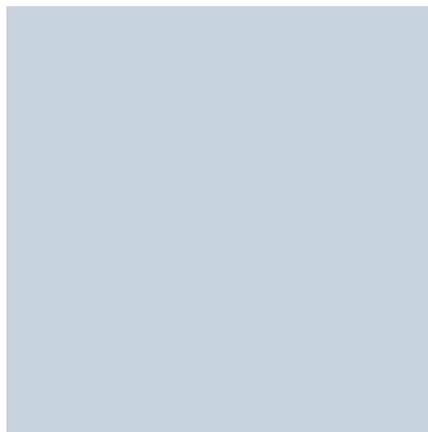
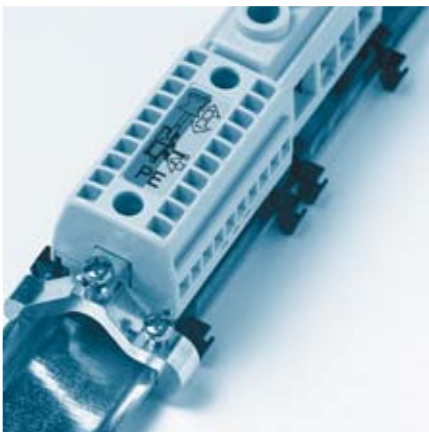
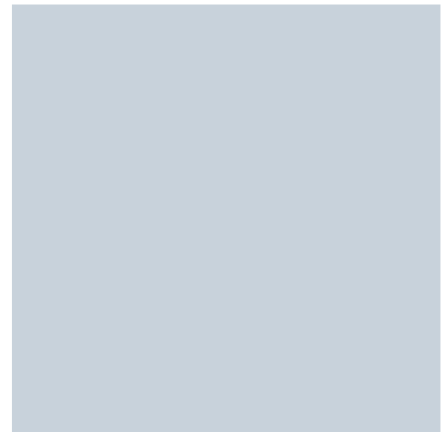


ENSTO

TERMINAL SOLUTIONS

Ensto Clampo



Terminal Solutions

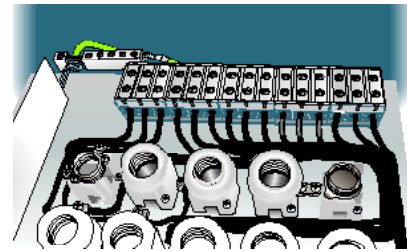
Ensto Clampo

Ensto is a source of expertise in enclosure and terminal technology. Our products are designed and tested to meet a wide range of applications and to operate under even the most extreme conditions. We aim to solve our customers' problems through expertise and co-operation. We are a reliable partner for our customers and partners - and accurate and prompt in our deliveries.

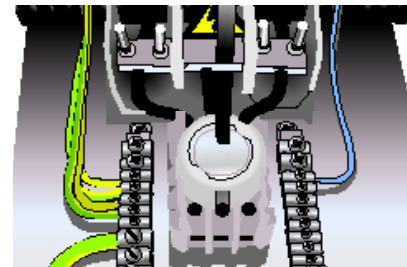
Our clientele mainly consist of OEM industries: electrical and

electronics industries and panel builders. Our store concept, developed for distributors and wholesalers, offers complete solutions for the end customer's needs - such customers are contractors, installation technicians or industrial maintenance and service providers.

We believe that our new catalogue of terminal solutions will help you to choose the right solution for your particular product application. Our team of competent customer service personnel is also at your disposal.

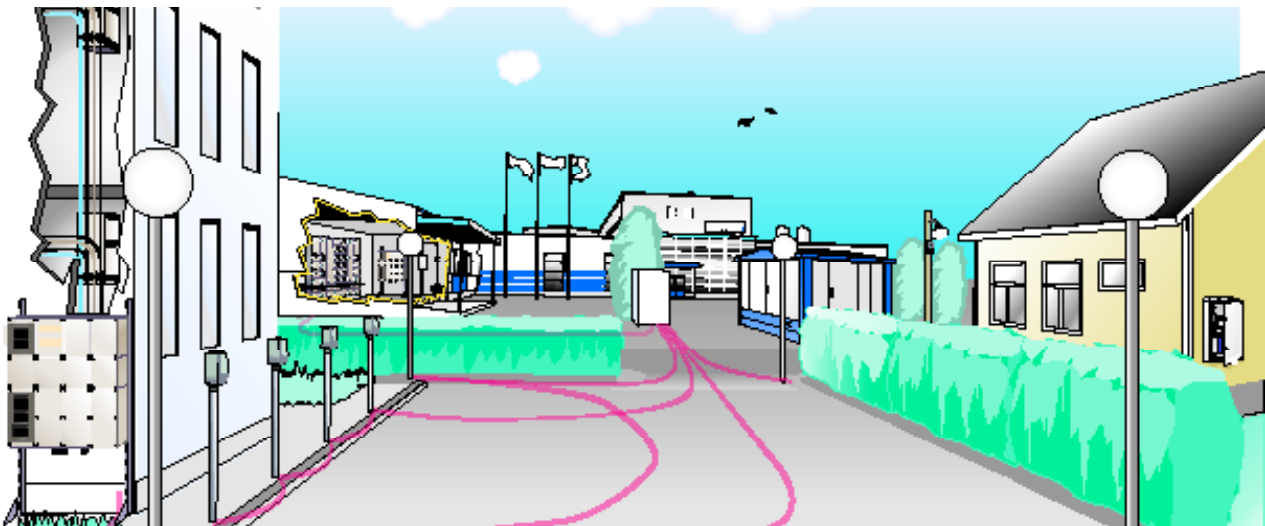


The Ensto Clampo terminals are suitable for example for cabling street lighting in a distribution pedestal.









A typical application for Ensto Clampo terminals: the meter box of a small building.

Ensto Clampo terminal solutions have a wide application area including traditional panel building as well as the manufacture of machinery and equipment.



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Universal Terminal Series for Al/Cu Conductors

Ensto Clampo Pro

The new generation of universal terminals, Ensto Clampo Pro, which was launched only a few years ago, has already had a significant impact on the market, and no wonder: it has a wide application area including traditional panel building as well as the manufacture of machinery and equipment. The four sizes also cover all normal building construction needs. The terminals are suitable for both aluminium and copper conductors from 2.5 mm² to 240 mm². In addition, the Ensto Clampo Pro series includes a three-pole terminal block that supports a three-phase system.

Versatile solution for all installation requirements

The Ensto Clampo universal terminal series is a versatile solution for all installation needs ranging from low-voltage switchgear and control gears for industry and construction to building automation. Because it can be used with both Al and Cu conductors, it saves trouble for designers in both the OEM industry and mechanical engineering.

Coated to suit all conductor materials

The body of Ensto Clampo Pro terminals is made of high-quality halogen-free polyamide (PA 6.6), and the conductive parts of tin-plated aluminium. The contact surfaces are grooved so that they will penetrate the oxide layer which may form on a conductor. The terminals are greased with an anti-oxidation compound. However, in order to

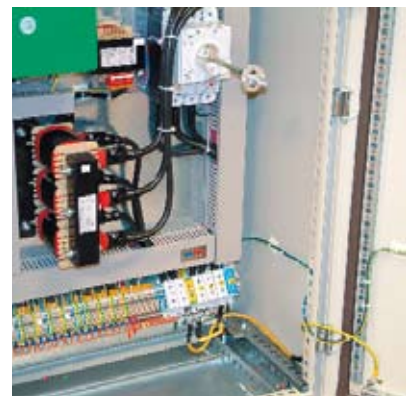


Ensto Clampo Pro universal terminals are suitable for all panel building applications.

achieve a reliable connection, we recommend that the conductors are greased before installation.

Conductor connection with just one screw

Ensto Clampo Pro is quick and easy to install: the conductor is held securely in position by just one screw. Thanks to its fine thread, little force is needed to achieve the required tightening torque. The screw is shaped and sharpened, so that when the screw tip is depressed it grips the conductor and drives





it firmly into the terminal. This new technology creates excellent characteristics for the Clampo Pro series.

International tests

The Ensto Clampo Pro series has been tested according to the SFS 2663 standard, and also meets the requirements of VDE 0220, Teil 1/11.71, Teil 2/11.71, SEN 241510, SEN 245012 and IEC 61238 class B. In addition, Ensto Clampo Pro universal terminals meet the requirements of the North American market (UL Recognized Components; UL1059 standard, category XCFR2, File number E 192532).

Versatile mounting possibilities

50 mm² terminals are attached to a DIN rail; the biggest, the 240 mm² terminals, are screw-mounted on to the base. The 95 mm² and 150 mm² terminals can be mounted either on a DIN rail or with screws on to the base. They are also suitable for high DIN 35 rails! The terminals are securely attached to the rail and retained in position.



The 95 mm² and 150 mm² terminals can be mounted either on a DIN rail or with screws onto the base. In addition, they are suitable for high DIN 35 rails.



35 – 150 mm² terminals (KE 63 and KE 68) and 35 – 240 mm² terminals (KE 64 and KE 69) are also suitable for use with flexible busbars.



The terminals are easy to mark.

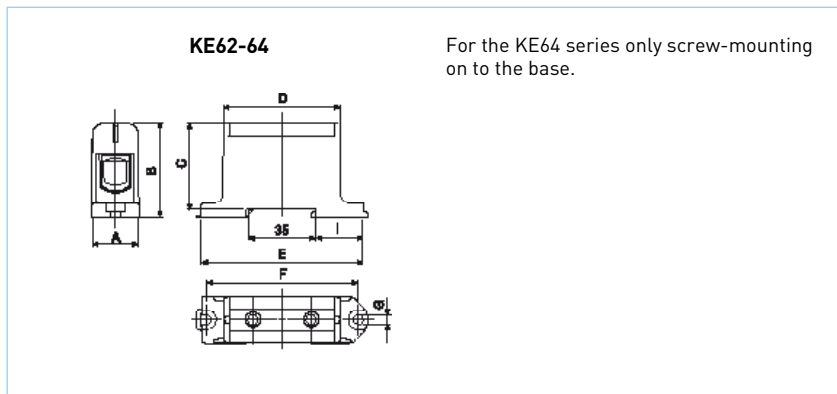
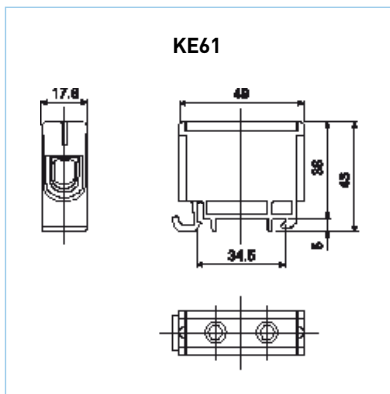


The series includes also a three-pole terminal block that supports a three-phase system.

One-pole Terminal Blocks

Ensto Clampo Pro

One-pole terminal blocks are designed for connecting or extending both aluminium and copper conductors from 2.5 mm² to 240 mm².



The use of ferrules is recommended for installations with flexible conductors* of the following cross-sections (single conductor installation):
 KE61 2.5 – 16 mm²
 KE62 16 – 35 mm²
 KE63 35 – 70 mm²
 KE64 35 – 120 mm²

The use of 240 mm² flexible conductors is not recommended.

*Class 5, according to IEC 228 Second Edition 1978

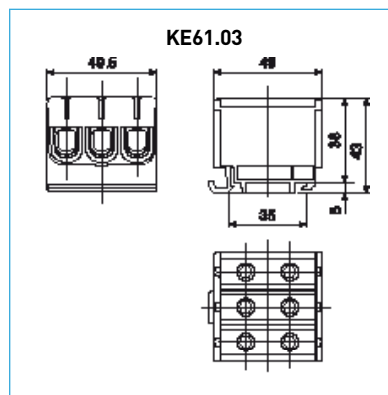
	Measurements mm							
	A	B	C	D	E	F	G	I
KE62	24	49	44	60	86	78	5.5	25.5
KE63	29.5	59	54	72	95	87	5.5	34.5
KE64	37.5	67	62	97	130	120	6.5	47.5

Cross-section mm ²	Product code	EAN 13 code	Colour	Nominal current [A]		Nominal insulation voltage [V]	Nominal tightening torque [Nm]	Screw head hexagon	Weight kg
				Cu	Al				
Cu 2.5 - 50 mm ² Al 6 - 50 mm ²	KE61	6419677191817	Grey	160	145	750	10	5 mm	0.030
	KE61.2	6419677191821	Blue						
	KE61.3	6419677191848	Yellow-green						
Cu/Al 16 - 95 mm ²	KE62	6419677191855	Grey	245	220	750	14	5 mm	0.074
	KE62.2	6419677191862	Blue						
	KE62.3	6419677191879	Yellow-green						
Cu/Al 35 - 150 mm ²	KE63	6419677191886	Grey	320	290	750	14 (35 - 95 mm ²)	8 mm	0.120
	KE63.2	6419677191893	Blue				24 (120 - 150 mm ²)		
	KE63.3	6419677191909	Yellow-green						
Cu/Al 35 - 240 mm ²	KE64	6419677191916	Grey	425	380	750	12 (35 - 70 mm ²)	8 mm	0.249
	KE64.2	6419677191923	Blue				40 (95 - 240 mm ²)		
	KE64.3	6419677191930	Yellow-green						

Temperature class: T1
 Operating temperature: max. 90 °C

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

The 50 mm² universal terminal is also available as a three-pole terminal block.



Cross-section mm ²	Product code	EAN 13 code	Colour	Nominal current [A]		Nominal insulation voltage [V]	Nominal tightening torque [Nm]	Screw head hexagon	Weight kg
				Cu	Al				
Cu 2.5 - 50 mm ² Al 5 - 50 mm ²	KE61.03	419677191824	Grey	160	145	750	10	5 mm	0.077

Temperature class: T1
Operating temperature: max. 90 °C

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



Ensto Clampo universal terminals are also available in convenient retail packages. For further information, see page 46.



Ensto Clampo Pro universal terminals are ideally suited to panel building.

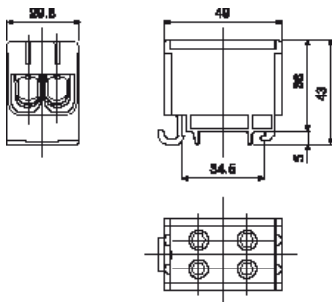
Tapping Blocks

Ensto Clampo Pro

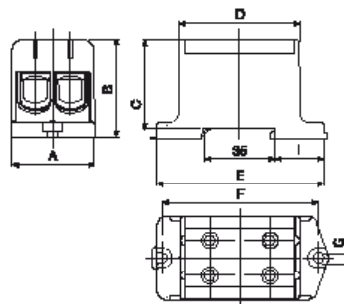
Ensto Clampo tapping blocks accommodate four conductors and are suitable for extending or branching both aluminium and copper conductors from 2.5 mm² to 240 mm².



