

Super-mini Signal Conditioners F2 Series

SQUARE ROOT EXTRACTOR

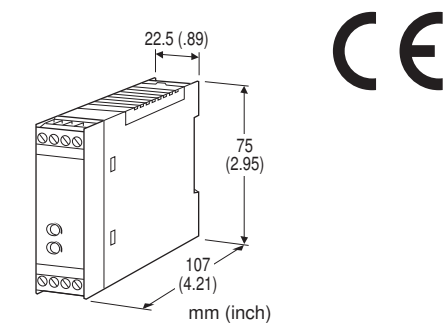
(non-isolated)

Functions & Features

- Provides a DC output proportional to the root of input signal
- Low-end cutout

Typical Applications

- Converting differential pressure to flow



MODEL: F2FL-[1]6-R[2]

ORDERING INFORMATION

- Code number: F2FL-[1]6-R[2]

Specify a code from below for each of [1] and [2].

- (e.g. F2FL-66-R/CE/Q)
- Specify the specification for option code /Q (e.g. /C01)

[1] INPUT

Current

A: 4 - 20 mA DC (Input resistance 250 Ω)

B: 2 - 10 mA DC (Input resistance 500 Ω)

C: 1 - 5 mA DC (Input resistance 1000 Ω)

H: 10 - 50 mA DC (Input resistance 100 Ω)

Voltage

6: 1 - 5 V DC (Input resistance 100 kΩ min.)

OUTPUT

Voltage

6: 1 - 5 V DC (Load resistance 10 kΩ min.)

POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

[2] OPTIONS (multiple selections)

Standards & Approvals (must be specified)

/N: Without CE

/CE: CE marking

Other Options

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to our web site.)

/C01: Silicone coating

/C02: Polyurethane coating

GENERAL SPECIFICATIONS

Construction: Stand-alone; terminal access at the front

Connection: Euro type connector terminal

(applicable wire size: 0.2 to 2.5 mm², stripped length 7 mm)

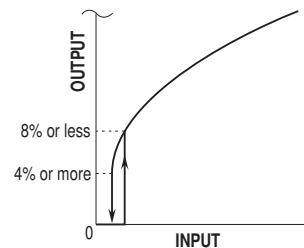
Housing material: Flame-resistant resin (black)

Isolation: Input or output to power

Zero adjustment: -5 to +5 % (front)

Span adjustment: 95 to 105 % (front)

Low-end cutout: Approx. 4 - 8 % (output)



INPUT SPECIFICATIONS

- DC Current: Input resistor incorporated

INSTALLATION

Current consumption

- DC: Approx. 80 mA

Operating temperature: -5 to +55°C (23 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: DIN rail

Weight: 150 g (0.33 lb)

PERFORMANCE in percentage of span

Accuracy: ±0.2 % (input 1 - 100 %)

Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)

Response time: ≤ 0.5 sec. (0 - 90 %)

Line voltage effect: ±0.1 % over voltage range

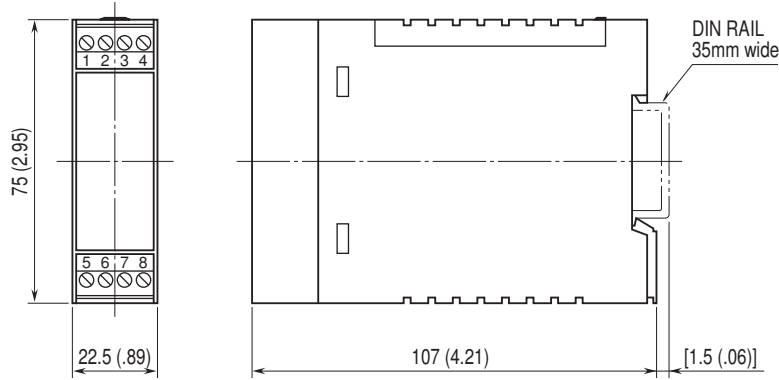
Insulation resistance: ≥ 100 MΩ with 500 V DC

Dielectric strength: 2000 V AC @1 minute (input or output to power to ground)

STANDARDS & APPROVALS

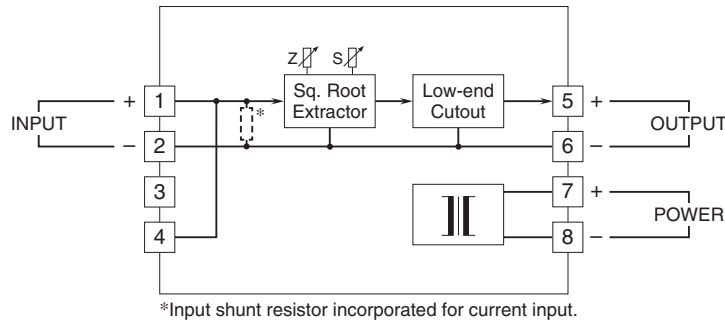
EU conformity:
 EMC Directive
 EMI EN 61000-6-4
 EMS EN 61000-6-2
 RoHS Directive

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



• When mounting, no extra space is needed between units.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*Input shunt resistor incorporated for current input.



Specifications are subject to change without notice.