

# 4

## PANEL PRODUCTS

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## Pilot Devices - Compact 22mm Series

### Pushbuttons

Type	Characteristic	NO	NC	Part No.	
Flush	Green	1	-	1SFA619100R1012	
	Yellow	1	-	1SFA619100R1013	
	Blue	1	-	1SFA619100R1014	
	Black	1	-	1SFA619100R1016	
	Green	2	-	1SFA619100R1022	
	Black	2	-	1SFA619100R1026	
	Red	-	1	1SFA619100R1041	
	Black	-	1	1SFA619100R1046	
	Red	1	1	1SFA619100R1071	
	Green	1	1	1SFA619100R1072	
	Yellow	1	1	1SFA619100R1073	
	Blue	1	1	1SFA619100R1074	
	Raised	Red	-	1	1SFA619102R1041
			-	1	1SFA619500R1041
Emergency stop	30mm Stop twist release	-	2	1SFA619500R1051	
		1	1	1SFA619500R1071	
	40mm Stop twist release	-	1	1SFA619550R1041	
		-	2	1SFA619550R1051	
		1	1	1SFA619550R1071	
	40mm Stop key release	-	2	1SFA619552R1051	
	1	1	1SFA619552R1071		

### Selector Switches

Type	No. of Positions	Action	Function	NO	NC	Part No.
Short Handle Switch	2	Maintained	BC	1	-	1SFA619200R1016
			BC	2	-	1SFA619200R1026
			BC	1	1	1SFA619200R1076
			AC	1	-	1SFA619201R1016
			AC	2	-	1SFA619201R1026
			AC	-	1	1SFA619201R1046
	3	Spring return	AC	1	1	1SFA619201R1076
			BC	2	-	1SFA619202R1026
			BC	1	1	1SFA619202R1076
			ABC	2	-	1SFA619210R1026
			ABC	1	1	1SFA619210R1076
			A-B-C	2	-	1SFA619211R1026
			AB-C	2	-	1SFA619212R1026
			AB-C	1	1	1SFA619212R1076

### Pilot Lights

Type	Characteristic	Part No.	
Pilot light heads	Red	1SFA619402R1001	
	Green	1SFA619402R1002	
	Yellow	1SFA619402R1003	
	Blue	1SFA619402R1004	
	White	1SFA619402R1005	
	Clear	1SFA619402R1008	
	Pilot light heads (Integrated LED)	24V AC/DC	Red 1SFA619403R5021 Green 1SFA619403R5022 Yellow 1SFA619403R5023 Blue 1SFA619403R5024 Clear 1SFA619403R5028
		100 - 130V AC	Red 1SFA619403R5131 Green 1SFA619403R5132 Yellow 1SFA619403R5133 Clear 1SFA619403R5138
		100 - 130V DC	Red 1SFA619403R5151 Green 1SFA619403R5152 Yellow 1SFA619403R5153 Clear 1SFA619403R5158
		230V AC	Red 1SFA619403R5231 Green 1SFA619403R5232 Yellow 1SFA619403R5233 Blue 1SFA619403R5234 Clear 1SFA619403R5238

### Pushbutton Enclosures



Type	Part No.
Compact enclosure 1 Hole - Yellow	1SFA619821R1000
Compact enclosure E-Stop	1SFA619821R1001
Compact enclosure E-Stop With shroud	1SFA619821R2001
E-Stop Shroud with compact enclosure	1SFA619920R8053
CP1-10W-10 Compact pushbutton	1SFA619100R1015
C2SS1-10R-20 Compact selector switch	1SFA619200R1021

## Pilot Devices - Modular 22mm Series



### Pushbuttons

Type	Characteristic	Part No. Plastic	Part No. Metal	
Flush	Non illuminated	1SFA611100R100 <input type="checkbox"/>	1SFA611100R300 <input type="checkbox"/>	
	Illuminated	Red	1SFA611100R1101	1SFA611100R3001
		Green	1SFA611100R1102	1SFA611100R3002
		Yellow	1SFA611100R1103	1SFA611100R3103
		White	1SFA611100R1105	1SFA611100R3105
Raised	Non illuminated	Red	1SFA611102R1001	1SFA611102R3001
Double Function	Non illuminated	Green/Red	1SFA611130R1106	
	Illuminated	Green/Red	1SFA611131R1102	
Mushroom	Non illuminated Non latching	Red 40mm	1SFA611124R1001	
		Red 60mm	1SFA611125R1001	

### Selector Switches

Type	No. of Position	Action	Maintained Positions	Part No. Plastic	Part No. Metal
Short Handle	2		Maintained B-C	1SFA611200R1006	1SFA611200R3006
			Spring return C-B	1SFA611202R1006	1SFA611202R3006
	3		Maintained A-B-C	1SFA611210R1006	1SFA611210R3006
			Spring return A-B/C-B	1SFA611211R1006	1SFA611211R3006

### Key Switches

Type	No. of Position	Action	Key Removal	Part No. Plastic	Part No. Metal
Key Operated	2		Maintained B-C	1SFA611280R1001	1SFA611280R3001
			Maintained B	1SFA611281R1001	1SFA611281R3001
			Spring return B	1SFA611282R1001	1SFA611282R3001
	3		Maintained A-B-C	1SFA611283R1001	1SFA611283R3001
			Maintained B	1SFA611284R1001	1SFA611284R3001
			Spring return B	1SFA611285R1001	1SFA611285R3001

### Pilot Lights

Type	Characteristic	Part No. Plastic
Pilot light heads	Red	1SFA611400R1001
	Green	1SFA611400R1002
	Yellow	1SFA611400R1003
	Blue	1SFA611400R1004
	White	1SFA611400R1005
	Clear	1SFA611400R1008
Emergency stop twist to release	E-Stop 40mm	1SFA611523R1001

### Contact Blocks

Type	NO	NC	Part No.
5 Block holder			1SFA611601R1100
3 Block holder			1SFA611605R1100
3 Block holder +	1	-	1SFA611605R1101
	2	-	1SFA611605R1102
	-	1	1SFA611605R1110
	1	1	1SFA611605R1111
	-	2	1SFA611605R1120
Contact block	1	-	1SFA611610R1001
	-	1	1SFA611610R1010
	2	-	1SFA611610R1002
Double contact block	1	1	1SFA611610R1011
	-	2	1SFA611610R1020

# ABB



Part No. Completion  
When ordering complete the Part No. by adding the following:-

Pushbuttons	
Colour	Code
Red	1
Green	2
Yellow	3
Blue	4
White	5
Black	6



## Pilot Light Heads - Integrated LED

### Lamp Blocks

Type	Characteristic	Part No.
24V AC/DC	Red	1SFA611621R1011
	Green	1SFA611621R1012
	Yellow	1SFA611621R1013
	Blue	1SFA611621R1014
Pilot light heads (Integrated LED)	Clear	1SFA611621R1015
	Red	1SFA611621R1041
	Green	1SFA611621R1042
	Yellow	1SFA611621R1043
230V AC	Clear	1SFA611621R1045
	Red	1SFA611621R1071
	Green	1SFA611621R1072
	Yellow	1SFA611621R1073
	Blue	1SFA611621R1074
	Clear	1SFA611621R1075

### Enclosures & Accessories

Type	Characteristics	Part No.
Empty grey enclosure	1 Hole	1SFA611811R1000
	2 Hole	1SFA611812R1000
	3 Hole	1SFA611813R1000
	4 Hole	1SFA611814R1000
Empty yellow enclosure	1 Hole	1SFA611821R1000
Mounting tool	New modular	1SFA611920R8015
Emergency stop shroud	Modular	1SFA611920R8053
Blanking plug	Black	1SFA611920R8130
	Holder - Black	1SFA616920R8120
Legend plate	Insert - No text	1SFA616920R8121
	Holder for plastic enclosures	1SFA611930R1060
	Insert for plastic enclosures	1SFA611930R1061

### Contact Blocks for Enclosures

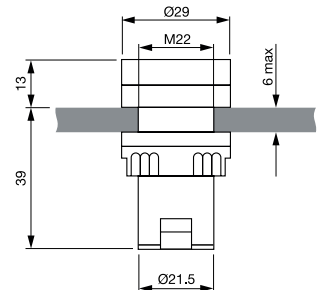
NO	NC	Part No.
1	0	1SFA611610R2001
0	1	1SFA611610R2010
2	0	1SFA611610R2002
0	2	1SFA611610R2020
1	1	1SFA611610R2011

## LED Indicator Lamps

A range of 22mm indicator lamps used in electrical circuits in a variety of voltages. They are primarily used for indication and alarm signals and conform to IEC60947-5-1. The AD56DS utilize LEDs for long life and very low energy consumption and have concealed terminals.

### Technical Specification

Operating Temperature:	-5...+40°C
Operating Humidity:	45...85% RH
Pollution Degree:	3
Installation Degree:	III
Degree of Protection:	IP65
Rated Operating Current:	≤80mA
Electrical Life:	≥30000 hours
Brightness:	≥60



### LED Lamps

Colour	24V AC Part No.	230V Part No.	110V Part No.
Blue	AD56DS-B-24	AD56DS-B-220	AD56DS-B-110
Green	AD56DS-G-24	AD56DS-G-220	AD56DS-G-110
Red	AD56DS-R-24	AD56DS-R-220	AD56DS-R-110
White	AD56DS-W-24	AD56DS-W-220	AD56DS-W-110
Yellow	AD56DS-Y-24	AD56DS-Y-220	AD56DS-Y-110

### LED Test Lamps

Colour	24V AC Part No.	230V Part No.	110V Part No.
Blue	AD56LT-B-24	AD56LT-B-220	AD56LT-B-110
Green	AD56LT-G-24	AD56LT-G-220	AD56LT-G-110
Red	AD56LT-R-24	AD56LT-R-220	AD56LT-R-110
White	AD56LT-W-24	AD56LT-W-220	AD56LT-W-110
Yellow	AD56LT-Y-24	AD56LT-Y-220	AD56LT-Y-110



## 03 Series - IP40

Pushbuttons and illuminated pushbuttons with a bezel size of 24 x 48mm.

### Pushbutton & Pilot Lights - IP40

Type	Switching Action	Contacts	Non-illuminated	illuminated
			Part No.	Part No.
Pushbutton	Momentary action	1 CO	03-611.011	03-616.011
		2 CO	03-612.011	03-617.011
	Maintained action	1 CO	03-613.011	03-618.011
		2 CO	03-614.011	03-619.011
Indicator pilot light				03-021.001

Pushbuttons & Indicator Pilot Lights are fitted with two independent lamp bases. Bezel/Lens/LED required.

### Accessories

Type	Colour	Part No.
One-Part lens	Blue	03-901.6
	Green	03-901.5
	Orange	03-901.3
	Red	03-901.2
	White	03-901.9
	Yellow	03-901.4
	Black/opaque	03-901.0
LED lamps 24V AC/DC	Green	10-2K12.1075
	Red	10-2K12.1072
	Yellow	10-2K12.1074
	Blue	10-2K12.1076
	White	10-2K12.1079
Front bezel flat	Black	03-965.0
Protective cover	Transparent	03-925
Spray proof cover		03-924

## 04 Series - IP65

A modular switching system for 22.5mm mounting holes.

