DATASHEET - M22-DP-R



Mushroom actuator, red, momentary

Part no. M22-DP-R Catalog No. 216714 Alternate Catalog M22-DP-RQ No. EL-Nummer 4355674 (Norway)



Delivery program

| Product range | | RMQ-Titan |
|-------------------------------------------------------------------------|---|---------------------------------|
| Basic function | | Mushroom-headed pushbutton |
| Single unit/Complete unit | | Single unit |
| Design | | Mushroom |
| | | momentary |
| Colour | | |
| Mushroom | | red |
| Mushroom colour | | |
| Button plate | | |
| button plate | | red |
| Button plate | | |
| | | Blank |
| Degree of Protection | | IP66, IP67, IP69 |
| Front ring | | Bezel: titanium |
| Connection to SmartWire-DT | | yes with SWD-RMQ connections |
| Actuator travel and actuation force as per DIN EN 60947-5-1, K.5.4.1 | | |
| Minimum force for positive opening | Ν | 0 |
| Front dimensions | | 22 x 22 |
| Function | | momentary |

Technical data

| General | | | |
|-----------------------------|--------------|-------------------|--------------------------------------------------------------------------------|
| Standards | | | IEC/EN 60947 VDE 0660 |
| Lifespan, mechanical | Operations | x 10 ⁶ | > 5 |
| Operating frequency | Operations/h | | ≦ 3600 |
| Actuating force | | n | ≦ 5 |
| Climatic proofing | | | Damp heat, constant, to IEC 60068-2-78 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 Shock duration 11 ms |

shipping classification

Sinusoidal according to IEC 60068-2-27 DNV

GL LR



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 _{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 (ecl@ss10.0.1-27-37-12-12 [AKF030014])

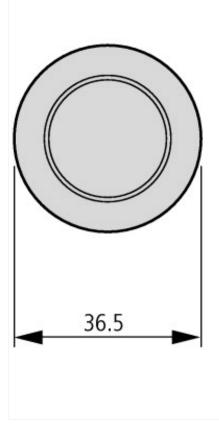
| Colour button | Red |
|------------------------|-------|
| Construction type lens | Round |

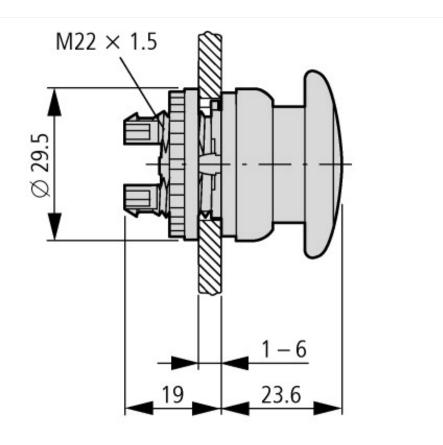
| Hole diameter mm 25 Widt opening mm 0 Height opening mm 0 Degree of protection (NEMA) MM F07/P69K Degree of protection (NEMA) MM Kacconomic Suitable for illumination MM Kacconomic Synchriging function latching MM No Synchriging function latching MM No With front ring MM F07/P60K Kuterial front ring MM F07/P60K | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----|------------|
| Width openingmmimHeight openingmm0Degree of protection (IP)F67/IP69KDegree of protection (NEMA)F67/IP69KSuitable for illuminationF64F64Svitching function latchingF64F64Syring-returnF64F64With front ringF64F64Colour front ringF64F64Stable for illuminationF64F64Stable for illuminationF64F64Stable for tringF64F64Stable for tringF64F64Stable for tringF64F64Stable for tringF64F64Stable for emergency stopF64F64Stable for emergency stopF64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64F64 </td <td>Diameter cap</td> <td>mm</td> <td>36.5</td> | Diameter cap | mm | 36.5 |
| Height opening mm 0 Degree of protection (IP) IP67/IP69K Degree of protection (NEMA) 4X Type of button Fat Suitable for illumination IP67/IP69K Switching function latching IP67/IP69K Spring-return No With front ring IP67/IP69K Material front ring IP67/IP69K Colour front ring IP67/IP69K Suitable for emergency stop IP67/IP69K | Hole diameter | mm | 22.5 |
| Degree of protection (IP)P67/P69KDegree of protection (NEMA)4XType of buttonFlatSuitable for illumination6NoSwitching function latching6NoSpring-returnVesVesWith front ring6PlasticMaterial front ring6PlasticColour front ring6NoSwitching function server of the mergency stop6NoSwitching function server of the mergency stop6No | Width opening | mm | 0 |
| Degree of protection (NEMA) 4X Type of button Flat Suitable for illumination No Switching function latching Mo Spring-return Ves With front ring Yes Naterial front ring Plastic Colour front ring Ko Suitable for emergency stop Ko | Height opening | mm | 0 |
| Type of button Flat Suitable for illumination No Switching function latching Mo Syring-return Yes With front ring Yes Material front ring Yes Colour front ring Yes Suitable for emergency stop Yes No No | Degree of protection (IP) | | IP67/IP69K |
| Suitable for illumination Image: Suitable for illumination No Switching function latching Image: Suitable for illumination No Spring-return Image: Suitable for illumination No With front ring Image: Suitable for illumination Yes Colour front ring Image: Suitable for emergency stop Image: Suitable for emergency stop | Degree of protection (NEMA) | | 4X |
| Switching function latching Mo Spring-return Yes With front ring Yes Material front ring Yes Colour front ring Yes Suitable for emergency stop Yes | Type of button | | Flat |
| Spring-return Yes With front ring Yes Material front ring Yes Colour front ring Yes Suitable for emergency stop Yes | Suitable for illumination | | No |
| With front ring Yes Material front ring Plastic Colour front ring Chrome Suitable for emergency stop Mode | Switching function latching | | No |
| Material front ring Plastic Colour front ring Chrome Suitable for emergency stop Image: Chrome | Spring-return | | Yes |
| Colour front ring Chrome Suitable for emergency stop No | With front ring | | Yes |
| Suitable for emergency stop No | Material front ring | | Plastic |
| | Colour front ring | | Chrome |
| Unlocking method None | Suitable for emergency stop | | No |
| | Unlocking method | | None |

