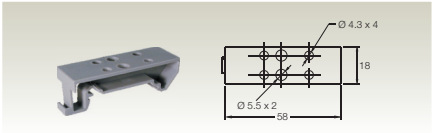
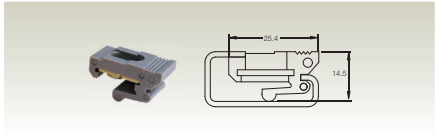
TERMINAL BLOCK ACCESSORIES

MOUNTING BASE

CMTB35 is used to assemble components on a Din Rail. The mounting base has 4 holes of Ø4.3mm and 2 holes of Ø5.5mm. CA902 can be used to fasten Din 15 Rail on to the Din 32 Rail.





Cat.No.	CMTB35	CA902
Dimension	58 x 18 x 18 mm	14.5 x 25.4 x 11.8 mm
Suitable for	Din 35 rail mounting	Din 32 Rail
Std. Pack	50	50

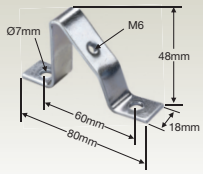
MOUNTING BRACKETS

These are used for better access and increased clearance from the surface of the panel. These brackets are zinc plated & chromate passivated.

CA603 - Can be used to install mounting rails at an angle of 45° to the panel surface.

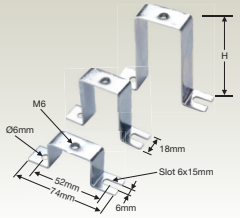
CA703 / CA803 / CA903 - Are used for fixing mounting rails at different heights.

CA603



Cat. No.	Std. Pack
CA603	25

CA703/CA803/CA903



Cat. No.	Height(H)	Std. Pack
CA703	25.4mm	25
CA803	50.8mm	25
CA903	76.2mm	25

SPACER

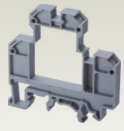
CASP can be used to increase the creepage and clearance distance between the Terminal Blocks and to segregate the different groups of Terminal Blocks.

CDL4USP can be stacked with the **CDL4U(O)** Terminal Block to create a housing for discrete components or small electronic circuits. The stacked housing can be fitted with an end plate to create a 'touch-proof' housing.

CASP

Cat. No.	Dimension
CASP	43 x 29 x 8 mm

CDL4USP

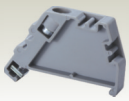
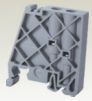


Cat.No.	Dimension
CDL4USP	54 x 55.5 x 6 mm

END CLAMPS

End Clamps help to secure the entire Terminal Block assembly on the DIN Rail. End Clamps should be fixed on both sides of the Terminal Block assemblies. These End Clamps are designed to fix on DIN 32, DIN 35 and DIN 15 rails. The Polyamide series End Clamps have suitable recessesto accommodate a group marker holder and marking tags for group identification. The steel parts are Zinc plated and Chromate passivated. The CA102 and CA202 are large End Stops for heavy duty applications. And the CA103 is a screwless End Stop which can be snapped on to the Din Rail.

Cat. No.	CA302	CA402	CA502	CA602
				
Dimension	39.5 x 27 x 16 mm	39.5 x 27 x 16 mm	25 x 22.5 x 11.5 mm	20 x 28 x 8 mm
Suitable for	DIN 35 Rail	DIN 35-15 Rail	DIN 32 Rail	DIN 15 Rail
Material	Steel	Steel	Steel	Polyamide 66
Std. Pack	50	50	50	50

Cat. No.	CA702	CA802	CA202	CA102	CA103
					
Dimension	34 x 44 x 9 mm	45 x 32 x 8 mm	44.5 x 50 x 9.5 mm	46 x 50 x 9 mm	41 x 35 x 6 mm
Suitable for	DIN 32 / DIN 35 / DIN 35-15 Rails	DIN 35 / DIN 35-15 Rails	DIN 35 / DIN 35-15 Rails	DIN 32 / DIN 35 / DIN 35-15 Rails	DIN 35 / DIN 35-15 Rails
Material	Polyamide 66	Polyamide 66	Polyamide 66	Polyamide 66	Polyamide 66
Std. Pack	50	50	50	50	50