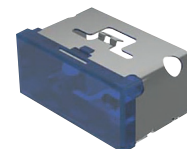
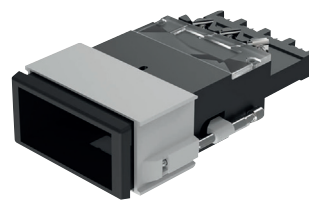
### Pushbutton

Type	Characteristic	Size (ø mm)	Front Ring / Bezel	Part No.	
Pushbutton actuator	Momentary action	22.5	Aluminium	704.012.	<input type="checkbox"/>
			Black plastic	704.009.	<input type="checkbox"/>
			Grey plastic	704.010.	<input type="checkbox"/>
Illuminated pushbutton	Momentary action	22.5	Aluminium	704.032.	<input type="checkbox"/>
			Black plastic	704.029.	<input type="checkbox"/>
			Grey plastic	704.030.	<input type="checkbox"/>
Emergency stop - twist release IEC60947.5	Maintained action	40mm	Plastic	704.064.2	704.075.2

### Selector Switches - IP65

Type	No. of Position	Action	Aluminium	Plastic
			Part No.	Part No.
Short handle	2	Maintained	704.411.0	704.410.0
			704.403.0	704.402.0
	3	Spring return	704.405.0	704.404.0
Long handle	2	Maintained	704.101.0	704.100.0
			704.093.0	704.092.0
	3	Spring return	704.095.0	704.094.0

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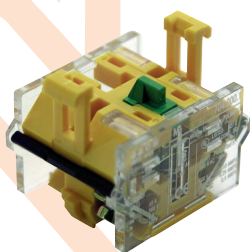
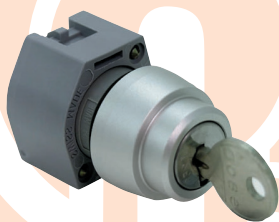


Part No. Completion  
When ordering complete the Part No. by adding the following:-







#### Pushbuttons

Colour	Code
Red	2
Green	5
Yellow	4
Blue	6
Clear	7

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## Key Switches

Type	No. of Positions	Action	Key Removal	Aluminium	Plastic
				Part No.	Part No.
Key operated	2	 Maintained	II	704.120.0	704.340.0
		 Maintained	I	704.121.0	704.341.0
		 Maintained	I - II	704.122.0	704.342.0
Key operated	3	 Maintained	0	704.114.0	704.344.0
		 Maintained	I - II	704.116.0	
		 Spring return	0	704.115.0	704.345.0

## Contact Block

Type	NO	NC	Part No.
Snap action	-	1	704.900.2
	1	1	704.900.5
	1	-	704.900.1
	-	2	704.900.4
	2	-	704.900.3
Slow make (use with emergency stop)	-	1	704.910.2
	1	1	704.910.5
	1	-	704.910.1
	-	2	704.910.4
	2	-	704.910.3

## Accessories

Type	Characteristic	Part No.
Protective cover for pushbuttons		704.925.0
Protective front ring	Aluminium anodised with transparent silicone membrane	704.600.3

## Pilot Lights

Type	Characteristic	Part No.	<input type="checkbox"/>
Full face illumination	Grey plastic	704.000.	<input type="checkbox"/>
	Black plastic	704.006.	<input type="checkbox"/>
Front illumination	Grey plastic	704.002.	<input type="checkbox"/>

## Accessories

Type	Socket	Characteristic	Part No.	
Lamp transformer units		115/24V AC	704.970.3	
		230/24V AC	704.970.4	
Flasher element		24V DC	704.943.5	
		6V AC/DC/200mA	10-1406.1369	
Filament lamp Ba9	Ba9s	12V AC/DC/100mA	10-1406.1329	
		24V AC/DC/50mA	10-1412.1279	
		110V AC/DC/22mA	10-1422.1179	
		130V AC/DC/20mA	10-1424.1179	
			Red	10-2512.1142
Single LED	Ba9s	24V AC/DC	Yellow	10-2512.1144
			Green	10-2512.1145
			Blue	10-2512.1146
			White	10-2512.1149

Other voltage LEDs available on request.

Part No. Completion  
When ordering complete the Part No. by adding the following:-



### Pushbuttons

Colour	Code
Red	2
Green	5
Yellow	4
Blue	6
Clear	7

## 04 Series Flush Mount

A modular switching system for 30.5mm mounting holes. IP65 Sealed.

Pushbutton				
Type	Characteristic	Front Ring / Bezel	Part No.	
Pushbutton actuator	Momentary action	Aluminium	704.012.	□ 18
	Maintained action	Aluminium	704.042.	□ 18
Illuminated pushbutton	Momentary action	Aluminium	704.032.	□ 18
	Maintained action	Aluminium	704.062.	□ 18

Selector Switches					
Type	No. of Position	Action	Front Ring / Bezel	Part No.	
Short handle	2		Maintained	Aluminium	704.411.018
	3		Maintained	Aluminium	704.403.018

Contact Blocks		
NO	NC	Part No.
1	0	704.900.1
0	1	704.900.2
2	0	704.900.3
0	2	704.900.4
1	1	704.900.5

## 61 Series Flush Mount

Flush mount switches 250V AC, 5A switches IP65 sealed

Illuminated Pushbuttons				
Bezel Shape	Actuator Function	Terminal	Size (mm)	Part No.
Square	Momentary	Solder	24x24	61-1100.0
	Maintained			61-1200.0
Rectangle	Indicator		24x30	61-0000.02

Front Bezel-Set			
Bezel Shape	Material	Size (mm)	Part No.
Round	Aluminium	22.5	61-9933.0
		22.5	61-9933.10
Square	Black plastic	24x24	61-9930.0
Rectangular		24x30	61-9931.0

Lens Illuminative			
Bezel Shape	Colour	Size (mm)	Part No.
Round	Red	19.7	61-9642.2
	Yellow	19.7	61-9642.4
	Green	19.7	61-9642.5
Square	Red	18x18	61-9671.2
	Yellow	18x18	61-9671.4
	Green	18x18	61-9671.5
Rectangular	Red	18x24	61-9681.2
	Yellow	18x24	61-9681.4
	Green	18x24	61-9681.5

Order Button/Bezel/Lens/Lamp for complete unit.



□ Part No. Completion  
When ordering complete the Part No. by adding the following:-

Pushbuttons	
Colour	Code
Red	2
Green	5
Yellow	4
Blue	6
Clear	7



Complete Switch consists of

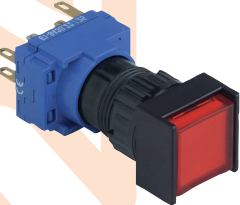
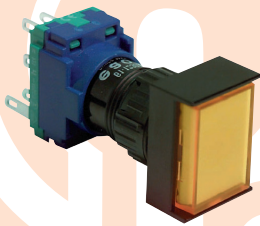
**Series 61 Flush Mount**

- \_\_\_\_\_ Lens
- \_\_\_\_\_ Actuator
- \_\_\_\_\_ Flush Bezel
- \_\_\_\_\_ Contact Block

**Series 61 Raised**

- \_\_\_\_\_ Lens
- \_\_\_\_\_ Actuator
- \_\_\_\_\_ Contact Block

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## 61 Series - Raised

Raised switches 16mm mounted 250V AC, 5A switches IP65 sealed.

### Illuminated Pushbuttons / Emergency Stop

Shape	Actuator Function	Size (mm)	Part No.
Round	Momentary	18	61-1110.0
	Maintained		61-1210.0
	Indicator		61-0010.02
Square	Momentary	18x18	61-1120.0
	Maintained		61-1220.0
	Indicator		61-0020.02
Rectangle	Momentary	18x24	61-1130.0
	Maintained		61-1230.0
	Indicator		61-0030.02
Round	Emergency stop (with arrows) Twist release	27	61-3440.4/1
	Emergency stop (marked STOP) EN418 Twist release		61-3440.4/2

### Lens (Raised Mounting)

Lens Shape	Colour	Lens Size (Approx) mm	Part No.
Round	Red	15.8	61-9311.2
	Yellow	15.8	61-9311.4
	Green	15.8	61-9311.5
Square	Red	15.3 x 15.3	61-9321.2
	Yellow	15.3 x 15.3	61-9321.4
	Green	15.3 x 15.3	61-9321.5
Rectangle	Red	21.5 x 15.3	61-9331.2
	Yellow	21.5 x 15.3	61-9331.4
	Green	21.5 x 15.3	61-9331.5

### Contact Block Series 61

Type	Contact		Illuminated	Mounting	Part No.
	NO	NC			
Snap action gold	1	0	Yes	Plug-In 2.8mm	61-8410.22
	2	0	Yes	Plug-In 2.8mm	61-8420.22
	1	1	Yes	Plug-In 2.8mm	61-8470.22
Snap action silver	1	0	Yes	Plug-In 2.8mm	61-8410.12
	2	0	Yes	Plug-In 2.8mm	61-8420.12
	1	1	Yes	Plug-In 2.8mm	61-8470.12
Slow make silver	1	0	Yes	Screw Terminal	61-8610.11
	2	0	No	Screw Terminal	61-8625.11
	1	1	No	Screw Terminal	61-8675.11
<b>Emergency Stop Contact Block</b>					
Slow make silver	0	1		Solder 2.8mm	61-8745.17
	1	1		Solder 2.8mm	61-8755.17
	0	1		Screw Terminal	61-8745.11
	1	1		Screw Terminal	61-8775.11

### Lamps / LEDs

Function	Voltage / Current	Colour	Base Style	Part No.
Lamp	14V/80mA 28V/40mA	White	T1¾	10-1310.1319
		White	T1¾	10-1313.1249
		Red	T1¾	10-2J12.1062
Single LED	24V AC/DC	Yellow	T1¾	10-2J12.1064
		Green	T1¾	10-2J12.1065
		White	T1¾	10-2J12.3139

### Accessories

Description	Part No.
Emergency stop label	61-9970.2
Lens remover for raised switches	02-905
Lens remover for flush switches	61-9730.0
Lamp / LED remover	61-9740.0
Contact block removal tool	61-9711.0

Order Button/Bezel/Lens/Lamp for complete unit.

#### Complete Switch consists of

##### Series 61 Flush Mount

- \_\_\_\_\_ Lens
- \_\_\_\_\_ Actuator
- \_\_\_\_\_ Flush Bezel
- \_\_\_\_\_ Contact Block

##### Series 61 Raised

- \_\_\_\_\_ Lens
- \_\_\_\_\_ Actuator
- \_\_\_\_\_ Contact Block



## 61 Series - Emergency Stop

Twist release, 16mm mounted, 50V, 0.2A, IP69K and IP67 Sealed.  
Emergency Stop - Approved to EN60947-5-5 and ISO 13850.

### 61 Series – Emergency Stop

Head Size	No. of Contacts	Mounting Depth	Connection Method	Illuminated 6-32V DC	Part No.
27mm	1 NC	21.2mm	Plug-in/solder	No	61-6441.4047
27mm	2 NC	21.2mm	Plug-in/solder	No	61-6441.4057
27mm	3 NC	21.2mm	Plug-in/solder	No	61-6441.4067
27mm	1 NO / 1 NC	21.2mm	Plug-in/solder	No	61-6441.4077
27mm	2 NC / 1 NO	21.2mm	Plug-in/solder	No	61-6441.4087
27mm	1 NC / 2 NO	21.2mm	Plug-in/solder	No	61-6441.4097
27mm	1 NC	21.2mm	Plug-in/solder	Red LED	61-6451.4247
27mm	2 NC	21.2mm	Plug-in/solder	Red LED	61-6451.4257
27mm	1 NC / 1 NO	21.2mm	Plug-in/solder	Red LED	61-6451.4277
40mm	1 NC	21.2mm	Plug-in/solder	No	61-6461.4047
40mm	2 NC	21.2mm	Plug-in/solder	No	61-6461.4057
40mm	3 NC	21.2mm	Plug-in/solder	No	61-6461.4067
40mm	1 NO / 1 NC	21.2mm	Plug-in/solder	No	61-6461.4077
40mm	2 NC / 1 NO	21.2mm	Plug-in/solder	No	61-6461.4087
40mm	1 NC / 2 NO	21.2mm	Plug-in/solder	No	61-6461.4097

## 84 Series - Emergency Stop

Twist release, 22.3mm mounted, 250V AC 3A, IP65 Sealed.  
Emergency Stop - Non Illuminated - Approved to EN60947-5-5 and ISO 13850.

