



**GENERAL**

These operating instructions conform to the following:

- ATEX Directive 2014/34/EU.
- EMC Directive 2014/30/EU.



**SAFETY INSTRUCTION AND UNSUITABLE USE**

- Explosion-proof potentiometer X195RP (hereinafter potentiometer) is **Ex component** intended to be **built-in** into a **certified enclosure** with suitable type of Ex protection.
- Always **carry out conformity assessment** according to directive **2014/34/EU (ATEX)** to complete Ex device, where the potentiometer is used!
- **Avoid any mechanical damage** when manipulating with the potentiometer, especially prevent damage of the **seal and shaft!**
- Potentiometers shall be **operated** in accordance with operating conditions, technical and rating data bellow!
- Storage, transport, assembly, installation, inspection, preventive maintenance, repairs and services are to follow instructions provided hereinafter.
- **Free wires** of potentiometer always terminate on **terminal blocks** or apparatus terminals **inside the Ex enclosure** (see point 4.2)!
- **If potentiometer is defect, do not repair it. Respect rating plate data** when replace!
- Potentiometer circuit shall be **fused** by **fast fuse** (characteristic F) with rated current max. **100 mA!**

**1. USE**

Potentiometer X195RP can be used only as Ex component built-in inside the Ex enclosure with appropriate type of Ex protection. In conjunction with the head XRP-M in can be operated from outside the enclosure. This way it can be operated in environments with the explosion risk of inflammable gases, combustible dust and explosives, respectively in the underground mines with occurrence of methane.

Potentiometer is especially suitable for electrical drive controlled by frequency invertors.

**2. OPERATING CONDITIONS**

**2.1 Use in areas and environments** acc. to valid regulations

It results from Ex design of complete Ex device where the potentiometer is installed in

**2.2 Operating position**

Any position.

**3. TECHNICAL DATA**

**3.1 General**

Name	Data	Standard, note
Type of protection	Ex d I Mb Ex d IIC Gb	EN 60079-0 EN 60079-1
Group and category	I M2, II 2G	2014/34/EU
Operating temperature range	-60°C to +115°C	EN 60079-0
Certification	FTZÚ 03 ATEX 0237U	FTZÚ NB 1026

**3.2 Technical data**

Name	Data
Rated loading	1 W
Rated voltage	250V AC/DC
Maximum collector current	100 mA
Resistance taper	Linear or logarithmic
Rated resistance	47R – 2M2
Standard values *	1K, 2K, 5K, 10K*
Shaft diameter	Ø 6 mm
Connection	3x free wires 0,5mm <sup>2</sup> , with length 30 cm of each

\*Other values on request.

**3.3 Type key**

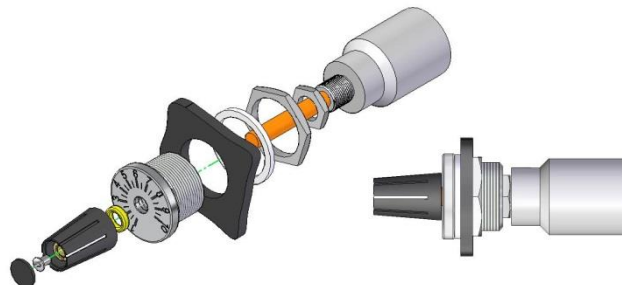
X195RP .....  
 └── rated resistance [Ω]

**4. MOUNTING INSTRUCTIONS**

**4.1 Mounting into enclosure**

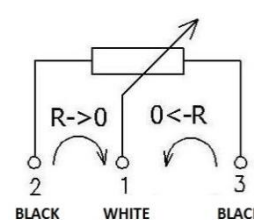
Potentiometers are designed for central mounting. For mounting into a cover/door of enclosure the head XRP-M is to be used.

Insert the head into the hole ø22,5 in enclosure wall/cover and properly tight by nut.



