# **DATASHEET - Q25LTR-RT/WB**

No.



Illuminated pushbutton actuator, red, maintained, +filament lamp 24V



Part no. Q25LTR-RT/WB Catalog No. 086412 Alternate Catalog **Q25LTR-RT/WB** 

Delivery program			
Product range			RMQ16
Basic function			Illuminated pushbutton actuators
Mounting hole diameter	Ø	mm	16
Single unit/Complete unit			Single unit
Design			Flat
			maintained
Colour			
Lens			
Button plate			
button plate			red
Button plate			
			Blank
Degree of Protection			IP65
Front ring			without bezel
Connection to SmartWire-DT			no

# **Technical data**

#### General Standards IEC/EN 60947 Lifespan, mechanical Operations > 30 x 10<sup>6</sup> Operating frequency Operations/h ≦ 1800 Actuating force ≦ 4 n 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 °C -25 - +60 Open °C - 25 - 40 Enclosed Mounting position As required Mechanical shock resistance > 40 g according to IEC 60068-2-27 Shock duration 11 ms Sinusoidal 0.5 - 1.0 Terminal capacities mm<sup>2</sup> 2.8 x 0.8 mm to DIN 46244 Blade terminal 2.8 x 0.8 mm to DIN 46247 and IEC 60760 Fast-on connectors Contacts U<sub>imp</sub> V AC 800 Rated impulse withstand voltage

Rated insulation voltage	Ui	V	250
Overvoltage category/pollution degree			111/3
Rated operational voltage	Ue	V AC	24
Control circuit reliability			
at 24 V DC/5 mA	H <sub>F</sub>	Fault probabilit	< 10 <sup>-7</sup> , < 1 fault in 10 <sup>7</sup> operations Y
at 5 V DC/1 mA	H <sub>F</sub>	Fault probabilit	< 5 x 10 <sup>-6</sup> (1 failure in 5 x 10 <sup>6</sup> operations) Y
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 vermeation as per reoren or 405			
Technical data for design verification			
Rated operational current for specified heat dissipation	I <sub>n</sub>	А	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	1
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 push button (EC000221)

 Electric engineering, automation, process control engineering / Low-voltage switck / Echnology / Command element for push-button actuators (ecl@ss10.0.1-27-37-12-10 [AKF028014])

 Colour button
 Red

 Number of command positions
 1

 Construction type lens
 Square

 Hole diameter
 mm
 16

Width opening	mm	n O
Height opening	mm	n 0
Type of button		Flat
Suitable for illumination		Yes
With protective cover		No
Labelled		No
Switching function latching		Yes
Spring-return		No
With front ring		Yes
Material front ring		Plastic
Colour front ring		Black
Degree of protection (IP), front side		IP65
Degree of protection (NEMA), front side		1

## **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