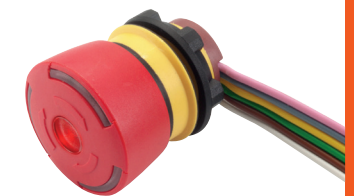
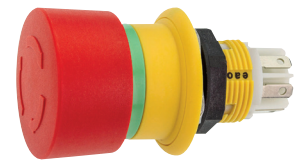
### 84 Series – Emergency Stop

Actuation Status Ring	No. of Contacts	Mounting Depth	Connection Method	Illuminated	Part No.
Green	1 NO	18mm	Plug-in/solder	No	84-5121.0020
Green	1 NO / 1NC	18mm	Plug-in/solder	No	84-5131.0020
Green	2 NO	18mm	Plug-in/solder	No	84-5141.0020
Black	1 NO	18mm	Plug-in/solder	No	84-5020.0020
Black	1 NO / 1NC	18mm	Plug-in/solder	No	84-5030.0020
Black	2 NO	18mm	Plug-in/solder	No	84-5040.0020
Green	1 NO	13mm	Flying Lead	No	84-5120.0040
Green	1 NO / 1NC	13mm	Flying Lead	No	84-5130.0040
Green	2 NO	13mm	Flying Lead	No	84-5140.0040
Black	1 NO	13mm	Flying Lead	No	84-5020.0040
Black	1 NO / 1NC	13mm	Flying Lead	No	84-5030.0040
Black	2 NO	13mm	Flying Lead	No	84-5040.0040

### 84 Series – Emergency Stop Illuminated

Actuation Status Ring	No. of Contacts	Mounting Depth	Connection Method	Illuminated	Part No.
Green	1 NO	18mm	Plug-in/solder	Red LED	84-5121.2B20
Green	1 NO / 1NC	18mm	Plug-in/solder	Red LED	84-5131.2B20
Green	2 NO	18mm	Plug-in/solder	Red LED	84-5141.2B20
Black	1 NO	18mm	Plug-in/solder	Red LED	84-5021.2B20
Black	1 NO / 1NC	18mm	Plug-in/solder	Red LED	84-5031.2B20
Black	2 NO	18mm	Plug-in/solder	Red LED	84-5041.2B20
Green	1 NO	13mm	Flying Lead	Red LED	84-5121.2B40
Green	1 NO / 1NC	13mm	Flying Lead	Red LED	84-5131.2B40
Green	2 NO	13mm	Flying Lead	Red LED	84-5141.2B40
Black	1 NO	13mm	Flying Lead	Red LED	84-5021.2B40
Black	1 NO / 1NC	13mm	Flying Lead	Red LED	84-5031.2B40
Black	2 NO	13mm	Flying Lead	Red LED	84-5041.2B40

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**Part No. Completion**  
When ordering complete the Part No. by adding the following:-

Colour	Code
Red	R
Green	G
Yellow	Y
Blue	B
Black	S
White	W

## RMQ Titan Series

### Pushbuttons

Type	Characteristic	Part No.
Flush cap	Spring return	M22-D- <input type="checkbox"/>
	Maintained	M22-DR- <input type="checkbox"/>
Raised cap	Spring return	M22-DH- <input type="checkbox"/>
	Maintained	M22-DRH- <input type="checkbox"/>
Double function	With indicator	M22-DDL-GR-X1/X0
Mushroom	Spring return	M22-DP-R/X0

### Selector Switches

Type	No. of Position	Action	Part No.
Short handle	2	↓	M22-WKV
	3	↓	M22-WRK3
Set of coding adaptors for converting between maintained and spring return function.			M22-XC-Y

### Key Switches

Type	No. of Position	Action	Key Removal	Part No.
Key operated	2	↓	0-I	M22-WRS
	3	↓	I-0-I	M22-WRS3
Set of coding adaptors for converting between maintained and spring return function.				M22-XC-Y
Set of coding adaptors for converting key withdrawability				M22-XC-R

### Indicator Lights

Type	Part No.
Flush	M22-L- <input type="checkbox"/>
Extended	M22-LH- <input type="checkbox"/>

### Illuminated Pushbuttons

Type	Characteristic	Part No.
Flush cap	Spring return	M22-DL- <input type="checkbox"/>
	Maintained	M22-DRL- <input type="checkbox"/>

### Fixing Adaptors

Type	No. of Position	Contact		Part No.
		NO	NC	
Fixing adaptor	Front	1	0	M22-A
	Front	0	1	M22-K10
Contact elements	Base	1	0	M22-KC10
	Base	0	1	M22-KC01

## LED Elements

Rating	Fixing	Part No.	
18-30V AC/DC	Front	M22-LED-	<input type="checkbox"/>
	Base	M22-LEDC-	<input type="checkbox"/>
85-264V AC/DC	Front	M22-LED230-	<input type="checkbox"/>
	Base	M22-LEDC230-	<input type="checkbox"/>

## Accessories

Type	Part No.
Blanking plug	M22-B
Diaphragms transparent	M22-T-D
Adaptor ring set 30/22.5mm	M22S-R30
Combination box spanner	M22-MS

## Legend Plates & Legends

Type	Characteristic	Part No.
Legend plate without holders, insert plates for label mounts	30mm wide	M22S-ST-X
		M22S-XST
Complete legend plates Std. 30x50mm with 18x27mm legends	O I	M22S-ST-X89
	I O II	M22S-ST-X93
	STOP	M22S-ST-GB0
	START	M22S-ST-GB1
	OFF	M22S-ST-GB5
	ON	M22S-ST-GB6
	FAULT	M22S-ST-D8
	RUN	M22S-ST-GB7
	HAND AUTO	M22S-ST-D11
	MAN. AUTO	M22S-ST-GB11
	OFF ON	M22S-ST-GB10
	HAND O AUTO	M22S-ST-D12
MAN. O AUTO	M22S-ST-GB12	
Emergency legend plates	Ø 90mm	M22-XAK1
	Ø 60mm	M22-XBK1

## Emergency-Stop Actuators IP66

Mounting	Characteristic	Part No.
Surface	Complete unit	M22-PV/KC11/Y
	Non-illuminated	M22-PV
Front pull to release	Illuminated	M22-PVL
	Key	M22-PVS
Front twist to release	Non-illuminated	M22-PVT
	Illuminated	M22-PVLT

## Pushbutton Enclosures - IP66

Type	Part No.
1 Gang	M22-I1
2 Gang	M22-I2
1 Gang for emergency-stop activators	M22-IY1



Part No. Completion  
When ordering complete the Part No. by adding the following:-

LED	Colour	Code
	Red	R
	Green	G
	Blue	B
	White	W



## Harmony XB4 Series - Metal

### Pushbuttons (Heads Only)

Type	Characteristic	Part No.
Flush cap	Choice of 6 colours	ZB4 BA <input type="checkbox"/>
	Green push with "I" marking	ZB4 BA331
	Green push with "START" marking	ZB4 BA333
	Red push with "O" marking	ZB4 BA432
	Red push with "STOP" marking	ZB4 BA434
Raised cap	Transparent cap for insertion of legend	Choice of 6 colours ZB4 BA <input type="checkbox"/> 8
	High bezel	Choice of 6 colours ZB4 BA <input type="checkbox"/> 4
		Choice of 6 colours ZB4 BL <input type="checkbox"/>
		Red push with "O" marking ZB4 BL434
		Red push with "STOP" marking ZB4 BL432
Double function	2 Flush	Green push with "I" marking / Red push with "O" marking ZB4 BA7341
	1 Flush 1 Raised	Green push with "I" marking / Red push with "O" marking ZB4 BL7341
	2 Flush 1 Clear central pilot light <sup>(1)</sup>	Green push with "I" marking / Red push with "O" marking ZB4 BW7A3741
	1 Flush 1 Raised 1 Clear central pilot light <sup>(1)</sup>	Green push with "I" marking / Red push with "O" marking ZB4 BW7L3741
	2 Flush 1 Raised red push marked "STOP"	White push with "↑" marking / Black push with "↓" marking ZB4 BA71124
Mushroom head spring return	30mm	Green ZB4 BC34
	40mm	Green ZB4 BC3
	60mm	Green ZB4 BR3
Mushroom head latching	40mm Push-pull	Black ZB4 BT2
	60mm Push-pull	Black ZB4 BX2
	30mm Turn to release	Black ZB4 BS42
	40mm Turn to release	Yellow ZB4 BS55
	60mm Turn to release	Black ZB4 BS62
	30mm Key release <sup>(2)</sup>	Black ZB4 BS72
	40mm Key release <sup>(2)</sup>	Black ZB4 BS12
	60mm Key release <sup>(2)</sup>	Black ZB4 BS22
	40mm Push-pull	ZB4 BT84
	60mm Push-pull	ZB4 BX84
Emergency stop and emergency switching off	30mm Turn to release	ZB4 BS834
	40mm Turn to release	ZB4 BS844
	60mm Turn to release	ZB4 BS864
Red mushroom head, Mechanical latching	30mm Key release <sup>(2)</sup>	ZB4 BS934
	40mm Key release <sup>(2)</sup>	ZB4 BS944
	60mm Key release <sup>(2)</sup>	ZB4 BS964
Emergency switching off, illuminated, Red mushroom head, Mechanical latching	40mm Push-pull <sup>(1)</sup>	Illuminated ZB4 BW643

(1) Only for use with bodies comprising a light source with integral LED.

(2) For specific keys with other numbers, please consult your local sales office.














Part No. Completion  
When ordering complete the Part No. by adding the following:-

Colour	Code
White	1
Black	2
Green	3
Red	4
Yellow	5
Blue	6







## Harmony ZB4 Series - Metal

### Selector Switches

Type	No. of Position	Action	Padlockable Position	Part No.
Short handle	2	 Maintained		ZB4 BD2
		 Spring return		ZB4 BD4
	3	 Maintained		ZB4 BD3
		 Spring return		ZB4 BD5
Long handle	2	 Maintained		ZB4 BJ2
		 Spring return		ZB4 BJ4
	3	 Maintained		ZB4 BJ3
		 Spring return		ZB4 BJ5
Long handle padlockable	2	 Maintained	I - II	ZB4 BJ294
		 Spring return	I	ZB4 BJ491
	3	 Maintained	I	ZB4 BJ391
		 Maintained	II	ZB4 BJ392
		 Spring return	0	ZB4 BJ593

### Key Switches

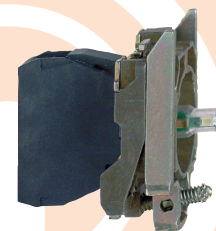
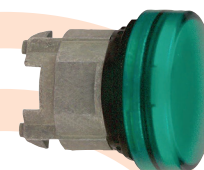
Type	No. of Position	Action	Key Removal	Part No.
Key operated with key No.455 (1)	2	 Maintained	I - II	ZB4 BG4
		 Spring return	I	ZB4 BG6
	3	 Maintained	I - II - 0	ZB4 BG0
		 Spring return	0	ZB4 BG7

### Body Fixing Collar

Type	Part No.
Body fixing collars for use with electrical block (contact or light)	ZB4 BZ009

### Pilot Lights

Type	Charactoristic	Part No.
Pilot light heads	Head with non removable lens for LED	ZB4 BV0 <input type="checkbox"/> 3
	Head with plain lens for insertion of legend for LED	ZB4 BV0 <input type="checkbox"/> 3E
Body sub assembly	24V AC/DC	ZB4 BVB <input type="checkbox"/>
	24/120V AC	ZB4 BVBG <input type="checkbox"/>
	24/120V AC	ZB4 BVG <input type="checkbox"/>
	230/240V AC	ZB4 BVM <input type="checkbox"/>
Flush cap for LED	Pushing spring return	ZB4 BW3 <input type="checkbox"/> 3



Part No. Completion  
When ordering complete the Part No. by adding the following:-

