



**Instruction Sheet for DIN Rail Terminals  
intended for use in Potentially Explosive Atmospheres**

Sira Notified Body No. 0518



II 2GD Ex e II

SIRA 05 ATEX 3157U  
IECEx SIR 05.0062U

The Type ER Range of Rail Mounted Terminals comprise a pair of single pole, feed-through terminal assemblies that are mounted into moulded (natural or coloured) insulation housings. Each terminal assembly consists of an electroplated copper current bar with screw clamping yokes. The following terminal types are covered:

Type	Rating	Cable size range
ER2.5	630 V, 21 A	Solid conductor: 0.5 mm <sup>2</sup> to 2.5 mm <sup>2</sup> Fine strand: 1.5 mm <sup>2</sup> to 2.5 mm <sup>2</sup>
ER4	400 V, 28 A	Solid conductor: 0.5 mm <sup>2</sup> to 4 mm <sup>2</sup> Fine strand: 1.5 mm <sup>2</sup> to 4 mm <sup>2</sup>
ER6	630 V, 36 A	Solid conductor: 0.5 mm <sup>2</sup> to 6 mm <sup>2</sup> Fine strand: 1.5 mm <sup>2</sup> to 6 mm <sup>2</sup>
ER10	500 V, 50 A	Solid conductor: 1.5 mm <sup>2</sup> to 10 mm <sup>2</sup> Fine strand: 1.5 mm <sup>2</sup> to 10 mm <sup>2</sup>
ER16	630 V, 66 A	Solid conductor: 1.5 mm <sup>2</sup> to 16 mm <sup>2</sup> Fine strand: 1.5 mm <sup>2</sup> to 16 mm <sup>2</sup>
ER35	630 V, 109 A	Solid conductor: 6 mm <sup>2</sup> to 16 mm <sup>2</sup> Fine strand: 10 mm <sup>2</sup> to 35 mm <sup>2</sup>
ER70	1000 V, 167 A	Solid conductor: 10 mm <sup>2</sup> to 16 mm <sup>2</sup> Fine strand: 10 mm <sup>2</sup> to 70 mm <sup>2</sup>

The range also includes three sizes of earth terminals, types ERPE2.5/4 (2.5mm<sup>2</sup>/4mm<sup>2</sup>), ERPE6/10 (6mm<sup>2</sup>/10mm<sup>2</sup>) and ERPE16/35 (16mm<sup>2</sup>/35mm<sup>2</sup>).

The current bars are fitted with a sliding yoke and screw at each end. When the screw is tightened the yoke is compressed against the current bar and serrations incorporated in the surface prevent slippage of the conductor.

Self-deformation is incorporated in the design when the screws are tightened down, this is used to provide an automatic and progressive anti-rotation/anti-vibration locking effect.

A natural spring effect is designed into the plastic moulding of the housing to allow them to be clipped onto a 35mm assembly rail.

**Safe Installation Notes / precautions for installation and use:**

- The end terminal shall be covered with the associated end plate and the terminal assembly clamped in place, at both ends, by an end bracket.
- Leads connected to the terminals shall be insulated for the appropriate voltage and this insulation shall extend to within 1 mm of the metal of the terminal throat.
- All terminal screws, used or unused, shall be tightened down.
- The terminals must be installed onto 35 mm mounting rail.
- Minimum creepage and clearance distances between the installed terminals and adjacent earth terminals, exposed faces of equipment, enclosure walls and covers shall be appropriate for the rated voltage.
- The terminals shall not be exposed to temperatures outside of the following range: -

Material	Temperature Range
Polyamide 6.6	-20°C to +85°C

All cables shall be connected to the terminals within a temperature range of 5°C to 50°C.

- Where this product is intended to be used in a potentially explosive dust atmosphere, it shall be installed in an enclosure that is suitably certified for use in this environment.
- The following terminals require supplementary clamping facilities for the connecting cables, if the terminals are to be used with a conduit cabling system:

ER 6    ER 10    ER 35    ER 70