



**Installation:** hazardous areas - Zone 1 / 2 (Gases) - Zone 21 / 22 (Dusts)  
**Classification:** Group II - Category 2G 2D



**REFERENCE STANDARDS**

**Directive 2014/34/EU**

EXECUTION	(⊕ II 2 G) Ex db IIA or IIB or IIB+H2 T6...T3 (⊕ II 2 G) Ex db [ia/ib IIA or IIB or IIC Ga] IIA or IIB or IIB+H2 T6 (⊕ II 2 D) Ex tb IIIC T85°C...T200°C (⊕ II 2 D) Ex tb [ja Da/ib] IIIC T85°C ⊕ II 2 G Ex db IIC T6...T3 ⊕ II 2 G Ex db [ia/ib/ic IIA or IIB or IIC Ga/ Gc] IIC T6...T3 ⊕ II 2 D Ex tb IIIC T85°C...T200°C ⊕ II 2 D Ex tb [ja Da/ib/ic Dc] IIIC T85°C...T200°C ⊕ II 2 G Ex d e ia/ib ia mb IIC T6, T5 or T4 Gb ⊕ II 2 D Ex tb IIIC T85°C or T135°C Db
RULES OF COMPLIANCE	EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-11; EN/IEC 60079-31
PROTECTION DEGREE	IP66
AMBIENT TEMPERATURE	-60°C ÷ +60°C
OTHER AVAILABLE CERTIFICATES	IECEx INMETRO EAC RINA RUSSIAN MARINE CERTIFICATE (RMRS) UL NEC 505

**NEC - NEMA 4, 7, 9**

INSTALLATION	Class I - Groups B, C, e D Class II - Groups E, F, e G Class III
PROTECTION	4, 7 BCD, 9 EFG
PROTECTION DEGREE	IP66
AMBIENT TEMPERATURE	-20°C ÷ +40°C
CERTIFICATION AND COMPLIANCES	- UL Standard 1203 - 4 <sup>th</sup> Ed. (15 Sett. 2006) - Explosion-Proof / Dust-Ignition-Proof - Electrical Equipment for Use in Hazardous (Classified) Locations



**REFERENCE STANDARDS**

**Directive 2014/34/EU**

EXECUTION	(⊕ II 2 G) Ex db IIB+H2 T6...T3 (⊕ II 2 G) Ex db [ia/ib] IIB+H2 T6...T3 (⊕ II 2 D) Ex tb IIIC T85°C...T150°C
RULES OF COMPLIANCE	EN/IEC 60079-0; EN/IEC 60079-1; EN/IEC 60079-11; EN/IEC 60079-31
EC Type-Examination Certificate	INERIS 13 ATEX 0022X
PROTECTION DEGREE	IP66
AMBIENT TEMPERATURE	-60°C ÷ +80°C
OTHER AVAILABLE CERTIFICATES	Component: INERIS 13 ATEX 9019U IECEx: IECEx INE 13_0070X INMETRO: CEPEL 12.2139 EAC: TC RU C-IT.Г508.B.02506 RINA: ELE139017CS003 RUSSIAN MARINE CERTIFICATE (RMRS): 13.03518.315 NEC 505: UL 20141204-E302348 - Type rating NEMA 1, 12, 4 and 4X

**On Request Accessories:**

- Stainless steel pipes and fittings
- Galvanized steel epoxy painted supporting rack
- Stainless steel supporting rack
- Internal anticondensate painting orange RAL-2004
- External colours different from standard

**Description:**

“SWITCH-RACK” is a word usually adopted to indicate an ensemble of control units, signaling units, motor starters, switching units, and so on. Switch-racks are mechanically assembled on robust frame with various fixing solutions (ground, wall, etc.), electrically wired up on purpose. BARTEC-FEAM since over 50 years, designs and manufacturers switch-racks according to its own diagram or according to customer’s specifications, in full compliance with European CENELEC standards.

**INFORMATIONS:**

**Test and inspections:**

All components and documents are tested and checked at the various working stages , according to BARTEC-FEAM’s “Quality Plans”. The above mentioned Plans call for all test and checks necessary to ensure an execution “on purpose”. Whenever a strict, documented quality control execution is required please advise BARTEC-FEAM Sales Department. When the switchrack is completed ,an effective working inspection is carried out, and an “inspection report” is written. Customer’s inspectors are allowed in BARTEC-FEAM’s workshop to survey working evolution and to witness final inspection.

**Standard Tests and Checks:**

- |  |   |  |
|--|---|--|
| <ul style="list-style-type: none"> <li>• Visual and dimensional control</li> <li>• Working control</li> <li>• Equipment control</li> </ul> | <ul style="list-style-type: none"> <li>• Mechanical running control</li> <li>• Hydrostatic test</li> <li>• Insulation test</li> </ul> | <ul style="list-style-type: none"> <li>• Grinding check</li> <li>• Insulation resistance measuring</li> <li>• Insulation test / Electrical running test</li> </ul> |
|--|---|--|

**Ordering:**

The following technical information are needed to work out a switchrack. A direct consult with BARTEC-FEAM Sales Department is however advisable, especially when problems of space arise.

- A) Area classification and mode of protection.
- B) Applicable standards
- C) Power and auxiliary wiring diagrams or full, detailed description of switchrack’s work
- D) Maximum overall dimensions.  
Possibility of double front execution
- E) Location of incoming and outgoing cable entries
- F) Threading, size and number of hubs
- G) Type of cable entries
- H) Painting cycle, type and color
- I) Switchrack’s location (indoor or outdoor)
- L) Request of protective canopy(if needed)
- N) “Vendor List” of components to be respected (if any)

**Responsibility:**

Once acknowledged the order, BARTEC-FEAM Technical Dept. issues electrical and mechanical manufacturing drawings. These drawings are sent to customer “for approval” and whichever change has to be advised as soon as possible. We take full responsibility for engineering, purchasing and assembling of components ,wiring and erection of the ensemble ready for installation.



**REMARK:**

Due to the development of the national and international specifications and of the technology, the above technical characteristics showed on this bulletin can be considered as binding on our confirmation only.