

## PUSH-BUTTON SWITCHES AND CONTROL PUSH-BUTTONS

- They can be used in both building and industrial installations and safety technology
- Modular design with mounting on the rail DIN EN 50 022 - width 35 mm

### Push-button switches MT2B

- For switching of up to 4 electric circuits up to 25 A
- The circuit is switched on permanently by upper green push-button, and switched off by lower red push-button
- The installed push-buttons can be replaced

### Control push-buttons MT

- **They are created by insertion of a push-button T... into the push-button module MT...**
- Modular design enables push-button replacement and creation of tens of different variants
- Very simple installation and replacement of the push-buttons by the customer
- For switching of up to 4 electric circuits up to 25 A

### Control push-buttons with light indication MT11N, MT22X

- **They are created by insertion of a push-button T... and an indicator light S... into the push-button module MT11N or MT22X**
- Modular design enables replacement of the push-button and indicator light and creation of tens of different variants

- Very simple installation and replacement of the push-button and indicator light by the customer
- For signalling and switching of up to 4 electric circuits up to 25 A

### Control push-button with signal light MT20S

- **It is created by insertion of a push-button T... and an indicator light S... into the push-button module MT20S**
- Modular design enables replacement of the push-button and indicator light and creation of tens of different variants
- Very simple installation and replacement of the push-button and indicator light by the customer
- For signalling and switching of up to 4 electric circuits up to 25 A
- **Signal light – separate lighting circuit**

### Double control push-button M2T11-11

- **It is created by insertion of two push-buttons T... into the push-button module M2T11-11**
- Modular design enables push-button replacement and creation of tens of different variants
- Very simple installation and replacement of the push-buttons by the customer
- **For switching of two independent electric circuits up to 25 A**



### Push-button switches

Contact sequence <sup>1)</sup>	Type	Product code	Weight [kg]	Packing [pcs]
11	MT2B11	11136	0.12	12
22	MT2B22	11139	0.12	12
40	MT2B40	11138	0.12	12

<sup>1)</sup> Each digit indicates successively the number of make and break contacts

### Accessories to MT2B

Labels	P...-LSN	page 25
Push-buttons	T...	page 87

### Control push-button modules

Contact sequence <sup>1)</sup>	Type	Product code	Weight [kg]	Packing [pcs]
10	MT10	08623	0.1	12
01	MT01	08622	0.1	12
11	MT11	08624	0.1	12
22	MT22	08951	0.1	12
31	MT31	08625	0.1	12

<sup>1)</sup> Each digit indicates successively the number of make and break contacts

### Accessories to MT

Labels	P...-LSN	page 25
Push-buttons	T...	page 87

## PUSH-BUTTON SWITCHES AND CONTROL PUSH-BUTTONS



### Modules of control push-buttons with light indication

Connector for indicator light <sup>1)</sup>	Contact sequence <sup>2)</sup>	Type	Product code	Weight [kg]	Packing [pcs]
Between contact and terminal	11	MT11N	08626	0.09	12
Between contacts	22	MT22X	08628	0.09	12

<sup>1)</sup> See the schematic symbol

<sup>2)</sup> Each digit indicates successively the number of make and break contacts

### Accessories to MT11N, MT22X

Labels	P...-LSN	page 25
Push-buttons	T...	page 87
Indicator lights	S...	page 87

### Module of control push-buttons with signal light

Contact sequence <sup>1)</sup>	Type	Product code	Weight [kg]	Packing [pcs]
20	MT20S	08627	0.09	12

<sup>1)</sup> Each digit indicates successively the number of make and break contacts

### Accessories to MT20S

Labels	P...-LSN	page 25
Push-buttons	T...	page 87
Indicator lights	S...	page 87

### Module of double control push-buttons

Contact sequence <sup>1)</sup>	Type	Product code	Weight [kg]	Packing [pcs]
11-11	M2T11-11	11140	0.09	12

<sup>1)</sup> Each digit indicates successively the number of make and break contacts

