Industrial components

Critical to the safety of your operations

2

We support your operations with high-quality terminals, load-break switches and fuse bases that are designed and tested to meet a wide range of applications in various environments.

In addition to the standard components, we offer customer-specific solutions. These include e.g. standard terminals customised with prints, and customer-specific labelling and solutions designed and developed on the basis of our customers' needs. An example of these is the Ensto Clampo Pro three-pole terminal block specially designed for one of our drives industry customers and available today in our standard product range. Our service offering also includes deliveries with special packaging and manufacturing of products for private label.

Our special strengths include:

- Years of experience in customer-specific terminal solutions
- Experienced design department
- Production and assembly, also in low cost countries (LCC)
- Large selection of high-quality terminals for a global clientele.

Terminals

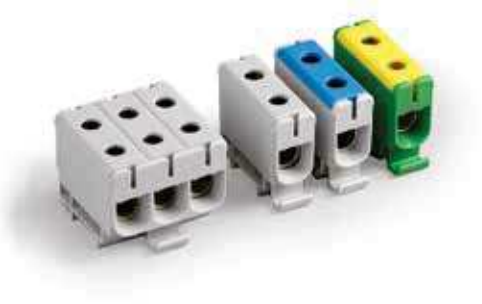
Our Ensto Clampo terminals are specially developed for the needs of the industry. Our offering includes a large range of terminal series, some of which are suitable for both aluminium and copper conductors. It also covers enclosed terminals, including everything needed for connecting wires, extending or branching cables and enclosing different components.

BENEFITS:

- Connecting aluminium and copper conductors
- Smaller stocks and reduced costs
- Wide application range
- Wide cross-section range

Ensto Clampo Pro universal terminals

For Al/Cu conductors from 2.5 mm² to 240 mm²



Ensto Clampo Pro universal terminals in brief:

- Certified according to the latest standards
- UL- recognized and Gost R certified (switchboards/equipment suitable for exporting to the US and Russia)
- Suitable for both aluminium and copper conductors
- Suitable for transitioning between aluminium and copper conductors without any extra cable clamps
- Suitable for use for the feed-in conductors (short circuit tested)
- Suitable for a wide cross-section range of conductors (a single terminal can be used in a wide range of applications)
- Also suitable for stranded wires also, without extra bushings

Technical features:

- Compact in size compared to similar products on the market
- Oxidation-inhibiting compound applied at the factory
- Simple and reliable construction made of a monoblock
- Can be fixed directly onto a DIN rail or, with screws, onto a base
- Quickly and easily connected using one screw only
- Reliable and strong tightening of connection with hexagonal screws (possible to reuse without damage)
- Color coding for N and PE terminals

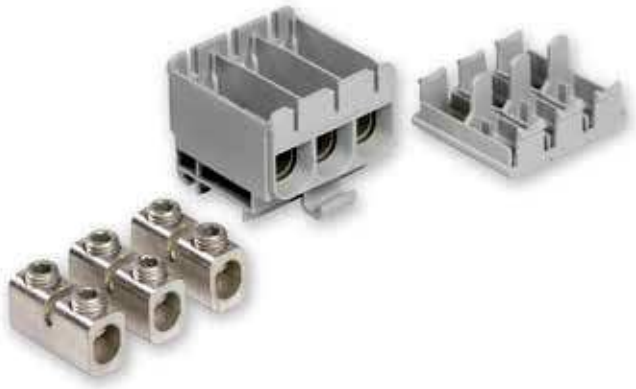
Conformity	
	CE RoHS FI UL EAC
Standards	
For copper conductors:	EN 60947-7-1:2009 EN 60947-7-2:2009
For aluminium conductors:	EN 61238-1:2003
UL- recognition:	UL 1059
Connector class:	A
Technical information	
Cross-section range:	Al 6 – 240 mm², Cu 2.5 – 240 mm²
Nominal current range:	145 – 425 A
Operating temperature:	Max. 80 °C
Pollution degree:	3
Material	
Housing:	Polyamide
Body and screws:	Tin-coated aluminium
Mechanical features	
Screw head:	Hexagonal
Mounting:	Screws or DIN rail

Conductor table can be found on page 58.

Note: The use of ferrules is recommended for installations with flexible conductors* with the following cross-sections (single conductor installation):

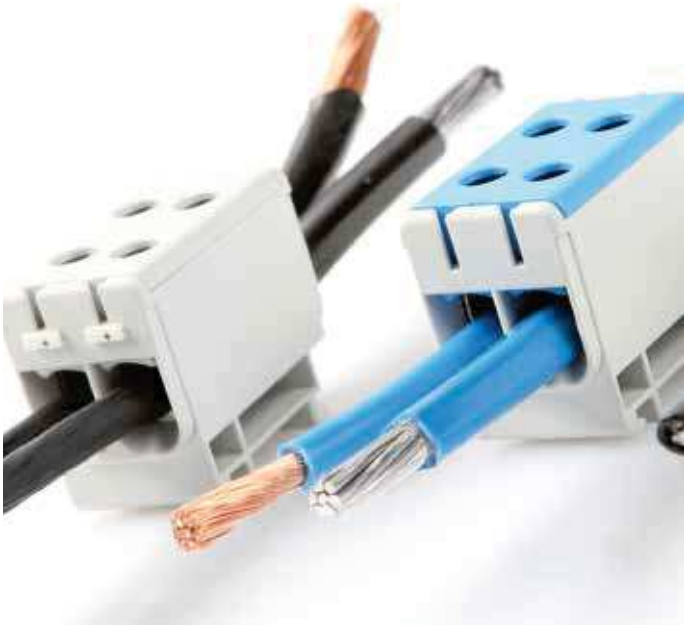
- KE61, KE 66 2.5 – 16 mm²
- KE62, KE67 16 – 35 mm²
- KE63, KE68 35 – 70 mm²
- KE64, KE69 35 – 120 mm²

The use of 240 mm² flexible conductors is not recommended.
*Class 5, according to IEC 228 Second Edition 1978



KE61.03 is a three-pole terminal block with three individual circuits.

Tapping terminals consist of a single pole with four connection points (single circuit).



Ensto Clampo Pro allows a safe connection between Al/Cu conductors.

Product code	Conductor cross-section	Color	Nominal current	Nominal insulation voltage	Screw head hexagon	Bit length min.	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Ensto Clampo Pro, one-pole terminal blocks												
KE61	Cu 2.5–50 mm² Al 6–50 mm²	Grey	Cu 160 A, Al 145 A	800 V	5 mm	20	4 Nm (2.5–4mm²), 12 Nm (6–50mm²)	DIN rail	17.8 x 49 x 43	0.030	30	6418677191817
KE61.2	Cu 2.5–50 mm² Al 6–50 mm²	Blue	Cu 160 A, Al 145 A	800 V	5 mm	20	4 Nm (2.5–4mm²), 12 Nm (6–50mm²)	DIN rail	17.8 x 49 x 43	0.030	30	6418677191831
KE61.3	Cu 2.5–50 mm² Al 6–50 mm²	Yellow/ Green		800 V	5 mm	20	4 Nm (2.5–4mm²), 12 Nm (6–50mm²)	DIN rail	17.8 x 49 x 43	0.030	30	6418677191848
KE62	Al/Cu 16–95 mm²	Grey	Cu 245 A, Al 220 A	800 V	5 mm	25	20 Nm	DIN rail/ screw	24 x 86 x 49	0.074	30	6418677191855
KE62.2	Al/Cu 16–95 mm²	Blue	Cu 245 A, Al 220 A	800 V	5 mm	25	20 Nm	DIN rail/ screw	24 x 86 x 49	0.074	30	6418677191862
KE62.3	Al/Cu 16–95 mm²	Yellow/ Green		800 V	5 mm	25	20 Nm	DIN rail/ screw	24 x 86 x 49	0.074	30	6418677191879
KE63	Al/Cu 35–150 mm²	Grey	Cu 320 A, Al 290 A	800 V	8 mm	34	20 Nm (35–95mm²), 30 Nm (120-150mm²)	DIN rail/ screw	29.5 x 95 x 59	0.120	30	6418677191886
KE63.2	Al/Cu 35–150 mm²	Blue	Cu 320 A, Al 290 A	800 V	8 mm	34	20 Nm (35–95mm²), 30 Nm (120-150mm²)	DIN rail/ screw	29.5 x 95 x 59	0.120	30	6418677191893
KE63.3	Al/Cu 35–150 mm²	Yellow/ Green		800 V	8 mm	34	20 Nm (35–95mm²), 30 Nm (120-150mm²)	DIN rail/ screw	29.5 x 95 x 59	0.120	30	6418677191909
KE64	Al/Cu 35–240 mm²	Grey	Cu 425 A, Al 380 A	800 V	8 mm	38	12 Nm (35–70mm²), 45 Nm (95–240mm²)	Screw	37.5 x 130 x 67	0.249	30	6418677191916
KE64.2	Al/Cu 35–240 mm²	Blue	Cu 425 A, Al 380 A	800 V	8 mm	38	12 Nm (35–70mm²), 45 Nm (95–240mm²)	Screw	37.5 x 130 x 67	0.249	30	6418677191923
KE64.3	Al/Cu 35–240 mm²	Yellow/ Green		800 V	8 mm	38	12 Nm (35–70mm²), 45 Nm (95–240mm²)	Screw	37.5 x 130 x 67	0.249	30	6418677191930
Ensto Clampo Pro, three-pole terminal block												
KE61.03	Cu 2.5–50 mm² Al 6–50 mm²	Grey	Cu 160 A, Al 145 A	800 V	5 mm	20	4 Nm (2.5–4mm²), 12 Nm (6–50mm²)	DIN rail	49.5 x 49 x 43	0.077	30	6418677191824
Ensto Clampo Pro, tapping blocks, single pole, four connections												
KE66	Cu 2.5–50 mm² Al 6–50 mm²	Grey	Cu 160 A, Al 145 A	800 V	5 mm	20	4 Nm (2.5–4mm²), 12 Nm (6–50mm²)	DIN rail	29.8 x 49 x 43	0.049	30	6418677191947
KE66.2	Cu 2.5–50 mm² Al 6–50 mm²	Blue	Cu 160 A, Al 145 A	800 V	5 mm	20	4 Nm (2.5–4mm²), 12 Nm (6–50mm²)	DIN rail	29.8 x 49 x 43	0.049	30	6418677191954
KE66.3	Cu 2.5–50 mm² Al 6–50 mm²	Yellow/ Green		800 V	5 mm	20	4 Nm (2.5–4mm²), 12 Nm (6–50mm²)	DIN rail	29.8 x 49 x 43	0.049	30	6418677191961
KE67	Al/Cu 16–95 mm²	Grey	Cu 245 A, Al 220 A	800 V	5 mm	25	20 Nm	DIN rail/ screw	42 x 86 x 49	0.128	30	6418677191978
KE67.2	Al/Cu16–95 mm²	Blue	Cu 245 A, Al 220 A	800 V	5 mm	25	20 Nm	DIN rail/ screw	42 x 86 x 49	0.128	30	6418677191985
KE67.3	Al/Cu 16–95 mm²	Yellow/ Green		800 V	5 mm	25	20 Nm	DIN rail/ screw	42 x 86 x 49	0.128	30	6418677191992
KE68	Al/Cu 35–150 mm²	Grey	Cu 320 A, Al 290 A	800 V	8 mm	34	20 Nm (35–95mm²), 30 Nm (120-150mm²)	DIN rail/ screw	51.5 x 95 x 59	0.210	30	6418677192005
KE68.2	Al/Cu 35–150 mm²	Blue	Cu 320 A, Al 290 A	800 V	8 mm	34	20 Nm (35–95mm²), 30 Nm (120-150mm²)	DIN rail/ screw	51.5 x 95 x 59	0.210	30	6418677192012
KE68.3	Al/Cu 35–150 mm²	Yellow/ Green		800 V	8 mm	34	20 Nm (35–95mm²), 30 Nm (120-150mm²)	DIN rail/ screw	51.5 x 95 x 59	0.210	30	6418677192029
KE69	Al/Cu 35–240 mm²	Grey	Cu 425 A, Al 380 A	800 V	8 mm	38	12 Nm (35–70mm²), 45 Nm (95–240mm²)	Screw	64 x 130 x 67	0.438	30	6418677192036
KE69.2	Al/Cu 35–240 mm²	Blue	Cu 425 A, Al 380 A	800 V	8 mm	38	12 Nm (35–70mm²), 45 Nm (95-240mm²)	Screw	64 x 130 x 67	0.438	30	6418677192043
KE69.3	Al/Cu 35–240 mm²	Yellow/ Green		800 V	8 mm	38	12 Nm (35–70mm²), 45 Nm (95–240mm²)	Screw	64 x 130 x 67	0.438	30	6418677192050

