C	E 6	B 3
622208	6	x	13	x	25	II B	KVE	Flex/Bosch
622212	6	x	14	x	23	II B	KVE	Bosch a.o.
622216	6.3	x	6.3	x	17	IV	KVE	B&D/Bosch a.o.
622220	6.3	x	8	x	20	II C	E 6	B 3 AEG a.o.
622224	6.3	x	8	x	20	III	KVE	
622228	6.3	x	8	x	25	II A	E 6	B 3
622232	6.3	x	10	x	20	II B	KVE	
622236	6.3	x	10	x	25	II B	KVE	
622240	6.3	x	10	x	25	II C	E 6	B 4
622244	6.3	x	12.5	x	25	II A	E 6	B 5
622248	6.3	x	12.5	x	32	II C	E 6	B 5
622252	6.4	x	6.4	x	20	II B	E14	A 4 Bosch
622256	6.4	x	6.45	x	20	Silver	E 9	A 4 Tacho Siemens
622260	6.4	x	8	x	18	IV	KVE	

## CARBON BRUSHES

Cat.No.				Carbon type	Model	Terminal	Remarks
622264	6.4	x	12.5	x	24	II B	KVE AEG
622268	6.4	x	12.7	x	25.4	III	KVE
622272	6.4	x	16	x	22	IV	E29/1 A 4 Bosch
622276	6.4	x	16	x	25	II C	E 1
622280	6.5	x	7.5	x	13.5	III	KVE Hitachi
622284	6.5	x	7.5	x	18	III	KVE Hitachi
622288	6.5	x	13.5	x	18	III	KVE Makita
622292	6.5	x	13.5	x	22	III	KVE Makita
622296	7	x	7	x	20	II A	E 6 B 3
622300	7	x	11	x	18.5	III	KVE Hitachi
622304	7	x	11	x	31.7	II B	KVE Miele
622308	7	x	13	x	18.5	III	KVE Hitachi
622312	7	x	15	x	18.5	III	KVE Hitachi
622316	7	x	17	x	18.5	III	KVE Hitachi
622320	8	x	8	x	20	II A	E 6 B 5
622324	8	x	10	x	25	II A	E 6 A 4 Lloyd/AEG
622328	8	x	10	x	25	II B	E 6 B 5
622332	8	x	10	x	25	II C	E 6 B 5
622336	8	x	12.5	x	22	V A	E 6/E29 B 5
622340	8	x	12.5	x	25	II B	E 6 A 4 Siemens/Hansa
622344	8	x	16	x	25	II A	E 1
622348	8	x	16	x	25	V A	E 1
622352	8	x	16	x	25	II A	E 6 B 6 Siemens V52
622356	8	x	16	x	25	II B	E 6 B 6
622360	8	x	16	x	25	II C	E 6 B 6
622364	8	x	16	x	32	II A	E 6 A 6
622368	8	x	16	x	32	II C	E 6 A 6 Baumuller
622372	8	x	16	x	32	III	E 6 A 6 Siemens G8
622376	8	x	19	x	25	III	E 6 A 4 E.Faurndau
622380	8	x	20	x	25	II B	E 6 B 6 Siemens V 8.20
622384	8	x	20	x	25	III	E 6 B 6
622388	8	x	20	x	32	II A	E 6 B 6
622392	8	x	23	x	26	II A	E 3 B 6 Indar
622396	8	x	32	x	32	II A	E 6 B 6
622400	10	x	10	x	20	II A	E 6 B 5 Smit
622404	10	x	12.5	x	32	II B	E 6 A 6 Siemens KG 10
622408	10	x	16	x	25	II A	E 6 A 6 Hansa
622412	10	x	16	x	25	II C	E 6 B 6
622416	10	x	16	x	32	II A	E 6 B 6
622420	10	x	20	x	25	II A	E 6 B 6 Thrige
622424	10	x	20	x	32	II A	E 6 A 6 Siemens V 63

## CARBON BRUSHES

Cat.No.					Carbon type	Model	Terminal	Remarks
622428	10	x	20	x	32 II B	E 6	B 6	Lloyd/AEG
622432	10	x	20	x	32 II C	E 6	B 6	
622436	10	x	20	x	40 II A	E 6	B 6	
622440	10	x	25	x	32 II B	E 6	B 6	Siemens V 10.25
622444	12	x	30	x	35 II A	E 3	B 6	Indar
622448	12.5	x	16	x	32 II A	E 6	B 6	Siemens KG 16
622452	12.5	x	16	x	32 II B	E 6	B 6	Siemens KG 16
622456	12.5	x	20	x	32 II A	E 6	B 6	Thrige-Hansa
622460	12.5	x	20	x	32 II B	E 6	A 6	Siemens KG 20
622464	12.5	x	25	x	32 II A	E 6	A 6	Siemens V 74
622468	12.5	x	25	x	32 II B	E 6	A 6	Siemens 101
622472	12.5	x	25	x	32 V A	E 6	B 6	Lloyd/AEG
622476	12.5	x	25	x	35 Silver	E 6	B 6	Propeller shaft
622480	12.5	x	25	x	40 II A	E 6	B 6	Smit a.o.
622484	12.5	x	25	x	40 II B	E 6	B 6	Smit a.o.
622488	12.5	x	25	x	40 II C	E 6	B 6	Smit a.o.
622492	12.5	x	25	x	50 II A	E 4	B 6	
622496	12.5	x	32	x	32 II B	E 5	B 6	Siemens V 12.32
622500	12.5	x	32	x	32 II B	E33		Siemens W 12
622504	12.5	x	32	x	32 II A	E33		
622508	12.5	x	32	x	40 II A	E 4	G 6	AEG
622512	12.5	x	32	x	40 Special	E 3	A 6	Forklifttruck
622516	15	x	30	x	30 II B	E24	A 6	BBC
622520	16	x	20	x	32 II A	E 6	B 4	Thrige
622528	16	x	20	x	45 I	E 7	B 6	
622524	16	x	20	x	45 I	E 6	B 6	
622532	16	x	20	x	50 I	E 5	B 6	
622536	16	x	25	x	40 II B	E35	G 6	Siemens G 57
622540	16	x	25	x	40 II B	E 6	B 6	Smit
622544	16	x	25	x	40 II C	E 6	B 6	
622548	16	x	25	x	50 I	E23	B 6	
622552	16	x	25	x	50 II B	E5	A 6	Siemens G 25
622556	16	x	32	x	32 II A	E 5	A 6	Siemens V 16.32
622560	16	x	32	x	32 II B	E 5	A 6	Siemens V 16.32
622564	16	x	32	x	40 I	E 5	B 6	
622568	16	x	32	x	40 II A	E 5	B 6	Siemens V 85
622572	16	x	32	x	40 II B	E 5	B 6	
622576	16	x	32	x	40 II C	E 5	B 6	
622580	16	x	32	x	40 II A	E 4	G 6	AEG/BBC
622584	16	x	32	x	40 II B	E 4	G 6	AEG/BBC
622588	16	x	32	x	40 II C	E 4	G 6	AEG/BBC

## CARBON BRUSHES

Cat.No.		Carbon type	Model	Terminal	Remarks
622592	16 x 32 x 50	II A	E7	B 6	
622596	16 x 32 x 50	II A	E27	B 6	Smit/Asea a.o.
622600	16 x 32 x 50	II B	E27	B 6	Smit/Asea a.o.
622604	16 x 32 x 50	II C	E27		Smit/Asea a.o.
622608	16 x 40 x 40	II B	E33		Siemens W 16
622612	16 x 40 x 40	V A	E33	A 6	Siemens W 16
622616	20 x 32 x 32	II A	E24	G 6	BBC
622620	20 x 32 x 40	II A	E 4	G 6	
622624	20 x 32 x 40	II A	E10	F 6	
622628	20 x 32 x 40	II A	E 5	G 8	Siemens
622632	20 x 32 x 40	II C	E 4	G 8	
622636	20 x 32 x 40	II C	E10	F 6	
622640	20 x 32 x 50	II A	E 7	F 6	
622644	20 x 32 x 50	I	E 7	F 6	
622648	20 x 32 x 50	I	E23	F 6	
622652	20 x 40 x 40	V A	E33	F 6	Siemens W 20
622656	20 x 40 x 40	V A	E 5	G 6	
622660	20 x 40 x 50	II A	E 5	F 6	Siemens V 96
622664	20 x 40 x 50	I	E 7	F 6	
622668	20 x 40 x 50	V A	E 5	G 6	
622672	25 x 32 x 40	V A	E35	G 6	Morgan
622676	25 x 32 x 40	II A	E35	G 6	
622680	25 x 32 x 50	V A	E35	A 6	
622684	30 x 30 x 40	II A	E24	A 6	BBC
622688	30 x 30 x 50	II A	E24		BBC

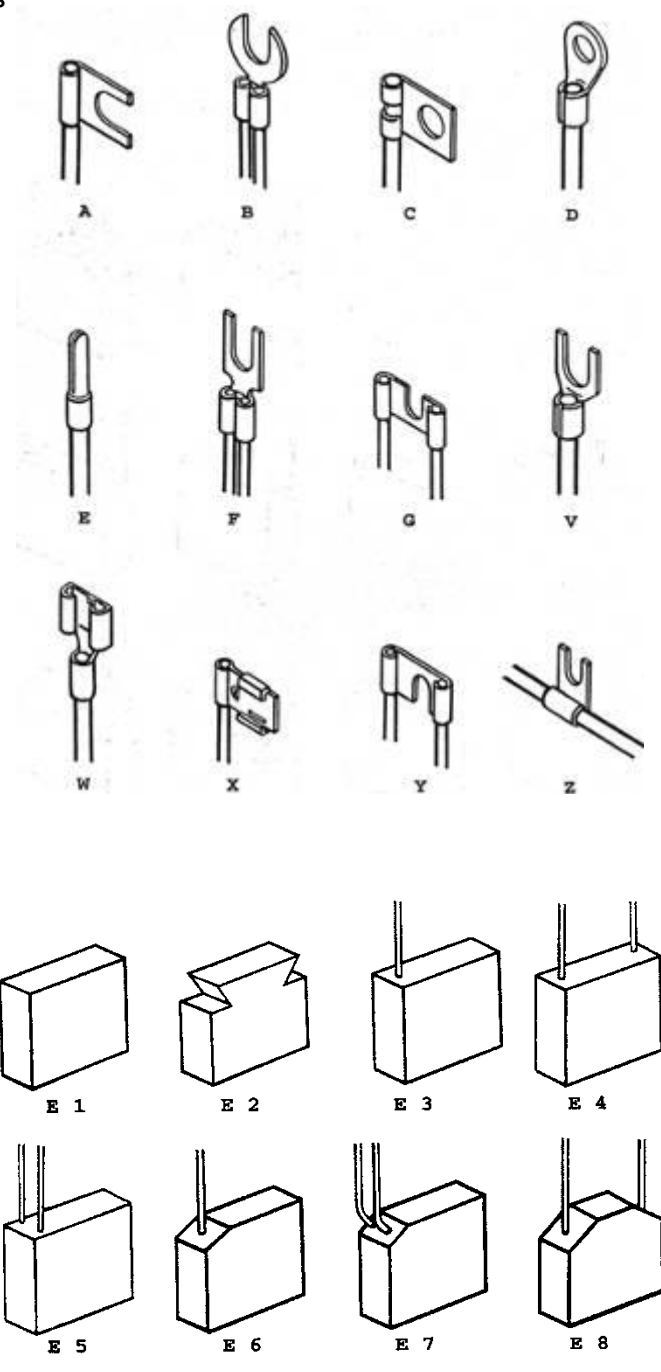
### Carbon-small-brush assortment boxes

Cat.No.	Description
623100	Assortment box: 144 brushes, 24 types, 6 of each type, Japanese constructors: Hitachi, Makita, Ryobi a.o.
623120	Assortment box: 144 brushes, 24 types, 6 of each type, German constructors: Bosch, Fein, AEG, Metabo a.o.

**Also available:** carbon rings  
carbon rods  
carbon contacts  
brush holders

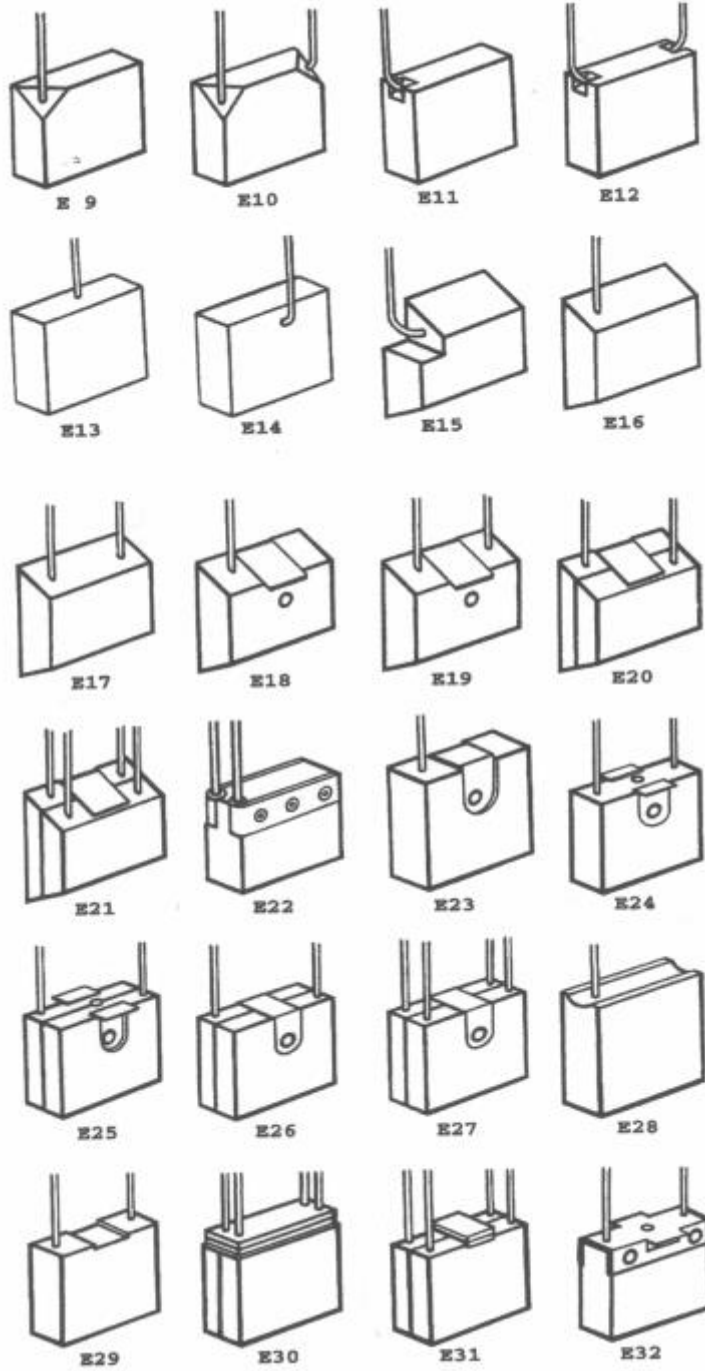
# CARBON BRUSHES

## Terminals

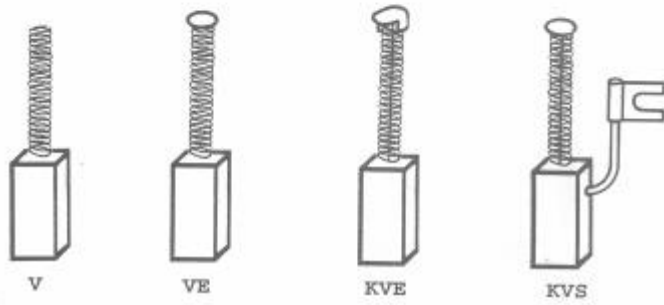
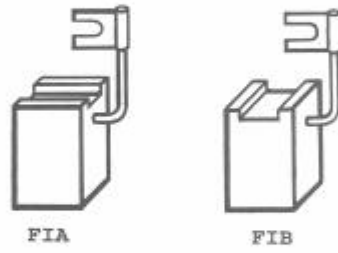
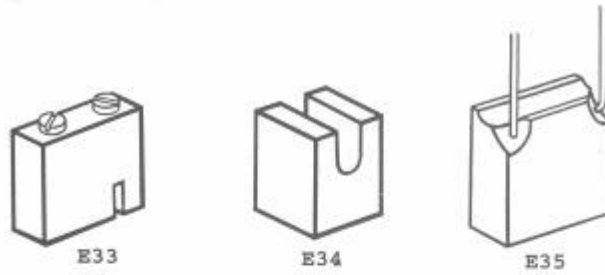




