# **DATASHEET - M22-CLEDC-G**

Part no.

(Norway)

No.

FC GIAIT-

LED element, green, base fixing, cage clamp



M22-CLEDC-G Catalog No. 216574 Alternate Catalog M22-CLEDC-GQ **EL-Nummer** 4355778

### **Delivery program**

|                        |                           | LED elements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                           | Cage Clamp is a registered trademark of Wago Kontakttechnik GmbH/Minden,<br>Germany                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                        |                           | Cage Clamp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                        |                           | Base fixing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| U <sub>e</sub>         | V                         | 12 - 30 V AC/DC, 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| le                     | mA                        | 8 - 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| P <sub>max</sub> .     | W                         | 0.26                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| t <sub>mean</sub> (AC) | h                         | 100000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                        |                           | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                        |                           | at 24 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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|                        |                           | LED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| Ν                      |                           | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                        |                           | Cage Clamp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| vitch actuators, t     | the followi               | ng applies:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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|                        | Ie<br>Pmax.<br>tmean (AC) | Ie mA   Pmax. W   tmean (AC) h   Image: Applie |

### **Technical data**

| 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 <sup>2</sup> |                                                                         |
| Solid                                                                                            |                  | mm <sup>2</sup> | 0.75 - 2.5                                                              |
| Stranded                                                                                         |                  | mm <sup>2</sup> | 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                                                               | 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  | 0.45                                                                                                                             |
| 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 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) / Lamp holder block for contro                                           | l circuit devices (EC | ;000204) |                                                                      |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------|----------|----------------------------------------------------------------------|
| Electric engineering, automation, process control engineering / Low-voltage<br>(ecl@ss10.0.1-27-37-12-09 [AKF027014]) | switch technology /   | Commar   | d and alarm device / Bulb socket block for command and alarm devices |
| 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        | 12 - 30                                                              |
| Rated voltage Ue at AC 60 Hz                                                                                          |                       | V        | 12 - 30                                                              |
| Rated voltage Ue at DC                                                                                                |                       | V        | 12 - 30                                                              |
| Voltage type for actuating                                                                                            |                       |          | AC/DC                                                                |
| Lamp type                                                                                                             |                       |          | LED                                                                  |
| Connection type auxiliary circuit                                                                                     |                       |          | Spring clamp connection                                              |
| Colour lamp                                                                                                           |                       |          | Green                                                                |
| Type of fastening                                                                                                     |                       |          | Floor 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

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

# Assets (links)

Declaration of CE Conformity 00003255