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**
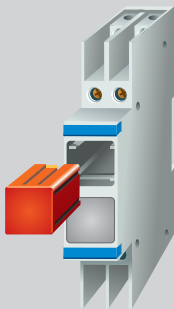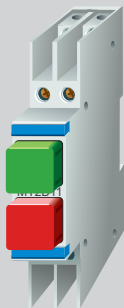
Push-button switches

Contact sequence [1]	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

[1] 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 [1]	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

[1] 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
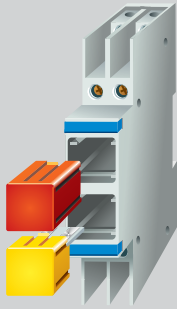
Modules of control push-buttons with light indication

Connector for indicator light [1]	Contact sequence [2]	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

[1] See the schematic symbol
[2] 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 [1]	Type	Product code	Weight [kg]	Packing [pcs]
20	**MT20S**	08627	0.09	12

[1] 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
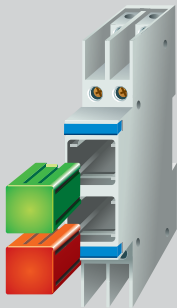
Module of double control push-buttons

Contact sequence [1]	Type	Product code	Weight [kg]	Packing [pcs]
11-11	**M2T11-11**	11140	0.09	12

[1] 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

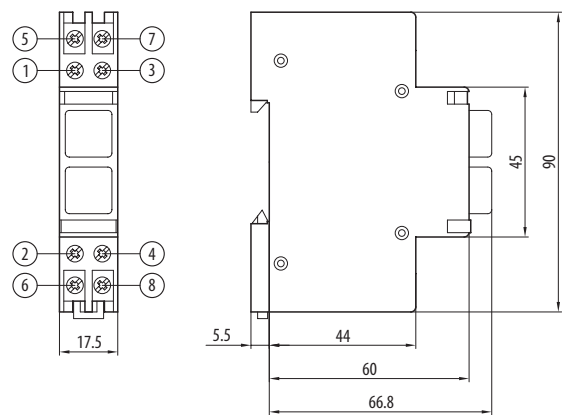| Type		MT2B	MT	MT11N, MT22X	MT20S	M2T11-11
Standards		EN 60 947-5-1	EN 60 947-5-1	EN 60 947-5-1	EN 60 947-5-1	EN 60 947-5-1
Approval marks						
Contacts						
Sequence [1]		11, 22, 40	10, 01, 11, 22, 31	11, 22	20	2x 11
Rated operating voltage	U_e	230/400 V a.c./220 V d.c.	230/400 V a.c./220 V d.c.	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 mm², 2x(0.75 ÷ 2.5)mm²	0.75 ÷ 6 mm², 2x(0.75 ÷ 2.5) mm²	0.75 ÷ 6 mm², 2x(0.75 ÷ 2.5) mm²	0.75 ÷ 6 mm², 2x(0.75 ÷ 2.5) mm²	0.75 ÷ 6 mm², 2x(0.75 ÷ 2.5) mm²
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 mm², 2x(0.75 ÷ 2.5) mm²	0.75 ÷ 6 mm², 2x(0.75 ÷ 2.5) mm²	-
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 ℃	-25 ÷ +55 ℃	-25 ÷ +55 ℃	-25 ÷ +55 ℃	-25 ÷ +55 ℃
Seismic immunity (8÷50 Hz)		3 g	3 g	3 g	3 g	3 g
Operating position		arbitrary	arbitrary	arbitrary	arbitrary	arbitrary