The nominal currents in the table are for maximum cross-sections.

KE61

KE62

KE63.2

KE64.3

KE61.03

KE66

KE68.2

KE69.3

Ensto Clampo terminal sets

Packed in convenient retail packages.

Cross-section (mm²)	Product code	GTIN-13	Description
Cu 2.5 – 50, Al 6 – 50	KE61SET	6418677191800	Mounting kit, KE61.03 + KE61.2 + KE61.3
	KE61T	6418677192326	Universal terminal, grey, bag of 3 pcs
	KE61.03T	6418677192357	Universal terminal, grey, 3-pole, bag of 2 pcs
	KE61.2T	6418677192333	Universal terminal, blue, bag of 3 pcs
	KE61.3T	6418677192340	Universal terminal, yellow-green, bag of 3 pcs
Al/Cu 16 – 95	KE62SET	6418677192432	Mounting kit, 3 x KE62 + KE62.2 + KE62.3
	KE62T	6418677192364	Universal terminal, grey, bag of 3 pcs
	KE62.2T	6418677192371	Universal terminal, blue, bag of 3 pcs
	KE62.3T	6418677192388	Universal terminal, yellow-green, bag of 3 pcs
Cu 2.5 – 50, Al 6 – 50	KE66T	6418677192395	Tapping block, grey, bag of 3 pcs
	KE66.2T	6418677192401	Tapping block, blue, bag of 3 pcs
	KE66.3T	6418677192418	Tapping block, yellow-green, bag of 3 pcs

KE61SET includes Ensto Clampo Pro universal terminals.

Accessories

Product code	Description	Weight (kg)	Package size (pcs)	GTIN-13
Terminal shrouds				
KEL61	Terminal shroud for KE61, KE66	0.001	100	6438100020064
KEL62	Terminal shroud for KE62, KE67	0.002	100	6438100020071
KEL63	Terminal shroud for KE63, KE68	0.003	100	6438100020088
KEL64	Terminal shroud for KE64, KE69	0.004	100	6438100020095
Other accessories				
PP37	DIN rail, 35 mm, steel, length 2 m	0.622	10	6418677161896
KRL2	End clip for fixing components to Din rail, PP37	0.009	50	6418677161919

The terminal shroud is L-shaped, thus protecting both the conductor space and the hole from the tightening tool.

The terminals are easy to mark using the marking strips.

Marking strips

Each strip contains 10 markers.

Product code	Markings	Weight (kg)	Package size (strips)	GTIN-13
PM34.00	0	0.001	10	6418677192067
PM34.01	1	0.001	10	6418677192074
PM34.02	2	0.001	10	6418677192081
PM34.03	3	0.001	10	6418677192098
PM34.04	4	0.001	10	6418677192104
PM34.05	5	0.001	10	6418677192111
PM34.06	6	0.001	10	6418677192128
PM34.07	7	0.001	10	6418677192135
PM34.08	8	0.001	10	6418677192142
PM34.09	9	0.001	10	6418677192159
PM34.10	A	0.001	10	6418677192166
PM34.11	R	0.001	10	6418677192173
PM34.12	S	0.001	10	6418677192180

Product code	Markings	Weight (kg)	Package size (strips)	GTIN-13
PM34.13	T	0.001	10	6418677192197
PM34.14	U	0.001	10	6418677192203
PM34.15	V	0.001	10	6418677192210
PM34.16	W	0.001	10	6418677192227
PM34.19	L	0.001	10	6418677192234
PM34.22	+	0.001	10	6418677192241
PM34.23	-	0.001	10	6418677192258
PM34.24	⏚	0.001	10	6418677192265
PM34.25	N	0.001	10	6418677192272
PM34.26	L1	0.001	10	6418677192289
PM34.27	L2	0.001	10	6418677192296
PM34.28	L3	0.001	10	6418677192302
PM34.29	PE	0.001	10	6418677192319

UL recognitions

Product code	Wire type	AWG* 1 wire/ terminal	AWG* 2 Cu-wires/ terminal	AWG* 3 Cu-wires/ terminal	Maximum voltage	Maximum current	Tightening torque	Allen-hex socket head terminal screw	Dimensions (W x L x H)
One-pole universal terminals									
KE61	Cu	1/0 – 6	6	8	600 V	150 A	90 lb·in	5 mm	0.7 x 1.9 x 1.7 In
	Al	1/0 – 6			600 V	120 A	(10 Nm)		(17.8 x 49 x 43 mm)
KE62	Cu	4/0 – 4	2 – 6	6	600 V	230 A	126 lb·in	5 mm	0.9 x 3.4 x 1.9 In
	Al	4/0 – 4			600 V	180 A	(14 Nm)		(24 x 86 x 49 mm)
KE63	Cu	300 – 2	1/0 – 2	2	600 V	285 A	216 lb·in	8 mm	1.2 x 3.7 x 2.3 In
	Al	300 – 2			600 V	230 A	(24 Nm)		(29.5 x 95 x 59 mm)
KE64	Cu	500 – 3/0	2/0 – 2	1/0 –2	600 V	380 A	360 lb·in	8 mm	1.5 x 5.1 x 2.6 In
	Al	500 – 3/0			600 V	310 A	(40 Nm)		(37.5 x 130 x 67 mm)
Three-pole universal terminal									
KE61.03	Cu	1/0 – 6	6	8	600 V	150 A	90 lb·in	5 mm	1.9 x 1.9 x 1.7 In
	Al	1/0 – 6			600 V	120 A	(10 Nm)		(49.5 x 49 x 43 mm)
Tapping blocks									
KE66	Cu	1/0 – 6	6	8	600 V	150 A	90 lb·in	5 mm	1.2 x 1.9 x 1.7 In
	Al	1/0 – 6			600 V	120 A	(10 Nm)		(29.8 x 49 x 43 mm)
KE67	Cu	4/0 – 4	2 – 6	6	600 V	230 A	126 lb·in	5 mm	1.7 x 3.4 x 1.9 In
	Al	4/0 – 4			600 V	180 A	(14 Nm)		(42 x 86 x 49 mm)
KE68	Cu	300 – 2	1/0 – 2	2	600 V	285 A	216 lb·in	8 mm	2.0 x 3.7 x 2.3 In
	Al	300 – 2			600 V	230 A	(24 Nm)		(51.5 x 95 x 59 mm)
KE69	Cu	500 – 3/0	2/0 – 2	1/0 – 2	600 V	380 A	360 lb·in	8 mm	2.5 x 5.1 x 2.6 In
	Al	500 – 3/0			600 V	310 A	(40 Nm)		(64 x 130 x 67 mm)

Standard UL 1059, UL category XCFR2, file no. E192532.
* AWG = American Wire Gauge
Insulating material polyamide, flammability rating V-2 (UL94).
All terminal blocks KE61–KE69 are delivered with oxide inhibiting compound applied.

