

USensor+	1	5	OUT +
IN	2	6	GND 2
GND 1	3	7	Us+
GND 1	4	8	GND 3

**Short description:**

The 857-421 HART Repeater Power Supply links SMART transmitters located in the field. It provides the power required and transmits the analog signals in an electrically isolated way.

**Characteristics:**

- HART communication
- Power supply to SMART transmitters
- Safe 3-way isolation with 2.5kV test voltage to EN 61140

**Technical Data****Input:**

Input signal	4 ... 20 mA
Input resistance	≤ 50 Ω
Transmitter supply	$V_s = 18 \text{ V}$ at 30 mA
Max. input current	Max. supply

**Output:**

Output signal	4 ... 20 mA
Load impedance	230 - 600Ω
Offset	< 20 μA
Residual ripple	< 10mV eff

**General specifications:**

Nominal supply voltage $V_s$	24 VDC
Supply voltage range	$V_s - 30 \% \dots + 30 \%$
Current consumption at 24 VDC	≤ 45 mA
Max. operating frequency	100 Hz signal / ≥ 2.5 kHz HART
Response time ( $T_{10/90}$ )	< 3.5 ms signal
Transmission error	≤ 0.1 % of the full scale value
Temperature coefficient	≤ 0.01 % /K

**Description**

**JUMPFLEX® Signal Conditioner, for DIN 35 rail**  
Repeater power supply, HART

**Item No.**

857-421

**Pack. Unit**

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**Technical Data****Environmental requirements:**

Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-40 °C ... +85 °C

**Safety and protection:**

Test voltage (input/output/supply)	2.5 kV AC, 50 Hz, 1 min
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**Connection and type of mounting:**

Wire connection	Push-in CAGE CLAMP®
Cross sections	solid: 0.08 mm² ... 2.5 mm² / AWG 28 ... 14 fine-stranded: 0.34 mm² ... 2.5 mm² / AWG 22 ... 14
Strip lengths	9 ... 10 mm / 0.35 ... 0.39 in

**Dimensions and weight:**

Dimensions (mm) W x H x L	6 x 96 x 94
Weight	47.8 g

**Standards and approvals:**

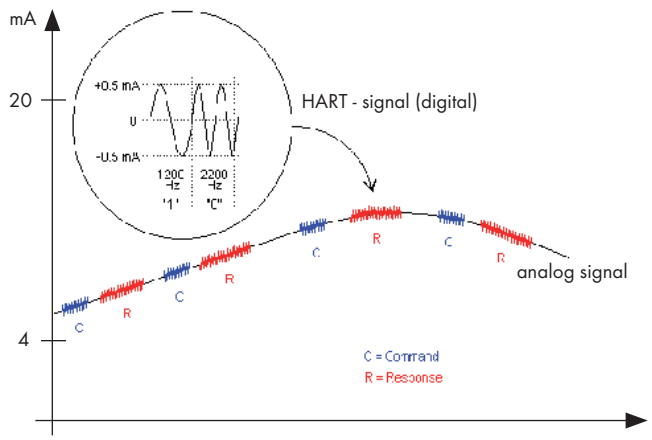
Conformity marking	CE
UL 508	
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4

**Accessories**

see pages 226 ... 236

# Simultaneous transmission of analog and digital signals

857-421



## Connection assignment

