

## **Product Family Overview**

The XB Series offers a complete terminal block system with a universal range of accessories. Marking, bridging and testing accessories are standardised across the different clamping technologies—reducing inventory and logistics costs. The modular terminal block design allows for use of the different terminal block types together or individually, providing the highest degree of flexibility.

## **Application Description**

The metal portion of the XB Series terminal blocks are made from highgrade, strain-crack and corrosion-proof copper alloys. They won't experience any electrolytic corrosion or rusting, even when moisture is present. The metal surfaces are protected with a lead-free, galvanic nickel or tin plating.

The good electrical conductivity permits only a low temperature rise. The Polyamide 6.6 housings allow for operating temperatures up to 125°C and are certified for inflammability Class V0 in accordance with UL 94.

#### **Features**

**Global Acceptance**— The XB Series terminal blocks are designed to meet worldwide standards and the latest international requirements.

#### Flexible Plug-In Bridge System—

All 3 technologies (screw, spring and IDC) use the same bridge system, allowing for individual potential distribution and quickly bridged connections among the same terminal block type or across different types. The XB Series terminal blocks have 2 bridge shafts arranged in 1 line, making flexible chain bridging and skip bridging between non-adjacent terminal blocks possible. Plug-in bridges are available from 2 to 50 positions. Reducing bridges are also available to connect a larger terminal block to a smaller one.



XBUT4RD-50PK £27 for pack of 50



All models shown smaller than actual size.





#### **Large Surface Area for Marking—**

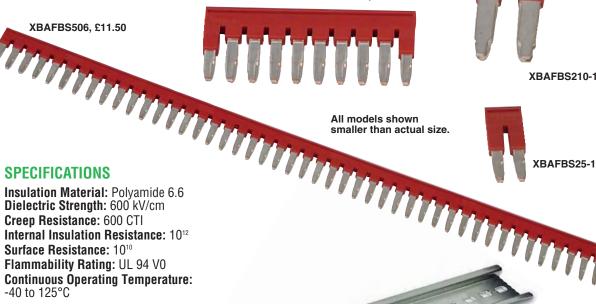
All XB Series terminal blocks have generously sized surface areas for labeling. This allows for clearly labeled wiring which results in reduced start-up time and simplifies activities such as testing and maintenance. There are provisions for marking individual terminal blocks and end stops, strips of terminal blocks, and large groups of terminal blocks.

## Standardised Testing System—

All test plugs make contact in one of the easily accessible bridge shafts. A 2.3 mm diameter test plug is available for individual measuring wires. Modular test plugs are also available for more advanced testing.



XBAFBS105-10PK, £18.25





XBAFBS210-10PK, £7.50

XBAFBS25-10PK, £2.30

XBAFBS506, £11.50

-40 to 125°C

STANDARDS AND CERTIFICATIONS

**UL** and cUL Recognised:

File no. E67464

LVD\*: EN 60947-7-1, EN 60947-7-2, EN 60998-2-3, EN 60352-4/A1 **ATEX Approval:** Eex e applications

\* Not all standards apply to all terminal blocks.



The standard modular terminal blocks are approved for potentially explosive environments. In addition to the usual approvals, they also have been approved by a testing center authorised by the EU. No extra approval is required in intrinsic safety type applications. Modular terminal blocks on the internet address listed below 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 recognised 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

XBANS3575P, £6

- Spring-cage connection terminal blocks
- Insulation displacement connection terminal blocks
- Mini terminal blocks
- Terminal blocks for specialised applications

#### Identification

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

TABLE 55-1. EN 50014 STANDARD EXAMPLE	
Type Designation	XBUT25
Abbreviation of Explosion Protection	EEx e II
Protection Type Increased Safety "e"	е
Equipment Group	II
Mark of the Testing Body	KEMA
Approval Number	05ATEX2158 U
Safety "e"  Equipment Group  Mark of the Testing Body	KEM



#### **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.

TABLE 55-2. ATEX GUEXAMPLE	JIDELINE
Manufacturing Data	02.