Ensto Clampo Pro 1000 V terminals

For Al/Cu conductors from 2.5 mm² to 150 mm²

Ensto Clampo Pro 1000 V terminals in brief

- Suitable for 1000 VAC and VDC
- Compact size
  - Can be installed next to each other without partition plates
- Suitable for both aluminium and copper conductors
- Short circuit tested class A terminals
- Higher temperature range (90 °C)

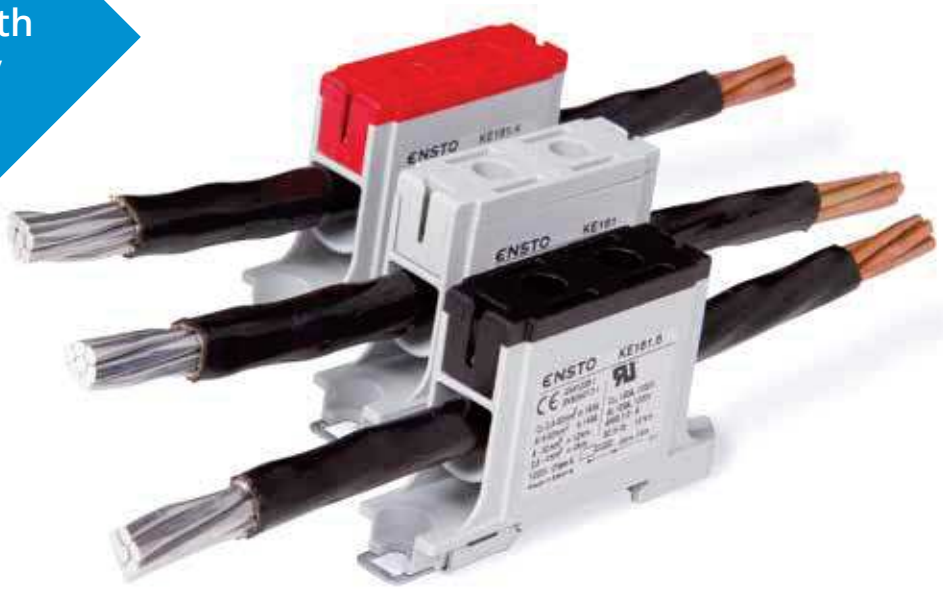
Technical features

- Housing: fiberglass reinforced polyamide
  - Better mechanical strength vs. polyamide
  - Better insulating capacity
  - 90°C temperature range achieved for the material
- Colors:
  - Red and black versions for DC applications
  - Grey and blue for AC applications (KE6x.3 to be used as a grounding terminal)

Conformity	
	CE RoHS FI EAC
Standards	
For copper conductors:	EN 60947-7-1:2009
For aluminium conductors:	EN 61238-1:2003
UL recognition	UL 1059
Connector class:	A
Technical information	
Cross-section range:	Al 6 – 150 mm² Cu 2.5 – 150 mm²
Nominal current range:	145 – 320 A
Operating temperature:	max. 90 °C
Pollution degree:	3
Material	
Housing:	Fiberglass reinforced polyamide
Body and screws:	Tin-coated aluminium
Mechanical features	
Screw heads:	Hexagonal
Mounting:	Screws or DIN rail

Conductor table can be viewed on page 58.

Reliability and protection with higher supply voltages



1000 V terminals are well suited for applications where higher supply voltages are used, such as in drivers, railway systems and ships. They are also suitable for DC applications, making them a perfect choice for photovoltaic connections.

Ensto Clampo Pro 1000 V, one-pole terminal blocks

Product code	Conductor cross-section (mm²)	Color	Nominal current (A)	Nominal insulation voltage (V)	Screw head hexagon (mm)	Bit length min.	Tightening torque (Nm)	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	EAN 13 code
KE161	Cu 2.5–50 mm² Al 6–50 mm²	Grey	Cu 160 A, Al 145 A	1000 V	5 mm	20	4 Nm (2.5–4mm²), 12 Nm (6–50mm²)	DIN rail/ screw	19.2 x 82.5 x 48.5	0.045	30	6438100181758
KE161.2	Cu 2.5–50 mm² Al 6–50 mm²	Blue	Cu 160 A, Al 145 A	1000 V	5 mm	20	4 Nm (2.5–4mm²), 12 Nm (6–50mm²)	DIN rail/ screw	19.2 x 82.5 x 48.5	0.045	30	6438100181765
KE161.4	Cu 2.5–50 mm² Al 6–50 mm²	Red	Cu 160 A, Al 145 A	1000 V	5 mm	20	4 Nm (2.5–4mm²), 12 Nm (6–50mm²)	DIN rail/ screw	19.2 x 82.5 x 48.5	0.045	30	6438100181772
KE161.6	Cu 2.5–50 mm² Al 6–50 mm²	Black	Cu 160 A, Al 145 A	1000 V	5 mm	20	4 Nm (2.5–4mm²), 12 Nm (6–50mm²)	DIN rail/ screw	19.2 x 82.5 x 48.5	0.045	30	6438100181789
KE162	Al/Cu 16–95 mm²	Grey	Cu 245 A, Al 220 A	1000 V	5 mm	25	20 Nm	DIN rail/ screw	25 x 93.5 x 55.5	0.091	30	6438100160616
KE162.2	Al/Cu 16–95 mm²	Blue	Cu 245 A, Al 220 A	1000 V	5 mm	25	20 Nm	DIN rail/ screw	25 x 93.5 x 55.5	0.091	30	6438100160623
KE162.4	Al/Cu 16–95 mm²	Red	Cu 245 A, Al 220 A	1000 V	5 mm	25	20 Nm	DIN rail/ screw	25 x 93.5 x 55.5	0.091	30	6438100160647
KE162.6	Al/Cu 16–95 mm²	Black	Cu 245 A, Al 220 A	1000 V	5 mm	25	20 Nm	DIN rail/ screw	25 x 93.5 x 55.5	0.091	30	6438100160654
KE163	Al/Cu 35–150 mm²	Grey	Cu 320 A, Al 290 A	1000 V	8 mm	34	20 Nm (35–95mm²), 30 Nm (120–150mm²)	DIN rail/ screw	30.4 x 108 x 64.5	0.143	30	6438100181796
KE163.2	Al/Cu 35–150 mm²	Blue	Cu 320 A, Al 290 A	1000 V	8 mm	34	20 Nm (35–95mm²), 30 Nm (120–150mm²)	DIN rail/ screw	30.4 x 108 x 64.5	0.143	30	6438100181802
KE163.4	Al/Cu 35–150 mm²	Red	Cu 320 A, Al 290 A	1000 V	8 mm	34	20 Nm (35–95mm²), 30 Nm (120–150mm²)	DIN rail/ screw	30.4 x 108 x 64.5	0.143	30	6438100181819
KE163.6	Al/Cu 35–150 mm²	Black	Cu 320 A, Al 290 A	1000 V	8 mm	34	20 Nm (35–95mm²), 30 Nm (120–150mm²)	DIN rail/ screw	30.4 x 108 x 64.5	0.143	30	6438100181826

UL recognitions

Product code	Wire type	AWG* 1 wire/terminal	AWG* 2 Cu-wires/ terminal	AWG* 3 Cu-wires/ terminal	Max insulation voltage	Max current	Tightening torque	Allen-hex socket head terminal screw	Dimensions (W x H x D)
KE161	Cu	1/0 – 6	6	8	1000 V	150 A	90 lb·in	5 mm	0.76 x 3.25 x 1.91 In
	Al	1/0 – 6			1000 V	120 A	(10 Nm)		(19.2 x 82.5 x 48.5 mm)
KE162	Cu	4/0 – 4	2 – 6	6	1000 V	230 A	126 lb·in	5 mm	0.98 x 3.68 x 2.19 In
	Al	4/0 – 4			1000 V	180 A	(14 Nm)		(25 x 93.5 x 55.5 mm)
KE163	Cu	300 – 2	1/0 – 2	2	1000 V	285 A	216 lb·in	8 mm	1.20 x 4.25 x 2.54 In
	Al	300 – 2			1000 V	230 A	(24 Nm)		(30.4 x 108 x 64.5 mm)

Standard UL 1059, UL category XCFR2, file # E 192532.
* AWG = American Wire Gauge
All terminal blocks are delivered with oxide-inhibiting compound applied.

KE161

KE161.2

KE162.6

KE163.4

Ensto Clampo Apparatus equipment terminals

For Al/Cu conductors from 2.5 mm² to 300 mm²

Ensto Clampo Apparatus equipment terminals in brief:

- Universal terminal series for connecting aluminium and copper conductors to equipment
- Specially developed to meet the needs of equipment manufacturers
- Wide application area (traditional panel-building and the manufacture of machinery and equipment in which both aluminium and copper conductors can be used)
- Used in equipment or as a transfer terminal between copper and aluminium
- Directly connected to one or two conductors
- Terminals with insulation base also available
- Reliable product with simple construction
- Oxidation-inhibiting compound applied at the factory
- Easy to install
- Models with two inputs also suitable for branching
- Fixing possibilities: with a bolt to a copper bar or with a base together with screws onto a DIN rail
- Short circuit tested class A terminals (not KE12.12 and KE12.20)

Conformity	
CE RoHS FI EAC	
Standards	
KE12.12, KE12.20:	IEC 61545, EN 60947-7-1
Other terminals:	EN 61238-1, EN 60947-7-1
Connector class:	A
Technical information	
Cross-section range:	Al 2.5 – 300 mm² Cu 6 – 300 mm²
Nominal current range:	145 – 630 A
Nominal insulation voltage:	750 V
Operating temperature:	max 80 °C
Pollution degree:	3
Material	
Housing KE12.xx and insulation base KE7x:	Polyamide
Body and screws:	Tin-coated aluminium, KE55, KE57, KE58, KE75, KE77 and KE78 with steel screws
Mechanical features	
Screw head:	Hexagonal
Mounting:	Screws or DIN rail

Conductor table can be viewed on page 58.

