

Ex e Instruction manual N° 6

TE...D Series type "increased safety" terminal blocks, are manufactured according to the prescriptions given by IEC 60079-0 and IEC 60079-7 Standards according to IECEx Certification Scheme and IEC 60079-0 and IEC 60079-7 Standards according to ATEX 2014/34/EU Directive.

TE...D Series is covered by IECEx CES 09.0010U and 02 ATEX 061U Certificates

TE...D Series terminal blocks are also designed and manufactured in compliance with IEC / EN 60947-1 and IEC / EN 60947-7-2 reference product standards.

Terminal blocks (components) must be inserted in Ex eb enclosures. The terminal blocks + enclosure assembly must be subjected to separate certification.

TE...D Series terminal blocks are suited for a service temperature range between - 40 and + 110 °C.

Ambient temperature range shall be between - 40 and + 40 °C for T6 applications.

ATEX Marking:



I M2 Ex eb I Mb
II 2 G Ex eb IIC Gb

IECEx Marking:

Ex eb I Mb
Ex eb IIC Gb



ATEX Marking description

0722	= number of the ATEX surveillance Notifying Body (CESI)
I M 2	= group I (mines), category M 2
II 2 G	= group II (surface), category 2 G (explosive atmosphere with presence of GAS)
Ex eb	= "increased safety" protection mode
I	= gas group I (mines)
IIC	= gas group IIC (Acetylene)
Gb	= E.P.L. (surface)
Mb	= E.P.L. (mines)
TE.../D	= terminal block series or type
(es.) 6	= rated cross-section of terminal block (es. 6mm ²)

IEC Ex Marking description

Ex eb	= "increased safety" protection mode
I	= gas group I (mines)
IIC	= gas group IIC (Acetylene)
Gb	= E.P.L. (surface)
Mb	= E.P.L. (mines)


Persona Autorizzata ATEX

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Terminal block	Rated cross-section [mm ²]	Gauge according to IEC 60947-1	Minimum / maximum cross-section of flexible conductor [mm ²]	Minimum / maximum cross-section of rigid conductor [mm ²]	Rated current [A] (*) (***)	Resistance of terminal block [Ω] (**)
TE.6/D	6	A5	0,5 / 6	0,5 / 10	41	4,86 x 10 ⁻⁴
TE.10/D	10	B6	0,5 / 10	0,5 / 16	57	5,10 x 10 ⁻⁴
TE.16/D	16	B7	0,5 / 16	0,5 / 25	76	4,31 x 10 ⁻⁴
TE.50/D	50	B9	1,5 / 50	1 / 70	150	1,98 x 10 ⁻⁴

Notes

(*): According to paragraph 8.4.5 of IEC 60947-1 Std.

(**): Values calculated from the results of the voltage drop test according to paragraph 8.4.4 of IEC 60947-1 Std.

(***): Rated voltage values can be subjected to a ± 10 % tolerance as listed in Table 2 of IEC 60079-7 Std.

(****): Ambient temperature according to paragraph 8.3.3.3.1 of IEC 60947-1 Std.

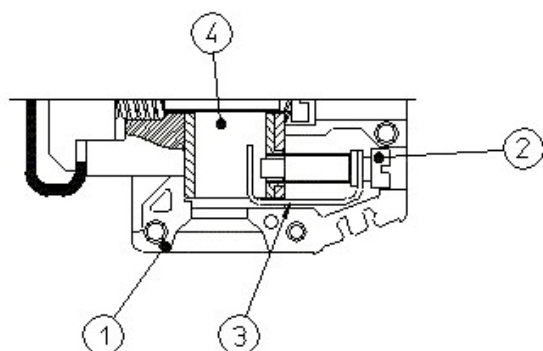


Fig. A

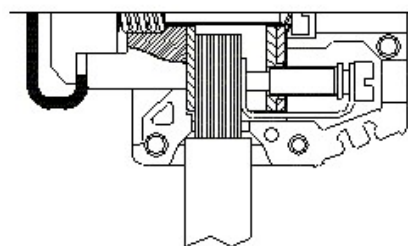


Fig. B

POSITION	COMPONENT
1	Insulating body
2	Tightening screw
3	Pressure plate
4	Conducting body

TERMINAL BLOCK	INSULATION STRIPPING LENGTH [mm]	TIGHTENING TORQUE VALUES [Nm] (*)
TE.6/D	12	0,8
TE.10/D	13	1,2
TE.16/D	13	1,8
TE.50/D	17	2,5


Note(*): values taken from Table 4 of IEC 60947-1 Std.

TE.../D Series Cabur terminal blocks are designed in order to enable the operator to perform a quick and safe connection of electrical conductors.

Each clamping unit can house only one conductor

For the connection of the conductors it is necessary to:

- 1) Unloosen the screw (Pos.2 - Fig. A) until it reaches its maximum height; in this position the screw is kept captive as the pressure plate (Pos. 3) obliges the screw to remain in its housing.
Once this operation is performed, the conductor insertion hole is widely open to its maximum receiving capability.
- 2) Prepare the conductor, by stripping its end from the insulating protection (Fig. B) and according to the stripping length given in the table.
Then introduce it in the terminal block, until it reaches the separating wall; at this stage, whilst keeping the conductor in place with one hand, the screw must be tightened, by applying the torque values given in the table and the connection secured.
In this position, the pressure plate acts as a spring, avoiding the screw to unloosen itself

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