




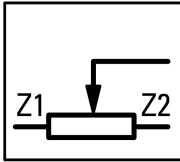
Potentiometer, Classical, M22, 22.5 mm, R 470 kΩ, P 0.5 W, Bezel: titanium



Powering Business Worldwide™

Part no. **M22-R470K**  
 Catalog No. **229494**  
 Alternate Catalog No. **M22-R470KQ**  
 EL-Nummer **4355468**  
 (Norway)

**Delivery program**

RMQ design			Classical
			
Part group reference (e.g. DIL)			M22
Mounting hole diameter	∅	mm	22.5
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	kΩ	470
Rated power	P	W	0.5
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		°C	-25 - +70
Mounting position			As required
Mechanical shock resistance		g	30 Shock duration 11 ms Sinusoidal 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 GL LR



## Contacts

Rated impulse withstand voltage	$U_{imp}$	V AC	4000
Rated insulation voltage	$U_i$	V	250
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	$I_n$	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	0.5
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			
			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	470000
Power consumption		W	0.5

Hole diameter	mm	22.5
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