## CARBON BRUSHES



## CARBON BRUSHES



## COMMUTATOR STONES AND ACCESSORIES

### Commutator cloth and polishing paper



Cat.No.	Description		
632114	Sheet commutator	cloth	coarse
632148	Meter commutator, 5 cm wide	cloth	coarse

### Commutator tools



1



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Cat.No.	Description	Fig.
632230	Rubber bond cleaning stone 3/8"x3/4"x5"	1
632246	Brush seater 4 3/4x5/8x1 1/2" for polishing carbon brushes	2
632280	Brush pressure meter, scale 0-3000 gr	3
632306	Commutator saw for interchangeable saw blades	4
632320	Saw blade 0.7 mm	
632322	Saw blade 0.8 mm	
632324	Saw blade 1 mm	

### Commutator stones



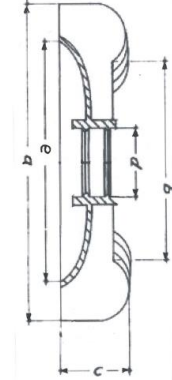
Cat.No.	Description
632418	1.5 x 1.5 x 1.5 inch medium
632426	2 x 1 x 1.5 inch fine
632438	3 x 2 x 1.5 inch fine
632442	3 x 3 x 2 inch medium
632446	3 x 3 x 2 inch fine
632450	4 x 2 x 2 inch coarse
632454	4 x 2 x 2 inch medium
632458	4 x 2 x 2 inch fine
632462	6 x 3 x 2 inch medium

## FAN IMPELLERS (PVC) FOR MOTOR COOLING

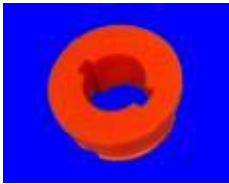
### Fan impellers without shaft bush



Cat.No.	Dimensions				
	a	b	c	d	e
642104	123	75	26	27.5	99
642116	132	79	25	27.5	104
642128	165	95	32	42.5	131
642140	171	99	36	42.5	147
642152	212	124.5	46	56	174
642164	247	134	56	56	203
642176	296	172.5	56	69	244
642188	335	214	56	69	274



### Shaft bushes for fan impellers



Cat.No.	For cat.no:	Shaft diameter
642300	642104, 642116	self-tapping from 6 till 19 mm
642306	642104, 642116	14
642312	642104, 642116	16
642316	642104, 642116	19
642318	642104, 642116	20
642324	642128, 642140	self-tapping from 17.5 till 30 mm
642330	642128, 642140	24
642336	642128, 642140	25
642342	642128, 642140	30
642348	642152, 642164	self-tapping from 20 till 40 mm
642354	642152, 642164	28
642360	642152, 642164	30
642366	642152, 642164	32
642372	642152, 642164	40
642378	642152, 642164	45
642384	642176, 642188	self-tapping from 29.5 till 50 mm
642390	642176, 642188	42
642396	642176, 642188	45
642402	642176, 642188	50

## BALL BEARINGS

### Deep groove ball bearings, single row, two side shielded, light duty



Cat.No.	Type	Inside ø	Outside ø	Thick
644003	6200-2Z	10	30	9
644005	6201-2Z	12	32	10
644007	6202-2Z	15	35	11
644009	6203-2Z	17	40	12
644011	6204-2Z	20	47	14
644013	6205-2Z	25	52	15
644015	6206-2Z	30	62	16
644017	6207-2Z	35	72	17
644019	6208-2Z	40	80	18
644021	6209-2Z	45	85	19
644023	6210-2Z	50	90	20
644025	6211-2Z	55	100	21
644027	6212-2Z	60	110	22
644029	6213-2Z	65	120	23
644031	6214-2Z	70	125	24
644033	6215-2Z	75	130	25

### Deep groove ball bearings, single row, two side shielded, medium duty



Cat.No.	Type	Inside ø	Outside ø	Thick
644070	6300-2Z	10	35	11
644072	6301-2Z	12	37	12
644074	6302-2Z	15	42	13
644076	6303-2Z	17	47	14
644078	6304-2Z	20	52	15
644080	6305-2Z	25	62	17
644082	6306-2Z	30	72	19
644084	6307-2Z	35	80	21
644086	6308-2Z	40	90	23
644088	6309-2Z	45	100	25
644090	6310-2Z	50	110	27
644092	6311-2Z	55	120	28
644094	6312-2Z	60	130	31
644096	6313-2Z	65	140	33
644098	6314-2Z	70	150	35
644100	6315-2Z	75	160	37

## BALL BEARINGS

Deep groove ball bearings, single row, two side shielded. Radial clearance is larger than the normal 6200-2Z series, light duty



Cat.No.	Type	Inside $\varnothing$	Outside $\varnothing$	Thick
644133	6200-2Z C3	10	30	9
644135	6201-2Z C3	12	32	10
644137	6202-2Z C3	15	35	11
644139	6203-2Z C3	17	40	12
644141	6204-2Z C3	20	47	14
644143	6205-2Z C3	25	52	15
644145	6206-2Z C3	30	62	16
644147	6207-2Z C3	35	72	17
644149	6208-2Z C3	40	80	18
644151	6209-2Z C3	45	85	19
644153	6210-2Z C3	50	90	20

## MEASURING INSTRUMENTS

### Clamp-meters



Cat.No.	Description
662140	Digital clamp-meter 200/600A AC, 200/600VAC, 2kOhm, 2kHz/5 MHz, with case
662152	Digital clamp-meter 40/400/1000A AC, 400/750VAC, 4kOhm, 4kHz/4MHz with continuity tester and case
662153	Digital clamp-meter 400/1200A AC/DC, 750V AC/DC, 200Ohm, data-hold en peakhold function with continuity tester and case

### Multimeters



1

Cat.No.	Description	Fig.
662214	Analogue multimeter 600V AC/DC, 300mA DC, 300KOhm, continuity test	1
662222	Small digital multimeter 0/250V AC/DC, 0/10A DC, 0/200MOhm with diode and continuity tester	
662226	Digital multimeter 0/600V AC/DC, 0/10A AC/DC, 0/200MOhm, 0/20mFd	2
662228	Digital multimeter <b>UT193C</b> , true RMS meter, 600V AC/DC, 10A AC/DC 60MOhm	
662238	Digital multimeter <b>Fluke 179</b> , 1000V AC/DC 10A AC/DC, 50MOhm with holster	
662240	Digital multimeter <b>Fluke 77</b> , 1000 V AC/DC 10A AC/DC, 32MOhm with holster	3
662242	Digital multimeter <b>Fluke 87-5</b> , true RMS meter 1000V AC/DC, 10A AC/DC, 40MOhm, 50nS, 5mFd, 200kHz with holster	



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### Infrared thermometer



Cat.No.	Description
662300	Digital infrared thermometer -50 to 900 degrees C. in case

## MEASURING INSTRUMENTS

### Voltagetesters



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7

Cat.No.	Description	Fig.
662310	Screwdriver tester 100/500VAC length 145 mm	1
662314	Set spark testing screwdriver 2,5-19kV	2
662322	Waterproof Volt tester IP65 12-690VAC/DC and continuity test	3
662325	Tester, 6-400V	4
662330	Tester, type <b>Mastercheck</b> 6-400V AC/DC	5
662340	Voltage and continuity tester type <b>Combicheck</b> 6-660V AC/DC	6
662350	<b>Volt Stick</b> , 90-1000VAC, for safely checking the presence of an AC voltage in e.g, cables, wallsockets, fuses and circuit breakers. No current flow is needed	7
182532	Battery 12V for cat.no. 662340	



## MEASURING INSTRUMENTS

### Insulation testers (Megger-testers)



Cat.No.	Description
662380	Electronic insulation tester analogue, 250V, 50MOhm, 500V, 100MOhm and 1000V, 2000Mohm
662384	Electronic insulation tester digital 1000V, 4000Mohm, 0-600V AC/DC with case



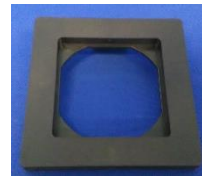
### Hour meters, for panel mounting, front dimensions 48 x 48 mm



Cat.No.	Voltage	Fig.
662397	10-80 VDC	
662400	24V 60 Hz	
662410	110V 60Hz	
662420	220V 50Hz	
662430	220V 60Hz	
662440	440V 60Hz	
662450	Adaptor for surface mounting on DIN-rail	1
662454	Adaptor 72 x72 mm for panel mounting hour meter 48 x 48 mm	2



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### Magnet testers



Cat.No.	Description
662480	For testing solenoid valves, relay coils and hydraulic or pneumatic systems without having to shut them down, Suitable for AC and DC current

## MEASURING INSTRUMENTS

Ammeters, moving iron, panel mounting 72x72 mm, scale 90°,  
AC 25-100Hz, for direct connection (without current  
transformer) with 2 times overload capacity



Cat.No.	Ampere	
665004	1	no overload capacity
665007	2.5	
665010	4	
665013	6	
665016	10	
665019	15	
665022	25	
665025	40	
665028	60	
665031	100	

Ammeters, moving iron, panel mounting 72x72 mm, scale 90°,  
AC 25-100Hz, for use with current transformer /5A,  
2 times overload capacity



Cat.No.	Ampere
665048	25
665051	50
665054	60
665057	100
665060	200
665063	400
665066	600
665069	1000

Current transformers secondary current 5A



Cat.No.	Ampere	VA
665086	25	5
665089	50	1.25
665092	60	1.25
665095	100	1.5
665098	200	10
665101	400	15
665104	600	15
665107	1000	15

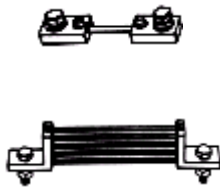
## MEASURING INSTRUMENTS

Ammeters, moving coil, panel mounting 72x72 mm, scale 90°,  
DC for use with shunt 60mV



Cat.No.	Ampere
665124	10
665127	25
665130	40
665133	60
665136	100
665139	150
665142	250
665145	400

Shunts 60 mV



Cat.No.	Ampere
665160	10
665163	25
665166	40
665169	60
665172	100
665175	150
665178	250
665181	400

Voltmeters, moving iron, panel mounting 72x72 mm, scale 90°,  
for AC 25-100Hz



Cat.No.	Volt
665201	15
665207	40
665216	150
665228	300
665234	500

Voltmeters, moving coil, panel mounting 72x72 mm, scale 90°,  
for DC



Cat.No.	Volt
665252	10
665255	25
665258	40
665261	60
665264	100
665267	150

## MEASURING INSTRUMENTS

Voltmeters, moving coil, panel mounting 72 x 72 mm, scale 90°, for DC  
(continuation)

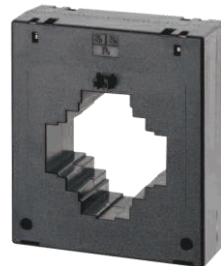


Cat.No.	Volt
665270	250
665273	400
665276	500

Frequency meters, panel mounting 72 x 72 mm, scale 90°



Cat.No.	Hz	Volt
665292	55-65	110/130
665295	45-55	230
665298	55-65	220
665301	45-55	400
665304	55-65	440



# MEASURING INSTRUMENTS

## Accessories for measuring instruments



1

Cat.No.	Description	Fig.
662750	Clip-on probe, Red	1
662752	Clip-on probe, Black	1
662780	Set test leads with clip-on probe and banana plug 4 mm	2
662800	Set test leads with test probe and banana plug 4 mm	3
662820	Set test leads, <b>type TL75</b> for <b>all Fluke</b> 3.5 digit DMM's, except 8010A and 8012A. Also for all other 3.5 digit DMM's that accept 8 or 9 mm safety shrouded banana plugs	4
662823	Set test leads, <b>type TL24</b> with bent and straight plugs for all <b>Fluke</b> DMM's except 8010A and 8012A	5
662835	<b>Fluke</b> heavy duty insulation piercing testclip type <b>AC89</b>	6



2

824103	Fuse 440mA	10.3 x 34.9 mm	for <b>Fluke</b> DMM's 75, 85, 87, 863 and 867
824106	Fuse 1A	10.3 x 34.9 mm	for <b>Fluke</b> DMM's 75, 77, 21 and 23
824109	Fuse 11A	10.3 x 38.1 mm	for <b>Fluke</b> DMM's 26, 70, 73, 83, 85, and 87
824112	Fuse 15A	10.3 x 38.1 mm	for <b>Fluke</b> DMM's 73, 75, 77, 79, 21, 23, 29, 83, 85 and 87



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## INDOOR LIGHTING

Fixtures for Philinea (Linestra) lamps, also suitable for Philinea LED lamps cat.no. 131498, 131506

Cat.No.	Watt	Length
682124	35	300 mm with switch
682134	60	500 mm with switch



### Berth lights



Cat.No.	Material	Watt	Base	
682208	Steel, chrome plated	20	E27	with tumbler switch for tubular lamp
682210	Stainless steel	40	E27	with adjustable reflector and tumbler switch for tubular lamp
682220	Stainless steel	40	B22	with adjustable reflector and tumbler switch for tubular lamp

### Machine and chartroom luminaries



1



2

Cat.No.	Description	Base		Fig.
682280	with pushbutton switch	E27	wall mounting adjustable	1
682290	with pushbutton switch	B22	wall mounting adjustable	1
682300	Elbow-hinge type	B22	desk mounting	2
682302	Elbow-hinge type	E27	desk mounting	2
682306	Elbow-hinge type	B22	wall mounting	2
682308	Elbow-hinge type	E27	wall mounting	2

### Desk and wall lamps



1

Cat.No.	Description	Fig.
682320	With flexible arm and adjustable shade, E27 lampholder, pushbutton switch, for ball lamp 40W	1
682340	Magnifying lamp with table clamp, for 40W bulb	2
682350	Pin-up lamp for wall mounting, with E27 lampholder and pushbutton switch	3
682360	Desk lamp 220V 50/60Hz 11W, energy saver lamp	4



2



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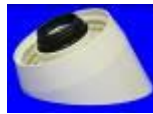
# INDOOR LIGHTING

