



TERMINAL BLOCKS OVERVIEW

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

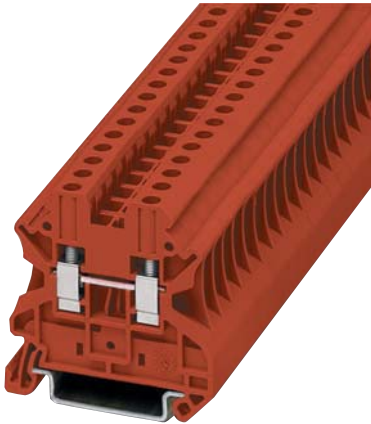
The metal portion of the XB Series terminal blocks are made from highgrade, strain-crack and corrosion-proof copper alloys. They won't experience any electrolytic corrosion or rusting, even when moisture is present. The metal surfaces are protected with a lead-free, galvanic nickel or tin plating.

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.

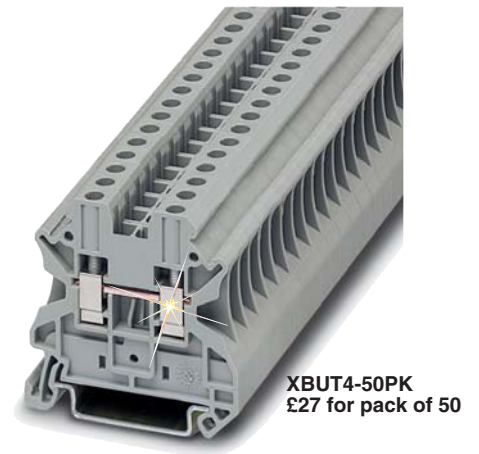
Features

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.



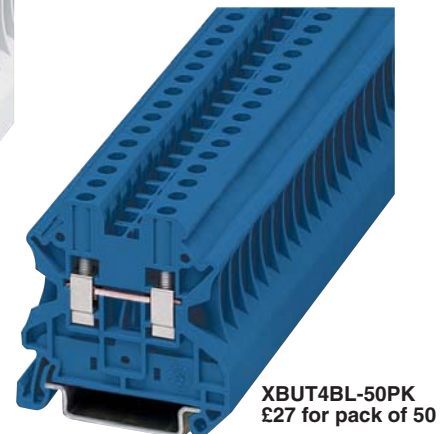
XBUT4RD-50PK
£27 for pack of 50



All models shown smaller than actual size.



XBUT4WH-50PK
£27 for pack of 50

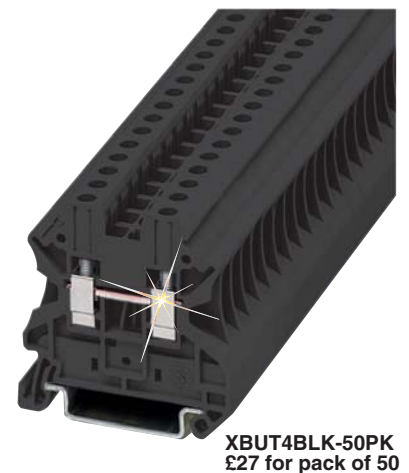


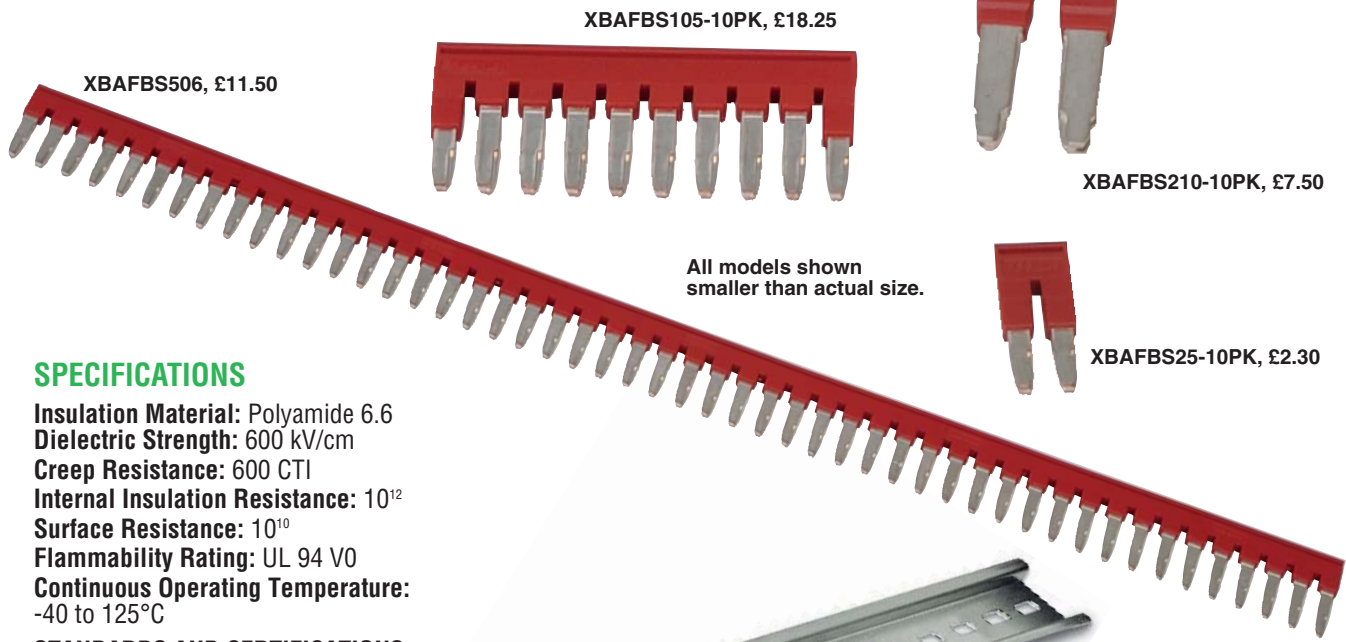
Large Surface Area for Marking

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.





