



**Illuminated pushbutton actuator, white, maintained, +filament lamp 24V**

**Part no.** Q18LTR-WS/WB  
**Article no.** 086708  
**Catalog No.** Q18LTR-WS-WB

**Delivery program**

|                            |  |  |                                  |
|----------------------------|--|--|----------------------------------|
| Product range              |  |  | RMQ16                            |
| Basic function             |  |  | Illuminated pushbutton actuators |
| Single unit/Complete unit  |  |  | Single unit                      |
| Design                     |  |  | Flat<br>maintained               |
| <b>Colour</b>              |  |  |                                  |
| Lens                       |  |  |                                  |
| <b>Button plate</b>        |  |  |                                  |
| button plate               |  |  | White                            |
| Button plate               |  |  |                                  |
|                            |  |  | Blank                            |
| Degree of Protection       |  |  | IP65                             |
| Connection to SmartWire-DT |  |  | no                               |
| Front dimensions           |  |  | 18 x 18                          |

**Technical data**

**General**

|                                    |              |                   |  |
|------------------------------------|--------------|-------------------|--|
| Standards                          |              |                   | IEC/EN 60947   |
| Lifespan, mechanical               | Operations   | x 10 <sup>6</sup> | > 30   |
| Operating frequency                | Operations/h |                   | 1800   |
| Actuating force                    | n            |                   | 4  |
| Degree of protection, IEC/EN 60529 |              |                   | IP65   |
| Climatic proofing                  |              |                   | Damp heat, constant, to IEC 60068-2-78<br>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<br>according to IEC 60068-2-27<br>Shock duration 11 ms<br>Sinusoidal      |
| Terminal capacities                |              | mm <sup>2</sup>   | 0.5 - 1.0  |
| Blade terminal                     |              |                   | 2.8 x 0.8 mm to DIN 46244  |
| Fast-on connectors                 |              |                   | 2.8 x 0.8 mm to DIN 46247 and IEC 60760  |

**Contacts**

|                                       |                  |      |       |
|---------------------------------------|------------------|------|-------|
| Rated impulse withstand voltage       | U <sub>imp</sub> | V AC | 800   |
| Rated insulation voltage              | U <sub>i</sub>   | 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 <sup>-7</sup> , < 1 fault in 10 <sup>7</sup> operations                                 |
| at 5 V DC/1 mA                   | H <sub>F</sub> | Fault probability | < 5 x 10 <sup>-6</sup> (1 failure in 5 x 10 <sup>6</sup> operations)                         |
| Use of insulated ferrule ISH 2,8 |                |                   | >24 V AC/DC recommended<br>>50 V AC or 120 V DC is mandatory, even on unused blade terminals |

## Design verification as per IEC/EN 61439

| Technical data for design verification   |                   |    |  |
|--|-------------------|----|--|
| Rated operational current for specified heat dissipation   | I <sub>n</sub>    | A  | 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 6.0