E

TERMINAL BLOCK TECHNICAL INFORMATION

ATEX APPROVED TERMINAL BLOCKS

The ATEX approved Terminal Blocks have been assured for compliance with :

- EN 50014
- EN 60079-7
- EN 50020
- EN 50281-1-1-1

Certification can be traced to Techspan Certificate Number TÜV 06 ATEX 2968U

Technical Data:

Operating Temperature	-40°C to +85°C
Maximum Voltage for intrinsicly safe "i" circuits *	60 V

Type No.	Rated Voltage			Rated Current	Wire Range
	for DIN 35 Rail	for DIN 32 Rail	for DIN 15 Rail		
CTS2.5UN	630 V	630 V		21 A	0.5-2.5 sq.mm
CTS4UN	630 V	630 V		28 A	0.5-4 sq.mm
CTS6U	630 V	630 V		36 A	1.5-6 sq.mm
CTS10U	630 V	630 V		50 A	1.5-10 sq.mm
CTS16U	630 V	500 V		66 A	2.5-16 sq.mm
CTS25U	630 V	630 V		88 A	6-25 sq.mm
CTS35U	630 V	630 V		109 A	10-35 sq.mm
CMC1-2	400 V	320 V		28 A	0.5-4 sq.mm
CMC2-2	500 V	500 V		28 A	0.5-4 sq.mm
CDL4U	320 V	320 V		28 A	0.5-4 sq.mm
ODL4U	630 V	500 V		28 A	0.5-4 sq.mm
CTL2.5U	320 V	320 V		21 A	0.5-2.5 sq.mm
CTL2.5UH	320 V	320 V		21 A	0.5-2.5 sq.mm
CMT4			320 V	28 A	0.5-4 sq.mm
CSC2.5T	500 V			21 A	0.5-2.5 sq.mm
CSC4T	500 V			28 A	0.5-4 sq.mm
CSC6T	500 V			36 A	0.5-6 sq.mm
CSC2.5T1-2	500 V			21 A	0.5-2.5 sq.mm
CSC2.5T2-2	500 V			21 A	0.5-2.5 sq.mm
CSC4T1-2	500 V			28 A	0.5-4 sq.mm
CSC4T2-2	500 V			28 A	0.5-4 sq.mm
CGT4U	PE	PE			0.5-4 sq.mm
CGT4N	PE				0.5-4 sq.mm
CGT10U	PE	PE			1.5-10 sq.mm
CGT35U	PE	PE			10-35 sq.mm
CGMT4			PE		0.5-4 sq.mm
CMB4		320 V (Panel Mount)		28 A	0.5-4 sq.mm
CSCP2.5T		500 V (Panel Mount)		21 A	0.5-2.5 sq.mm
CSCP2.5T2		500 V (Panel Mount)		21 A	0.5-2.5 sq.mm

* CGT Series (Earthing) Terminal Blocks can not be used in " i " intrinsicly safe circuit

Note:
For installation instructions refer to **www.elecDirect.com**

TERMINAL BLOCK TECHNICAL INFORMATION

WIRE TIGHTENING

The design of the elecDirect.com Screw Clamps / Cable Lug system ensures vibration proof positive connection wires at the recommended torque values. However, elecDirect.com Terminal Blocks can withstand torque levels in excess of the recommended torque values. The Terminal Block clamping parts when tightened within the torque range ensure optimum performance as given below:

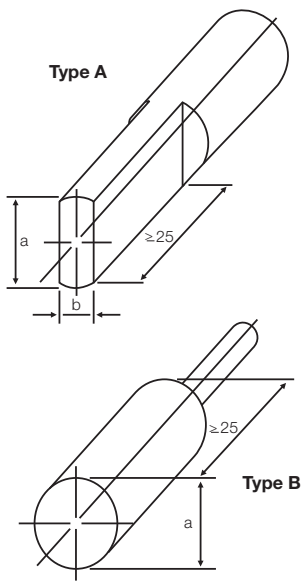
- The voltage drop (contact resistance) is well below the specified limits
- The wire gets clamped perfectly to form a gas tight connection
- The clamping yoke does not get damaged mechanically. The tightening torque according to IEC 60947-7-1 table 4, is the safe limit of the torque which guarantees the successful clamping of the connected wire.

elecDirect.com Terminal Blocks tightening torque data is given in the respective product pages.

