MTL MTL Series Service Manual

ICC316

1. Description

ICC316 general purpose indicating trip

3. Product Information

www.autronexa.com

ICC316 general purpose indicating trip

amplifier

Choice of one or two relay alarm outputs

Choice of two SPST or one DPST outputs

Phase reversal facilities for both relays

4 to 20mA or 1 to 5V inputs

10A relay contacts

0.2% display/trip accuracy31/-digit 7-segment LED display

Provides transmitter supply

T-or G-section DIN-rail mounting

The ICC316 is an independently powered low.cost general-purpose indicating trip amplifier with relay outputs. It accepts inputs from4 to 20mA or 1 to 5V sources and provides a transmitter power supply.A 31/ digit seven-segment LED display shows inputs or set-points in percentages from 0 to 100.Phase reversal switches for relays are located at the top of the unit; these provide alternatives of ‘normally energised' or 'normally de-energised' operation. Hysteresis of approximately 1.5% of span is provided to prevent the relays hunting.Set-point adjustment is provided for each channel by multi-turn trimpots accessible through the top of the unit.

SPECIFICATION Number of channels

One

Input signals

4 to 20mA current source between terminals 11 (+ve) and 12

4 to 20mA current sink between terminals 9 (+ve) and 11

1 to 5V dc between terminals 10 (+ve) and 12

Input impedance

<10Ω+0.3V max for 4 to 20mA input>100kΩ for 1 to 5V input Power supply

20 to 35V dc

Transmitter supply

20V min at 20mA between terminals 9 and 11

Output relay characteristics Each output single pole normally open

Contact rating:250V ac/10A,2.5kVA resistive

30V dc/10A,300Wresistive

Contact life expectancy: 105operations at

maximum load

www.autronexa.com

Note: reactive loads must be suppressed

sufficiently LED indicators

One red LED for each output: ON when relay activated.

One green LED indicating POWER ON. Parameter monitoring

0 to 100% through a 31/₂- digit 7. segment LED display

Accuracy (including non-linearity) at25C

Display: <0.1% of span ±1 digit Trip: <0.2% of span ±1 digit Temperature drift

<0.01% of span/°C Response time

Relay:300ms

Display, to reach 99.9% of span: 700ms

Hysteresis

1.5% of span (typical) Set-point adjustment

5 to 95% of the input

Isolation between power supply, input and each relay output

1500V dc/ac

Power requirements (powering a transmitter at 20mA,display and relays ON)

20 to 35V dc, 3.85W maximum110mA at 35V dc maximum170mA at 20V dc maximum

Power requirements(accepting a20mA input, display and relays ON)

80mA at 35V dc maximum110mA at 20V dc maximum Common mode rejection ratio

150dB typical RFI susceptibility

Conforms to IEC801.3

Ambient temperature limits

-20 to +55°C (operating) -40 to +80C (storage) Humidity

5 to 95% RH,non-condensing Terminals

Accommodate 2.5mm² conductors

Casing

40mm width polyamide casing Mounting

Directly onto Tor G-section DIN-rail to DIN46277

TO ORDER:-

ICC316-T1 Trip amplifier with one set-point and one SPST output

ICC316-T2 Trip amplifier with two set-points and two SPST outputs

ICC316·T3 Trip amplifier with one set-point and one DPST output

www.autronexa.com