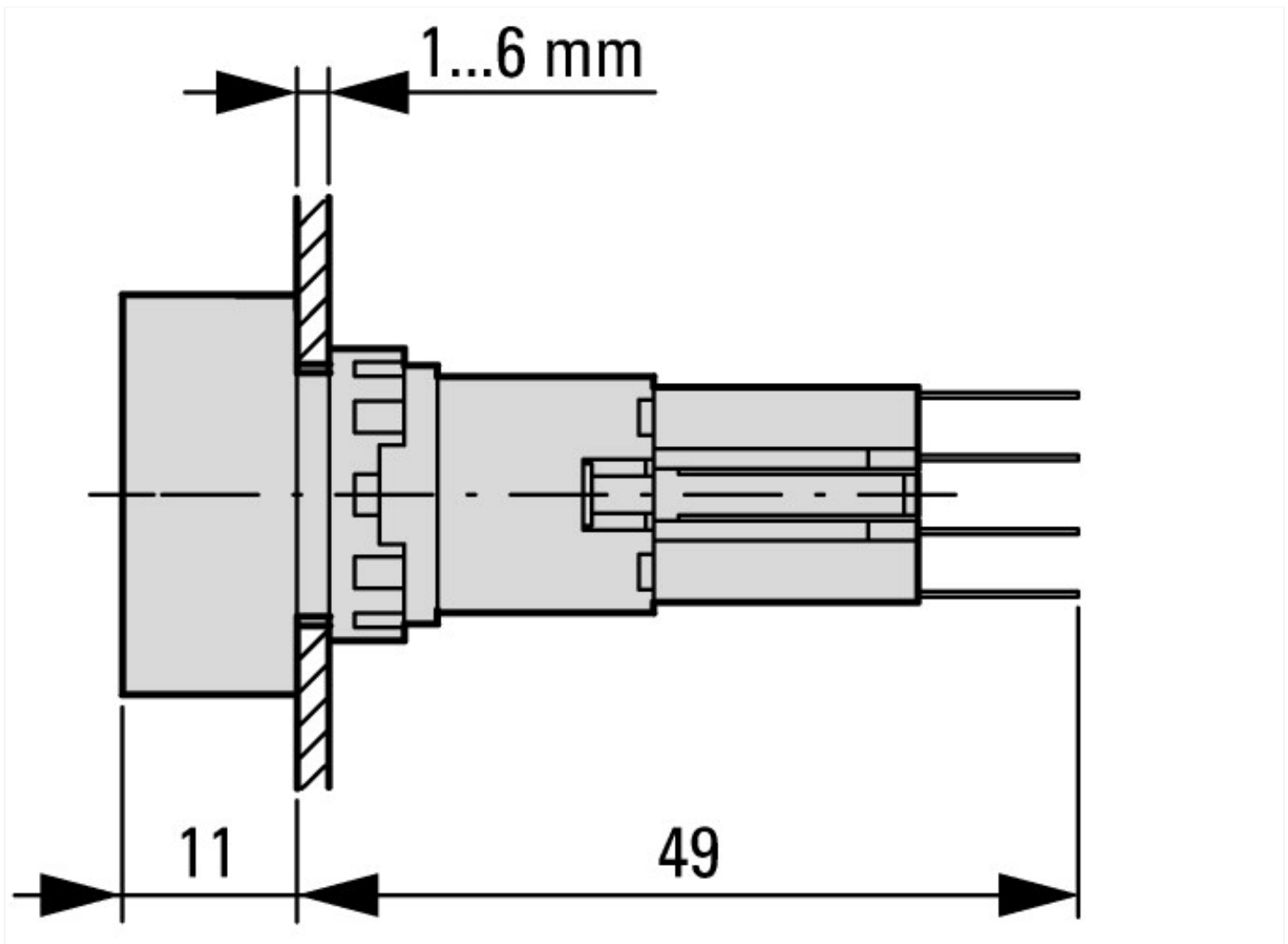
| Low-voltage industrial components (EG000017) / Front element for push button (EC000221)  |  |    |        |
|--|--|----|--------|
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Front element for push-button actuators (ecl@ss8.1-27-37-12-10 [AKF028011]) |  |    |        |
| Colour button  |  |    | White  |
| Number of command positions  |  |    | 1      |
| Construction type lens   |  |    | Square |
| Hole diameter  |  | mm | 16     |
| Width opening  |  | mm | 0      |
| Height meter opening   |  | mm | 0      |
| Degree of protection (IP), front side  |  |    | IP65   |
| Type of button   |  |    | Flat   |

|                             |  |         |
|-----------------------------|--|---------|
| Suitable for illumination   |  | Yes     |
| With protection cover       |  | No      |
| Labelled                    |  | No      |
| Switching function latching |  | Yes     |
| Spring-return               |  | No      |
| With front ring             |  | Yes     |
| Material front ring         |  | Plastic |
| Colour front ring           |  | Black   |

## 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

## Additional product information (links)

### IL04716016Z (AWA1160-1429) Mounting of components

IL04716016Z (AWA1160-1429) Mounting of components [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL04716016Z2011\\_03.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04716016Z2011_03.pdf)