All elecDirect.com Terminal Blocks are designed to function with rated wire sizes as per their respective AWG (American Wire Gauge) or Metric size/system. The Terminal Blocks are tested for Gauge Insertion as per VDE 0660.

Tightening Torque for Screw Clamp Terminal Blocks

Terminal Blocks	Thread Size of Fastener	Recommended Torque Value
CTS2.5UN/CPT(M)/CPT5	M 2.5	0.4 Nm
CTS2.5(M)/CMST1/CMST2	M 2.6	0.4 Nm
CTS2.5/CMT4/CMB4/CDL4U/ODL4U/ CGT4U/CTS4UN/CTS4SC/CSTSB3/CSFL4U/ CSDL4U/CKT4U/CPT7.5/DDFL4U/ DDFL4U(E)/DDFL4U(E)LR/CMC1-2/CMC2-2	M 3	0.5 Nm
CTS6/CTS6SC/CTS6U/CSFL6U/CENC4	M 3.5	0.8 Nm
CTS10/10U/CTS16/16U/CSTSN4/B4/CDT TS/ CTS10SC/CGT10U/DDPT/CDTTU/CSTSN4U/STH4	M 4	1.2 Nm
CTS25U/CSTSB5/N5/N5(15)/RN5/N5U/CENC16	M 5	2.0 Nm
CTS35/CTS35U/CENC35/CGT35U/CSTSN6U	M 6.0	2.0 Nm
CTS35L/35LS/CSTSRN6/CSTSN6	M 6.0	2.8 Nm
CTS70L/70LS/CTS95L/95LS	M10.0	10.0 Nm



Representative Picture of Gauge Type A and Type B

Conductor cross-sections and Gauges

Conductor Cross-section							
Flexible (sq.mm)	Rigid (solid or stranded) (sq.mm)	Gauge Type A			Gauge Type B		Permissible deviation for a and b
		Marking	Diameter a (mm)	Width b (mm)	Marking	Diameter a (mm)	
1.5	1.5	A1	2.4	1.5	B1	1.9	0 / -0.05
2.5	2.5	A2	2.8	2.0	B2	2.4	0 / -0.05
2.5	4	A3	2.8	2.4	B3	2.7	0 / -0.05
4	6	A4	3.6	3.1	B4	3.5	0 / -0.06
6	10	A5	4.3	4.0	B5	4.4	0 / -0.06
10	16	A6	5.4	5.1	B6	5.3	0 / -0.06
16	25	A7	7.1	6.3	B7	6.9	0 / -0.07
25	35	A8	8.3	7.8	B8	8.2	0 / -0.07
35	50	A9	10.2	9.2	B9	10.0	0 / -0.07
50	70	A10	12.3	11.0	B10	12.0	0 / -0.08
70	95	A11	14.2	13.1	B11	14.0	0 / -0.08
95	120	A12	16.2	15.1	B12	16.0	0 / -0.08
120	150	A13	18.2	17.0	B13	18.0	0 / -0.08
150	185	A14	20.2	19.0	B14	20.0	0 / -0.08
185	240	A15	22.2	21.0	B15	22.0	0 / -0.09
240	300	A16	26.5	24.0	B16	26.0	0 / -0.09

TERMINAL BLOCK TECHNICAL INFORMATION

ELECTRICAL DATA

elecDirect.com Terminal Blocks are standard blocks for industries such as Switchgear, Distribution, Machine Tools Control, Instrumentation Installations, Material Handling Equipments, Process Plants On and Offshore Installations and Panel Board Construction.

Rated Voltage

The voltage rating of the product is assigned in accordance with specifications related to Creepage & Clearance distance defined in respective **EN, VDE, UL** and **CSA** standards, for the environmental conditions and pollution degrees as given below.

Degree of Pollution

Creepage and clearance distances are evaluated for the following pollution degree :

Pollution degree 1 — No pollution or only dry, non-conductive pollution occurs. The pollution has no influence.

Pollution degree 2 — Only non-conductive pollution occurs except that occasionally a temporary conductivity caused by condensation is to be expected.

Pollution degree 3 — Conductive pollution occurs or dry, non conductive pollution occurs which becomes conductive due to condensation is to be expected.