Ensto Clampo Apparatus, adapter terminals

Product code	Conductor cross-section	Number of poles	Nominal current	Screw head hexagon	Tightening torque	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
KE12.12	Cu 2.5–50 mm² Al 6–50 mm²	1	Cu 160 A. Al 145 A	5 mm	10 Nm	16.4 x 43 x 29.1	0.013	90	6418677181788
KE12.20	Cu 2.5–50 mm² Al 6–50 mm²	1	Cu 160 A. Al 145 A	5 mm	10 Nm	16.4 x 51 x 29.1	0.014	90	6418677181795

The nominal currents in the table are for maximum cross-sections.

Ensto Clampo Apparatus, equipment terminals

Product code	Conductor cross-section	Number of poles	Nominal current	Screw head hexagon	Tightening torque	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
KE52.2	Al/Cu 16–95 mm²	1	270 A	5 mm	14 Nm	20 x 47 x 33	0.030	30	6418677192449
KE53.2	Al/Cu 35–150 mm²	1	320 A	8 mm	24 Nm (35–95 mm²), 24 Nm (120–150 mm²)	24.5 x 60 x 40	0.050	30	6418677192456
KE54.2	Al/Cu 35–240 mm²	1	425 A	8 mm	12 Nm (35–70 mm²), 40 Nm (95–240 mm²)	32 x 77 x 48	0.115	15	6418677192463
KE55	Al/Cu 120–300 mm²	1	420 A	5 mm	25 Nm	43 x 98 x 84	0.446	15	6418677161957
KE57	Al/Cu 2 x 95–185 mm²	1	400 A	5 mm	35 Nm	39 x 83 x 102	0.360	15	6418677161964
KE58	Al/Cu 2 x 150–300 mm²	1	630 A	5 mm	35 Nm	45 x 98 x 126	0.561	15	6418677161971

KE57 and KE58 are only suitable for two conductors.
Specified I_{cw} value:
KE57: I_{cw} (1.5 s) 20.5 kA
KE58: I_{cw} (2 s) 30.5 kA

The nominal currents in the table are for maximum cross-sections.

KE12.12

KE52.2

KE55

KE57

Ensto Clampo Apparatus, equipment terminals with insulation base

Product code	Conductor cross-section	Number of poles	Nominal current	Nominal insulation voltage	Screw head hexagon	Tightening torque	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
KE73.2	35–150 mm²	1	320 A	750 V	8 mm	24 Nm (35–95 mm²), 24 Nm (120–150 mm²)	58 x 63 x 79.7	0.077	15	6418677192470
KE74.2	35–240 mm²	1	425 A	750 V	8 mm	12 Nm (35–70 mm²), 40 Nm (95–240 mm²)	75 x 78 x 95	0.166	15	6418677192487
KE75	120–300 mm²	1	420 A	750 V	5 mm	25 Nm	81 x 114 x 105.5	0.521	10	6418677162008
KE77	2 x 95–185 mm²	1	400 A	750 V	5 mm	35 Nm	75 x 95 x 131	0.416	10	6418677162015
KE78	2 x 150–300 mm²	1	630 A	750 V	5 mm	35 Nm	81 x 114 x 158	0.615	10	6418677162022

KE57 and KE58 are only suitable for two conductors.
Specified I_{cw} value:
KE77: I_{cw} (1.5 s) 20.5 kA
KE78: I_{cw} (2 s) 30.5 kA

The nominal currents in the table are for maximum cross-sections.

KE74.2

KE75

KE77

KE78

Ensto Clampo Apparatus equipment terminals sets

Packed in convenient retail packages

	Product code	GTIN-13	Description
Cu 2.5 – 50, Al 6 – 50	KE12.12T	6418677181764	Al transition terminal for MCB, bag of 3 pcs
	KE12.20T	6418677181771	Al transition terminal for KSM- and KSR/KST3.63-3.80
Cu/Al 16 – 95	KE52.2T	6418677192494	Equipment terminal, bag of 3 pcs + screw kits
Cu/Al 35 – 150	KE53.2T	6418677192500	Equipment terminal, bag of 3 pcs + screw kits
Cu/Al 35 – 240	KE54.2T	6418677192517	Equipment terminal, bag of 3 pcs + screw kits

KE53.2T includes Ensto Clampo Apparatus equipment terminals.

Accessories

Product code	Description	Weight (kg)	Package size (pcs)	GTIN-13
Intermediate plates				
PMR1420	For KE73.2	0.016	25	6418677162299
PMR1421	For KE74.2 and KE75	0.024	25	6418677162305
PMR1422	For KE77 and KE78	0.030	25	6418677162312
Fastening screws for attaching insulation bases to each other				
PLP98	For KE73.2	0.001	50	6418677162275
PLP99	For KE74.2, KE75, KE77 and KE78	0.004	50	6418677162282
Screw kits for busbar mounting				
KJ5.10	Incl. 3 pcs. M10 x 35 mm	0.182	10	6418677181863
KJ5.12	Incl. 3 pcs. M12 x 45 mm	0.327	10	6418677181870
Others				
SR1	Contact grease, 225 g tube	0.254	25	6418677405402

Intermediate plate, PMR1422.

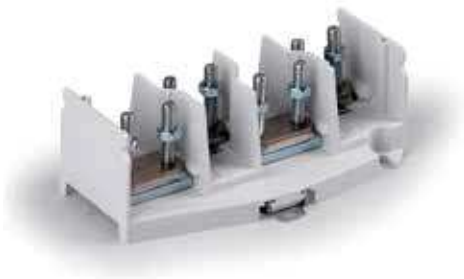
Fastening screws, PLP98.

Screw kit, KJ5.10.

Contact grease, SR1.

Ensto Clampo Tap tapping terminals

For Cu conductors from 1.5 mm² to 70 mm²



Ensto Clampo Tap tapping terminals in brief:

Tapping terminals, 750 V

- One-pole and four-pole terminal plates for 1.5 – 70 mm² copper conductors
- Particularly suitable for use with higher voltages or when improved shrouding is required
- Terminals have insulating partitions
- Can be mounted onto a DIN rail

Conformity	
	CE RoHS FI EAC
Standards	
All terminals:	EN 60947-7-1
Technical information	
Cross-section range:	Al/Cu 2.5 – 70 mm²
Nominal current range:	62 – 192 A
Nominal insulation voltage:	750 V
Operating temperature:	Max. 80 °C
Pollution degree:	3
Material	
Housing:	Polyamide
Body and screws:	Steel
Mechanical features	
Screw head:	Slot head or nut
Mounting:	Screws or DIN rail

Conductor table can be viewed on page 59.

Ensto Clampo Tap, tapping terminal, 750 V

Product code	Conductor cross-section	Nominal current	Nominal insulation voltage	Screw head	Key size	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
Four-pole terminal plates											
KF7.10	Cu 2.5 – 16 mm²	62 A	750 V	Slot head		2.5 Nm	DIN rail/screw	66 x 63 x 43	0.110	25	6418677162589
KF7.70	Cu 6 – 70 mm²	192 A	750 V	Nut	8 mm	4 Nm	DIN rail/screw	122 x 64 x 43	0.160	25	6418677162602
One-pole terminal plates											
KF8.10	Cu 2.5 – 16 mm²	62 A	750 V	Slot head		2.5 Nm	DIN rail/screw	21.5 x 54 x 43	0.030	25	6418677162596
KF8.70	Cu 6 – 70 mm²	192 A	750 V	Nut	8 mm	4 Nm	DIN rail/screw	38 x 64 x 43	0.050	20	6418677162619

The nominal currents in the table are for maximum cross-sections.

KF7.10

KF7.70

KF8.10

KF8.70

Protective covers

Product code	Description	Length	Weight (kg)	Package size (pcs)	GTIN-13
RDP6	For KF7 and KF8	2 m	0.247	10	6418677162626
KNL6.122	For KF7.70	122 mm	0.017	30	6418677170416
KNL6.161	For KF7.70 and KF8.70	161 mm	0.021	30	6418677170423

Not RoHS compliant

Protective cover, KNL6.122.

Ensto Clampo Compact terminal blocks

For Cu conductors from 1.5 mm² to 16 mm²

Ensto Clampo Compact terminal blocks in brief:

- For 1.5 – 16 mm² copper conductors
- Used in controlling, instrumentation and automation applications
- Cost-effective solution
- Compact in size (ideal for installations with limited space)
- Include wire protection (to prevent damage to fine wire strands, while also preventing wires from entering too deeply into the terminal)
- Body of polyamide, heat resistance 105 °C
- Installation onto a DIN rail or directly onto surface
- Easy to mark (either by using marking tape or printing directly onto the terminal body)

Conformity	
	CE RoHS FI UL SP EAC
Standards	
	EN 60947-7-1, UL 1059, CSA C22.2 No. 158-1987
Technical information	
Cross-section range:	Cu 1.5 – 16 mm²
Nominal current range:	17.5 – 82 A
Nominal insulation voltage:	450 – 750 V
Operating temperature:	Max. 105 °C
Material	
Housing:	Polyamide
Body:	Ni-coated brass
Mechanical features	
Screw head:	Slot head
Mounting:	Screws or DIN rail

Conductor table can be viewed on page 59.

