### **DATASHEET - M22-CLED230-G**



### LED element, green, front mount, cage clamp

Part no. M22-CLED230-G Catalog No. 216577

Alternate Catalog M22-CLED230-GQ

No.

EL-Nummer (Norway)

4355782



## **Delivery program**

| zomor, program                         |                        |    |  |
|--|------------------------|----|--|
| Basic function accessories             |                        |    | LED elements   |
| Description                            |                        |    | Cage Clamp is a registered trademark of Wago Kontakttechnik GmbH/Minden, Germany |
| Connection technique                   |                        |    | Cage Clamp   |
| Fixing                                 |                        |    | Front fixing   |
| Rated operational voltage              | U <sub>e</sub>         | V  | 85 - 264 V AC, 50/60 Hz  |
| Rated operational current              | le                     | mA | 5 - 15   |
| Power consumption                      | P <sub>max</sub> .     | W  | 0.33   |
| Lifespan to EN 60064 at $t_a$ = +25 °C | t <sub>mean</sub> (AC) | h  | 100000   |
| Degree of Protection                   |                        |    | IP20   |
|  |                        |    | At 230 V   |
| Colour                                 |                        |    |  |
|  |                        |    | green  |
|  |                        |    |  |
| Connection to SmartWire-DT             |                        |    | no   |
| Approval                               |                        |    | LED  |
| Connection technique                   |                        |    | Cage Clamp   |
|  |                        |    |  |

#### 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**

#### Genera

| General                            |    |  |
|------------------------------------|----|--|
| Standards                          |    | IEC 60947-5-1  |
| Operating torque (screw terminals) | 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                               | °C | -25 - +70  |
| Storage                            | °C | - 40 - + 80  |

| Mounting position  |                  |                 | As required   |
|--|------------------|-----------------|---|
| Mechanical shock resistance according to IEC 60068-2-27<br>Shock duration 11 ms, half-sinusoidal |                  | g               | > 30  |
| Mechanical shock resistance  |                  | g               | 30<br>Shock duration 11 ms<br>Sinusoidal<br>according to IEC 60068-2-27 |
| Terminal capacities  |                  | $mm^2$          |   |
| Solid  |                  | $\mathrm{mm}^2$ | 0.75 - 2.5  |
| Stranded   |                  | $\mathrm{mm}^2$ | 0.5 - 2.5   |
| Contacts   |                  |                 |   |
| Rated impulse withstand voltage  | U <sub>imp</sub> | 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 <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 | 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.   |
| $10.2.3.3\ Verification\ of\ resistance\ of\ insulating\ materials\ to\ abnormal\ heat\ and\ fire\ due\ to\ internal\ electric\ effects$ |                   |    | 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 b observed.                                    |
| 10.12 Electromagnetic compatibility  |                   |    | Is the panel builder's responsibility. The specifications for the switchgear must b 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**

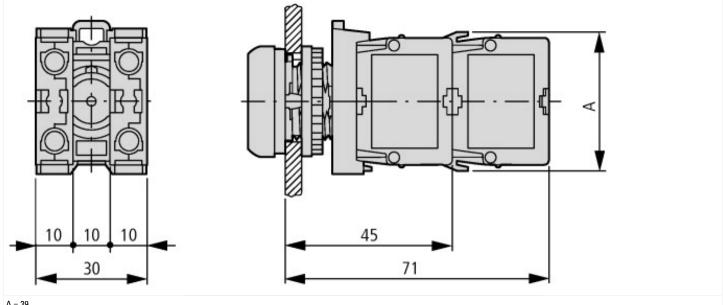
Low-voltage industrial components (EG000017) / Lamp holder block for control circuit devices (EC000204)

| Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Bulb socket block for command and alarm devices (eci@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   |   | Spring clamp connection |
| Colour lamp   |   | Green                   |
| Type of fastening   |   | Front fastening         |

# **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: -   |

# **Dimensions**



A = 39

Pushbutton with M22-(C)K... Pushbutton with M22-(C) LED... + M22-XLED...