### LED element, red, base fixing, 85-264VAC

Part no. M22-LEDC230-R Catalog No. 216567

**Alternate Catalog** 

M22-LEDC230-RQ

**EL-Nummer** 4355380

(Norway)



# **Delivery program**

| Basic function accessories                          |                        |    | LED elements            |
|---|------------------------|----|-------------------------|
| Connection technique                                |                        |    | Screw terminals         |
| Fixing  |                        |    | Base fixing             |
| Rated operational voltage                           | U <sub>e</sub>         | V  | 85 - 264 V AC, 50/60 Hz |
| Rated operational current                           | l <sub>e</sub>         | mA | 5 - 15                  |
| Power consumption                                   | P <sub>max</sub> .     | W  | 0.33                    |
| Lifespan to EN 60064 at $t_a = +25^{\circ}\text{C}$ | t <sub>mean</sub> (AC) | h  | 100000                  |
| Degree of Protection                                |                        |    | IP20                    |
|   |                        |    | At 230 V                |
| Colour  |                        |    |                         |
|   |                        |    | Red                     |
| Connection to SmartWire-DT                          |                        |    | no                      |
| Connection technique                                |                        |    | Screw terminals         |

#### Notes

For indicator lights, illuminated pushbutton actuators, and illuminated selector switch actuators, the following applies:

M22...-R only in combination with M22-LED...-R

M22...-G only in combination with M22-LED...-G

M22...-W only in combination with M22-LED...-W

M22...-Y only in combination with M22-LED...-W

M22...-B in combination with M22-LED...-W or M22-LED...-B

## **Technical data**

#### General

| Standards  |   |                 | IEC 60947-5-1  |
|--|---|-----------------|--|
| Operating torque (screw terminals)   | N | Nm              | ≦ 0.8  |
| Degree of Protection   |   |                 | IP20   |
| Climatic proofing  |   |                 | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |
| Ambient temperature  |   |                 |  |
| Open   | 0 | °C              | -25 - +70  |
| Storage  | 0 | °C              | - 40 - + 80  |
| Mounting position  |   |                 | As required  |
| Mechanical shock resistance according to IEC 60068-2-27<br>Shock duration 11 ms, half-sinusoidal | g | 9               | > 30   |
| Mechanical shock resistance  | g | J               | 30<br>Shock duration 11 ms<br>Sinusoidal<br>according to IEC 60068-2-27        |
| Terminal capacities  | n | mm <sup>2</sup> |  |
| Solid  | n | mm <sup>2</sup> | 0.75 - 2.5   |
| Stranded   | n | mm <sup>2</sup> | 0.5 - 2.5  |
| Contacts   |   |                 |  |

| Rated impulse withstand voltage           | $U_{\text{imp}}$ | V AC | 6000  |
|---|------------------|------|-------|
| Rated insulation voltage                  | Ui               | V    | 500   |
| Overvoltage category/pollution degree     |                  |      | III/3 |
| Indoor and protected outdoor installation |                  |      |       |

| Design verification as per IEC/ | EN 61439 |
|---------------------------------|----------|
|---------------------------------|----------|

| Technical data for design verification  |                   |    |  |
|---|-------------------|----|--|
|   |                   |    |  |
| Rated operational current for specified heat dissipation  | In                | Α  | 0  |
| Heat dissipation per pole, current-dependent  | $P_{\text{vid}}$  | 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 | 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 hea and fire due to internal electric effects | t                 |    | Meets the product standard's requirements.   |
| 10.2.4 Resistance to ultra-violet (UV) radiation  |                   |    | Meets the product standard's requirements.   |
| 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 8.0**

Low-voltage industrial components (EG000017) / Lamp holder block for control circuit devices (EC000204)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Bulb socket block for command and alarm devices (ec.(@ss10.01-27-37-12-09 [AKF077014])

| (ecl@ss10.0.1-27-37-12-09 [AKF027014])      |   |                  |
|---|---|------------------|
| Transformer integrated                      |   | No               |
| With integrated voltage decreasing resistor |   | No               |
| With light source                           |   | Yes              |
| With integrated diode                       |   | Yes              |
| Lamp holder                                 |   | None             |
| Rated voltage Ue at AC 50 Hz                | V | 85 - 264         |
| Rated voltage Ue at AC 60 Hz                | V | 85 - 264         |
| Rated voltage Ue at DC                      | V | 0 - 0            |
| Voltage type for actuating                  |   | AC               |
| Lamp type                                   |   | LED              |
| Connection type auxiliary circuit           |   | Screw connection |
| Colour lamp                                 |   | Red              |
| Type of fastening                           |   | Floor fastening  |