Ensto Clampo Compact, terminal blocks

Product code	Conductor cross-section	Number of poles	Nominal current	Nominal insulation voltage	Screw head slot head	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
KR5031	Cu 1.5 mm²	3	17.5 A	750 V (pollution degree 2)*	M2.6	0.4 Nm	DIN rail/ screw	26 x 22 x 18	0.007	200	6418677111402
KR5131	Cu 1.5 mm²	12	17.5 A	750 V (pollution degree 2)*	M2.6	0.4 Nm	DIN rail/ screw	70.9 x 22 x 18	0.026	50	6418677111426
KR8031	Cu 1.5 – 6 mm²	3	41 A	750 V (pollution degree 2)*	M3.5	0.8 Nm	DIN rail/ screw	31.4 x 22 x 22	0.015	200	6418677111778
KR8041	Cu 1.5 – 6 mm²	4	41 A	750 V (pollution degree 2)*	M3.5	0.8 Nm	DIN rail/ screw	38.2 x 22 x 22	0.021	200	6418677111792
KR8121	Cu 1.5 – 6 mm²	12	41 A	750 V (pollution degree 2)*	M3.5	0.8 Nm	DIN rail/ screw	90.8 x 22 x 22	0.060	100	6418677111822
KR10021	Cu 6 – 16 mm²	2	82 A	750 V (pollution degree 2)**	M6	2.5 Nm	DIN rail/ screw	34 x 30.8 x 39.5	0.044	100	6418677111334
KR10031	Cu 6 – 16 mm²	3	82 A	750 V (pollution degree 2)**	M6	2.5 Nm	DIN rail/ screw	45.3 x 30.8 x 39.5	0.065	100	6418677111358

* Pollution degree 3: nominal insulation voltage 450 V
** Pollution degree 3: nominal insulation voltage 500 V

The nominal currents in the table are for maximum cross-sections.

KR5131

KR8041

KR10031

KR10021

UL recognitions

Product code	Number of poles	Wire type	AWG* 1 wire/terminal	Maximum voltage	Maximum current	Nominal tightening torque	Screwdriver terminal screw	Dimensions (W x L x H)
KR5031	3	Cu	14 – 22	150 V	10 A	4.4 lb·in (0.5 Nm)	Max. 3.5 mm slot	1.0 x 0.9 x 0.7 In (26 x 22 x 18 mm)
KR5131	12	Cu	14 – 22	150 V	10 A	4.4 lb·in (0.5 Nm)	Max. 3.5 mm slot	2.8 x 0.9 x 0.7 In (70.9 x 22 x 18 mm)
KR8031	3	Cu	8 – 18	150 V	50 A	7 lb·in (0.8 Nm)	Max. 5 mm slot	1.2 x 0.9 x 0.9 In (31.4 x 22 x 22 mm)
KR8041	4	Cu	8 – 18	150 V	50 A	7 lb·in (0.8 Nm)	Max. 5 mm slot	1.5 x 0.9 x 0.9 In (38.2 x 22 x 22 mm)
KR8121	12	Cu	8 – 18	150 V	50 A	7 lb·in (0.8 Nm)	Max. 5 mm slot	3.6 x 0.9 x 0.9 In (90.8 x 22 x 22 mm)
KR10021	2	Cu	6 – 18	300 V	65 A	20 lb·in (2.25 Nm)	Max. 6.5 mm slot	1.3 x 1.2 x 1.6 In (34 x 30.8 x 39.5 mm)
KR10031	3	Cu	6 – 18	300 V	65 A	20 lb·in (2.25 Nm)	Max. 6.5 mm slot	1.8 x 1.2 x 1.6 In (45.3 x 30.6 x 39.5 mm)

Standard UL 1059, UL category XCFR2, file no. E192532.
* AWG = American Wire Gauge
Insulating material polyamide, flammability rating V-2 (UL94).

Accessories

Product code	Description	Weight (kg)	Package size (pcs)	GTIN-13
KRL1505.02	Cross connector, 2-pole, 1.5 mm²	0.001	100	6418677111860
KRL6067.02	Cross connector, 2-pole, 6 mm²	0.001	100	6418677112003
KRL6067.03	Cross connector, 3-pole, 6 mm²	0.002	100	6418677112010
KRL6067.04	Cross connector, 4-pole, 6 mm²	0.002	100	6418677112027
KRL7	Adapter for 35 x 7.5 mm DIN rail mounting, grey	0.001	100	6418677112034
KNL7	Adapter for 35 x 15 mm DIN rail mounting, black	0.001	100	6418677193187
KRL8	End holder, fits both DIN 15 and 35 mm rails	0.003	100	6418677112041
PMR143	End plate for direct mounting	0.001	100	6418677112614
PMR370	Spacer plate, fits both DIN 15 and 35 mm rails	0.002	100	6418677112645
KRL6	Spacer plate for KR8121	0.002	100	6418677111952
PP44	DIN rail, 15 mm, steel , length = 2 m	0.290	10	6418677112720

Cross connector, 3-pole, KRL6067.03.

Adapter for 35 x 7.5 mm DIN rail mounting, KRL7.

End holder, fits both DIN 15 and 35 mm rails, KRL8.

End plate for direct mounting, PMR143.

Spacer plate, fits both DIN 15 and 35 mm rails, PMR370.

Ensto Clampo Eurostrips

For Cu conductors from 1.5 mm² to 16 mm²

Ensto Clampo Eurostrips in brief:

- For 1.5 – 16 mm² copper conductors
- For flexible, stranded and solid wires
- Produced as 12-pole
  – can be ordered precut with the required number of poles
- On request individual pole positions can be marked with desired markings
- Available with or without standoff feet
- Available with or without wire protection

Conformity	
Terminal blocks:	CE RoHS FI VDE UL CSA EAC
Standards	
Terminal blocks:	EN 60998-1, EN 60998-2-1, UL1059, UL 486, CSA C22.2 No. 158-1987
Technical information	
Cross-section range:	Cu 1.5 – 16 mm²
Nominal current range:	15 – 65 A
Nominal insulation voltage:	450 – 750 V
Operating temperature:	Max. 80 °C
Material	
Housing:	Polyamide
Body:	Ni-coated brass
Mechanical features	
Screw head:	Slot head
Mounting:	Screws

Conductor table can be viewed on page 59.

Ensto Clampo Eurostrips

Product code	Conductor cross-section	Flat base or standoff feet	Wire protection	Number of poles	Nominal current	Nominal insulation voltage	Screw head slot head	Tightening torque	Mounting hole diameter (mm)	Dimensions L x W x H (mm)	Weight (kg)	GTIN
KA16.12	1.5 mm²	Flat base	No	12	15 A	450 V	M2.6	0.3–0.5 Nm	2.8	93.5 x 18.2 x 13.8	0.0191	6418677102608
KB16.12	1.5 mm²	Flat base	Yes	12	15 A	450 V	M2.6	0.3–0.5 Nm	2.8	93.5 x 18.2 x 13.8	0.0191	6418677105593
KA17.12	1.5 mm²	Standoff feet	No	12	15 A	450 V	M2.6	0.3–0.5 Nm	2.8	93.5 x 18.2 x 17.3	0.0190	6418677102721
KB17.12	1.5 mm²	Standoff feet	Yes	12	15 A	450 V	M2.6	0.3–0.5 Nm	2.8	93.5 x 18.2 x 17.3	0.0200	6418677105715
KA241.12	4 mm²	Flat base	No	12	30 A	450 V	M3	0.4–0.6 Nm	3.5	117 x 22.2 x 15.8	0.0320	6418677103445
KB241.12	4 mm²	Flat base	Yes	12	30 A	450 V	M3	0.4–0.6 Nm	3.5	117 x 22.2 x 15.8	0.0330	6418677106439
KA242.12	4 mm²	Standoff feet	No	12	30 A	450 V	M3	0.4–0.6 Nm	3.5	117 x 22.2 x 19.8	0.0350	6418677103568
KB242.12	4 mm²	Standoff feet	Yes	12	30 A	450 V	M3	0.4–0.6 Nm	3.5	117 x 22.2 x 19.8	0.0360	6418677106552
KA460.12	6 mm²	Flat base	No	12	40 A	450 V	M3.5	0.6–0.8 Nm	4.2	140 x 23.2 x 17.7	0.0460	6418677104701
KB460.12	6 mm²	Flat base	Yes	12	40 A	450 V	M3.5	0.6–0.8 Nm	4.2	140 x 23.2 x 17.7	0.0480	6418677107283
KA463.12	6 mm²	Standoff feet	No	12	40 A	450 V	M3.5	0.6–0.8 Nm	4.2	140 x 23.2 x 21.2	0.0480	6418677104824
KB463.12	6 mm²	Standoff feet	Yes	12	40 A	450 V	M3.5	0.6–0.8 Nm	4.2	140 x 23.2 x 21.2	0.0490	6418677107405
KA612.12	16 mm²	Standoff feet	No	12	65 A	750 V	M5	1.8–2.0 Nm	4.0	176 x 28 x 26.5	0.0920	6418677105302
KB612.12	16 mm²	Standoff feet	Yes	12	65 A	750 V	M5	1.8–2.0 Nm	4.0	176 x 28 x 26.5	0.0940	6418677108006

Package size 250 pcs.

The nominal currents in the table are for maximum cross-sections.

KA16.12

KA241.12

KA460.12

KA612.12

UL recognitions

Product code	AWG* 1 wire/terminal	Number of poles	Maximum current	Maximum insulation voltage	Screw head slot head	Tightening torque	Dimensions L x W x H (mm)
KA / KB16.12	12 – 22	12	20 A	300 V	M2.6	0.3 – 0.5 Nm	93.5 x 18.2 x 13.8
KA / KB17.12	12 – 22	12	20 A	600 V	M2.6	0.3 – 0.5 Nm	93.5 x 18.2 x 17.3
KA / KB241.12	10 – 20	12	30 A	300 V	M3	0.4 – 0.6 Nm	117 x 22.2 x 15.8
KA / KB242.12	10 – 20	12	30 A	600 V	M3	0.4 – 0.6 Nm	117 x 22.2 x 19.3
KA / KB460.12	8 – 20	12	40 A	300 V	M3.5	0.6 – 0.8 Nm	140 x 23.2 x 17.7
KA / KB463.12	8 – 20	12	40 A	600 V	M3.5	0.6 – 0.8 Nm	140 x 23.2 x 21.2
KA / KB612.12	6 – 14	12	65 A	600 V	M5	1.8 – 2.0 Nm	176 x 28 x 26.5

Standard UL 1059, UL category XCFR2, file no. E192532.
* AWG = American Wire Gauge
Insulating material polyamide, flammability rating V-2 (UL94).

