

Technical Data and Specifications

IEC—XB Series

Description	Specification
Insulation material	Polyamide 6.6
Dielectric strength	600 kV/cm
Creep resistance	600 CTI
Internal insulation resistance	10 ¹² ohms cm
Surface resistance	10 ¹⁰ ohms
Flammability rating	UL 94 V0
Continuous operating temperature	−40 to 257°F (−40 to 125°C)

Modular Terminal Blocks for Potentially Explosive Environments

The standard modular terminal blocks from Eaton are approved for potentially explosive environments. In addition to the usual approvals, they also have been approved by a testing centre authorized by the EU. No extra approval is required in Intrinsic Safety type applications.

Modular terminal blocks on www.eaton.com fulfill the requirements for “Increased Safety” protection type when installation instructions are followed, and have a type examination certificate in accordance with the Ex directive Ex-RL 94/9/EU.

These test certificates are recognized in all the EU member states and beyond.

The modular terminal blocks are approved for fitting in Zone 1, the Ex environment, as well as Zone 2. Zone 1 fitting is conditional upon terminal blocks being used in connection boxes approved for EEx e type protection and having the equivalent of at least IP54 protection.

The EEx approved modular terminal blocks can be divided into the following groups:

- Screw connection terminal blocks
- Spring-cage connection terminal blocks
- Insulation Displacement Connection terminal blocks
- Mini terminal blocks
- Terminal blocks for specialized applications

More detailed information on modular terminal blocks in the EEx e area is available on the Internet at www.eaton.com for downloading.

Here you will find the following:

- Technical data in accordance with EN 50 019
- Approved accessories
- Important installation instructions and mounting diagrams
- EU type examination certificates
- General information on Ex protection

Identifications

Explosion protected electrical equipment must be marked so that the safety characteristics are identifiable. The identification of electrical equipment is described in the harmonized standard EN 50014, as shown in the following example:

EN 50014 Standard Example

Description	Identification
Manufacturer or trademark	Eaton
Type designation	XBUT25
Abbreviation of explosion protection	EEx e II
Protection type increased safety “e”	e
Equipment group	II
Mark of the testing body	KEMA
Approval number	05ATEX2158 U

Identification in Accordance with ATEX-RL

Electrical equipment that is certified in accordance with the ATEX 100a guideline also receives identification describing the site for use.

ATEX Guideline Example

Description	Identification
Manufacturing data	02.01.2004
Address of the manufacturer	Duncan, SC
Number of the appointed dept.	344
Common marking	Ex symbol
Equipment group	II
Category	2
Use in gas and/or dust atmospheres	G D

Screw Connection



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Screw Connection Terminal Blocks Overview

Product Description

The XBUT Series uses a screw connection system that is accepted worldwide and is suitable in most applications. The maintenance-free connection provides the reliability you expect from Eaton.

Application Description

Designed for applications with high demands, the XBUT Series screw terminal block has a maintenance-free wire connection. re-tightening of the terminal screws is not necessary to ensure proper operation. The screw locking technique prevents the screws from backing out. Copper wires can be clamped without pre-treatment or ferrules can be used for splicing protection. Multiple conductors can be connected in the same clamping mechanism, saving space.

Features

- Maintenance-free connections
- Global acceptance
- Multi-conductor connections
- Flexible Plug-in bridge system
- Large surface area for marking
- Standardized testing system
- Metal parts made of tin-plated copper alloy

Standards and Certifications

- UL and cUL recognized—File No. E67464
- CE approved
- LVD ①:
 - EN 60947-7-1
 - EN 60947-7-2
 - EN 60998-2-3
 - EN 60352-4/A1
- ATEX approval (Eex e applications)



Note

① Not all standards apply to all terminal blocks. Contact Eaton for details.