# **Control Panels, Distribution Panels and Components**





8202







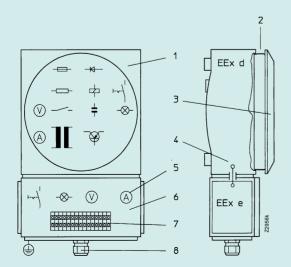
8225 + 8125

#### Product range

Our product range contains a wide variety of flameproof enclosures which offer a selection of sizes, designs and materials. The 8225 sheet steel enclosure series is designed for single installations as well as for large distribution units. The cast metal enclosures in the GUB, EJB and 8261 series, the moulded plastic enclosures in the 8202 series and the 8214 and 8218 panel mounting type enclosures are intended for single installations.

#### **Flameproof enclosures**

The "flameproof" type protection 'd' is based on the principle that electrical components which may cause sparks or arcing in normal operation (switches, contactors etc.) are in an enclosure constructed so that it will contain an explosion of flammable gas or vapour and will not permit ignition of a surrounding explosive atmosphere. Further, the temperature of the outside surface of the enclosures must not exceed the prescribed temperature limit for the appropriate temperature class. That means, the heat loss from the components fitted must not exceed a specified value.



#### **Direct cable entry**

8218

Cables can be brought into and out of flameproof enclosures directly. Flameproof cable glands or conduit with seals must be used for this purpose.

8214

#### Indirect cable entry

Cables can also be brought in and out of flameproof enclosures via a terminal chamber with "increased safety" protection type. The cable is normally brought into the chamber via a cable gland, however other methods of entry are possible. The cable passes into the flameproof enclosure via insulated, flameproof, stud-type or conductor bushings, set into the enclosure wall.

### **Empty enclosures**

When supplying EEx d enclosures, a certificate for the empty enclosure is provided, confirming that the relevant construction requirements are met. The final assembly must be approved and certified by an authorized specialist, in accordance with regulations.

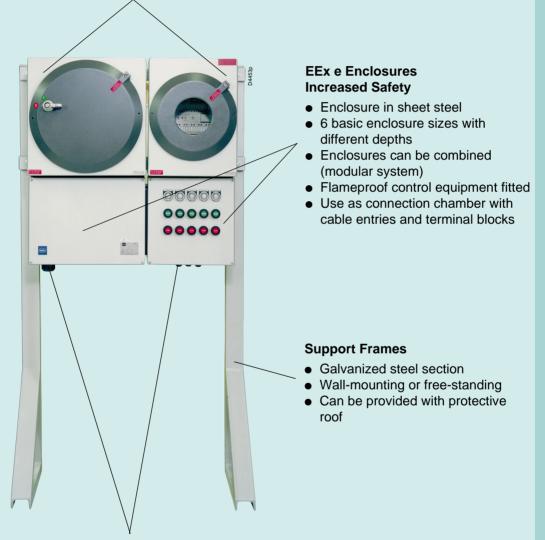
- 1 Enclosure EEx d, "flameproof" construction, pressure withstanding
- 2 Lengths and clearences of joint "paths" comply with manufacturing regulations EN 50 018
- 3 Cover
- 4 Conductor bushing, pressure tight, flameproof, increased insulation paths
- 5 Indication and control devices in EEx d/e
- 6 Terminal chamber EEx e, ≥ IP 54
- 7 EEx e terminals, indication and control devices in EEx d/e
- 8 Cable entry, e.g. cable glands,
  - bell mouthed glands
    cable dividing boxes

Schematic representation

of a flameproof enclosures with a terminal chamber

## **EEx d Enclosures Flameproof Encapsulation**

- Enclosures in sheet steel
- 6 basic enclosure sizes with different depths
- Enclosures can be combined (modular system)
- Installation of commercially available electrical equipment
- Switch actuated externally
- Inspection windows fitted (also with axial lead-through)
- Direct or indirect cable entries possible



## **Cable Entries**

- Indirect entries through EEx e enclosures
  - Cable glands
  - Bell-mouthed glands
  - Cable sealing ends
- Entry with armoured and plain cable

STAHL