

# Supply unit HRT

## For 2-wire transmitters

**Snap-on mounting**

**Short circuit and overheating protection**

**HART communication resistor**

**Compact**

**Galvanical isolation**

### GENERAL

This power supply can energize one or more two-wire transmitters.

Connection of HART transmitters is featured by the built-in communication resistor.

Energization of transmitters in hazardous areas and built-in square root extraction is not possible.

### DESCRIPTION

The power supply is fitted in a dual UNIFLEX snap-on housing. The primary AC voltage is transformed down, rectified and smoothed. Protection of the output circuit against short circuit and overheating is provided. One of the two 24 V outputs has a built-in resistance of 250  $\Omega$ , specially designed for supply of transmitters with HART-communication.

### TECHNICAL DATA

#### OUTPUT

**Transmitter supply:** 24 V DC  $\pm$  1 VDC

**Ripple:**  $\leq$  25 mV<sub>rms</sub>

#### Load

$$R_{Load} = \frac{24[V] - U_s}{0,02[A]} [\Omega]$$

$R_{load}$  = lead resistance & load of connected devices.

$U_s$  = minimum supply voltage of transmitter.

**Output current:**  $\leq$  85 mA

**Short circuit current:**  $\leq$  250 mA

#### POWER SUPPLY

**AC - voltage:** 115 or 230 V

Tolerance: +6 -10 %

Frequency: 48...60 Hz

#### Effect of supply

$$I_{Output} = f(U_{input}) \text{ approx. } 1 \text{ mA / V}$$

### ENVIRONMENTAL CONDITIONS

#### Temperature limits

**Operation:** -10...+ 60 °C

**Transport & storage:** -35... + 85 °C

#### Relative humidity

$\leq$  95 %, no condensation

#### Vibrations

0,7 g 10...100 Hz to LLoyds register test 1

#### Effect of temperature

$$I_{Output} = f(\vartheta_{Ambient}) \text{ approx. } -0,5 \text{ mA / K}$$

### ELECTROMAGNETIC COMPATIBILITY

Complies with european guideline EN 50 081-1 and 50 082-2 for use within rural and industrial areas. CE labelled

Fig. 1 Dimensions [mm]

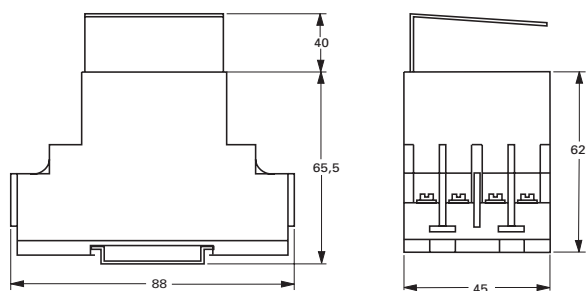
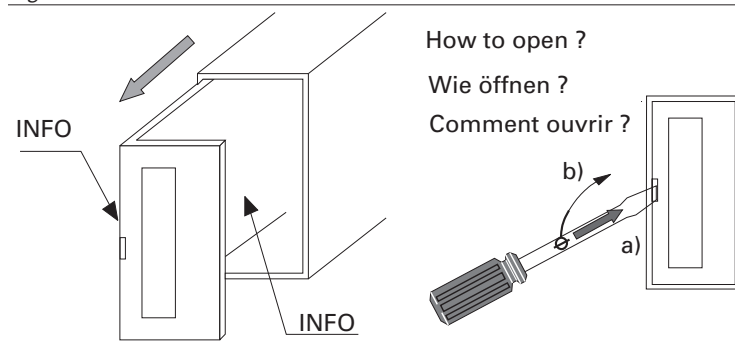


Fig. 2 Information and connections



## ELECTRICAL SAFETY

Complies with 73/23/EEC LVD

CE labelled

Isolation voltage: 3,75 kVAC

## GENERAL

### Mode of Protection

Housing: IP 30

Terminals: IP 10

### Electrical connection

Screw terminals

**Weight:** 0,21 kg

### Mounting

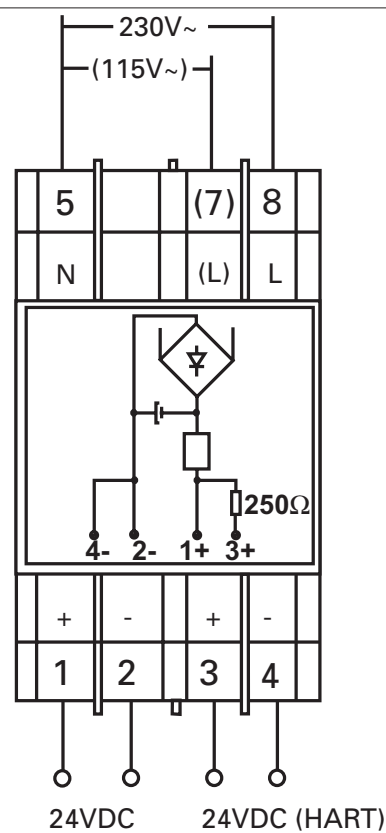
35 mm standard rail to DIN 46 277

**Mounting position:** not critical

## ORDERING DATA

Description	Order-no
Transmitter supply unit TPS HRT	
230 VAC	<b>9404-202-08401</b>
115 VAC	<b>9404-202-08411</b>

Fig. 3 Electrical connections



### Deutschland

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