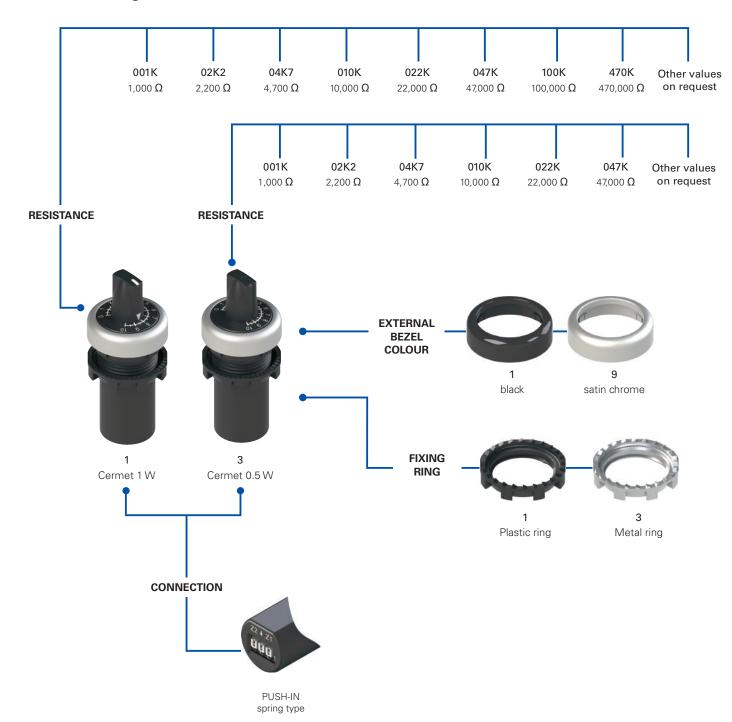
113

Selection diagram



Code structure

Attention! The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

E6 1DM02K2-D111

Fixing ring and shaped ring Plastic ring (standard) Plastic fixing ring and shaped ring Metal ring Metal fixing ring and shaped ring

Resistance				
1 kΩ				
2.2 kΩ				
4.7 kΩ				
10 kΩ				
22 kΩ				
47 kΩ				
$100~k\Omega$ (for 1 W versions only)				
$470~k\Omega$ (for 1 W versions only)				

Other values on request

External bezel colour

- 1 black (standard)
- 9 satin chrome (standard)

Potentiometer type

- 1 Cermet 1 W
- 3 Cermet 0.5 W



Main features

- Fully integrated potentiometer in monolithic body
- Protection degrees IP67 and IP69K
- Rotary potentiometer with Cermet technology
- 3-pole PUSH-IN type spring-operated connection system
- Various resistance values

Quality marks:

UL approval: E131787

EAC approval: RU C-IT.AД35.B.00454

Features approved by UL

Ratings: 30 Vac, 31 mA (Supplied by class 2 or limited energy external power supply source). For Use on a Flat Surface of a Type 1, 4X, 12 and 13. Tightening torque 2.0 Nm.

Please contact our technical department for the list of approved products.

Technical data

General data

Protection degree: IP67 acc. to EN 60529
IP69K acc. to ISO 20653

Ambient temperature: -40°C ... +80°C

Mechanical endurance:

1 W version 50,000 operating cycles 0.5 W version 10,000 operating cycles

Tightening torque of the fixing ring: 2 ... 2.5 Nm Utilization requirements: see page 149

Electrical data

Rated insulation voltage (Ui):

 1 W version
 300 Vac/dc

 0.5 W version
 200 Vac

 Resistive material:
 Cermet

 Operation:
 linear

 Resistance tolerance:
 ±10%

Cross-section of rigid/flexible wires w. wire-end sleeve: min. 1 x 0.34 mm 2 (1 x AWG 24)

max 1 x 1.5 mm² (1 x AWG 16)

