

Universal Indicator With Control Action

**OVERVIEW**

The ASHE Series AF is a range of fully configurable micro-controller based universal Digital Process Indicator with and without control relay outputs, offered in a highly compact, rugged and reliable execution. The instrument has three keys on the front panel, with which the operator can set the parameters and configure the instrument as desired. Single or Dual four-digit LED display options are offered on the front panel. The display can indicate any scale range between -999 to +9999 units.

The Indicators accept all industrial standard input signals, like 4 to 20 mA DC, AC/DC Voltage, AC/DC Current, Resistance, and temperature sensors like RTD Pt-100, Thermocouples (type J,K,R,S,T,) etc. The Indicator is available in several dimensions in panel-mount execution and operates on AC or DC power supply, as required. The instrument may be used in either two-wire or four-wire configuration and is calibrated as specified.

The instrument has multiple Relays for control action, the set-points of which may be set from the front keyboard. Options include Dual display, analog retransmission signal, DIN rail mount, Weather-proof / flame-proof executions, etc.

The ASHE Series AF range of Indicators offer a high degree of reliability owing to their inherent accuracy in process control, besides other characteristics like total immunity to shocks, dust, ambient temperatures, humidity and corrosive atmospheres. Further, the instruments are manufactured using selected high-grade components which guarantee their functional reliability and long operational life.



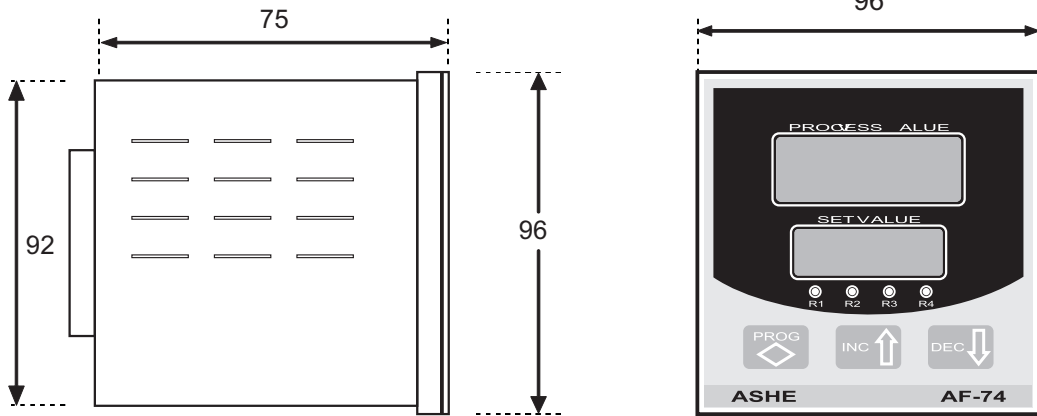
**SPECIFICATIONS**

<b>Model</b>	ASHE AF-Series
<b>Type</b>	Microcontroller based analog process indication on Digital display with control action
<b>Input Signals</b>	4 to 20 mA DC, AC/DC Voltage, AC/DC Current, Resistance and all temperature sensors like RTD Pt-100, Thermocouples type J,K,R,S,T etc.
<b>Display</b>	Dual 4-digit 0.5" / 0.4" seven-segment LED display.
<b>Scale Range</b>	-999 to +9999.
<b>Response Time</b>	< 100 mS
<b>Linearity</b>	± 0.1% of span.
<b>Calibration Facility</b>	By Membrane keypad on front panel.
<b>Control Outputs</b>	Up to 4 Relay changeover contacts (configurable).
<b>Contact Rating</b>	10 Ampere @ 230 V AC (resistive loads).
<b>Control Logic</b>	High-Low (Configurable).
<b>Alarm Indication</b>	By LEDs on front panel.
<b>Memory</b>	Non volatile
<b>Accuracy</b>	± 0.1% of FSD.
<b>Retransmission</b>	4 to 20 mA DC (optional).
<b>Load Driving Capacity</b>	600 Ohms
<b>Settings</b>	For zero, Span, Decimal point.
<b>Power Supply</b>	90 to 270 V AC, 50/60 Hz Universal Power Supply. (Optionally 24 V DC).
<b>Dimensions</b>	96 x 96 x 75 mm [W x H x D].
<b>Execution</b>	Panel mounting.
<b>Enclosure</b>	Industrial grade ABS.
<b>Weight</b>	Approximately 0.5 Kgs.
<b>Operating Temperature</b>	0 to 55°C.

**FEATURES**

- Microcontroller based design
- Universal Input (configurable)
- Standard analog signals and Sensors
- Low Input impedance – negligible load on loop
- High accuracy and linearity to input signal
- Dual 4-digit seven-segment LED displays
- Up to 4 Relay change-over contacts
- Very low power consumption and heat dissipation
- Fully configurable
- Retransmission option
- External transmitter powering option
- Polarity Auto-sensing
- Selectable Decimal-point
- Universal AC Power Supply (24 V DC optionally)
- Rugged, industrial grade ABS enclosure
- High Noise immunity
- Panel / Field / Hazardous-area installation in IP66 execution
- Proven record of several thousand installations

**DIMENSIONAL DIAGRAM**



**How To ORDER**

UNIVERSAL INDICATOR WITH CONTROL ACTION	AF-7							
Configuration and add-on options								
<b>1 CONTROL RELAY OUTPUTS</b>								
▶ No Relay Outputs								
▶ One Relay Outputs								
▶ Two Relay Outputs								
▶ Three Relay Outputs								
▶ Four Relay Outputs								
<b>2 INPUT SIGNAL</b>								
▶ 4 to 20 mA DC								
▶ 0 to 10 V DC								
▶ RTD Pt-100 (3-wire)								
▶ J type Thermocouple (0 to 750°C)								
▶ K type Thermocouple (0 to 1200°C)								
▶ R type Thermocouple (0 to 1600°C)								
▶ S type Thermocouple (0 to 1800°C)								
▶ T type Thermocouple (-200 to +350°C)								
▶ Resistance								
▶ AC Voltage (to be specified)								
▶ AC Current (0 to 1/5 Ampere)								
<b>3 POWER SUPPLY</b>								
▶ 90 to 270 V AC, 50 / 60 Hz.								
▶ 24 V DC (±10%).								
<b>4 OUTPUT SIGNAL</b>								
▶ 4 to 20 mA DC with aux. 24 VDC @ 100 mA power for trans.								
▶ 4 to 20 mA DC retransmission								
▶ Retransmission not required								
<b>5 EXECUTION</b>								
▶ Front Panel mounting								
▶ Field mounting in Weather-proof execution (Polycarbonate enclosure, Ingress protection)								
▶ Field mounting in Flame/Explosion-proof Ex-d execution (Cast Aluminum Alloy LM6 enclosure, for Gas groups IIA, IIB)								

**OUR OTHER PRODUCTS**



FLOW TOTALIZER



SIGNAL ISOLATORS & TRANSDUCERS



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FLAMEPROOF INSTRUMENTS



STATIC POWER SWITCHES



Designed and Manufactured by :

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