Translated from Czech to English - www.onlinedoctranslator.com

wMM Series - Sets and kits

MM900001

MM900011

MM900016

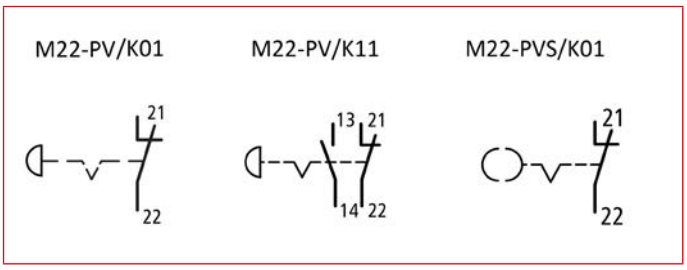
MM216514

wSchrack Info

The preconfigured assembly consists of:

- Command or signal element
- Mounting adapter
- Light source / contact blocks
- Technical data see individual devices

wWiring diagram



DESCRIPTION	TYPE NUMBER	AVAILABILITY	STORE	ORDER NUMBER
Emergency stop control head, with lock, 1NO/1NC	M22-PVS/K01			MM216514
Emergency stop control head, 1R	M22-PV/K01			MM216515
Emergency stop control head, 1NO/1NC	M22-PV/K11			MM216516
Assembly - Control head illuminated green 230V, 1 make contact	M22-SET			MM900001
Illuminated red push button 230V, 1 normally closed contact	M22-SET			MM900002
Illuminated green push button 24V, 1 NO contact	M22-SET			MM900003
Illuminated red push button 24V, 1 normally closed contact	M22-SET			MM900004
Flat green signal light 230V	M22-SET			MM900005
Signal lamp flat red 230V	M22-SET			MM900006
Assembly - flat indicator light, green 24V, including adapter	M22-SET			MM900007
Signal lamp flat red 24V	M22-SET			MM900008
Green button, 1 NO contact	M22-SET			MM900009
Red button, 1 normally closed contact	M22-SET			MM900010
Emergency stop button - set	M22-SET			MM900011
Lever control, 2 positions, with detent	M22-SET			MM900012
Lever control, 3 positions, with detent	M22-SET			MM900013
Double green/red button 230V	M22-SET			MM900014
Double green/red button 24V	M22-SET			MM900015
Push button with lock, with 40° detent	M22-SET			MM900016

wSignal and command elements of the MM series

			Contact elements	Double-contact elements	ICE	Backlit buttons, buttons, mushroom buttons without arrest	Double-buttons
Standards			EN 60947, VDE 0660				
Lifespan, mechanical	Number of cycles	x10^6	5	–	–	5	0.2
Maximum control frequency	Cycles/h		≤ 3600	≤ 3600	–	≤ 3600	≤ 3600
Control force		N	5	10	–	5	5
Tightening torque (screw terminals)		Nm	0.8	–	0.8	–	–
Degree of protection (ČSN EN 60529)			IP20	IP20	IP20	IP67, IP69K	IP66
Climate resistance			Damp heat, constant according to IEC 60068-2-78 Damp heat, cyclic according to IEC 60068-2-30				
Ambient temperature, open		°C	- 25 ... +70				
Mounting position			any	any	any	any	any
Shock resistance according to IEC 60068-2-27 Impulse duration 11ms, half sine		G	30	30	30	30	30
Connection cross-sections							
full		mm^2	0.75 - 2.5	0.5 - 1.5	0.75 - 2.5	–	–
roped		mm^2	0.5 - 2.5	0.5 - 1.5	0.5 - 2.5	–	–
roped with a hollow core		mm^2		0.5 - 1.0	–	–	–
Flow paths							
Rated voltage surge withstand voltage U_{imp}		VAC	6000	4000	6000	–	–
Rated insulation voltage U_{and}		IN	500	250	500	–	–
Overvoltage category/pollution degree			III/3	III/3	III/3	–	–
Switching reliability							
at 24VDC/5mA	H_FError rate		< 10^{-7}(corresponds to 1 outage in 10^7 switching)	–	–	–	–
at 5VDC/1mA	H_FError rate		< 5x10^{-6}(corresponds to 1 outage per 5x10^6switching)	–	–	–	–
Maximum upstream protection Circuit breaker		Type	B6/1	B6/1	–	–	–
Fuse	gG/gL		10	10	–	–	–
Switching capacity							
Rated operating current I_E							
AC-15	115V	AND	6	6	–	–	–
	230V	AND	6	6	–	–	–
	400V	AND	4	–	–	–	–
	500V	AND	2	–	–	–	–
DC-13	24V	AND	3	3	–	–	–
	42V	AND	1.7	–	–	–	–
	60V	AND	1.2	–	–	–	–
	110V	AND	0.8	0.6	–	–	–
	220V	AND	0.3	0.3	–	–	–
Electrical life							
AC-15	230V/0.5A		1.6	–	–	–	–
	230V/1.0A		1	–	–	–	–
	230V/3.0A		0.7	–	–	–	–
DC-13	12V/2.8A		1.2	–	–	–	–

wSignal and command elements of the MM series

			Buttons, backlit	Key buttons	Indicator lights, Acoustic whistles compact, Indicator lights compact, Potentiometers	Backlit buttons, buttons, mushroom buttons buttons with locking	Stop buttons, Emergency buttons
Standards			**EN 60947, VDE 0660**				
Lifespan, mechanical	Number of cycles	x10^6	0.1	0.1	–	1	0.1
Maximum control frequency	Cycles/h		≤ 2000	≤ 100	–	≤ 1800	≤ 600
Control force		N	–	–	–	5	50
Tightening torque		Nm	0.3	0.5	–	–	–
Degree of protection (ČSN EN 60529)			IP66	IP66	Lighting elements compact: IP65 Acoustic elements compact: IP40 Potentiometers: IP66	IP67, IP69K	IP67, IP69K
Climate resistance			Damp heat, constant according to ČSN EN 60068-2-78 Damp heat, cyclic according to ČSN EN 60068-2-30				
Ambient temperature, open		°C	- 25 ... +70				
Mounting position			any	any	any	any	any
Impact resistance according to ČSN EN 60068-2-27 Impulse duration 11ms, half sine		G	30	30	30	30	30
Connection cross-sections							
full		mm^2	–	–	0.5 - 1.5	–	–
roped		mm^2	–	–	0.5 - 1.5	–	–
roped with a hollow core		mm^2	–	–	–	–	–
Flow paths							
Rated voltage surge withstand voltage U_{imp}		VAC	–	–	4000	–	–
Rated insulation voltage U_{and}		IN	–	–	250	–	–
Overvoltage category/pollution degree			–	–	III/3	–	–