

■ FC0184

1 channel – repeater power supply 4-20mA for 2, 3, or 4 wire transmitter

Description:

The module FC0184 is used as interface between the transmitters located in the field area and the control room.

It provides a DC floating power supply for 2 or 3 wire transmitters or accepts the transmitters with their own power supply, and repeats with accuracy after isolation the mA input signal.

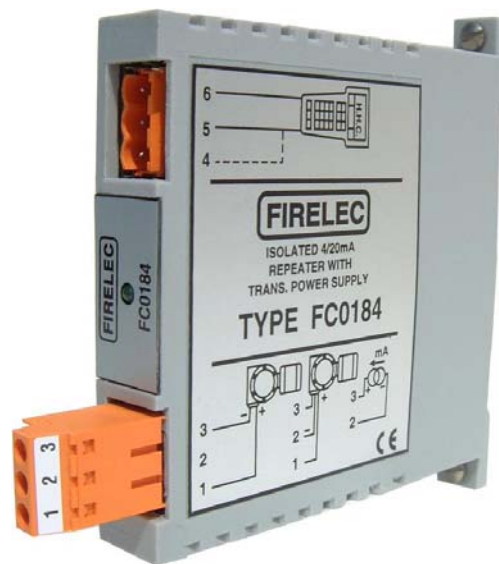
The Hart communication pass through the module from the input loop to the output loop (even for the 4wires transmitters).

Using the dedicated connector on the front side, it is easy to communicate from the control room with the smart transmitters on the field, with a H.H.C

Product options:

Option **ST**:FC0184-**ST**: transmitter connected using Screw Terminals

Option **CCT**:FC0184-**CCT**: transmitter connected using Cage Clamp or spring Terminals



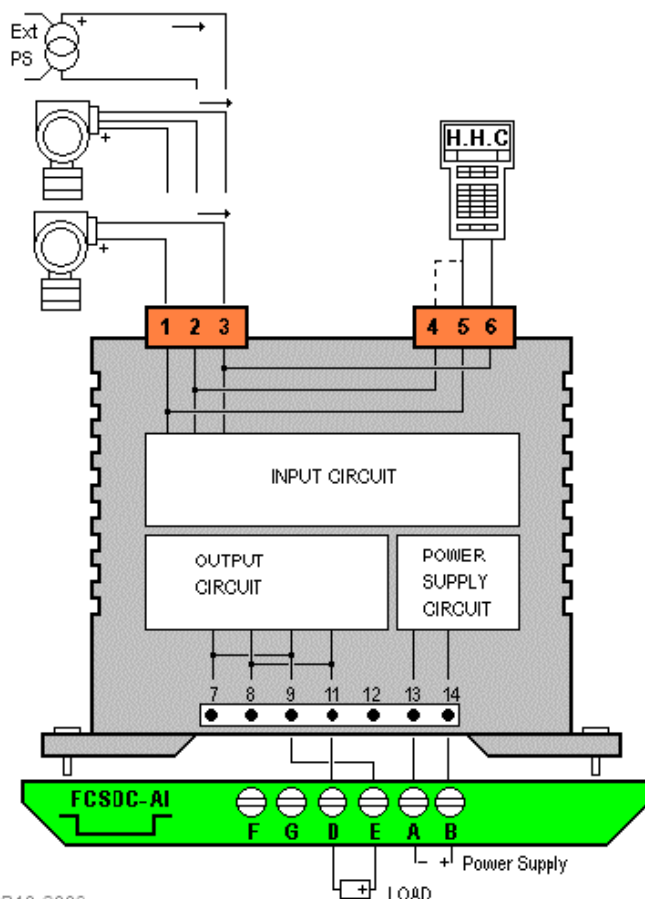
Main characteristics:

1 channel 4-20 mA for 2, 3 or 4-wire transmitters

Triple isolation between input, output and power supply

Bi-directional HART communication pass through

DIN rail mounting, on termination panel modulo 8 or modulo 16, or individual socket