Pilot lights	Colour	Code
	White	1
	Green	3
	Red	4
	Orange	5
	Blue	6



## Harmony ZB5 Series - Plastic

### Pushbuttons (Heads Only)

Type	Characteristic	Part No.
	Choice of 6 colours	ZB5 AA <input type="checkbox"/>
	Green push with "I" marking	ZB5 AA331
	Green push with "START" marking	ZB5 AA333
	Red push with "O" marking	ZB5 AA332
	Red push with "STOP" marking	ZB5 AA334
Flush cap	Transparent cap for insertion of legion	Choice of 5 colours ZB5 AA <input type="checkbox"/> 8
	High bezel	Choice of 6 colours ZB5 AA <input type="checkbox"/> 4
		Choice of 6 colours ZB5 CA <input type="checkbox"/>
Square	Green push with "I" marking	ZB5 CA431
	Red push with "O" marking	ZB5 CA432
Clear silicon boot IP69 Protection for insertion of protected legend	Green	ZB5 AP38
	Red	ZB5 AP48
Recessed cap	Circle	Choice of 6 colours ZB5 AA <input type="checkbox"/> 6
	Square	Choice of 6 colours ZB5 CA <input type="checkbox"/> 6
		Choice of 6 colours ZB5 AL <input type="checkbox"/>
Circle	Red push with "STOP" marking	ZB5 AL434
	Red push with "O" marking	ZB5 AL432
Square	Choice of 6 colours	ZB5 CL <input type="checkbox"/>
Clear silicon boot IP69K protection	Choice of 6 colours	ZB5 AP <input type="checkbox"/>
Double function	2 Flush	Green push with "I" marking / Red push with "O" marking ZB5 AA7341
	1 Flush 1 Raised	Green push with "I" marking / Red push with "O" marking ZB5 AL7341
	2 Flush 1 Clear central pilot light <sup>(1)</sup>	Green push with "I" marking / Red push with "O" marking ZB5 AW7A3741
	1 Flush 1 Raised 1 Clear central pilot light <sup>(1)</sup>	Green push with "I" marking / Red push with "O" marking ZB5 AW7L3741
2 Flush 1 Raised red push marked "STOP"	White push with "↑" marking / Black push with "↓" marking ZB5 AA71124	
Mushroom head spring return	30mm Push-pull	Green ZB5 AC34 Red ZB5 AC44
	40mm Push-pull	Green ZB5 AC3 Red ZB5 AC4
	60mm Push-pull	Green ZB5 AR3 Red ZB5 AR4
	30mm Push-pull	Black ZB5 AT24
Mushroom head latching	40mm Push-pull	Black ZB5 AT2
	60mm Push-pull	Black ZB5 AX2
	30mm Turn to release	Black ZB5 AS42
	40mm Turn to release	Black ZB5 AS52
	60mm Turn to release	Black ZB5 AS62
	30mm Key release <sup>(2)</sup>	Black ZB5 AS72
	40mm Key release <sup>(2)</sup>	Black ZB5 AS12
60mm Key release <sup>(2)</sup>	Black ZB5 AS22	
Emergency stop, Red mushroom head, Trigger & Mechanical, latching	40mm Push-pull	ZB5 AT84
	30mm Turn to release	ZB5 AS834
	40mm Turn to release	ZB5 AS844
	30mm Key release <sup>(2)</sup>	ZB5 AS934
	40mm Key release <sup>(2)</sup>	ZB5 AS944
	60mm Key release <sup>(2)</sup>	ZB5 AS964

Part No. Completion  
When ordering complete the Part No. by adding the following:-

Pushbuttons	Colour	Code
	White	1
	Black	2
	Green	3
	Red	4
	Yellow	5
	Blue	6









(1) Only for use with bodies comprising a light source with integral LED.

(2) For specific keys with other numbers, please consult your local sales office.






### Bellows for Harsh Environments (IP69)

Type	Material	Part No.
ZB4 BT4... ZB4 BW643 & ZB5 AT84... ZB5 AS964	Silicone	Red ZBZ 48
	EPDM	Black ZBZ 28 Yellow ZBZ 58

## Selector Switches

Type	No. of Position	Action	Padlockable Position	Part No.
Short Handle	2	 Maintained		ZB5 AD2
		 Spring return		ZB5 AD4
	3	 Maintained		ZB5 AD3
		 Spring return		ZB5 AD5
Long Handle	2	 Maintained		ZB5 AJ2
		 Spring return		ZB5 AJ4
	3	 Maintained		ZB5 AJ3
		 Spring return		ZB5 AJ5

## Key Switches

Type	No. of Position	Action	Key Removal	Part No.
Key operated with key No.455 <sup>(1)</sup>	2	 Maintained	I	ZB5 AG2
		 Maintained	I - II	ZB5 AG4
	3	 Spring return	I	ZB5 AG6
		 Maintained	I - 0 - II	ZB5 AG0
		 Spring return	0	ZB5 AG7

## Body Fixing Collar

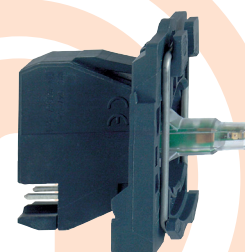
Description	Part No.
Body fixing collars for use with electrical block (contact or light)	ZB5 AZ009

## Contact Blocks for ZB4 & ZB5

Type	NO	NC	Part No.
Standard screw clamp terminal blocks single contact	1	-	ZBE 101
	-	1	ZBE 102
Standard spring clamp terminal blocks	1	-	ZBE 1015
	-	1	ZBE 1025
High power switching screw clamp terminal blocks	1	-	ZBE 501
	-	1	ZBE 502
	2	-	ZBE 503
	-	2	ZBE 504
	1	1	ZBE 505

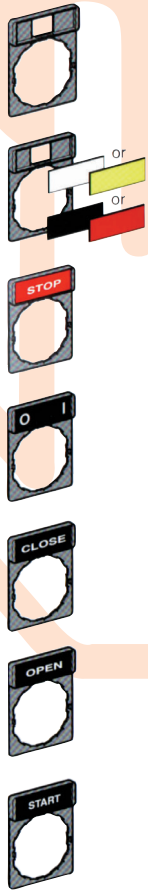
## Pilot Lights

Type	Characteristic	Part No.
Pilot Light Heads	Circle Head with non removable lens for LED	ZB5 AV0 <input type="checkbox"/> 3
	Circle Head with plain lens for insertion of legend for LED	ZB5 AV0 <input type="checkbox"/> 3E
	Circle Head with grooved lens for LED	ZB5 AV0 <input type="checkbox"/> 3S
Body Sub Assembly	Square Head with grooved lens for LED	ZB5 CV0 <input type="checkbox"/> 3
	24V AC/DC	ZB5 AVB <input type="checkbox"/>
	110/120V AC	ZB5 AVG <input type="checkbox"/>
	230/240V AC	ZB5 AVM <input type="checkbox"/>



Part No. Completion  
When ordering complete the Part No. by adding the following:-

Pilot lights	Colour	Code
	White	1
	Green	3
	Red	4
	Orange	5
	Blue	6



## Accessories for Harmony Series XB4 & XB5

### Light Blocks

Type	Characteristic	Part No.	
Integral LED	12V AC/DC	ZBV J	<input type="checkbox"/>
Screw clamp	24V AC/DC	ZBV B	<input type="checkbox"/>
Terminal connections	230/240V AC	ZBV G	<input type="checkbox"/>
	230/240V AC	ZBV M	<input type="checkbox"/>

### Legend Plates & Legends

Type	Characteristic	Part No.	
Legend holders, Std.30 x 40mm	Without Legend	ZBZ 32	
	With Blank Black or Red Legend	ZBY 2101	
	With Blank White or Yellow Legend	ZBY 4101	
	0	ZBY 2146	
	I	ZBY 2147	
	II	ZBY 2148	
	0 - I	ZBY 2178	
	I - II	ZBY 2179	
	I - 0 - II	ZBY 2186	
	AUTO	ZBY 2115	
	CLOSE	ZBY 2314	
	DOWN	ZBY 2308	
	FAST	ZBY 2328	
	FORWARD	ZBY 2305	
	Legend holders, Std.30 x 40mm With 8 x 24mm legends (Black background)	HAND	ZBY 2316
INCH		ZBY 2321	
LEFT		ZBY 2310	
OFF - ON		ZBY 2367	
ON		ZBY 2311	
OPEN		ZBY 2313	
POWER ON		ZBY 2326	
REVERSE		ZBY 2306	
RIGHT		ZBY 2309	
RUN		ZBY 2334	
SLOW		ZBY 2327	
START		ZBY 2303	
UP		ZBY 2307	
EMERGENCY STOP		ZBY 2330	
Transparent cap legends (sheets of 66 circular)		0	ZBY 1146
	I	ZBY 1147	
	Emergency legend plates (Circular)	60mm dia. Blank	ZBY 9101
		90mm dia. Blank	ZBY 8101
	Yellow background	60mm dia. EMERGENCY STOP	ZBY 9320
		90mm dia. EMERGENCY STOP	ZBY 8330

### Ancillaries

Type	Part No.
Blanking hole plug	ZB5 SZ3

### Harmony Control Station

Type	Characteristic	Part No.
Complete	"I" / "O" (Green/Red) - NO+NC station	XALD213
	2 button "UP" / "DOWN"	XALD222
	"UP" / "O" / "DOWN" - NO+NC+NO station	XALD324
	Turn to release E-Stop 2 NC	XALK178F
	Key operated E-Stop 2 NC	XALK188F
Empty enclosure for ZB5	1 Hole empty control station	XALD01
	2 Hole empty control station	XALD02
	3 Hole empty control station	XALD03
	1 Hole empty E-Stop station	XALK01
Single contact block	Head Ø22 1NO screw clamp terminal	ZENL1111
	Head Ø22 1NC screw clamp terminal	ZENL1121

### Harmony 22mm Biometric Switch

Type	Description	Part No.
PNP Bistable biometric switch	24V 2m	XB5S1B2L2
	24V M12	XB5S1B2M12
PNP Monostable biometric switch	24V 2m	XB5S2B2L2
	24V M1	XB5S2B2M12

Part No. Completion  
When ordering complete the  
Part No. by adding the following:-

Colour	Code
White	1
Green	3
Red	4
Yellow	5
Blue	6



## XAC Series Pendant Control Stations

The XAC-A pendant control stations are designed for mechanical handling of hoists and travelling cranes and similar applications.

The IP65 polypropylene casings are available from 2 way to 12 way and can accommodate a variety of actuators.



### Empty Enclosures

Type	Part No.
2 Cut Outs	XAC A02
3 Cut Outs	XAC A03
4 Cut Outs	XAC A04
5 Cut Outs	XAC A05
6 Cut Outs	XAC A06
8 Cut Outs	XAC A08
12 Cut Outs	XAC A12

### Protective Guards for Base Mounted Units

Description	Part No.
To protect either a selector switch or mushroom head pushbutton	XAC A982
To protect either a key switch or key release emergency stop	XAC A983

### 22.5mm Pushbuttons

Type	Characteristic	Part No.
Booted pushbutton		XAC A941 <input type="checkbox"/>
Emergency stop	30mm Turn release	ZA BS834
	40mm Turn release	ZA BS844
Red mushroom head	40mm Key release	ZA BS944

### Switches

Type	No. of Position	Action	Part No.
Selector switch	2	Maintained	ZA2 BD2
	3	Maintained	ZA2 BD3
Key switch	2	Maintained I-II	ZA2 BG4
	3	Maintained 0	ZA2 BG3

### Accessories

Description	Part No.
Blanking plug with seal and lock nut	ZB2 SZ3
Mechanical interlock for 2 pushbuttons	XAC A009

### Pilot Lights

Type	Characteristic	Part No.
Pilot light heads	For use with incandescent bulb	ZA2 BV0 <input type="checkbox"/>
	For use with neon bulb	ZA2 BV0 <input type="checkbox"/> 3
Pilot light body	Direct supply 400V	ZA2 BV006
	Through resistor 230V	ZA2 BV007

### Contact Blocks

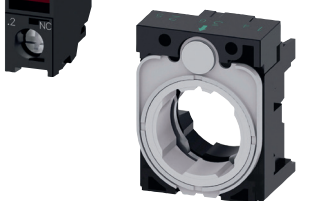
NO	NC	Characteristic	Part No.
1	-	Front mounting	ZB2 BE101
-	1	Front mounting	ZB2 BE102
2	1 Staggered	Front mounting	XEN G1191
1	-	Base mounting	XAC S101
-	1	Base mounting	XAC S102
2	-	Base mounting	XAC S103
-	2	Base mounting	XAC S104
1	1	Base mounting	XAC S105



Part No. Completion  
When ordering complete the Part No. by adding the following:-

	Colour	Code	Code
Pushbuttons	Black	2	
	Red	4	4
	Yellow	5	5
	Green	3	3
	Blue	6	6
	White	1	1
Pilot Lights	White	1	1
	Clear		7

## SIEMENS



### SIRIUS ACT

#### Pushbuttons

Type	Characteristic	Plastic Part No.	Metal Part No.
Pushbutton with flat button	Black	3SU1000AB100AA0	3SU10500AB100AA0
	Red	3SU1000AB200AA0	3SU10500AB200AA0
	Yellow	3SU1000AB300AA0	3SU10500AB300AA0
	Green	3SU1000AB400AA0	3SU10500AB400AA0
	Blue	3SU1000AB500AA0	3SU10500AB500AA0
Emergency stop mushroom	White	3SU1000AB600AA0	3SU10500AB600AA0
	Red	3SU1001HB200AA0	3SU10501HB200AA0

#### Illuminated Pushbuttons

Illuminated with flat button	Red	3SU10010AB200AA0
	Yellow	3SU10010AB300AA0
	Green	3SU10010AB400AA0
	Blue	3SU10010AB500AA0
	White	3SU10010AB600AA0