KE66



KE67-69



For the KE69 series only screw-mounting on to the base.

The use of ferrules is recommended in installations with flexible conductors* of the following cross-sections (single conductor installation):
 KE66 2.5 – 16 mm²
 KE67 16 – 35 mm²
 KE68 35 – 70 mm²
 KE69 35 – 120 mm²

The use of 240 mm² flexible conductors is not recommended.

*Class 5, according to IEC 228 Second Edition 1978

	Measures mm							
	A	B	C	D	E	F	G	I
KE67	42	49	44	60	86	78	5.5	25.5
KE68	51.5	59	54	72	95	87	5.5	34.5
KE69	64	67	62	97	130	120	6.5	47.5

UL-Recognitions

Ensto Clampo Pro

Product code	Wire type	AWG* 1 wire per terminal	AWG* 2 Cu-wires per terminal	AWG* 3 Cu-wires per terminal	Nominal insulation voltage [V]	Nominal current [A]	Nominal tightening torque [Nm]	Allen-head socket head terminal screw	Overall dimensions [W x H x D]
One-pole universal terminals									
KEE1	Cu	1/0 - 6	6	8	600V	150 A	10 Nm	5 mm	77.8 x 49 x 43 mm
	Al	1/0 - 6				120 A	(90 Lb-in)		(0.7 x 1.9 x 1.7 in)
KEE2	Cu	4/0 - 4	2 - 6	6	600V	230 A	14 Nm	5 mm	24 x 86 x 49 mm
	Al	4/0 - 4				190 A	(126 Lb-in)		(0.9 x 3.4 x 1.9 in)
KEE3	Cu	300 - 2	1/0 - 2	2	600V	285 A	24 Nm	8 mm	29.5 x 95 x 59 mm
	Al	300 - 2				230 A	(216 Lb-in)		(1.2 x 3.7 x 2.3 in)
KEE4	Cu	500 - 3/0	2/0 - 2	1/0 - 2	600V	380 A	40 Nm	8 mm	37.5 x 130 x 67 mm
	Al	500 - 3/0				310 A	(280 Lb-in)		(1.5 x 5.1 x 2.6 in)
Three-pole universal terminal									
KEE1.03	Cu	1/0 - 6	6	8	600V	150 A	10 Nm	5 mm	49.5 x 49 x 43 mm
	Al	1/0 - 6				120 A	(90 Lb-in)		(1.9 x 1.9 x 1.7 in)
Tapping blocks									
KEE6	Cu	1/0 - 6	6	8	600V	150 A	10 Nm	5 mm	29.8 x 49 x 43 mm
	Al	1/0 - 6				120 A	(90 Lb-in)		(1.2 x 1.9 x 1.7 in)
KEE7	Cu	4/0 - 4	2 - 6	6	600V	230 A	14 Nm	5 mm	42 x 86 x 49 mm
	Al	4/0 - 4				190 A	(126 Lb-in)		(1.7 x 3.4 x 1.9 in)
KEE8	Cu	300 - 2	1/0 - 2	2	600V	285 A	24 Nm	8 mm	51.5 x 95 x 59 mm
	Al	300 - 2				230 A	(216 Lb-in)		(2.0 x 3.7 x 2.3 in)
KEE9	Cu	500 - 3/0	2/0 - 2	1/0 - 2	600V	380 A	40 Nm	8 mm	64 x 130 x 67 mm
	Al	500 - 3/0				310 A	(280 Lb-in)		(2.5 x 5.1 x 2.6 in)

Standard UL1059, UL category XC FR2, file E 192532.

* AWG = American Wire Gauge

Insulating material: Polyamide, flame stability rating V-2 (UL94).

All terminal blocks KEE1 - KEE9 are delivered with oxide inhibiting compound applied.

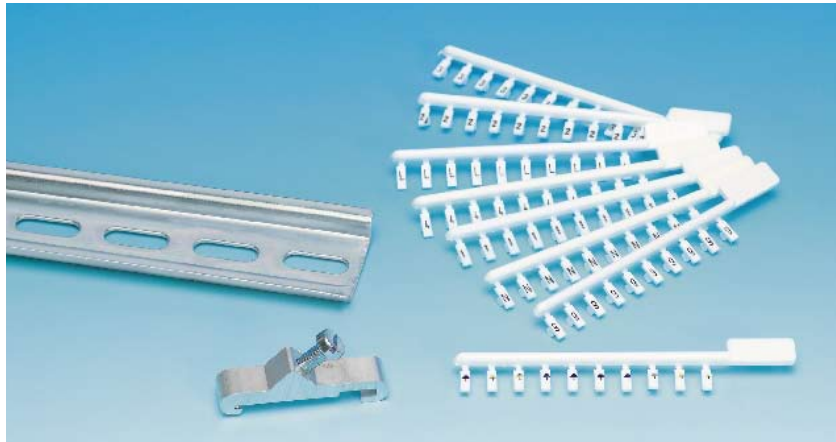


Ensto Clampo Pro universal terminals are suitable for all panel building applications and various terminal enclosure solutions: for extending or branching the cables or changing the conductor type.

Accessories

Ensto Clampo Pro

Ensto Clampo Pro accessories include marking strips listed in the beneath table. Each strip contains 10 markers. 35 mm DIN rails and end clips for the rails, product code KRL2, are also available as accessories.



The functional shroud is L-shaped, thus covering both the conductor space and the hole for the tightening tool.



The terminals are easy to mark using the marking strips.



The terminals can also be supplied with ink-jet markings pre-printed on the terminal body.

Product code	EAN 13 code	Marking
PM34.00	6418677192067	0
PM34.01	6418677192074	1
PM34.02	6418677192081	2
PM34.03	6418677192098	3
PM34.04	6418677192104	4
PM34.05	6418677192111	5
PM34.06	6418677192128	6
PM34.07	6418677192135	7
PM34.08	6418677192142	8
PM34.09	6418677192159	9
PM34.10	6418677192166	
PM34.11	6418677192173	R
PM34.12	6418677192180	S
PM34.13	6418677192197	T
PM34.14	6418677192203	U
PM34.15	6418677192210	V
PM34.16	6418677192227	W
PM34.19	6418677192234	L
PM34.22	6418677192241	+
PM34.23	6418677192258	-
PM34.24	6418677192265	
PM34.25	6418677192272	N
PM34.26	6418677192289	L1
PM34.27	6418677192296	L2
PM34.28	6418677192302	L3
PM34.29	6418677192319	PE

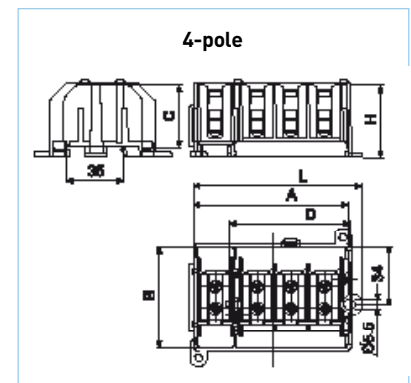
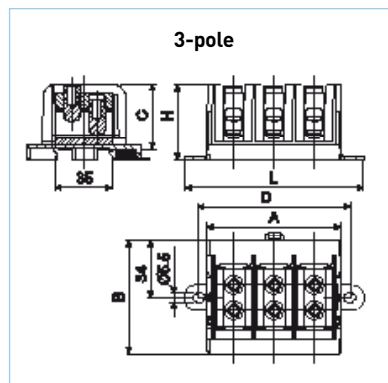
Each strip contains 10 markers.

Product code	EAN 13 code	Description	Weight kg
PP37	6418677161896	DIN rail, 35 mm, steel, L = 2 m	0.622
KRL2	6418677161919	End clip, for fixing components to 35 mm DIN rail	0.009
KEL61	6438100020064	Terminal shroud for KE61 and KE66	0.001
KEL62	6438100020071	Terminal shroud for KE62 and KE67	0.002
KEL63	6438100020088	Terminal shroud for KE63 and KE68	0.003
KEL64	6438100020095	Terminal shroud for KE64 and KE69	0.004

Branching Terminals

Ensto Clampo Pro

Three-pole branching terminal blocks can be used for rising mains without cutting the main conductor. A four-pole terminal is created by attaching an additional pole to a three-pole terminal. The standard product range includes three-pole terminals with and without a shroud as well as four-pole terminals with a shroud (additional blue).



	Measures mm					
	A	B	C	D	H	L
KE85.3	68	60	37	70	43	85
KE85.30						
KE85.40	92.5	60	37	70	43	101
KE86.3	80	68	39	90	45	107
KE86.30						
KE86.40	108.5	68	39	90	45	122
KE87.3	91	68	56	102	62	119
KE87.30						
KE87.40	123.5	68	56	102	62	137.5

Cross-section mm ² Main Al/Cu	Branch Cu	Product code	EAN 13 code	Poles	Shroud	Nominal current [A]	Nominal insulation voltage [V]	Nominal tightening torque [Nm]	Screw head hexagon	Weight kg
35 mm ²	1 x 16 mm ² (2 x 10 mm ²)	KE85.3	6418677181897	3	--					0.114
		KE85.30	6418677181894	3	x	99	750	4	3 mm	0.131
		KE85.40	6418677181900	4	x					0.178
50 mm ²	1 x 35 mm ² (2 x 16 mm ²)	KE86.3	6418677181917	3	--					0.151
		KE86.30	6418677181924	3	x	171	750	8	5 mm	0.173
		KE86.40	6418677181931	4	x					0.230
95 mm ²	1 x 50 mm ² (2 x 25 mm ²)	KE87.3	6418677181948	3	--					0.262
		KE87.30	6418677181955	3	x	215	750	10	5 mm	0.290
		KE87.40	6418677181962	4	x					0.391

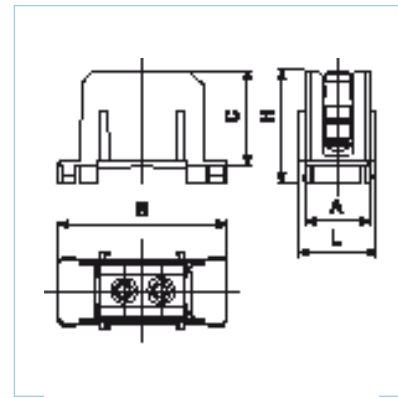
Temperature class: T1
Operating temperature: max. 90 °C

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

Additional Poles

Ensto Clampo Pro

A four-pole terminal is created by attaching an additional pole to a three-pole terminal, KE85.3, KE86.3 or KE87.3. The additional pole is available as grey, blue and yellow-green.



	Measures mm				
	A	B	C	H	L
KE85.1 KE85.1B KE85.1YG	22	60	37	43	27
KE86.1 KE86.1B KE86.1YG	26	68	39	46	31
KE87.1 KE87.1B KE87.1YG	30	68	56	62	35

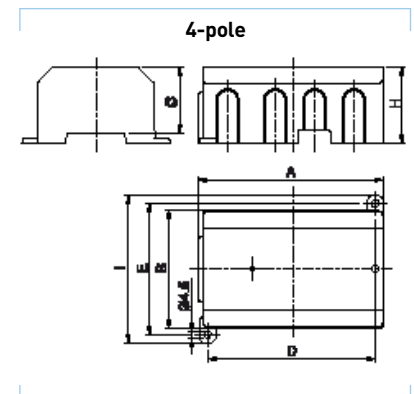
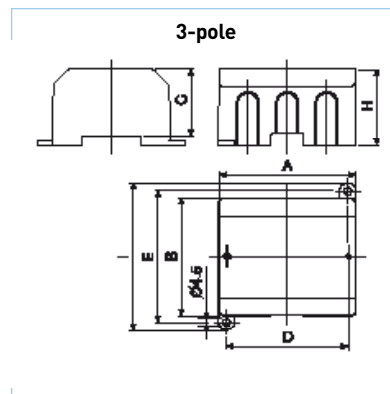
Cross-section mm ² Main A/Cu	Branch Cu	Product code	EAN 13 code	Colour	Nominal current [A]	Nominal insulation voltage [V]	Nominal tightening torque [Nm]	Screw head hexagon	Weight kg
25mm ²	1 x 16 mm ² (2 x 10 mm ²)	KE85.1	641807 181979	Grey	99	750	4	3 mm	0040
		KE85.1B	641807 182075	Blue					
		KE85.1YG	641807 182105	Yellow-green					
50mm ²	1 x 35 mm ² (2 x 16 mm ²)	KE86.1	641807 181986	Grey	171	750	8	5 mm	0052
		KE86.1B	641807 182082	Blue					
		KE86.1YG	641807 182112	Yellow-green					
95mm ²	1 x 50 mm ² (2 x 25 mm ²)	KE87.1	641807 181993	Grey	215	750	10	5 mm	0090
		KE87.1B	641807 182099	Blue					
		KE87.1YG	641807 182129	Yellow-green					

Temperature class: T1
Operating temperature: max. 90°C

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

Shrouds

Ensto Clampo Pro



	Measures mm						
	A	B	C	D	E	H	I
PEE185.3	72	64	38.5	62	72	44.5	92
PEE185.4	97	64	38.5	88	72	44.5	92
PEE186.3	84	72	40.5	80	80	46.5	90
PEE186.4	113	72	40.5	102	80	46.5	90
PEE187.3	95	72	57.5	80	80	63.5	90
PEE187.4	125	72	57.5	118	80	63.5	90

For terminal	Product code	EAN 13 code	Poles	Colour	Weight kg
KE85.3	PEE185.3	6418677182006	3	Grey	0.0180
	PEE185.4	6418677182013	4		0.0240
KE86.3	PEE186.3	6418677182020	3	Grey	0.0220
	PEE186.4	6418677182037	4		0.0270
KE87.3	PEE187.3	6418677182044	3	Grey	0.0290
	PEE187.4	6418677182051	4		0.0390

Equipment Terminals

Ensto Clampo Apparatus

Ensto Clampo Apparatus is a universal terminal series for connecting Al/Cu conductors to equipment. The terminals are suitable for one or two conductors to be directly connected. Terminals with an insulation base are also available.

The smallest terminals [KE52.2, KE53.2, KE54.2, KE73.2 and KE74.2] have only one contact screw, which not only speeds up installation, but also makes it possible to use wires with a larger cross section.

The equipment terminal series is certified in accordance with the EN 61238-1 standard; the terminals fulfil the requirements for Class A (short-circuit test). The terminals are also tested for so-called multiple conductor use with Cu conductors.

High-quality materials

The Ensto Clampo Apparatus terminals are made of high-quality tin-coated special aluminium. The contact surfaces of the terminals are grooved so that they will penetrate the oxide layer a conductor may have. The base for terminals with an insulation base is made of fibreglass-reinforced polyamide.

