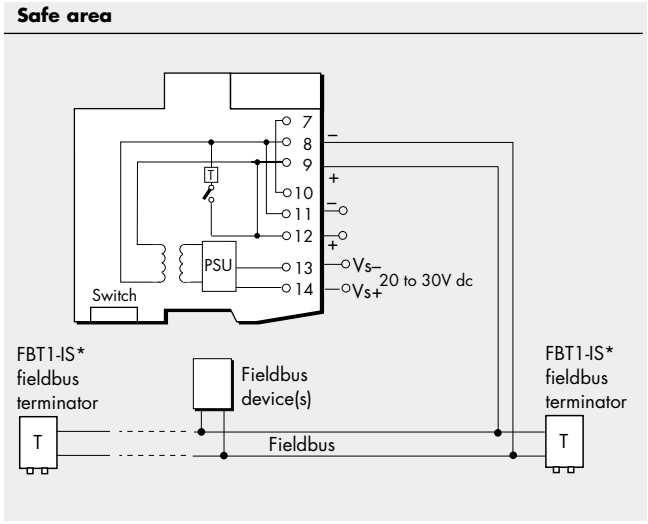
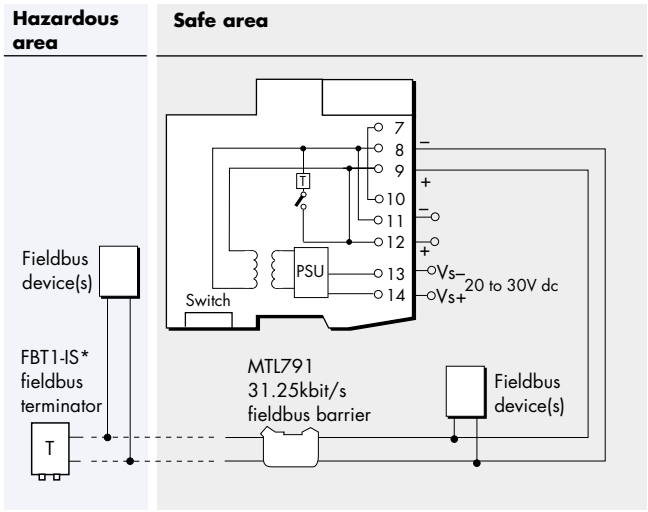
# MTL5995 FIELDBUS POWER SUPPLY

## 31.25kbit/s fieldbus

CE

The MTL5995 is a general purpose power supply unit designed for use in 31.25kbit/s (H1) fieldbus systems. It is compatible with both IS applications and non-IS applications. For IS applications it must be used with a safety barrier such as MTL791. The MTL5995 complies with the requirements of Fieldbus Foundation™ power supply Type 131† (non-IS supply intended for feeding an IS barrier).
To comply with fieldbus standards, each bus must be terminated at both ends. MTL's FBT1-IS or FCS-MBT fieldbus terminators can be supplied for this purpose or, for installations in which the safe-area bus length is small, the MTL5995 includes an internal safe-area terminator which is switch enabled.




## SPECIFICATION

**See also common specification**

**Output**
19V±2%
<2Ω dc impedance
350mA maximum current

**Output ripple**
Complies with clause 22.6.2 of the fieldbus standards† for output current >10mA.

**Minimum load current**
0mA

**Maximum cable length**
1900m Type 'A' cable as defined in clause 22.7.2 of the fieldbus standards†, other cables as indicated in annex B of the standard.

**Internal termination**
Selected by a switch in the base of the unit.

**Supply voltage**
20 to 30V dc -20°C to +60°C

**Power requirement, with 350mA output load**
420mA typical at 24V
370mA at 30V
520mA at 20V

**Power dissipation within unit, with 350mA output load**
3.4W typical at 24V
4.5W maximum at 30V

*Note: To allow adequate heat dissipation under all likely thermal conditions, it is recommended that MTL5995s are installed on DIN-rail with a 10mm space between adjacent units. MTL MS010 10mm DIN-rail module spacers are available for this purpose.*

**LED indicator**
Green: one provided for power indication

† *The applicable fieldbus specifications and standards are: Foundation™ Fieldbus 31.25kbit/s Physical Layer Profile Specification, document FF-816, IEC 61158-2: 1993 and ISA-S50.02-1992 for 31.25kbit/s fieldbus systems.*

| Terminal | Function |
|---|---|
| 7 | Internally linked to 10 |
| 8 & 11 | Safe-area fieldbus device(s) connection –ve |
| 9 & 12 | Safe-area fieldbus device(s) connection +ve |
| 10 | Internally linked to 7 |
| 13 | Supply –ve |
| 14 | Supply +ve |

*Note: Terminals 7 and 10 are linked internally to assist in the process of terminating cable screens.*



**See also MTL5000 Series cable parameters and approvals**

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