# Selection diagram

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#### 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



#### In compliance with standards:

IEC 60947-1, IEC 60947-5-1, IEC 60204-1, EN 60947-1, EN 60947-5-1, EN 60204-1, UL 508, CSA 22-2 No. 14.

#### Compliance with the requirements of:

Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EC

Technical dat	a			
<b>General data</b> Protection degree	1	IP67 acc. to El IP69K acc. to I	IP67 acc. to EN 60529 IP69K acc. to ISO 20653	
Ambient tempera	ture:	-40°C +80°	-40°C +80°C	
Mechanical endurance:		50,000 operat	50,000 operating cycles	
Mechanical travel:		285°	285°	
Tightening torque of the fixing ring:		2 2.5 Nm	2 2.5 Nm	
Utilization requirements:		See page 139	See page 139	
Flectrical data				
Rated insulation voltage (Ui):		300 Vac/dc	300 Vac/dc	
Resistive material:		Cermet	Cermet	
Operation:		linear	linear	
Resistance tolerance:		±10%	±10%	
cross-section of ri sleeve:	gid/flexible wires w. wii	re-end min 1 x 0.34 n	nm² (1 x AVVG 24)	
		max 1 x 1.5 m	m² (1 x AWG 16)	
Wire cross-sectio sleeve:	n with pre-insulated wi	re-end min 1 x 0.34 n	nm² (1 x AWG 24)	
Connection syste Cable stripping lea O-VVVV	m: ngth (x): ////-O	max 1 x 0.75 r PUSH-IN spring min.: 8 mm max.: 12 mm	max 1 x 0.75 mm <sup>2</sup> (1 x AWG 18) PUSH-IN spring type min.: 8 mm max.: 12 mm	
Z1 terminal terminal mol	Z2 terminal bile cursor		δ	
Resistance	Rated operating voltage Ue max	Rated operating current le max	Power (70 °C) max.	

Resistance	Rated operating voltage Ue max	Rated operating current le max	Power (70 °C) max.		
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.					

### Features approved by UL

Operating voltage (Ue): 30 Vac, 31 mA For Use on a Flat Surface of a Type 1, 4X, 12 and 13 Tightening torque 2.0 Nm Note: Supply from Remote Class 2 Source or limited energy external power supply source.

#### **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, since the wire just needs to be inserted into the appropriate hole in order to be secured and to establish the electrical connection. This operation can be carried out without the help of any tool, but

simply using rigid or flexible wires with a crimped wire-end sleeve. Release is obtained by pressing the appropriate wire-releasing button.

### Protection degrees IP67 and IP69K

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 a 80°C).

#### Dimensions

All measures in the drawings are in mm



