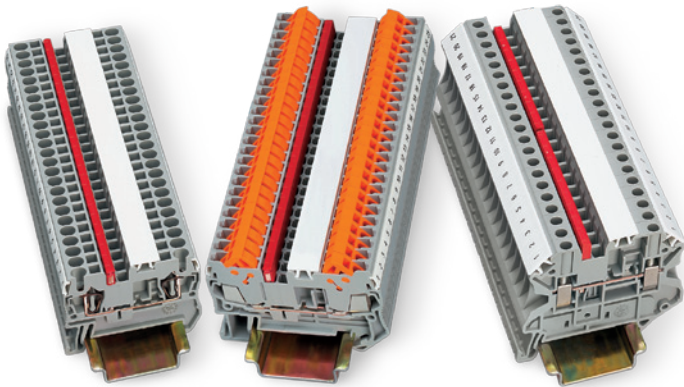


# XB IEC terminal blocks— versatility, quality, and reliability



## Little things make a big difference.

The complete line of Eaton motor control solutions for OEMs includes everything from sophisticated drives and power control to logic components like pushbuttons and terminal blocks—all the latest in technology. The **XB** IEC terminal blocks make a big difference with screw type, spring cage and insulation displacement connection (IDC) technologies. Hybrid terminal blocks offer the best of both worlds with IDC or spring cage technology on one side and a universal screw connection on the other, giving you the options you need, while common profiles and accessories help keep your business efficient.

### Three connection methods, one complete line

All **XB** terminal block types—screw, spring cage and IDC—have a dual bridge shaft with the same shape and common accessories, reducing inventory and simplifying engineering efforts. **XB** offers a great solution for bridging, marking and simplified testing.

### Fast distribution

Arranged in a line over all the terminal blocks, these shafts permit the connections systems to be combined.

### Easy to read markings

All the terminal points of **XB** terminal blocks have a large area available for marking, facilitating identification during testing and maintenance work. Also available are snap-on, large-area marker carriers for group and terminal strip marking.

With identical accessories, you can use screw, spring cage or IDC terminal blocks in combinations to fit your application needs.

### Screw type

- Low contact resistance
- Nickel-plated copper alloy for corrosive environments
- Suited for material handling, petrochemical, water and wastewater, pulp and paper, and most other industries



### Spring cage type

- Rugged contact spring for high-vibration environments
- Suited for mass transportation/ railroad, elevator/escalator, shipbuilding and machine-building industries



### Insulation displacement (IDC)

- High volume applications where speed of termination is critical
- Hybrid blocks with IDC on one side for factory wiring and screw or spring technology on the other for field wiring are also available



*Powering Business Worldwide*

## Universal screw terminal connection

**XB** screw type terminal blocks, catalog prefix XBUT, fit most applications. The technology features a multi-conductor connection and maximum contact forces. The style combines the advantages of a screw connection system with the benefit of spring-loaded contacts. The snap-fit ground (PE) terminal block and standard plug-in bridges allow for critical time savings when assembling terminal strips.

<b>XBUT Available Product</b>
Feed-through terminal blocks
2-, 3- and 4-conductor modular terminal blocks
Multiple level terminal blocks
Knife disconnect terminals
Fuse terminal blocks
Disconnect and component terminal blocks
Diode terminal blocks
Wide variety of available accessories

## Spring cage terminal connection

Featuring a smaller spring technology, the spring cage terminal style saves significant space without giving up large surface marking and generous wire entrance, as well as its flexible push-in bridging system. **XB** spring cage terminal blocks are available for rated conductor cross sections of 1.5–35 mm<sup>2</sup>.

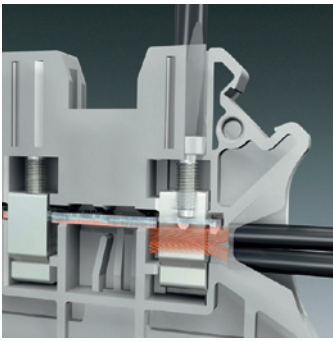
<b>XBPT Available Product</b>
Feed-through terminal blocks
2-, 3- and 4-conductor modular terminal blocks
3-conductor hybrid modular terminal blocks (spring cage to screw terminals)
Double-level terminal blocks
Double-level 3-conductor terminal blocks
Three-level terminal blocks
Disconnect terminal blocks
Fuse terminal blocks
Diode terminal blocks
Pluggable terminal blocks for disconnect, fuse and component plugs
Wide variety of available accessories

## Insulation displacement connection (IDC)

Designed for critical time-saving applications. Connect the conductor without having to strip it first—amounting to up to a 60% time savings. With the insulation displacement contact, this style of terminal block ensures a reliable electrical connection with a simple, audible click.

The IDC style of **XB** terminal blocks is also available in a hybrid version, with the fast, time-saving IDC connection for wiring in the control cabinet and screw terminals for field wiring of the conductors that come from outside. The hybrid version allows you to profit from the fast IDC connection and still offer your customers their preferred connection system.