### Accessories to M2T11-11

Labels	P...-LSN	page 25
Push-buttons	T...	page 87

## PUSH-BUTTON SWITCHES AND CONTROL PUSH-BUTTONS

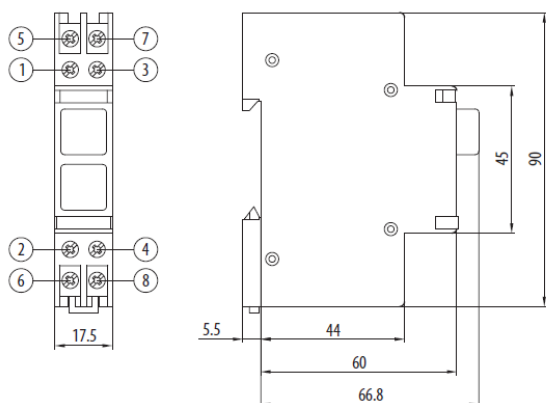
### Specification

Type	MT2B	MT	MT11N, MT22X	MT20S	M2T11-11
Standards	EN 60 947-5-1	EN 60 947-5-1	EN 60 947-5-1	EN 60 947-5-1	EN 60 947-5-1
Approval marks					
Contacts					
Sequence <sup>1)</sup>	11, 22, 40	10, 01, 11, 22, 31	11, 22	20	2x 11
Rated operating voltage	$U_e$ 230/400 V a.c./220 V d.c.	230/400 V a.c./220 V d.c.	230/400 V a.c./220 V d.c.	230/400 V a.c./220 V d.c.	230/400 V a.c./220 V d.c.
Rated thermal current	$I_{th}$ 25 A	25 A	25 A	25 A	25 A
Rated operating current	AC-12 $I_e$ 25 A	25 A	25 A	25 A	25 A
	AC-15 $I_e$ 6 A	6 A	6 A	6 A	6 A
	DC-12 $I_e$ 1 A	1 A	1 A	1 A	1 A
Endurance	30 000 operating cycles	100 000 operating cycles	100 000 operating cycles	100 000 operating cycles	100 000 operating cycles
Connection	0.75 ÷ 6 mm <sup>2</sup> , 2x(0.75 ÷ 2.5)mm <sup>2</sup>	0.75 ÷ 6 mm <sup>2</sup> , 2x(0.75 ÷ 2.5) mm <sup>2</sup>	0.75 ÷ 6 mm <sup>2</sup> , 2x(0.75 ÷ 2.5) mm <sup>2</sup>	0.75 ÷ 6 mm <sup>2</sup> , 2x(0.75 ÷ 2.5) mm <sup>2</sup>	0.75 ÷ 6 mm <sup>2</sup> , 2x(0.75 ÷ 2.5) mm <sup>2</sup>
Light signalling					
Power	-	-	0.8 W	0.8 W	-
Rated voltage	-	-	24 V a.c./d.c., 230 V a.c., 220 V d.c.	24 V a.c./d.c., 230 V a.c., 220 V d.c.	-
Colour	-	-			-
Light	-	-	permanent, flashing	permanent, flashing	-
Source	-	-	LED	LED	-
Dispersion	-	-	by raster in front of LED	by raster in front of LED	-
Connection	-	-	0.75 ÷ 6 mm <sup>2</sup> , 2x(0.75 ÷ 2.5) mm <sup>2</sup>	0.75 ÷ 6 mm <sup>2</sup> , 2x(0.75 ÷ 2.5) mm <sup>2</sup>	-
Push-buttons					
Colour					
Other data					
Mounting on the rail DIN EN 50 022 - width	35 mm	35 mm	35 mm	35 mm	35 mm
Degree of protection	IP20	IP20	IP20	IP20	IP20
Ambient temperature	-25 ÷ +55 °C	-25 ÷ +55 °C	-25 ÷ +55 °C	-25 ÷ +55 °C	-25 ÷ +55 °C
Seismic immunity (8÷50 Hz)	3 g	3 g	3 g	3 g	3 g
Operating position	arbitrary	arbitrary	arbitrary	arbitrary	arbitrary