Easy to install

Reliable connections are achieved with standard tools; no special clamps are required for installations. Terminals with base can also be mounted directly to a DIN rail, and single terminals can be combined into more extensive units with intermediate plates.



Terminals with a base can be combined into more extensive units. With intermediate plates a creepage distance required by norms is achieved.

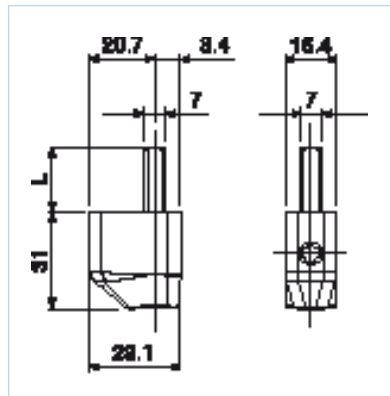
Terminals with a base can be mounted directly to a DIN rail.



Adapter Terminals

Ensto Clampo Apparatus

Ensto Clampo Apparatus KE12 Al/Cu universal terminal for MCB's and switches. KE12.20 is suitable for use with Ensto switches, Compact KSM and Ensto Origin KSR/KST 3.63-80. KE12.12 enables connection of a max. 50 mm² Al conductor to equipment. The terminal is shrouded. Check suitability with MCB:s before ordering KE12.12.



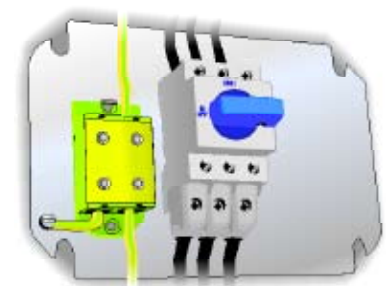
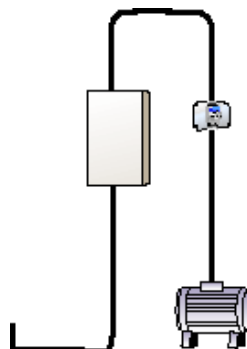
	L
KE12.12	12
KE12.20	20

Cross-section mm ²	Product code	EAN 13 code	Description	Nominal current (A)		Nominal tightening torque (N m)	Screw head hexagon	Weight kg
				Cu	Al			
Cu 2.5 - 50 mm ²	KE12.12	6418677181788	12mm, for MCB	180	195	10	5 mm	0.013
Al 6 - 50 mm ²	KE12.20	6418677181795	20mm, for switch					0.014

Temperature class: T1

Operating temperature: max. 80 °C

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



Ensto Clampo Pro and Apparatus Al/Cu terminals are suitable for use in various production machines and devices. Ensto Clampo Pro and Apparatus terminals are used in frequency converters, reactive power regulators, service and safety switches, automation panels, control gears etc.

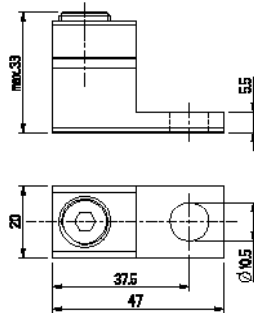
Universal Terminals

Ensto Clampo Apparatus

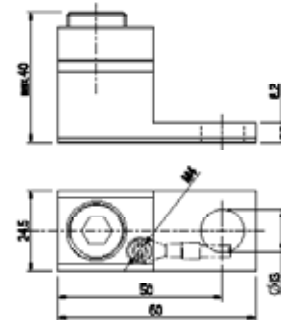
Universal terminals that can be used to connect both Al and Cu conductors to equipment. Wire cross-section is 16–300 mm².



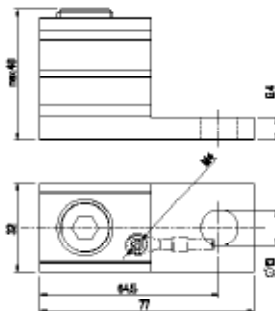
KE52.2



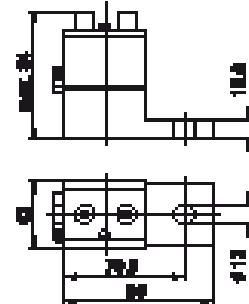
KE53.2



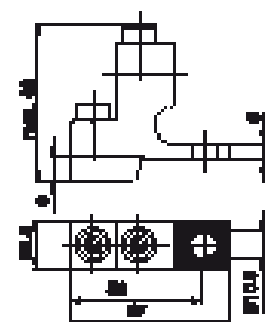
KE54.2



KE55

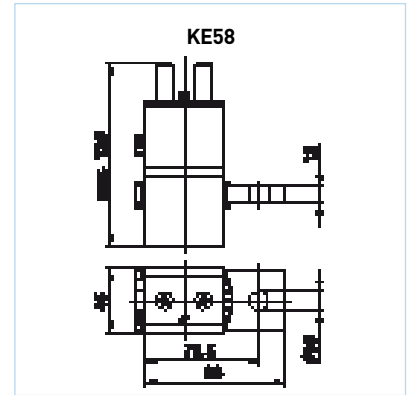
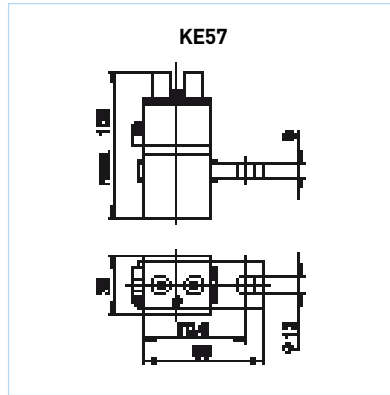


KE56.1



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



Cross-section mm ² Cu/Al	Product code	EAN 13 code	Nominal current (A)		Nominal tightening torque (Nm)	Screw head hexagon	Class	Operating temperature (°C)	Weight kg
			Cu	Al					
16 - 95 mm ²	KE52.2	6418677192449	270	270	14	5 mm	A	max. 80	0.040
35 - 150 mm ²	KE53.2	6418677192456	320	320	14 (35 - 95 mm ²) 24 (120 - 150 mm ²)	6 mm	A	max. 80	0.080
35 - 240 mm ²	KE54.2	6418677192463	425	425	12 (35 - 70 mm ²) 40 (95 - 240 mm ²)	8 mm	A	max. 80	0.136
120 - 300 mm ²	KE55	6418677161957	420	420	25	5 mm	T2	over 80	0.446
2 x (16 - 95 mm ²)	KE56.1	6418677181757	490	440	16	5 mm	T1	max. 80	0.078
2 x (95 - 185 mm ²)	KE57	6418677161964	400	400	35	5 mm	A	over 80	0.360
2 x (150 - 300 mm ²)	KE58	6418677161971	630	630	35	5 mm	A	over 80	0.561

Maximum permitted temperature of terminals in a short-circuit test: T1 200 °C and T2 250 °C (according to SFS 2663).

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



KE57 is an equipment terminal for 2 x (95 - 185 mm²) Al/Cu conductors, KE58 for 2 x (150 - 300 mm²) Al/Cu conductors. KE55 is for 120 - 300 mm² Al Cu conductors.

Universal Terminals with a Base

Ensto Clampo Apparatus

Ensto Clampo Apparatus terminals are suitable for Al/Cu conductors. Cross-section is 35–300 mm². The base is made of fibreglass-reinforced polyamide. KE77 and KE78 are only suitable for two conductors.

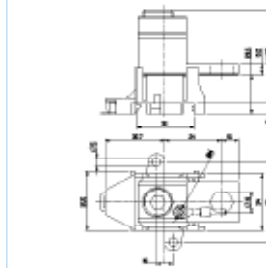
Specified I_{cw} value:

KE77: I_{cw} (1.5 s) 20.5 kA

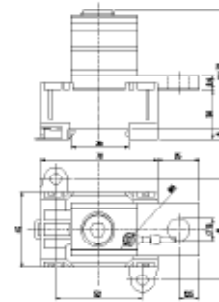
KE78: I_{cw} (2 s) 30.5 kA



KE73.2



KE74.2



KE75



KE77



KE78



Cross-section mm ² Cu/Al	Product code	EAN 13 code	Nominal current (A)	Nominal insulation voltage (V)	Nominal tightening torque (Nm)	Screw head hexagon	Class	Operating temperature (°C)	Weight kg
35 - 150 mm ²	KE73.2	6418677192470	320	750	14 (35 - 95 mm ²) 24 (120 - 150 mm ²)	6 mm	A	max. 80	0.098
35 - 240 mm ²	KE74.2	6418677192487	425	750	12 (35 - 70 mm ²) 40 (95 - 240 mm ²)	8 mm	A	max. 80	0.188
120 - 300 mm ²	KE75	6418677162008	420	750	25	5 mm	T2	max. 80	0.521
2 x (95 - 185 mm ²)	KE77	6418677162015	400	750	35	5 mm	A	max. 80	0.416
2 x (150 - 300 mm ²)	KE78	6418677162022	630	750	35	5 mm	A	max. 80	0.615

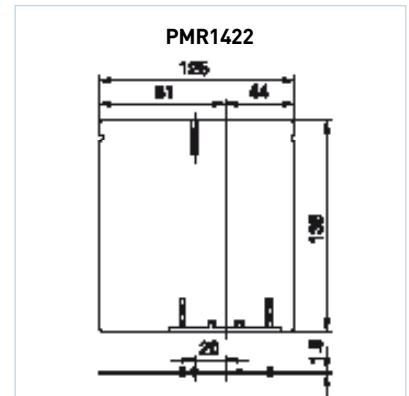
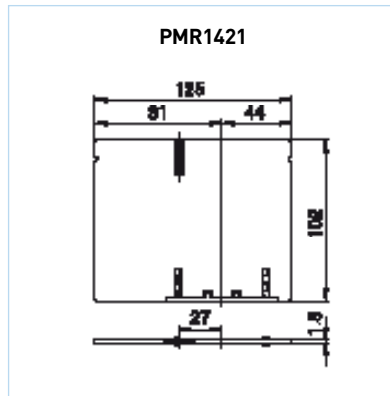
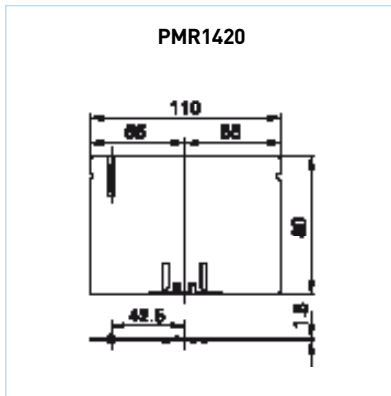
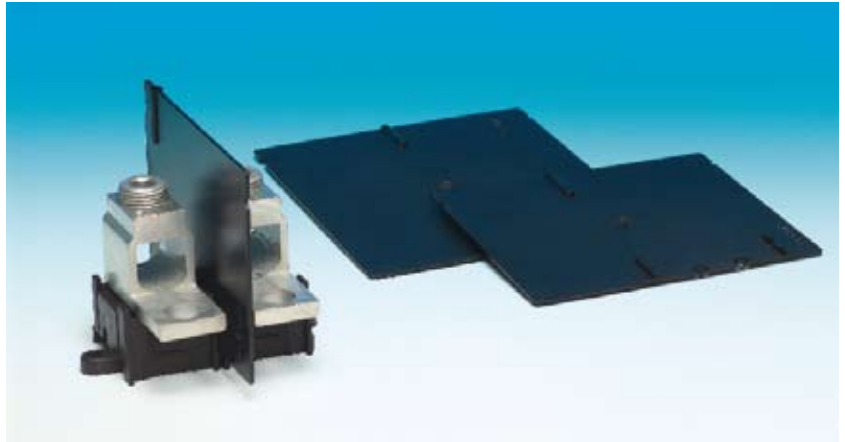
Maximum permitted temperature of terminals in a short-circuit test: T1 200 °C and T2 250 °C (according to SFS 2663).

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

Accessories

Ensto Clampo Apparatus

Single terminals with a base can be combined into more extensive units with intermediate plates and screws. With intermediate plates a creepage distance required by norms is achieved.



Product code	EAN 13 code	Description	Weight kg
PMR1420	6418677162299	Intermediate plate for KE73.2	0,016
PMR1421	6418677162305	Intermediate plate for KE74.2 and KE75	0,024
PMR1422	6418677162312	Intermediate plate for KE77 and KE78	0,030
PLP98	6418677162275	Fastening screw for KE73.2	0,001
PLP99	6418677162282	Fastening screw for KE74.2, KE75, KE77 and KE78	0,004
SR1.1	6418677405402	Contact grease, 225 g tube	0,225
KJ5.10	6418677181863	Screw kit for KE52.2 and KE56.1, incl. 3 pcs. M10 x 35 mm	0,182
KJ5.12	6418677181870	Screw kit for KE53.2, KE54.2, KE55, KE57 and KE58, incl. 3 pcs. M12 x 45 mm	0,327

Tapping Blocks

Ensto Clampo Tap

The Ensto Clampo Tap series is an extensive selection of Cu cable blocks for branching and connecting conductors in distribution boards and equipment. Wire cross-section area is wide, 1.5 – 240 mm².

Easy to install

Ensto Clampo Tap blocks can be installed onto a DIN rail or attached with screws directly to a surface.



Polyamide based KE80 series has a nominal current of 750 V, but it has been tested for 1000 V installations.



4- and 5-pole terminal plates 500 V, product numbers KF9...14, blocks can be installed onto a DIN rail with a fixing device PMR130.