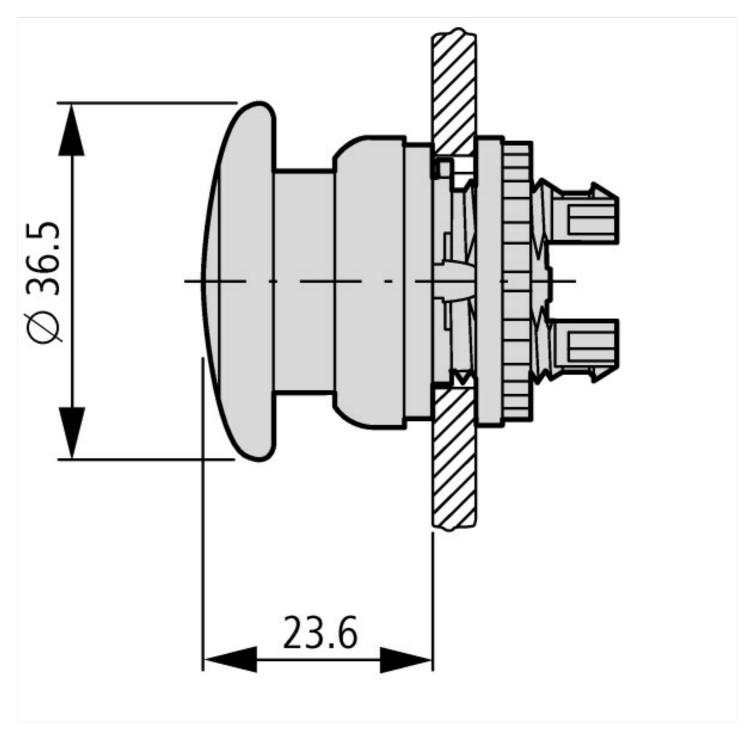
Approvals

| UL File No. E29184 UL Category Control No. MCR CSA File No. Image: Control No. CS | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------|
| UL Category Control No. NKCR CSA File No. 012528 CSA Class No. 64 North America Certification 64 | Product Standards | IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking |
| CSA File No. Image: Constraint of the second of the seco | UL File No. | E29184 |
| CSA Class No. 3211-03 North America Certification UL listed, CSA certified | UL Category Control No. | NKCR |
| North America Certification UL listed, CSA certified | CSA File No. | 012528 |
| | CSA Class No. | 3211-03 |
| Degree of Protection UL/CSA Type 3R, 4X, 12, 13 | North America Certification | UL listed, CSA certified |
| | Degree of Protection | UL/CSA Type 3R, 4X, 12, 13 |

Dimensions







Assets (links)

Declaration of CE Conformity 00003256