

Technor

EEx ed Control boxes and stations

XAWFS/XAWG



Features

The range of control boxes/stations comprises many standard sizes of enclosure. Type XAWFS is made in SS316, type XAWG is made in GRP.

- Product range with many standard sizes.
- Ingress protection to meet harsh environment with IP66 as standard.
- Wide temperature range (-20°C to +60°C)
- Drainage flange to prevent penetration of water in XAWFS version.
- Control equipment possibilities.
- Several earthing alternatives.
- High operational reliability and cost efficiency, reduced lifetime maintenance costs.
- ATEX approved.

Applications

The range of control boxes/stations are designed to meet the various markets, and are ideal for offshore, Onshore, Petrochemical and Marine applications, and for all kind of industry where an explosive atmosphere may be present. Thousands of Technor control boxes/stations are installed on- and offshore during the last years. If you should have a particular need our sales staff will be happy to advise on this.



General Specifications

| | |
|-------------|---|
| Material | Acid resistant stainless steel SS316/GRP |
| IP Rating | IP66 according to IEC 60529 |
| Temperature | T6–T4 T85°C–T135°C |
| Approvals | INERIS-03ATEX-0122 |
| Standards | EN50014, EN50019, EN50018, EN50028, EN50281 |
| Ex-Code | EEx e em II ed IIC emd IIC T6-T85°C to T4-T135°C ⊕ II 2 GD |
| Marking | Ref. certificate |



Parameters relating to the safety

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|--|---|--|---|
| Rated Operational Characteristics AC15; A 600 Ue= 600 V, Ie= 1,2 A or Ue= 240 V, Ie= 3 A or Ue= 120 V, Ie= 6 A DC13; Q600 Ue= 600 V, Ie= 0,1 A or Ue= 250 V, Ie= 0,27 A or Ue= 125 V, Ie= 0,55 A Integral LED – 24V to 415V AC-DC | Terminals | Maximal Voltage | 660V acc. to model |
| | | Current density | -3,5A/mm ² for terminal ≤ 10mm ² |
| | | | -3A/mm ² for 16mm ² ≤ terminal ≤ 25mm ² |
| | -2,8A/mm ² for terminal ≤ 35mm ² limit at 360A | | |
| | Lights with transformers: | Maximal voltage | 500V/8V |
| | | Maximal current | 0,2A |
| | | Maximal power of lamp | 1,2W |
| | | Led + Thermal diffuser 8V | 0,6W |
| | Direct lights: | Maximal voltage | 400V |
| | | Maximal current | 0,016A |
| | | Maximal power of incandescent lamp | 2W |
| | | Maximal power of neon lamp | 1,5W |
| | Switches: | Led + Thermal diffuser 6 to 48V | 0,6W |
| | | Maximal voltage | 500V |
| | Maximal current | Maximal current | 10A |
| | | Ampere meters: 2 rates of current | 1 and 5A In the two cases I _{th} =50I _n and I _{dyn} =1,3 x 125I _n |

XAWFS Measurement Table

| Type | Width mm | Height mm | Depth mm | Weight kg | Dwg. ref | No of entries for control equipment | Part no: |
|--------|----------|-----------|----------|-----------|----------|-------------------------------------|-------------|
| XAWFS1 | 112 | 112 | 82 | 1,0 | TN-65-6 | 0 | TEAXAWFS1C* |
| | | | | | | 1 | TEAXAWFS101 |
| XAWFS2 | 112 | 152 | 82 | 1,2 | TN-66-6 | 0 | TEAXAWFS2C* |
| | | | | | | 1 | TEAXAWFS201 |
| | | | | | | 2 | TEAXAWFS202 |
| XAWFS3 | 112 | 197 | 82 | 1,4 | TN-67-6 | 0 | TEAXAWFS3C* |
| | | | | | | 2 | TEAXAWFS302 |
| | | | | | | 3 | TEAXAWFS303 |
| XAWFS4 | 112 | 242 | 82 | 1,6 | TN-68-6 | 0 | TEAXAWFS4C* |
| | | | | | | 3 | TEAXAWFS403 |
| | | | | | | 4 | TEAXAWFS404 |
| XAWFS5 | 112 | 297 | 82 | 1,9 | TN-69-6 | 0 | TEAXAWFS5C* |
| | | | | | | 4 | TEAXAWFS504 |
| | | | | | | 5 | TEAXAWFS505 |
| XAWFS6 | 112 | 332 | 82 | 2,1 | TN-70-6 | 0 | TEAXAWFS6C* |
| | | | | | | 4 | TEAXAWFS605 |
| | | | | | | 6 | TEAXAWFS606 |



The boxes are delivered as standard with screws only in lid. * 0 = Empty enclosure

XAWG Measurement Table

| Type | Width mm | Height mm | Depth mm | Weight kg | Dwg. ref | No of entries for control equipment | Part no: |
|-------|----------|-----------|----------|-----------|----------|-------------------------------------|------------|
| XAWG2 | 85 | 146 | 70 | 0,5 | TN-71-6 | 0 | TEAXAWG2C* |
| | | | | | | 1 | TEAXAWG201 |
| | | | | | | 2 | TEAXAWG202 |
| XAWG3 | 85 | 226 | 70 | 0,7 | TN-72-6 | 0 | TEAXAWG3C* |
| | | | | | | 3 | TEAXAWG303 |
| XAWG5 | 112 | 197 | 82 | 1,4 | TN-67-6 | 0 | TEAXAWG5C* |
| | | | | | | 4 | TEAXAWG504 |
| | | | | | | 5 | TEAXAWG505 |



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Hazardous area information & terminology

ATEX Directive

The ATEX Directive, derived from the French "ATmosphères EXplosibles" and formally known as 94/9/EC, contains the ESR (Essential Safety Requirements) to which electrical equipment and protective systems used within potentially explosive atmospheres must conform.

The new ATEX Directive currently in place within the European Union was made mandatory on 1st July 2003. Primarily intended for manufacturers of hazardous area equipment for use in the presence of flammable gases, vapours, fumes or dusts, the new directive requires a quality management system to be implemented.

Procedures for the design, manufacture and verification of products are to be approved by a notified body (i.e. DNV, NEMKO, etc.) and all equipment conforming to the new directive will feature CE and Ex Marking.

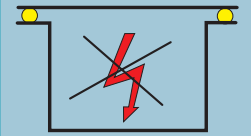
Zone Classification with the presence of DUST

| | |
|----------------|--|
| Zone 21 | An area in which an explosive atmosphere in the form of a cloud of combustible dust in air is likely to occur in normal operation of the plant. |
| Zone 22 | A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur in normal operation, if it does occur, will persist for a short period only. |

Applicable EX protection

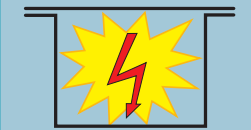
EEx e Protection

for electrical components that do not spark under normal working conditions but where measures are applied to prevent high temperatures and the occurrence of arcs and sparks internally.



EEx d Protection

Parts, which can ignite a potentially explosive atmosphere, are surrounded by an enclosure, which are designed to withstand the pressure of an internal explosion and to prevent the propagation of the explosion to the atmosphere surrounding the enclosure.



Zone Classification with the presence of GAS

| | |
|----------------------------|---|
| Zone 1 (Category 2) | An area in which explosive gas is likely to be present during normal operation of the plant. |
| Zone 2 (Category 3) | An area in which explosive gas is not continuously present, but may exist for a short period of time. |