#### Indicator Lamps

Indicator lights with smooth lens	Red	3SU10016AA200AA0
	Yellow	3SU10016AA300AA0
	Green	3SU10016AA400AA0
	Blue	3SU10016AA500AA0
	White	3SU10016AA600AA0

#### Selector Switches

Type	No. of Position	Action	Maintained Positions	Part No. Plastic	Part No. Metal
Short Handle	2	Spring return	B-C	3SU10022BC100AA0	
		Maintained	B-C	3SU10022BF100AA0	3SU10522BC100AA0
	Key switch	B-C	3SU10004BF110AA0		
3	3	Maintained	A-B-C	3SU10022BL100AA0	3SU10522BL100AA0
		Spring return	A-B/C-B	3SU10022BM100AA0	

#### Contact Blocks for Enclosures

NO	NC		Part No.
1	0	Screw terminal, for front plate mounting	3SU14001AA101BA0
0	1	Screw terminal, for front plate mounting	3SU14001AA101CA0
0	0	Holder for 3 modules, plastic	3SU15000AA100AA0
1	0	Holder for 3 modules, plastic, screw terminal	3SU15001AA101BA0
0	1	Holder for 3 modules, plastic, screw terminal	3SU15001AA101CA0
1	0	Holder for 3 modules, metal, screw terminal	3SU15501AA101BA0
0	1	Holder for 3 modules, metal, screw terminal	3SU15501AA101CA0

#### LED Modules

Voltage	Colour		Part No.
24V AC/DC	Red	Screw terminal, for front plate mounting	3SU14011BB201AA0
	Yellow		3SU14011BB301AA0
	Green		3SU14011BB401AA0
	Blue		3SU14011BB501AA0
	White		3SU14011BB601AA0

#### LED Modules

24-240V AC/DC	Red	Screw terminal, for front plate mounting	3SU14011BH201AA0
	Yellow		3SU14011BH301AA0
	Green		3SU14011BH401AA0
	Blue		3SU14011BH501AA0
	White		3SU14011BH601AA0

## LMU Series Direct Voltage Indicator Lamps

Direct Voltage Indicators enable indicator lamps to be connected directly to the Supply Voltage.

### Functions

Input Voltages: Same as and determined by the lamp used.  
Lamp Caps: E0 Miniature Edison Screw - MES

### Mounting Type

Mount to panel using JY or H series housings and lenses.  
LMU's screw onto housings

### LMU - Standard Direct Indicator Lamp Body

Type	Part No.
C/W 24V lamp	LMU24/4
W/O lamp	LMUMES/4

TranLamp



## TMU Series Transformer Lamp Indicators

Transformer lamps are generally used for running indicator lamps on control panels at low voltages.

### Functions

Input Voltages: 24,110, 240V AC.  
Frequency: 50/60 Hz as standard.  
Lamps: 6V, 1.8W tubular filament lamp supplied as standard.

### Mounting Type

Mount to panel using JY or H series housings and lenses.  
TMU's screw onto housings

### TMU - Standard Transformer Indicator Lamp Body

Input Voltage	Part No.
24	TMU/24/4
110	TMU/110/4
240	TMU/240/4



## MTMU Series Multi-Lamp Test Indicators

Multi-Lamp Test Indicators enable groups of indicator lamps to be tested from a single pushbutton switch without interrupting normal operation.

### Functions

Input Voltages: 24,110, 240V AC.  
Frequency: 50/60 Hz as standard.  
Lamps: 6V, 1.8W tubular filament lamp supplied as standard.

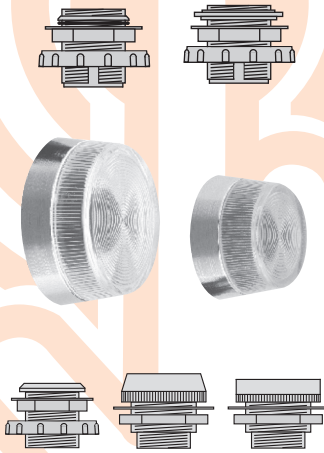
### Mounting Type

Mount to panel using JY or H series housings and lenses.  
MTMU's screw onto housings

### MTMU - Standard Multi-Test Transformer Indicator Body

Input Voltage	Part No.
24	MTMU/24/4
110	MTMU/110/4
240	MTMU/240/4





Part No. Completion  
When ordering complete the Part No. by adding the following:-

Code
Red
Amber
Green
White
Clear
Blue

Lens
Red
Amber
Green
White
Clear
Blue

## Housings & Lenses

### JY Series

Housings: Black moulded glass reinforced nylon.  
Lens: Polycarbonate welded to brass.  
Protection: IP64

#### Housing

Hole Diameter (mm)	Part No.
Ø19	<b>MP HOUSING BODY</b>
Ø22.5	<b>FP HOUSING BODY</b>

#### Lens

Lens Diameter (mm)	For MP Housing	Part No.
Ø22.3	For MP Housing	<b>BJ LENS BENZEL</b> <input type="checkbox"/>
Ø30	For MP & FP Housing	<b>BY LENS</b> <input type="checkbox"/>

### H Series

Housings: Chrome plated brass.  
Lens: Polystyrene (2W lamp maximum)  
Protection: IP64

#### Housing

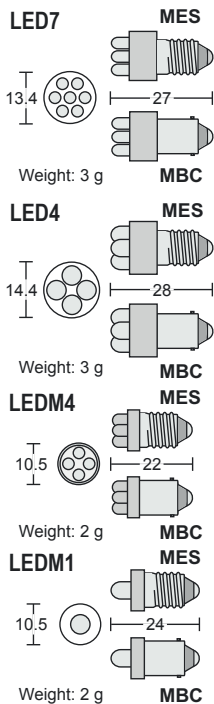
Hole Diameter (mm)	Part No.
Ø19	<b>MH LESS LENS</b>
Ø22.5	<b>FH LESS LENS</b>
Ø22.5	<b>FHB LESS LENS</b>

#### Lens

Lens Diameter (mm)	For MH Housing	Part No.
Ø17.5	For MH Housing	<b>MA LENS</b> <input type="checkbox"/>
Ø17	For MH Housing	<b>MC LENS</b> <input type="checkbox"/>
Ø21.5	For MF Housing	<b>FA LENS</b> <input type="checkbox"/>
Ø23.5	For MF Housing	<b>FB/LB LENS</b> <input type="checkbox"/>

## LED Cluster

Long life, bright lamps at lower currents. The LEDs are configured as standard in parallel circuits. This means that the functionality of the lamp is maintained in the event of a diode failure.



Type	Supply				Current mA				Product Code Make-Up				LED Cluster MES or MBC	
	AC/DC	Volts	AGR	B	W	Type	Colour	Supply	Current	Cap	Colours	Type		
LED7 Wide light spread for indicator lamps	AC	4.5	60	80	80	LED7	A G R B W	4.5V AC	MES or MBC	20mA	Amber, Green or Red	LED7 4.5V AC or DC		
		24	40	40	40			24V AC				LED7 24V AC or DC		
		110	8	8	8			101V AC				LED7 110V AC		
	DC	*4.5	80	-	-			4.5V DC			Blue	LED7 4.5V AC or DC		
		24	40	40	40			24V DC			LED7 110V AC			
		24	20	20	20			24V DC			White	LED7 4.5V AC or DC		
LED4 for indicator lamps	AC	4.5	40	40	40	LED4	A G R B W	4.5V AC	MES or MBC	20mA	Amber, Green or Red	LED7 24V AC or DC		
		24	40	40	40			24V AC				LED7 110V AC		
		110	8	8	8			101V AC				Blue	LED7 4.5V AC or DC	
	DC	*4.5	40	-	-			4.5V DC			LED7 24V AC or DC			
		24	40	40	40			24V DC			LED7 110V AC			
		24	20	20	20			24V DC			White	LED7 4.5V AC or DC		
LEDM1 for indicator lamps	AC	4.5	20	20	20	LEDM1	A G R B W	4.5V AC	MES or MBC	20mA	Amber or Red	LED7 4.5V AC or DC		
		24	20	20	20			24V AC				LED7 24V AC or DC		
		110	8	8	8			101V AC				LED7 110V AC		
	DC	24	20	20	20			4.5V DC			Blue	LED7 4.5V AC or DC		
		24	20	20	20			24V DC			LED7 24V AC or DC			
		24	20	20	20			24V DC			White	LED7 110V AC		

\* Blue and White clusters are not available at 4.5V DC  
Colour Key: A=Amber, G=Green, R=Red, B=Blue, W=White

#### Product Part No. Make-Up

Example 1	<b>LED7A 4.5V AC MES</b>	= LED7 Amber cluster 4.5V AC with E10 MES cap.
Example 2	<b>LED4R 24V DC 20mA MBC</b>	= LED4 Red cluster 24V DC (20mA option) with BA9s MBC.
Example 3	<b>LEDM1W 24V AC MBC</b>	= LEDM1 White single LED 24 AC with BA9s MBC.

## Rotary Cam Switches

4 hole mounting with escutcheon plate.

Ratings: 690V  
 Ith: 20A  
 AC23 @ 440V: 7.5kW  
 AC3 @ 440V: 5.5kW

### Panel Mounting

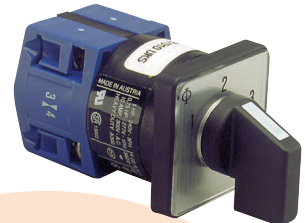
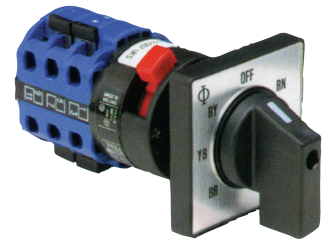
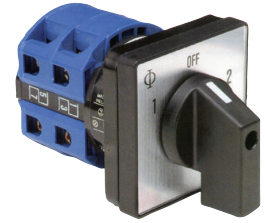
Function	No of Poles	Part No.
OFF / ON 60° Switching	1	CA10 A200 620E
	2	CA10 A201 620E
	3	CA10 A202 620E
	4	CA10 A203 620E
	6	CA10 A342 620E
Changeover with centre OFF 60° Switching	1	CA10 A210 620E
	2	CA10 A211 620E
	3	CA10 A212 620E
	4	CA10 A213 620E
Changeover without centre OFF 60° Switching	1	CA10 A220 600E
	2	CA10 A221 600E
	3	CA10 A222 600E
	4	CA10 A223 600E
3 Step without OFF 60° Switching	1	CA10 A230 600E
	2	CA10 A250 600E
	3	CA10 A270 600E
4 Step without OFF 60° Switching	1	CA10 A231 600E
	2	CA10 A251 600E
	3	CA10 A271 600E
Volmeter switch		CA10 A004 622E
Volmeter switch		CA10 A007 622E
	c/w Header plate	CA10 A007 623E
Ammeter switch		CA10 A048 621E
	c/w Header plate	CA10 A048 622E
Motor reversing	3	CA10 A401 620E

The above switches are available in a single hole mount version. Replace the E at the end of the part no. with FT2.

The above switches (except voltmeter, ammeter and motor reversing switch) are also available in the CG4 size.