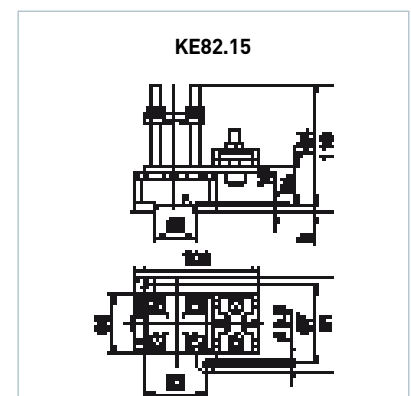
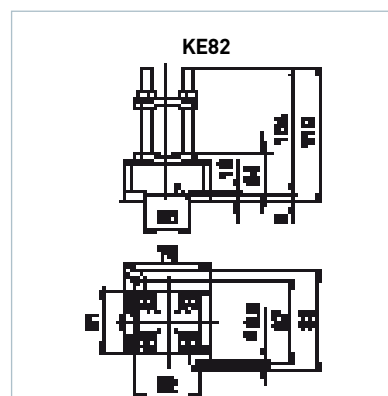
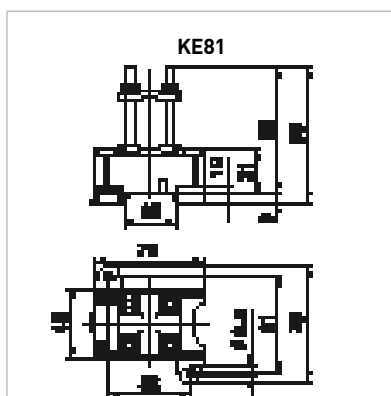
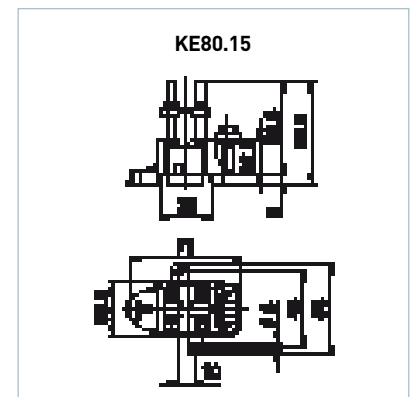
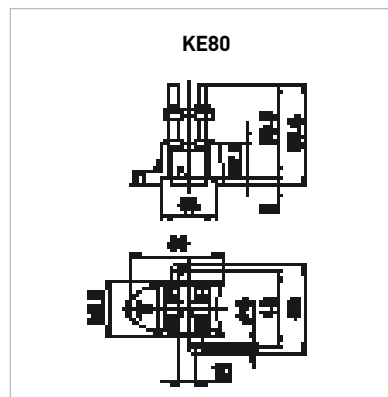


4-pole and 1-pole terminal plates have insulating partitions; nominal current 750 V. KF17 is a Cu tapping block for a three-phase system with one incoming and three outgoing conductors per phase.

Tapping Blocks 750 V

Ensto Clampo Tap

The terminals of the KE80 series are polyamide based Cu tapping blocks that can be installed onto a DIN rail. With intermediate plates a creepage distance required by norms is achieved, when several terminals are combined to create more extensive units. Wire cross-section area is 6 – 240 mm². Nominal voltage 750 V, tested for 1000 V circuits. The base is made of polyamide.



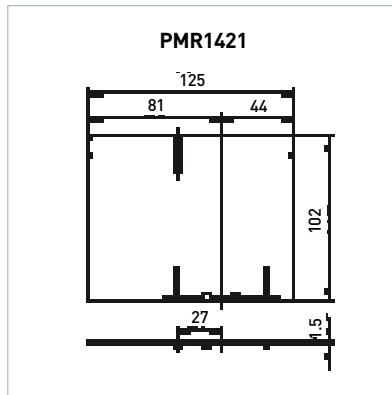
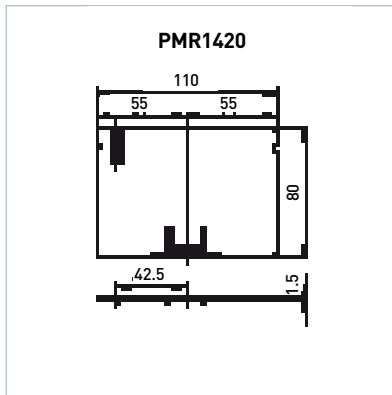
Cross-section mm ² Cu	Product code	EAN 13 code	Nominal current [A]	Nominal insulation voltage [V]	Nominal tightening torque [Nm]	Screw head nut	Weight kg
6 - 70 mm ²	KE80	6419677162220	270	750	2	Key 8 mm	0.088
6 - 70 mm ² + 2.5 - 70 mm ²	KE80.15	6419677162227	270	750	2+3	Key 8 mm	0.127
10 - 150 mm ²	KE81	6419677162244	490	750	9	Key 10 mm	0.188
35 - 240 mm ²	KE82	6419677162251	560	750	6	Key 13 mm	0.248
35 - 240 mm ² + 16 - 185 mm ²	KE82.15	6419677162268	560/353	750	6	Key 13 mm	0.609

Temperature class: max. 120°C
Base black: PA.

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

Accessories for Tapping Blocks

Ensto Clampo Tap



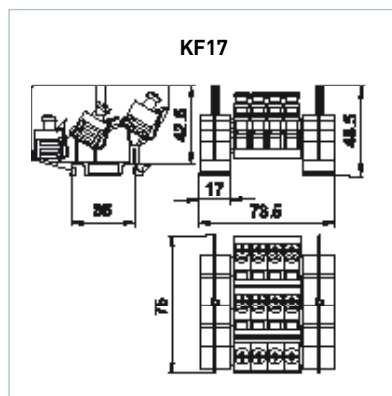
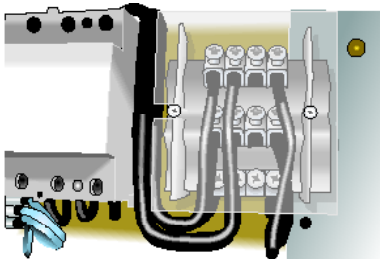
Polyamide based KE80 series can be combined into more extensive units.

Product code	EAN 13 code	Description	Weight kg
PMR1420	6418677162299	Intermediate plate for KE80	0.016
PMR1421	6418677162305	Intermediate plate for KE81 and KE82	0.024
PLP98	6418677162215	Fastening screw for KE80	0.001
PLP99	6418677162282	Fastening screw for KE81 and KE82	0.004

Tapping Block 400 V

Ensto Clampo Tap

Cu tapping block for a three-phase system with one incoming and three outgoing conductors per phase. It has a compact structure, and is suitable for e.g. panels.



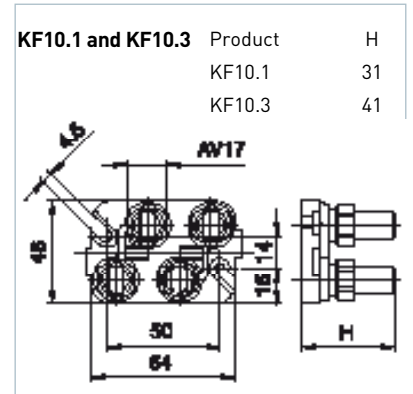
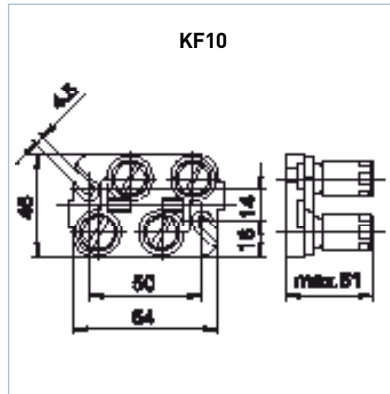
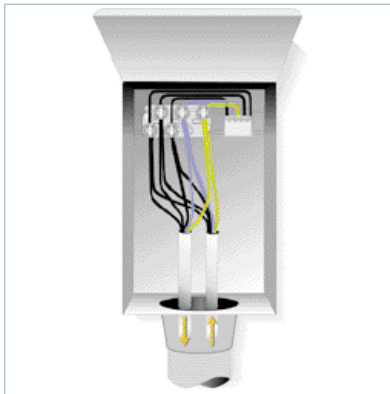
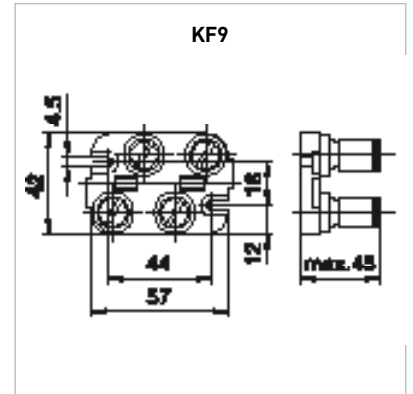
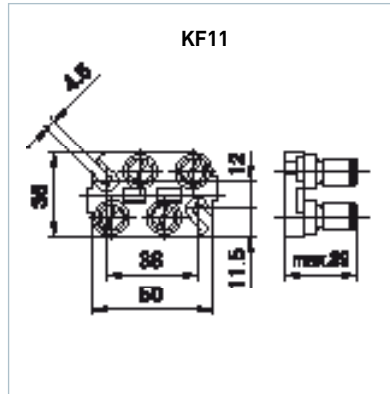
Cross-section mm ² Cu	Product code	EAN 13 code	Nominal current [A]	Nominal insulation voltage [V]	Nominal tightening [Nm]	Screw head	Operating temperature [°C]	Weight kg
4 x (1.5 - 16mm ²)	KF17	6418677170909	100	400	25	+/- screw	max 90	0.133

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

Terminal Plates 500 V

Ensto Clampo Tap

4-pole terminal plates for 1.5– 25 mm² Cu conductors. Terminal plates have an extensive selection of accessories including e.g. shrouds. The plates can be installed onto a DIN rail with a fixing device.



In this application Ensto Clampo Tap terminals are used for branching in outdoor distribution boxes.

Cross-section mm ² Cu	Product code	EAN 13 code	Nominal cross- section	Nominal current [A]	Nominal insulation voltage [V]	Nominal tightening torque [Nm]	Screw head	Weight kg
1.5 - 6 mm ²	KF11	6418677162411	6 mm ²	33	500	3.5	Slot	0.065
1.5 - 10 mm ²	KF9	6418677162428	10 mm ²	62	500	4	Slot	0.100
2.5 - 25 mm ²	KF10	6418677162442	16 mm ²	92	500	5	Slot	0.174
2.5 - 25 mm ²	KF10.1	6418677162459	16 mm ²	92	500	5	Nut, key 17 mm	0.115
4 - 25 mm ²	KF10.3	6418677162473	25 mm ²	107	500	5	Nut, key 17 mm	0.143

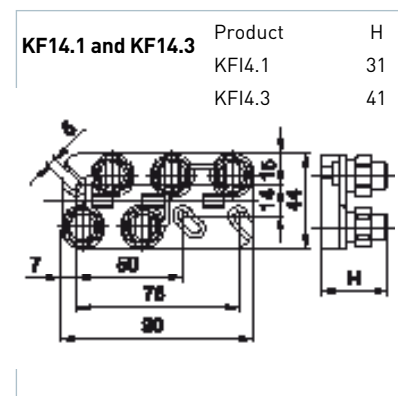
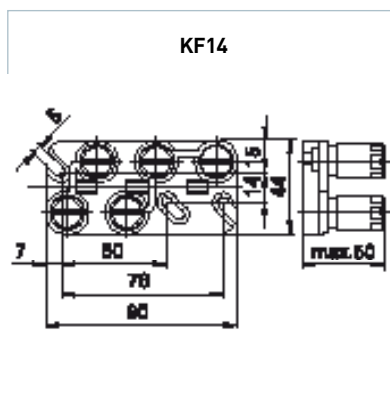
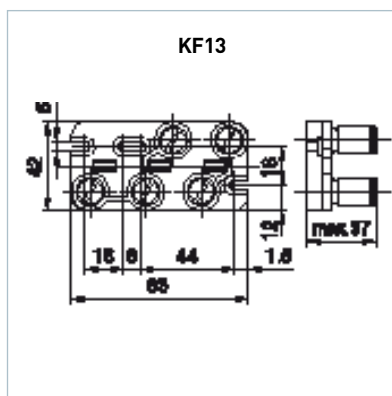
Operating temperature: max. 90 °C
Base MFF.

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

Terminal Plates 500 V

Ensto Clampo Tap

5-pole terminal plates for 1.5– 25 mm² Cu conductors. Terminal plates have an extensive selection of accessories including e.g. shrouds. The plates can be installed onto a DIN rail with a fixing device.



Cross-section mm ² Cu	Product code	EAN 13 code	Nominal cross- section [A]	Nominal current voltage [V]	Nominal insulation require [Nm]	Nominal tightening	Screw head	Weight kg
1.5 - 16 mm ²	KF13	6419677162435	10 mm ²	62	500	4	Slot	0.199
2.5 - 25 mm ²	KF14	6419677162480	16 mm ²	82	500	5	Slot	0.214
2.5 - 25 mm ²	KF14.1	6419677162497	16 mm ²	82	500	5	Nut, key 17 mm	0.160
4 - 25 mm ²	KF14.3	6419677162503	25 mm ²	107	500	5	Nut, key 17 mm	0.187

Operating temperature: max. 90 °C
Base MPF.

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

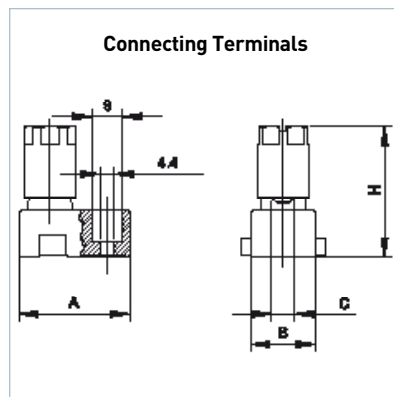


Product code	EAN 13 code	Description	Colour	Weight kg
PMR130	6419677162510	DIN rail fixing	White	0.002
PMR588	6419677162527	Protective cover	White	0.031
PMR587	6419677162534	Base for protective cover	White	0.008
PMR723	6419677162541	White protective cover for 10-16 mm ² main screws	White	0.002
PMR723.2	6419677162558	Blue protective cover for 10-16 mm ² main screws	Blue	0.002
PPK222	6419677162565	Wire protector for 10 mm ² main screws		0.001
PPK222	6419677162572	Wire protector for 16 mm ² main screws		0.001

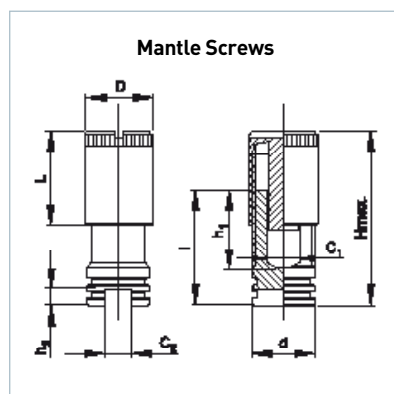
Connecting Terminals and Mantle Screws 500 V

Ensto Clampo Tap

Ensto Clampo Tap connecting terminals have a base. They can be combined into larger units. Mantle screws for Cu conductors are with a cross-section of 1.5–16 mm².



