DATASHEET - M22-DP-R



Mushroom actuator, red, momentary

Part no. M22-DP-R Catalog No. 216714 Alternate Catalog M22-DP-RQ No. EL-Nummer 4355674 (Norway)



Delivery program

Product range		RMQ-Titan
Basic function		Mushroom-headed pushbutton
Single unit/Complete unit		Single unit
Design		Mushroom
		momentary
Colour		
Mushroom		red
Mushroom colour		
Button plate		
button plate		red
Button plate		
		Blank
Degree of Protection		IP66, IP67, IP69
Front ring		Bezel: titanium
Connection to SmartWire-DT		yes with SWD-RMQ connections
Actuator travel and actuation force as per DIN EN 60947-5-1, K.5.4.1		
Minimum force for positive opening	Ν	0
Front dimensions		22 x 22
Function		momentary

Technical data

General			
Standards			IEC/EN 60947 VDE 0660
Lifespan, mechanical	Operations	x 10 ⁶	> 5
Operating frequency	Operations/h		≦ 3600
Actuating force		n	≦ 5
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Degree of Protection			IP66, IP67, IP69
Ambient temperature			
Open		°C	-25 - +70
Storage		°C	- 40 - + 80
Mounting position			As required
Mechanical shock resistance		g	30 Shock duration 11 ms

shipping classification

Sinusoidal according to IEC 60068-2-27 DNV

GL LR



Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	0
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Please enquire
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			Not applicable.
10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Front element for mushroom push-button (EC001038)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Front element for mushroom push-button actuators (ecl@ss10.0.1-27-37-12-12 [AKF030014])

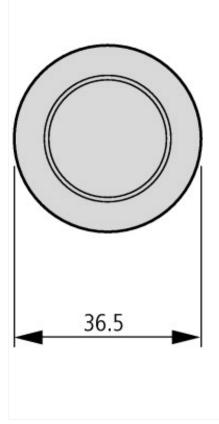
Colour button	Red
Construction type lens	Round

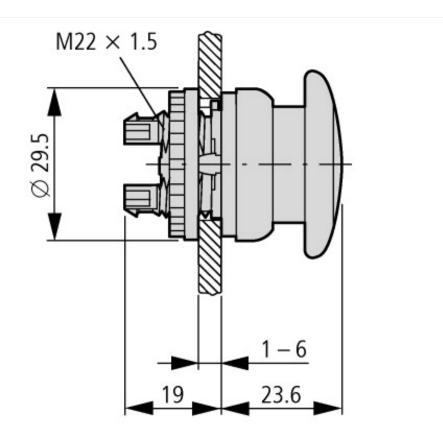
Hole diameter mm 25 Widt opening mm 0 Height opening mm 0 Degree of protection (NEMA) MM F07/P69K Degree of protection (NEMA) MM Kacconomic Suitable for illumination MM Kacconomic Synchriging function latching MM No Synchriging function latching MM No With front ring MM F07/P60K Kuterial front ring MM F07/P60K			
Width openingmmimHeight openingmm0Degree of protection (IP)F67/IP69KDegree of protection (NEMA)F67/IP69KSuitable for illuminationF64F64Svitching function latchingF64F64Syring-returnF64F64With front ringF64F64Colour front ringF64F64Stable for illuminationF64F64Stable for illuminationF64F64Stable for tringF64F64Stable for tringF64F64Stable for tringF64F64Stable for tringF64F64Stable for emergency stopF64F64Stable for emergency stopF64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64 </td <td>Diameter cap</td> <td>mm</td> <td>36.5</td>	Diameter cap	mm	36.5
Height opening mm 0 Degree of protection (IP) IP67/IP69K Degree of protection (NEMA) 4X Type of button Fat Suitable for illumination IP67/IP69K Switching function latching IP67/IP69K Spring-return No With front ring IP67/IP69K Material front ring IP67/IP69K Colour front ring IP67/IP69K Suitable for emergency stop IP67/IP69K	Hole diameter	mm	22.5
Degree of protection (IP)P67/P69KDegree of protection (NEMA)4XType of buttonFlatSuitable for illumination6NoSwitching function latching6NoSpring-returnVesVesWith front ring6PlasticMaterial front ring6PlasticColour front ring6NoSwitching function server of the mergency stop6NoSwitching function server of the mergency stop6No	Width opening	mm	0
Degree of protection (NEMA) 4X Type of button Flat Suitable for illumination No Switching function latching Mo Spring-return Ves With front ring Yes Naterial front ring Plastic Colour front ring Ko Suitable for emergency stop Ko	Height opening	mm	0
Type of button Flat Suitable for illumination No Switching function latching Mo Syring-return Yes With front ring Yes Material front ring Yes Colour front ring Yes Suitable for emergency stop Yes No No	Degree of protection (IP)		IP67/IP69K
Suitable for illumination Image: Suitable for illumination No Switching function latching Image: Suitable for illumination No Spring-return Image: Suitable for illumination No With front ring Image: Suitable for illumination Yes Colour front ring Image: Suitable for emergency stop Image: Suitable for emergency stop	Degree of protection (NEMA)		4X
Switching function latching Mo Spring-return Yes With front ring Yes Material front ring Yes Colour front ring Yes Suitable for emergency stop Yes	Type of button		Flat
Spring-return Yes With front ring Yes Material front ring Yes Colour front ring Yes Suitable for emergency stop Yes	Suitable for illumination		No
With front ring Yes Material front ring Plastic Colour front ring Chrome Suitable for emergency stop Mode	Switching function latching		No
Material front ring Plastic Colour front ring Chrome Suitable for emergency stop Image: Chrome	Spring-return		Yes
Colour front ring Chrome Suitable for emergency stop No	With front ring		Yes
Suitable for emergency stop No	Material front ring		Plastic
	Colour front ring		Chrome
Unlocking method None	Suitable for emergency stop		No
	Unlocking method		None