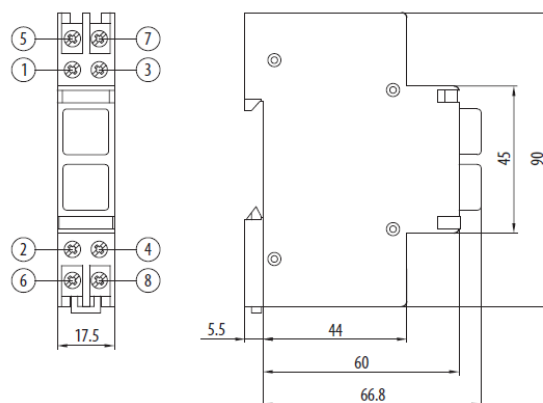
<sup>1)</sup> Each digit indicates successively the number of make and break contacts

### Dimensions

MT, MT11N, MT22X, MT20S

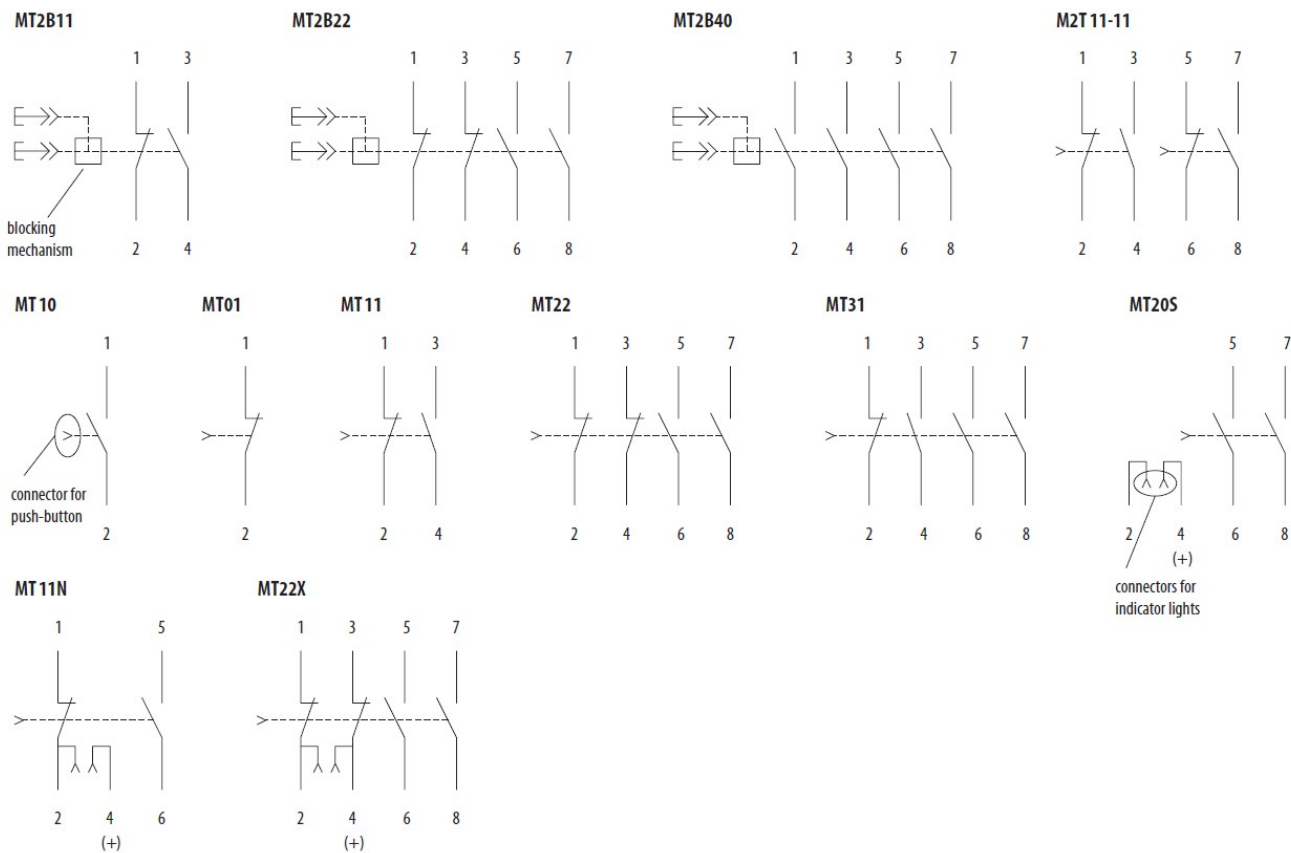


MT2B, M2T11-11



## PUSH-BUTTON SWITCHES AND CONTROL PUSH-BUTTONS

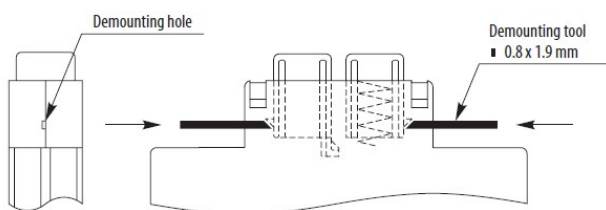
### Diagram



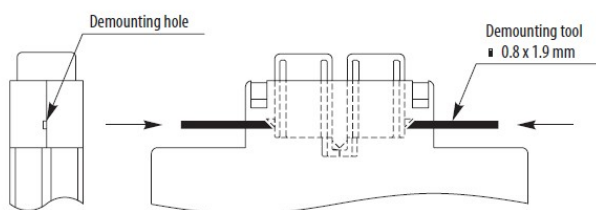
### Demounting

#### Demounting of push-button switches MT2B...

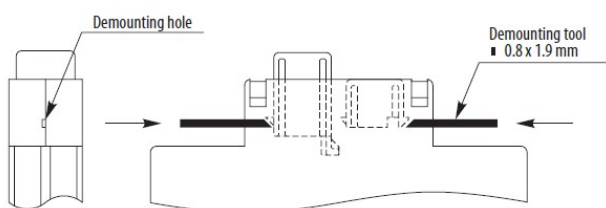
At replacement of the push-button under which there is a spring it is necessary to cut the boss off the new push-button, and only after it to install it in the module



#### Demounting of double control push-buttons (M2T11-11 + push-buttons)



#### Demounting of control push-buttons (MT...), control push-buttons with indication (MT...N, MT...X + indicator light)



## SIGNAL LIGHTS



- They are created by insertion of one or two indicator lights S... into the signal light module MK1 or MK2
- Modular design enables replacement of the indicator light and creation of hundreds of different variants
