



Medium Voltage Switchgear Devices and Transformers
for Zone 1 Applications

BARTEC has developed switchgear and transformers for medium voltage applications in Zone 1 to ensure reliable operations in demanding environments. These units can distribute and transform medium and low voltages economically and safely.

Medium Voltage Switchgear Devices for Zone 1

BARTEC medium voltage feeding solutions combine knowledge in industrial medium voltage solutions with the high level of expertise needed to ensure safe protection for hazardous areas in Zone 1.

The BARTEC Zone 1 transformer solutions guarantee a failure-free operation as well as high availability and reliability due to the absence of rotating elements. The systems are natural air cooled which pre-empts the problem of environmental hazards due to oil loss. They are available in two different versions.

Ex e Transformers for Mobile Applications in Zone 1

The Ex e model is a unique transformer solution designed for applications in different environments. This unit features low weight, less than half the maintenance requirement compared with oil-cooled transformers and only one annual service.

Ex d Transformers for Stationary Applications in Zone 1

The Ex d model is an extremely robust transformer system with a standard industrial transformer in a high quality Ex d enclosure. It offers reliable operations over many years with minimal maintenance requirement.

BARTEC

Your partner for safety technology



The specialists at BARTEC have many years of experience in safety technology. They create solutions you can rely on: economical, reliable and for the future.



PORTFOLIO

- Switchgear
- Ring main unit
- Motor starter
- Splitter box

APPLICATION AREAS

Harsh environments like artificial islands or offshore platforms

FEATURES

Simple operation

The closed unit can be operated from the outside.

Efficient servicing

Low and medium voltage sections can be opened separately from one another.

Safe use

The low voltage unit can be independently removed without working in the medium voltage range.

PORTFOLIO

- Uninterrupted power supply system
- Distribution board
- Battery box

FEATURES

- Low maintenance
- High availability
- Weight reduced

APPLICATION AREAS

Mobile units, stand alone units, service container business, offshore

FEATURES

- Reliable:** only annual maintenance
- Robust:** designed for offshore and +50 °C
- Sustainable:** designed for long live time

APPLICATION AREAS

Harsh environments like offshore platforms, rigs or artificial islands

Medium Voltage Switchgear Devices

Explosion protection

ATEX	II 2G Ex d IIB T5 Gb -20 °C to +50 °C
Certification	BVS 14 ATEX E 143 X
Protection class (IEC 60529)	IP 66

Technical data

Dimensions	1700 x 1000 x 1700 mm
Weight	3300 kg
Operating voltage	up to 11,000 V
Rated current	circuit breaker 630 A contactor 400 A bus bar 630 A
Short time withstand current/duration	31.5 kA/3s
Bus bar system	Ex e, cable based and pluggable
Accessibility of industrial equipment	removable

BARTEC

Your partner
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technology.
Challenge us!

Ex e Transformers

Explosion protection

ATEX	II 2G Ex eb IIC T3/Ex eb IIC T3 -40 °C ≤ T _a ≤ +60 °C
Protection class (IEC 60529)	IP 66

Technical data

Enclosure	Ex e, SS316L, acid treated thin sheet reinforced bottom, pockets for forklift, optional lifting lugs, IP 66
Transformer	3-phase dry type AN heat impregnated, Class F. Vector group Dyn 11 (standard), multi tappings possible on both sides
Size range	2.5 kVA to 275 kVA primary: 3 x 115 to 3 x AC 1000 V secondary: 3 x 115 to 3 x AC 1000 V
Temperature monitoring	Ex e Pt100 sensors in each of the windings, 2 x redundant Pt100

Ex d Transformers

Explosion protection

ATEX	II 2G Ex d Gb IIB -40 °C ≤ T _a ≤ +60 °C Nemko 14ATEX2139X
Protection class (IEC 60529)	IP 66

Technical data

Enclosure	SS316L, shotblasted, IP 66 DE8BC148 DE8BC107
Transformer	3-phase dry type AN heat impregnated, Class F. Vector group Dyn 11 (standard), multi tappings possible on both sides
Size range	2.5 kVA to 63 kVA primary: 3 x 115 to 3 x AC 1000 V secondary: 3 x 115 to 3 x AC 1000 V
Temperature monitoring	Pt100 sensors in each of the windings, 2 x redundant Pt100