



**Mushroom actuator, RMQ-Titan, Mushroom, momentary, Mushroom black, Without button plate, Bezel: black**

**Part no.** M22S-DP-S-X  
**Catalog No.** 216730  
**Alternate Catalog No.** M22S-DP-S-XQ

## Delivery program

|                            |   |    |                                 |
|----------------------------|---|----|---------------------------------|
| Product range              |   |    | RMQ-Titan                       |
| Basic function             |   |    | Mushroom-headed pushbutton      |
| Mounting hole diameter     | Ø | mm | 22.5                            |
| Single unit/Complete unit  |   |    | Single unit                     |
| Design                     |   |    | Mushroom                        |
|                            |   |    | momentary                       |
| <b>Colour</b>              |   |    |                                 |
| Mushroom                   |   |    | black                           |
| Mushroom colour            |   |    |                                 |
| <b>Button plate</b>        |   |    |                                 |
| button plate               |   |    | Without button plate            |
| Degree of Protection       |   |    | IP66, IP67, IP69                |
| Front ring                 |   |    | Bezel: black                    |
| Connection to SmartWire-DT |   |    | yes<br>with SWD-RMQ connections |
| Function                   |   |    | momentary                       |

## 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                                                                      |
| Storage                     |              | °C                | - 40 - + 80                                                                    |
| 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                                                                |



## Design verification as per IEC/EN 61439

|                                                                                                                        |            |    |                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------|------------|----|----------------------------------------------------------------------------------------------------------|
| Technical data for design verification                                                                                 |            |    |                                                                                                          |
| Rated operational current for specified heat dissipation                                                               | $I_n$      | A  | 0                                                                                                        |
| Heat dissipation per pole, current-dependent                                                                           | $P_{vid}$  | W  | 0                                                                                                        |
| Equipment heat dissipation, current-dependent                                                                          | $P_{vid}$  | W  | 0                                                                                                        |
| Static heat dissipation, non-current-dependent                                                                         | $P_{vs}$   | W  | 0                                                                                                        |
| Heat dissipation capacity                                                                                              | $P_{diss}$ | 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 mushroom push-button (EC001038)                                                                                                                   |  |    |       |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Front element for mushroom push-button actuators (ec1@ss10.0.1-27-37-12-12 [AKF030014]) |  |    |       |
| Colour button                                                                                                                                                                                                      |  |    | Black |
| Construction type lens                                                                                                                                                                                             |  |    | Round |
| Diameter cap                                                                                                                                                                                                       |  | mm | 36.5  |
| Hole diameter                                                                                                                                                                                                      |  | mm | 22.5  |
| Width opening                                                                                                                                                                                                      |  | mm | 0     |
| Height opening                                                                                                                                                                                                     |  | mm | 0     |

|                             |  |            |
|-----------------------------|--|------------|
| Degree of protection (IP)   |  | IP67/IP69K |
| Degree of protection (NEMA) |  | 4X         |
| Type of button              |  | Flat       |
| Suitable for illumination   |  | No         |
| Switching function latching |  | No         |
| Spring-return               |  | Yes        |
| With front ring             |  | Yes        |
| Material front ring         |  | Plastic    |
| Colour front ring           |  | Black      |
| Suitable for emergency stop |  | No         |
| Unlocking method            |  | None       |

### 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 3R, 4X, 12, 13                                                   |

### Dimensions