Screw up the potentiometer into the head and fix it by nut M10. Than fasten the control knob to potentiometer shaft.

Potentiometer disassemble do in reverse order.



**4.2 Connection**

Short potentiometer free wires to required length ant connect them into terminal blocks or directly into apparatus terminals inside the enclosure.

Wires ends provide by ferrules. Wire insulation must reach as close the current-carrying connection as possible. Wire must not be damaged anyway.

**5. INSTALLATION ACC. TO VALID REGULATIONS**

Use of potentiometers – see Safety instructions and unsuitable use.

Installation into enclosure must be in accordance with these operating instructions, normative standards EN 60079-x and other related regulations.

**6. INSPECTION AND PREVENTIVE MAINTENANCE**

As there are not performed test to **vibrations** on potentiometers (external influences AH1, 2, 3 acc. to IEC 60364-5-51) in relation to classes of climatic conditions (EN 60721-3-3 and -4), so in case of **mobile equipment** we recommend carry out inspection at least **2 times a year** as **detailed inspection** acc. to EN 60079-17.

**7. REPAIRS AND MAJOR INSPECTIONS, SERVICE**

Potentiometers are **unrepairable components and must be replaced completely when they are defect or damaged anyway.**

In case of any problems regarding the GENERI products (such as loss of accompanying documents, technical defects etc.), just **read** the two data on the **rating plate**:

- 1) **Type of equipment**
- 2) **Serial number**

On the basis of these data it is possible to find any accompanying and technical documents of concrete product at manufacturer.

**8. STORAGE, PACKING AND TRANSPORT**

Potentiometers shall be **stored** at the ambient temperature of +5°C to +40°C, in non-aggressive interior areas without the UV radiation and weather conditions where the quality does not deteriorate (climatic conditions 1K2, biological conditions 1B1, active chemical compounds 1C2, mechanically active substances 1S1, and mechanical conditions 1M2 according to EN 60721-3-1).

Potentiometers are **packed** in protective foils and supplied in cardboard boxes (bigger boxes can be attached to pallets).

**Transport** is provided by an express transport company within 24 hours, or according to request. It is also possible to cash on delivery.

**Transport conditions** are 2K2, 2B1, 2C2, 2S1, 2M2 (EN 60721-3-2).

**9. DELIVERY TERMS**

Price, delivery terms, methods of payment and transport are mentioned in a purchase contract or order confirmation which is sent by the business department after receiving the order.



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# OPERATING INSTRUCTIONS

## EXPLOSION-PROOF POTENTIOMETER

TYPE: **X195RP**

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**N740091**

Valid from: **20.4.2016**

### 10. SPARE PARTS

As the potentiometer is unreparable component, there are no spare parts available.

### 11. PRODUCT DISPOSAL



Useless products shall be disposed in accordance with valid regulations.  
**!!!All components may produce harmful exhalations during combustion!!!**

### 12. ACCOMPANYING DOCUMENTATION

- 📄 Attestation of conformity
- 📄 These operating instructions including of warranty
- 📄 Delivery noted

Certificate is available on [www.generi.cz](http://www.generi.cz) or upon request.



*WE WISH YOU MAXIMUM SATISFACTION WITH OUR PRODUCTS AND SERVICES*

## WARRANTY

<b>Product:</b> ( fill in full code )	<b>X195RP</b>
Serial number No.: from:	to:

You are provided with a warranty for a period of 12 months (if it is not specified otherwise in the purchase contract) valid from the day the product was handed over. We guarantee quality of work and material. Despite this, faults unidentifiable in the manufacturing plant may occur due to storage, during transport or use. If they were caused by faulty material or production, we shall restore the product to a trouble-free state at our own costs. The warranty does not apply to defects resulting from mishandling or mechanical damage and not following instructions for assembly and maintenance.

## FINAL INSPECTION

Authorised person:	Result:	Stamp and signature:
	<b>OK</b>	