Accessories

Product code	Description	Weight (kg)	Package size (pcs)	GTIN-13
Cross connectors				
KRL1508.02	2-pole, 1.5 mm²	0.0008	100	6418677111891
KRL1508.03	3-pole, 1.5 mm²	0.0014	100	6418677111907
KRL4010.02	2-pole, 4 mm²	0.0012	100	6418677714856
KRL4010.03	3-pole, 4 mm²	0.0019	100	6418677111938
KRL6012.02	2-pole, 6 mm²	0.0013	100	6418677111969
KRL6012.03	3-pole, 6 mm²	0.0021	100	6418677111983
KRL16015.02	2-pole, 16 mm²	0.0018	100	6418677112959
Mounting pins				
AH2242	For KA/KB242, white, total length 20.5 mm, insertion length 14 mm, hole Ø 4.5 mm	0.0002	10 000	6418677100161
AH2463	For KA/KB463, grey, total length 21.5 mm, insertion length 14.5 mm, hole Ø 4.5 mm	0.0003	10 000	6418677100178
AH2512	For KA/KB612, black, total length 24.5 mm, insertion length 19 mm, hole Ø 5.5 mm	0.0003	10 000	6418677100185
Spacer plate				
KA46	For 4–6 mm² terminal blocks with standoff feet	0.002	1000	6418677104589

KRL6012.02

Mounting pins

KA46

Marking plates

Product code	Single or double	Markings	Nominal cross-section mm²	For products	Weight (kg)	Package size (pcs)	GTIN-13
PMK2612	2	Plain	4	241, 242	0.0040	500	6418677112485
PMK2712	2	(1–12)	4	241, 242	0.0040	500	6418677112492
PMK2812	1	Plain	4	241, 242	0.0023	500	6418677112508
PMK2912	1	(1–12)	4	241, 242	0.0023	500	6418677112515
PMK3012	2	Plain	6	460, 463	0.0050	500	6418677112522
PMK3212	1	Plain	6	460, 463	0.0050	500	6418677112546
PMK4412	2	Plain	16	612	0.0080	500	6418677112560
PMK4512	2	(1–12)	16	612	0.0080	500	6418677112577
PMK4612	1	Plain	16	612	0.0040	500	6418677112584

PMK2812, PMK3012

Ensto Clampo Wire Connectors

For Cu conductors from 2.5 mm² to 16 mm²

- Ensto Clampo Wire Connectors in brief:
- For 2.5 – 16 mm² copper conductors
- For flexible, stranded and solid wires
- Produced as 12-pole
  – can easily be cut without any tools

Conformity	
Terminal blocks:	CE RoHS FI EAC
Standards	
Terminal blocks:	EN 60998-1
Technical information	
Cross-section range:	Cu 2.5 – 16 mm²
Nominal insulation voltage:	450 V
Operating temperature:	Max. 80 °C
Material	
Housing:	Polyamide (KD160 Polycarbonate)
Body:	Steel (KD160 Ni-coated brass)
Mechanical features	
Screw head:	Slot head
Mounting:	Screws or DIN rail

Conductor table can be viewed on page 59.

Ensto Clampo Wire Connectors

Product code	Conductor cross-section	Number of poles	Nominal insulation voltage	Screw head slot head	Tightening torque	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
AL1.12	3 x 2.5 mm²/ 4 x 1.5 mm²	12	450 V	M3.5	0.8 – 1.0 Nm	128.6 x 19.2 x 28.8	0.0545	50	6410019230543
AL2.12	2 x 6 mm² / 3 x 4 mm² / 4 x 2.5 mm²	12	450 V	M4.5	1.8 – 2.0 Nm	130 x 26 x 32.1	0.0812	50	6410019230550
AL13	2 x 16 mm² / 2 x 10 mm² / 3 x 6 mm²/ 4 x 4 mm²	1	450 V	M6	2.5 – 2.7 Nm	16 x 39.5 x 40	0.0120	500	6410019230604
KD160.01	4 x 1 mm² / 3 x 1.5 mm² / 2 x 2.5 mm²	1	450 V	M4	1.2 – 1.4 Nm	9 x 15.5 x 17	0.0002	2000	6418677109348
KD160.12	4 x 1 mm² / 3 x 1.5 mm² / 2 x 2.5 mm²	12	450 V	M4	1.2 – 1.4 Nm	110 x 15.5 x 17	0.0025	500	6418677109454

The nominal currents in the table are for maximum cross-sections.

AL1.12

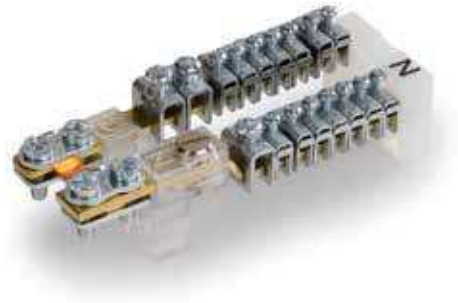
AL2.12

AL13

KD160.12

Ensto Clampo Ground N and PE terminals

For Cu conductors from 1.5 mm² to 35 mm²



Ensto Clampo Ground N and PE terminals in brief:

- Used in control and panel building applications
- Versatile installation and mounting alternatives
- Products as complete units in wide selection of sizes and markings
- Separate components of terminals also available for special assemblies
- Models with wire protection (to prevent damage to fine wire strands)

Conformity	
	CE RoHS FI EAC
Standards	
N busbars:	EN 60947-7-1
PE busbars:	EN 60947-7-2
N and PE busbars:	EN 60947-7-1, EN 60947-7-2
Technical information	
Cross-section range:	Cu 1.5 – 35 mm²
Nominal current range:	82 – 135 A
Nominal insulation voltage:	500 V
Operating temperature:	max 80 °C
Pollution degree:	3
Material	
Body:	Polyamide/polycarbonate
Base:	Brass/steel
Mechanical features	
Screw head:	+/-
Mounting:	Screws or DIN rail

Conductor table can be viewed on page 59.

Ensto Clampo Ground, neutral busbars

Product code	Conductor cross-section	Nominal current	Nominal insulation voltage	Screw head	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
N busbars with 16 mm² and 6 mm² pillar terminals										
KNA4.104	Cu 2 x (1 x 16 mm² + 3 x 6 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 53 x 35	0.063	50	6418677162770
KNA4.106	Cu 2 x (1 x 16 mm² + 5 x 6 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 65 x 35	0.085	50	6418677162787
KNA4.108	Cu 2 x (1 x 16 mm² + 7 x 6 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 79 x 35	0.104	25	6418677162794
KNA4.110	Cu 2 x (2 x 16 mm² + 8 x 6 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 95 x 35	0.130	25	6418677162817
KNA4.112	Cu 2 x (2 x 16 mm² + 10 x 6 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 106 x 35	0.153	25	6418677162824
KNA4.114	Cu 2 x (3 x 16 mm² + 11 x 6 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 122 x 35	0.178	25	6418677162831
KNA4.120	Cu 2 x (4 x 16 mm² + 16 x 6 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 160 x 35	0.243	25	6418677162848
N busbars with 16 mm² pillar terminals										
KN4.102	Cu 2 x (2 x 16 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 43 x 43	0.052	100	6418677152849
KN4.104	Cu 2 x (4 x 16 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 61 x 43	0.088	50	6418677152856
KN4.106	Cu 2 x (6 x 16 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 79 x 43	0.122	50	6418677152863
KN4.108	Cu 2 x (8 x 16 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 97 x 43	0.162	25	6418677152870
KN4.110	Cu 2 x (10 x 16 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 115 x 43	0.198	25	6418677152887
KN4.112	Cu 2 x (12 x 16 mm²)	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 133 x 43	0.230	25	6418677152894
N busbars with 35 mm² pillar terminals										
KND4.103N	Cu 2 x (3 x 35 mm²)	135 A	500 V	PH2	4 Nm	DIN rail/screw	41.5 x 64 x 41	0.127	50	6418677162855

The nominal currents in the table are for maximum cross-sections.

KNA4.110

KN4.106

KND4.103N

Ensto Clampo Ground, PE busbars

Product code	Conductor cross-section	Screw head	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
PE busbars with 16 mm² and 6 mm² pillar terminals								
KNA4.104P	Cu 2 x (1 x 16 mm² + 3 x 6 mm²)	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 58 x 35	0.063	50	6418677152900
KNA4.106P	Cu 2 x (1 x 16 mm² + 5 x 6 mm²)	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 65 x 35	0.085	50	6418677152917
KNA4.108P	Cu 2 x (1 x 16 mm² + 7 x 6 mm²)	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 79 x 35	0.104	25	6418677152924
KNA4.110P	Cu 2 x (2 x 16 mm² + 8 x 6 mm²)	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 95 x 35	0.130	25	6418677152931
KNA4.112P	Cu 2 x (2 x 16 mm² + 10 x 6 mm²)	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 106 x 35	0.153	25	6418677152948
KNA4.114P	Cu 2 x (3 x 16 mm² + 11 x 6 mm²)	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 122 x 35	0.178	25	6418677152955
KNA4.120P	Cu 2 x (4 x 16 mm² + 16 x 6 mm²)	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 160 x 35	0.243	25	6418677152962
PE busbars with 35 mm² pillar terminals								
KND4.103P	Cu 2 x (3 x 35 mm²)	PH2	4 Nm	DIN rail/screw	41.5 x 64 x 41	0.127	50	6418677152979

The nominal currents in the table are for maximum cross-sections.