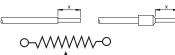
terminal

terminal

Wire cross-section with pre-insulated wire-end sleeve: min. 1 x 0.34 mm² (1 x AWG 24) max. 1 x 0.75 mm² (1 x AWG 18)

Connection system: PUSH-IN spring type

Cable stripping length (x): min.: 8 mm, max: 12 mm



Pin assignment:

Application features, 1 W version:

Resistance	Rated operating voltage Ue max	Rated operating current le max	Max power (70 °C)
1 kΩ	31 V	31 mA	1 W
2.2 kΩ	46 V	21 mA	1 W
4.7 kΩ	63 V	14 mA	1 W
10 kΩ	100 V	10 mA	1 W
22 kΩ	148 V	6.7 mA	1W
47 kΩ	217 V	4.6 mA	1 W
100 kΩ	300 V	3 mA	0.9 W
470 kΩ	300 V	0.75 mA	0.23 W

Other resistance values are available. Please contact our sales office

Application features, 0.5 W version:

Resistance	Rated operating voltage Ue max	Rated operating current le max	Max power (70 °C)
1 kΩ	21 V	23.8 mA	0.5 W
2.2 kΩ	31 V	16.1 mA	0.5 W
4.7 kΩ	46 V	10.8 mA	0.5 W
10 kΩ	67 V	7.4 mA	0.5 W
22 kΩ	99 V	5.0 mA	0.5 W
47 kΩ	145 V	3.4 mA	0.5 W

Other resistance values are available. Please contact our sales office

In compliance with standards:

IEC 60947-1, IEC 60947-5-1, IEC 60204-1, EN 60947-1, EN 60947-5-1, EN 60204-1, EN 50581, UL 508, CSA 22-2 N°14.

Compliance with the requirements of:

Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU, RoHS Directive 2011/65/EU.



General data

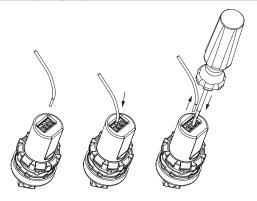
Integrated potentiometer



Thanks to its monolithic shape, it has been possible to integrate all the mechanical and electrical components needed for its end use inside the E6 series potentiometer body; it is therefore not necessary to assemble any other parts, such as knobs or trimmers, all that is required is to insert the circuit wires into the incorporated terminal board.

Moreover, the resistive element used is made of a composite ceramic and metal material, produced with the Cermet technology, which ensures remarkable stability and constancy in the set resistance value.

PUSH-IN spring-operated connection



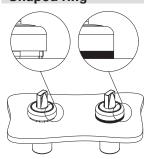
The potentiometer is provided with a three-pole terminal board with PUSH-IN type spring-operated connection. This technology allows a very handy quick wiring procedure. The wire is simply inserted into the appropriate hole, without the need for any auxiliary tooling, through the use of rigid or flexible wires with crimped wire-end sleeve. Release is obtained by pressing the appropriate wire-releasing button.

Protection degrees IP67 and IP69K

IP69K IP67 These devices are designed to be used in the toughest environmental conditions and they pass the IP67 immersion test acc. to EN 60529. They can therefore be used in all environments where maximum protection

degree of the housing is required. Due to their special design, these devices are suitable for use in equipment subjected to cleaning with high pressure hot water jets. These devices meet the IP69K test requirements according to ISO 20653 (water jets with 100 bar and 80°C).

Shaped ring



The shaped ring can be used when no label holder or other devices are applied; it prevents dirt and other residues from settling between the potentiometer and the panel or housing.

This turns out to be particularly useful in the sectors where high standards of cleanness and hygiene are required.

Metal fixing ring



The fixing ring in metal is particularly suitable for those applications which require tighter fitting of the panel-mounted device, such as for example in metal panels having holes without reference notches.

Dimensions All values in the drawings are in mm

Potentiometer version 0.5 W Packs of **50 pcs**.