SPECIFICATIONS

Insulation Material: Polyamide 6.6
Dielectric Strength: 600 kV/cm
Creep Resistance: 600 CTI
Internal Insulation Resistance: 10^{12}
Surface Resistance: 10^{10}
Flammability Rating: UL 94 V0
Continuous Operating Temperature: -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.

Modular Terminal Blocks for Potentially Explosive Environments

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
- + 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”	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.

TABLE 55-2. ATEX GUIDELINE EXAMPLE	
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



FEED-THROUGH TERMINAL BLOCK

**XBUT Series
Starts at
£26
Pack of 50**



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.

Designed for applications with high demands, the XBUT Series screw terminal block has a maintenance-free wire connection. 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.

The XBUT terminal blocks feature a compact design and maintenance-free screw connection. There is a double bridge shaft providing maximum flexibility. The double bridge shaft can accommodate individual chain bridging and step down bridging from other terminal blocks. There are numerous options for accessories, including those for testing and marking. Terminal blocks are available for wire cross-sections ranging from 2.5 mm² (12 AWG) to 50 mm² (0 AWG).

- ✦ Maintenance-Free Connections
- ✦ Global Acceptance
- ✦ Multi-Conductor Connections
- ✦ Flexible Plug-In Bridge System
- ✦ Large Surface Area for Marking
- ✦ Standardised Testing System
- ✦ Metal Parts Made of Tin-Plated Copper Alloy

SPECIFICATIONS FOR XBUT25

Terminal Width: 5.2 mm
Maximum Wire Size: 12 AWG/2.5 mm²
IEC 60 947-7-1 in V/A/AWG:
 800/32/26-12
EN 50 019¹ in V/A/AWG:
 750/22 or 28/26-12
UL-cUL Ratings in V/A/AWG:
 600/20/26-12

TECHNICAL DATA DIMENSIONS
Width/Length/Cover Width in mm:
 5.2/46.9/2.2
Height for 35 x 7.5/35 x 15 in mm:
 47.5/55.0

TECHNICAL DATA IN ACCORDANCE WITH IEC
Maximum Load Current in A/Cross Section in mm²: 32 / 4
Rated Surge Voltage in kV/Contamination Class: 8 / 3
Surge Voltage Category/Insulating Material Group: III / II

CONNECTION CAPACITY
Stranded with Ferrule/with Ferrule and Plastic Sleeve in mm²:
 0.25 to 2.5/0.25 to 2.5

MULTI-CONDUCTOR CONNECTION (SAME CROSS-SECTION)
Solid/Stranded in mm²:
 0.14 to 1.5/0.14 to 1.5
Stranded with Ferrules without Plastic Sleeve in mm²: 0.25 to 1.5
Stranded with Twin Ferrule with Plastic Sleeve in mm²: 0.5 to 1.5
Stripping Length in mm: 9
Thread: M3
Torque in Nm: 0.6 to 0.8

XBANS3575P, £6, shown smaller than actual size.



XBUT25-50PK, £26, shown smaller than actual size.



To Order (Specify Model Number)

MOST POPULAR MODELS HIGHLIGHTED!

MODEL NO.	PRICE	DESCRIPTION
XBUT25-50PK	£26.00	Grey single level connection, pack of 50
XBUT25BU-50PK	26.00	Blue single level connection, pack of 50
ACCESSORIES		
XBACUT10-10PK	£2.40	Grey end cover pack of 10
XBATUT10-10PK	3.10	Grey partition plate pack of 10
XBAFBS25-10PK	2.30	Red 2 position plug-in bridge pack of 10
XBAFBS35-10PK	4.50	Red 3 position plug-in bridge pack of 10
XBAFBS55-10PK	8.70	Red 5 position plug-in bridge pack of 10
XBAFBS105-10PK	18.25	Red 10 position plug-in bridge pack of 10
XBAFBS505	9.30	Red 50 position plug-in bridge
XBATSPA14-10PK	54.00	Test adaptor pack of 10
XBMZB5-10PK	3.10	5.2 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 slotted
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

Comes with instruction sheet.

Ordering Example: XBUT25-50PK, grey terminal blocks, XBACUT10-10PK, grey end covers, £26 + 2.40 = £28.40.

Note 1: EU type-examination certificate number KEMA 05ATEX2158U.

omega.co.uk[®]

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

www.omega.co.uk



UNITED STATES

www.omega.com

1-800-TC-OMEGA

Stamford, CT.

CANADA

www.omega.ca

Laval(Quebec)

1-800-TC-OMEGA

GERMANY

www.omega.de

Deckenpfronn, Germany

0800-8266342

UNITED KINGDOM

www.omega.co.uk

Manchester, England

0800-488-488

FRANCE

www.omega.fr

088-466-342

CZECH REPUBLIC

www.omegaeng.cz

Karviná, Czech Republic

596-311-899

BENELUX

www.omega.nl

0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters