

# MTL4706+

## FOR TWO TRANSMITTERS

- 2-wire 4/20mA and 'smart'



The MTL4706+ is a 2-channel electronic, over-volt protected barrier. It is designed primarily for energising conventional and smart 2-wire 4/20mA hazardous-area transmitters. As each loop is typically powered by a single channel, the barrier is capable of driving two hazardous-area devices. The novel patented circuit design is notable for extreme accuracy of  $\pm 2\mu\text{A}$  under all conditions. A floating dc power supply is built-in to provide a high voltage output to power the transmitters. The MTL4706+ is capable of operating from bussed power.

### SPECIFICATION

(See also common specification)

#### Channel numbers

1 and 2

#### Safety description

28V, 300 $\Omega$ , 93mA

#### Polarity

Positive input to safe-area load

Note that the output voltage to the transmitter is negative with respect to earth.

#### Output current

4/20mA

#### Voltage for Tx & lines

$\geq 16\text{V}$  at 20mA

#### Load resistance

250 $\Omega \pm 5\%$

#### Accuracy

$\pm 2\mu\text{A}$

#### Fuse rating

50mA

#### Matched power

0.65W

#### Supply current (total)

100mA maximum at 20mA with 20V supply

80mA typical at 20mA with 24V supply

#### Supply voltage range

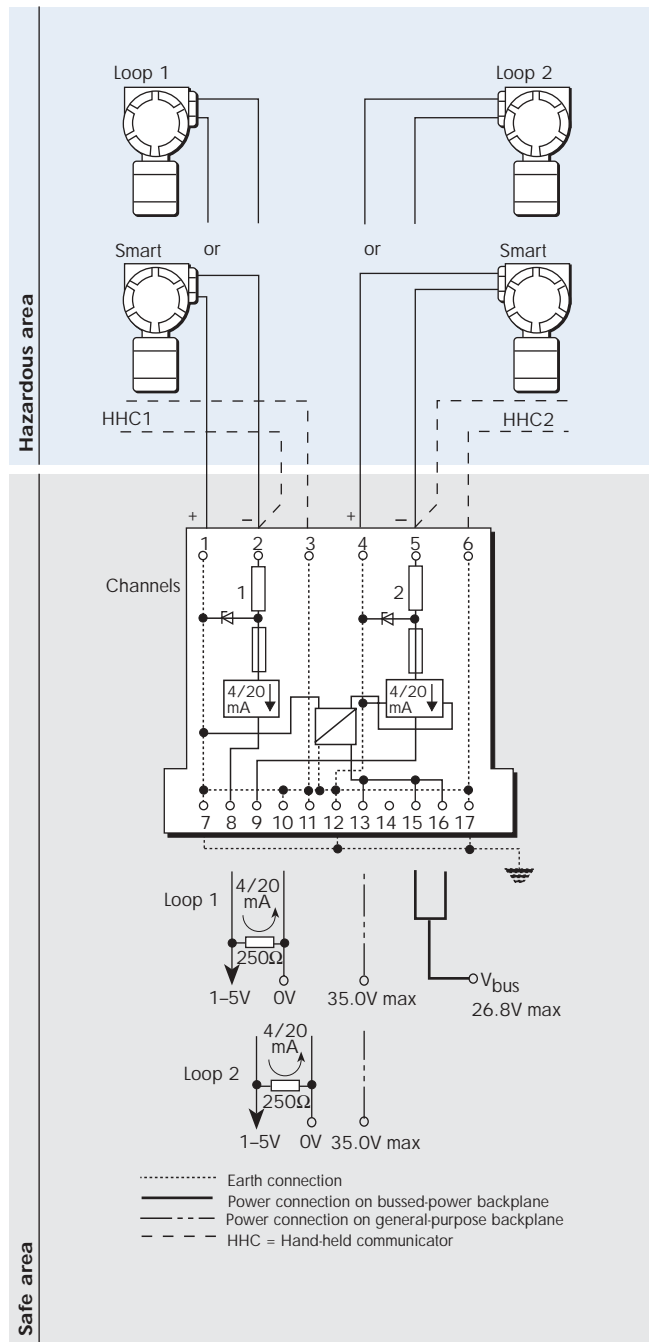
20 to 26.8V on bussed-power backplanes limited by on-board protection circuit

20 to 35.0V on general-purpose or custom backplanes

#### Power supply fuse

250mA

### ANALOGUE INPUTS (HIGH LEVEL)



UK Patent No. 2205699

USA Patent No. 4967302

European Patent (Germany, France, Italy)

No. EP0294139BI

### MAXIMUM CABLE PARAMETERS

(for single channel with earth return)

BASEEFA (group IIC)			FM (groups A & B)	
Capacitance ( $\mu\text{F}$ )	Inductance (mH) or L/R ratio ( $\mu\text{H}/\Omega$ )		Capacitance ( $\mu\text{F}$ )	Inductance (mH)
0.13	4.2	55	0.14	4.23



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