## **DATASHEET - Q25LPV**



## Emergency-stop pushbutton, illuminated

Part no. Q25LPV Catalog No. 072371 Alternate Catalog Q25LPV



**Delivery program** 

Delivery program			
Product range			RMQ16
Basic function			Controlled stop pushbuttons/emergency-stop buttons
Mounting hole diameter	Ø	mm	16
Single unit/Complete unit			Single unit
Design			Mushroom-shaped
Diameter	Ø	mm	28
Illumination			Illuminated
			Pull-to-release function
Description			Tamper-proof according to ISO 13850, EN 418 Pushbutton remains in pushed position I <sub>e</sub> = 15 mA Positive pole at X1 No bulb replacement required.
Colour			
Mushroom head			Red
Degree of Protection			IP65
Connection to SmartWire-DT			no

## **Technical data**

General

General			
Standards			IEC/EN 60947
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	> 0.1
Operating frequency	Operations/h		≦ 600
Actuating force		n	≦ 25
Degree of protection, IEC/EN 60529			IP65
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Open		°C	-25 - +60
Enclosed		°C	- 25 - 40
Mounting position			As required
Mechanical shock resistance		g	> 40 according to IEC 60068-2-27 Shock duration 11 ms Sinusoidal
Terminal capacities		$\text{mm}^2$	0.5 - 1.0
Blade terminal			2.8 x 0.8 mm
Fast-on connectors			2.8 x 0.8 mm
Contacts			
Rated impulse withstand voltage	$U_{imp}$	V AC	800
Rated insulation voltage	Ui	V	250
Overvoltage category/pollution degree			III/3
Rated operational voltage	U <sub>e</sub>	V AC	24
Control circuit reliability			

at 24 V DC/5 mA	H <sub>F</sub>	Fault probability	$< 10^{-7}$ , $< 1$ fault in $10^7$ operations
at 5 V DC/1 mA	H <sub>F</sub>	Fault probabilit	$< 5 \times 10^{-6}$ , $< 1$ failure in $5 \times 10^{6}$ operations
Use of insulated ferrule ISH 2,8			>24 V AC/DC recommended >50 V AC or 120 V DC is mandatory, even on unused blade terminals

**Design verification as per IEC/EN 61439** 

Design verincation as her IPO/FIA 01493			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0.36
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60
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			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
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])

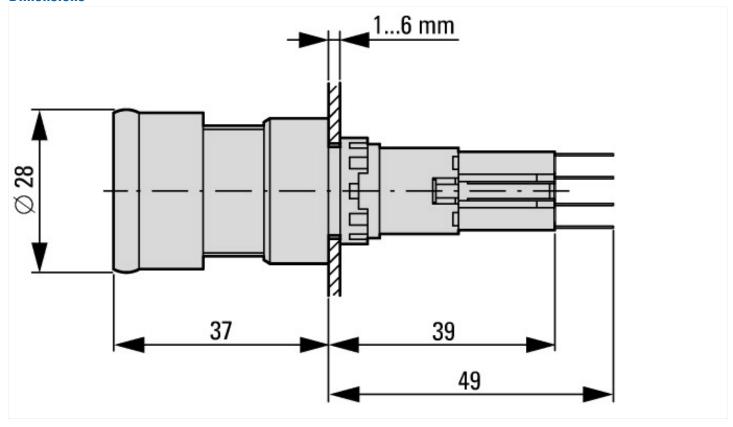
(ecl@ss10.0.1-27-37-12-12 [AKF030014])		
Colour button		Red
Construction type lens		Round
Diameter cap	mm	28
Hole diameter	mm	16
Width opening	mm	0
Height opening	mm	0
Degree of protection (IP)		IP65
Degree of protection (NEMA)		1

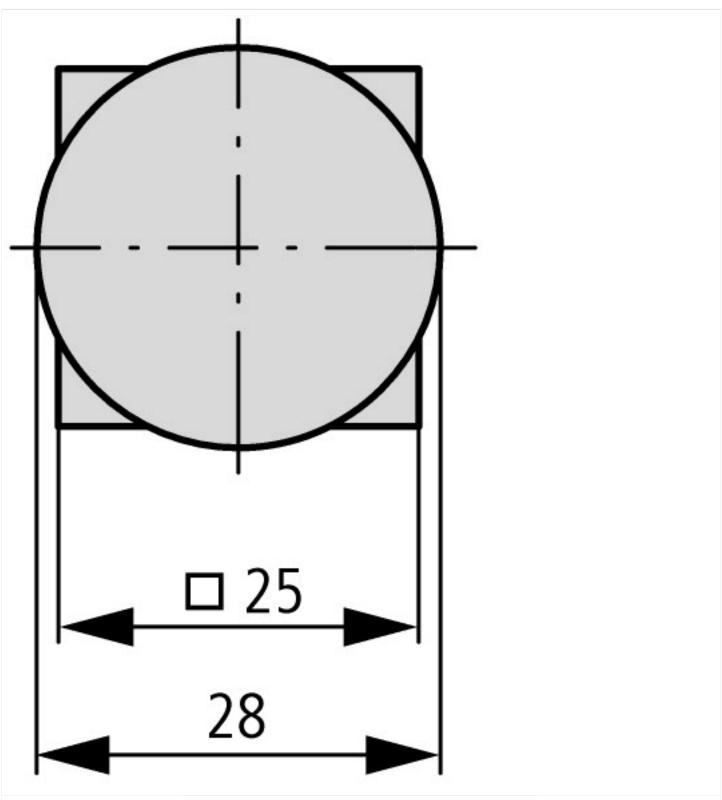
Type of button	High
Suitable for illumination	Yes
Switching function latching	Yes
Spring-return	Yes
With front ring	No
Material front ring	Plastic
Colour front ring	Yellow
Suitable for emergency stop	Yes
Unlocking method	Pull-release

# Approvals

Product Standards	IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29184
UL Category Control No.	NKCR
CSA File No.	46552
CSA Class No.	3211-03
North America Certification	UL listed, CSA certified
Degree of Protection	UL/CSA Type 1

## **Dimensions**





Actuating and indicator elements Square style