## Ceiling or wall lighting fixtures for surface mounting

Cat.No.	Watt	Base		Fig.
682400	40	E27	straight	1
682402	40	E27	slant	2
682404	60	E27	straight	1
682406	60	E27	slant	2
682410	60	E27	IP44 white	3
682412	60	B22	IP44 white	3



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Cat.No.	Description	For cat. no.
682500	DKN glass, opal 109 x 200 mm	682440
682502	DKN glass, opal 158 x 250 mm	682442
682504	DKN glass, opal 180 x 300 mm	682444
682506	DKN glass, opal 180 x 350 mm	682444
682540	Screwed opal spherical globe, screw diameter 75 mm globe 130 x 130 mm 40W	682400, 682402
682542	Screwed opal spherical globe, screw diameter 85 mm globe 145 x 145 mm 60W	682404, 682406, 682410, 682412



# OUTDOOR LIGHTING

## Portable handlamps, IP65

Cat.No.	Description	Fig.
692100	Rubber handlamp with guard and clear glass globe for lamp B22	1
692101	Rubber handlamp with guard and clear glass globe for lamp E27	1
692110	Heavy duty handlamp with PVC handle, for lamp B22, guard and clear glass globe (also available with red, green or blue glass globe)	2
692111	Same as cat.no. 692110, however for lamp E27	2
692140	Portable handlamp with for lamp B22, as 692100 with 15 m cable and Europlug	3
692141	Portable handlamp with for lamp E27, as 692101 with 15 m cable and Europlug	3



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## Well glass fittings (European), IP65

Cat.No.	Material	Watt	Connection	Base		Fig.
692194	Brass	25	0=	B15		1
692196	Brass	25	-0-	B15		1
692198	Brass	25	0-	B15		1
692199	Brass	25	0=	E14		1
692200	Brass	25	-0-	E14		1
692202	Brass	25	0-	E14		1
692203	Brass	100	0-	B22		2
692205	Brass	100	0-	E27	without drop hole	2
692206	Brass	100	0-	E27		2
692207	Brass	100	0=	B22		2
692209	Brass	100	0=	E27	without drop hole	2
692210	Brass	100	0=	E27		2
692211	Brass	100	-0-	B22		2
692214	Brass	100	-0-	E27		2
692215	Brass	100	-0-	E27	without drop hole	2
692219	Brass	100	0-	B22	wall bracket	3
692222	Brass	100	0-	E27	wall bracket	3



1



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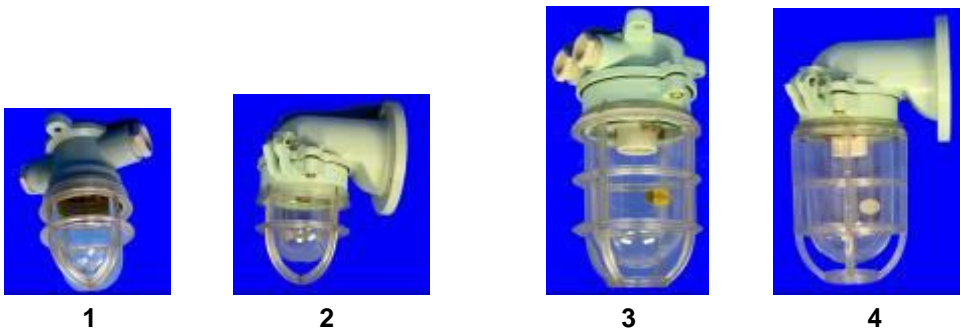
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# OUTDOOR LIGHTING

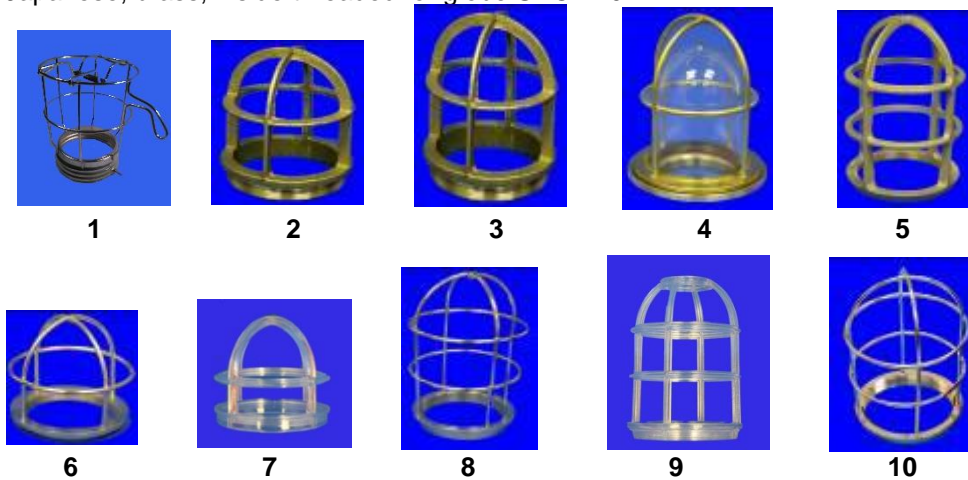
## Well glass fittings (Japanese)

Cat.No.	Description	Watt	Connection	Base	Fig.
692250	With globe SAO 57	20	-0-	B15	1
692256	With globe SAO 80	20	0=	B15	1
692258	Type WBM1 with globe	20	0-	B15	2
692262	Type P1S2 with globe SAO 90	60	0=	E26	3
692268	Type WB-2 with globe SAO 90	60	0-	E26	4
692276	With globe SAO 120	100	0=	E26	3








## Guards for well glass fittings and handlamps

Cat.No.	Description	Fig.
692350	Iron for handlamps	1
692360	Brass, for cat.no. 692198 and 692202	2
692380	Brass, for cat.no. 692203, 692206, 692207, 692210, 692211, 692214, 692219 and 692222	3
692382	German, brass, inside threaded with clear globe	4
692390	American 6", brass, inside threaded	5
692400	Japanese, brass, inside threaded for globe SAO 57	6
692408	Japanese, polycarbonate, inside threaded for globe SAO 80	7
692424	Japanese 6", brass, inside threaded for globe SAO 90	8
692428	Japanese 6", polycarbonate, inside threaded for globe SAO 90	9
692432	Japanese, brass, inside threaded for globe SAO 120	10




# OUTDOOR LIGHTING

## Globes for well glass fittings

Fig.	Cat.No.	Outside		Colour	Description	Fig.
		diam.	length			
 1	692619	64	x 73	clear	for 692194, 692196, 692198	1
	692630	80	x 102	clear	692199, 692202 and 692200 for 692100, 692101, 692140 and 692141	
 2	692680	88	x 165	clear	type 1021/1	3
	692684	88	x 165	red	type 1021/3	
	692686	88	x 165	green	type 1021/4	
	692688	88	x 165	blue/green	type 1021/5	
	692710	93	x 150	clear	Swedish type	
 3	692712	93	x 150	red	Swedish type	4
	692714	93	x 150	green	Swedish type	
	692730	94	x 115	clear	German type	
	692731	94	x 115	clear	German type, without drop hole	
	692732	94	x 115	red	German type	
	692734	94	x 115	green	German type	
	692780	103	x 150	clear	Japanese, FAO 90	
	692784	103	x 150	red	Japanese, FRO 90	
692786	103	x 150	blue	Japanese, FBO 90		
 4	692788	103	x 150	green	Japanese, FGO 90	5
	692830	132	x 160	clear	German type	
 5						

## Globes for well glass fittings, screw type

Fig.	Cat.No.	Outside		Colour	Description	Fig.
		diam.	length			
1	693020	57	x 75	clear	Japanese, SAO 57	1
	693026	80	x 90	clear	Japanese, SAO 80	
2	693040	82	x 150	clear	Japanese, SAO 90	2
	693044	82	x 150	red	Japanese, SAO 90	
	693046	82	x 150	blue	Japanese, SAO 90	
	693048	82	x 150	green	Japanese, SAO 90	
	693060	100	x 115	clear	thread M100 x 2 with structure	
	693066	125	x 122	opal	thread M100 x 2	
	693080	120	x 175	clear	Japanese, SAO 120	
3	693090	135	x 225	clear	Japanese, SAO 135	2
 4						

# OUTDOOR LIGHTING

## Bulleyes



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Cat.No.	Shape	Material	Watt	Base	Connection	Fig.
693210	oval	light metal	60	B22	T-entry with guard	1
693211	oval	light metal	60	E27	T-entry with guard	1
693218	oval	PVC	60	B22	-0- with guard	2
693219	oval	PVC	60	E27	-0- with guard	2
693237	round	synthetic resin	60	E27		3
693240	round	cast iron	100	B22	0= with guard	4
693241	round	cast iron	100	E27	0= with guard	4
693250	round	brass	100	B22	0= with guard	4
693251	round	brass	100	E27	0= with guard	4

## Globes for bulleyes



Cat.No.	Description
693425	Round, 197 x 46 mm, with flange for K#693240/41 and 693250/51

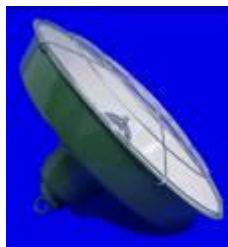
## Accessories for bulleyes



Cat.No.	Description
693810	Brass swing bolt, 1/4 x 1 1/4 " for brass bulleyes

Cargo clusters with steel reflector and wire guard, complete with suspension hook, cable gland and lampholder, for max. 75W lamps

Cat.No.	Description
695103	With 5 E27 lampholders, complete with internal wiring



## OUTDOOR LIGHTING

### Cargo lights, single base



Cat.No.	Description
695150	Steel reflector with wire guard and suspension lug, E40 lampholder, max 500W

### LED floodlights IP65, aluminium



Cat.No.	Watt	VAC	Lumen	Colour
695164	10	100-240	530	warm white
695166	10	100-240	700	daylight
695168	20	100-240	1300	warm white
695170	20	100-240	1500	daylight
695172	30	100-240	2400	warm white
695174	30	100-240	2700	daylight
695176	50	100-240	3500	warm white
695178	50	100-240	4500	daylight
695180	70	100-240	4900	warm white
695182	70	100-240	6300	daylight
695184	100	100-240	9000	warm white
695186	100	100-240	9000	daylight
695188	150	100-240	14200	warm white
695190	150	100-240	14200	daylight
695192	200	100-240	18500	warm white
695194	200	100-240	18500	daylight
695196	300	100-240	28200	warm white
695198	300	100-240	28200	daylight

## OUTDOOR LIGHTING

### Halogen floodlights for lamps with R7s base

Cat.No.	Watt	Material	IP	FEH	Fig.
695200	500	die-cast aluminium	IP44		1
695203	500	heavy duty aluminium	IP54	FEH 500	2
695205	500	stainless steel	IP67		3
695210	1000	Die-cast aluminium	IP44		1
695218	1000	Heavy duty aluminium	IP54	FEH 1000	2
695222	1000	Stainless steel	IP67		3
695230	1500	Die-cast aluminium	IP44		1
695235	1500	Heavy duty aluminium	IP54	FEH 1500	2
695240	2000	Heavy duty aluminium	IP54	FEH 2000	2
695225		Support for halogen floodlights 500/1000W			4



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### Floodlights Sodium lamps



Cat.No.	Description
695290	For high pressure sodium lamps type NAV/T, SON/T, etc. 250W IP65 complete with ballast and ignitor in enclosure for 220V 50Hz
695294	For high pressure sodium lamps type NAV/T, SON/T, etc. 250W IP65 complete with ballast and ignitor in enclosure for 220V 60Hz
695400	for 400W, 110V 60Hz (also for HPIT 400W lamp)
695408	for 400W, 220V 50Hz
695412	for 400W, 220V 60Hz (also for HPIT 400W lamp)

### Glasses for floodlights

Cat.No.	Description	Dimensions
694014	For floodlight cat.no. 695200	176 x 141 mm
694016	For floodlight cat.no. 695203 FEH 500	appr. 205 x 175 mm in frame
694024	For floodlight cat.no. 695210	258 x 183 mm
694028	For floodlight cat.no. 695218 FEH 1000	appr. 247 x 207 mm in frame
694040	For floodlight cat.no. 695230	336 x 217 mm
694042	For floodlight cat.no. 695290, 695294 and 695400/08/12	420 x 363 mm

## OUTDOOR LIGHTING

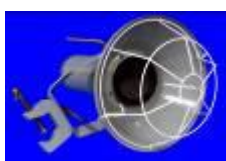
### Floodlights for incandescent and mercury lamps

Cat.No.	Description	Fig.
695300	Brass, with B22 lampholder for 200W incandescent lamp or 125W mercury vapor lamp, IP56	1
695301	Same as cat.no, 695300, however with E27 lampholder	
695350	Brass, with E40 lampholder for 1000 W incandescent or 400W mercury vapor lamp IP56	1
695354	Boat deck light 500W E40 IP56 cast iron	2



### Floodlights for halogen, reflector and mercury lamps

Cat.No.	Description	Fig.
695360	Type T98 for halogenlamp 24V 200W max., flange base ( for lamp see cat.no. 108724)	1
695368	For Japanese reflector lamps 100 and 200W with E26 base, clamp type	2
695370	For Japanese reflector lamps 100 and 200W with E26 base, flange base	3
695374	For Japanese reflector lamps 300 and 500W with E39 base, flange base	3
695376	For Japanese reflector lamps 300 and 500W with E39 base, clamp type	2
695378	For Japanese mercury reflector lamps 300 and 400W with E39 base, flange base	3
695380	For Japanese mercury reflector lamps 300 and 400W with E39 base, clamp type	2



### Rubber hand searchlights

Cat.No.	Description
695442	Complete with cable plug and lamp 12 Volt 50W



## OUTDOOR LIGHTING

Searchlights, 220 mm, deck mounted, IP68

Material: seawater resistant aluminium, complete with lamp



Cat.No.	Volt	Watt	Range in mtrs at 1 lux
696010	24	250	950
696014	220	300	1005

Searchlights, 350 mm, deck mounted, IP56

Material: seawater resistant aluminium, complete with lamp



Cat.No.	Volt	Watt	Range in mtrs at 1 lux
696030	24	250	1300
696034	110	1000	1460
696038	220	1000	1260

Searchlights, 350 mm, cabin controlled , IP56

Material: seawater resistant aluminium, complete with lamp



Cat.No.	Volt	Watt	Range in mtrs at 1 lux
696054	24	250	1300
696058	110	1000	1460
696062	220	1000	1260



**cabin control**

Suez Canal searchlights



Cat.No.	Description
695500	Standard Suez Canal searchlight for 2000W or 3000W halogen lamps with G38 base. Reflector diam. 625 mm.

