

AHM990DIKJX Common Red LED Display Unit

- Suitable for SIL 1, SIL 2 & SIL 3 rated (EN 61508) safety instrumented system (SIS) loop monitoring applications as 1oo1 architecture (HFT:0)
- Supply voltage 21 to 30Vdc
- Non-Smart / Non-uProcessor based, Type A instrument
- RFI Protection to EN 61000-4-3:2006/A2:2010
- 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 AH Series19" Rack systems, the Input signal is from the internal Read line and is typically 0.1-2.1Vdc .

When used simply as a display within either RIS or AMELEC high density 3U high 19" Racks, any DC input Voltage signal can be specified up to 150V max, or Current up to 100mA max. Typical input: 4 - 20mA (Passive, impedance 20 ohms)

DISPLAY

Up to Four 0.3" (7mm) high Red LED digits. Display range is Factory settable as requested at time of orders, typically in either Engineering units within the range of -1999 to +2999 to suit the application, or as 0.0 to 100.0 (%)

CONTROLS

Zero / Span: 15-turn potentiometer to calibrate Display range (Input Test / Calibration injection jack socket on front fascia)

INDICATOR

Amber Led: power ON indicator

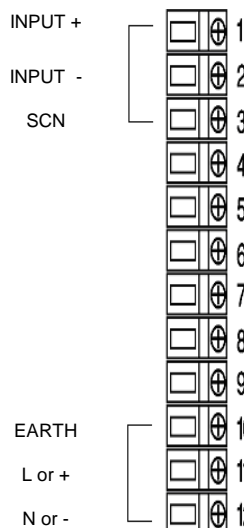
PERFORMANCE

Accuracy / Linearity: $< \pm 0.1\%$
Response time: Typically $< 100\text{ms}$

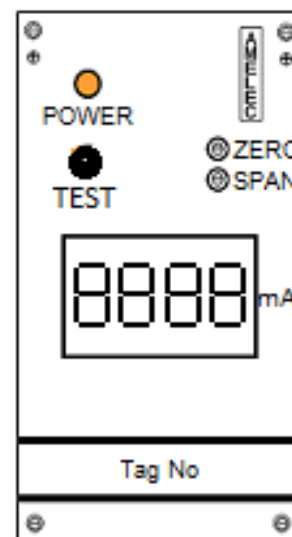
PROTECTION

Isolation: 500Vdc Input/Supply/Earth
Internal Fuse.
Input O/C response: Downscale drive/ i.e; 0000 for zero based signal & scaling, or Under Range for offset signals & scaling.
RF Immunity: 20MHz-3GHz/5.25GHz $\leq 10\text{V/m}$,
80MHz-1GHz/5.6GHz $\leq 30\text{V/m}$, 889MHz/1.75GHz $\leq 40\text{V/m}$

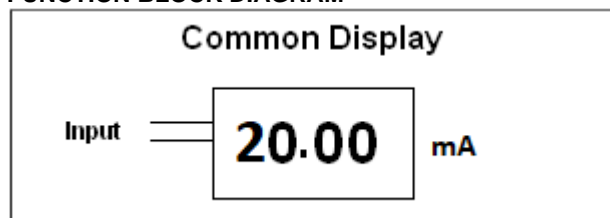
TERMINATION



FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIROMENTAL CONDITION

Storage temperature: - 40 to +70 °C
Operating Ambient: -15 to +55 °C
Relative Humidity: 5 to 95% RH (Non-Condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (Generic Industrial)

MOUNTING / DIMENSION

To the extreme right of the rack, occupying 3x std positions
Plug-in Card with 3U high 12E wide front plate
Mounting: 19" rack / 84E wide (See rack GA for details)
Card weight $< 200\text{g}$

ADD ON / OPTIONS

P: Test point on front fascia
X: Non standard Power supply ranges available