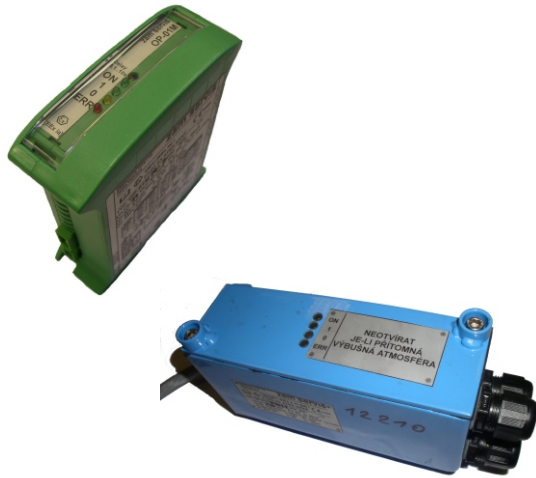




OP-01 control converter



Use:

The OP-01 control converter is used to switch loads on and off, to control heavy-current equipment with a controller in a potentially explosive atmosphere, and to evaluate the signal using a standard NAMUR sensor. It enables the implementation of an adjusted binary (the NAMUR limit states disconnect the load). The OP-01 evaluates the input current from the IS control device in three states (NAMUR 0-1-Error), which are indicated by an LED. For a valid input signal, the converter switches 2 output relays according to the selected function:

- function 1 - both power relays close
- function 2 - power relay 1 closes, relay 2 opens during control malfunction
- function 2 - relay 1 closes at time T (0.1 sec < T < 10 sec), when relay 1 opens, relay 2 closes (good for starting up machines with warning devices)

The converter includes a reed relay switching IS circuits for signaling and control. There is also an IS 8.2 VDC/30mA for powering alarm and auxiliary circuits.

Individual versions of the converter differ

- by design (for mounting on DIN35 raiiling, solid enclosure for an explosive environment (instead of PNV or NV bushings)
- supply voltage
- input current levels
- functions

The converter can be adapted to include the OP-NK balun or OP-PB memory block to extend the range of applications.

The OP-NK is used to customize information for a simple relay or switch. This completes the circuits so as to ensure NAMUR functioning even for the simple contact.

The OP-PB is used for manual push-button on and off for the OP-01. The device is placed with a stainless cabinet. Pressing ON will set log1 for the OP-01 input, pressing OFF log0. The MANUAL-0-AUTO switch is used to switch

Specifications of OP-01:

Supply voltage in versions	24VDC 24, 36, 42, 48, 110, 230 VAC/50Hz
Electric power	max 2W
Control IS circuitry	1 reed relay with switching contact
	Maximum switching frequency 2Hz
	Max. switching voltage 50V AC / DC
	Max. switching current 0.5A AC / DC
Control power circuits	2 relays with switching contacts
	Max. switching power 100VA
	Max. switching voltage 250VAC / DC
	Max. switching current 5A AC / DC
	contact life 1*10 ⁵ operations

Specifications of OP-01 M (version for mounting on DIN35 raiiling):

Explosion protection	I(M1) [EEx ia] I
Case	IP20
Temperature range	-20 to +70°C
Relative humidity	95% w/o condensation
Dimensions	119x113x35 mm
Weight	0.28 kg

Specifications of OP-01V (version placed in solid enclosure):

Explosion protection	I M2(M1) EEx e m [ia] I
Case	IP54
Temperature range	-20 to +70°C
Relative humidity	95% w/o condensation
Dimensions	231x116,5x81 mm
Weight	2.5 kg

control to automatic using switches connected here through the balun. The STOP button with lock results in disconnection from the OP-01 unless released by rotating, resulting in an Error condition.

OP-NK :



OP-PB :



The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.