

Potentiometer, 10k, front mount

Powering Business Worldwide*

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

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 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 ETR4-70

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 Damp heat, cyclic, to IEC 60068-2-30 Degree of Protection IP66 Ambient temperature **** Open **** *** *** Open **** *** *** As required Mounting position As required Mechanical shock resistance *** ** Shock duration 11 ms Sinusoidal according to IEC 60068-2-27 Terminal capacities mm² Solid mm² 0.5 - 1.5 Stranded mm² 0.5 - 1.5 Tightening torque for terminal screw mm² 0.5 - 1.5 Contacts Rated impulse withstand voltage U _{imp} V AC 4000 Rated insulation voltage U _i V 250				
Climatic proofing Degree of Protection Ambient temperature Open Mounting position Mechanical shock resistance Terminal capacities Solid Stranded Tightening torque for terminal screw Contacts Rated impulse withstand voltage Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 Pamp heat, constant, to IEC 60068-2-78 Damp heat, constant, to IEC 60068-2-78 Pamp heat, cyclic, to IEC 60068-2-79 Pamp he	Standards			
Degree of Protection Ambient temperature Open Mounting position Mechanical shock resistance Solid Stranded Tightening torque for terminal screw Contacts Rated impulse withstand voltage Damp heat, cyclic, to IEC 60068-2-30 IP66 IP66 IP66 IP66 IP66 Read Damp heat, cyclic, to IEC 60068-2-30 IP66 IP66 IP66 IP66 IP66 IP66 IP66 IP6	Lifespan, mechanical	Operations		25000
Ambient temperature Open C -25 - +70 Mounting position Mechanical shock resistance g 30 Shock duration 11 ms Sinusoidal according to IEC 60068-2-27 Terminal capacities mm² Solid Stranded mm² 0.5 - 1.5 Tightening torque for terminal screw Contacts Rated impulse withstand voltage Uimp V AC 4000	Climatic proofing			
Open Mounting position Mechanical shock resistance Mechanical shock resistance g 30 Shock duration 11 ms Sinusoidal according to IEC 60068-2-27 Terminal capacities mm² Solid mm² 0.5 - 1.5 Stranded mm² 0.5 - 1.5 Tightening torque for terminal screw Nm 0.5 Contacts Rated impulse withstand voltage Uimp V AC 4000	Degree of Protection			IP66
Mounting position Mechanical shock resistance g 30 Shock duration 11 ms Sinusoidal according to IEC 60068-2-27 Terminal capacities mm² Solid mm² 0.5 - 1.5 Stranded Tightening torque for terminal screw Contacts Rated impulse withstand voltage As required As required As required As required Diamonal Stranded mm² 0.5 - 1.5 Mm 0.5 - 1.5 Contacts	Ambient temperature			
Mechanical shock resistance g 30 Shock duration 11 ms Sinusoidal according to IEC 60068-2-27 Terminal capacities mm² Solid mm² 0.5 - 1.5 Stranded mm² 0.5 - 1.5 Tightening torque for terminal screw Nm 0.5 Contacts Rated impulse withstand voltage Uimp V AC 4000	Open		°C	-25 - +70
Shock duration 11 ms Sinusoidal according to IEC 60068-2-27 Terminal capacities mm² Solid mm² 0.5 - 1.5 Stranded mm² 0.5 - 1.5 Tightening torque for terminal screw Nm 0.5 Contacts Rated impulse withstand voltage U _{imp} V AC 4000	Mounting position			As required
Solid mm² 0.5 - 1.5 Stranded mm² 0.5 - 1.5 Tightening torque for terminal screw Nm 0.5 Contacts Rated impulse withstand voltage Uimp VAC 4000	Mechanical shock resistance		g	Shock duration 11 ms Sinusoidal
Stranded mm² 0.5 - 1.5 Tightening torque for terminal screw Nm 0.5 Contacts Rated impulse withstand voltage U _{imp} V AC 4000	Terminal capacities		mm^2	
Tightening torque for terminal screw Nm 0.5 Contacts Rated impulse withstand voltage Uimp V AC 4000	Solid		mm ²	0.5 - 1.5
Contacts Rated impulse withstand voltage U _{imp} V AC 4000	Stranded		mm ²	0.5 - 1.5
Rated impulse withstand voltage U _{imp} V AC 4000	Tightening torque for terminal screw		Nm	0.5
·	Contacts			
Rated insulation voltage U _i V 250	Rated impulse withstand voltage	U_{imp}	V AC	4000
	Rated insulation voltage	Ui	V	250

Design verification as per IEC/EN 61439

Overvoltage category/pollution degree

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0
Heat dissipation per pole, current-dependent	P _{vid}	W	0

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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 switch gear must be observed. $\label{eq:constraint}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 6.0

Low-voltage industrial components (EG000017) / Potentiometer for control circuit devices (EC001027)

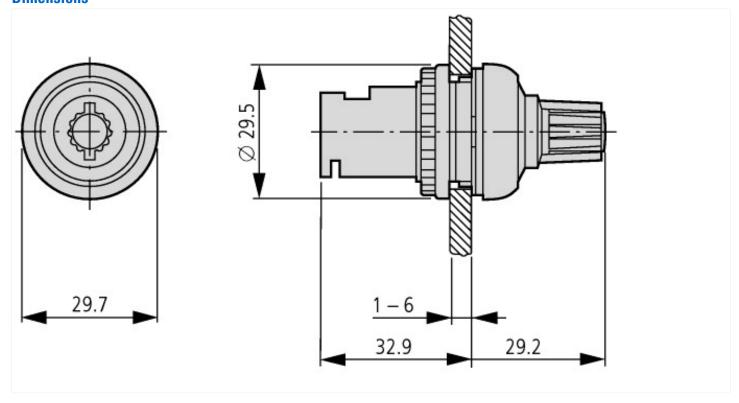
Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Potentiometer for command devices (ecl@ss8.1-27-37-12-27 [AKF045011])

Resistance	Ohm	10000
Power consumption	W	0.5
Hole diameter	mm	22
Degree of protection (IP)		IP66

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



Additional product information (links)

IL04716002Z (AWA1160-1745) RMQ-Titan System

IL04716002Z (AWA1160-1745) RMQ-Titan System

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04716002Z2017_01.pdf