

## AHM990DI Common Display Unit

- Suitable for SIL 1 & 2 rated (IEC61508) safety system loop applications, as 1oo1 architecture (HFT:0)
- Supply voltage 21 to 30Vdc
- RFI Protection to IEC61000-4-3:2006/A2:2010 available
- AMELEC Standard 10 year warranty

### TECHNICAL SPECIFICATION

#### FUNCTION

Operating the push buttons (Read & Trip) on any instrument card mounted within the rack(s), will show the relevant input & trip set point levels within the range scaled on this Common Display module.

#### INPUT

When used as a common display within our AH Series 19" Rack systems, the Input signal is from the internal Read line and is typically 0-2Vdc.

Can be used simply as a display within either RIS or AMELEC high density 3U high 19" Racks. Any DC current / voltage can be specified in the range of:  
Current up to 100mA max (Passive)  
Voltage 0.4 up to 150V max  
Typical input: 4 - 20mA (Passive, impedance 20 ohms)

#### DISPLAY

Three and a half digit Liquid Crystal Display,  
Factory settable as requested in the range of: -1999 to +1999 to suit the application.  
Typically scaled: 0 -100.0 or 0 - 100 (%)

#### CONTROLS

Zero / Span: 15-turn potentiometer to calibrate Display range

#### INDICATOR

Amber Led: power ON indicator

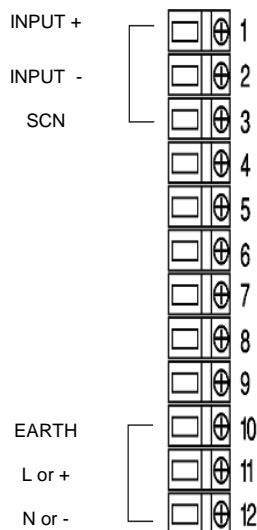
#### PERFORMANCE

Linearity: <  $\pm 0.1\%$   
Response time: Typically < 200ms  
Accuracy: <  $\pm 0.1\%$

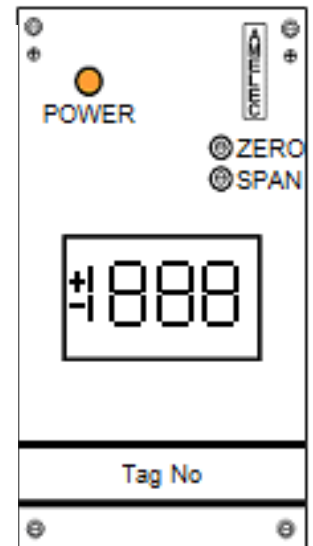
#### PROTECTION

Isolation 1000V RMS\*. Input/Supply/Earth  
\*500Vdc if RFI option (K) is specified.  
Internal Fuse.  
Input O/C response: Downscale drive or Blank display.  
Input over range typically at 300%.

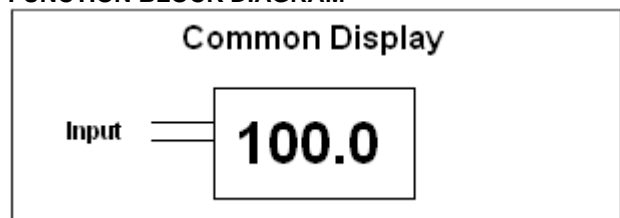
#### TERMINATION



#### FRONT VIEW



#### FUNCTION BLOCK DIAGRAM



#### ENVIRONMENTAL CONDITION

Storage temperature: - 40 to +70 °C  
Operating Ambient: -15 to +55 °C  
Relative Humidity: 5 to 95% RH

#### MOUNTING / DIMENSION

To the extreme right of the rack, occupying 3x std positions  
Card 3U high 12HP wide front plate  
Mounting: 19" rack / 84E wide (See rack GA for details)  
Card weight < 200g

#### ADD ON / OPTIONS

J : Input injection jack socket on front fascia  
P: Test point on front fascia  
K: RFI protection to IEC61000-4-3:2006/A2:2010  
Non standard Power supply ranges available