

FC SERIES INTEGRATOR

DATA SHEET

PKE

This is a 6-digit analog integrator which displays an integral upon receiving FC SERIES signals or signals from slide rheostat.

FEATURES

1. Accuracy of $\pm 0.5\%$.
2. A variety of integral levels are available for free choice, optimum for process lines.
3. The instrument permits transmitting pulses up to 10 times as many as the integral level selected.

The integrator can easily be connected to a computer through a remote data transmission system.

The output stage is prepared in three types for optional choice in accordance with practical requirements.



SPECIFICATIONS

Measuring signal :FC SERIES signal DC 1 to 5V
DC 4 to 20mA

Wiring resistance :5 Ω or less per wire
Circuit resistance adjustment unnecessary (for slide rheostat)

Input resistance :1M Ω (DC 1 to 5V)
250 Ω (DC 4 to 20mA)

Allowance	Input 5 to 100%	Input less than 5%
	Within $\pm 0.5\%$ of rating	Within $\pm 1\%$ of rating

Rated value means the theoretical value to be obtained when 100% input is continuously applied and integrated.

Display mode :Decimal 6-digit electromagnetic counter (with click-touch reset pushbutton)

Integral level :Value to be integrated for 1 hour at 100% input:

50	100	200	250	300	400
500	600	750	800	900	1000
1200	1500	1600	1800	2000	

Power supply :DC24V (20 to 30V or AC 100V 10%, 50/60 Hz)

Power consumption:
Approx. 6W (DC 24V)
Approx. 9VA (AC 100V)
(including power consumption by pulse transmitter)

Power indicator lamp:
Rectangular green LED

Ambient temperature:
0 to 45°C

Ambient humidity:
90% RH (MAX)

Enclosure :Steel case

External dimensions (HxWxD):
144 x 72 x 400 mm (casing) + terminal board

Mass (weight) :Approx. 4.5kg

Finish color :Munsell 7Y 7.3/1.4

Optional devices : Pulse transmitter

Number of transmission pulses :

Integral x 1, 2, 5, 10

Output contact ; 1a contact

(excluding semi-conductor output contact)

Type of contact ;

Relay contact

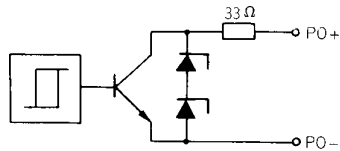
Contact capacity

AC 100V, 0.3A/DC 24V, 0.2A
(resistive load)

Dielectric strength between contact and ground :

AC 500V for 1 min

Contactless pulse*



Output stage of semiconductor contact

Load current; 50mA or less

Dielectric strength

Between PO+ and ground

AC 500V for 1 min

Between PO+ and PO-: DC 33V

Integration cutoff :

Integration starts at 10% or higher when input is increased from 0%

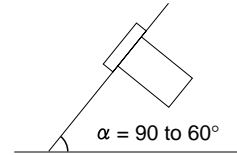
Accuracy of cutoff point: +0%
Hysteresis: -0.5%
Hysteresis: 1% or less

Scope of delivery :

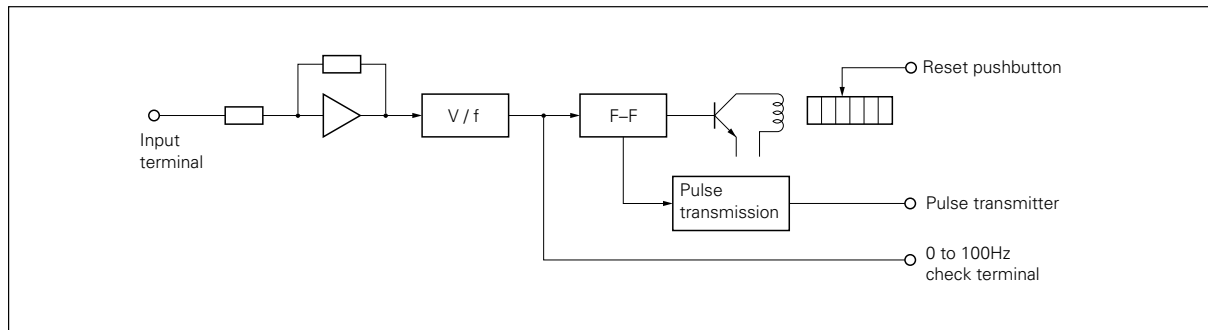
Integrator and mounting bracket

Mounting:

