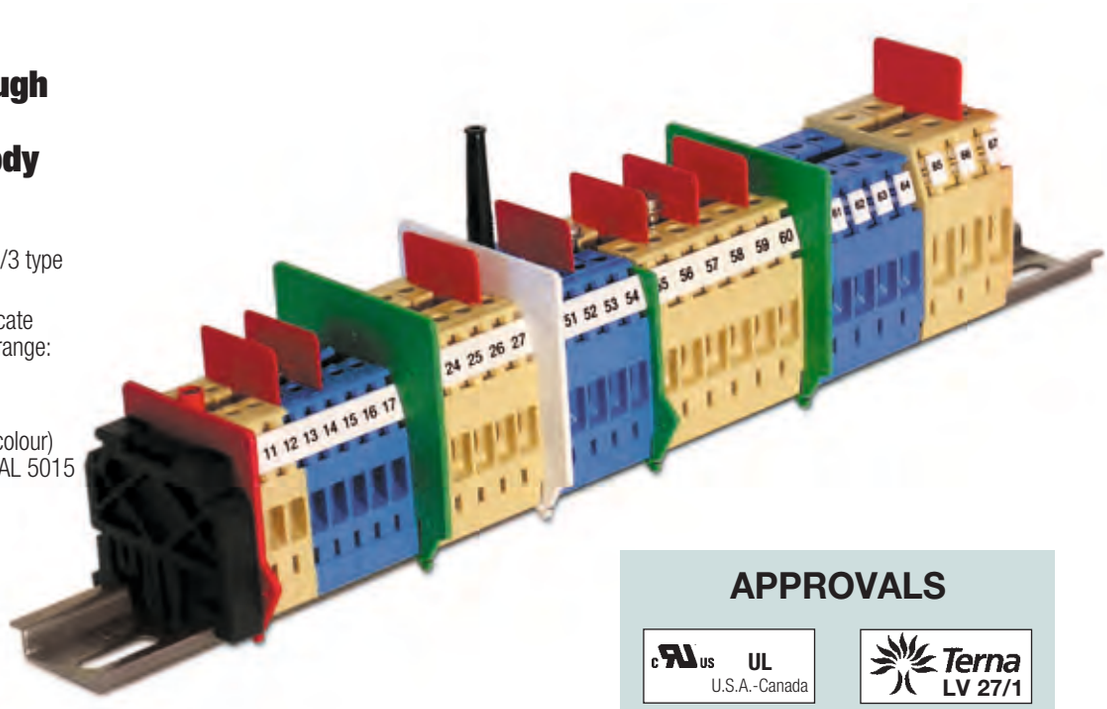
CBD Series

Screw-clamp feed-through terminal blocks with polyamide insulating body

- UL94V-0 flame behaviour
- universal mounting onto PR/DIN and PR/3 type rails according to IEC 60715 Std.
- **CESI 01 ATEX 090 U** Ex e (Ex) certificate I M2 / II 2 G D operating temperature range: –40 ÷ +80 °C
- **CoC IEC Ex CES 09.0009U** Ex e II
- available in standard (beige RAL 1001 colour) or (Ex)i "intrinsic safety" circuits (blue RAL 5015 colour) versions



APPROVALS

UL U.S.A.-Canada
Terna LV 27/1
KEMA - KEUR The Netherlands
CESI ATEX Ex e Italy
Enel Distribuzione DV 27/1
BBJ-SEP Poland
R.I.NA. Italy

The CBD Series consists of eight sizes, featuring:
- reduced overall dimension
- high connecting capacity
- superior effective current carrying capacity, with respect to the prescribed reference values
- very low contact resistance of the resulting connection
- materials of excellent quality and, consequently, maximum reliability throughout time
- very practical usage

Cabur has always designated every product through a type reference, consisting of letters (usually 3) and a number, with an interposing full-stop.
With this number the **rated cross-section** of the terminal block itself has always been defined; this value, as the reference Standard states *"…is a value of connectable conductor cross-section, stated by the manufacturer, and to which certain thermal, mechanical and electrical requirements are referred"*.
Nevertheless, the application field of the terminal block is much wider and is defined by its **connecting capacity**, in other words the range of conductor sizes, both rigid and flexible, minimum and maximum, that a terminal block can connect, fully respecting all the parameters given by the reference standards.

In the following table, in fact, the "usual" type reference of every terminal block has been integrated with the addition, after the existing digits which retain the indication of the rated cross-section, of another numerical value (written in smaller characters, in red and separated by the digits indicating the rated cross-section by a /). This second group of digits represents, in mm^2, the **maximum size of the flexible conductor that can effectively be connected to the terminal block**. If rigid conductors (solid or stranded) are to be connected, reference must be always made to the indications given by the relevant technical characteristics of each product and under "connecting capacity"; in most cases in fact the size of the maximum rigid conductor is even greater.
By stating the wide connecting capacity feature, with the occasion some sizes among the CBD Series have been reconsidered; firmly maintaining the eight rated cross-sections, the existing types CBD.25 and CBD.35 have been reviewed and, after the actions and the verifications which have taken place, re-evaluated as **CBD.35** e **CBD.50**; the latter rated cross-section up to this point, has never considered within Cabur product range, but has nevertheless wide use.