CG4 Ratings: 440V

Ith: 10A  
 AC23 @ 440V: 3kW  
 AC3 @ 440V: 2.2kW





## Bussmann

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### Fuse Links - BS88

BS88 Ref.	Utilisation Category	Rating Amp	Max Voltage AC	Rating DC	Pack Qty.	Part No.		
A1	gG	2	550	250	1	NITD2		
		4	550	250	1	NITD4		
		6	550	250	1	NITD6		
		10	550	250	1	NITD10		
		16	550	250	1	NITD16		
	20	550	250	6	NITD20			
	gM	20M25	440	-	6	NITD20M25		
		20M32	440	-	6	NITD20M32		
	gG	25	440	-	6	* NITD25		
		32	440	-	6	* NITD32		
gM	32M40	440	-	6	* NITD32M40			
	32M50	440	-	6	* NITD32M50			
	32M63	440	-	6	* NITD32M63			
A2	gG	2	660	460	6	AA02		
		4	660	460	6	AA04		
		6	660	460	6	AA06		
		10	660	460	6	AA010		
		16	660	460	6	AA016		
		20	660	460	6	AA020		
		25	660	460	6	AA025		
		32	660	460	6	AA032		
		gM	32M35	660	460	6	AA032M35	
			32M40	660	460	6	AA032M40	
32M50	660		460	6	AA032M50			
32M63	660		460	6	AA032M63			
A3	gG	32	660	460	6	BA035		
		40	660	460	6	BA040		
		50	660	460	6	BA050		
		63	660	460	6	BA063		
		gM	63M80	660	-	6	BA063M80	
			63M100	660	-	6	BA063M100	
		A4	gG	32	660	460	6	CE032
				40	660	460	6	CE040
				50	660	460	6	CE050
				63	660	460	2	CE063
80	660			350	2	CE080		
100	660		350	2	CE0100			
gM	100M125		660	350	2	CE0100M125		
	100M160		660	350	2	CE0100M160		
	100M200		660	350	2	CE0100M200		
	125		660	350	2	DE0125		
	160	660	350	2	DE0160			
B1	gG	200	660	350	2	DE0200		
		80	660	350	11	CD80		
		100	660	350	1	CD100		
		100M125	660	350	11	CD100M125		
		100M160	660	350	1	CD100M160		
	gM	100M200	660	350	1	CD100M200		
		125	660	350	1	DD125		
		160	660	350	5	DD160		
		200	660	350	5	DD200		
		gM	200M250	660	460	5	DD200M250	
200M315	550		-	5	DD200M315			
B2	gG	250	600	460	1	ED250		
		315	660	460	1	ED315		
		250	660	460	1	EFS250		
		315	660	460	1	EFS315		
		gM	315M355	660	460	1	EFS315M355	
			335	660	460	1	ED335	
B3	gG	400	660	460	1	ED400		
		400M450	660	460	1	ED400M450		
B4	gG	335	660	460	1	EF355		
		400	660	460	1	EF400		
C1	gM	400M450	660	460	1	EF400M450		
		450	660	450	1	FF450		
		500	660	450	1	FF500		
		560	660	450	1	FF560		
C2	gG	630	660	450	1	FF630		
		630M670	660	450	1	FF630M670		
		670	660	350	1	GF670		
C3	gG	710	660	350	1	GF710		
		750	660	350	1	GF750		
		800	660	350	1	GF800		

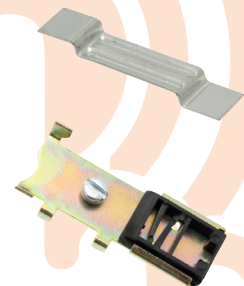
All 'RED SPOT' fuse links have a utilisation category of either gG or gM and so have a full range breaking capacity.

The first letter indicates the breaking range of the fuse link, as follows: 'g' Full range breaking capacity fuse link.

The second letter indicates utilisation category, as follows: 'G' Fuse link for general application, including the protection of motor circuits.

'M' Fuse link for protection of motor circuits.

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## Fuse Links

BS88 Ref.	Utilisation Category	Rating Amp	Max Voltage Rating AC	Part No.
E1	gG	2	240	SSD2
		4	240	SSD4
		6	240	SSD6
		10	240	SSD10
		16	240	SSD16
		20	240	SSD20
F1	gG	2	440	NSD2
		4	440	NSD4
		6	440	NSD6
		10	440	NSD10
		16	440	NSD16
		20	440	NSD20
		25	440	NSD25
		32	440	NSD32
		32M40	415	NSD32M40
		40	440	ESD40
F2	gG	50	440	ESD50
		63	440	ESD63
	gM	63M80	415	ESD63M80
		80	440	OSD80
-	gM	100	440	OSD100
		100M125	415	OSD100M125
		100M160	415	OSD100M160

## Fuse Holders

Rating Amp	Fuse Link Type	Type of Connection	Colour	Part No.	
20	SSD	Front	Black	SC20H	
			White	SC20H WH	
			Green	SC20H GN	
		Back	Black	SC20P	
			White	SC20P WH	
			Green	SC20P GN	
32	NSD	Busbar / Front	Black	SC20BH	
			Black	SC32HD	
			White	SC32HD WH	
		Front	Green	SC32HD GN	
			Black	SC32P	
			White	SC32P WH	
		Back	Green	SC32P GN	
			Busbar / Front	Black	SC32BH
			Black	SC63HD	
63	ESD	Front	White	SC63HD WH	
			Black	SC63P	
		Busbar / Front	Black	SC63BH	
			Black	SC100H	
100	OSD	Front	Black	SC100H	

## Copper Links

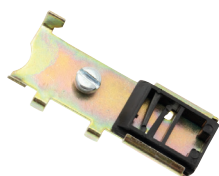
Amps	Associated Fuse Holder	Part No.
20	SC32	NSC LINK
32	SC63	ESC LINK
63	SC100	OSC LINK
100	SC125	XSC LINK

## Padlockable Rail

Amps	Part No.
32	SC32LOCK
63	SC63LOCK

Contact your local sales office for additional products from this range.  
\*Terms of Business\* applies, a copy of which is available on request. ESOE - Although we strive to keep this document as accurate as possible, we cannot be held responsible for any errors and omissions.

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by **EAT-N**



## RED SPOT

### Fuse Holders

Rating Amp	Fuse Link Type	Type of Connection	Colour	Part No.		
20	NITD	Front	Black	RS20H		
			White	RS20H WH		
		Front / Back	Green	RS20H GN		
			Grey	RS20H GY		
		Back, Surface	Black	RS20PH		
			White	RS20PG		
		Back, Flush	Black	RS20PGWH		
			Black	RS20F		
			White	RS20F WH		
			Green	RS20F GN		
32	AA0	Front	Black	RS32H		
			White	RS32H WH		
		Front / Back	Green	RS32H GN		
			Black	RS32PH		
		Back	Black	RS32P		
			White	RS32P WH		
			Green	RS32P GN		
			Black	RS63H		
		63	BA0	Front	White	RS63H WH
					Black	RS63PH
Back	Black			RS63P		
	White			RS63P WH		
100	CEO	Front	Black	RS100H		
			White	RS100H WH		
		Front / Back	Black	RS100PH		
			Black	RS100P		
		Back	White	RS100P WH		
			Black	RS200H		
200	DD	Front	White	RS200H WH		
			Black	RS200PH		
		Front / Back	Black	RS200P		
			White	RS200P WH		
		Back	Black	RS400H		
			White	RS400PH		
400	ED	Front	Black	RS400H		
		Front / Back	Black	RS400PH		
		Back	Black	RS400P		

## Accessories

### Signal Red Warning Carriers

Amps	Part No.
20	RS20RED
32	RS32RED
63	RS63RED
100	RS100RED

### Padlockable Insert

Amps	Part No.
20	RS20LOCK
32	RS32LOCK
63	RS63LOCK
100	RS100LOCK

### Copper Links

Amps	Associated Fuse Holder	Part No.
20	RS20/RS32	32CMLC
63/100	RS63	63/100CML

### DIN Rail Adaptor

Description	Part No.
DIN rail adaptor for RS20H	DIN 20/32



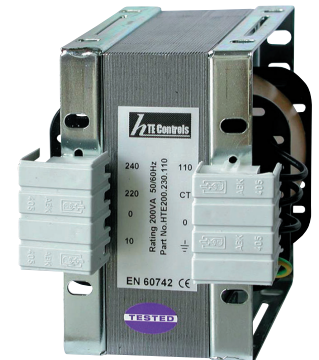
## HTE Controls Transformers

- Continuously rated panel mounting, double wound isolating transformers
- Manufactured in the UK and designed to fully comply with BS EN6558
- Copper earth screen between primary and secondary windings
- Multi tapped to include the harmonised European voltages
- Terminals clearly colour coded for easy identification
- Terminals give finger proof protection (IP20)
- Additional fixing points for easy identification in panels
- Varnish impregnated

### Special Transformers

If our standard range does not suit your application, we are happy to quote for your specific transformer requirements. Please contact our sales office with the specification, for a speedy response.

Suggested Primary Fuse Vaules		
VA Rating	10-0-220-240 Primary	20-0-380-420 Primary
50	0.5	0.315
100	0.8	0.5
150	1.25	0.8
200	2	1.25
300	3.15	2
400	4	2
500	6.3	3.15
750	8	5
1000	10	6.3
1500	16	8
2000	16	8
2500	20	10
3000	25	16
5000	40	25



## Transformers

VA Rating	Primary Voltage	Insert Secondary Voltage	Part No.
50	10-0-220-240	<input type="checkbox"/>	HTE 50 230
	20-0-380-420	<input type="checkbox"/>	HTE 50 400
100	10-0-220-240	<input type="checkbox"/>	HTE 100 230
	20-0-380-420	<input type="checkbox"/>	HTE 100 400
150	10-0-220-240	<input type="checkbox"/>	HTE 150 230
	20-0-380-420	<input type="checkbox"/>	HTE 150 400
200	10-0-220-240	<input type="checkbox"/>	HTE 200 230
	20-0-380-420	<input type="checkbox"/>	HTE 200 400
300	10-0-220-240	<input type="checkbox"/>	HTE 300 230
	20-0-380-420	<input type="checkbox"/>	HTE 300 400
400	10-0-220-240	<input type="checkbox"/>	HTE 400 230
	20-0-380-420	<input type="checkbox"/>	HTE 400 400
500	10-0-220-240	<input type="checkbox"/>	HTE 500 230
	20-0-380-420	<input type="checkbox"/>	HTE 500 400
750	10-0-220-240	<input type="checkbox"/>	HTE 750 230
	20-0-380-420	<input type="checkbox"/>	HTE 750 400
1000	10-0-220-240	<input type="checkbox"/>	HTE 1000 230
	20-0-380-420	<input type="checkbox"/>	HTE 1000 400
1500	10-0-220-240	<input type="checkbox"/>	HTE 1500 230
	20-0-380-420	<input type="checkbox"/>	HTE 1500 400
2000	10-0-220-240	<input type="checkbox"/>	HTE 2000 230
	20-0-380-420	<input type="checkbox"/>	HTE 2000 400
2500	10-0-220-240	<input type="checkbox"/>	HTE 2500 230
	20-0-380-420	<input type="checkbox"/>	HTE 2500 400
3000	10-0-220-240	<input type="checkbox"/>	HTE 3000 230
	20-0-380-420	<input type="checkbox"/>	HTE 3000 400
5000	10-0-220-240	<input type="checkbox"/>	HTE 5000 230
	20-0-380-420	<input type="checkbox"/>	HTE 5000 400

Please note: Transformers above 1500VA with low voltage secondary output will be fitted with stud terminals.

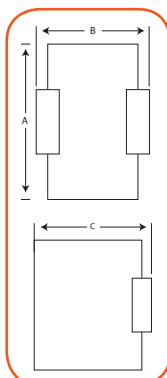
## Accessories

- Ventilated Sheet steel IP23 enclose
- Wall or floor mounted
- Cable entry - 25mm cutouts

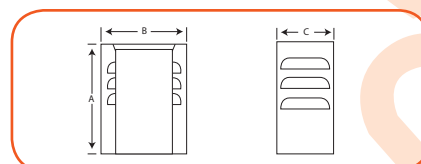
## Enclosures

To Suit Transformer Size	Part No.
50... 100VA	AP0
200... 500VA	AP2
750... 1000VA	AP4
1500... 3000VA	AP5
5000VA	AP6

Transformers (approx. size)				
Size VA	A	B	C	Weight kg
50	80	80	90	1.1
100	98	95	110	2.1
150	98	105	110	2.8
200	118	100	125	3.7
300	118	113	125	4.5
400	137	110	140	6.9
500	137	130	140	7.4
750	137	143	140	10.2
1000	168	150	175	12.6
1500	168	182	175	17.4
2000	216	162	215	21.0
2500	216	175	215	24.0
3000	233	200	230	34.8
5000	286	216	299	53.0

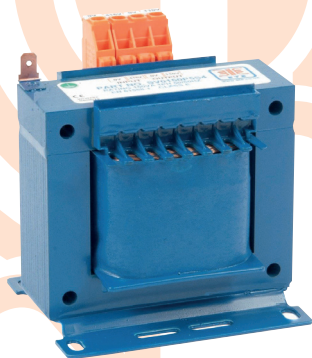


Enclosures (approx. size)				
Type	A	B	C	Weight kg
AP0	132	200	118	1
AP2	225	220	155	2
AP4	272	340	185	3
AP5	355	350	250	5
AP6	455	385	315	7



Part No. Completion  
When ordering complete the Part No. by adding the following:-

Secondary Voltage	<input type="checkbox"/>
0-CT-24	24
0-CT-48	48
0-CT-110	110
0-CT-240	240



## Transformers - 240V AC - 24V AC

VA Rating	Part No.
50	SV0050P4S6
100	SV0100P4S6
150	SV0150P4S6
200	SV0200P4S6
250	SV0250P4S6
400	SV0400P4S6
500	SV0500P4S6
750	SV0750P4S6

## Transformers - 240V AC - 110V AC

VA Rating	Part No.
50	SV0050P4S4
100	SV0100P4S4
150	SV0150P4S4
200	SV0200P4S4
250	SV0250P4S4
400	SV0400P4S4
500	SV0500P4S4
750	SV0750P4S4
1000	SV1000P4S4

## Transformers - 415V AC - 24V AC

VA Rating	Part No.
50	SV0050P5S6
100	SV0100P5S6
150	SV0150P5S6
200	SV0200P5S6
250	SV0250P5S6
400	SV0400P5S6
500	SV0500P5S6
750	SV0750P5S6
1000	SV1000P5S6

## Transformers - 415V AC - 110V AC

VA Rating	Part No.
50	SV0050P5S4
100	SV0100P5S4
150	SV0150P5S4
200	SV0200P5S4
250	SV0250P5S4
400	SV0400P5S4
500	SV0500P5S4
750	SV0750P5S4
1000	SV1000P5S4

## DURACELL®



### Industrial Range

General purpose alkaline manganese batteries.