	Measures mm			
	A	B	C	H
KF5.06	29	15	5	33
KF5.10	31	17	6	36
KF5.16	32	20	7	29



	Measures mm									
	Hmax	D	L	d	l	h1	h2	c1	c2	
KF5.06	33	11	16.5	10	19	12.5	2.5	5	5	
KF5.10	36	14	19.5	12	22	14.5	2.5	5.5	5	
KF5.16	44.5	16	23	14	25	17.6	3	7.5	5	

Cross-section mm ² Cu	Product code	EAN 13 code	Poles	Nominal current [A]	Nominal insulation voltage [V]	Nominal tightening torque [Nm]	Screw head	Weight kg
Connecting terminals								
1.5 - 10 mm ²	KF5.06	6418677162664	6 mm ²	33	500	3.5	Slot	0.019
2.5 - 16 mm ²	KF5.10	6418677162671	10 mm ²	62	500	4	Slot	0.029
2.5 - 25 mm ²	KF5.16	6418677162698	16 mm ²	92	500	5	Slot	0.046
Mantle screws								
1.5 - 10 mm ²	KF5.06	6418677162701	6 mm ²	33		3.5	Slot	0.011
2.5 - 16 mm ²	KF5.10	6418677162718	10 mm ²	62		4	Slot	0.017
2.5 - 25 mm ²	KF5.16	6418677162725	16 mm ²	92		5	Slot	0.034

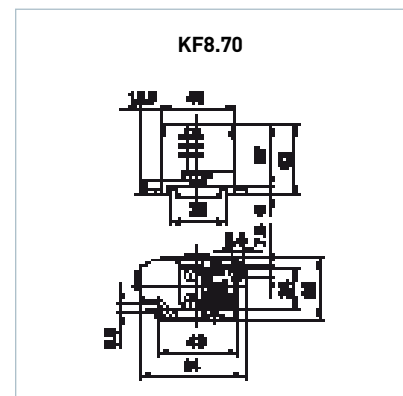
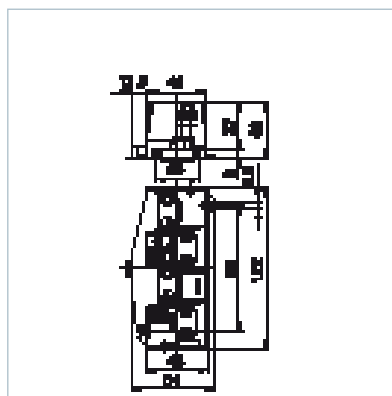
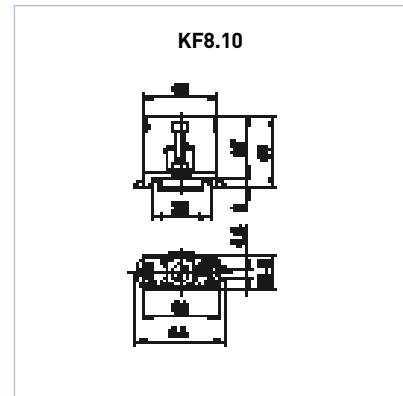
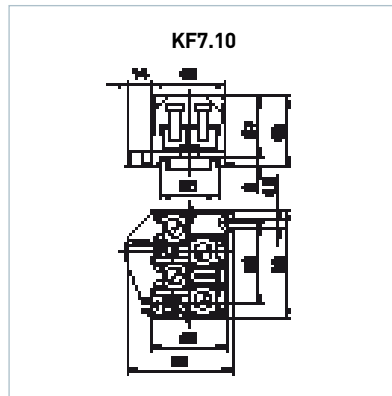
Operating temperature: max. 90 °C
The base of connecting terminals is MPF.

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

Terminal Plates 750 V

Ensto Clampo Tap

KF7 and 8 are 4-pole and 1-pole terminal plates for 2.5 – 70 mm² Cu conductors. The terminal plates have insulating partitions, and they are especially suitable for use with higher voltages or when improved shrouding is required. The plates can be mounted onto a DIN rail, and a shroud is also available.



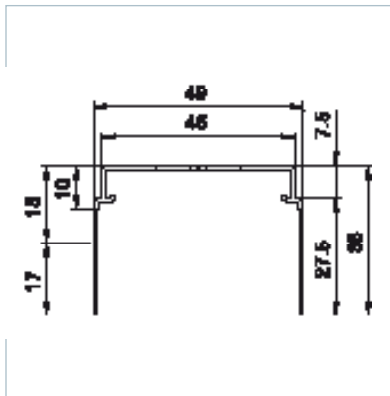
Cross-section mm ² Cu	Product code	EAN 13code	Poles	Nominal current [A]	Nominal insulation voltage [V]	Nominal tightening torque [Nm]	Screw head	Weight [g]
2.5 - 16 mm ²	KF7.10	64 18677 162589	4	62	750	2.5	Slot	0.110
2.5 - 16 mm ²	KF8.10	64 18677 162596	1	62	750	2.5	Slot	0.030
6 - 70 mm ²	KF7.70	64 18677 162602	4	200	750	4	Nut key 8 mm	0.160
6 - 70 mm ²	KF8.70	64 18677 162619	1	200	750	4	Nut key 8 mm	0.050

Operating temperature: max. 90 °C
Base PA6

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

Protective Covers

Ensto Clampo Tap



Product code	EAN 13 code	Description	Weight kg
RDP6	6418677162626	Protective cover for KF7 and KF8, L= 2m	0.247
KNL6.122	6418677170416	Protective cover for KF7.7Q L= 122 mm	0.017
KNL6.161	6418677170423	Protective cover for KF7.7Q L= 161 mm	0.021



The terminal plates have insulating partitions, and they are especially suitable for use with higher voltages when improved shrouding is required.

Terminal Blocks

Ensto Clampo Compact

Ensto Clampo Compact terminal blocks are an excellent and cost-effective solution for installations with limited space available.

High-quality design

The body of Ensto Clampo Compact terminals is made of light-grey polyamide. The heat resistance of the terminals is 105 °C in continuous use and 140 °C temporarily. The terminals are nickel-plated brass, and the screws are zinc- and yellow-chrome plated steel with rounded heads. The terminals are with wire protection to prevent damaging of fine wire strands, also avoiding the wires from entering too deep into the terminal.

Ensto Clampo Compact terminals also meet the requirements of the North American market: they are "Recognized by Underwriters Laboratories, Inc." (File E192532) and "Certified by CSA" (File 200865), more information on page 30.

Wide range of accessories

Ensto Clampo Compact terminals can be mounted onto a DIN rail or directly onto a surface. Ensto Clampo Compact terminals also have a wide range of accessories. You can mark the terminals easily with the marking tapes. You can also order the terminal blocks with markings pre-printed directly on the terminal body.



Enclosed terminal Ensto Cubo T1 at our All-in-One sales concept is a ready-made solution for example to automation control systems. The terminal is KR8121 terminal block, for 0.75 - 6 mm² conductors.



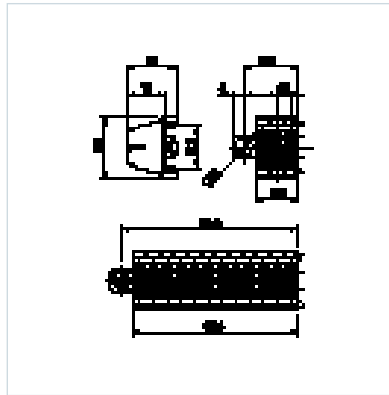
Terminal blocks are attached to the 35 mm DIN rail using a separate adapter (KRL7). The end holder KRL8 prevents terminals from sliding off the rail.

Terminal Blocks

Ensto Clampo Compact

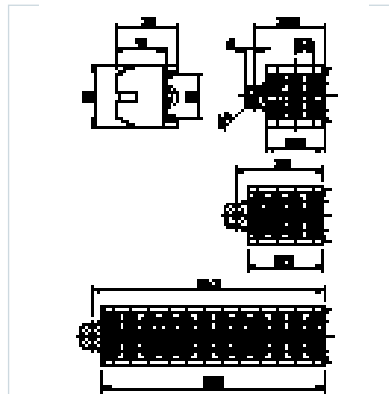
Cu 1.5 mm², 450 V

3-pole KR5031 and 12-pole KR5131 terminal blocks for 1.5 mm² conductors, former 1639SP series. Entry opening 2.8 mm. Connector screws M2.6. Mounting hole diameter 3 mm, space for screw head \varnothing 6 mm. Versatile mounting possibilities: terminals can be installed onto DIN 15 rail directly, onto DIN 35 rail with adapter KRL7, or surface mounted with face plate PMR143.



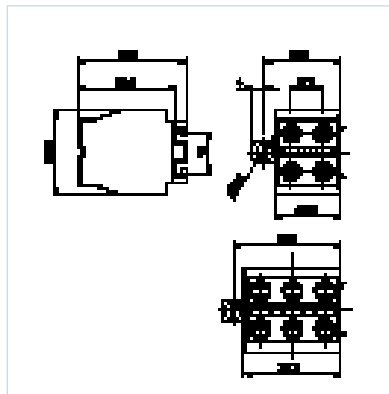
Cu 6 mm², 750 V

3-, 4- and 12-pole terminal blocks KR8031, KR 8041 and KR 8121, former 1640SP series. Entry opening 4.1 mm. Connector screws M3.5. Mounting hole diameter 3 mm, space for screw head \varnothing 6 mm. Terminals can be installed onto DIN 15 rail directly, onto DIN 35 rail with adapter KRL7, or surface mounted with face plate PMR143.



Cu 16 mm², 750 V

2-pole KR10021 and 3-pole KR10031 terminal blocks for 16 mm² conductors, former 1642SP series. Entry opening 6.4 mm. Connector screws M6. Mounting hole diameter 3.4 mm, space for screw head \varnothing 5.7 mm. Terminals can be installed onto DIN 15 rail directly, onto DIN 35 rail with adapter KRL7, or surface mounted with face plate PMR143.



Cross-section mm ² Cu	Product code	EAN 13 code	Poles	Colour	Nominal current [A]	Nominal insulation voltage [V]	Nominal tightening torque [Nm]	Connector screw [slot]	Weight kg
1.5 mm ²	KR5031	6418677111902	3	Grey	17.5	450	0.4	M2.6	0.007
	KR5131	6418677111926	12						0.026
6 mm ²	KR8031	6418677111778	3	Grey	41	750	0.8	M3.5	0.015
	KR8041	6418677111792	4						0.021
	KR8121	6418677111822	12						0.060
16 mm ²	KR10021	6418677111234	2	Grey	76	750	2.5	M6	0.044
	KR10031	6418677111258	3						0.065

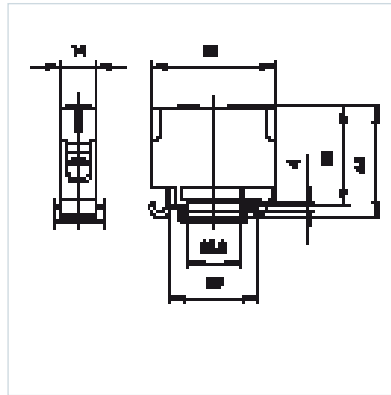
Operating temperature: max. 105 °C
Body of polycarbonate.

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

Cu Terminal Blocks

Ensto Clampo Compact

KE 33 is a narrow Cu terminal for 1.5 – 35 mm² copper conductors.



Cross-section mm ²	Product code	EAN 13 code	Colour	Nominal current [A]	Nominal insulation voltage [V]	Nominal tightening torque [Nm]	Screw head	Weight kg
Cu								
1.5 - 35 mm ²	KE33	6418677161704	Grey	135	750	3.5	6mm slot	0.043
	KE33.20	6418677161735	Blue					
	KE33.30	6418677161759	Yellow-green					

Operating temperature: max. 90 °C

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

UL-Recognitions

Ensto Clampo Compact

Product code	No. of poles	Wire type	AWG* 1 wire per terminal	Nominal insulation voltage [V]	Nominal current [A]	Nominal tightening torque [Nm]	Screwdriver terminal screw	Overall dimension [W x H x D]
HR5031	3	Cu	14 - 22	150 V	10 A	0.5 Nm (4.4 Lb-in)	max. 3.5 mm slot	26 x 22 x 19 mm (1.0 x 0.9 x 0.7 in)
HR5131	12	Cu	14 - 22	150 V	10 A	0.5 Nm (4.4 Lb-in)	max. 3.5 mm slot	70.5 x 22 x 19 mm (2.8 x 0.9 x 0.7 in)
HR8031	3	Cu	8 - 18	150 V	50 A	0.8 Nm (7 Lb-in)	max. 5 mm slot	31 x 22 x 22 mm (1.2 x 0.9 x 0.9 in)
HR8041	4	Cu	8 - 18	150 V	50 A	0.8 Nm (7 Lb-in)	max. 5 mm slot	38 x 22 x 22 mm (1.5 x 0.9 x 0.9 in)
HR8121	12	Cu	8 - 18	150 V	50 A	0.8 Nm (7 Lb-in)	max. 5 mm slot	90.5 x 22 x 22 mm (3.6 x 0.9 x 0.9 in)
HR10021	2	Cu	6 - 18	300 V	65 A	2.25 Nm (20 Lb-in)	max. 6.5 mm slot	33.5 x 31 x 40 mm (1.3 x 1.2 x 1.6 in)
HR10031	3	Cu	6 - 18	300 V	65 A	2.25 Nm (20 Lb-in)	max. 6.5 mm slot	45 x 31 x 40 mm (1.8 x 1.2 x 1.6 in)
KE33	1	Cu	2 - 16	600 V	115 A	4.5 Nm (40.5 Lb-in)	max. 6.5 mm slot	14 x 50 x 44 mm (0.6 x 2.0 x 1.7 in)

Standard UL 1059, UL category XC FR2, file E 192532.

* AWG = American Wire Gauge

Insulating material: Polyamide, flameability rating V-2 (UL94).

Accessories

Ensto Clampo Compact

Ensto Clampo Compact terminals have a wide range of accessories that provide versatile mounting options. With cross connectors the terminal blocks can also be used as distribution blocks. You can mark the terminals easily with the marking tapes: ink-jet marking is also possible.