Panel flush mounting



BASIC OPERATING PRINCIPLE DIAGRAM

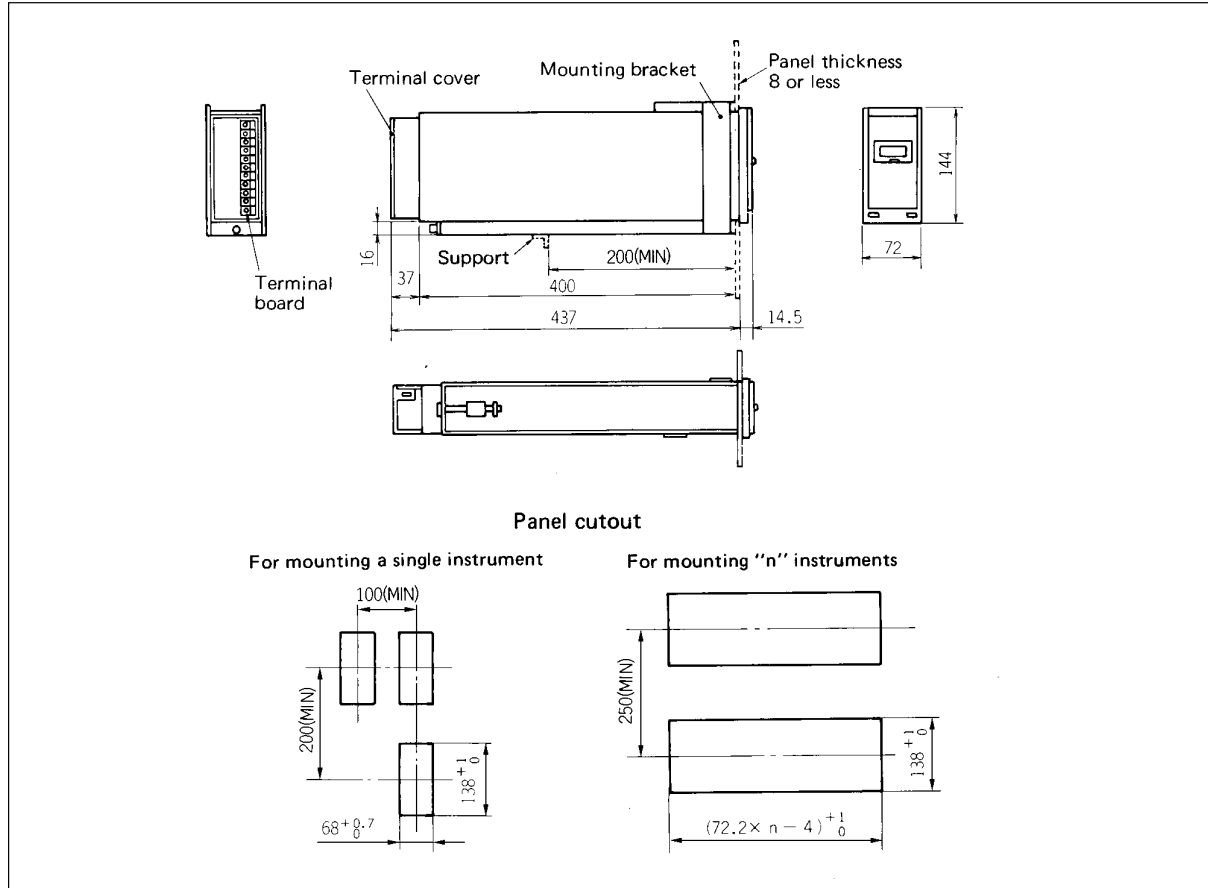


CODE SYMBOLS

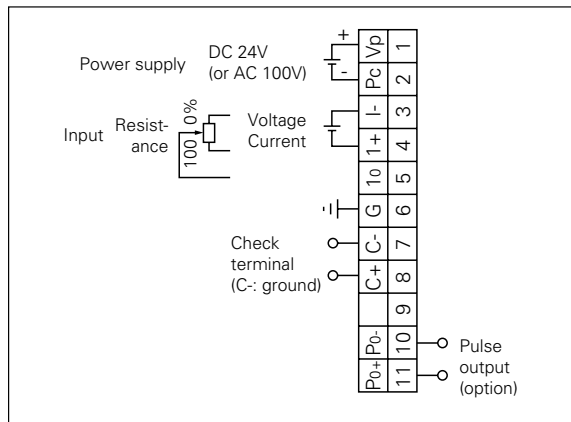
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<ul style="list-style-type: none"> • Contact capacity: DC 24V, 0.2A, DC48V, 0.1A AC 100V, 0.3A, AC 200V, 0.15A • Service life: Mechanical 50 million operations, electrical 10 million operations • Dielectric strength: AC 1000V for 1 min between contact and ground • Dielectric strength Between PO+ and ground: AC 500V for 1 min Between PO+ and PO-: DC 33V • Load current: 50mA 																																																			

* Asterisked (*) items: Nonstandard

OUTLINE DIAGRAM (Unit : mm)



CONNECTION DIAGRAM



⚠ Caution on Safety

*Before using this product, be sure to read its instruction manual in advance.

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