[1] Each digit indicates successively the number of make and break contacts
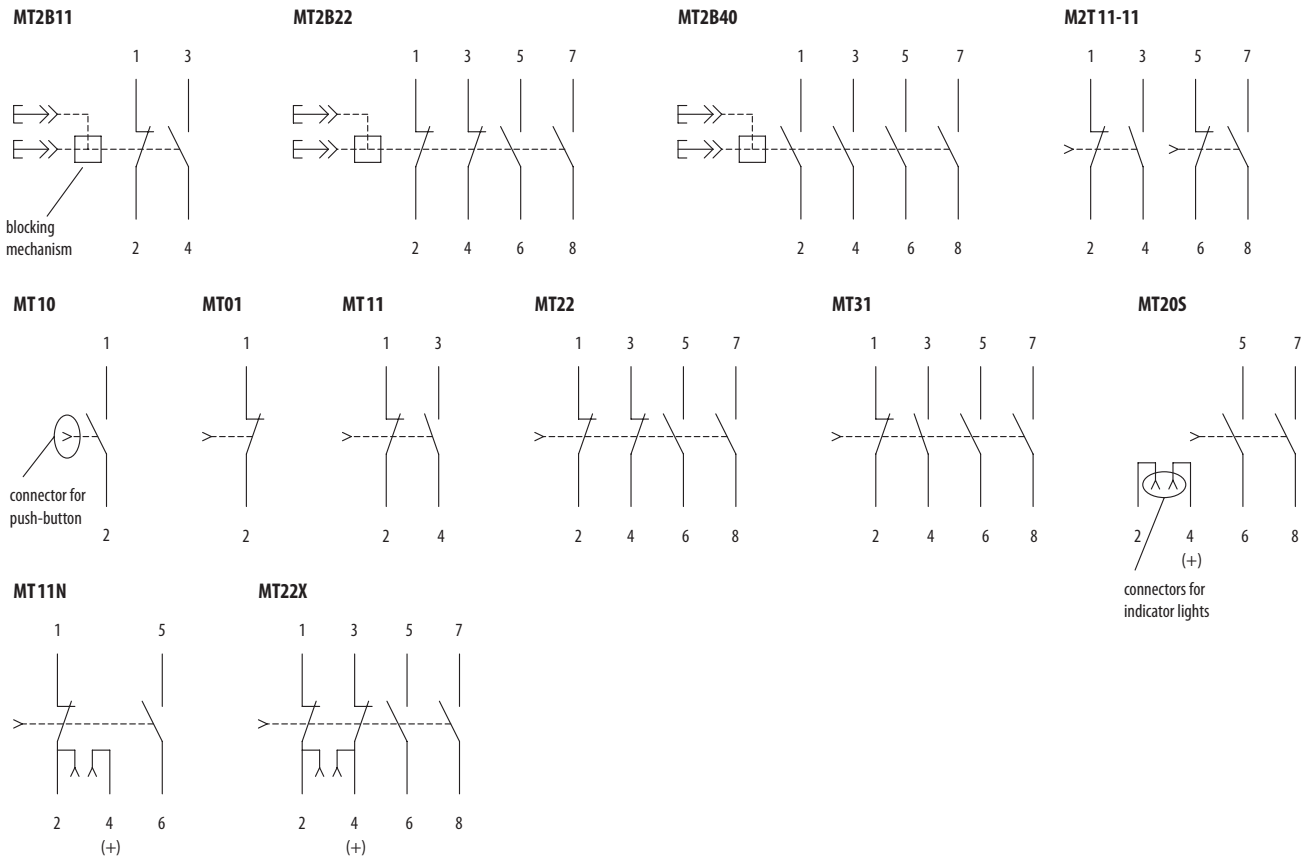
Dimensions

MT, MT11N, MT22X, MT20S
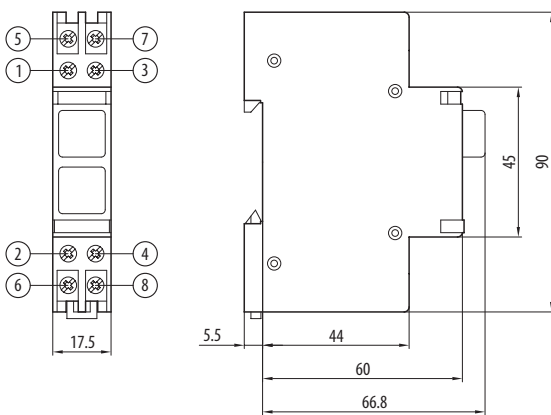
MT2B, M2T 11-11
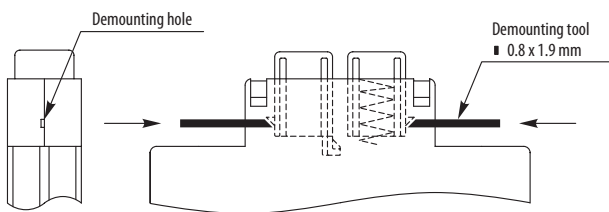
PUSH-BUTTON SWITCHES AND CONTROL PUSH-BUTTONS

