

## ■ FC2190

2 channels – Converter module 0-1A DC to 4-20mA

### Description:

The module FC2190 is used as interface between the instruments located in the field area and the control room .  
The module FC2190 has two 0-1A DC input channels. Each input is isolated from the other one and from its output.  
For each channel the input signal 0-1A DC is converted with accuracy after isolation into 4-20mA.

### Product options:

Option **ST**:FC2190-ST: signal connected using Screw Terminals  
Option **CCT**:FC2190-CCT: signal connected using Cage Clamp or spring Terminals

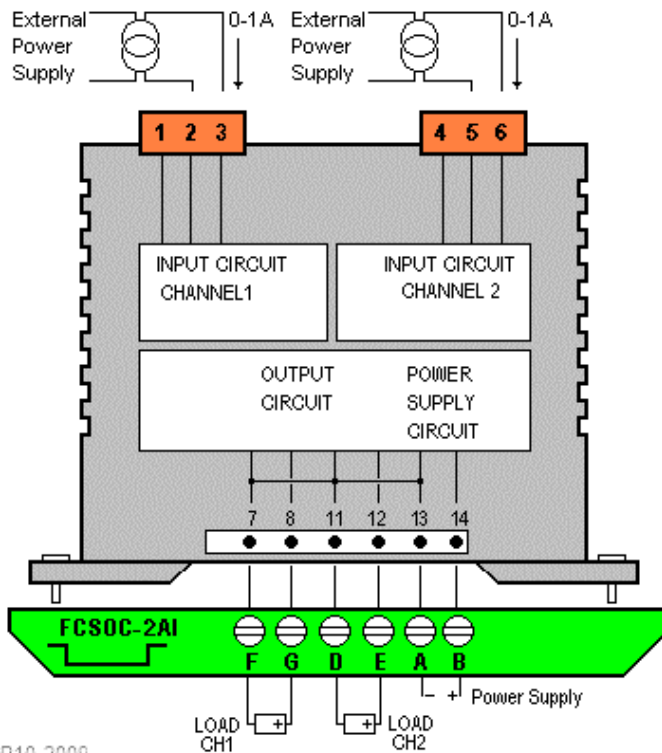


### Main characteristics:

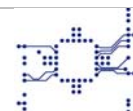
**2 input channels 0–1A direct current converted into 4-20mA**

**Galvanic isolation between each input and between input and output**

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



R10-2009



**Technical specifications**
**Power Supply**

<b>Voltage range:</b>	20Vdc to 28Vdc
<b>Power ON indication:</b>	By green Led on front plate
<b>Consumption (25Vdc):</b>	100 mA with all channels at 100%
<b>Replaceable fuse:</b>	200 mA 250V quick action

**Input specifications for each channel**

<b>Protection:</b>	By polyswitch circuit protector 1.1A
<b>Input range:</b>	0 – 1 Adc
<b>Input impedance:</b>	1,1Ω

**Output specifications for each channel**

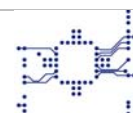
<b>Current:</b>	4-20mA
<b>High limit:</b>	30mA +/- 1mA
<b>Max load:</b>	500 ohms at 20mA output

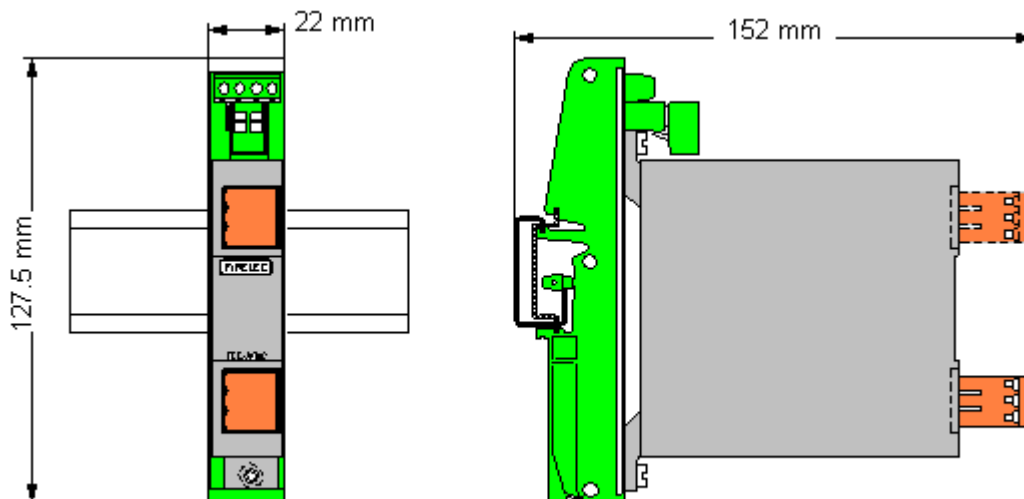
**Transfer characteristics for each channel**

<b>Accuracy at 20°C ambient:</b>	0,2%
<b>Response time:</b>	90% of the final value within 70ms.
<b>Drift:</b>	0,015%/°C
<b>Isolation Voltage ( Input 1 / Input 2 / output ):</b>	1500Vdc
<b>Common mode rejection at 220v:</b>	DC: without measurable effect AC (50Hz): 120 dB

**Mechanical and environment characteristics**

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



**Socket for individual mounting on DIN rail**

**FC2190 installed on FCSOC-2AI socket**
**Individual socket characteristics**

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