Product code	EAN 13 code	Description	Weight kg
KRL1505.02	6418677111860	Cross connector, 2-pole, 1.5 mm ²	0.001
KRL6067.02	6418677112003	Cross connector, 2-pole, 6 mm ²	0.001
KRL6067.03	6418677112010	Cross connector, 3-pole, 6 mm ²	0.002
KRL6067.04	6418677112027	Cross connector, 4-pole, 6 mm ²	0.002
KRL7	6418677112034	Adapter for 35 mm DIN rail mounting	0.001
KRL8	6418677112041	End holder for both DIN 15 and 35 rails	0.003
PMR143	6418677112614	End plate for direct mounting	0.001
PMR370	6418677112645	Spacer plate for both DIN 15 and 35 rails	0.002
KRL6	6418677111952	Spacer plate for KR8121	0.002
PP44	6418677112720	DIN rail, 15 mm, steel, L= 2 m	0.290
PEM10.2	6418677112706	Marking labels, unmarked	0.001
PEM10.1	6418677112880	Marking labels, see alternatives in the chart below	0.001

Marking labels, markings

Product code	EAN 13 code	Description
Cu 1.5 mm²		
PEM80	6418677112379	Num bers 1 - 12
PEM81	6418677112386	Num bers 13 - 24
PEM82	6418677112843	Num bers 25 - 36
PEM83	6418677112867	Num bers 37 - 48
PEM84	6418677112393	Num bers 49 - 60
PEM85	6418677112874	Num bers 61 - 72
PEM86	6418677112409	Num bers 73 - 84
PEM87	6418677112416	Num bers 85 - 96
PEM88	6418677112423	Num bers 97 - 108
PEM89	6418677112430	Num bers 1 - 3, (4x)
PEM90	6418677112447	Num bers 1 - 4, (3x)
PEM91	6418677112454	Mark: L1, L2, L3 (4x)
PEM92	6418677112461	Num bers 1 - 60 consecutive
PEM93	6418677112478	Mark: R, S, T, PE, PE PE+, -, U, V, W
Cu 6 mm²		
PEM23	6418677112072	Num bers 1 - 12
PEM24	6418677112089	Num bers 13 - 24
PEM25	6418677112096	Num bers 25 - 36
PEM26	6418677112102	Num bers 37 - 48
PEM27	6418677112119	Num bers 49 - 60
PEM28	6418677112126	Num bers 61 - 72
PEM29	6418677112133	Num bers 73 - 84
PEM31	6418677112140	Num bers 1 - 3, (4x)
PEM32	6418677112157	Num bers 1 - 4, (3x)
PEM33	6418677112164	Num bers 85 - 96
PEM34	6418677112171	Num bers 97 - 108
PEM35	6418677112188	Mark: 101 - 148 consecutive, RS TO PE PE+ - UNW
PEM36	6418677112195	Num bers 149 - 208 consecutive
PEM37.1	6418677167898	Mark: 1-4/1-3/R, S, T, O, PE
PEM37.2	6418677167904	Mark: 1-4/1-3/U, V, W, +, -
PEM38	6418677112218	Mark: R, S, T, PE, PE PE+, -, U, V, W
PEM39.1	6418677167911	Num bers 109 - 168 consecutive
PEM39.2	6418677167928	Num bers 169 - 228 consecutive
PEM40.1	6418677167935	Num bers 229 - 288 consecutive
PEM40.2	6418677167942	Num bers 289 - 348 consecutive
PEM42	6418677112249	Mark: L1, L2, L3 (4x)
PEM44	6418677112256	Num bers 1 - 60 consecutive
PEM45	6418677112263	Mark: PE, N, L1, L2, L3 (2x)
Cu 16 mm²		
PEM64	6418677112287	Num bers 1 - 6
PEM65	6418677112294	Num bers 7 - 12
PEM66	6418677112300	Num bers 13 - 18
PEM67	6418677112317	Num bers 19 - 24
PEM68	6418677112324	Mark: L1, L2, L3 (2x)
PEM69	6418677112331	Mark: L1, L2, L3, N, PE

N- and PE-terminals

Ensto Clampo Ground

Ensto Clampo Ground series is an extensive selection of N- and PE-terminals. The application range of Ensto Clampo Ground terminals is broad: low-voltage switchgear and control gear assemblies, electronics industry, machine and device manufacture.

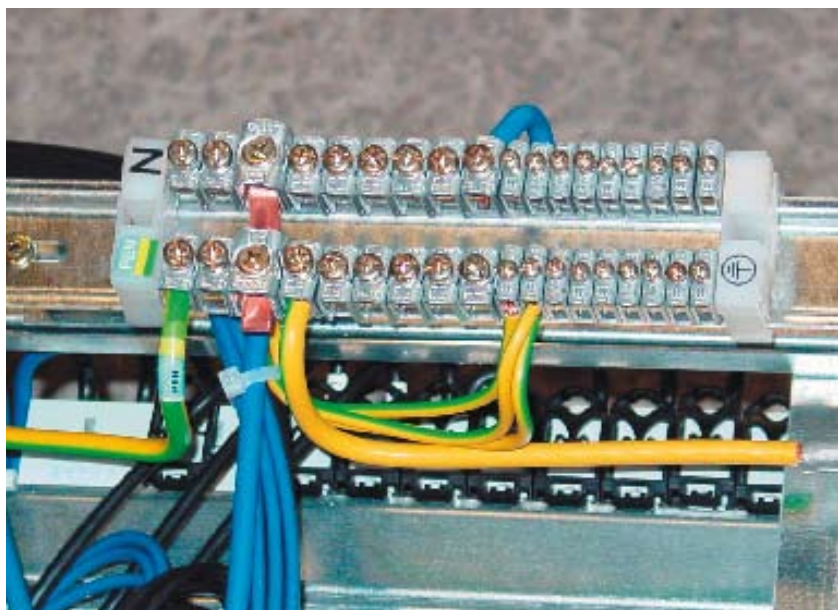
Complete units and components

Ensto Clampo Ground is a very flexible system. There is a wide selection of complete units. The Ensto Clampo Ground series is also available as components for individual assembly. The Ensto Clampo Ground series also contains types with wire protection.

The Ensto Clampo Ground series have very versatile installation and mounting alternatives. Shrouds and marking tapes are also available.



Ensto Clampo Ground pillar terminals and N- and PE-terminals in a customer application.

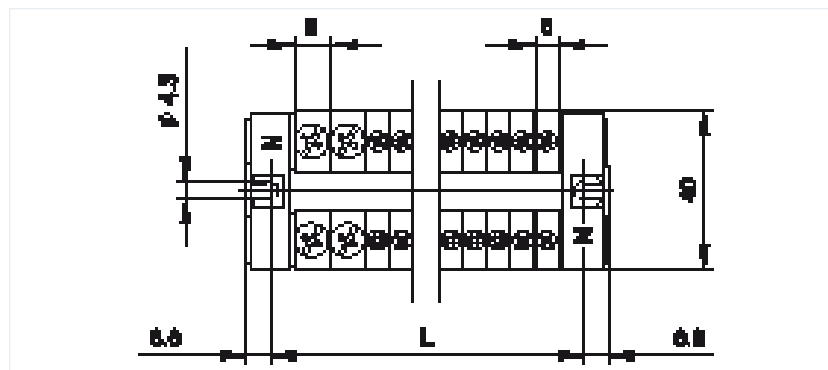


Ensto Clampo Ground terminals can be acquired as complete units as well as loose components for individual assembly.

N- and PE-terminals

Ensto Clampo Ground

N- and/or PE-busbars for distribution board with both 16 mm² and 6 mm² pillar terminals.



Dimensions mm	
	L
KNA4.104	39.5
KNA4.106	52
KNA4.108	66
KNA4.110	82
KNA4.112	93
KNA4.114	109
KNA4.120	147
KNA4.126NP	196
KNA4.136NP	256

Cross-section mm ² Cu	Product code	EAN 13 code	Marking	Nominal current [A]	Nominal insulation voltage [V]	Weight kg
N-busbars						
2x(1x 16mm ² + 3x 6mm ²)	KNA4.104	6418677162770	N-N	92	500	0.063
2x(1x 16mm ² + 5x 6mm ²)	KNA4.106	6418677162787	N-N	92	500	0.085
2x(1x 16mm ² + 7x 6mm ²)	KNA4.108	6418677162794	N-N	92	500	0.104
2x(2x 16mm ² + 8x 6mm ²)	KNA4.110	6418677162817	N-N	92	500	0.130
2x(2x 16mm ² + 10x 6mm ²)	KNA4.112	6418677162824	N-N	92	500	0.153
2x(3x 16mm ² + 11x 6mm ²)	KNA4.114	6418677162831	N-N	92	500	0.178
2x(4x 16mm ² + 16x 6mm ²)	KNA4.120	6418677162848	N-N	92	500	0.243
PE-busbars						
2x(1x 16mm ² + 3x 6mm ²)	KNA4.104P	6418677152900	PE-PE	92	500	0.063
2x(1x 16mm ² + 5x 6mm ²)	KNA4.106P	6418677152917	PE-PE	92	500	0.085
2x(1x 16mm ² + 7x 6mm ²)	KNA4.108P	6418677152924	PE-PE	92	500	0.104
2x(2x 16mm ² + 8x 6mm ²)	KNA4.110P	6418677152931	PE-PE	92	500	0.130
2x(2x 16mm ² + 10x 6mm ²)	KNA4.112P	6418677152948	PE-PE	92	500	0.153
2x(3x 16mm ² + 11x 6mm ²)	KNA4.114P	6418677152955	PE-PE	92	500	0.178
2x(4x 16mm ² + 16x 6mm ²)	KNA4.120P	6418677152962	PE-PE	92	500	0.243
N-PE-busbars						
N and PE 1x 16mm ² + 7x 6mm ²	KNA4.108NP	6418677153105	N-PE	92	500	0.104
N and PE 3x 16mm ² + 11x 6mm ²	KNA4.114NP	6418677153112	N-PE	92	500	0.178
N and PE 4x 16mm ² + 16x 6mm ²	KNA4.120NP	6418677153129	N-PE	92	500	0.243
N and PE 4x 16mm ² + 22x 6mm ²	KNA4.126NP	6418677153136	N-PE	92	500	0.315
N and PE 4x 16mm ² + 32x 6mm ²	KNA4.136NP	6418677153143	N-PE	92	500	0.415

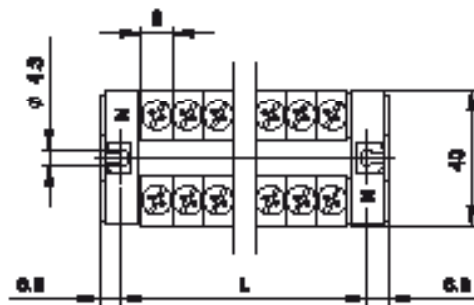
Operating temperature: max. 80 °C
 Nominal tightening torque: 0.8 Nm + 2 Nm
 Screw head: +/- screw

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

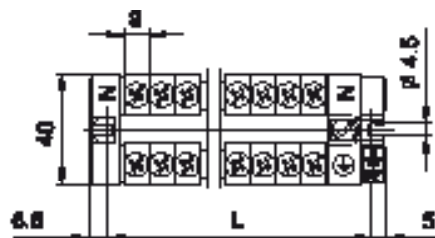
N- and PE-terminals

Ensto Clampo Ground

N- and/or PE-busbars with 16 mm² pillar terminals. The N- and PE-circuits can be isolated from each other for measuring.



Measure mm	
	L
KNF.102	30
KNF.104	48
KNF.106	66
KNF.108	84
KNF.110	102
KNF.112	120



Measure mm	
	L
KNF.204	57
KNF.206	75
KNF.208	93
KNF.210	111
KNF.212	129

Cross-section mm ²	Product code	EAN 13 code	Marking	Nominal current [A]	Nominal insulation voltage [V]	Weight kg
Cu						
N-busbars						
2x(2x 16 mm ²)	KNF.102	6418677152849	N-N	92	500	0.052
2x(4x 16 mm ²)	KNF.104	6418677152856	N-N	92	500	0.088
2x(6x 16 mm ²)	KNF.106	6418677152863	N-N	92	500	0.122
2x(8x 16 mm ²)	KNF.108	6418677152870	N-N	92	500	0.162
2x(10x 16 mm ²)	KNF.110	6418677152887	N-N	92	500	0.198
2x(12x 16 mm ²)	KNF.112	6418677152894	N-N	92	500	0.230
N-PE-busbars						
N and PE 4x 16 mm ²	KNF.204	6418677162909	N-PE	92	500	0.100
N and PE 6x 16 mm ²	KNF.206	6418677162916	N-PE	92	500	0.146
N and PE 8x 16 mm ²	KNF.208	6418677162923	N-PE	92	500	0.181
N and PE 10x 16 mm ²	KNF.210	6418677162930	N-PE	92	500	0.219
N and PE 12x 16 mm ²	KNF.212	6418677162947	N-PE	92	500	0.254

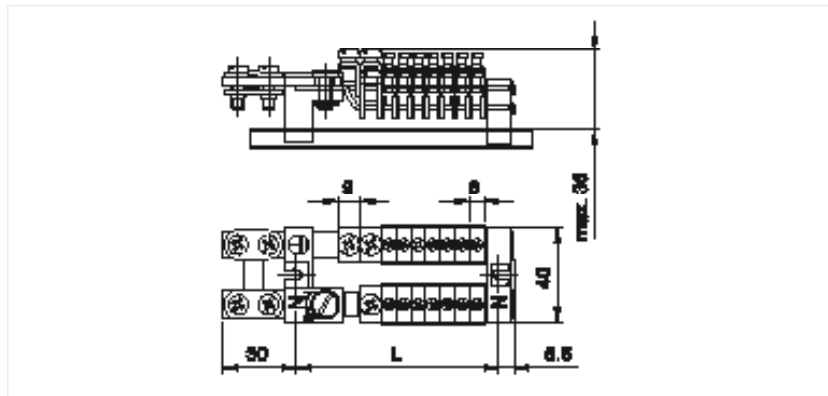
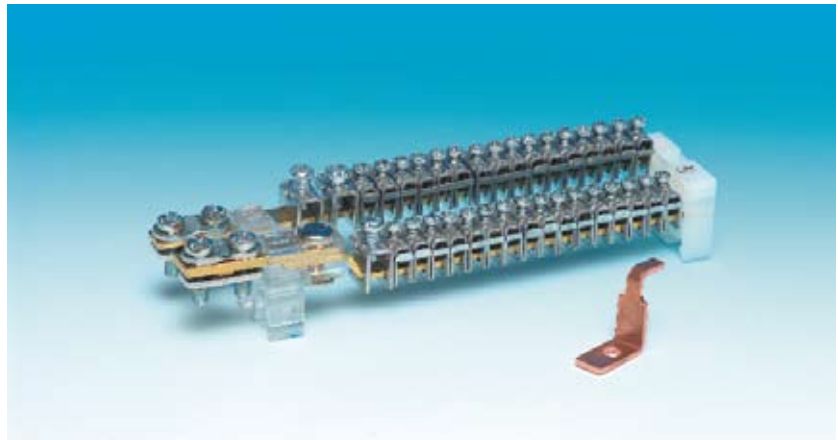
Operating temperature: max. 80 °C
 Nominal tightening torque: 2 Nm
 Screw head: +/- screw

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

N- and PE-terminals

Ensto Clampo Ground

N- and PE-busbars with both 16 mm² and 6 mm² pillar terminals. The N- and PE-circuits can be isolated from each other for measuring. The 6 mm² pillar terminals are fitted with wire protection. PPK 225 earthing busbar rail is available for the 16 mm² PE-terminal.



