

FC SERIES ISOLATOR

DATA SHEET

PRF

The FC series isolator is designed for conversion of input signals into other signals as required in addition to providing isolation between input and output. Therefore, this system is suited for connecting an FC system with other systems or preventing stray current.

SPECIFICATIONS

Input signal and input resistance:

- 1 to 5V DC (1M Ω or more)
- 4 to 20mA DC (50 Ω)
- 10 to 50mA DC (20 Ω)
- 0 to 20mA DC (40 Ω)
- 0 to 50mA DC (16 Ω)
- 0 to 10V DC (approx. 36k Ω)
- 10 to + 10 V DC (approx. 35k Ω)

Output signal and allowable load resistance:

- 4 to 20mA DC (0 to 1k Ω)
- 0 to 20mA DC (0 to 750 Ω)
- 0 to 10V DC (2k Ω or more)
- 1 to 5V DC (1k Ω or more)
- 10 to + 10V DC (10k Ω or more)
- 10 to 50mA DC (0 to 450 Ω) or (400 to 800 Ω)*

Note: * 48V DC power supply must be provided in addition to the power supply for computing element in case the allowable load resistance is 400 to 800 Ω (10 to 50mA output).

Accuracy: $\pm 0.5\%$ of full span
 $\pm 0.25\%$ of full span is available on request

Reproducibility: $\pm 0.1\%$ of full span

Response time: 0.1 sec (99.5% response)

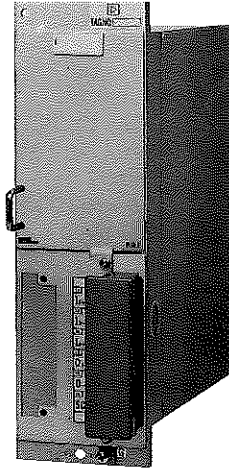
Power supply: 24V DC (20 to 30V DC) or

24V $\pm 13\%$ AC, 50/60Hz

(In case of 400 to 800 Ω allowable load resistance with 10 to 50mA output, 48V DC is additionally required.)

Power consumption (approx.):

	24V DC	24V AC
Current output	4W	5VA
Voltage output	2W	3VA
10 to 50mA DC output	5W	10VA



Isolation characteristic:

Between input and output, and between input/output and power supply

Dielectric strength:

1500V AC, 1 min

Insulation resistance:

100M Ω (min.) at 500V DC

Ambient temperature:

0 to 45 $^{\circ}$ C

Ambient humidity:

Less than 90%RH

Enclosure: Steel case

Dimensions (H x W x D):

247 x 74 x 225mm

Weight: Approx. 3.5kg

Finish color: Case; Silver (melamine baking)

Cover; Gray (molded synthetic resin)

Mounting method:

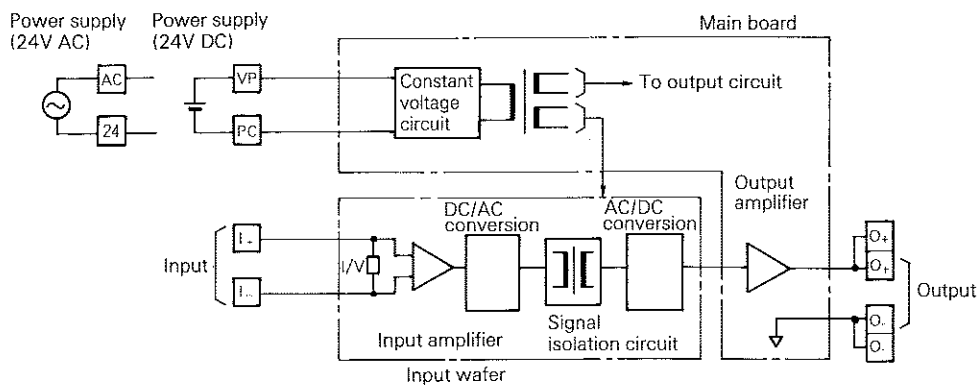
Rack mounting

Range of delivery: Isolator

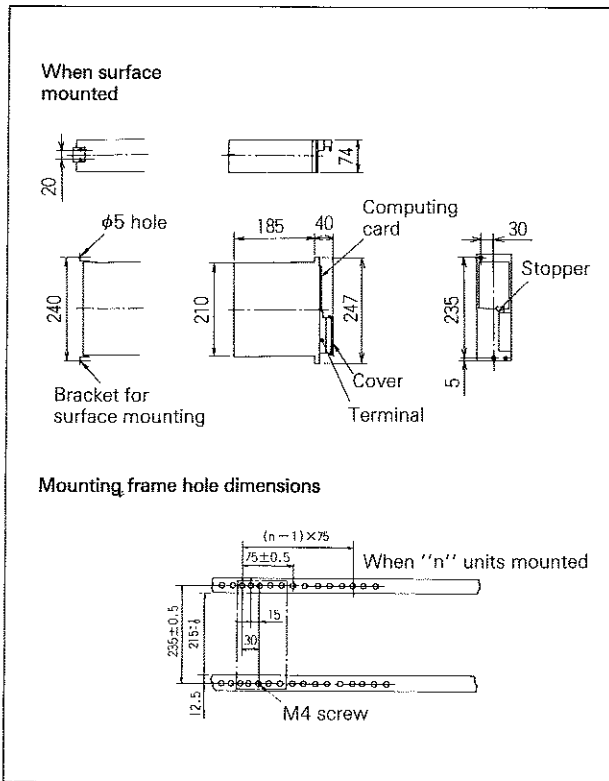
CODE SYMBOLS

PRF	006	000	Description
1			Input signal 1 to 5V DC
2			4 to 20mA DC
3			10 to 50mA DC
4			0 to 20mA DC
5			0 to 50mA DC
6			0 to 10V DC
7			- 10 to +10V DC
1			Output signal 1 to 5V DC
2			4 to 20mA DC
3			10 to 50mA DC
4			0 to 20mA DC
5			0 to 50mA DC
6			0 to 10V DC
7			- 10 to + 10V DC
9			10 to 50mA DC (Allowable load: 400 to 800Ω)
1			Accuracy ± 0.5%
2			± 0.25%
1			Power supply 24V DC
7			24V AC, 50/60Hz

BASIC CIRCUIT DIAGRAM



OUTLINE DIAGRAM (Unit:mm)



CONNECTION DIAGRAM

