Universal terminals OTL

According to IEC
1000V AC
1500V DC

According to UL
1000V AC/DC

Bimetal
(Al/Cu)

Class A

Universal terminals OTL are designed for copper and aluminium conductors. The terminals are suitable for all types of copper or aluminium conductors with cross-section up to 300 mm². Multiple copper wires can be placed to the universal terminals OTL blocks according to the respective terminal type (see Table of universal terminals OTL wiring connectivity on page 9). IP protection class for OTL terminals is IP20.

Certification and product safety

Universal terminals OTL undergo rigorous testing and certification to ensure compliance with industry standards. They are certified according to **EN 60947-7-1:2009** and **EN 61238-1:2003**, which establish requirements for terminal blocks and connectors for power cables.

EN 61238-1:2003 classifies connectors into two categories

Class A, which undergo heat cycle and short-circuit testing for electricity distribution and industrial networks.

Class B, which only undergo heat cycle testing and are suitable for networks with rapid overload or short-circuit protection.

Universal terminals OTL are certified as Class A connectors, making them suitable for most applications. When choosing a connector, it is essential to ensure it bears the CE marking and Class A certification symbol, such as the FI mark, for reliable and safe electrical connections.

Material classification according to UL 94 V-0 standard (vertical burning test)

Criteria Conditions	94 V-0	94 V-1	94 V-2
Total flaming combustion for each specimen	**≤ 10 sec**	≤ 30 sec	≤ 30 sec
Total flaming combustion for all 5 specimens of any set	**≤ 50 sec**	≤ 250 sec	≤ 250 sec
Flaming and glowing combustion for each specimen after second burner flame application	**≤ 30 sec**	≤ 60 sec	≤ 60 sec
Cotton ignited by flaming drips from any specimen	**No**	No	Yes

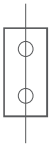
Universal terminals OTL wiring connectivity

In case of Aluminum wire, only one wire is allowed to connect per connection

	Conductor cross-section (mm²) / number of copper wires per connection																Tightening torque (Nm)	In (A) Al / Cu
Type	**1,5**	**2,5**	**4**	**6**	**10**	**16**	**25**	**35**	**50**	**70**	**95**	**120**	**150**	**185**	**240**	**300**		
OTL 16	3 pcs	3 pcs	2 pcs	2 pcs	1 pcs	1 pcs											1,5 Nm (1,5 - 6 mm²) 7 Nm (10 - 16 mm²)	75 / 82
OTL 35 OTL 35-2 OTL 35-3X OTL 35-5X		3 pcs	3 pcs	3 pcs	3 pcs	2 pcs	1 pcs	1 pcs									3 Nm (2,5 - 16 mm²) 6 Nm (25 - 35 mm²)	120 / 135
OTL 50 OTL 50-2 OTL 50-3	3 pcs	3 pcs	3 pcs	3 pcs	3 pcs	3 pcs	2 pcs	1 pcs	1 pcs								1,5 Nm (1,5 - 2,5 mm²) 5 Nm (4 - 10 mm²) 10 Nm (16 - 50 mm²)	145 / 160
OTL 95 OTL 95-2 OTL 95-3				3 pcs	3 pcs	3 pcs	3 pcs	2 pcs	1 pcs	1 pcs	1 pcs						12 Nm (6 - 25 mm²) 22Nm (35 - 95 mm²)	220 / 245
OTL 150 OTL 150-2 OTL 150-3							3 pcs	3 pcs	3 pcs	2 pcs	1 pcs	1 pcs	1 pcs				14 Nm (25 - 50 mm²) 30 Nm (70 - 150 mm²)	290 / 320
OTL 240 OTL 240-2								3 pcs	3 pcs	3 pcs	2 pcs	2 pcs	1 pcs	1 pcs	1 pcs		26 Nm (35 - 120 mm²) 40 Nm (150 - 240 mm²)	380 / 425
OTL 300-1											3 pcs	2 pcs	2 pcs	1 pcs	1 pcs	1 pcs	35 Nm (95-150 mm²) 60 Nm (185-300 mm²)	440 / 490
OTL 300-3											3 pcs	2 pcs	2 pcs	1 pcs	1 pcs	1 pcs	35 Nm (95 - 150 mm²) 45 Nm (185 - 300 mm²)	630 / 630

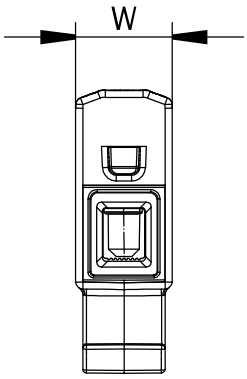
We recommend using cable end sleeves, when using fine-strand wires with following cross-sections (single-wire connections):

