

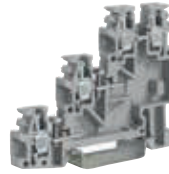


TL SERIES

THREE LEVELS TERMINAL BLOCKS FOR SENSORS



- with LOCK system



(1) See chapter accessories for more details

(2) A special version with green LED is available. TLS.2/T (cod. TL120) with green LED between upper and intermediate levels. TLS.2/U (cod. TL110) with green LED between upper and lower levels.

GREY VERSION	CODE	TL100GR
	TYPE	TLS.2/GR
BEIGE VERSION	CODE	TL100
	TYPE	TLS.2
BLUE VERSION	CODE	
	TYPE	

TECHNICAL CHARACTERISTICS

Function/type		three level - for sensors
Rated cross-section	(mm ²)	2.5
Connecting capacity	Flexible	0.2 - 4
	Rigid	0.2 - 4
	Max. flexible with ferrule - ferrule type	2.5 - WP25/14
Electrical characteristics According to European standard IEC EN 60947-7-1	Max AC/DC Voltage	(V) 250
	Max current with rated cross-section	(A) 24
	Section	Caliber A3
Electrical characteristics According to UL	Max AC/DC Voltage	(V) 600
	Max current with rated cross-section	(A) 15
	Section Min-Max	(AWG) 20-12
	Tightening torque	(lb.in) 3.5
Electrical characteristics According to ATEX directive and IEC ex standard	Max AC/DC Voltage	(V) -
	Max current with rated cross-section	(A) -
	Operating temperature	(°C) -
Rated impulse withstand voltage/pollution degree		4 KV / 3
Insulation stripping length	(mm)	8
tightening torque value (test / max)	(Nm)	0.4 / 0.8
Length	(mm)	62.5
Width	(mm)	6.2
Height mounted on TH35/7,5	(mm)	52
Height mounted on TH35/15	(mm)	60
Height mounted on G32	(mm)	-
Insulation material temperature index (EN 60216-1)	(°C)	130
Plastic material		Polyamide UL94V-0



APPROVALS

ACCESSORIES		
End section	Grey	TL5/PT/GR (cod. TL101GR)
	Beige	TL5/PT (cod. TL101)
	Blue	-
	Thickness (mm)	1.5
Cross connection	PTC or other versions (1)	PM/.../... (cod. PM...)
	PTP version (1)	-
	Rated current / Rated current ATEX applications (A)	24 / -
Cross connection identification strip	green	-
Switchable cross connection		POS/41 (cod. POS41)
Multiple common bar	250 mm	PMP/02 (cod. PMP02)
Shunting screw and sleeve	standard / Ex e version	-
	internal jumper	-
	internal jumper + external jumper	-
Coloured partition	red	DFU/3/R (cod. DU03R)
Cross connection barred (upper level)	red	-
Cross connection barred (lower level)	red	-
Cross connection barrier	red	DFM/400 (cod. DF400)
Test plug socket		PSD/A (cod. PD001)
Test plug		SDD/1 (cod. DD001)
Modular test plug		-
Numbering strip		CNU/8/51 (cod. NU0851)
Single marking tag		CNU/8/51 (cod. NU0851)
		CNU/8/51 (cod. NU0851)
Warning plate	on adjacent terminal blocks	-
Cover for cross-connection		PRP/5 (cod. PRP05)
End bracket	Snap-fit TH35 and G32	BTU (cod. BT005)
	Snap-fit TH35	BTO (cod. BT007)
	Screw TH35	BT/3 (cod. BT003)
	Screw G32	-

For the installation on limited longitudinal space where high density wiring is needed together with reliable insulation, special feed-through two/three level terminal blocks are available. The three level terminal blocks are suitable for circuits which are to be used and connected with specific equipment, as for example proximity sensors. In fact, through the combined use of TLS.2 and TLD.2 terminal blocks it is possible to connect in an optimal and economic manner both power supply conductors on input to the sensor, and those on output carrying the signal of the same. Particularly in the **TLS.2 terminal block**, the intermediate and lower levels can be used to feed the sensors in d.c.; the feeding is distributed on the adjoining elements of the terminal board by means of a special **LOCK** connection system.

The above mentioned conducting bodies have a fork, pointed towards the exterior of the terminal block, which connects to the homologous element of the adjoining terminal block. The resulting contact is clamped with a screw, supplied already inserted in the conductor element.

The LOCK system, above described, allows the connection of positive and negative poles, without the use of any other parallel cross connection. At the upper, feed-through level, the conductor for the return signal of the sensor is connected; inserting PRP/5 coloured protections in the special channels guarantees against all possible contact of the live parts and enables immediate identification of the polarity (Red for +, Blue for -).

TLD.2 terminal block is perfectly compatible with the **TLS.2** for the connection of proximity sensors, as it has the same electrical and mechanical characteristics. Two of six tightening units can be connected to the sensor feeding cables and distribute the power supply to the other sensors.

The cross-connection between the intermediate and lower levels of these terminal blocks to the contiguous ones of the TLS.2 can be performed by means of the two screws provided in the fork type conducting bodies of the TLS.2 - the first of the Series - free from whatever connection; between the TLD.2 and TLS.2 terminal blocks a TLD/PI intermediate end section must be interposed, to ensure electric insulation of the TLD.2 terminal block conducting parts, which otherwise would be uncovered.