## NAVIGATION LIGHTS

Navigation lights, for all seagoing vessels with a length of 20 mtrs or more.  
According to International Regulations for Preventing Collisions at sea.  
Housing of black polyamid, glass fibre reinforced, IP56, with P28s lampholder.  
Voltage to be specified when ordering



Cat.No.	Single type (sectional) serie 760	Colour
715306	Starboard	green
715308	Portlight	red
715310	Masthead	white
715312	Stern light	white
715316	Towing light	yellow

Cat.No.	Single type (all round) serie 760	
715320	Signal light (anchor light)	white
715324	Signal light	green
715322	Signal light (not under command light)	red



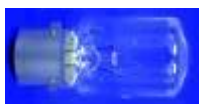
Cat.No.	Double type (sectional) serie 760	
715338	Starboard	green
715340	Portlight	red
715342	Masthead	white
715344	Stern light	white
715345	Towing light	yellow

Cat.No.	Double type (all round) serie 760	
715346	Signal light (anchor light)	white
715350	Signal light (not under command light)	red
715352	Signal light	green

### Spare parts for navigation lights













Cat.No.	Description
715441	Lampholder P28s
715415	Lens red for old serie 700/740
715417	Lens green for old serie 700/740
715419	Lens clear for old serie 700/740
715421	Lens grey for old serie 700/740
103492	Navigation lamp 24 V 40 W 60 CD P28s
103494	Navigation lamp 48 V 65 W 60 CD P28s
103496	Navigation lamp 110 V 65 W 60 CD P28s
103498	Navigation lamp 220 V 65 W 60 CD P28s





## WIRING ACCESSORIES FOR MARINE USE

### Switches outdoor

	Cat.No.	Material		Ampere	Connection	Fig.	
 <b>1</b>	742109	Synthetic resin	double-pole	10	0-	1	
	742110	Brass	double-pole HNA	10	0-	2	
	742113	Synthetic resin	double-pole	10	0=	3	
	742114	Brass	double-pole HNA	10	0=	4	
	742117	Synthetic resin	double-pole	10	-0-	5	
 <b>2</b>	742118	Brass	double-pole HNA	10	-0-	6	
	742124	PVC	double-pole	10	-0-	7	
	742128	Synthetic resin	double-pole	10	0=	Japanese	8
	742147	Pushbutton switch, synthetic resin, 1 NO, 0-				9	
	742150	Pushbutton switch HNA, brass, 1 NO + 1 NC, 16 A 0-				10	
 <b>3</b>	 <b>4</b>	 <b>5</b>	 <b>6</b>	 <b>7</b>	 <b>8</b>	 <b>9</b>	 <b>10</b>

### Switch interiors

Cat.No.	Description	Fig.
742196	Two-way, for brass switches HNA	1
742208	Double-pole, for brass switches HNA	1
742220	Double-pole, for American and Japanese switches 742128 USCG	2
742240	Knobs for switch interior and switches cat.no. 742109 - 742118	



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### American plugs and accessories

Cat.No.	Description	Fig.
742510	Plug type Oceanic, 2-pole	1
742540	Plug type Russel & Stoll, 2-pole and earth, 15A USCG	2
742550	Interior for plug cat.no. 742540	
743550	Interior for Russel & Stoll receptacles 2-pole and earth USCG	3



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## WIRING ACCESSORIES FOR MARINE USE

### Ceeform plugs, IP44



Cat.No.	Volt	Poles	Ampere	Hours
742570	24	2	16	
742576	24	3	16	
742581	42	2	16	12
742590	42	3	16	12
742596	110	3	16	4
742612	220	3	16	6
742618	220	3	32	6
742624	220	3	63	6
742634	380/415	4	16	6
742640	380/415	4	32	6
742652	380/415	5	16	6
742658	380/415	5	32	6

### Ceeform plugs, IP67, earth pin on 6h



Cat.No.	Volt	Poles	Ampere
742710	220	3	16
742716	220	3	32
742722	220	3	63
742732	380/415	4	16
742738	380/415	4	32
742744	380/415	4	63
742750	380/415	4	125
742756	380/415	5	16
742762	380/415	5	32
742768	380/415	5	63
742774	380/415	5	125

### Ceeform plugs for reefer container service, earth pin on 3h



Cat.No.	Description
742806	Moulded compound, 380/440V, 3-pole and earth, 32A, IP67
742812	Brass, 380/440V, 3-pole and earth, 32A, IP56

## WIRING ACCESSORIES FOR MARINE USE

### Ceeform couplings, IP44



Cat.No.	Volt	Poles	Ampere	Hours
743310	24	2	16	
743314	24	3	16	
743316	42	2	16	12
743318	42	3	16	12
743322	110	3	16	4
743326	220	3	16	6
743328	220	3	32	6
743330	220	3	63	6
743336	380/415	4	16	6
743338	380/415	4	32	6
743346	380/415	5	16	6
743348	380/415	5	32	6

### Ceeform couplings, IP67, earth pin on 6h



Cat.No.	Volt	Poles	Ampere
743420	220	3	16
743422	220	3	32
743424	220	3	63
743432	380/415	4	16
743434	380/415	4	32
743436	380/415	4	63
743438	380/415	4	125
743446	380/415	5	16
743448	380/415	5	32
743450	380/415	5	63
743458	380/415	5	125

### Ceeform couplings for reefer container service, earth pin on 3h



Cat.No.	Description
743480	Moulded compound, 380/440V, 3-pole and earth, 32A, IP67

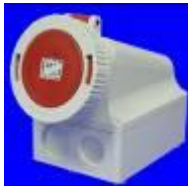
## WIRING ACCESSORIES FOR MARINE USE

### Ceeform receptacles, IP44



Cat.No.	Volt	Poles	Ampere	Hours
743620	24	2	16	
743624	24	3	16	
743629	42	2	16	12
743632	42	3	16	12
743637	110	3	16	4
743640	220	3	16	6
743642	220	3	32	6
743652	380/415	4	16	6
743654	380/415	4	32	6
743664	380/415	5	16	6
743666	380/415	5	32	6

### Ceeform receptacles, IP67, earth pin on 6h



Cat.No.	Volt	Poles	Ampere
743710	220	3	16
743712	220	3	32
743722	380/415	4	16
743724	380/415	4	32
743726	380/415	4	63
743728	380/415	4	125
743736	380/415	5	16
743738	380/415	5	32
743740	380/415	5	63
743742	380/415	5	125

### Ceeform appliance receptacles (with pins) earth on 6h



Cat.No.	Volt	Poles	Ampere	
743810	220	3	16	IP44
743814	220	3	32	IP44
743822	380/415	4	16	IP44
743824	380/415	4	32	IP44
743830	380/415	5	16	IP44
743832	380/415	5	32	IP44
743860	220	3	63	IP67
743868	380/415	4	63	IP67
743876	380/415	5	63	IP67

## WIRING ACCESSORIES FOR MARINE USE

### Ceeform receptacles for reefer container service, 3h

Cat.No.	Description	Fig.
743910	Moulded compound, 380/440V, 3-pole and earth, 32A, IP67	1
743920	Brass, 380/440V, 3-pole and earth, 32A, IP56	2
743930	Moulded compound, flush, 380/440V, 3-pole and earth, 32A, IP67	3



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### Accessories for Ceeform material



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Cat.No.	Description	Fig.
742870	Interior for brass Ceeform plugs 380/440V, 3-pole and earth, 32A, 3h cat.no. 742812	1

742880 Wrench for cat.no. 742870

744120	Receptacle interior for brass Ceeform receptacles 3-pole and earth, 32A, 3h, cat.no. 743920 also suitable for the <b>Varitain</b> system	2
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2

744138	Brass screw ring for interiors cat.no. 742870 and 744120	3
744146	Switch interior for brass Ceeform receptacles 3-pole and earth, 32 A, 3h, cat.no. 743920	3

744154 Knob for cat.no. 744146

744162	Moulded compound screw cap with strap for receptacles cat.no. 743920	4
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744170	Wrench for receptacles cat.no. 743920	5
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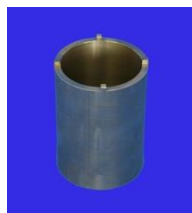
747365	Reefer extension cables, 20 mtrs length with plug and coupling 380/440V, 3-pole and earth 32A, 3h	6
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## WIRING ACCESSORIES FOR MARINE USE






### Concentric wiring accessories

	Cat.No.	Description	Fig.
	742934	Plug, PVC with brass locking ring, 2-pole, 10A for socket cat.no. 744300 and 744302	1
<b>1</b>	742940	Coupling, PVC, 2-pole, 6A for cat.no. 742934	
	744300	Receptacle brass, 2-pole, 6A, 0-	2
	744420	Interior for receptacle cat.no. 744300/302	3
	744424	Interior for German receptacles	4
	744428	Interior for German receptacles	5
			<b>2</b>
			<b>3</b>
			<b>4</b>
			<b>5</b>

### British wiring accessories

	Cat.No.	Description	Fig.
	742970	Plug, Niphan type, 2-pole and earth, 5A for Aldis signalling lamps	1
<b>1</b>	744450	Receptacle, Niphan type, 2-pole and earth, 5A for Aldis signalling lamps	2
			<b>2</b>

### Plugs and couplings, HNA (German)

	Cat.No.	Description	Fig.
	743010	Plug, brass 2-pole and earth, 10A	1
<b>1</b>	743012	Plug, moulded compound 2-pole and earth 10A	2
	743018	Plug, <b>locking type with hole in screw collar</b> , moulded compound, 2-pole and earth, 16A, for receptacle cat.no. 744642	3
	743024	Plug, brass, 4-pole for telephone use, 10A	4
	743030	Plug, moulded compound, 4-pole and earth for 42V, 10A	
	743036	Coupling, moulded compound, 2-pole and earth 16A	
<b>2</b>	743038	Coupling, brass, 2-pole and earth, 16A	5
			<b>3</b>
			<b>4</b>
			<b>5</b>

## WIRING ACCESSORIES FOR MARINE USE

### Receptacles, HNA (German)



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Cat.No.	Description	Amp	Connection	Remark	Fig.
744609	2-pole and earth	10	-0	synthetic resin	1
744610	2-pole and earth	10	-0	brass	
744615	2-pole and earth	10	0-	synthetic resin	
744616	2-pole and earth	10	0-	brass	2
744621	2-pole and earth	10	=0	synthetic resin	
744622	2-pole and earth	10	=0	brass	
744627	2-pole and earth	10	0=	synthetic resin	3
744628	2-pole and earth	10	0=	brass	
744633	2-pole and earth	10	-0-	synthetic resin	
744634	2-pole and earth	10	-0-	brass	4
744642	2-pole and earth	10	-0	brass, <b>locking type</b> for plug cat.no. 743018	5
744650	4-pole	10	-0	for telephone use	6
744658	4-pole	10	0-	for telephone use	
744666	4-pole and earth	10	-0 and 0-	for 42V	
744674	2-pole and earth	10	-0-	Receptacle for 2 plugs	7
744682	2-pole and earth	10	-0-	Receptacle for 3 plugs	8



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## WIRING ACCESSORIES FOR MARINE USE

### Receptacles with switch, HNA (German)

	Cat.No.	Description	Amp	Connection	Remark	Fig.
 <p>1</p>	744709	2-pole and earth	10	-0	synthetic resin	1
	744710	2-pole and earth	10	-0	brass	
	744715	2-pole and earth	10	0-	synthetic resin	
	744716	2-pole and earth	10	0-	brass	
 <p>2</p>	744721	2-pole and earth	10	=0	synthetic resin	2
	744722	2-pole and earth	10	=0	brass	
	744727	2-pole and earth	10	0=	synthetic resin	
	744728	2-pole and earth	10	0=	brass	
 <p>3</p>	744733	2-pole and earth	10	-0-	synthetic resin	3
	744734	2-pole and earth	10	-0-	brass	

### Accessories for HNA plugs, couplings and receptacles

	Cat.No.	Description	Fig.
 <p>1</p>	743084	Interior 110V, 3 round pins for plug	1
	743086	Interior 220V, 2 round pins and earth pin with groove for plug	2
 <p>2</p>	743090	Interior 4-pole, for plug cat.no. 743024	3
	744810	Interior for 110V, 3 round bushes, for coupling and receptacle	
 <p>3</p>	744814	Interior for 220V, 2 round and bush for grooved earth pin, for coupling and receptacle	4
	744818	Interior 4-pole for receptacle cat.no. 744650 and 744658	
 <p>4</p>	744822	Interior 5-pole for receptacle cat.no. 744666	5
	743120	Makrolon screw rings for interiors	
 <p>5</p>	743122	Conical gasket for interiors	6
	743126	Rubber gasket for covers of receptacles	
 <p>6</p>	743132	Wrench for interiors	7
	743136	Brass screw cap with chain for receptacles and couplings	
 <p>7</p>	743137	Moulded compound screw cap with chain for receptacles and couplings	8
	 <p>8</p>		
 <p>9</p>			



## WIRING ACCESSORIES FOR MARINE USE

### Italian plugs



Cat.No.	Description
743150	Bakelite, 2-pole and earth, 10A (UNAV 1437)

### Japanese plugs and accessories



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Cat.No.	Description	Fig.
743176	Moulded compound, straight, 2-pole and earth	1
743180	Metal, straight, 2-pole and earth	
743184	Moulded compound, angle, 2-pole and earth	2
743196	Moulded compound, straight, 3-pole and earth	
743198	Moulded compound, angle, 3-pole and earth	3
743220	Interior 2-pole and earth, for plugs cat.no. 743180 and 743184	4



3



4

### Japanese receptacles



1



2

Cat.No.	Description	Fig.
744912	Metal, 2-pole and earth, 0=	1
744918	Phenol, 2-pole and earth, 0=	2
744926	Twin receptacle, phenol, 2-pole and earth, 0=	3
744936	Phenol, 3-pole and earth, 0=	
744960	Metal, 2-pole and earth, 15A, (USCG) 0=	4



3



4

## WIRING ACCESSORIES FOR MARINE USE

### Japanese receptacles with switch and accessories



1

Cat.No. Description

747110 Metal, 2-pole and earth 0=

747116 Phenol, 2-pole and earth 0=

747126 Metal, 2-pole and earth, (USCG) 0=

747140 Phenol, twin-type, 2-pole and earth 0=

747206 Interior 2-pole and earth for cat.no. 744912.

744926, 747110, 747116 and 747140

Fig.

1

2

3

4



2



3



4

### Receptacles, European, 'Schuko', with hinged cover

Cat.No. Description

744510 PVC, 2-pole and earth, 10A

744518 PVC, two-way, 2-pole and earth, 10A

Fig.

1

2



1



2

## WIRING ACCESSORIES FOR MARINE USE

### Junction boxes



1



2



3



4



5



6



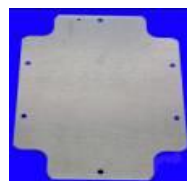
7



8



9



10



11



12

Cat.No.	Description	Fig.
747309	Synthetic resin, -0-	1
747310	Brass, -0-	
747311	Synthetic resin, 0=	2
747312	Brass, 0=	
747313	Synthetic resin, -0=	3
747314	Brass, -0=	
747315	Synthetic resin, T	4
747316	Brass, T	
747317	Synthetic resin, =0=	5
747318	Brass, =0=	
747319	Synthetic resin, +	6
747320	Brass, +	
747326	Synthetic terminal block with 4 terminals for junction boxes	7
747332	Moulded compound with 7 breakable entries and 3 glands PG16 (cat.no. 282322)	8
747340	Thermoplastic, 150 x 110 x 70 h. mm	
747346	Thermoplastic, 190 x 140 x 70 h. mm	9
747352	Thermoplastic, 190 x 140 x 140 h. mm	
747354	Steel, IP66, 200 x 200 x 120 h. mm	10
747358	Thermoplastic, 300 x 220 x 120 h. mm	
747372	Metal fixing plate for cat.no. 747346 and 747352	10
747374	Metal fixing plate for cat.no. 747354	
747376	Metal fixing plate for cat.no. 747358	11
747410	Key no. 5 for Rittal junction boxes	11
747414	Universal enclosures key	12

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### Perfect for any situation.