Pollution degree 4 — The pollution generates persistent conductivity caused by conductive dust or by rain or snow.

Rated Impulse Voltage

The rated impulse voltage of the product is the peak value of an impulse voltage with which the terminal block can be loaded and on which the creepage and clearances according to relevant standard are based.

CTI - Comparative Tracking Index of Insulation material

The insulation material is divided into four groups according to their CTI (Comparative Tracking Index)

Insulation I	**600 ≤ CTI**
Insulation II	**400 ≤ CTI < 600**
Insulation III a	**175 ≤ CTI < 400**
Insulation III b	**100 ≤ CTI < 175**

The Comparative Tracking Index must be defined according to **DIN IEC 112/ VDE 0303 part 1** on specimens made specifically for this purpose with test solution A. The proof-tracking index (PTI) is also used to identify the tracking characteristics of materials. A material may be included in one of the four groups given above on the basis that its PTI, established by the method of IEC 112 using solution A, is equal to or greater than the lower value specified for the Insulation group.

Current carrying capacity of terminal block (DIN EN 60947-7-1/VDE 0611part1: 2000-05)

The data given below is for unprepared conductor ends without ferrules. The rated current for Terminal Blocks with specific functions such as Fuse type, Relays, Terminal Blocks incorporating electronic components is to be specified by manufacturer.

Rated Cross Section (sq.mm)	0.2	0.5	0.75	1	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
Test current (A)	4	6	9	13.5	17.5	24	32	41	57	76	101	125	150	192	232	269	309	353	415	520

Current Rating with two wire/conductors

The total current of the two wires / conductors should not exceed the continuous current rating of the Terminal Block. The continuous current rating is the maximum current the terminal block can conduct without a temperature rise of 45 K (as per EN standard) and 300C (as per UL / CSA standard).

Note

For PE-Terminals only one conductor should be connected per clamping part, in accordance with installation requirement.

TERMINAL BLOCK TECHNICAL INFORMATION

TERMINAL BLOCK MATERIAL

Polyamide 6.6

Engineering Thermoplastic Polyamide 6.6 has excellent electrical, mechanical and chemical characteristics, even at temperature as high as 105°C. This insulating material has high mechanical strength - it is unbreakable. Its resistance to tracking is similar to Melamine. The Polyamide 6.6 moulded housing absorbs humidity from its surroundings. However, it does not crystallise water in the plastic itself as is the case in thermosetting plastic. The H_20 groups combine within the molecular structure.
Thus moulded plastic housing becomes fracture proof and unbreakable even in sub zero temperature conditions.
Polyamide 6.6 is difficult to ignite, self-extinguishing, burns only as long as there is a supporting flame and is rated V2 according to UL 94. It has excellent resistance to micro organisms, bacteria, enzymes and termites. Good ageing resistance and insensitivity to ultra violet light makes it suitable for tropical and open air applications. Polyamide 6.6 has excellent resistance to fuels, oils, fats and most common solvents like aliphatic and aromatic carbohydrates, ketons and alcohols.

Typical properties of insulation material

Property	Unit	Thermoset High Grade Melamine	Engineering Thermoplastic Polyamide 6.6
Specific Gravity	-	1.5	1.2 - 1.15
Upper Temperature Limit	^{0}C	130	105
Lower Temperature Limit	^{0}C	- 55	- 50
Volume Resistivity	Ohm cm	10^{11}	10^{12}
Surface Resistivity	Ohm	10^{10}	10^{10}
Dielectric Strength	KV/cm	100	400
Trophical Resistance	-	Good	Good
Flammability	Grade	V0	V2 / V0#
Flexibility	-	-	Excellent

V0 available on request

CE Marking

The CE marking is, in particular, an indication that the products comply with the essential requirements of applicable directives and that the products have been subject to a conformity assessment procedure provided for in the directives. CE marking ensures free trading within Europe. elecDirect.com terminal blocks are CE marked and the products comply to Low Voltage Directive, 73/23/EEC,

At elecDirect.com the Product Development cycle, production & assembly of components and supply are all controlled by an **ISO 9001:2000** Quality Management System.

elecDirect.com Products not only fulfill Customers needs and requirements of standards and specifications but also surpass the same.