These alkaline batteries are manufactured by Duracell for the industrial user. High performance, long life and a 5 year shelf life. Each battery is date stamped for freshness.

### Industrial Batteries

Type	Voltage	Pack Qty.	Part No.
9V	9.0	10	MN1604
AAA	1.5	10	MN2400
AA	1.5	10	MN1500
C	1.5	10	MN1400
D	1.5	10	MN1300



### S8VK-G Series

The S8VK-G offers a wide product range (from 15W up to 480W), in a very compact size. It is 13% smaller than comparable power supplies and the smallest on the market of its type.

- Wide operating temperature range (-40 to +70°C) to guarantee operation stability
- Double set of DC output terminals (three for the negative) to provide easy wiring
- High efficiency (90%) to reduce energy consumption
- Power Boost functionality (120%)

#### S8VK-G

Power Rating	Input Voltage	Output Voltage	Output Current	Part No.
15W	100-240V AC	12V DC	1.2A	<b>S8VKG-01512</b>
			0.65A	<b>S8VKG-01524</b>
24V DC		1.3A	<b>S8VKG-03024</b>	
		2.5A	<b>S8VKG-06024</b>	
		5A	<b>S8VKG-12024</b>	
		10A	<b>S8VKG-24024</b>	
480W		20A	<b>S8VKG-48024</b>	



### Phaseo ABL8 Series

The Modular, Optimum, and Universal series of regulated switch mode power supplies are designed to provide DC voltage necessary for electrical equipment. Designed for applications ranging from simple machine control, to complex systems requiring status contacts and battery back up options.

#### Single Phase

Input Voltage	Frequency	Output Voltage	Output Amps	Power (W)	Part No.
100-240V AC / 120-250V DC	47-63Hz	24V DC	1.2A	30	<b>ABL8MEM24012</b>
100-240V AC / 110-220V DC			3A	72	<b>ABL8REM24030</b>
			5A	120	<b>ABL8REM24050</b>
100-120V AC / 200-500V AC			10A	240	<b>ABL8RPS24100</b>

#### Three Phase

380-500V AC	47-63Hz	24V DC	20A	480	<b>ABL8WPS24200</b>
			40A	960	<b>ABL8WPS24400</b>



### SITOP smart Series

SITOP smart is the high-performance standard power supply for automated machines and systems with 24V or 12V electronics.

- Small footprint thanks to compact design, no clearances required at the sides
- "Extra power" with 1.5 times the rated current for 5 s/min for transient overloads
- 120% of the rated capacity can be used durably up to 45°C ambient temperature (24V models)
- Signalling contact for "Output voltage OK" for easy integration into the system monitoring

#### SITOP smart

Input Voltage	Output Voltage	Output Current	Part No.
(1AC)120-230V AC	24V DC	2.5A	<b>6EP1332-1LB00</b>
		5A	<b>6EP1333-1LB00</b>
		10A	<b>6EP1334-1LB00</b>
		10A	<b>6EP1434-2BA10</b>
		20A	<b>6EP1436-2BA10</b>
(3AC)400-500V AC		40A	<b>6EP1437-2BA10</b>





## ConnectPower

- Compact DIN rail mounted power supplies
- Wide range of input voltages
- International approvals, CE, UL, CSA EN60204 (PELV); EN 60950m (SELV)
- Parallel operation on Eoline range

### WavePower

Input Voltage	Frequency	Output Voltage	Amps	Power (W)	Part No.
85-265V AC / 120-300V DC	50-60 Hz	24V DC	0.5A	12	9918840024

### InstaPower

Input Voltage	Frequency	Output Voltage	Amps	Power (W)	Part No.
85-265V AC / 120-300V DC	50-60 Hz	24V DC	1A	24	9928890024
85...264V AC / 110...370V DC	50-60 Hz	15...28V DC	2A	48	8739140000

### PROeco Single Phase

Input Voltage	Frequency	Output Voltage	Amps	Power (W)	Part No.
85...264V AC / 80...370V DC	50-60Hz	24V DC	3	72	1469470000
			5	120	1469480000
			10	240	1469490000
			20	480	1469510000
			40	960	1469520000

### PROeco Three Phase

Input Voltage	Frequency	Output Voltage	Amps	Power (W)	Part No.
340...575V AC / 450...870V DC	47... 63Hz	24V DC	5	120	1469530000
			10	240	1469540000
			20	480	1469550000
			40	960	1469560000

### PROmax Single Phase

Input Voltage	Output Voltage	Amps	Power (W)	Part No.
AC 85...277 / DC 80...370	24	3	72	1478100000
	24	5	120	1478110000
	24	7.5	180	1478120000
	24	10	240	1478130000
	24	20	480	1478140000
	24	40	960	1478150000

### PROtop Single Phase

Input Voltage	Output Voltage	Amps	Power (W)	Part No.
AC 85...277 / DC 80...410	24	3	72	2466850000
	24	5	120	2466870000
	24	10	240	2466880000
	24	20	480	2466890000
	24	40	960	2466900000

## 55 Series

Contact rating: 10A for the DPDT version (240V resistive load) / 7A for the 4PDT version.

### Plug-In Relays

Type	Contact Arrangement	Coil Type	Coil Voltage	Part No.
With LED indicator and test button	DPDT	DC	24V	55.32.9.024.0074
		DC	12V	55.34.9.012.0074
	4PDT	DC	24V	55.34.9.024.0074
		AC	100/110V	55.34.9.110.0074
		AC	110/120V	55.34.8.110.0054
		AC	220/240V	55.34.8.230.0054

### Base & Clips for 55 Series Relays

Type	For Relay	Part No.
DIN Rail Surface Mounting (includes retaining clip)	DPDT	94.72SMA
	4PDT	94.74SMA

Other coil voltages available on request.

## 56 Series

Contact rating: 12A (240V resistive load)

### Plug-In Relays

Type	Contact Arrangement	Coil Type	Coil Voltage	Part No.
Standard	DPDT	DC	24V	56.32.9.024.0040
	4PDT	AC	24V	56.34.8.024.0040

### Base & Clips for 56 Series Relays

Type	For Relay	Part No.
DIN rail surface mounting (includes retaining clip)	DPDT	96.72SMA
	4PDT	96.74SMA

Other coil voltages available on request.

## 60 Series

Contact rating: 10A (240V resistive load)

### Plug-In Relays

Type	Contact Arrangement	Coil Type	Coil Voltage	Part No.
With LED indicator and test button	DPDT	AC	110V	60.12.8.110.0054
		DC	24V	60.12.9.024.0074
	3PDT	AC	110V	60.13.8.110.0054
		DC	24V	60.13.9.024.0074
		DC	24V	60.13.9.024.0074

### Base & Clips for 60 Series Relays

Type	For Relay	Part No.
DIN rail surface mounting (includes retaining clip)	DPDT	90.26SMA
	3PDT	90.27SMA

Other coil voltages available on request.

## 46 Series

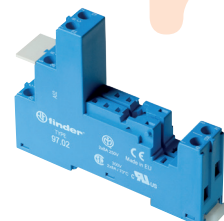
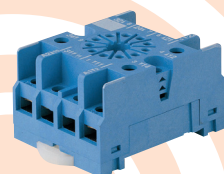
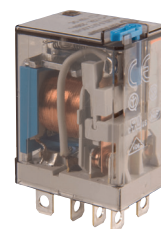
Contact rating: 16A for the SPDT version (240V resistive load)  
8A for the DPDT version

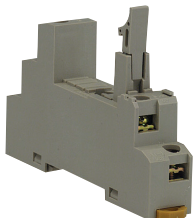
### Plug-In Relays

Type	Contact Arrangement	Coil Type	Coil Voltage	Part No.
With operation indicator	SPDT	AC	24V	46.61.8.024.0040
		DC	24V	46.61.9.024.0040
	DPDT	AC	24V	46.52.8.024.0040
With LED indicator, diode suppression & test button	DPDT	DC	24V	46.52.9.024.0074

### Base & Clips for 60 Series Relays

Type	For Relay	Part No.
DIN rail surface mounting (Back connecting socket -PCB terminal)	SPDT	97.01SPA
	DPDT	97.02SPA





## MY Series

Contact rating: 5A for the DPDT version (240V resistive load) / 3A for the 4PDT version.

### Plug-In Relays

Type	Contact Arrangement	Coil Type	Coil Voltage	Part No.
Standard	DPDT	DC	24V	MY2 24DC S
	4PDT	DC	100/110V	MY4 100/110DC S
With LED indicator	4PDT	DC	24V	MY4N 24DC S
			24V	MY4IN 24AC S
With LED indicator and test button	4PDT	AC	110/110V	MY4IN 100/110AC S
			220/240V	MY4IN 220/240AC S
		DC	12V	MY4IN 12DC S
			24V	MY4IN 24DC S

### Bases & Clips

Type	For Relay	Part No.
DIN rail surface mounting	DPDT	PYF08AE
	4PDT	PYF14AE
3 Tier base		PYF14-ESS-B
Clips		PYCA1

Other coil voltages available on request.

## LY Series

Contact rating: 10A (240V resistive load)

### Plug-In Relays

Type	Contact Arrangement	Coil Type	Coil Voltage	Part No.
Standard	DPDT	DC	24V	LY2 24DC
	4PDT			LY4 24DC

### Bases & Clips

Type	For Relay	Part No.
DIN rail surface mounting	DPDT	PTF08AE
	4PDT	PTF14AE
Clips		PYCA1

Other coil voltages available on request.

## MK Series

Contact rating: 10A (240V resistive load)

### Plug-In Relays

Type	Contact Arrangement	Coil Type	Coil Voltage	Part No.
With LED indicator and test button	DPDT	AC	110V	MKS2PINAC110
		DC	24V	MKS2PINDC24
	3PDT	AC	110V	MKS3PIN5AC110
		DC	24V	MKS3PIN5DC24

### Bases & Clips

Type	For Relay	Part No.
DIN rail surface mounting	DPDT	PF083AE
	3PDT	PF113AN
Clips		PFC-A1

Other coil voltages available on request.

## G2RS Series

Contact rating: 10A (240V resistive load)

### Plug-In Relays

Type	Contact Arrangement	Coil Type	Coil Voltage	Part No.
With operation indicator	SPDT	AC	24V	G2R1SN 24AC
		DC	24V	G2R1SN 24DC
	DPDT	AC	24V	G2R2SN 24AC
With operation indicator & diode suppression	DPDT	DC	24V	G2R2SND 24DC
			24V	G2R2SNI 24DC
With LED indicator and test button	DPDT	AC	110V	G2R2SNI 110AC
			230V	G2R2SNI 230AC

### Bases & Clips

Type	For Relay	Part No.
DIN rail surface mounting (Back connecting socket -PCB terminal)	SPDT	P2RF05E
	DPDT	P2RF08E

Other coil voltages available on request.