Our latest brass product news: Ex multipurpose fixture 525 – the Ex de protection allows it to choose lamps flexibly according to the requirements at hand. The Ex-525 withstands vibration, shock, saltwater, is UV resistant and watertight (IP66 / 67).



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see page 203

## EXPLOSION-PROOF EQUIPMENT

Ex-protected light fittings, IP66 For regular Bi-pin FL tubes, Atex approved

Cat.No.	Description
765120	110-254V AC/DC 2 x 18 W zone 1-2 and 21-22
765122	110-254V AC/DC 2 x 36 W zone 1-2 and 21-22
765124	110-254V AC/DC 2 x 18 W zone 2 and 21-22
765126	110-254V AC/DC 2 x 36 W zone 2 and 21-22
765101	Shade (2x18 W) for cat.no. 765120/765124
765103	Shade (2x36 W) for cat.no. 765122/765126



Rubber portable explosion-proof handlamps

Cat.No.	Description	Fig.
762100	Handlamp with E27 lampholder, suitable for incandescent lamp, 110-220V, 60W, group G4, 110-220V, 40W, group G5, 24-65V, 25-40W, group G3, <b>ATEX II 2G Ex d e IIC T3/T4, IP65</b>	1
762120	Spare globe 99 x 140 mm for cat.no. 762100	
762126	Hexagon key for cat.no. 762100	
762132	E27 lampholder for cat.no. 762100	2
762140	Handlamp with E27 lampholder, suitable for incandescent lamp, 230V, max. 60W, <b>ATEX II 2G Ex d e IIA T3, IP54</b>	3



1



2



3

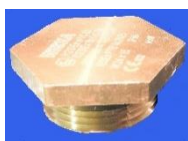
Explosion-proof brass fixtures. Protection category: IP57,

Explosion category: E Ex ed II CT 3

Cat.No.	Description	Fig.
762180	Fixture for incandescent lamp 220V, 60W, E27 -0- <b>Atex</b> approved, type 505/D	1
762181	Fixture for GLS 60W, CFL 15W and LED 9W, E27 -0- <b>Atex</b> approved, type 525/D	1
762200	Spare globe for cat.no. 762180	
762201	Spare globe with guard for cat.no. 762181	
762209	Spare E27 lampholder for cat.no. 762181	
762215	Brass stop end M24 x 1.5, can be used when only 1 cable entry is used instead of 2 cable entries	2



1



2

## EXPLOSION-PROOF EQUIPMENT

Explosion-proof fixtures up to 200W, flameproof enclosed, brass/red brass casing and glass ring with thread, brass wire guard, complete with E27 lampholder.

Temperature class: incandescent lamp 200W: T3, high pressure mercury vapour lamp 125W: T3, 80W: T4, blended light lamp 160W: T3, compact fluorescent lamp 23W: T6, EN 50 014, 50 018, 50 0191977 Zone 1 Atex approved

Cat.No.	Description
762232	Complete fixture max. 200W E27
762215	Brass stop end M24 x 1.5, can be used when only 1 cable entry is used instead of 2 cable entries
762245	Glass with guard for cat.no. 762232



### Explosion-proof floodlights

Cat.No.	Description
765226	Floodlight with E40 lampholder for double-envelope tungsten halogen (iodine) lamps, 120-240V 500W <b>Atex</b> Zone 2, IP67



Other types of the Aqua Signal product assortment available on request

### Explosion-proof brass switches. Protection category: IP66

Explosion category: Eex de IIC T6 Atex approved

Cat.No.	Description	Fig.
762410	2-pole, 16A, 250VAC, 0-	1
762412	2-pole, 16A, 250VAC, 0=	
762414	2-pole, 16A, 250VAC, -0-	2
762215	Brass stop end M24 x 1.5, can be used when only 1 cable entry is used instead of 2 cable entries	
762210	Interior 2-pole for switch 762410, 12 and 14	3



1



2



3

## EXPLOSION-PROOF EQUIPMENT

Explosion-proof CEE-plugs, protection category: IP66

Explosion category: Eex de IIC T6, max. 240VAC ATEX approved

Cat.No.	Description	Fig.
762440	Brass, 2-pole and earth 16A	1
762450	Interior for cat.no. 762440	2



1



2

Explosion-proof CEE-receptacles, protection category: IP66

Explosion category: Eex de IIC T 6 ATEX approved



Cat.No.	Description
762460	Brass, 2-pole and earth, 16A, max. 240 VAC, -0
762215	Brass stop end M24 x 1.5, can be used when only 1 cable entry is used instead of 2 cable entries
762470	Interior for cat.no. 762460

Explosion-proof brass junction boxes with cable glands M 24 x 1.5

Protection category: IP56, explosion category: EEx e II T 6 ATEX approved



Cat.No.	Description
762480	With gland position =0
762482	With gland position -0-
762484	With gland position -0=
762486	With gland position =0=
762215	Brass stop end M24 x 1.5, can be used when only 1 cable entry is used instead of 2 cable entries

Explosion-proof bells. 105 dB (A) 3 dB, 1 M. 200 mm diam.

Protection category: IP54, explosion category: EEx de II BT 6 ATEX approved



Cat.No.	Volt	Herz
762704	12 AC	50
762706	24 AC	50
762708	42 AC	50
762712	110 AC	50
762714	120 AC	60
762716	220 AC	50
762718	240 AC	60
762720	12 DC	
762722	24 DC	
762728	110 DC	
762730	220 DC	

## FUSES

Glass fuses, quick-acting, 15 x 5 mm, in boxes of 10 pcs



Cat.No.	Ampere
822053	0.16
822055	0.2
822057	0.25
822059	0.315
822061	0.4
822063	0.5
822065	0.63
822067	0.8
822069	1
822071	1.25
822073	1.6
822075	2
822077	2.5
822079	3.15
822081	4
822083	5
822085	6.3

Glass fuses, quick-acting, 20 x 5 mm, in boxes of 10 pcs



Cat.No.	Ampere
822100	0.05
822104	0.1
822108	0.125
822112	0.16
822116	0.2
822120	0.25
822124	0.315
822128	0.4
822132	0.5
822136	0.63
822140	0.7
822144	0.8
822148	1
822152	1.25
822156	1.6
822160	2
822164	25



## FUSES

Glass fuses, quick-acting, 20 x 5 mm, in boxes of 10 pcs  
(continuation)



Cat.No.	Ampere
822168	3.15
822172	4
822176	5
822180	6.3
822184	8
822188	10
822192	16
822196	20

Glass fuses, slow-acting, 20 x 5 mm, in boxes of 10 pcs



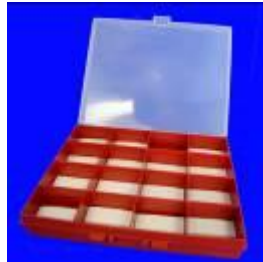
Cat.No.	Ampere
822220	0.05
822224	0.1
822228	0.125
822232	0.16
822236	0.2
822240	0.25
822244	0.315
822248	0.5
822252	0.63
822256	0.7
822260	0.8
822264	1
822268	1.25
822272	1.6
822276	2
822280	2.5
822284	3.15
822288	4
822292	5
822296	6.3
822300	8
822304	10
822308	16
822312	20

## FUSES

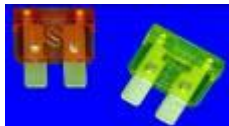
### Accessories for glass fuses 20 x 5 mm



Cat.No.	Description
822325	Assortmentbox with 160 glass fuses 20 x 5 mm
822330	Fuse holder, panel mounting



### Car fuses, 18.5 x 4.5 x 20 mm



Cat.No.	Ampere	Colour
822337	2	grey
822338	3	violet
822340	5	amber
822342	7.5	brown
822344	10	red
822346	15	blue
822348	20	yellow
822350	25	transparent
822352	30	green

### Glass fuses, quick-acting, 25 x 5 mm. in boxes of 10 pcs



Cat.No.	Ampere
822360	1
822366	2
822372	3.15
822378	4
822384	5
822390	6.3
822396	10

## FUSES

Glass fuses, medium time lag, 25 x 5 mm, in boxes of 10 pcs



Cat.No.	Ampere
822440	1
822442	1.25
822446	2
822452	3.15
822458	4
822464	5
822470	6.3
822476	10

Fuses with indicator, 25 x 5 mm



Cat.No.	Ampere		Material
822520	0.5	slow-acting	glass
822526	0.63	slow-acting	glass
822532	0.8	slow-acting	ceramic
822538	1	slow-acting	ceramic
822544	2	quick-acting	ceramic
822550	2.5	quick acting	ceramic
822556	3.15	quick acting	ceramic
822562	4	quick-acting	ceramic
822568	5	quick-acting	ceramic
822574	6.3	quick-acting	ceramic
822580	10	quick-acting	ceramic

Fuse holders for fuses with indicator 25 x 5 mm



Cat.No.	Description
822650	Panel mounting

## FUSES

### Car fuses, 25 mm length



Cat.No.	Ampere
822660	5
822664	8
822668	16
822672	25

### Glass fuses, quick-acting, 32 x 6.3 mm, in boxes of 10 pcs



Cat.No.	Ampere
822704	0.1
822708	0.2
822712	0.25
822716	0.315
822720	0.5
822724	0.63
822728	0.8
822732	1
822736	1.6
822740	2
822744	2.5
822748	3.15
822752	4
822756	5
822764	6.3
822768	7
822772	8
822776	10
822780	16
822784	20
822788	25
822792	30
822796	35

## FUSES

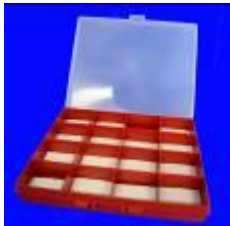
Glass fuses, slow acting, 32 x 6.3 mm, in boxes of 10 pcs

Cat.No.	Ampere
822810	0.1
822814	0.2
822818	0.25
822822	0.315
822826	0.5
822830	0.63
822834	0.8
822838	1
822842	1.6
822846	2
822850	2.5
822854	3.15
822858	4
822862	5
822870	6.3
822874	7
822878	8
822882	10
822886	16
822890	20
822894	25
822898	30



Accessories for glass fuses 32 x 6.3 mm

Cat.No.	Description
822940	Assortmentbox with 160 glass fuses 32 x 6.3 mm
822950	Fuse holder, panel mounting



High voltage fuse for microwaves

Cat.No.	Description
822004	5kV, 0.7A



## FUSES

### Porcelain fuses, quick-acting (GI), 32 x 8 mm



Cat.No.	Ampere
824040	0.5
824042	1
824044	2
824046	4
824048	6
824050	8
824052	10
824054	12
824056	16
824058	20

### Fuses for Fluke testers



Cat.No.	Description
824103	Fuse 440mA, 10.3 x 34.9 mm for <b>Fluke</b> tester 75, 85, 87, 863 and 867
824106	Fuse 1A, 10.3 x 34.9 mm for <b>Fluke</b> tester 75, 77, 21 and 23
824109	Fuse 11A, 10.3 x 38.1 mm for <b>Fluke</b> tester 26, 70, 73, 83, 85, and 87
824112	Fuse 15A, 10.3 x 38.1 mm for <b>Fluke</b> tester 73, 75 77, 79, 21, 23, 29, 83, 85 and 87

### Porcelain fuses, quick-acting (GI), 38 x 10 mm



Cat.No.	Ampere
824200	0.5
824202	1
824204	2
824208	4
824210	6
824212	8
824214	10
824216	12
824218	16
824220	20
824222	25
824224	32

## FUSES

### Porcelain fuses, slow-acting (AM), 38 x 10 mm



Cat.No.	Ampere
824240	0.16
824244	0.25
824248	0.5
824252	1
824256	2
824260	4
824264	6
824268	8
824272	10
824276	12
824280	16
824284	20
824288	25

### Porcelain fuses, quick-acting (GI), 51 x 14 mm



Cat.No.	Ampere
824348	1
824350	2
824351	3
824352	4
824354	6
824356	8
824358	10
824360	12
824362	16
824364	20
824366	25
824368	32
824370	40
824372	50

## FUSES

### Porcelain fuses, slow-acting (AM), 51 x 14 mm



Cat.No.	Ampere
824400	2
824404	4
824408	6
824412	8
824416	10
824420	12
824424	16
824428	20
824432	25
824436	32
824440	40
824444	50

### Porcelain fuses, quick-acting (GI), 58 x 22 mm



Cat.No.	Ampere
824504	4
824506	6
824508	8
824510	10
824512	12
824514	16
824516	20
824518	25
824520	32
824522	40
824524	50
824526	63
824528	80
824530	100
824532	125

### Porcelain fuses, slow-acting (AM), 58 x 22 mm



Cat.No.	Ampere
824550	4
824552	6
824554	8
824556	10
824558	12
824560	16



## FUSES

### Porcelain fuses, slow-acting (AM), 58 x 22 mm (continuation)



Cat.No.	Ampere
824562	20
824564	25
824566	32
824568	40
824570	50
824572	63
824574	80
824576	100
824578	125

### Links for renewable fuses



Cat.No.	Ampere	Volt
824747	35	250
824748	40	250
824749	45	250
824750	50	250
824751	60	250
824752	70	250
824753	80	250
824755	100	250
824757	160	250
824758	200	250
824759	225	250
824760	250	250
824762	350	250
824763	400	250
824790	4	600
824794	10	600


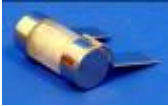




### Fuse puller for tubular fuses

Cat.No.	Description
824820	Fuse puller for tubular fuses



## FUSES

### HRC cartridge fuses, British standard

	Cat.No.	Ampere	Type	Dimensions	Fixing center	Fig.
 <b>1</b>	827100	13	25 x 6.3	for English fused plug		1
	827132	25	OP	32 x 14		2
	827180	20	SS	51 x 13	49	3
	827182	25	SS	51 x 13	49	3
	827220	2	NIT	53 x 13	44	4
	827222	4	NIT	53 x 13	44	4
 <b>2</b>	827224	6	NIT	53 x 13	44	4
	827226	10	NIT	53 x 13	44	4
	827228	15	NIT	53 x 13	44	4
	827230	20	NIT	53 x 13	44	4
	827232	25	NIT	53 x 13	44	4
	827270	2	NS	60 x 13		3
 <b>3</b>	827272	4	NS	60 x 13		3
	827274	6	NS	60 x 13		3
	827276	10	NS	60 x 13		3
	827278	15	NS	60 x 13		3
	827316	2	TIA	85 x 22	73	4
	827318	4	TIA	85 x 22	73	4
 <b>4</b>	827320	6	TIA	85 x 22	73	4
	827322	10	TIA	85 x 22	73	4
	827324	15	TIA	85 x 22	73	4
	827326	20	TIA	85 x 22	73	4
	827328	25	TIA	85 x 22	73	4
	827330	32	TIA	85 x 22	73	4
 <b>5</b>	827370	35	TIS	86 x 22	73	4
	827372	40	TIS	86 x 22	73	4
	827374	50	TIS	86 x 22	73	4
	827376	60	TIS	86 x 22	73	4
	827378	80	TIS	86 x 22	73	4
	827380	100	TIS	86 x 22	73	4
 <b>6</b>	827430	80	TCP	109 x 26	90	5
	827432	100	TCP	109 x 26	90	5
	827460	125	TFP	109 x 35	90	5
	827462	160	TFP	109 x 35	90	5
	827490	125	TF	133 x 32	111	6
	827492	150	TF	133 x 32	111	6
	827494	200	TF	133 x 32	111	6