Hezures mm	
	L
KN/5.108	92
KN/5.113	115.5
KN/5.117	140
KN/5.120	158.5
KN/5.125	204
KN/5.130	234.5
KN/5.134	259
KN/5.138	293.5

Cross-section mm ²	Product code	EAN 13 code	Marking	Nominal current [A]	Nominal insulation voltage [V]	Weight kg
Cu N-PE-busbars N 1 x 16 mm ² + 7 x 6 mm ² , PE 2 x 16 mm ² + 7 x 6 mm ²	KN/5.108	6419677162954	N-PE	92	500	0.176
N 1 x 16 mm ² + 12 x 6 mm ² , PE 2 x 16 mm ² + 12 x 6 mm ²	KN/5.113	6419677162961	N-PE	92	500	0.233
N 1 x 16 mm ² + 16 x 6 mm ² , PE 2 x 16 mm ² + 16 x 6 mm ²	KN/5.117	6419677162978	N-PE	92	500	0.276
N 1 x 16 mm ² + 19 x 6 mm ² , PE 2 x 16 mm ² + 19 x 6 mm ²	KN/5.120	6419677162985	N-PE	92	500	0.309
N 2 x 16 mm ² + 23 x 6 mm ² , PE 3 x 16 mm ² + 23 x 6 mm ²	KN/5.125	6419677162992	N-PE	92	500	0.377
N 2 x 16 mm ² + 28 x 6 mm ² , PE 3 x 16 mm ² + 28 x 6 mm ²	KN/5.130	6419677163005	N-PE	92	500	0.438
N 2 x 16 mm ² + 32 x 6 mm ² , PE 3 x 16 mm ² + 32 x 6 mm ²	KN/5.134	6419677163012	N-PE	92	500	0.470
N 2 x 16 mm ² + 36 x 6 mm ² , PE 3 x 16 mm ² + 36 x 6 mm ²	KN/5.138	6419677163029	N-PE	92	500	0.520
Earthing busbar	PPK225	6419677163036				0.007

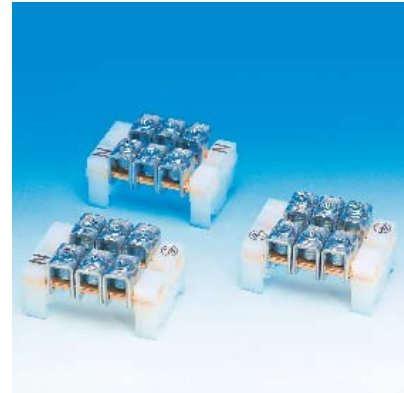
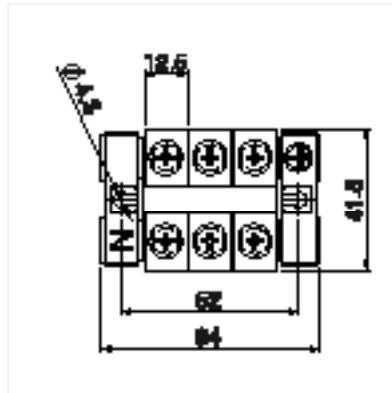
Operating temperature: max. 90 °C
Nominal tightening torque: 0.8 Nm + 2 Nm
Screw head: +/- screw

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

N- and PE-terminals

Ensto Clampo Ground

N- and/or PE-busbars for distribution board with 35 mm² pillar terminals.



Cross-section mm ²	Product code	EAN 13 code	Description	Marking	Nominal current [A]	Nominal insulation voltage [V]	Weight kg
Cu							
2 x (3 x 35 mm ²)	KN D4.103N	6418677162855	N-busbar	N-N	135	500	0.127
2 x (3 x 35 mm ²)	KN D4.103P	6418677152979	PE-busbar	PE-PE	135	500	0.127
3 x 35 mm ²	KN D4.103NP	6418677153150	N-PE-busbar	N-PE	135	500	0.127

Operating temperature: max. 80 °C

Nominal tightening torque: 4 Nm

Screw head: Phillips size 2

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

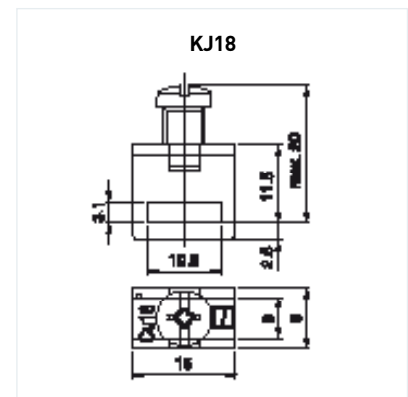
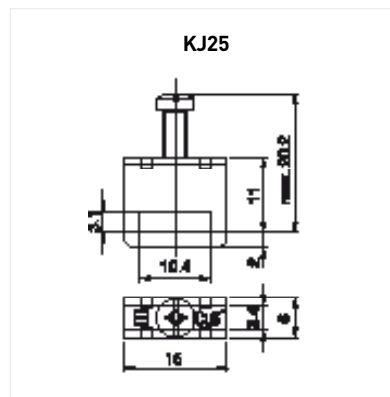
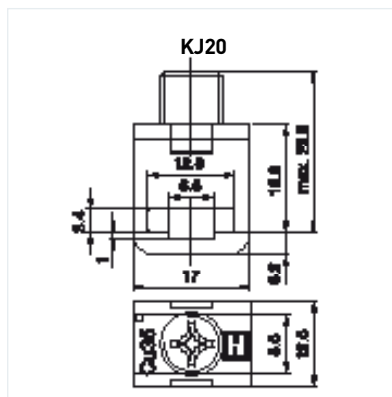


Ensto Clampo Ground N- and PE-busbars as various complexes in a panel assembly.

Pillar terminals

Ensto Clampo Ground

Pillar terminals are available as components for customised applications for N and PE special busbars. Available with or without wire protection.



Cross-section mm ² Cu	Product code	EAN 13 code	Description	Nominal current [A]	Nominal tightening torque [Nm]	Screw head	weight kg
1 - 6 mm ²	KJ25	6419677 163135	with wire protection	33	0.8	+/- screw	0.004
1 - 6 mm ²	KJ25.1	6419677 163142		33	0.8	+/- screw	0.004
1.5 - 16 mm ²	KJ18	6419677 163173	with wire protection	92	2	+/- screw	0.007
1.5 - 16 mm ²	KJ18.1	6419677 171505		92	2	+/- screw	0.007
2.5 - 35 mm ²	KJ20	6419677 163425		135	4	Phillips size 2	0.011
2.5 - 35 mm ²	KJ20.1	6419677 163043		135	4	hexagon 5 mm	0.012

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

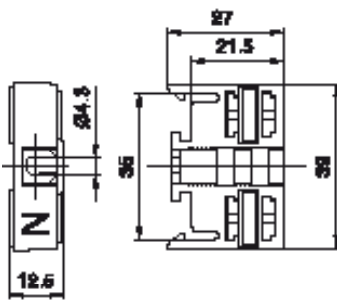
N-busbar Supports

Ensto Clampo Ground

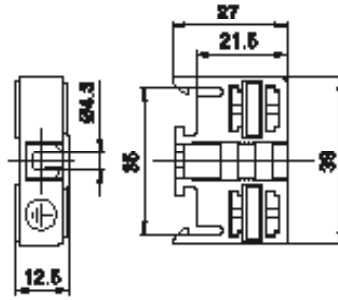
Supports for 2 x 10 mm busbars are available also as components for customer applications.



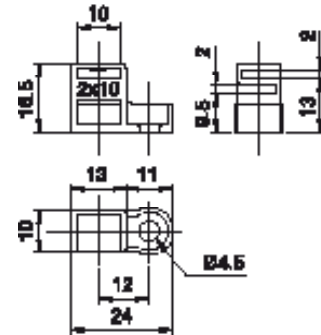
PMR117



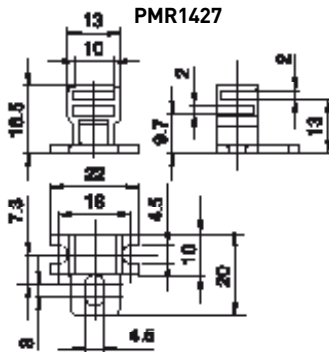
PMR117.1



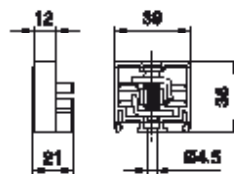
PMR1413



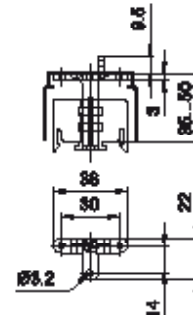
PMR1427



KJ19



KNL2

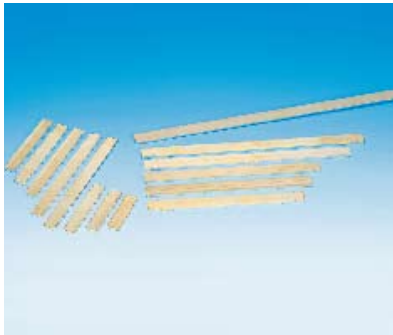


Product code	EAN 13 code	Description	Weight kg
PMR117	6419677163190	Marked N, PA, rail and screw-mounting	0.005
PMR117.1	6419677163197	Marked PE, PA, rail and screw-mounting	0.005
PMR1413	6419677163203	PA, screw-mounting	0.002
PMR1427	6419677163531	PA, screw-mounting	0.002
KJ19	6419677163224	For two busbars, with joint (N + PE), rail and screw-mounting	0.023
KNL2	6419677163261	Protective cover support for RDPs (page 27)	0.004

Busbars

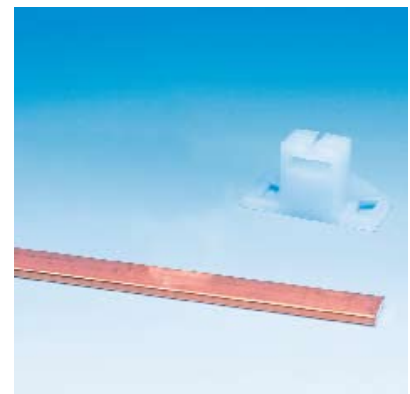
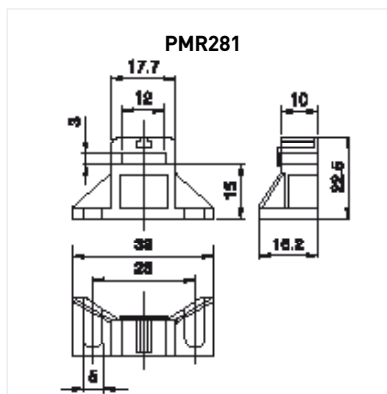
Ensto Clampo Ground

2 x 10 mm brass busbars for customer applications.

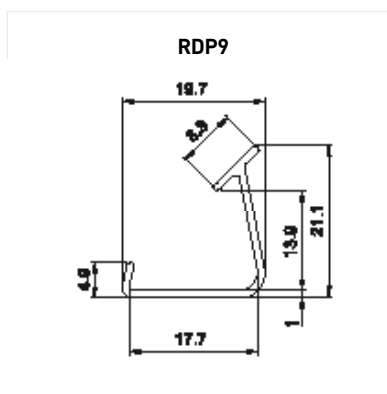


Product code	EAN 13 code	Description	Weight kg
PSK20.037	6418677163296	Length 37 mm	0.006
PSK20.046	6418677163302	Length 46 mm	0.008
PSK20.055	6418677163319	Length 55 mm	0.009
PSK20.064	6418677163326	Length 64 mm	0.011
PSK20.073	6418677163333	Length 73 mm	0.012
PSK20.082	6418677163340	Length 82 mm	0.014
PSK20.100	6418677163364	Length 100 mm	0.017
PSK20.109	6418677163371	Length 109 mm	0.019
PSK20.118	6418677163388	Length 118 mm	0.020
PSK20.127	6418677163395	Length 127 mm	0.021
PSK20.136	6418677163401	Length 136 mm	0.023
PSK20.161	6418677163623	Length 161 mm	0.027
PSK20.175	6418677163630	Length 175 mm	0.029
PSK152	6418677163418	Length 1000 mm	0.171
PSK152.2	6418677163722	Length 2000 mm	0.341

Components for 3 x 12 Cu busbar. Used when a 2 x 10 mm brass busbar is not sufficient, but a sturdier design or larger cross-section is required.



Shroud profile for Ensto pillar terminals, used when the pillar terminals are marked. Cut to length.

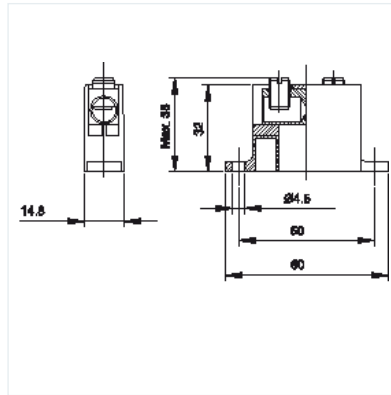


Product code	EAN 13 code	Description	Weight kg
PMR281	6418677163449	Support for 3 x 12 mm busbar	0.006
PSK131	6418677163456	Cu busbar, 3 x 12 mm, L= 2000 mm	0.630
RDP9	6418677163463	Shroud profile for N/PE-busbar, L= 2000 mm	0.140

Neutral Terminal

Ensto Clampo Ground

For extending a neutral conductor e.g. in distribution boards. For Cu conductors with a cross-section of 1.5 – 35 mm². Neutral terminals also meet the requirements of the North American market: they are "Recognized by Underwriters Laboratories, Inc." (File E192532).



Cross-section mm ² Cu	Product code	EAN 13 code	Nominal current [A]	Nominal insulation voltage [V]	Nominal tightening torque [Nm]	Screw head	Weight kg
1.5 - 35 mm ²	KJ7	6418677163524	135	500	2.5	slot	0.037

Operating temperature: max. 90 °C

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

UL-recognitions

Product code	No. of poles	AWG** 1 wire per terminal	Wire type	Nominal insulation voltage [V]	Nominal current [A]	Nominal tightening torque [Nm]	Screw driver terminal screw	Overall dimensions [W x H x D]
KJ7*	1	2 - 16	Cu	800 V	115 A	4.5 Nm (40.5 lb-in)	slot	15 x 60 x 38 mm (0.6 x 2.4 x 1.5 in)

Standard UL1058, UL category XC FR2, file E192532.

* KJ7 is suitable for only 300V if two or more poles are mounted side by side.

** AWG = American Wire Gauge

Insulating material: Polyamide, flame stability rating V-2 (UL94).

Marking Stickers

Ensto Clampo Ground

Stickers for marking Ensto Clampo Ground products. Can be attached onto the shroud profile RDP9 (see previous page).

