### DATASHEET - M22-R10K



Potentiometer, 10k, front mount

Part no. M22-R10K Catalog No. 229491 Alternate Catalog M22-R10KQ

No.

**EL-Nummer** 4133288

(Norway)



### **Delivery program**

| Delivery program                |   |    |  |
|---------------------------------|---|----|--|
| RMQ design                      |   |    | Classical  |
| Part group reference (e.g. DIL) |   |    | M22  |
| Mounting hole diameter          | Ø | mm | 22.5   |
| Basic function                  |   |    | Potentiometer  |
| Single unit/Complete unit       |   |    | Single unit  |
| Description                     |   |    | 3 individual screw terminals<br>Accuracy of resistance value: ± 10% (linear) |
| Contact sequence                |   |    | <u>Z1</u> <u>Z2</u>  |
| Impedance                       | R | kΩ | 10   |
| Rated power                     | P | W  | 0.5  |
| Degree of Protection            |   |    | IP66   |
| Front ring                      |   |    | Bezel: titanium  |
| Connection to SmartWire-DT      |   |    | no   |
| For use with                    |   |    | DILET<br>ETR4-70   |

### **Technical data**

#### Canaval

| General                              |            |                 |  |
|--------------------------------------|------------|-----------------|--|
| Standards                            |            |                 | IEC/EN 60947<br>VDE 0660   |
| Lifespan, mechanical                 | Operations |                 | 25000  |
| Climatic proofing                    |            |                 | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |
| Degree of Protection                 |            |                 | IP66   |
| 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        |
| Terminal capacities                  |            | mm <sup>2</sup> |  |
| Solid                                |            | mm <sup>2</sup> | 0.5 - 1.5  |
| Stranded                             |            | mm <sup>2</sup> | 0.5 - 1.5  |
| Tightening torque for terminal screw |            | Nm              | 0.5  |
| shipping classification              |            |                 | DNV<br>GL<br>LR  |







#### Contacts

| Rated impulse withstand voltage       | U <sub>imp</sub> | V AC | 4000  |
|---------------------------------------|------------------|------|-------|
| Rated insulation voltage              | Ui               | V    | 250   |
| Overvoltage category/pollution degree |                  |      | III/3 |

### Design verification as per IEC/EN 61439

| Design vernication as per 1EG/EN 01453   |                   |    |  |
|--|-------------------|----|--|
| 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  | 0.5  |
| 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   |                   |    | 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) / Potentiometer for control circuit devices (EC001027)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Potentiometer for command devices (ecl@ss10.0.1-27-37-12-27 [AKF045014])

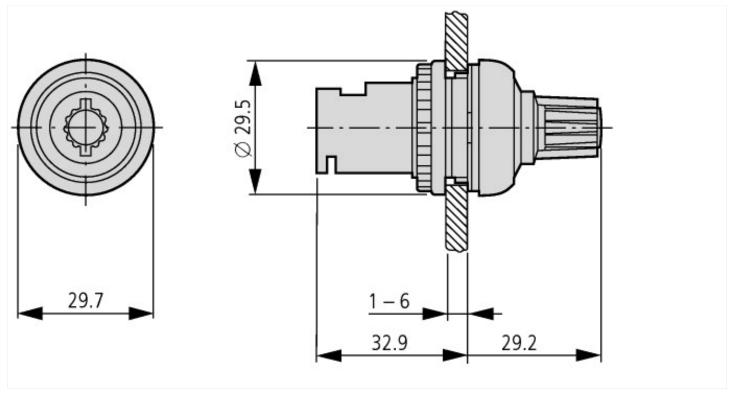
| Resistance        | Ohm | 10000 |
|-------------------|-----|-------|
| Power consumption | W   | 0.5   |

| Hole diameter               | mm | 22               |
|-----------------------------|----|------------------|
| Number of revolutions       |    | 1-1              |
| Type of electric connection |    | Screw connection |
| Degree of protection (IP)   |    | IP66             |
| Degree of protection (NEMA) |    | 4X               |

## Approvals

| Product Standards           | IEC/EN 60947-5-1; UL 508; CSA-22.2 No. 14-05; 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        | IEC: IP 66; UL/CSA Type: 3R, 4X, 12, 13                  |

# **Dimensions**



## Assets (links)

**Declaration of CE Conformity** 00003256