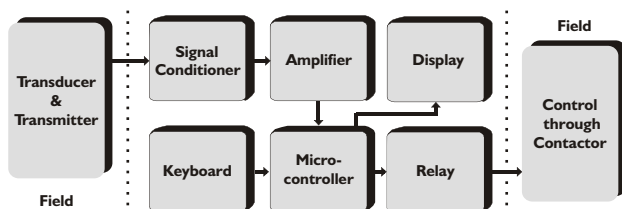




INTRODUCTION

Flow Indicators Totalisers / 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

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.



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.

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

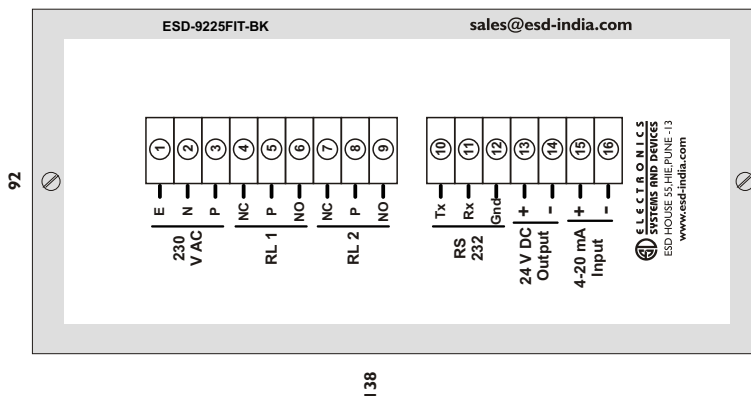
- ✓ Linear or Square root extractor type input
- ✓ Choice of 6 or 8 digit totaliser
- ✓ Setpoint on flow or totaliser
- ✓ Bright LED display
- ✓ Proven trouble-free field performance
- ✓ Highly compact
- ✓ Dust and vermin proof enclosure with epoxy powder coating
- ✓ Fast response time
- ✓ Highly accurate
- ✓ Maximum MTBF and minimum MTTR
- ✓ Feather touch push button
- ✓ Wide supply variation and environmental band
- ✓ User friendly programming

SPECIFICATIONS

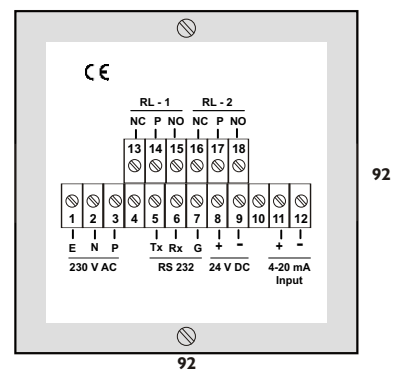
Model	: FIT 9223 / FIT 9225	Control action	: ON / OFF
Range	: Programmable from 0 to 9999	Set point Adjust	: Thr' Flat Membrane key pads
Decimal Position	: Selectable	On / Off differential	: From 0.1 to 9.9
Input	: 4 - 20 mA / 0 - 5 V DC	Relay Output	: One set of potential free Relay contact changeover contact rated 5 Amp resistive at 230V AC.
Input type	: Linear / Square root selectable	Supply for Transmitter	: 24 V DC +/- 1V, @30mA
Indication	: 4 digit 7 segment 12.5 mm RED for flow 6 digit 7 segment 10 mm RED for totalizer	Relay logic	: User selectable High or Low
Indication accuracy	: +/- 0.1 % of fullscale +/- 1 digit	Relay ON indication	: By Red LED
Totalizer display	: 6 digit	Mounting	: Flush mounting
Time base	: Selectable bet'n secs, mins and hour	Enclosure	: IP 55 mild steel with power coating
Power supply	: 230 V AC, +/- 10 % , 50 Hz	Termination	: PBT
Relative Humidity	: 90 % Non Condensing	Dimensions (mm)	: 96 x 96 x 120 (D) : 144 x 72 x 120 (D)
Ambient Temperature	: 0 to 55 °C	Output (Optional)	: Isolated 4- 20 mA for retransmission
Accuracy deviation due to		Maximum load for current output	: 500 ohms
a) Temperature change	: +/- 0.002 % / °C, ref at 25 °C	Interface (Optional)	: RS 232 / RS 485
b) Supply Variation	: +/- 0.005 % / V	Protocol	: Modbus RTU
Recalibration (if reqd)	: Thr' front keypads		
Power consumption	: 6 VA		
Setpoints	: Two (Configurable on flow or totaliser)		

INSTALLATION

Model : FIT 9225



Model : FIT 9223



ORDERING INFORMATION

FIT 92 X1	X2	X3	X4	X5	X6	Ordering eg. FIT 9223 - 1111
Setpoints 2 - Two	Panel Cutout 3 - 92 x 92 5 - 138 x 68	Input 1 - 4 to 20 mA 2 - 0 to 5V DC 3 - Other	Relay Output 1 - I C/O 5 Amp 2 - Other	Power Supply 1 - 230 V AC 2 - 110 V AC 3 - 24 V AC 4 - 24 V DC 5 - Other	Optional O/p 1 - NIL 2 - RS 232 3 - RS 485 4 - 4 - 20mA Retransmission 5 - Other	Setpoint - Two (2) Panel cutout - 92 x 92 mm (3) Input - 4 - 20 mA (1) Relay output - I C/O 5 Amp (1) Power Supply - 230 V AC (1) Optional O/p - NIL (1)

ALSO SELECET
ESD ...

BACKEND

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

SAME RANGE

- ✓ Flow Totaliser with Data Logging
- ✓ Profile Controllers

FRONT END

- ✓ Alarm Annunciators
- ✓ Automation Panels



**ELECTRONICS
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