TLD.2 terminal block can also be used for other connecting applications, in other types of circuits.

SCREW CLAMP



TL SERIES

THREE LEVELS TERMINAL BLOCKS



(1) See chapter accessories for more details

GREY VERSION	CODE	TL200GR	TL400GR	TL500GR
	TYPE	TLD.2/GR	TLE.2/GR	TDE.2/GR
BEIGE VERSION	CODE	TL200	TL400	TL500
	TYPE	TLD.2	TLE.2	TDE.2
BLUE VERSION	CODE	TL300		
	TYPE	TLD.2 (EXI)		

TECHNICAL CHARACTERISTICS

Function/type		3 niveles	2 levels + earth	2 levels feed through + earth
Rated cross-section	(mm ²)	2.5	2.5	2.5
Connecting capacity	Flexible (mm ²)	0.2 - 4	0.2 - 4	0.2 - 4
	Rigid (mm ²)	0.2 - 4	0.2 - 4	0.2 - 4
	Max. flexible with ferrule - ferrule type (mm ²)	2.5 - WP25/14	2.5 - WP25/14	2.5 - WP25/14
Electrical characteristics According to European standard IEC EN 60947-7-1	Max AC/DC Voltage (V)	250	250	250
	Max current with rated cross-section (A)	24	24	24
	Section Caliber	A3	A3	A3
Electrical characteristics According to UL	Max AC/DC Voltage (V)	600	600	600
	Max current with rated cross-section (A)	15	20	20
	Section Min-Max (AWG)	20-12	20-12	20-12
	Tightening torque (lb.in)	3.5	3.5	3.5
Electrical characteristics According to ATEX directive and IEC ex standard	Max AC/DC Voltage (V)	-	-	-
	Max current with rated cross-section (A)	-	-	-
	Operating temperature (°C)	-	-	-
Rated impulse withstand voltage/pollution degree		4 KV / 3	4 KV / 3	4 KV / 3
Insulation stripping length (mm)		8	8	8
tightening torque value (test / max) (Nm)		0.4 / 0.8	0.4 / 0.8	0.4 / 0.8
Length (mm)		85	62.5	85
Width (mm)		6.2	6.2	6.2
Height mounted on TH35/7,5 (mm)		52	52	52
Height mounted on TH35/15 (mm)		60	60	60
Height mounted on G32 (mm)		-	-	-
Insulation material temperature index (EN 60216-1) (°C)		130	130	130
Plastic material		Polyamide UL94V-0	Polyamide UL94V-0	Polyamide UL94V-0

APPROVALS

ACCESSORIES				
End section	Grey	TLD/PT/GR (cod. TL201GR)	TLS/PT/GR (cod. TL101GR)	TLS/PT/GR (cod. TL101GR)
	Beige	TLD/PT (cod. TL201)	TLS/PT (cod. TL101)	TLS/PT (cod. TL101)
	Blue	-	-	-
Cross connection	Thickness (mm)	1.5	1.5	1.5
	PTC or other versions (1)	PM/.../... (cod. PM...)	PM/.../... (cod. PM...)	PM/.../... (cod. PM...)
	PTP version (1)	-	-	-
Cross connection identification strip	Rated current / Rated current ATEX applications (A)	24 / -	24 / -	24 / -
	green	-	-	-
	Switchable cross connection	POS/41 (cod. POS41)	POS/41 (cod. POS41)	POS/41 (cod. POS41)
Multiple common bar	250 mm	PMP/02 (cod. PMP02)	PMP/02 (cod. PMP02)	PMP/02 (cod. PMP02)
Shunting screw and sleeve	standard / Ex e version	-	-	-
	internal jumper	-	-	-
	internal jumper + external jumper	-	-	-
Coloured partition	red	DFU/3/R (cod. DU03R)	DFU/3/R (cod. DU03R)	DFU/3/R (cod. DU03R)
Cross connection barred (upper level)	red	-	-	-
Cross connection barred (lower level)	red	-	-	-
Cross connection barrier	red	DFM/400 (cod. DF400)	DFM/400 (cod. DF400)	DFM/400 (cod. DF400)
Test plug socket		PSD/A (cod. PD001)	PSD/A (cod. PD001)	PSD/A (cod. PD001)
Test plug		SDD/1 (cod. DD001)	SDD/1 (cod. DD001)	SDD/1 (cod. DD001)
Modular test plug		-	-	-
Numbering strip		CNU/8/51 (cod. NU0851)	CNU/8/51 (cod. NU0851)	CNU/8/51 (cod. NU0851)
Single marking tag		CNU/8/51 (cod. NU0851)	CNU/8/51 (cod. NU0851)	CNU/8/51 (cod. NU0851)
		CNU/8/51 (cod. NU0851)	CNU/8/51 (cod. NU0851)	CNU/8/51 (cod. NU0851)
	Warning plate	on adjacent terminal blocks	-	-
Cover for cross-connection		PRP/5 (cod. PRP05)	PRP/5 (cod. PRP05)	PRP/5 (cod. PRP05)
	Snap-fit TH35 and G32	BTU (cod. BT005)	BTU (cod. BT005)	BTU (cod. BT005)
	Snap-fit TH35	BTO (cod. BT007)	BTO (cod. BT007)	BTO (cod. BT007)
	Screw TH35	BT/3 (cod. BT003)	BT/3 (cod. BT003)	BT/3 (cod. BT003)
	Screw G32	-	-	-