MTL4644D REPEATER POWER SUPPLY

single channel, 4/20mA, HART® for 2- or 3-wire transmitters, two outputs

The MTL4644D provides a fully-floating dc supply for energising a conventional 2- or 3-wire 4/20mA transmitter and repeating the current in other circuits to drive two loads. For HART 2-wire transmitters, the unit allows bi-directional transmission of digital communication signals superimposed on the 4/20mA loop current.

SPECIFICATION

See also common specification

Number of channels

One

Output

Signal range: 4 to 20mA Under/over-range: 0 to 24mA

Load resistance

@ 24mA: 0 to 360Ω @ 20mA: 0 to 450Ω

Circuit output resistance: > $1M\Omega$

Circuit ripple

< 50µA peak-to-peak

Input

Signal range: 0 to 24mA (including over-range)

Transmitter voltage: 16.5V at 20mA

Transfer accuracy at 20°C

Better than 15µA

Temperature drift

 $< 0.8 \mu A/^{\circ}C$

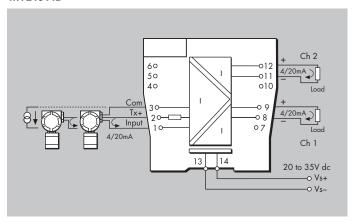
Response time

Settles to within 10% of final value within 50µs

Communications supported

HART (terminals 1 & 2, output Ch 1 only)

MTL4644D



LED indicator

Green: power indication

Maximum current consumption (with 20mA signals)

96mA at 24V dc

Power dissipation within unit (with 20mA signals)

1.4W @ 24V dc



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