



ComEx^{flex} Potentiometer

Features

- One module for all fields of application
- High flexibility thanks to the junction box
- Low installation depth

Description

The ComEx^{flex} potentiometer is used in almost all hazardous (potentially explosive) areas where machine functions are controlled by means of adjustable voltage distributors.

The module can be combined with a potentiometer actuator (scale graduation 0 to 10). A junction box is available as a safe and convenient means of installing the potentiometer in a control panel.

The conductors are connected by means of terminals on the back of the module which have an increased safety level. The easy installation of the potentiometer actuating element without the need for tools, ensures conformance to the high IP degree of protection.

Explosion protection

Ex protection type

ATEX II 2G Ex de IIC Gb
 I M2 Ex de I Mb

Certification

PTB 05 ATEX 1064 U

IECEx Ex de IIC Gb
Ex de I Mb

Certification

IECEx PTB 10.0017 U

Further approvals

CSA, NEPSI, GOST, KTL, INMETRO, DNV

Other approvals and certificates,
see www.bartec-group.com

Ambient temperature

-55 °C to +60 °C



Technical data

Protection class

determined by the actuating element and control station enclosure, min. IP 66, terminals IP 20 (IEC 60529).

Rated insulation voltage

500 V

Max. rated voltage

AC/DC 230 V

Resistance

1 kΩ to 10 kΩ

Curve shape

linear

Resistance tolerance

+ 20 %

Rated output

max. 1 W for $T_a \leq +40\text{ °C}$

Resistor material

carbon film on ceramics

Rotation

mech. 285° to 5°
electr. approx. 250°

Torque (beginning)

0.5 to 1.5 Ncm

Torque (end stop)

≥ 100 Ncm

Enclosure material

Thermoplastic

Connection

double terminals 2 x 2.5 mm², fine-stranded

Mechanical life

25,000 sinusoidal cycles

Storage and transport temperature

-55 °C to +70 °C

Weight

approx. 110 g

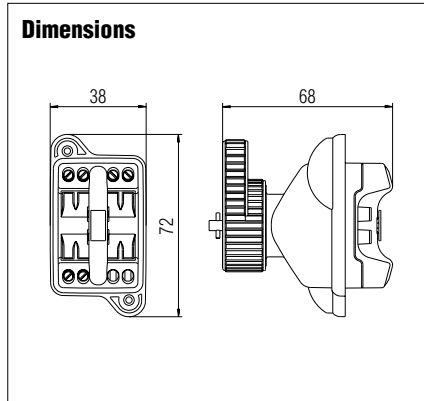
Notes for installation and inspection

At rated voltage:

■ ≤ AC 50 V/≤ DC 120 V
(Safety extra low voltage in conformance to DIN VDE 0100 T. 410)
The potentiometer drive shaft can be operated without actuating element.

■ ≥ AC 50 V to max. AC/DC 230 V
Potentiometer drive shaft must be operated with an actuating element or it must be deenergized.

Dimensions



Selection chart

Wiring diagram	Resistance (kΩ)	Code no.
	1	4
	2,2	5
	4,7	6
	10	7

Complete order no.*

Potentiometer without actuating element **07-3373-40** 0

Please enter code number. Other levels of resistance on request. Technical data subject to change without notice.

Actuating element **Complete order no.**

Standard (Scale 1 to 10) **05-0003-007600**

Increased oil resistance (Scale 1 to 10) **05-0003-007600BN**

* Product printing standard: ATEX and IECEx marking. Other markings on request. Please specify in plain text.