KNA4.110P

KND4.103P

Ensto Clampo Ground, N and PE busbars

Product code	Conductor cross-section	Nominal current	Nominal insulation voltage	Screw head	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
N and PE busbars with 16 mm² and 6 mm² pillar terminals, 6 mm² pillar terminals with wire protection										
KNA5.108	Cu, N 1 x 16 mm² + 7 x 6 mm², PE 2 x 16 mm² + 7 x 6 mm²	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 121.5 x 35	0.176	25	6418677162954
KNA5.113	Cu, N 1 x 16 mm² + 12 x 6 mm², PE 2 x 16 mm² + 12 x 6 mm²	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 152 x 35	0.233	25	6418677162961
KNA5.117	Cu, N 1 x 16 mm² + 16 x 6 mm², PE 2 x 16 mm² + 16 x 6 mm²	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 176.5 x 35	0.276	25	6418677162978
KNA5.120	Cu, N 1 x 16 mm² + 19 x 6 mm², PE 2 x 16 mm² + 19 x 6 mm²	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 195 x 35	0.309	25	6418677162985
KNA5.125	Cu, N 2 x 16 mm² + 23 x 6 mm², PE 3 x 16 mm² + 23 x 6 mm²	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 240.5 x 35	0.377	25	6418677162992
KNA5.130	Cu, N 2 x 16 mm² + 28 x 6 mm², PE 3 x 16 mm² + 28 x 6 mm²	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 271 x 35	0.438	20	6418677163005
KNA5.134	Cu, N 2 x 16 mm² + 32 x 6 mm², PE 3 x 16 mm² + 32 x 6 mm²	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 295.5 x 35	0.470	20	6418677163012
KNA5.138	Cu, N 2 x 16 mm² + 36 x 6 mm², PE 3 x 16 mm² + 36 x 6 mm²	82 A	500 V	+/-	2 Nm/0.8 Nm	DIN rail/screw	40 x 320 x 35	0.520	10	6418677163029
N and PE busbars with 16 mm² and 6 mm² pillar terminals										
KNA4.108NP	Cu, N 1 x 16 mm² + 7 x 6 mm², PE 1 x 16 mm² + 7 x 6 mm²	82 A	500 V	+/-	2 Nm	DIN rail/screw	40 x 79 x 35	0.104	25	6418677153105
KNA4.114NP	Cu, N 3 x 16 mm² + 11 x 6 mm², PE 3 x 16 mm² + 11 x 6 mm	82 A	500 V	+/-	2 Nm	DIN rail/screw	40 x 122 x 35	0.178	25	6418677153112
KNA4.120NP	Cu, N 4 x 16 mm² + 16 x 6 mm², PE 4 x 16 mm² + 16 x 6 mm²	82 A	500 V	+/-	2 Nm	DIN rail/screw	40 x 160 x 35	0.243	25	6418677153129
KNA4.126NP	Cu, N 4 x 16 mm² + 22 x 6 mm², PE 4 x 16 mm² + 22 x 6 mm²	82 A	500 V	+/-	2 Nm	DIN rail/screw	40 x 203 x 35	0.315	25	6418677153136
KNA4.136NP	Cu, N 4 x 16 mm² + 32 x 6 mm², PE 4 x 16 mm² + 32 x 6 mm²	82 A	500 V	+/-	2 Nm	DIN rail/screw	40 x 269 x 35	0.415	25	6418677153143
N and PE busbars with 16 mm² pillar terminals										
KN4.204	Cu, N 4 x 16 mm², PE 4 x 16 mm²	76 A	500 V	+/-	2 Nm	DIN rail/screw	40 x 68.5 x 40	0.100	50	6418677162909
KN4.206	Cu, N 6 x 16 mm², PE 6 x 16 mm²	76 A	500 V	+/-	2 Nm	DIN rail/screw	40 x 86.5 x 40	0.146	25	6418677162916
KN4.208	Cu, N 8 x 16 mm², PE 8 x 16 mm²	76 A	500 V	+/-	2 Nm	DIN rail/screw	40 x 104.5 x 40	0.181	25	6418677162923
KN4.210	Cu, N 10 x 16 mm², PE 10 x 16 mm²	76 A	500 V	+/-	2 Nm	DIN rail/screw	40 x 122.5 x 40	0.219	25	6418677162930
KN4.212	Cu, N 12 x 16 mm², PE 12 x 16 mm²	76 A	500 V	+/-	2 Nm	DIN rail/screw	40 x 140.5 x 40	0.254	25	6418677162947
N and PE busbars with 35 mm² pillar terminals										
KND4.103NP	Cu, N 3 x 35 mm², PE 3 x 35 mm²	135 A	500 V	PH2	4 Nm	DIN rail/screw	41.5 x 64 x 41	0.127	50	6418677153150

The nominal currents in the table are for maximum cross-sections.

KNA5.108

KNA4.120NP

KNA4.206

KND4.103NP

Neutral terminal

For extending a neutral conductor e.g. in distribution boards.

Product code	Conductor cross-section	Nominal current	Nominal insulation voltage	Screw head	Tightening torque	Mounting	Dimensions W x L x H (mm)	Weight (kg)	Package size (pcs)	GTIN-13
KJ7	Cu 1.5 – 35 mm²	135 A	500 V	Slot	3.5	Screw	14.8 x 60 x 38	0.037	250	6418677163524

The nominal currents in the table are for maximum cross-sections.

Neutral terminal, UL recognitions

Product code	Number of poles	Wire type	AWG* 1 wire/terminal	Maximum voltage	Maximum current	Tightening torque	Screwdriver terminal screw	Dimensions (W x H x D)
KJ7**	1	Cu	2 – 16	600 V	115 A	40.5 lb·in (4.5 Nm)	Slot	0.6 x 2.4 x 1.5 In (15 x 60 x 38 mm)

Standard UL1059, UL category XCFR2, file no. E192532.
* AWG = American Wire Gauge
** KJ7 is suitable for only 300 V if two or more poles are mounted side by side.
Insulating material polyamide, flammability rating V-2 (UL94).

KJ7

Ensto Clampo Ground, N and PE busbars in parts

Product code	Description	Nominal current	Tightening torque	Weight (kg)	Package size (pcs)	GTIN-13
N and PE busbars in parts, saddle terminals						
KN2.2	Cu 2 x (1.5–16 mm²)	82 A	1.2 Nm	0.019	250	6418677163050
KN2.3	Cu 3 x (1.5–16 mm²)	82 A	1.2 Nm	0.028	250	6418677163067
KN2.4	Cu 4 x (1.5–16 mm²)	82 A	1.2 Nm	0.035	200	6418677163074
KN2.5	Cu 5 x (1.5–16 mm²)	82 A	1.2 Nm	0.045	200	6418677163081
KN2.6	Cu 6 x (1.5–16 mm²)	82 A	1.2 Nm	0.052	200	6418677163098
KN2.7	Cu 7 x (1.5–16 mm²)	82 A	1.2 Nm	0.061	100	6418677163104
KN2.8	Cu 8 x (1.5–16 mm²)	82 A	1.2 Nm	0.070	100	6418677163111
PM58	Support for busbar KN2.x			0.003	2000	6418677163128

N and PE busbar in parts with saddle terminals, KN2.2.

Terminal saddles

Product code	Description	Nominal current	Weight (kg)	Package size (pcs)	GTIN-13
PPK28	Cu 1.5–25 mm²	82 A	0.002	100	6418677166853
PPK9	Cu 1.5–35 mm²	135 A	0.003	100	6418677166860
PPK2	Cu 6–70 mm²	270 A	0.009	100	6418677166877
PSS63	Cu 16–185 mm²	535 A	0.064	10	6418677182068

PPK9

Pillar terminals

Product code	Description	Nominal current	Tightening torque	Screw head	Weight (kg)	Package size (pcs)	GTIN-13
KJ25	Cu 1–6 mm², width 6 mm	33 A	0.8 Nm	+/-	0.004	1000	6418677163135
KJ25.1	Cu 1–6 mm², with wire protection, width 6 mm	33 A	0.8 Nm	+/-	0.004	1000	6418677163142
KJ18	Cu 1.5–16 mm², width 9 mm	82 A	2 Nm	+/-	0.007	1000	6418677163173
KJ18.1	Cu 1.5–16 mm², with wire protection, width 9 mm	82 A	2 Nm	+/-	0.007	1000	6418677171505
KJ20	Cu 2.5–35 mm², width 13 mm	135 A	4 Nm	PH2	0.011	1000	6418677163425
KJ20.1	Cu 2.5–35 mm², width 13 mm, for hexagonal key	135 A	4 Nm	Hexagon 5 mm	0.012	1000	6418677163043

KJ25

KJ25.1

KJ20

KJ20.1

Busbar supports

Product code	Description	Weight (kg)	Package size (pcs)	GTIN-13
PMR117	Support for 2 x 10 mm busbar, marked N	0.005	100	6418677163180
PMR117.1	Support for 2 x 10 mm busbar, marked PE	0.005	100	6418677163197
PMR1413	Support for 2 x 10 mm busbar	0.002	100	6418677163203
PMR1427	Support for 2 x 10 mm busbar	0.002	100	6418677163531
KJ19	Support for two 2 x 10 mm busbars, with joint	0.023	100	6418677163234
KNL2	Protective cover support for RDP6, used together with PMR117	0.004	200	6418677163241
RDP6	Protective cover, length 2000 mm	0.247	10	6418677162626

Support for 2 x 10 mm busbar, PMR117.

Busbars

2 x 10 mm brass busbars.