Diagram

MT2B11

1   3

2   4

blocking mechanism

MT2B22

1   3   5   7

2   4   6   8

MT2B40

1   3   5   7

2   4   6   8

M2T11-11

1   3   5   7

2   4   6   8

MT10

1

2

connector for push-button

MT01

1

2

MT11

1   3

2   4

MT22

1   3   5   7

2   4   6   8

MT31

1   3   5   7

2   4   6   8

MT20S

5   7

2   4   6   8
(+)

connectors for indicator lights

MT11N

1   5

2   4   6
(+)

MT22X

1   3   5   7

2   4   6   8
(+)

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 hole

Demounting tool
▯ 0.8 x 1.9 mm

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

Demounting hole

Demounting tool
▯ 0.8 x 1.9 mm
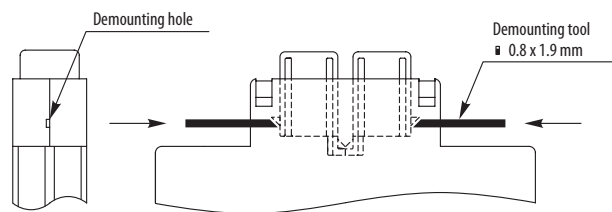
■ **Demounting of control push-buttons (MT..)**,
control push-buttons with indication (MT..N, MT..X + indicator light)

Demounting hole

Demounting tool
▯ 0.8 x 1.9 mm
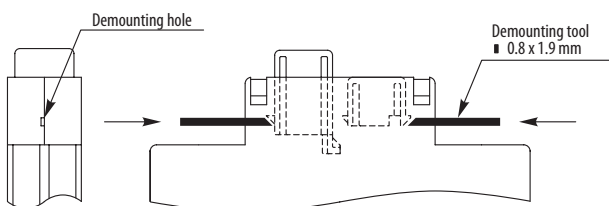
LOCKING INSERT, LABELS

Locking insert VU-LSN
- Accessories to: LSN, LSE, ASN, MS
- For reliable locking in both closed and open positions
- The breaking function of miniature circuit breakers is possible also in the locked position
- Max. diameter of the lock shank – 4.5 mm
- The padlock is not a part of delivery

Label P…-LSN
- Accessories to: LSN, ASN, MS, MT, MK, M2T, MCR, IR116K, C-IR, D-IR, PR116, PR208, …
- For better orientation in the switchboard
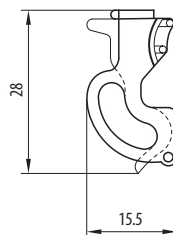- Use spirit marker for description of blank labels

Locking insert

Type	Product code	Weight [kg]	Packing [pcs]
VU-LSN	09087	0.002	1

Labels

Description	Colour	Type	Product code	Weight [kg]	Packing [pcs]
	■	**PB-LSN**	01499	0.001	20
L1	■	**PB07-LSN**	01506	0.001	20
L2	■	**PB08-LSN**	01507	0.001	20
L3	■	**PB09-LSN**	01508	0.001	20
	□	**PW-LSN**	01509	0.001	20

Dimensions

VU-LSN

28

15.5

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 [1]	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

[1] Flashing indicator lights are identified by "*" 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
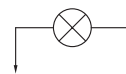
Indicator light   Push-button

Meaning of push-button and indicator light colours at coding - general principles [2]

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)		without a special meaning	
■ (black)			

[2] According to EN 60 073