Type	Rated cross section (mm^2)	Flexible conductor (mm^2)		Rigid conductor (mm^2)		Gauge	Max. current (A)
		min.	max.	min.	max.		
CBD.2/4	2,5	0,5	4	0,5	4	A3	29
CBD.4/6	4	0,5	6	0,5	6	A4	40
CBD.6/10	6	0,5	10	0,5	10	A5	58
CBD.10/16	10	0,5	16	0,5	16	B6	77
CBD.16/25	16	0,5	25	0,5	25	B7	104
CBD.35/35	35	0,5	35	0,5	50	B8	147
CBD.50/50	50	1,5	50	1,0	70	B9	180
CBD.70/95	70	1,5	95	1,0	95	B11	250

type of connection:
by means of screws, on both sides, indirect and anti-loosening. The tightening screws are accessible only with an adequate screwdriver and the particular shape of the screws makes it impossible to lose them. The tightening process by means of screws ensures the best mechanical performance and efficiency of the current flow. It is suitable for the connection, with or without preparation of conductors of all cross-sections. The tightening and un-tightening operations are extremely simple and they can be carried out with tools, such as screwdrivers, which are always at hand. Its is however important to use an appropriately sized screwdriver in order to avoid the damaging either of the screw itself or the insulating body.

conducting body:
of the tube type **entirely of a copper and zinc alloy and treated with nickel-plating**; the characteristics of the material used and the manufacturing methods are such as to avoid the phenomenon of "seasoning cracking".

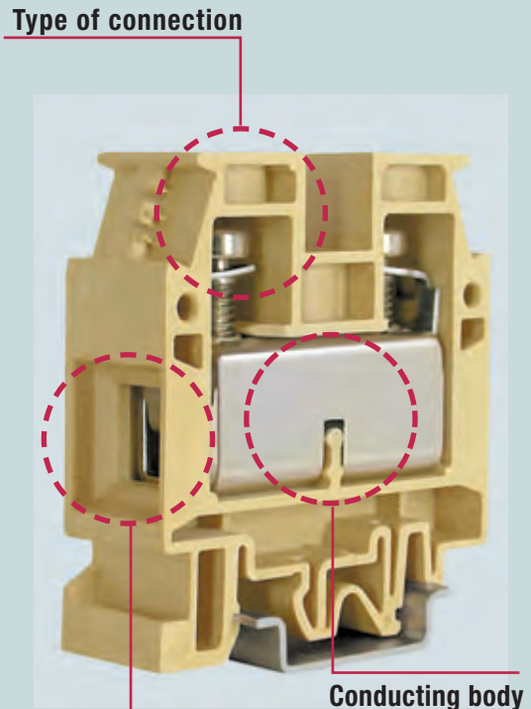
tightening reliability:
special orthogonal grooves on the bottom of the conducting body and on the lower surface of the pressure plates, ensure under all conditions the perfect electrical contact with the conductors and an efficient mechanical clamp. The grip is made particularly effective by the spring function of the pressure plate, which in a certain way and under the pushing action of the screws, tends to flex; in this way a reaction to the head of the screw itself, is exerted, resisting unscrewing, even under dynamic stress (vibrations).

ease of insertion:
insertion of the conductor into the terminal block is made easy by:
- sloping entrance planes on the insulating body
- the rounded edges of the pressure plate
- an appropriately sized entrance hole, with reference to the diameter of the maximum permitted conductor. The depth into which the conductor can be inserted is limited by a partition in the insulating body.

other functions:
besides their main as feed-through function, CBD terminal blocks are designed in such a way as to carry out other functions. In fact, by means of a prearranged threaded hole on the upper side of the conducting body it is possible:
- to create a cross-connection (either permanent or switchable) between two adjoining terminal blocks
- to create a multiple common bar connection between several adjoining terminal blocks
- to insert a socket for a test plug
- to insert a composable test plug for multiple signal shunting.

marking: all CBD terminal blocks can be marked on both sides by using CNU/8, SNZ or CSC marking tags (the latter system allows the composition of alphanumeric marking up to a maximum of 6 characters (an ADR/6 adapter though is required if more than 4 characters are to be inserted on each side).

mounting: CBD series polyamide terminal blocks are designed to be mounted on two types of rail, **"G32"** or **"TH/35"** (acc. to the IEC 60715), with obvious advantages towards supply, management and use in general of the product.



SNZ marking


CNU/8 marking


CSC marking


TH/35-7,5 rail


TH/35-15 rail


"G 32" rail