

SCM 201

Industrial signal conditioner

Highlights

- Converting 0-5Aac to 4-20mA
- Galvanic isolation input and output
- Power supplied from current loop
- Monitoring current loop without interrupting it
- Span and zero adjustment
- Output overvoltage protection
- High linearity and temperature stability
- Short response time
- 35mm DIN rail mounting



Description

SCM 201 is a galvanic isolated transducer for 35mm DIN rail mounting that converts input – alternate current (0-5A AC), to 4-20mA current. Conversion is proportional and linear. Transducer is supplied from measurement loop since output connection (4/20mA current) is passive 2-wire. It is possible to adjust zero current and conversion span. By connecting voltmeter to test connectors it is possible to monitor loop current without interrupting it. SCM 201 signal conditioner is used for safe current measuring motors, pumps, heaters and other devices which are intended to use this current range.

Technical specification

Accuracy	±0.1% of full range, typical (for 2-100%) for sinusoidal input
Temperature stability	±0.02%/°C
Response time	220 ms (0-98%)
Output voltage ripple	0.1% of full range RMS
Frequency range	40-500Hz
Galvanic isolation	2.5KV RMS in 1 minute
Loop power supply	10-32VDCc
Output current	4-20mA
Test tap	40-200mV represents 4-20mA (shunt 10ohm ±1%)
Output over-voltage protection	33V tranzorb
Output over-current protection	slow fuse 100mA 20x5mm
Current loop resistance	$R_{max}(ohms) = (V_{supply} - 10) / 0.02$
Zero adjustment	±25% min
Span adjustment	±25% min
Operating temp. range	0-70 °C without condensation
Storage temp. range	-25 to 85 °C
Enclosure	plastic 35x89x71mm, IP50
Mounting	standard 35mm rail

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