<b>XBQT Available Product</b>
2-, 3- and 4-conductor modular terminal blocks
Double-level modular terminal blocks
Disconnect terminal blocks
Disconnect, fuse and component plugs
Hybrid terminal blocks with screw connections
Wide variety of available accessories

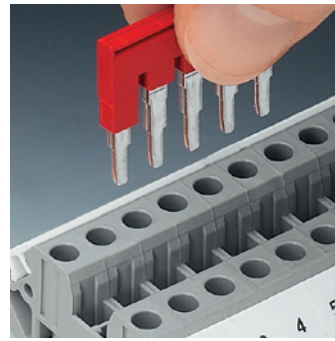


A screw type connection is characterized by three main features:

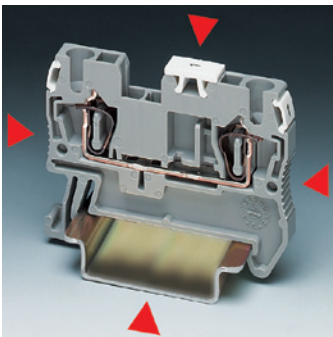
- Metals made of high-strength copper alloys
- Multi-conductor connection
- Unique maintenance-free design prevents screw back-out when properly torqued



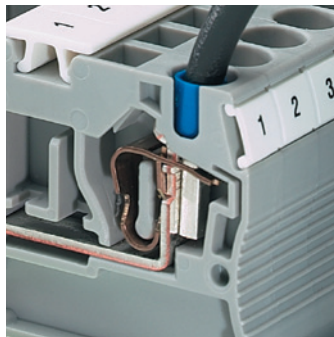
Ground terminal blocks of the same shape are simply snapped onto the DIN rail in order to make contact. This mechanically and electrically efficient contacting meets all the requirements of IEC 60947-7-2.



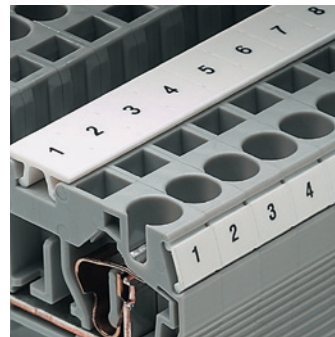
Standardized plug-in bridges allow potential distribution to be implemented quickly. Two bridge shafts make flexible chain and skip bridging, or bridging between non-adjacent terminal blocks, possible.



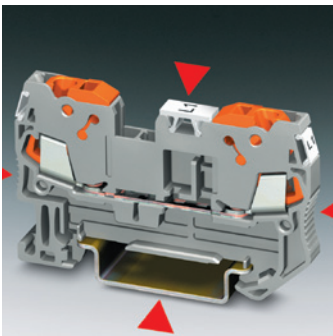
Front entry spring cage terminal blocks are ideally suited to control systems where space is restricted because the wire and screwdriver come in parallel from above.



Due to the large amount of connection space, **XB** spring cage terminal blocks offer a fast wiring option for solid and stranded conductors, with or without the use of ferrules.



Large-area marking offers clear identification at the terminal center—a prerequisite for safe, time-saving installation and end marking for labeling each terminal point.



Conductors of 0.25–2.5 mm<sup>2</sup> and 24A are connected using a compact insulation displacement contact. High-grade special alloys and snap fittings of the



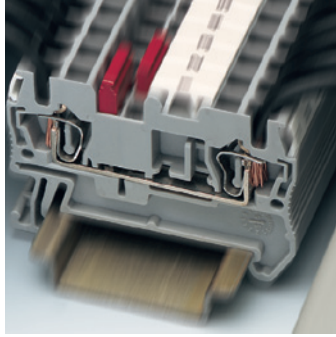
switching statuses ensure a reliable electrical connection, and large-surface, spring-loaded contact points guarantee a current-carrying capacity of 17.5A (IEC).



**No wire stripping or fitting needed**

Cut conductors to the correct length, and actuate the lever to make the connection. Plus, IDC is operated with a standard screwdriver, so no need for special tools.

The universal concept of the design ensures that feed-through, multi-conductor, disconnect and double-level terminal blocks are equipped with a dual bridge channel and are therefore not only compatible with each other, but also with XBPT spring cage terminal blocks.



### Reliability and quality

**XB** IEC terminal blocks will fill your basket of reliable quality solutions for your business. International approvals, vibration and shock resistance, and explosion and fire protection are just some of the features the **XB** line offers you and your customers.

**XB** terminal blocks are tested and approved for a wide range of certifications, including EN and IEC standards, cULus, and CE, providing a globally rated connection and termination system for shipping panels and machines around the world.

All three connection systems guarantee the highest contact reliability on the market, even in the case of high vibration environments. Tested in accordance with railway standard EN 50 155, **XB** terminal blocks are suited for use in safety-relevant applications where vibration stressing occurs.

The highest level of safety is standard because of routine testing in accordance with the ATEX-100a guideline. Standard **XB** terminal blocks are approved and certified for use in potentially explosive areas. Maximum safety is assured because

high-quality material is used exclusively for the insulation housing. This highly durable material is non-flammable and fulfills the highest requirements of classification V0 in accordance with UL® 94.

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