# DATASHEET - M22-DL-B



Illuminated pushbutton actuator, RMQ-Titan, Flush, momentary, Blue, Blank, Bezel: titanium



| Part no.          | M22-DL-B  |
|-------------------|-----------|
| Catalog No.       | 216931    |
| Alternate Catalog | M22-DL-BQ |
| No.               |           |
| EL-Nummer         | 4355346   |
| (Norway)          |           |

#### **Delivery program**

| Product range              |   |    | RMQ-Titan                        |
|----------------------------|---|----|----------------------------------|
| Basic function             |   |    | Illuminated pushbutton actuators |
| Mounting hole diameter     | Ø | mm | 22.5                             |
| Single unit/Complete unit  |   |    | Single unit                      |
| Design                     |   |    | Flush                            |
|                            |   |    | momentary                        |
| Button plate               |   |    |                                  |
| button plate               |   |    | Blue                             |
| Button plate               |   |    |                                  |
|                            |   |    | Blank                            |
| Degree of Protection       |   |    | IP66, IP67, IP69                 |
| Front ring                 |   |    | Bezel: titanium                  |
| Connection to SmartWire-DT |   |    | yes<br>with SWD-RMQ connections  |

### **Technical data**

| General                     |              |                   |  |
|-----------------------------|--------------|-------------------|--|
| Standards                   |              |                   | IEC/EN 60947<br>VDE 0660   |
| Lifespan, mechanical        | Operations   | x 10 <sup>6</sup> | > 5  |
| Operating frequency         | Operations/h |                   | ≦ 3600   |
| Actuating force             |              | n                 | ≦ 5  |
| Climatic proofing           |              |                   | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |
| Degree of Protection        |              |                   | IP66, IP67, IP69   |
| Ambient temperature         |              |                   |  |
| Open                        |              | °C                | -25 - +70  |
| Mounting position           |              |                   | As required  |
| Mechanical shock resistance |              | g                 | 30<br>Shock duration 11 ms<br>Sinusoidal<br>according to IEC 60068-2-27        |
| shipping classification     |              |                   | DNV<br>GL<br>LR  |
|                             |              |                   | <b>CONV</b><br>Germanischer Lloyd<br><b>CERTATION</b>                          |

| Design verification as per IEC/EN 61439  |                   |    |  |
|--|-------------------|----|--|
| Technical data for design verification   |                   |    |  |
| Rated operational current for specified heat dissipation   | In                | 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  |
| 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   |                   |    | 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   |                   |    | Not applicable.  |
| 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)

| Low-voltage industrial components (EG000017) / Front element for push button (EC0   | JUZZI)             |  |
|---|--------------------|--|
| Electric engineering, automation, process control engineering / Low-voltage switch (ecl@ss10.0.1-27-37-12-10 [AKF028014]) | technology / Comma | and and alarm device / Front element for push-button actuators |
| Colour button   |                    | Blue   |
| Number of command positions   |                    | 1  |
| Construction type lens  |                    | Round  |
| Hole diameter   | mm                 | 22.5   |
| Width opening   | mm                 | 0  |
| Height opening  | mm                 | 0  |
| Type of button  |                    | Flat   |
| Suitable for illumination   |                    | Yes  |
| With protective cover   |                    | No   |
| Labelled  |                    | No   |
| Switching function latching   |                    | No   |
| Spring-return   |                    | Yes  |
| With front ring   |                    | Yes  |
| Material front ring   |                    | Plastic  |
| Colour front ring   |                    | Chrome   |

| Degree of protection (IP), front side   | IP67/IP69K   |
|---|--|
| Degree of protection (NEMA), front side | 4X   |
|   |  |
| 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   |
|   | A19770   |

| CSA File No.   |               | 012528                     |
|----------------|---------------|----------------------------|
| CSA Class No.  |               | 3211-03                    |
| North America  | Certification | UL listed, CSA certified   |
| Degree of Prot | tection       | UL/CSA Type 3R, 4X, 12, 13 |

# Dimensions