- Very simple installation and replacement of the indicator light by the customer
- For signalling operating states, emergency lighting etc.
- They can be used in both building and industrial installations and safety technology
- Modular design with mounting on the rail DIN EN 50 022 – width 35 mm









### Signal light modules

Number of openings for indicator lights	Type	Product code	Weight [kg]	Packing [pcs]
1	MK1	08641	0.1	12
2	MK2	08642	0.1	12

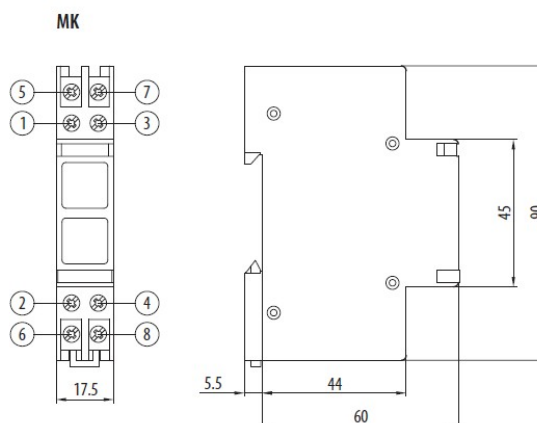
### Accessories to MK

Labels	P...-LSN	page 25
Indicator lights	S...	page 87

### Specification

Type	MK1, MK2	
Standards	EN 60 947-5-1	
Approval marks	   	
Light signalling		
Power	0.8 W	
Rated operating voltage	$U_e$	24 V a.c./d.c., 230 V a.c., 220 V d.c.
Colour	   	
Light	permanent, flashing	
Source	LED	
Dispersion	by raster in front of LED	
Connection	0.75 ÷ 6 mm <sup>2</sup> , 2x(0.75 ÷ 2.5) mm <sup>2</sup>	
Other data		
Mounting on the rail DIN EN 50 022 - width	35 mm	
Degree of protection	IP20	
Ambient temperature	-25 ÷ +55 °C	
Seismic immunity (8 ÷ 50 Hz)	3 g	
Operating position	arbitrary	

