Powering Business Worldwide

M22-R100K - Potentiometer, Classical, M22, 22.5 mm, R 100 kΩ, P 0.5 W, Bezel: titanium

229493 M22-R100K

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Potentiometer, Classical, M22, 22.5 mm, R 100 kΩ, P 0.5 W, Bezel: titanium

Alternate Catalog No.	M22-R100KQ
EL-Nummer (Norway)	4355467

Potentiometer, RMQ design: Classical, Part group reference (e.g. DIL): M22, Mounting hole diameter: 22.5 mm, Single unit, Description: 3 individual screw terminals, Accuracy of resistance value: ± 10% (linear), Impedance: R= 100 kΩ, Rated power: P= 0.5 W, Degree of Protection: IP66, Bezel: titanium, Connection to SmartWire-DT: no, Standards: IEC/EN 60947, VDE 0660

- Delivery program
- Technical data
- Design verification as per IEC/EN 61439
- Technical data ETIM 7.0
- Approvals
- Dimensions

Delivery program

RMQ design

Classical

Part group reference (e.g. DIL)

M22

Mounting hole diameter [□]

22.5 mm

Basic function

Potentiometer

Single unit/Complete unit

Single unit

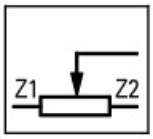
Description

3 individual screw terminals

Accuracy of resistance value: ± 10% (linear)

mechanical angle of rotation: 285° (+0/-5°)

Contact sequence



Impedance [R]

100 kΩ

Rated power [P]

0.5 W

Degree of Protection

IP66

Front ring

Bezel: titanium

Connection to SmartWire-DT
no

Technical data

General
Standards
IEC/EN 60947
VDE 0660
Lifespan, mechanical [Operations]
25000
Climatic proofing
Damp heat, constant, to IEC 60068-2-78
Damp heat, cyclic, to IEC 60068-2-30
Degree of Protection
IP66
Ambient temperatureOpen
-25 - +70 °C
Mounting position
As required
Mechanical shock resistance
30
Shock duration 11 ms
Sinusoidal
according to IEC 60068-2-27 g
Terminal capacitiesSolid
0.5 - 1.5 mm^2
Terminal capacitiesStranded
0.5 - 1.5 mm^2
Tightening torque for terminal screw
0.5 Nm
shipping classification
DNV
GL
LR

Germanischer Lloyd

Contacts
Rated impulse withstand voltage [U_{imp}]
4000 V AC
Rated insulation voltage [U_i]
250 V
Overvoltage category/pollution degree
III/3

Design verification as per IEC/EN 61439

Technical data for design verification
Rated operational current for specified heat dissipation [I_n]
0 A
Heat dissipation per pole, current-dependent [P_{vid}]
0 W
Equipment heat dissipation, current-dependent [P_{vid}]
0 W
Static heat dissipation, non-current-dependent [P_{vs}]
0.5 W
Heat dissipation capacity [P_{diss}]
0 W
Operating ambient temperature min.
-25 °C
Operating ambient temperature max.
+70 °C
IEC/EN 61439 design verification
10.2 Strength of materials and parts10.2.2 Corrosion resistance
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.3.2 Verification of resistance of insulating materials to normal heat
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.4 Resistance to ultra-violet (UV) radiation
Please enquire
10.2 Strength of materials and parts10.2.5 Lifting
Does not apply, since the entire switchgear needs to be evaluated.
10.2 Strength of materials and parts10.2.6 Mechanical impact
Does not apply, since the entire switchgear needs to be evaluated.
10.2 Strength of materials and parts10.2.7 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 properties10.9.2 Power-frequency electric strength
Is the panel builder's responsibility.
10.9 Insulation properties10.9.3 Impulse withstand voltage
Is the panel builder's responsibility.
10.9 Insulation properties10.9.4 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
100000 Ohm
Power consumption
0.5 W
Hole diameter
22.5 mm
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; 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

CAD data

- Product-specific CAD data
  (Web)
- 3D Preview
  (Web)

DWG files

- DA-CD-potentiometer
  File
  (Web, Language independent)

edz files

- DA-CE-ETN.M22-R100K
  File
  (Web)

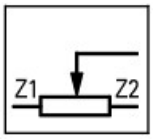
Step files

- DA-CS-potentiometer
  File
  (Web, Language independent)

3D drawing

- 116I329
  Line drawing
  Potentiometer

Wiring diagram

- 

  116S107
  Line drawing
  Potentiometer

Dimensions single product

- 116X145
  Line drawing
  Potentiometer
- 116X217
  Line drawing
  Potentiometer

Product photo

- 
  1160PIC-173
  Photo
  Potentiometer

Symbol

- Germanischer Lloyd
  0000SPC-180
  Graphic
  Germanischer Lloyd approval for Germany (color logo)
- DNV
  0000SPC-183
  Logo
  Approval Norway Det Norske Veritas DNV

Instruction Leaflet

- RMQ-Titan System (IL04716002Z)
  Asset
  former AWA1160-1745, IL04716001E
  (PDF, 09/2020, multilingual)

StandardsSymbol

- 0000SPC-179
  Graphic
  Lloyd's Register approval for Great Britain

Declaration of Conformity

EU

- RMQ Titan (Operating and signalling devices) M22.../M30.../C22.../C30… (DA-DC-00003657)
  Asset
  (PDF)

UK

- RMQ Titan (Operating and signalling devices) M22.../M30.../C22.../C30… (DA-DC-00003960)
  Asset
  (PDF)

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