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M22-R470K - Potentiometer, Classical, M22, 22.5 mm, R470 kΩ, P0.5 W, Bezel: titanium



229494 M22-R470K

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229494 M22-R470K

Potentiometer, Classical, M22, 22.5 mm, R470 kΩ, P0.5 W, Bezel: titanium

Alternate Catalog No.

M22-R470KQ

EL-Nummer (Norway)

4355468

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: $\pm 10\%$ (linear), Impedance: R= 470 kΩ, Rated power: P= 0.5 W, Degree of Protection: IP66, Bezel: titanium, Connection to SmartWire-DT: no, Standards: IEC/EN 60947, VDE 0660

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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

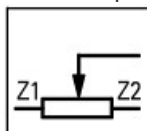
Description

3 individual screw terminals

Accuracy of resistance value: $\pm 10\%$ (linear)

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

Contact sequence



Impedance [R]

470 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 temperature Open

-25 - +70 °C

Mounting position

As required

Mechanical shock resistance

30

Shock duration 11 ms

Sinusoidal

according to IEC 60068-2-27 g

Terminal capacities Solid

0.5 - 1.5 mm²

Terminal capacities Stranded

0.5 - 1.5 mm²

Tightening torque for terminal screw

0.5 Nm

shipping classification

DNV

GL

LR



Germanischer Lloyd

DNV

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_r]

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 parts 10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2 Strength of materials and parts 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 Strength of materials and parts 10.2.4 Resistance to ultra-violet (UV) radiation
Please enquire

10.2 Strength of materials and parts 10.2.5 Lifting
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 10.2.6 Mechanical impact
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 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 Insulation properties 10.9.3 Impulse withstand voltage
Is the panel builder's responsibility.

10.9 Insulation properties 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

470000 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-R470K](#)
File
(Web)

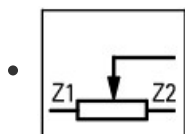
Step files

- [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)



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 \(Operating and signalling devices\) M2.../M30.../C22.../C30...](#) (DA-DC-00003657)
Asset
(PDF)


UK


- [RMQ Titan \(Operating and signalling devices\) M2.../M30.../C22.../C30...](#) (DA-DC-00003960)
Asset
(PDF)

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