



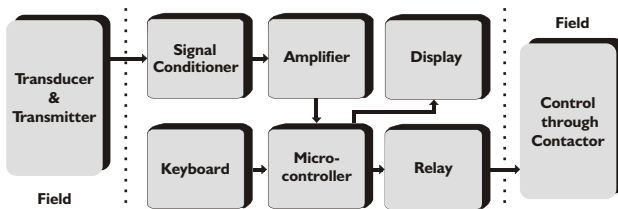
INTRODUCTION

Flow Indicators / Controllers play an important part in any process industry. Quick and accurate measurement / control of flow improves the final product quality, reliability and reduce rejection. Flow indication and totalisation is therefore one of the prime considerations in any process industry. The FIT 92 series is microcontroller based programmable flow indicator/totalizer designed for fast and accurate measurement/control. The instrument is designed using highly reliable electronic components. The process parameter is displayed in digits, which gives better resolution compared to analog indicator. The FIT 92 series accepts 4 - 20 mA as input. The instrument is immune to mechanical vibrations. Even the mounting position will not affect the measurement accuracy. The LED display allows better messaging and can also display unit of



measurement. Use of highly reliable electronic components with lowest temperature coefficient ensure long and trouble free service. The instrument is tested for its performance under various climatic conditions. Wide ranges of measurements are available depending on the sensor used.

PRINCIPLE OF OPERATION



The FIT 92 series is based on the principle of a high input impedance amplifier feeding a microcontroller followed by a relay and an inbuilt ADC. The signal from the transducer is fed to a signal conditioning amplifier, output of which is given to the 13 bit analog to digital convertor which is inbuilt the microcontroller. This microcontroller then switches the relay ON or OFF depending upon the process value with respect to the setpoint. Linearisation of the transducer signal is done by software. The microcontroller also drives the LED display, indicating the actual flow.

APPLICATION

The FIT 92 series flow controllers can be used in monitoring and controlling continuous as well as batch flow processes in almost any industry.

FEATURES

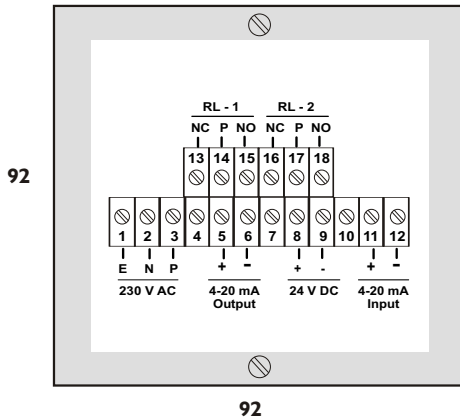
- ✓ Linear or Square root extractor type input
- ✓ 6 digit totaliser
- ✓ Setpoint on flow or totaliser
- ✓ Proven trouble-free field performance
- ✓ Highly compact
- ✓ Dust and vermin proof enclosure with epoxy powder coating
- ✓ Fast response time
- ✓ Highly accurate
- ✓ Maximum MTBF and minimum MTTR
- ✓ Feather touch push button
- ✓ Wide supply variation and environmental band
- ✓ User friendly programming

SPECIFICATIONS

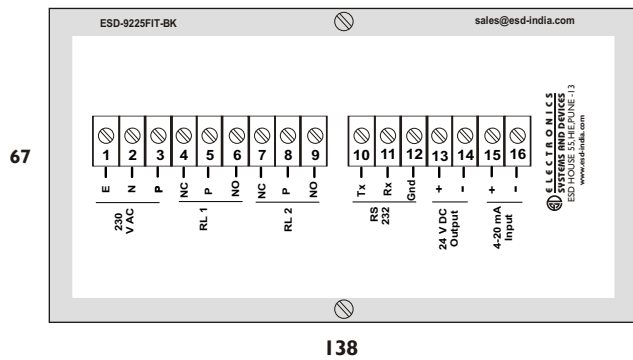
Model	: FIT 9223 / FIT 9225	Power consumption	: 6 VA
Range	: Programmable from 0 to 9999	Setpoints	: Two (Configurable on flow or totaliser)
Decimal Position	: Selectable	Control action	: ON / OFF
Input	: 4 - 20 mA / 0-5 V DC	Set point Adjust	: Thr' Flat Membrane key pads
Input type	: Linear / Square root selectable	On / Off differential	: From 0.1 to 9.9
Indication	: 4 digit 12.5 mm RED LED for flow 6 digit 12.5 mm RED LED for totalizer	Relay Output	: One set of potential free Relay changeover contact rated 5 Amp resistive at 230V AC per setpoint.
Indication accuracy	: +/- 0.1 % of fullscale +/- 1 digit	Relay logic	: User selectable High or Low Logic
Totalizer display	: 6 digit 12.5 mm RED LED	Relay ON indication	: 3 mm Red LED
Flow Unit	: Selectable bet'n gram, litre, kilog, galon, cubic feet, cubic mtr, ton	Front facia	: ABS plastic suitable for IP 55
Time base	: Selectable bet'n secs, mins and hour	Mounting	: Flush panel
Power supply	: 230 V AC, +/- 10 % , 50 Hz	Enclosure	: Mild steel CRCA sheet with powder coating
Relative Humidity	: Less than 90 % Non Condensing	Termination	: Screwed type suitable for 2.5mm ² wire
Ambient Temperature	: 0 to 55 °C	Weight	: 700 grams approximately
Accuracy deviation due to		Optional :	
a) Temperature change	: +/- 0.002 % / °C, ref at 25 °C	A)Retransmission O/p	: Isolated 4- 20 mA for retransmission
b) Supply Variation	: +/- 0.001 % / V	Resolution	: 10 bit (0.016 mA step change)
Recalibration (if reqd)	: By software using keypads	Load resistance	: Maximum 500 ohms
Programming	: Using 4 keys membrane keypad. Default password is 134	B)Serial Interface	: Isolated RS 485(2wire) / RS 485
		Protocol	: Modbus RTU

INSTALLATION

Model : FIT 9223



Model : FIT 9225



Model	Facia	Cutout	Depth [■]
FIT 9223	96 x 96	92 x 92	80
FIT 9225	72 x 144	67 x 138	120

[■]Depth Including Terminals

ORDERING INFORMATION

FIT 92 X1	X2	X3	X4	X5	X6	Ordering eg. FIT 9223 - 1114
Setpoints 2 - Two	Panel Cutout 3 - 92 x 92 5 - 67 x 138	Input 1 - 4 to 20 mA 2 - 0 to 5V DC 3 - Other	Relay Output 1 - 1 C/O 5 Amp 2 - Other	Power Supply 1 - 230 V AC 2 - 110 V AC 3 - 24 V DC 4 - Other	Optional O/p 1 - NIL 2 - RS 232 3 - RS 485 4 - 4 - 20mA Retransmission 5 - Other	FIT 92 Setpoint - Two (2) Panel cutout - 92 x 92 mm (3) Input - 4- 20 mA (1) Relay output - 1 C/O 5 Amp (1) Power Supply - 230 V AC (1) Optional O/p - 4 - 20mA O/p (4)

ALSO SELECT ESD ...

BACKEND

- ✓ Pt - 100
- ✓ Thermocouples
- ✓ Thermowells
- ✓ Compensating Cables

SAME RANGE

- ✓ Flow Totaliser with Data Logging
- ✓ Profile Controllers

FRONT END

- ✓ Alarm Annunciators
- ✓ Automation Panels



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