Product code	Description	Weight (kg)	Package size (pcs)	GTIN-13
PSK20.037	Length 37 mm	0.006	100	6418677163296
PSK20.046	Length 46 mm	0.008	100	6418677163302
PSK20.055	Length 55 mm	0.009	100	6418677163319
PSK20.064	Length 64 mm	0.011	100	6418677163326
PSK20.073	Length 73 mm	0.012	100	6418677163333
PSK20.082	Length 82 mm	0.014	100	6418677163340
PSK20.100	Length 100 mm	0.017	100	6418677163364
PSK20.109	Length 109 mm	0.018	100	6418677163371
PSK20.118	Length 118 mm	0.020	100	6418677163388
PSK20.127	Length 127 mm	0.021	100	6418677163395
PSK20.136	Length 136 mm	0.023	100	6418677163401
PSK20.161	Length 161 mm	0.027	100	6418677163623
PSK20.175	Length 175 mm	0.029	100	6418677163630
PSK152	Length 1000 mm	0.171	10	6418677163418
PSK152.2	Length 2000 mm	0.341	10	6418677163722

PSK20.100

Other accessories

Product code	Description	Weight (kg)	Package size (pcs)	GTIN-13
PMR281	Support for 3 x 12 mm busbar	0.004	200	6418677163449
PSK131	Busbar, length 2000 mm, 3x12 mm, copper	0.630	10	6418677163456
RDP9	Shroud profile for N and PE busbar, length 2000 mm	0.140	10	6418677163463
PPK225	Earthing bar for connecting pillar terminal to mounting plate, height 24 mm	0.007	100	6418677163036

Support for 3 x 12 mm busbar, PMR281.

Busbar, copper, PSK131.

Shroud profile, RPD9.

Earthing bar, PPK225.

Ensto Clampo conductor table 1/2

Conductors that can be used with the terminals: number, cross-section and type.

- Nominal cross-sections are in **bold type**.
- Often the requirements of a specific apparatus restrict the number of conductors.
- The nominal current of the terminal must not be exceeded.
- In general, the conductors connected to one conductor space of a connector must be of the same type.
- Table values require careful installation.
- After installation, check that all conductors are pressed into a connection.
- We recommend a ferrule when using a fine stranded conductor.
- According to installation standard SFS 6000: 1999 section 810.2.6, each incoming and outgoing protection and neutral conductor in a panel must have its own separate terminal.
- The conductor numbers below refer only to industrially-installed terminals (internal connections in a panel), (SGS Fimko).

Product code	Wire type	Cross-sections of conductors (mm²) and number of conductors/space. The conductor numbers below refer only to industrially-installed terminals.																Nominal current (A)	Nominal insulation voltage (V)	Tightening torque (Nm)
		1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300			
Ensto Clampo Pro universal terminals																				
KE61	Al				1	1	1	1	1	**1**								145	800	4 (2.5–4 mm²)
	Cu		3	3	3	3	2	1	1	**1**								160		12 (6–50 mm²)
KE62	Al						1	1	1	1	1	**1**						220	800	20
	Cu						3	2	2	1	1	**1**						245		
KE63	Al								1	1	1	1	1	**1**				290	800	20 (35–95 mm²)
	Cu								3	2	1	1	1	**1**				320		30 (120–150 mm²)
KE64	Al								1	1	1	1	1	1	1	**1**		380	800	12 (35–70 mm²)
	Cu								3	3	2	1	1	1	1	**1**		425		45 (95–240 mm²)
KE66	Al				1	1	1	1	1	**1**								145	800	4 (2.5–4 mm²)
	Cu		3	3	3	3	2	1	1	**1**								160		12 (6–50 mm²)
KE67	Al						1	1	1	1	1	**1**						220	800	20
	Cu						3	2	2	1	1	**1**						245		
KE68	Al								1	1	1	1	1	**1**				290	800	20 (35–95 mm²)
	Cu								3	3	2	1	1	**1**				320		30 (120–150 mm²)
KE69	Al								1	1	1	1	1	1	1	**1**		380	800	12 (35–70 mm²)
	Cu								3	3	2	1	1	1	1	**1**		425		45 (95–240 mm²)
Ensto Clampo Pro 1000 V terminals																				
KE161	Al				1	1	1	1	1	**1**								145	1000	4 Nm (2.5–4 mm²)
	Cu		3	3	3	3	2	1	1	**1**								160		12 Nm (6–50 mm²)
KE162	Al						1	1	1	1	1	**1**						220	1000	20
	Cu						3	2	2	1	1	**1**						245		
KE163	Al								1	1	1	1	1	**1**				290	1000	30 Nm (120–150 mm²)
	Cu								3	2	1	1	1	**1**				320		20 Nm (35–95 mm²)
Ensto Clampo Apparatus equipment terminals																				
KE12.12, KE12.20	Al				1	1	1	1	1	**1**								145	750	10
	Cu		1	1	1	1	1	1	1	**1**								160		
KE52.2	Al						1	1	1	1	1	**1**						270		14
	Cu						3	2	2	1	1	**1**								
KE53.2	Al								1	1	1	1	1	**1**				320		14 (35–95 mm²)
	Cu								3	2	1	1	1	**1**						24 (120–150 mm²)
KE54.2	Al								1	1	1	1	1	1	1	**1**		425		12 (35–70 mm²)
	Cu								3	3	2	1	1	1	1	**1**				40 (95–240 mm²)
KE55	Al												1	1	1	1	**1**	420		25
	Cu												1	1	1	1	**1**			
KE57	Al											1	1	1	**1**			400		35 2 conductor spaces
	Cu											1	1	1	**1**					
KE58	Al													1	1	1	**1**	630		35 2 conductor spaces
	Cu													1	1	1	**1**			
KE73.2	Al								1	1	1	1	1	**1**				320	750	14 (35–95 mm²)
	Cu								3	2	1	1	1	**1**						24 (120–150 mm²)
KE74.2	Al								1	1	1	1	1	1	1	**1**		425	750	12 (35–70 mm²)
	Cu								3	3	2	1	1	1	1	**1**				40 (95–240 mm²)
KE75	Al												1	1	1	1	**1**	420	750	25
	Cu												1	1	1	1	**1**			
KE77	Al											1	1	1	**1**			400	750	35 2 conductor spaces
	Cu											1	1	1	**1**					
KE78	Al													1	1	1	**1**	630	750	35 2 conductor spaces
	Cu													1	1	1	**1**			

Ensto Clampo conductor table 2/2

Conductors that can be used with the terminals: number, cross-section and type.

- Nominal cross-sections are in **bold type**.
- Often the requirements of a specific apparatus restrict the number of conductors.
- The nominal current of the terminal must not be exceeded.
- In general, the conductors connected to one conductor space of a connector must be of the same type.
- Table values require careful installation.
- After installation, check that all conductors are pressed into a connection.
- We recommend a ferrule when using a fine stranded conductor.
- According to installation standard SFS 6000: 1999 section 810.2.6, each incoming and outgoing protection and neutral conductor in a panel must have its own separate terminal.
- The conductor numbers below refer only to industrially-installed terminals (internal connections in a panel), (SGS Fimko).

Product code	Wire type	Cross-sections of conductors (mm^2) and number of conductors/space. The conductor numbers below refer only to industrially-installed terminals.																Nominal current (A)	Nominal insulation voltage (V)	Tightening torque (Nm)
		1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300			
Ensto Clampo Tap tapping terminals																				
KF7.10	Cu		7	6	5	**3**	2											62	750	2.5
KF7.70	Cu				7	7	6	4	4	2	**2**	1						192	750	4
KF8.10	Cu		7	6	5	**3**	2											62	750	2.5
KF8.70	Cu				7	7	6	4	4	2	**2**	1						192	750	4
Ensto Clampo Compact terminal blocks																				
KR5031/5121	Cu	**1**																17.5	450	0.4
KR8031...8121	Cu	3	2	1	**1**													41	450	0.8
KR10021/10031	Cu				1	1	**1**											82	500	2.5
Ensto Clampo Eurostrips																				
KA / KB16.12	Cu	**1**																15	450	0.3 - 0.5
KA / KB17.12	Cu	**1**																15	450	0.3 - 0.5
KA / KB241.12	Cu	1	1	**1**														30	450	0.4 - 0.6
KA / KB242.12	Cu	1	1	**1**														30	450	0.4 - 0.6
KA / KB460.12	Cu		1	1	**1**													40	450	0.6 - 0.8
KA / KB463.12	Cu		1	1	**1**													40	450	0.6 - 0.8
KA / KB612.12	Cu				1	1	**1**											65	750	1.8 - 2.0
Ensto Clampo Wire connectors																				
AL1.12	Cu	4	**3**															24	450	0.8 – 1.0
AL2.12	Cu		4	3	**2**													41	450	1.8 – 2.0
AL13	Cu			4	3	2	**2**											76	450	2.5 – 2.7
KD160.01	Cu	3	**2**	1														24	450	1.2 – 1.4
KD160.12	Cu	3	**2**	1														24	450	1.2 – 1.4
Ensto Clampo Ground N and PE terminals																				
KNA4.xx	Cu	See KJ25 and KJ18																82	500	0.8 (KJ25)/2 (KJ18)
KN4.102...112	Cu	5	5	4	4	2	**1**											82	500	2
KNA5.xxx	Cu	See KJ25 and KJ18																82	500	0.8 (KJ25)/2 (KJ18)
KN4.204...212	Cu	5	5	4	4	2	**1**											76	500	2
KND4.103N and P, NP	Cu		5	5	5	4	2	1	**1**									135	500	4
KJ7	Cu	3	3	3	3	3	2	1	**1**									135	500	2.5
KN2.2...8	Cu	5	5	4	3	2	**1**	1										82		1.2
PPK28	Cu	5	5	4	3	2	**1**	1										82		
PPK9	Cu	5	5	5	5	4	2	1	**1**	1								135		
PPK2	Cu		5	5	5	5	5	3	2	1	**1**	1						270		
PSS63	Cu						5	5	4	3	2	2	1	1	**1**	1		535		
KJ25	Cu	5	3	2	**2**													33		0.8
KJ18	Cu	5	5	4	4	2	**1**											82		2
KJ20	Cu		5	5	5	4	2	1	**1**									135		4