## FUSES

### Fuse elements for Japanese Cello-lite fuses



Cat.No.	Ampere	Dimensions without blades
827720	1	42 x 8 mm
827722	2	42 x 8 mm
827724	3	42 x 8 mm
827726	5	42 x 8 mm
827728	10	42 x 8 mm
827730	15	42 x 8 mm
827732	20	42 x 8 mm
827734	25	42 x 8 mm
827736	30	42 x 8 mm
827738	40	65 x 11 mm
827740	50	65 x 11 mm
827742	60	65 x 11 mm

### Fuse holders for Japanese Cello-lite fuses



Cat.No.	Ampere	Dimensions
827780	1 - 30	50 x 13 mm (NC 1)
827782	40 - 60	75 x 18 mm (NC 2)

### Fuse bases for Japanese Cello-lite fuses



Cat.No.	Ampere	Description
827790	1 - 30	Fuse base with 2 clamps (NC 1)
827792	40 - 60	Fuse base with 2 clamps (NC 2)

### Fuse wire, rolls



Cat.No.	Ampere
827820	1
827822	3
827824	5
827826	10
827828	15
827830	20
827832	25
827834	30
827836	35
827838	50
827840	60

## FUSES

### Neozed fuses, quick-acting



Cat.No.	Ampere	Type	Dimensions
828000	2	D01	36 x 11 mm
828002	4	D01	36 x 11 mm
828004	6	D01	36 x 11 mm
828006	10	D01	36 x 11 mm
828008	16	D01	36 x 11 mm
828010	20	D02	36 x 15 mm
828012	25	D02	36 x 15 mm
828014	35	D02	36 x 15 mm
828016	50	D02	36 x 15 mm
828018	63	D02	36 x 15 mm

### Ndz fuses, quick-acting



Cat.No.	Ampere	Dimensions
828050	2	50 x 13 mm
828052	4	50 x 13 mm
828054	6	50 x 13 mm
828056	10	50 x 13 mm
828058	16	50 x 13 mm
828060	20	50 x 13 mm
828062	25	50 x 13 mm

### Ndz fuses, slow-acting



Cat.No.	Ampere	Dimensions
828070	2	50 x 13 mm
828072	4	50 x 13 mm
828074	6	50 x 13 mm
828076	10	50 x 13 mm
828078	16	50 x 13 mm
828080	20	50 x 13 mm
828082	25	50 x 13 mm

### Mignon diazed fuses, quick-acting



Cat.No.	Ampere	Type	Dimensions
828090	2	D1	34 x16 mm
828092	4	D1	34 x16 mm
828094	6	D1	34 x16 mm
828096	10	D1	34 x16 mm
828098	16	D1	34 x16 mm

## FUSES

### Diazed fuses, quick-acting



Cat.No.	Ampere	Type	Dimensions
828110	2	D2	50 x 22 mm
828112	4	D2	50 x 22 mm
828114	6	D2	50 x 22 mm
828116	10	D2	50 x 22 mm
828118	16	D2	50 x 22 mm
828120	20	D2	50 x 22 mm
828122	25	D2	50 x 22 mm
828124	35	D3	50 x 27 mm
828126	50	D3	50 x 27 mm
828128	63	D3	50 x 27 mm
828130	80	D4	64 x 34 mm
828132	100	D4	64 x 34 mm
828134	125	D5	66 x 47 mm

### Diazed fuses, super-quick-acting



Cat.No.	Ampere	Type	Dimensions
828150	2	D2	50 x 22 mm
828152	4	D2	50 x 22 mm
828154	6	D2	50 x 22 mm
828156	10	D2	50 x 22 mm
828158	16	D2	50 x 22 mm
828160	20	D2	50 x 22 mm
828162	25	D2	50 x 22 mm
828164	35	D3	50 x 27 mm
828166	50	D3	50 x 27 mm
828168	63	D3	50 x 27 mm

### Diazed fuses, slow-acting



Cat.No.	Ampere	Type	Dimensions
828180	2	D2	50 x 22 mm
828182	4	D2	50 x 22 mm
828184	6	D2	50 x 22 mm
828186	10	D2	50 x 22 mm
828188	16	D2	50 x 22 mm
828190	20	D2	50 x 22 mm
828192	25	D2	50 x 22 mm
828194	35	D3	50 x 27 mm
828196	50	D3	50 x 27 mm
828198	63	D3	50 x 27 mm
828200	160	D5	66 x 47 mm
828202	200	D5	66 x 47 mm

## FUSES

### Bottom screws



Cat.No.	Ampere	Colour
828306	2-6	green
828308	10	red
828310	16	grey
828312	20	blue
828314	25	yellow
828316	35	black
828318	50	white
828320	63	gold
828330	Bottom screw wrench for 2 till 63A (D2 and D3)	



### Fuse bases

Cat.No.	Ampere	Type	Thread
828350	25	D2	E27
828356	63	D3	E33



### Screw caps



Cat.No.	Type	Thread
828370	K01	E14
828376	KN2	E16
828388	K2	E27
828392	K3	E33
828396	K4	R1 1/4 "



## FUSES

### Knife blade fuses, DIN-size 00



Cat.No.	Ampere	Overall length
828506	6	78 mm
828508	10	78 mm
828510	16	78 mm
828512	20	78 mm
828514	25	78 mm
828516	35	78 mm
828518	50	78 mm
828520	63	78 mm
828522	80	78 mm
828524	100	78 mm
828526	125	78 mm
828528	160	78 mm

### Knife blade fuses, DIN-size 0



Cat.No.	Ampere	Overall length
828560	16	125 mm
828562	20	125 mm
828564	25	125 mm
828566	32	125 mm
828568	35	125 mm
828570	40	125 mm
828572	50	125 mm
828574	63	125 mm
828576	80	125 mm
828578	100	125 mm
828580	125	125 mm
828582	160	125 mm

### Knife blade fuses, DIN-size I



Cat.No.	Ampere	Overall length
828630	35	133 mm
828632	50	133 mm
828634	63	133 mm
828636	80	133 mm
828638	100	133 mm
828640	125	133 mm
828642	160	133 mm
828644	200	133 mm
828646	224	133 mm
828648	250	133 mm

## FUSES

### Knife blade fuses, Din-size II



Cat.No.	Ampere	Overall length
828710	80	150 mm
828712	100	150 mm
828714	125	150 mm
828716	160	150 mm
828718	200	150 mm
828720	225	150 mm
828722	250	150 mm
828724	315	150 mm
828725	355	150 mm
828726	400	150 mm

### Knife blade fuses, Din-size III



Cat.No.	Ampere	Overall length
828750	315	150 mm
828752	355	150 mm
828754	400	150 mm
828756	425	150 mm
828758	500	150 mm
828760	630	150 mm

### Accessories for knife blade fuses



Cat.No.	Description
828870	Fuse holder for knife blade fuses Din-size 00
828878	Fuse holder for knife blade fuses Din-size 0 to 1
828890	Fuse puller for knife blade fuses Din-size 000 till 4





## CIRCUIT BREAKERS

### Circuit breakers, 1-pole, B-type tripping characteristic



Cat.No.	Ampere
842102	6
842104	10
842106	16
842108	20
842110	25

### Circuit breakers, 2-pole, B-type tripping characteristic



Cat.No.	Ampere
842202	6
842204	10
842206	16
842208	20
842210	25
842212	32

### Circuit breakers, 3-pole, B-type tripping characteristic



Cat.No.	Ampere
842302	6
842304	10
842306	16
842308	20
842310	25
842312	32

### Circuit breakers, 1-pole, C-type tripping characteristic



Cat.No.	Ampere
842320	6
842322	10
842324	16
842326	20
842328	25

### Circuit breakers, 2-pole, C-type tripping characteristic



Cat.No.	Ampere
842330	6
842332	10
842334	16
842336	20
842338	25
842340	32

## CIRCUIT BREAKERS

### Circuit breakers, 3-pole, C-type tripping characteristic



Cat. No.	Ampere
842342	6
842344	10
842346	16
842348	20
842350	25
842352	32

### Circuit breakers type Compact, make Merlin Gerin



Cat.No.	Ampere	Type	kA	Pole	Height (mm)	Width (mm)	Depth (mm)
842503	100	NS 100N	25	3	161	105	111
842505	100	NS 100H	70	3	161	105	111
842507	100	NS 100L	150	3	161	105	111
842509	100	NS 100N	25	4	161	140	111
842511	100	NS 100H	70	4	161	140	111
842513	100	NS 100L	150	4	161	140	111
842515	160	NS 160N	36	3	161	105	111
842517	160	NS 160H	70	3	161	105	111
842519	160	NS 160L	150	3	161	105	111
842521	160	NS 160N	36	4	161	140	111
842523	160	NS 160H	70	4	161	140	111
842525	160	NS 160L	150	4	161	140	111
842527	250	NS 250N	36	3	161	105	126
842529	250	NS 250H	70	3	161	105	126
842531	250	NS 250L	150	3	161	105	126
842533	250	NS 250N	36	4	161	140	126
842535	250	NS 250H	70	4	161	140	126
842537	250	NS 250L	150	4	161	140	126
842539	400	NS 400N	45	3	255	140	168
842541	400	NS 400H	70	3	255	140	168
842543	400	NS 400L	150	3	255	140	168
842545	400	NS 400N	45	4	255	185	168
842547	400	NS 400H	70	4	255	185	168
842549	400	NS 400L	150	4	255	185	168
842551	630	NS 630N	45	3	255	140	168
842553	630	NS 630H	70	3	255	140	168
842555	630	NS 630L	150	3	255	140	168
842557	630	NS 630N	45	4	255	185	168
842559	630	NS 630H	70	4	255	185	168
842561	630	NS 630L	150	4	255	185	168

### Auxiliary contact for NS circuit breakers

Cat.No.	Type
842680	OF,SD,SDE,SDV

## CIRCUIT BREAKERS

### Standard protection units for NS circuit breakers

Cat.No.	Type	A range	For cat.no.
842604	TM 16D	12.8 ..16	842503-05-07
842606	TM 16D	12.8 ..16	842509-11-13
842608	TM 25D	20 ..25	842503-05-07
842610	TM 25D	20 ..25	842509-11-13
842612	TM 32D	25.6 ..32	842503-05-07
842614	TM 32D	25.6 ..32	842509-11-13
842616	TM 40D	32 ..40	842503-05-07
842618	TM 40D	32 ..40	842509-11-13
842620	TM 50D	40 ..50	842503-05-07
842622	TM 50D	40 ..50	842509-11-13
842624	TM 63D	50 ..63	842503-05-07
842626	TM 63D	50 ..63	842509-11-13
842628	TM 80D	63 ..80	842503-05-07
842630	TM 80D	63 ..80	842509-11-13
842632	TM 80D	63 ..80	842515-17-19
842634	TM 80D	63 ..80	842521-23-25
842636	TM 100D	80 ..100	842503-05-07
842638	TM 100D	80 ..100	842509-11-13
842640	TM 100D	80 ..100	842515-17-19
842642	TM 100D	80 ..100	842521-23-25
842644	TM 125D	100 ..125	842515-17-19
842646	TM 125D	100 ..125	842521-23-25
842648	TM 160D	128 ..160	842515-17-19
842650	TM 160D	128 ..160	842521-23-25
842652	TM 160D	128 ..160	842527-29-31
842654	TM 160D	128 ..160	842533-35-37
842656	TM 200D	160 ..200	842527-29-31
842658	TM 200D	160 ..200	842533-35-37
842660	TM 250D	200 ..250	842527-29-31
842662	TM 250D	200 ..250	842533-35-37
842664	STR23E	160 ..400	842539..49
842665	STR23E	252 ..630	842551..61

### Overcurrent switch-off coils type MX for NS circuit breakers

Cat.No.	Volt
842685	24DC
842686	24AC
842687	100/130AC
842688	200/240AC
842689	380/440AC



## CIRCUIT BREAKERS

Undervoltage coils type MN for NS circuit breakers

Cat.No.	Volt
842700	24DC
842701	24AC
842702	100/130AC
842703	200/240AC
842704	380/440AC



## PRESSURE CONTROLS

### RT pressure controls, ship approved

High repeatability. Interchangeable contact system.  
Two cable entries, IP66. Manual or automatic reset.



RT 121



RT 262A / RT 260A

### Technical data

Media:	air, gas, liquid		
Media temp.:	-50°C to 150°C, RT113 max. 90° C		
Ambient temp.:	in general: -50° C to 70° C		
Contact system:	SPDT		
Contact load:	AC-1 Ohmic	10A	440V
	AC-3 (motor)	4A	400V
	AC-14/15 (coil. transformer)	3A	400V
	DC-13/14	12W	230V
Connection:	G 3/8" A		

Cat.No.	Setting range (bar)	Adjustable/fixed Differential (bar)	Max. operating pressure (bar)	Type
862300	-1 to 0	0.09 to 0.4	7	RT 121
862302	0 to 0.3	0.01 to 0.05	0.4	RT 113
862304	0.1 to 1.1	0.07 to 0.16	7	RT 112
862306	0.2 to 3	0.08 to 0.25	7	RT 110
862308	0.2 to 6	0.25 to 1.2	22	RT 200
862310	1 to 10	0.15 to 1.3	22	RT 116
862312	4 to 17	1.2 to 4	22	RT 5
862320	10 to 30	1 to 4	42	RT 117

### RT differential pressure controls, connection G3/8 A

Cat.No.	Regulation range (bar)	Mechanical Differential (bar)	Operation Range (bar)	Max. operating Pressure (bar)	Type
862330	0.01 to 1.5	0.1	-1 to 9	11	RT 262A
862336	0.5 to 4	0.3	-1 to 18	22	RT 260A

## PRESSURE CONTROLS

### KPS pressure switches

For harsh environments, very robust construction  
 Resistant to shock and vibration, IP67  
 Covers most outdoor and indoor applications  
 Suitable for alarm and regulation  
 Marine approved



Media:	air. gas. liquid		
Ambient temperature:	KPS 31-39: -40° C to 70° C		
Enclosure:	IP67		
Electrical connection:	PG 13.5		
Contact system:	SPDT, gold plated		
Contact load:	AC-1 Ohmic	10A	440V
	AC-3 (motor)	6A	440V
	AC-14/15 (coil, transformer)	4A	440V
	DC-13/14	12W	230V
Connection:	G 3/8" A		

Cat.No.	Setting range (bar)			Adjustable/fixed <b>Differential</b> (bar)		Permissible operating pressure	Type	
862380	0	to	2.5		0.01	6	KPS 31	
862382	0	to	3.5		0.2	10	KPS 33	
862384	0	to	8	0.4	to	1.5	12	KPS 35
862386	6	to	18	0.85	to	2.5	22	KPS 37
862388	10	to	35	2.0	to	6	45	KPS 39

## THERMOSTATS, RESISTANCE THERMOMETERS AND THERMOCOUPLES

### RT thermostats

High repeatability. Interchangeable contact system  
Two cable entries, IP66. Ship approved

Ambient temperature: -50 °C to 70 °C  
Enclosure: IP66  
Electrical connection: PG 13.5  
Contact system: SPDT, gold plated  
Contac load:  
AC-1 Ohmic 10A 440V  
AC-3 (motor) 4A 400V  
AC-14/15 (coil, transformer) 3A 400V  
DC-13/14 12W 230V  
Connection: G 3/8" A