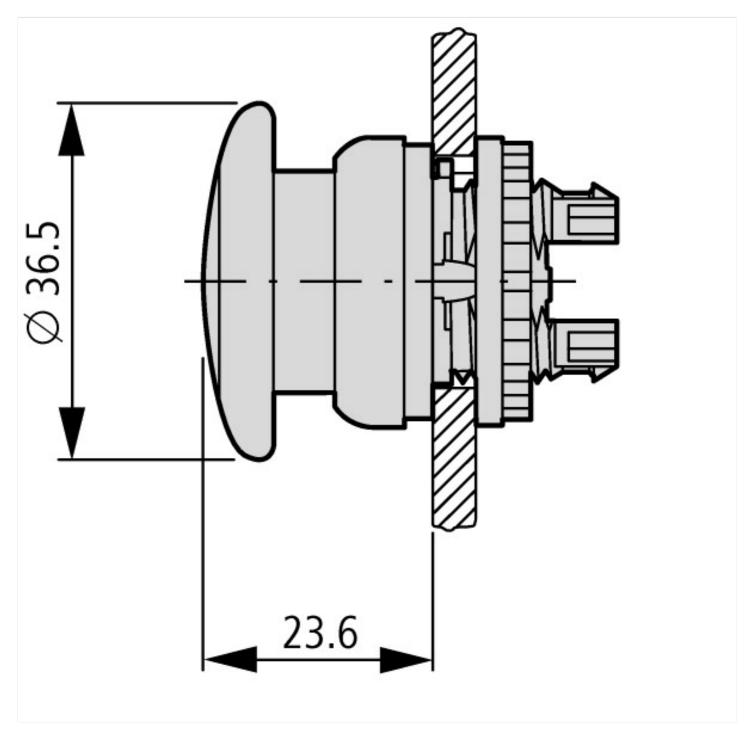
Approvals

UL File No. E29184 UL Category Control No. MCR CSA File No. Image: Control No. CS		
UL Category Control No. NKCR CSA File No. 012528 CSA Class No. 64 North America Certification 64	Product Standards	IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking
CSA File No. Image: Constraint of the second of the seco	UL File No.	E29184
CSA Class No. 3211-03 North America Certification UL listed, CSA certified	UL Category Control No.	NKCR
North America Certification UL listed, CSA certified	CSA File No.	012528
	CSA Class No.	3211-03
Degree of Protection UL/CSA Type 3R, 4X, 12, 13	North America Certification	UL listed, CSA certified
	Degree of Protection	UL/CSA Type 3R, 4X, 12, 13

Dimensions







Assets (links)

Declaration of CE Conformity 00003256