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



## **SPECIFICATIONS FOR XBUT16**

Terminal Width: 12 mm

Maximum Wire Size: 4 AWG/16 mm<sup>2</sup>

IEC 60 947-7-1 in V/A/AWG:

1000/101/17-4

**UL-cUL Ratings in V/A/AWG:** 

600/85/16-4

TECHNICAL DATA DIMENSIONS Width/Length/Cover Width in mm:

12/52.8/2.2

Height for 35 x 7.5/35 x 15 in mm:

54.8/62.3

## TECHNICAL DATA IN ACCORDANCE WITH IEC

Maximum Load Current in A/ Cross-Section in mm²: 101/25 Rated Surge Voltage in kV/ Contamination Class: 8/3

Surge Voltage Category/Insulating

Material Group: |||/|

#### **CONNECTION CAPACITY**

Stranded with Ferrule/with Ferrule and Plastic Sleeve in mm<sup>2</sup>:

1.0 to 16/1.0 to 16

# MULTI-CONDUCTOR CONNECTION (SAME CROSS-SECTION)

Solid/Stranded in mm<sup>2</sup>:

1.0 to 6/1.0 to 4

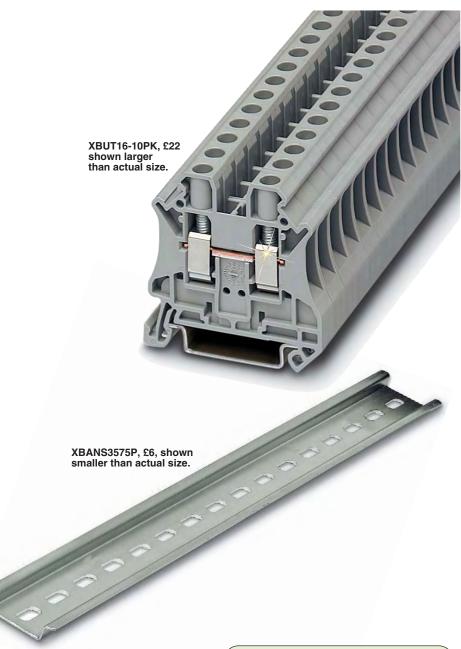
Stranded with Ferrules without Plastic

Sleeve in mm<sup>2</sup>: 1.0 to 4

Stranded with Twin Ferrule with Plastic Sleeve in mm<sup>2</sup>: 0.75 to 10 Stripping Length in mm: 10

Thread: M5

Torque in Nm: 2.5 to 3.0



To Order (Specify Mode	el Number)	AVAILABLE FOR FAST DELIVERY!	
MODEL NO.	PRICE	DESCRIPTION	
XBUT16-10PK	£22.00	Grey single level connection, pack of 10	
ACCESSORIES			
XBACUT16-10PK	£3.30	Grey end cover pack of 10	
XBAFBS212-10PK	8.90	Plug-in bridge pack of 10	
XBMZB10-10PK	3.10	8.22 mm white blank marker strip pack of 10	
XBANS3575P	6.00	DIN rail 35 x 7.5 mm x 2 m slotted	
XBANS3575U	6.20	DIN rail 35 x 7.5 mm x 2 m solid	
XBANS3515P	11.50	DIN rail 35 x 15 mm x 2 m slotted	
XBANS3515U	11.50	DIN rail 35 x 15 mm x 2 m solid	
XBAES35C-50PK	28.00	1-screw mounted end stop pack of 50	
XBAES35T-50PK	21.00	3-screw mounted end stop pack of 50	
XBAES35N-50PK	17.75	Snap-on end stop pack of 50	

Ordering Example: XBUT16-10PK, grey terminal blocks, XBANS3575P, DIN rail, £22 + 6 = £28.

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