RT 4

### Standard thermostats

Cat.No.	Standard type		Differential type		Adjustable diff. range at highest range setting °C	Maximum sensor temp. °C	Cap. Tube length mtr	Type
	Setting range °C	Adjustable diff. range at lowest range setting °C	Adjustable diff. range at lowest range setting °C	Adjustable diff. range at highest range setting °C				
882110	-5 to 30	1.5 to 7	1.2 to 4	75	room sensor	RT 4		
882112	10 to 45	1.3 to 7	1 to 5	100	room sensor	RT 103		
882113	-25 to 15	2 to 10	1 to 14	150	2	RT 7		
882114	-5 to 30	2 to 8	2 to 10	150	2	RT 14		
882118	-5 to 30	2 to 8	2 to 10	150	5	RT 14		
882120	-5 to 30	2 to 8	2 to 10	150	8	RT 14		
882124	25 to 90	2.4 to 10	3.5 to 20	300	2	RT 101		
882128	25 to 90	2.4 to 10	3.5 to 20	300	5	RT 101		
882134	70 to 150	6 to 25	1.8 to 8	215	2	RT 107*		
882138	70 to 150	6 to 25	1.8 to 8	215	5	RT 107*		
882144	120 to 215	7 to 30	1.8 to 9	260	2	RT 120*		
882148	150 to 250	6.5 to 30	1.8 to 9	300	2	RT 123*		
882150	150 to 250	6.5 to 30	1.8 to 9	300	5	RT 123*		
882154	200 to 300	5 to 25	2.5 to 10	350	2	RT 124*		
882156	200 to 300	5 to 25	2.5 to 10	350	5	RT 124*		

\* Partial charge: sensor must not be the coolest part

### Differential thermostats

Cat.No.	Mechanical differential °C	Setting range (diff. temp.) °C	Operating range (LT element) °C	Max. sensor temp. °C	Cap. tube length (m)	Type
882230	2	0 to 15	-30 to 40	65	2 x 5	RT 270
882234	3	0 to 20	20 to 100	200	2 x 10	RT 271

## THERMOSTATS, RESISTANCE THERMOMETERS AND THERMOCOUPLES

### Sensor pockets with 1/2" BSP ext. connection for thermostats



Cat.No.	For type	Insert l x d. mm.	Material
882300	RT 3/7/14/26/101/123/270	112 x 11	brass
882310	RT 3/7/14/26/101/123/270	112 x 11	18/8 steel
882320	KPS	110 x 15	brass
882330	KPS	110 x 15	18/8 steel

### KPS thermostats

For harsh environments  
IP67

Very robust construction  
Various approvals

Ambient temperature:

-40°C to 70 ° C

Contact load:

AC-1	10A	AC-3	6A
AC-15	4A		

Cat.No.	Setting range °C			Mech. diff. °C			Max. sensor temp.°C	Cap. Tube length (m)	Type	Fig.
		to			to					
882400	20	to	60	3	to	14	130	-	KPS 77	1
882404	20	to	60	3	to	14	130	2	KPS 77	2
882402	20	to	60	3	to	14	130	2	KPS 77	3
882406	50	to	100	4	to	16	200	-	KPS 79	1
882408	50	to	100	4	to	16	200	2	KPS 79	2
882410	50	to	100	4	to	16	200	2	KPS 79	3
882412	70	to	120	4.5	to	18	220	-	KPS 80	1
882414	70	to	120	4.5	to	18	220	2	KPS 80	2
882416	70	to	120	4.5	to	18	220	2	KPS 80	3



1



2

armoured



3

non armoured



# THERMOSTATS, RESISTANCE THERMOMETERS AND THERMOCOUPLES

How to order resistance thermometers

Type: PT 100/0

Design: see pictures

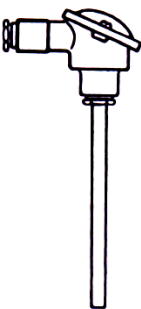
Relevant dimensions: length(s), diameter(s)

Electrical connection: 2, 3, or 4-wire

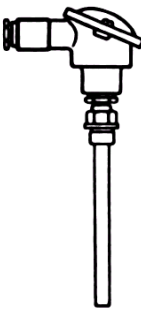
Cable: length and type: armoured or not armoured

Connection: thread size (BSP or metric)

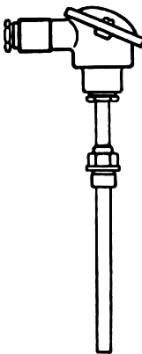
Further details and/or dimensions, if important



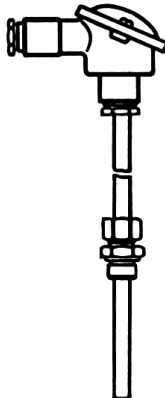
1



2



3



4



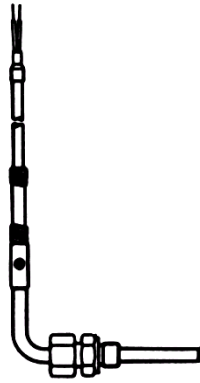
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6



7



8

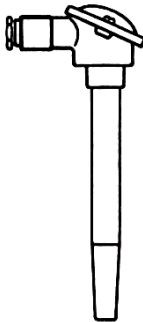
THERMOSTATS, RESISTANCE THERMOMETERS AND THERMOCOUPLES



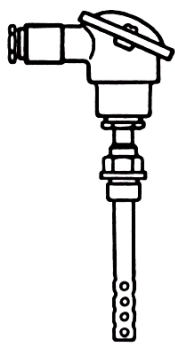
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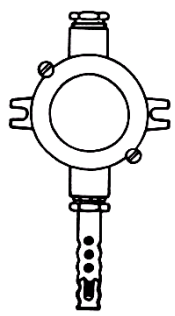
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11



12



13



14



15



16

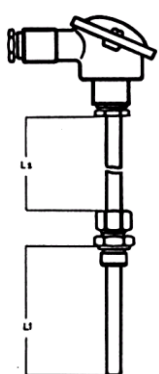


17

## THERMOSTATS. RESISTANCE THERMOMETERS AND THERMOCOUPLES

Resistance thermometers 1 x Pt100/0 in 3-wire connection.

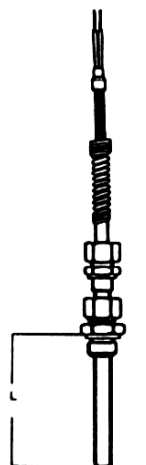
Stainless steel protection tube. Fitting 1/2" BSP



Cat.No.	Diam. stem	Stem l. L1	Extension length L2
883001	8	80	80
883003	8	100	80
883005	8	150	80
883007	8	200	80
883009	8	250	80
883011	10	80	80
883013	10	100	80
883015	10	150	80
883017	10	200	80
883019	10	250	80

Resistance thermometers 1 x Pt100/0 in 3-wire connection.

Stainless steel protection tube. Fitting 1/2" BSP with 3 mtrs SiSi insulated cable with armouring.



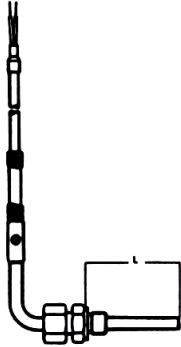
Cat.No.	Diam. stem	Stem length
883045	8	80
883047	8	100
883049	8	150
883051	8	200
883053	8	250
883055	10	80
883057	10	100
883059	10	150
883061	10	200
883063	10	250

## THERMOSTATS, RESISTANCE THERMOMETERS AND THERMOCOUPLES

Resistance thermometers 1 x Pt100/0 in 3-wire connection.

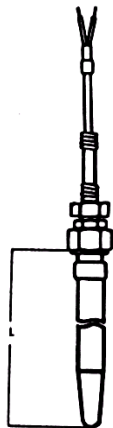
Hook shaped 90 degr. Stainless steel protection tube 8 mm diam.

Fitting 1/2" BSP with 3 mtrs SiSi insulated cable with armouring.



Cat.No.	Stem length
883105	80
883107	100
883109	150
883111	200
883113	250

Thermocouples type K (NiCr-Ni Chromel-Alumel) for exhaust temperatures. Stainless steel protection tube 6 mm diam. Fitting 1/2" BSP with 3 mtrs. SiSi insulated cable with armouring. Thermowell from bar stock (St.St. 316) 3/4" BSP threaded.



Cat.No.	Length
883350	80
883352	100
883354	150
883356	250

### Also available:

Thermocouples **type J** (Fe-Const, Iron-Constantane) and **type T** (Cu-Const, Copper-Constantane)

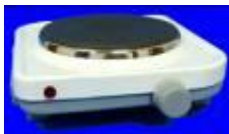
## DOMESTIC EQUIPMENT

### Toasters, automatic



Cat.No.	Volt	
902160	110	2 slices
902170	110	4 slices
902180	220	2 slices
902190	220	4 slices

### Hotplates, complete with cord



Cat.No.	Volt	Watt	Plate diameter
902210	125	600	15.2 cm
902222	220	1500	18 cm with switch
902228	230	750/1500	15.5 cm – 18.5 cm



### Microwaves



Cat.No.	Description
902290	110V 60Hz 20 ltr
902293	220V 60Hz 20 ltr

### Rice cookers



Cat.No.	Description
902282	110V 3.6 liters
902284	220V 1.8 liters
902286	220V 4.2 liters

## DOMESTIC EQUIPMENT

### Immersion heaters, complete with cord

Cat.No.	Volt	Watt
902460	220	1000
902470	220	2000



### Electric stoves



1

Cat.No.	Volt	Watt	Description	Fig.
902530	110	1000	Length 1 meter	1
902535	110	1200	Halogen heater 400-800-1200W	2
902538	110	1500	Fan heater	3
902558	220	1000	Length 1 meter	1
902566	220	2000	Fan heater	3
902570	220	2000	Fan heater (metal)	4



2



3



4

### Coffee makers (12 cups)



1

Cat.No.	Volt
902720	110
902730	220
902740	220



2

Fig.
1
2
1

### Water boilers



1

Cat.No.	Volt	Liter
902820	115	1.5
902830	220	1.7



2

Fig.
1
2

## DOMESTIC EQUIPMENT

### Electric Irons



Cat.No.	AC Volts
902920	115 (steam iron)
902940	220 (steam iron)

### Hand-mixers



Cat.No.	AC/DC Volts
902980	110

### Vacuum cleaners

Cat.No.	Volt	Description	Fig.
903210	110	Sledge model	1
903252	220	Sledge model	1
903260	220	Make Nilfisk VP300	2



1



2

### Paper dust-bags for vacuum cleaners



Cat.No.	Description
903429	For sledge vacuum cleaner K#903252
903440	For sledge vacuum cleaner K#903210
903450	For Nilfisk vacuum cleaners (GA70, GS80 and GS90)
903451	For Nilfisk vacuum cleaner K#903260 and GD1000, VP300 and Saltix 3

## DOMESTIC EQUIPMENT

### Refrigerators for use on 50/60Hz



Cat.No.	Volt	Liters
905110	110	50
905120	110	90
905130	110	220
905140	110	260
905170	220	50
905180	220	105
905200	220	250
905294	220	300

### Watercooler for use on 50/60Hz



Cat.No.	Volt
905280	220

### Automatic washing machines for use on 60Hz, content 6Kg



Cat.No.	Volt
905650	110
905660	220



## DOMESTIC EQUIPMENT

### Tumble-dryers



Cat.No.	Description
905878	110V 60Hz cap. 6Kg
905880	220V 60Hz cap. 6Kg

### Dishwashers



Cat.No.	Description
905900	220V 60Hz, 12 place settings

### Megaphones



Cat.No.	Description
904000	10 Watt (4 batteries LR20)

### Telephones



Cat.No.	Description
904050	Desk/wall type, tone with ringer and LED indicator

### Thermostat for cooking ranges



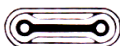
Cat.No.	Description
904100	50-300°, capillary length 90 cm, type 55340 52010 for EGO cooking range

## HEATING CABLES AND HEATING ELEMENTS

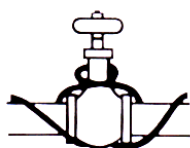
### Self limiting heating cable 110V and 220V, meter



Cat.No.	Description
902605	110V 8W per meter, 220V 17W per meter
902609	110V 12W per meter, 220V 23W per meter
902613	110V 25W per meter, 220V 40W per meter
902603	Connectionset for heating cables



### Complete sets heating self limiting cables



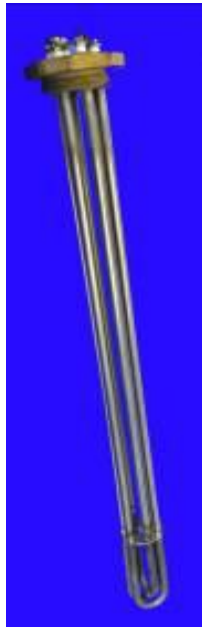
Cat.No.	Length	110V W/Mtr	220V W/Mtr
902615	2	8	17
902619	3	8	17
902623	4	8	17
902627	5	8	17
902631	7	8	17
902635	10	8	17
902639	12	8	17
902643	15	8	17
902647	25	8	17
902651	35	8	17
902655	50	8	17
902659	2	12	23
902663	3	12	23
902667	4	12	23
902671	5	12	23
902675	7	12	23
902679	10	12	23
902683	12	12	23
902687	15	12	23
902691	25	12	23
902695	35	12	23
902699	50	12	23

### Screw-plug immersion heaters. Element: incoloy-800 plug: brass size 1.5" BSP. (Adaptor rings to 2" and 2,5" BSP available)

Cat.No.	Volt Delta	Volt Star	Watt	Insert l/mm
922110	230	1 phase	10000	150
922114	230	400	15000	145
922118	230	400	2000	180

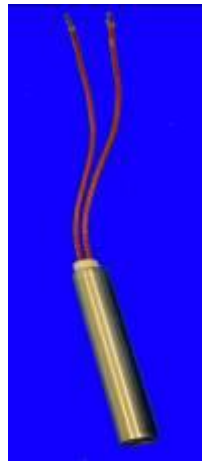
## HEATING CABLES AND HEATING ELEMENTS

### Screw-plug immersion heaters (continuation)



Cat.No.	Volt Delta	Volt Star	Watt	Insert l/mm
922122	230	400	2000	250
922126	230	400	2000	430
922130	230	400	2500	250
922134	230	400	3000	250
922138	230	400	4500	365
922142	230	400	6000	420
922146	230	400	7500	500
922150	230	400	9000	450
922154	230	400	9000	580
922158	254	440	3000	250
922160	254	440	3750	250
922164	254	440	5500	365
922168	254	440	7250	420
922172	254	440	9100	500

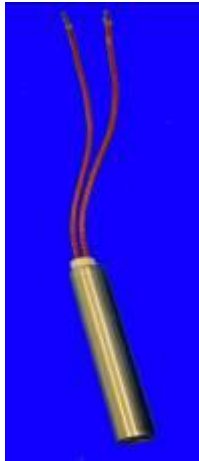
### Cartridge heating elements, stainless steel