R10-2009



Technical specifications

Power Supply

Voltage range:	21Vdc to 32Vdc
Power ON indication:	By green Led on front plate
Consumption (26Vdc):	75 mA with output at 20mA
Replaceable fuse:	100 mA 250V quick action

Input specifications

Protection:	Against over voltage and short circuit
Input impedance for a 4-20mA input:	About 140 ohms
HART input impedance:	>250 ohms
Transmitter Power Supply at 20mA:	15V (at 21V Main Power Supply) 18V (at 24V Main Power Supply) 26V (at 32V Main Power Supply)
Transmitter Power Supply ripple:	< 0.5%
Transmitter Power Supply current limitation:	25mA+/- 0.5mA

Output specifications

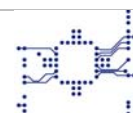
Current:	4-20mA
Low limit:	< 0,1mA (open input circuit)
High limit:	30mA +/- 1mA
Max load at P.S=21 Vdc:	600 ohms at 20mA output

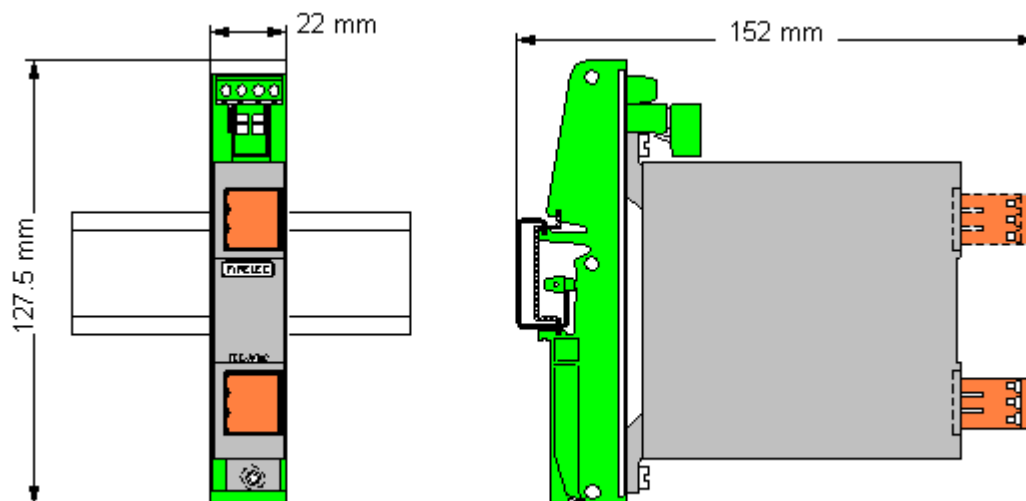
Transfer characteristics

Accuracy at 20°C ambient:	Better than 0,15%
Response time:	90% of the final value within 50ms.
Drift:	0,01%/°C
Isolation Voltage (Input / output / P.S):	1500Vdc
Common mode rejection at 220v:	DC: without measurable effect AC (50Hz): 120 dB

Mechanical and environment characteristics

Protection:	IP20
Wiring conductor section:	Option ST: 24 to 12 AWG (0.2 to 2.5 mm ²) Option CCT: 24 to 12 AWG (0.2 to 2.5 mm ²)
Weight:	100g
Size:	H=85mm W=16mm D=120mm with front connector
Operating temperature:	-10°C to 50°C
Storage temperature:	-20°C to 60°C
Relative humidity:	10 to 90% (no condensation)
Mounting:	<u>DIN rail</u> : panel modulo 8 type FC8308-1 or FC8308-2 or modulo 16 type FC8316-1 or individual socket type FCSOC-AI <u>Rack 19"</u> : panel modulo 16 type FC5321



Socket for individual mounting on DIN rail

FC0184 installed on FCSOC-AI socket
Individual socket characteristics

Reference of individual socket:	FCSOC-AI
Power Supply connection:	Screw Terminal B (+) and A (-) AWG 14 to 26 or 0.14 to 1.5mm ²
Fuse protection on power supply:	1A
Protection:	Against over voltage and reverse polarity
Output connection:	Screw terminals E (+) and D (-) AWG 14 to 26 or 0.14 to 1.5mm ²