## D-SERIES - Industrial Relay Modules

### D-Series - DRI

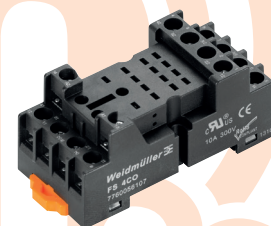
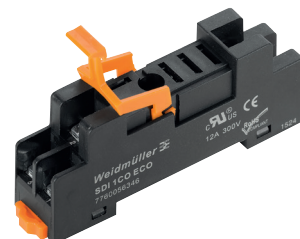
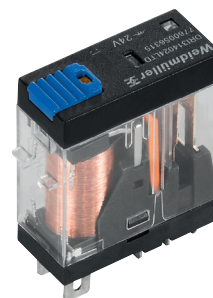
Description	Coil Voltage	Output (A) Max	Contacts	Part No.
DRI 314024 Standard	24V DC	10A	1 CO	7760056297
DRI 314024LTD With LED + test button + freewheel diode		10A	1 CO	7760056315
DRI 314524 Standard	24V AC	10A	1 CO	7760056300
DRI 314524LT With LED + test button		10A	1 CO	7760056318
DRI 314615 Standard	115V AC	10A	1 CO	7760056301
DRI 314615LT With LED + test button		10A	1 CO	7760056319
DRI 314730 Standard	230V AC	10A	1 CO	7760056302
DRI 314730LT With LED + test button		10A	1 CO	7760056320
SDI 1CO F ECO				7760056348
SDI 1CO				7760056350

### DRI - 2 Changover Contact Relays

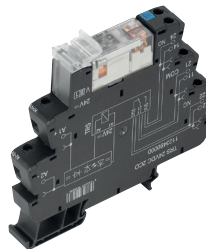
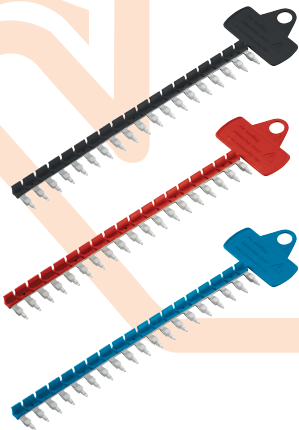
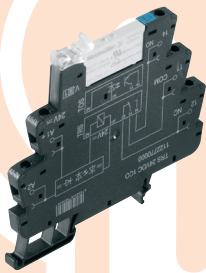
Description	Coil Voltage	Output (A) Max	Contacts	Part No.
DRI 424024 Standard	24V DC	5A	2 CO	7760056322
DRI 424024LTD With LED + test button + freewheel diode		5A	2 CO	7760056340
DRI 424524 Standard	24V AC	5A	2 CO	7760056325
DRI 424524LT With LED + test button		5A	2 CO	7760056343
DRI 424615 Standard	115V AC	5A	2 CO	7760056326
DRI 424615LT With LED + test button		5A	2 CO	7760056344
DRI 424730 Standard	230V AC	5A	2 CO	7760056327
DRI 424730LT With LED + test button		5A	2 CO	7760056345
SDI 2CO F ECO				7760056349
SDI 2CO				7760056351

### D-Series - DRM

Description	Coil Voltage	Output (A) Max	Contacts	Part No.
DRM270024 Standard	24V DC	10A	2 CO	7760056051
DRM270024LT With LED + Test button		10A	2 CO	7760056069
DRM270524 Standard	24V AC	10A	2 CO	7760056055
DRM270524LT With LED + Test button		10A	2 CO	7760056073
DRM270615 Standard	115V AC	10A	2 CO	7760056057
DRM270615LT With LED + Test button		10A	2 CO	7760056075
DRM270730 Standard	230V AC	10A	2 CO	7760056058
DRM270730LT With LED + Test button		10A	2 CO	7760056076
SCM ECO 2CO				7760056263
DRM clip M (for DRM relay)				7760056108
FS 2CO				7760056106
DRM570024 Standard	24V DC	5A	4 CO	7760056079
DRM570024LT With LED + Test button		5A	4 CO	7760056097
DRM570524 Standard	24V AC	5A	4 CO	7760056083
DRM570524LT With LED + Test button		5A	4 CO	7760056101
DRM570615 Standard	115V AC	5A	4 CO	7760056085
DRM570615LT With LED + Test button		5A	4 CO	7760056103
DRM570730 Standard	230V AC	5A	4 CO	7760056086
DRM570730LT With LED + Test button		5A	4 CO	7760056104
SCM ECO 4CO				7760056264
DRM clip M (for DRM relay)				7760056108
FS 4CO				7760056107







## D-SERIES - Industrial Relay Modules Continued

### Termseries Screw Clamp

Description	Coil Voltage	Output (A) Max	Contacts	Part No.
TRS 24V DC 1CO	24V DC	6A	1CO	1122770000
TRS 24V UC 1CO	24V AC/DC	6A	1CO	1122780000
TRS 120V UC 1CO	115V AC	6A	1CO	1122810000
TRS 230V UC 1CO	230V AC	6A	1CO	1122820000
TRS 24-230V UC 1CO	24-230V AC	6A	1CO	1122850000
TRS 24V DC 2CO	24V DC	8A	2CO	1123490000
TRS 24V UC 2CO	24V AC/DC	8A	2CO	1123500000
TRS 120V UC 2CO	115V AC	8A	2CO	1123530000
TRS 230V UC 2CO	230V AC	8A	2CO	1123540000
TRS 24-230V UC 2CO	24-230V AC	8A	2CO	1123580000
TOS 24V DC 48V DC 0.1A	24V DC 48V DC	0.1A	1NO	1126940000
TOS 120V UC 48V DC 0.1A	120V UC 48V DC	0.1A	1NO	1126980000
TOS 230V UC 48V DC 0.1A	230V AC 48V DC	0.1A	1NO	1126990000
TOS 24-230V UC 48V DC 0.1A	24-230V AC 0-48V DC	0.1A	1NO	1127020000
TOS 24V DC 230V AC 1A	24V DC 230V AC	1A	1NO	1127410000
TOS 120V UC 230V AC 1A	120V UC 230V DC	1A	1NO	1127450000
TOS 230V UC 230V AC 1A	230V UC	1A	1NO	1127470000
TOS 24-230V UC 230V AC 1A	24-230V UC	1A	1NO	1127500000
ZQV 1.5N/R6.4/19 GE	Cross connections for termseries			1193690000
ZQV 1.5N/R6.4/19 SW	Cross connections for termseries			1391600000
ZQV 1.5N/R6.4/19 RT	Cross connections for termseries			1391610000
ZQV 1.5N/R6.4/19 BL	Cross connections for termseries			1391620000

### Termseries Tension Clamp

Description	Coil Voltage	Output (A) Max	Contacts	Part No.
TRZ 24V DC 1CO	24V DC	6A	1CO	1122880000
TRZ 24V UC 1CO	24V UC	6A	1CO	1122890000
TRZ 120V UC 1CO	120V UC	6A	1CO	1122920000
TRZ 230V UC 1CO	230V UC	6A	1CO	1122930000
TRZ 24-230V UC 1CO	24-230V UC	6A	1CO	1122970000
TRZ 24V DC 2CO	24V DC	8A	2CO	1123610000
TRZ 24V UC 2CO	24V UC	8A	2CO	1123620000
TRZ 120V UC 2CO	120V UC	8A	2CO	1123650000
TRZ 230V UC 2CO	230V UC	8A	2CO	1123670000
TRZ 24-230V UC 2CO	24-230V UC	8A	2CO	1123700000
TOZ 24V DC / 48V DC 0.1A	24V DC 48V DC	0.1A	1NO	1127050000
TOZ 120V UC / 48V DC 0.1A	120V UC 48V DC	0.1A	1NO	1127090000
TOZ 230V UC / 48V DC 0.1A	230V UC 48V DC	0.1A	1NO	1127100000
TOZ 24-230V UC / 48V DC 0.1A	24-230V UC 48V DC	0.1A	1NO	1127130000
TOZ 24V DC / 230V AC 1A	24V DC 230V AC	1A		1127530000
TOZ 120V UC / 230V AC 1A	120V UC 230V AC	1A		1127580000
TOZ 230V UC / 230V AC 1A	230V UC	1A		1127590000
TOZ 24-230V UC / 230V AC 1A	24-230V UC	1A		1127620000

### H3DK Series

DIN-rail mounted, standard 22.5mm-width solid state timer range. The H3DE series of timers provides a wide AC/DC power supply and time range to reduce the number of items.

**Features**

- H79 x W22.5 x D100mm
- DIN-rail mounting
- 24-230V AC/DC (except -H)
- Wide time setting range: 0.10s - 120h (except -H and -G), 8 ranges

#### Din Rail Mounted Timers

Operating Modes	Supply Voltage	Control OutPut	Time Setting Range	Part No.
<b>Multi-functional Standard Timers</b>				
ON-delay, flicker OFF start, flicker ON start, signal ON / OFF delay, signal OFF-delay, interval, signal ON / OFF delay, one-shot	12V DC	DPDT	0.1s - 120h	<b>H3DK-M2 DC12</b>
		SPDT	0.1s - 120h	<b>H3DK-M1 AC/DC24/230</b>
ON-delay, flicker ON start, interval, one-shot	24-230V AC/DC	DPDT	0.1s - 120h	<b>H3DK-M2 AC/DC24/230</b>
		SPDT	0.1s - 120h	<b>H3DK-S1 AC/DC24/230</b>
		DPDT	0.1s - 120h	<b>H3DK-S2 AC/DC24/230</b>
<b>Twin Timer</b>				
Flicker OFF start, Flicker ON start		SPDT	0.1 - 12s	<b>H3DK-F AC/DC24/230</b>
<b>Star-delta Timer</b>				
Star-delta		2x SPDT	1 - 120s	<b>H3DK-G AC/DC24/230</b>
<b>Power OFF-delay Timer</b>				
Signal OFF-delay	24V AC/DC	SPDT	1 - 120s	<b>H3DK-H AC/DC24L</b>
			0.1 - 12s	<b>H3DK-H AC/DC24S</b>
	48V AC/DC	SPDT	1 - 120s	<b>H3DK-H AC/DC48L</b>
			0.1 - 12s	<b>H3DK-H AC/DC48S</b>
100-120V AC	SPDT	1 - 120s	<b>H3DK-H AC/DC100-120L</b>	
		0.1 - 12s	<b>H3DK-H AC/DC100-120S</b>	
200-230V AC	SPDT	1 - 120s	<b>H3DK-H AC/DC200-230L</b>	
		0.1 - 12s	<b>H3DK-H AC/DC200-230S</b>	

### H3YN Series

**Features**

- High repeat accuracy
  - 2% Short resetting time <0/1 sec
  - Contact rating 3A at 250V AC (resisted)
- Function: Miniature timer with multiple time ranges and multiple operating modes

#### H3YN Series

Type	Time Limit Contact	Voltage	Part No.
Long time range model 0.1 min to 10 hours	4PDT	24V AC	H3YN 41 24VAC
		230V AC	H3YN 41 230VAC



### Zelio Time - Timer Relays

**Features**

- Compliant with international standards and certifications IEC 61812-1, EN 61812-1 UL, CSA, GL, RCM, EAC, CCC, China ROHS
- Wide power supply range from 24 to 240 V
- Single or multiple functions
- Single or multi timing ranges from 0.02s to 999 hrs
- Screw or spring connection terminals
- Relay or Solid-state output
- Diagnostic button and dial pointer LED indicator
- Module DIN rail mount, miniature plug-in and panel mount

#### RE22 Timers

Type	Voltage	Time Range	Relay Output	Part No.
On Delay	24-240V AC/DC	0.5sec-300hrs	1 C/O	<b>RE22R1AMR</b>
			2 C/O	<b>RE22R2AMR</b>
Asymmetrical		1 C/O	<b>RE22R1MLMR</b>	
			1 C/O	<b>RE22R1KMR</b>
OFF Delay		0.3sec-300sec	2 C/O	<b>RE22R2KMR</b>
			2 C/O	<b>RE22R2DMR</b>
Symmetrical	0.5sec-300hrs	1 C/O	<b>RE22R1DMR</b>	
		2 C/O	<b>RE22R2QEMR</b>	
Star Delta Timers	0.3sec-30sec	2 C/O	<b>RE22R2QTMR</b>	
		1 C/O	<b>RE22R1MYMR</b>	
Multifunction	0.5sec-300hrs	2 C/O	<b>RE22R2MYMR</b>	

