

Fuse and MCB Distribution Panels 8125 and 8146 Enclosure Series

- Explosion protection to
 - CENELEC
 - IEC
- Can be used in Zone 1 and Zone 2
- EEx e enclosures in different materials:
 - Series 8146 in polyester resin
 - Series 8125 in sheet steel, stainless steel
- Benefits of installing miniature circuit-breakers under hinged inspection windows
 - Operation of the breakers externally
 - Operation under voltage
 - Not necessary to open the enclosure
 - Switch setting visible at all times

STAHL

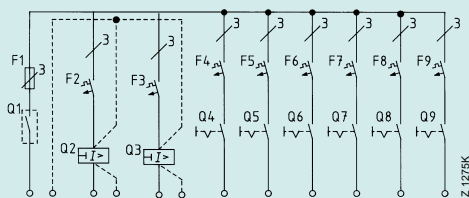
Fuse and miniature circuit breaker distribution assemblies in EEx e enclosures, with EEx modules, have been proved in practice to have exceptional qualities and have been used with success in locations where there is risk of explosion.

Explosion protected, individually, EEx d encapsulated components, described on pages 11/82 ff, are selected to order, and assembled in EEx e "increased safety" enclosures of sizes and combinations to suit the volume of components and the application.

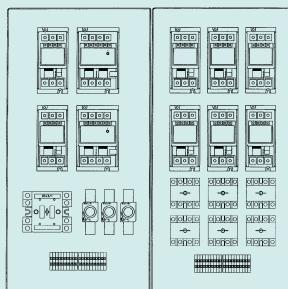
Zone 1 and Zone 2

Fuse and MCB distribution panels (examples)

Schematic



Arrangement, series 8146

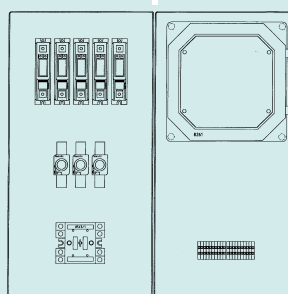
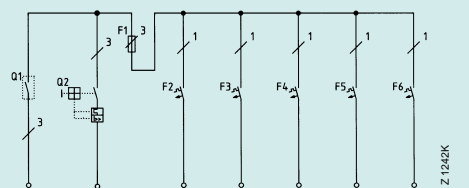


8146/5093
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Component list

- 1 Q1 Main switch 8543, 63 A
 - 3 F1 Fuse holder 8561/02 (Diazed-System)
 - 8 F2-F9 MCB 8562/43 (3-pole, mounted behind flap)
 - 2 Q2, Q3 ELCB 8562 with 30 mA sensitivity (mounted behind flap)
 - 6 Q4-Q9 Switch 8006/2, 25 A 4-pole
- Panel completely wired to terminals



8146/5095 and
8261/5011 and
8146/5092

- 1 Q1 Switch 8543, 3-pole, 80 A
 - 1 Q2 MCB 3-pole, 40 A
 - 3 F1 Fuse holder 8561
 - 5 F2-F6 MCB 8562, 1-pole, 16 A
- Panel completely wired to terminals

Cable entries

Cable entries are provided, to order, in the appropriate sides of the panel. Fuse distribution panel EEx de IIC T4 assembled in polyester enclosure 8146 and comprising:

State with order (example)

- 1 Main switch, 63 A, type 8543
- 3 Main fuses, 63 A, type 8561
- 12 MCBs, 6 A, type 8562 (mounted behind flap, operable externally)
- 1 Compression cable gland M 40 at top
- 9 Compression cable gland M 20 below

Panel completely wired to line-up terminals in accordance with attached sketch.

Notes on the use of MCBs

Instantaneous tripping occurs with model B breakers at 3 ... 5 times rated current ; with model C the pick-up value lies between 5 and 10 times rated value and with D breakers at 10 to 20 times rated current.

Load capacity in lighting circuits :

Incandescent (filament) lamps take a surge current on switch-on which is a multiple of their normal current (up to approx. $12 \times I_n$). Thus, a large number of filament lamps in a lighting circuit may cause the instantaneous release of a model MCB to operate when switched on. The designer must take this into account (permissible utilisation max. 80% of rating).

Fluorescent lamps are not critical in this respect, providing they are not parallel compensated, since in that case the switch-on capacitor surge can also cause the MCB to trip. Thus large numbers of such fittings must be correctly distributed.

MCBs with C characteristic are not susceptible to these problems and may therefore be loaded to their full capacity, since the pick-up value for the instantaneous release is at a significantly higher level (5 to 10 times).