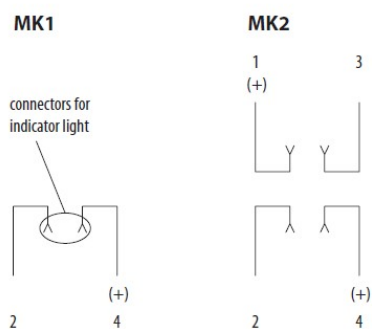
### Dimensions





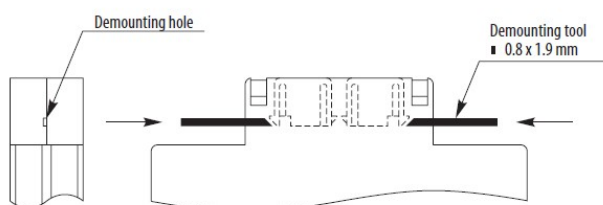
## SIGNAL LIGHTS

### Diagram

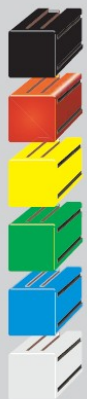


### Demounting

#### ■ Demounting of signal lights (MK1, MK2 + indicator light)



## INDICATOR LIGHTS AND PUSH-BUTTONS



### Indicator lights S...

- They are designed for signalling after insertion into the modules MS..N, MS..X, MT11N, MT22X, MT20S, MK1, MK2
- Indicator light power: 0.8 W
- Indicator light contains a LED

### Push-buttons T...

- They are designed control after insertion into the modules MT2B..., MT..., MT11N, MT22X, MT20S, M2T11-11

### Indicator lights

Colour	Light <sup>1)</sup>	Voltage [V]		Type	Product code	Weight [kg]	Packing [pcs]
		AC	DC				
■ (red)	permanent	230	-	SC/230	11102	0.003	12
		24	24	SC/24	11106	0.003	12
	flashing	230	220	SPC/230	11110	0.003	12
		24	24	SPC/24	11118	0.003	12
■ (green)	permanent	230	-	SE/230	11103	0.003	12
		24	24	SE/24	11107	0.003	12
	flashing	230	220	SPE/230	11111	0.003	12
		24	24	SPE/24	11119	0.003	12
■ (yellow)	permanent	230	-	SD/230	11104	0.003	12
		24	24	SD/24	11108	0.003	12
	flashing	230	220	SPD/230	11112	0.003	12
		24	24	SPD/24	11120	0.003	12
□ (white)	permanent	230	-	SG/230	11101	0.003	12
		24	24	SG/24	11105	0.003	12
	flashing	230	220	SPG/230	11109	0.003	12
		24	24	SPG/24	11117	0.003	12

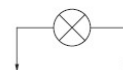
<sup>1)</sup> Flashing indicator lights are identified by "SF" on the front face

### Push-buttons

Colour	Type	Product code	Weight [kg]	Packing [pcs]
■ (black)	TB	08932	0.002	12
■ (red)	TC	08930	0.002	12
■ (yellow)	TD	08933	0.002	12
■ (green)	TE	08931	0.002	12
■ (blue)	TF	08935	0.002	12
□ (white)	TG	08934	0.002	12

### Diagram

Indicator light



Push-button



### Meaning of push-button and indicator light colours at coding - general principles <sup>2)</sup>

Colour	Safety of personnel or environment	Operating conditions	Equipment condition
■ (red)	danger	emergency	without a general meaning
■ (yellow)	warning	extraordinary	without a general meaning
■ (green)	safe condition	normal	without a general meaning
■ (blue)	special meaning - an order	special meaning - an order	without a general meaning
□ (white)			
■ (grey)			
■ (black)			
		without a special meaning	

<sup>2)</sup> According to EN 60 073