## EEx d IIC / IIB Explosion proof enclosures

## TNCD-TNBCD

## $C \in\langle\varepsilon\rangle$

## Features

The TNCD / TNBCD range comprises of many standard sizes of enclosures manufactured in SS316 Acid Resistant Stainless steel, this to give the maximum environmental protection. The enclosures allowed for standard electrical com ponents inside. Thus subsequent replacement and maintenance of the installed components is easy, and may be perform ed by trained electricians. If required, several enclosures may be assembled on a framework, with separate or common EEx e/i connection boxes. The enclosures can be delivered empty with U -component certificate or supplied fully assembled according to client's demands.

- Flexible product range with many standard sizes.
- Ingress protection to meet harsh environment with IP66 as standard.
- Suitable for demanding environments.
- Wide temperature range.
- Many cable entries possibilities.
- Several earthing alternatives.
- May be used with a EEx efi connection box.
- Window may be fitted in all sides.
- Motor starters.
- Alarm panels for offshore containers.
- Zenerbarriers.
- Transformers.
* Charging units.
- PLC.
- Control panels.
- Terminals.
- High operational reliability and reduced lifetime maintenance costs.
- ATEX and GOST approved.


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## Applications

The TNCD / TNBCD range of enclosures are designed to meet the harsh environments of the North Sea and are also ideal for Petrochemical and Marine applications as well for all kind of industry where an explosive atmosphere may be present. Thousands of Technor enclosures 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
IP rating TNCD
IP Rating TNBCD
Temperature TNCD
Temperature TNBCD
Approvals TNCD
Approvals TNBCD
Standards
Ex-Code

Lid gasket
Surface treatment
Earthing between
EExd and EEx efi enclosures Lid

Acid resistant stainless steel SS316
IP66 (IP67 upon request)
IP66 (IP67 and IP68 upon request)
$-20^{\circ} \mathrm{C}-+40^{\circ} \mathrm{C}(T 6)$, Option $-50^{\circ} \mathrm{C}-+60^{\circ} \mathrm{C}$
$-20^{\circ} \mathrm{C}-+50^{\circ} \mathrm{C}$ (Tb), Option $-50^{\circ} \mathrm{C}-+60^{\circ} \mathrm{C}$
NEMKO 03ATEX263U
NEMKO 03ATEX264U
Cenelec EN50014, EN50018
EExd IICAIB T6-T4
족 II $2 \mathrm{G} / \mathrm{D}$ or $\| 2(1 / 2) \mathrm{G} / \mathrm{D}+\mathrm{IM} 1$
viton
Glas blasted


Measurement table for EEx d IIC Explosion proof enclosures

| External dimensions |  |  |  |  |  |  |  |  | Intemal dimensions |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| THCD | Wide | Height | Depth | Total <br> Depth | Lid <br> aperature | Wide | Height | Depth | $\mathbf{K g}$ |  |  |  |
| 191918 | 190 | 190 | 180 | 213 | 140 | 170 | 170 | 131 | 16 |  |  |  |
| 282827 | 280 | 280 | 270 | 300 | 235 | 260 | 260 | 217 | 37 |  |  |  |
| 383827 | 380 | 380 | 270 | 300 | 335 | 360 | 360 | 217 | 60 |  |  |  |
| 57527 | 570 | 570 | 270 | 300 | 500 | 550 | 550 | 213 | 125 |  |  |  |



## Viewing window TNCD

The window is placed in centre of the lid. Windows (665) can also be placed on the sides or back wall. Viewing windows are available with the following diameters: $65 \mathrm{~mm}, 100 \mathrm{~mm}$ and 154 mm .

| Enclosure type | Maxinum window diameter |
| :---: | :---: |
| TNCD $1919 X X$ | 65 mm |
| TNCD 2828 XX | 100 mm |
| TNCD 3838 XX | 100 mm |
| TNCD 5757 XX | 154 mm |

## EEx d IIC / IIB Explosion proof enclosures

Measurement table for EEx e connection boxes

| TNGN THCC |  | $\underset{(H b i g h)}{\mathrm{H}}$ | $\underset{(\mathrm{Deph})}{1}$ | Kg |
| :---: | :---: | :---: | :---: | :---: |
| 191918 | 190 | 190 | 180 | 3.0 |
| 281927 | 280 | 190 | 270 | 4,4 |
| 282827 | 280 | 280 | 270 | 6,6 |
| 381927 | 380 | 190 | 270 | 4,6 |


| TNGN/ <br> TNG6 | A <br> (wide) | H <br> (Heigth) | I <br> (Depht) | $\mathbf{K g}$ |
| :---: | :---: | :---: | :---: | :---: |
| 383827 | 380 | 380 | 270 | 10,5 |
| 571927 | 570 | 190 | 270 | 9,6 |
| 573827 | 570 | 380 | 270 | 13,4 |
| 575727 | 570 | 570 | 270 | 19,7 |

Measure sin mm. Other sizes upon request





sertss

180.0.

## EEx d IIC / IIB Explosion proof enclosures



MEX : :-


Man -
SEX A-S


MEW C-S


MEN E-S

## EEx d IIC / IIB Explosion proof enclosures

Measurement table for EEx d IIB Explosion proof enclosures

| TNBCD |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | G | D | a | b | c | Weight | Window |  |
| 262531 | 300 | 290 | 315 | 230 | 226 | 216 | 265 | 47 kg | $65 / 100$ |  |
| 323321 | 360 | 370 | 215 | 260 | 286 | 296 | 165 | 59 kg | $65 / 100$ |  |
| 453535 | 490 | 390 | 355 | 420 | 416 | 316 | 305 | 89 kg | $65 / 100 / 154$ |  |
| 53835 | 615 | 420 | 355 | 545 | 541 | 346 | 305 | 113 kg | $65 / 100 / 154$ |  |

Measurement table for EEx e connection boxes

| TNGNTNG6 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | $\mathbf{E}$ | $\mathbf{F}$ | $\mathbf{G}$ |
| 202025 | 200 | 200 | 255 |
| 252015 | 250 | 200 | 155 |
| 383821 | 380 | 380 | 255 |
| 453825 | 450 | 380 | 255 |



Control and indication equipment can be fitted directly into the cover of the TNBCD EEx d enclosure, or in the EEx e connection box.


## Options:

EEx denclosure with wind ows in lid (665 or o100) or base (665).
Lamps or switches in lid or base, for EEx d enclosure, as well as EXx e enclosure.

* Option: With out hinges but with a sup port below the lid. (Holding the lid in correct position while fitting)

Material SS 316L.

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## Hazardous area information \& terminology ATEX Directive

The ATEX Directive, derived from the French "ATmosphères EXplosibles" and formally known as $94 / 9 / \mathrm{g}$ 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.

## Applicable EX protection

## EExd 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 atmosp here surrounding the enclosure.

## EExe Protection

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


## Zone Classification with the presence of GAS

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