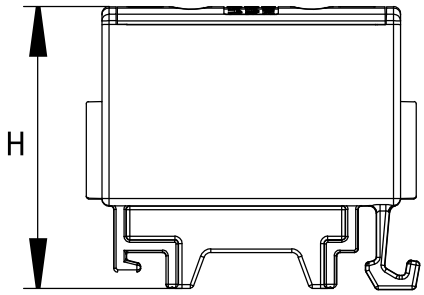
OTL 16: 1,5 mm²…6 mm²
OTL 35: 2,5 mm²…10 mm²
OTL 50: 1,5 mm²…16 mm²
OTL 95: 6 mm²…35 mm²
OTL 150: 25 mm²…70 mm²
OTL 240: 35 mm²…120 mm²
OTL 300: 95 mm²…150 mm²

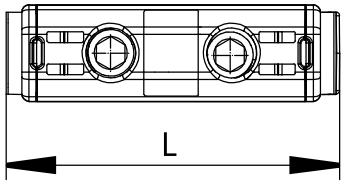


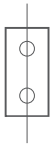
		OTL 16	OTL 35	OTL 50
Grey		MAA1016A10	MAA1035A10	MAA1050A10
Blue		MAA1016B10	MAA1035B10	MAA1050B10
Yellow-green		MAA1016Y10	MAA1035Y10	MAA1050Y10
Red		MAA1016R10	MAA1035R10	MAA1050R10
Black		MAA1016S10	MAA1035S10	MAA1050S10
Technical data				
Conductor cross-section Cu, Al (mm^2)		1,5 - 16	2,5 - 35	1,5 - 50
Nominal voltage AC / DC (V)	IEC	1000 / 1500	1000 / 1500	1000 / 1500
Nominal voltage AC / DC (V)	UL	1000	1000	1000
Nominal current (A)	IEC	82 (Cu) / 75 (Al)	135 (Cu) / 120 (Al)	160 (Cu) / 145 (Al)
Nominal current (A)	UL	85 (Cu) / 65 (Al)	115 (Cu) / 90 (Al)	150 (Cu) / 120 (Al)
Width / Height / Length (mm)		13,5 / 39,5 / 45	16 / 40 / 45	18 / 43 / 50
Screw, hexagonal key		No. 4	No. 4	No. 5
Tightening torque (Nm)		1,5 Nm (1,5 mm^2) 3,5 Nm (2,5 - 6 mm^2) 7 Nm (10-16 mm^2)	3 Nm (2,5 - 16 mm^2) 6 Nm (25 - 35 mm^2) -	1,5 Nm (1,5 - 2,5 mm^2) 5 Nm (4 - 10 mm^2) 10 Nm (16 - 50 mm^2)
Mounting		DIN rail	DIN rail	DIN rail
Weight (g)		17	27	30
Package (pcs)		30	30	50 / 30

Dimensions









NEW

	OTL 95	OTL 150	OTL 240	OTL 300
Grey	MAA1095A10	MAA1150A10	MAA1240A10	MAA1300A10
Blue	MAA1095B10	MAA1150B10	MAA1240B10	MAA1300B10
Yellow-green	MAA1095Y10	MAA1150Y10	MAA1240Y10	MAA1300Y10
Red	MAA1095R10	MAA1150R10	MAA1240R10	MAA1300R10
Black	MAA1095S10	MAA1150S10	MAA1240S10	MAA1300S10
Technical data				
Conductor cross-section Cu, Al (mm^2)	6 - 95	25 - 150	35 - 240	95 - 300
Nominal voltage AC / DC (V) IEC	1000 / 1500	1000 / 1500	1000 / 1500	1000 / 1500
Nominal voltage AC / DC (V) UL	1000	1000	1000	
Nominal current (A) IEC	245 (Cu) / 220 (Al)	320 (Cu) / 290 (Al)	425 (Cu) / 380 (Al)	490 (Cu) / 440 (Al)
Nominal current (A) UL	230 (Cu) / 180 (Al)	285 (Cu) / 250 (Al)	380 (Cu) / 310 (Al)	-
Width / Height / Length (mm)	25 / 51 / 84	31 / 54 / 84	37 / 65 / 106	44 / 71 / 122
Screw, hexagonal key	No. 6	No. 6	No. 8	No. 8
Tightening torque (Nm)	12 Nm (6 - 25 mm^2) 22 Nm (35 - 95 mm^2) -	14 Nm (25 - 50 mm^2) 35 Nm (70 - 150 mm^2)	26 Nm (35 - 120 mm^2) 46 Nm (150 - 240 mm^2)	30 Nm (95 - 150 mm^2) 60 Nm (185 - 300 mm^2)
Mounting	DIN rail, screw	DIN rail, screw	DIN rail, screw	DIN rail, screw
Weight (g)	65	100	195	332
Package (pcs)	20 / 10	20 / 10	10 / 3	3 / 3

Dimensions