#### **DATASHEET - M22-PVL**



Emergency stop/emergency switching off pushbutton, RMQ-Titan, Mushroom-shaped, 38 mm, Illuminated with LED element, Pull-to-release function, Red, yellow, RAL 3000



Part no. M22-PVL Catalog No. 216878 Alternate Catalog M22-PVLQ

No.

**EL-Nummer** 4355322

(Norway)

### **Delivery program**

Delivery program			
Product range			RMQ-Titan
Basic function			Controlled stop pushbuttons/emergency-stop buttons
Mounting hole diameter	Ø	mm	22.5
Single unit/Complete unit			Single unit
Design			Mushroom-shaped
Diameter	Ø	mm	38
Illumination			Illuminated with LED element
Approval			ET 16107 Sicherheit geprüft tested safety
			Pull-to-release function
Description			Tamper-proof according to ISO 13850/EN 418
Colour			
Mushroom head			Red
Base			yellow
			RAL 3000
Degree of Protection			IP66, IP69
Connection to SmartWire-DT			no
Instructions			Max. Configuration: 4 x M22-(C)K01,10 or 2 x M22-(C)K02,20,11 and 1 x M22-(F)LED  When using M22-PVL with 1 x M22-K01SMC10 (single channel), article M22-XSMC (order no.: 173030) is required. Order this item separately.

## **Technical data**

#### General Standards IEC/EN 60947 **VDE 0660** Lifespan, mechanical Operations > 0.1 Operating frequency Operations/h ≦ 600 Actuating force ≦ 50 n Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 Climatic proofing IP66, IP69 Degree of Protection Ambient temperature Open °C -25 - +70

Mounting position		As required
Mechanical shock resistance	g	50 Shock duration 11 ms Sinusoidal according to IEC 60068-2-27
shipping classification		DNV GL LR
		Lloyd's Register  DIV Germanischer Lloyd  TYPE APPROVED

# Design verification as per IEC/EN 61439

Technical data for design verification  Rated operational current for specified heat dissipation  Heat dissipation per pole, current-dependent  Equipment heat dissipation, current-dependent  Pvid  W  0  Static heat dissipation, non-current-dependent  Pvs  W  0  Heat dissipation capacity  Pdiss  W  0  Operating ambient temperature min.  Operating ambient temperature max.  IEC/EN 61439 design verification  10.2 Strength of materials and parts	
Heat dissipation per pole, current-dependent  Equipment heat dissipation, current-dependent  P <sub>vid</sub> W  0  Static heat dissipation, non-current-dependent  P <sub>vs</sub> W  0  Heat dissipation capacity  P <sub>diss</sub> W  0  Operating ambient temperature min.  °C  -25  Operating ambient temperature max.  IEC/EN 61439 design verification  10.2 Strength of materials and parts	
Equipment heat dissipation, current-dependent P <sub>vid</sub> W 0  Static heat dissipation, non-current-dependent P <sub>vs</sub> W 0  Heat dissipation capacity P <sub>diss</sub> 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	
Static heat dissipation, non-current-dependent  P <sub>vs</sub> W  0  Heat dissipation capacity  Operating ambient temperature min.  Operating ambient temperature max.  CC -25  Operating ambient temperature max.  IEC/EN 61439 design verification  10.2 Strength of materials and parts	
Heat dissipation capacity  Pdiss  W  Operating ambient temperature min.  Operating ambient temperature max.  C  TO  IEC/EN 61439 design verification  10.2 Strength of materials and parts	
Operating ambient temperature min.  Operating ambient temperature max.  Operating ambient temperature max.  C 70  IEC/EN 61439 design verification  10.2 Strength of materials and parts	
Operating ambient temperature max.  C 70  IEC/EN 61439 design verification  10.2 Strength of materials and parts	
IEC/EN 61439 design verification  10.2 Strength of materials and parts	
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	
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	
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 observed.	or the switchgear must be
10.12 Electromagnetic compatibility  Is the panel builder's responsibility. The specifications for observed.	or the switchgear must be
10.13 Mechanical function  The device meets the requirements, provided the inform leaflet (IL) is observed.	ation in the instruction

#### **Technical data ETIM 7.0**

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

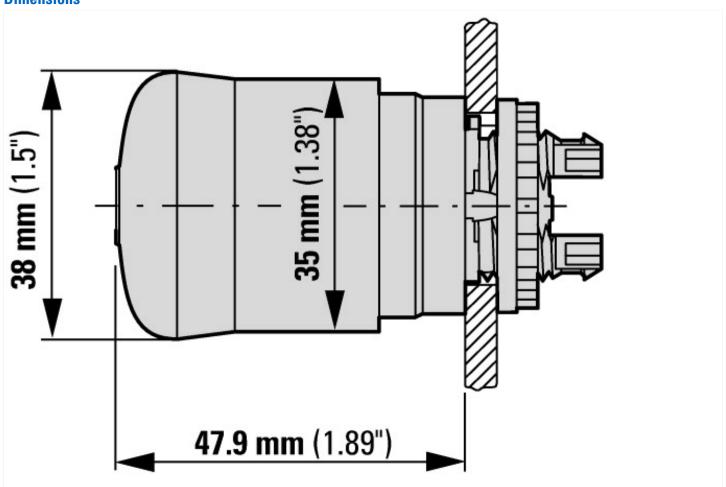
Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Front element for mushroom push-button actuators (ecl@ss10.0.1-27-37-12-12 [AKF030014])

Colour button		Red
Construction type lens		Round
Diameter cap	mm	38
Hole diameter	mm	22.5
Width opening	mm	0
Height opening	mm	0
Degree of protection (IP)		IP66
Degree of protection (NEMA)		4X
Type of button		Flat
Suitable for illumination		Yes
Switching function latching		Yes
Spring-return		No
With front ring		No
Material front ring		Plastic
Colour front ring		Chrome
Suitable for emergency stop		Yes
Unlocking method		Pull-release

# Approvals

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

## **Dimensions**



# **Additional product information (links)**

DGUV Test Mark Customer Information

 $http://www.dguv.de/medien/dguv-test-medien/\_pdf\_zip\_doc\_ppt/agb-und-pzo/dguv\_test\_zeichen\_infoblatt\_kunden.pdf$