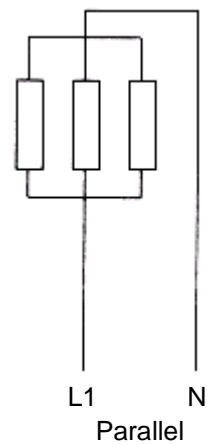
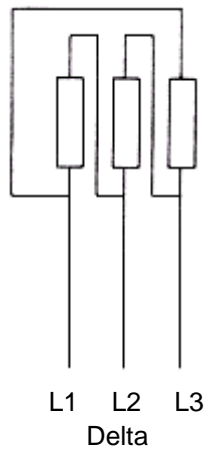
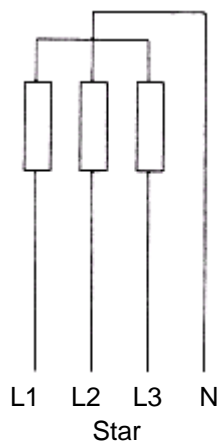
Cat.No.	Volt	Watt	D. x l. mm		
922310	230	100	6.5	x	40
922314	230	100	8	x	40
922318	230	100	15	x	100
922326	230	160	10	x	80
922332	230	200	8	x	60
922334	230	200	8	x	80
922338	230	200	8	x	100
922342	230	200	8	x	250
922346	230	200	10	x	50
922350	230	250	10	x	60
922358	230	250	10	x	130
922362	230	250	12.5	x	100
922366	230	250	16	x	60
922370	230	250	16	x	250
922373	230	300	12.5	x	120
922376	230	315	12.5	x	80
922378	230	350	10	x	100
922386	230	350	16	x	100
922390	230	400	10	x	80
922392	230	400	10	x	100
922406	230	500	10	x	130

## HEATING CABLES AND HEATING ELEMENTS

### Cartridge heating elements, stainless steel (continuation)



Cat.No.	Volt	Watt	D. x l. mm		
922410	230	500	10	x	250
922414	230	500	12.5	x	100
922422	230	500	16	x	100
922430	230	800	10	x	130
922438	230	800	16	x	300
922440	230	1000	12.5	x	250
922442	230	1000	16	x	100
922454	230	1250	20	x	250
922456	230	2000	20	x	200
922457	230	2200	20	x	280
922458	230	2500	20	x	200



## FANS, BLOWERS AND ELECTRICAL TOOLS

### Cabin fans, oscillating



Cat.No.	Description
940085	110V 50/60Hz, fan blade diam. 300 mm desk type
940086	110V 50/60Hz, fan blade diam. 300 mm desk/wall type
940087	220V 50/60Hz, fan blade diam. 300 mm desk type
940088	220V 50/60Hz, fan blade diam. 300 mm desk/wall type

### Mini cooling fans (120 x 120 mm, complete with connection cord)



Cat.No.	Description
942086	24VDC
942090	115V 50/60Hz
942100	220/240V 50/60Hz
942130	Finger guard, 120 mm for K#942090 and K#942100

### Hot melt glue guns



Cat. No.	Description
942229	100-240V for 11 mm cartridges
942233	Box with 10 glue cartridges 11 x 200 mm

### Blowers for cleaning electrical equipment



Cat.No.	Description
942248	Hot air gun 110VAC 1600W, 3 steps for drying, cleaning and cool down
942250	Hot air gun 220VAC 1600W, 3 steps for drying, cleaning and cool down

Alphabetical index	
	Page
<b>A</b>	
acrylic sheets	155
adaptor plugs	118
adaptors for panel meters	175
adjustable wrenches	107
alarm bells	72
Aldis lamps	30
Aldis signalling lights	68
alkaline batteries	62
alligator clips	91
American plugs	191
ampere meters	176, 177
angle grinder	109
antennas	70
antenna amplifiers	70
antenna plugs	70, 71
appliance plug	121
Aqua Signal fl shades	46
armoured marine cable	83
assembling strap	87
assortment boxes glass fuses	208, 211
auxiliary contact blocks	137
auxiliary relays	135

<b>B</b>	
ball bearings	171, 172
ballasts for fluorescent lighting	43, 44
ballasts for mercury lamps	59
ballasts for sodium lamps	59
banana plugs	70
barrels for batteries	61
batteries	60, 62
battery chargers	61, 64
battery clips	61
battery filler	61
battery liquid	61
battery syringe	61
battery tester	61
battery sets for signalling lights	68
bearing pullers	107
Beha cooking range switches	114
bells	72
bench grinder	109
berth lights	180
BHF lamps	57
binding wire	153
bi-pin lamps	25
black light lamps	41
blended light lamps	57, 58
blowers	243

bootlace ferrules	96
bottom screw wrenches	220
bottom screws	220
bowl reflector lamps	12
Brakleen	158
Brass junction boxes	201
brass switches	191
Bright Star flashlights	65
Bright Star spare parts	68
British fuses	216
brush seater	169
bullseyes	185
buoy lamps	19
button cells	63
buzzers	72

<b>C</b>	
cabin fans	243
cabin switches	111
cable clips	87
cable drums	123
cable glands	84-86
cable knives	100
cable saddles	87
cable shoes	94-98
cable tie bases	90
cable ties	88-90
cable tray	90
cable trunking	90
cam switches	114
candle lamps	12
capacitors	157
capacitors for fluorescent lighting	43
car fuses	208
carbon brushes	160-168
cargo clusters	185, 186
Ceeform couplings	193
Ceeform plugs	192
Ceeform receptacles	194, 195
Celeron rods	155
cell tester	61
Cello-lite fuses	217
Christmas lights	36
Circline fluorescent tubes	40
circuit breaker accessories	224-226
circuit breakers	223, 224
clamp-meters	173
clip-on probes	179
CO contact cleaner	158
coaxial cable	70
code markers	93
coffee makers	236

coils for contactors	135, 136
coloured lamps	11
Combicheck	174
combination spanners	107
commutator cloth	169
commutator file	169
commutator saws	169
commutator stones	169
compass lamps	29
computer fans	243
concentric plugs	196
concentric receptacles	196
conduit tubing	121
contact blocks	116, 117, 137
contactors	133, 134
container couplings	193
container plugs	192
container receptacles	195
control cable	80
control cable with copper screen	81
control stations	120
cord dimmers	111
cordless drills	109
cotton tape	148
couplings	121
CRC 2/26	158
CRC 5/56	158
CRC products	158
crimping tools	98
current transformers	176

D	
daylight blue lamps	11
demineralized water	61
desk lamps	180
de-solder wick	99
de-soldering gun	99
diagonal cutting pliers	104, 105
diazed fuses	219
diazed fuses bases	220
diazed screw caps	220
dimmer switches	111
dishwashers	239
DKN fixtures	181
double envelope lamp	33
Duct Seal	153
Dust Free	158
dust bags for vacuum cleaners	237



E	
earthing clamps	91
Ego switches	114
electric drills	109
electric irons	236
electric tools	109, 110
electrical putty	153
electricians gloves	153
electricians screwdrivers	101-103
electro cleaner	158
electrode holders	91
electrolyte for alkaline batteries	61
emergency stop switches	120
empire sleeving	151
empire tape	148
enclosures	201
enclosures for transformers	146
end cutters	104
energy savers	41, 42
exiter lamps	30
explosion proof bells	204
explosion proof fixtures	203, 204
explosion proof hand lamps	66
explosion proof junction boxes	205
explosion proof plugs	205
explosion proof receptacles	205
explosion proof switches	204
extension cables for containers	195

F	
fan heaters	236
fan impellers for motors	170
fans	242
festoon lamps	29
files	103
fl lighting fittings	44-46
fl lamp holders	48, 49
fl tubes	39, 40
flashlight spare lamps	68, 69
flashlights	65
flat nose pliers	104, 105
flexible wire	75, 76
floodlights	186-188
Fluke accessories	179
Fluke meters	173
fluorescent 2D lamps	40
fluorescent hand lamps	44
fluorescent lights	44-46
fluorescent tubes	39, 40
fork terminals	95
frequency meters	178
fuse pullers	222

fuse wire	217
fuses	206-222
fuses for Fluke meters	179
fuses with indicator	209

<b>G</b>	
Glamox fl fittings	46
glass fuses and holders	206-211
glass sleeving	151
globes for bullseyes	185
globes for rotating beacons	74
globes for well glass fittings	184
glue guns	243
guards for well glass fittings	183

<b>H</b>	
hacksaws	105
halogen fixtures	187
halogen lamps	32-35
hammer lamps	10
hand lamps	44, 66, 181
hand-mixers	237
hand taps	109
heat resistant cable	77
heating cables	240
heating elements	240-242
heating lamps	36
hexagon allen screwdrivers	106
hexagon allen wrenches	106
high-pressure sodium fixtures	187
high-pressure mercury lamps	57
high-pressure sodium lamps	58
high-temperature tape	148
HNA accessories	198
HNA couplings	196
HNA inserts	198
HNA plugs	196
HNA receptacles	197
HNA receptacles with switch	198
hole saws	105
hooters	73
hooters with warning light	73
hot air guns	242
hot melt glue guns	242
hotplates	235
hour meters	175
hydrometers	61

I	
ignitors	59
illuminated pushbutton switches	116, 117
immersion heaters	236-241
indicator lamps	20-28
indoor lighting	181
infra-red heating lamps	36
infra-red thermometer	173
insulating paper	155
insulating sheets	154
insulating sleeving	149, 150
insulating tape	147
insulating varnish	153
insulation beads	151
insulation matting	153
insulation testers	175
interiors for Cee container material	195
interiors for concentric material	196
iodine lamps	33
irons	237
Italian plugs	199

J	
Japanese buzzers	72
Japanese fuses and holders	217
Japanese lamp holders	49
Japanese mercury lamps	57
Japanese plugs	199
Japanese receptacles	199
Japanese receptacles with switch	200
Japanese reflector lamps	16
Japanese switches	191
Japanese well glass fittings	183
jig saws	109
junction boxes	201
junior hacksaws	105

K	
key for Rittal junction boxes	201
knife blade fuses	221, 222
knobs for cooking ranges	114

<b>L</b>	
lamp holders	48, 125-128
lamp pullers	29
lamps	8-10
Lectra Clean	158
LED Berth Light	55
LED Bright Star	66
LED energy savers	50
LED flashlights	65
LED floodlights	186
LED floodlights on rack, rech.	56
LED Handlamp	56
LED indicator lamp	50, 51
LED lamp candle	51
LED lamp GLS	51
LED lamp GU10	52
LED lamp luminaire with tube	56
LED lamp spherical	51
LED lamp tubular	51
LED magnet test	65
LED Mirror Bathroom fixture	55
LED Philinea	52, 180
LED pilotlight	130, 131
LED pushbutton	115-117
LED reflector lamp	50, 51
LED Sabrelite	66
LED torch	55
LED tube	53
LED tube Philips	53
LED Wolfrite explosion proof	67
limit switches	140, 141
Linestra lamps	36
links for renewable fuses	215
lithium batteries	63
lock nuts	84-86
locking type plugs	196
long nose pliers	104, 105
low voltage lamps	16, 17

<b>M</b>	
Maglite	65
magnet tester	175
magnifying lamp	180
marine cable	82
marine cable armoured	83
marking tape dispenser	92
marking tapes	92
mastercheck	174
measuring instruments	173-179
megaphone	239
megger-testers	175
mercury lamps	57

metal halide lamp	59
microswitches	142-144
microwaves	235
Mignon diazed fuses	218
miniature switches	115
motor run capacitors	157
motor start/protection switch	139
multigrip pliers	104, 105
multimeters	173
multiway plugs	118
multiway receptacles	123, 124

<b>N</b>	
navigation lamps	18, 19
navigation lights	190
Ndz fuses	218
neon indicator lamps	26
neoprene cable	79
neoprene drum reeling cable	123
Neozed fuses	218
Niphan plugs and receptacles	196

<b>O</b>	
oven lamps	15
overload relays	136

<b>P</b>	
Pertinax	154
petroleum gel	61
phase control relay	137
Philinea fixtures	180
Philinea lamps	36
pilot lights	129-131
pin terminals	95
PLC lamps	42
PLE lamps	41
pliers	104, 105
PLL lamps	42
PLS lamps	42
plugs	118
plugs, American	119
plugs, Belgian	119
plugs, British	118
plugs, European	118, 119
plugs, Japanese	119
portable hand lamps	181
power supplies	146
precision screwdrivers	103
prefocus lamps	69
pressed-glass lamps	15

pressure controls	227, 228
projection lamps	30, 31
PT100	231-234
pushbutton switches	115-117
putty	153
PVC cable	77, 78
pygmy lamps	13, 14

<b>R</b>	
REF test units	159
receptacles, American	124
receptacles, British	122
receptacles, European	122
receptacles, Japanese	124
rechargeable batteries	64
REF testgas	159
reflector lamps	12
refrigerators	238
reinforced construction lamps	10
relay sockets	133
relays, plug-in type	132, 133
resin core solder	99
resistance thermometers	231-234
rewinding wire	156
rice cookers	235
ring terminals	94, 97
rods for test equipment	159
rotary switches	112-115
rotating beacons	74
round nose pliers	104, 105
rubber cable	78
rubber gloves	153

<b>S</b>	
Sabrelite flashlight	66
SAK material	92
Schuko plugs	118
Schuko receptacles	200
Scotch tape	148
screwdriver tester	174
screwdrivers	101-103
sealed beam lamps	16
searchlight lamps	31
searchlights	189
selector switch	115
self-limiting heating cables	239
self-vulcanizing tape	148
series lamps for navigation lights	17
shade clamps	48
shades for fl fittings	46
shaft bushes for fan impellers	170

shrinkable sleeving	152
shunts	177
side-cutting pliers	104, 105
signalling lamps	30
signalling lights	68
silicon cable	77
silicon cable armoured	82
silicone sealant	153
Single pin fluorescent tubes	40
sirens	73
smoke detector lamps	30
sodium lamps	58
soldering guns	100
soldering irons	100
soldering liquid	99
soldering paste	99
soldering stations	99
solderless connectors	95, 98
spark testing screwdriver	174
spherical lamps	12, 13
splicing compound tape	148
stainless steel cable ties	90
starter holders	48
starters	43
storage batteries	60
storage boxes	110
stoves	236
sulphuric acid	61
supports for thermal relays	136
switches indoor	115
switchboard cable	82
switches, outdoor	191
switches Telemecanique	115

T	
tape rules	103
teflon tape	148
telephone indicator lamps	26-28
telephone plugs	121
telephone receptacles	121
telephones	239
Terasaki equipment, lamps for	20, 28
terminal blocks	201
terminal blocks for TS32	92
terminal boards	157
terminal connectors	91
test gas	159
test leads	179
thermal overload relays	136
thermistor relay	137
thermocouples	231-234
thermostats	229-234, 239

thinner for isolating varnish	153
time relays	138
tips for soldering irons	99
toasters	235
toolbox	110
tornado lamp	41
transformers	145
trimming knives	103
tubular lamps	14, 15
tumble-dryers	239
tweezers	104
twist drills	108

U	
UV lamps	41

V	
vacuum cleaners	237
varnished cambric tape	148
varnished cotton sleeving	151
vaseline	61
vernier calipers	103
Volt Stick	174
Volt testers	174
voltmeters	177, 178

W	
wall lamps	180
washing machines	238
water boilers	236
watercooler	238
watertight fl fittings	44-46
WD-40	159
wedge base lamps	19
welding cable	77
welding connectors	91
well glass fittings	182, 183
wire	75
wire connectors	91
wire strippers	100
Wolf hand lamps	66
Wolfrite accessories	67
Wolfrite hand lamps	67

Z	
Zinc-it	158





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