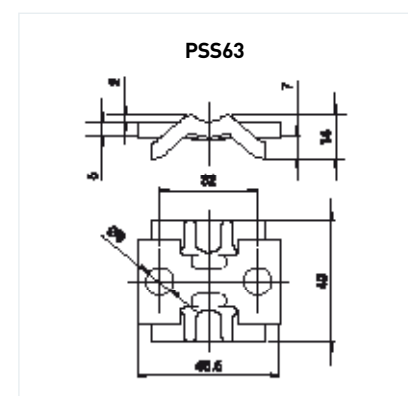
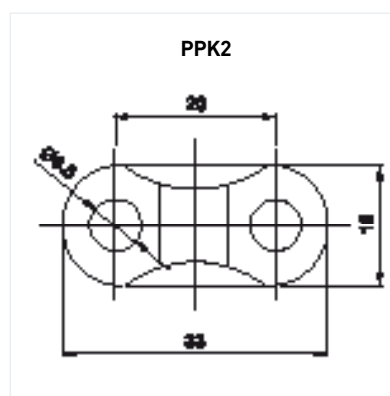
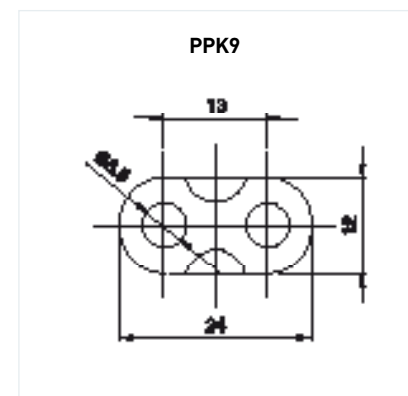
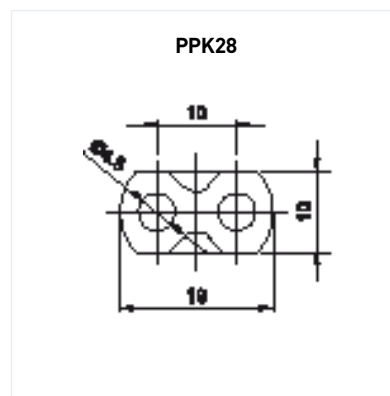


Product code	EAN 13 code	Description	Weight kg
PEM730.1	6418677170447	L1 character, 250 characters/sheet	0.002
PEM730.2	6418677170454	L2 character, 250 characters/sheet	0.002
PEM730.3	6418677170461	L3 character, 250 characters/sheet	0.002
PEM734	6418677163258	N character, 250 characters/sheet	0.002
PEM735	6418677163265	PE character, 250 characters/sheet	0.002
PEM736	6418677163272	PEN character, 250 characters/sheet	0.002
PEM757	6418677163289	G character, 126 characters/sheet	0.002
PEM728.61	6418677163470	Numbers 1-20, 35 strips/sheet for 6 mm ² pillar terminals	0.002
PEM728.621	6418677163487	Numbers 21-40, 35 strips/sheet for 6 mm ² pillar terminals	0.002
PEM728.641	6418677163494	Numbers 41-60, 35 strips/sheet for 6 mm ² pillar terminals	0.002
PEM728.16	6418677163517	Numbers 1-20, 35 strips/sheet for 16 mm ² pillar terminals	0.002

Clamps

Ensto Clampo Ground

Clamps for grounding installation equipment and apparatus.



Cross-section mm ² Cu	Product code	EAN 13 code	Distance between holes	Nominal current [A]	Nominal tightening [Nm]	Weight kg
1.5 - 25mm ²	PPK28	641807166953	10mm	92		0.002
1.5 - 35mm ²	PPK9	641807166960	13mm	135		0.003
6 - 70mm ²	PPK2	641807166977	20mm	270	3	0.009
16 - 185mm ²	PSS63	641807192068	32mm	535	6	0.064

Screwless Terminals

Ensto Clampo Ground

Ease of modification and connection are key features of the Ensto Clampo Ground screwless terminal family. The terminals are also easy to extend by combining standard parts into larger assemblies. Ensto Clampo Ground screwless terminals can be used as neutral and protective earth conductor terminals or as tapping blocks. They are suitable for solid, stranded and flexible wires without ferrules. Even an aluminium conductor can be connected as the supply, when using the KE12.20 adapter terminal.

Easy, reliable connection

The new screwless terminals are easy to connect. The wire entry in the terminals must always be opened with a tool: thus we can guarantee good contact even in extreme conditions. The conductors are equally easy to disconnect – by simply pressing open the wire entry. The markings serve as a reminder that the wire entry in the terminals must always be opened with a tool. Faulty installation is prevented by the design of the terminal.

Compact design

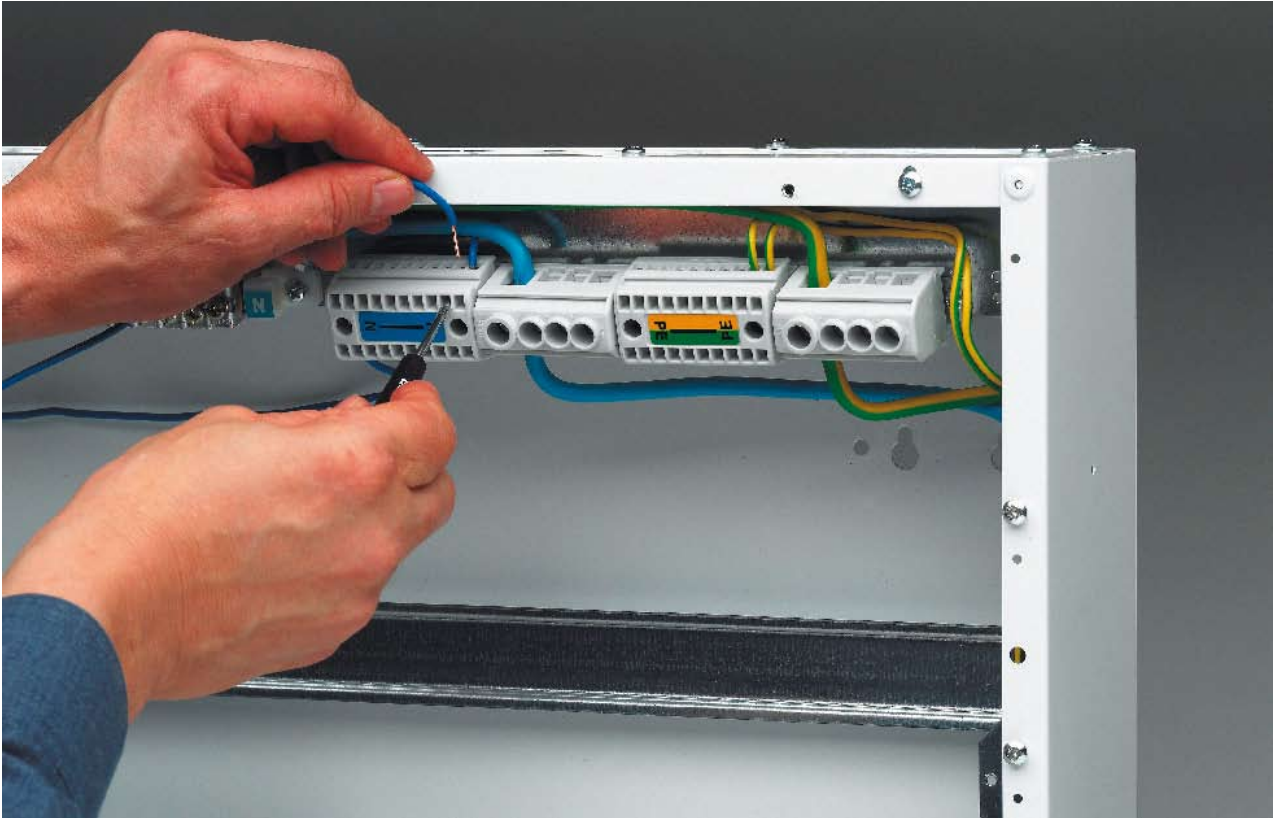
Ensto Clampo Ground N/PE screwless terminals are compact and protected against contact. They can be directly mounted onto a DIN 15 rail, and onto a DIN 35 rail using a KNL7 fitting. Surface mounting is done with a rail fitting. The terminals are locked in place on the rail by using the KRL8 end holder. Ensto Clampo Ground screwless terminals



The new Ensto Clampo Ground screwless terminals are ideal in conditions where high vibration resistance is required.



The terminals are easy to mark using standard marking strips.



The wire entry in the terminals must always be opened with a tool: thus we can guarantee good contact even in extreme conditions.

are easy to mark using standard marking strips (division 5 mm, snap on 4.4 mm).

Ideal for renovation applications

The range of applications for Ensto Clampo Ground N/PE screwless terminals includes traditional panel building and, in particular, panel change and extension. They are also suitable for automation and control gears. Thanks to their compact size and shrouding, these new products are ideal for renovation tasks, where the efficient use of limited space is important.



The markings serve as a reminder that the wire entry in the terminals must always be opened with a tool.



The terminals are suitable for both DIN 15 and DIN 35 rails. The terminals are locked in place on the rail by using the KRL8 end holder.



The terminals can be directly mounted onto a DIN 15 rail and onto a DIN 35 rail using a KNL7 fitting. Also on the high DIN 35 rail!

Screwless Terminals

Ensto Clampo Ground

The supply module is suitable for Cu-conductors $1 \times 35 \text{ mm}^2 + 3 \times 16 \text{ mm}^2$, N/PE and tapping terminals for Cu-conductors $2 \times (10 \times 2,5 \text{ mm}^2)$. Base material is high quality polyamide.



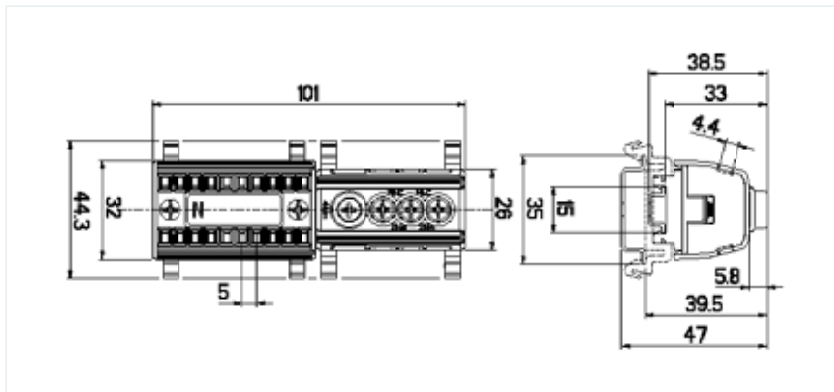
A typical application for screwless terminals: tapping of neutral earth and live conductors.



Ensto Clampo Ground screwless terminals are suitable also for aluminium conductors when using KE12.20 adapter terminals.

Technical characteristics

Rated insulation voltage:	900 VAC
Rated current:	135 A
Cross-section of conductors:	
Supply module:	Cu $1 \times 35 \text{ mm}^2 + 3 \times 16 \text{ mm}^2$
Screwless busbar:	Cu $20 \times (0,75 \text{ mm}^2 - 2,5 \text{ mm}^2)$
Strip length:	10 mm
Tightening torque:	
Supply module:	$35 \text{ mm} \approx 4 \text{ Nm}$
Joint:	$16 \text{ mm} \approx 2 \text{ Nm}$
Joint:	1,2 Nm
Screw head:	Phillips 2
Operating temperature:	max 90°C
Insulation material:	PA 66, V-2
Standards:	EN 60947-7-1 EN 60947-7-2 EN 60999-1 (Clauses 16, 19 and 19)
Short-circuit	$35 \text{ mm} \approx \text{Cu}$ 4,2 kA $16 \text{ mm} \approx \text{Cu}$ 1,92 kA $2,5 \text{ mm} \approx \text{Cu}$ 0,3 kA



Cross-section mm ² Cu	Product code	EAN 13 code	Description	For DIN rail	Colour	Nominal current [A]	Nominal insulation voltage [V]	Std. package	Weight kg
1 x 35 mm ² + 3 x 16 mm ²	KN20.415 KN20.435	6418677 193002 6418677 193040	Supply module incl. DIN 35 adapters	15 mm 35 mm	Grey	135	900	100 10/100	0.057 0.060
2 x (10 x 2,5 mm ²)	KNN1.15 KNN1.35	6418677 193019 6418677 193057	N-busbar incl. DIN 35 adapters	15 mm 35 mm	Grey	135	900	50 10/100	0.028 0.041
2 x (10 x 2,5 mm ²)	KNP1.15 KNP1.35	6418677 193026 6418677 193064	PE-busbar incl. DIN 35 adapters	15 mm 35 mm	Grey	135	900	50 10/100	0.028 0.041
2 x (10 x 2,5 mm ²)	KNF1.15 KNF1.35	6418677 193023 6418677 193071	Tapping terminal incl. DIN 35 adapters	15 mm 35 mm	Brown	135	900	50 10/100	0.028 0.041

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

Terminals are available in different package sizes. KNP1.15 is a PE-busbar that is suitable for DIN 15 rail, package size 50 pcs.
KNP1.35 is a PE-busbar with an adapter for DIN 35 rail, package size 10 / 100 pcs.
Adapter for DIN 35 rail and other accessories are also available as separate components.



Product code	EAN 13 code	Description	Std. package	Weight kg
KNL3	6418677 193095	Grounding of PE-busbar to DIN 35 rail incl. joint	25/250	0.011
KNL4	6418677 193088	Joint for N/PE-busbars	10/100	0.002
KNL7	6418677 193187	Adapter for DIN 35 rail	100/1000	0.001
KRL8	6418677 112041	End holder for DIN 15 and 35 rail	100/1000	0.003

On the left side picture is an end holder for DIN 15 and 35 rail, KRL8 and black adapter for DIN 35 rail, KNL7.

On the right side picture you can see grounding incl. joint, KNL3 and joint for N/PE-busbars, KNL4.



All-in-One Concept

Ensto Clampo

We selected for our All-in-One series terminals that solve the most common installation needs and packed them in convenient retail packages. Ensto's All-in-One products are displayed in racks at the wholesalers and distributor outlets. Ensto Clampo All-in-One products have their own product numbers, always ending with a T. Please, note that the product code means one bag of products!

Ensto Clampo Pro universal terminals are suitable for both aluminium and copper conductors. KE61SET is a mounting kit that includes one grey three-pole terminal, one blue and one yellow-green terminal for Al 6 - 50 mm²/Cu 2.5 - 50 mm² conductors. Similar set is also available for 16 - 95 mm² Al/Cu conductors, KE62SET.

All-in-One Ensto Cubo Enclosed Terminals

We have combined our expertise in enclosure and terminal manufacture and solved the needs for connecting, extending or branching cables and enclosing the terminals with a single finished product. Available bending space has been taken into consideration – the enclosure has exactly the right dimensions – and plenty of time is saved in choosing products.



All-in-One enclosed terminals are a ready solution for connecting, extending or branching cables as well as enclosing terminals. The Picture's Ensto Cubo T2 is a 200 x 300 mm polycarbonate enclosure with 5 x 6 - 35 mm² Al/Cu conductors.

In addition to the actual enclosure and cover screws each package includes gland flanges (T1 cable glands), terminals with markings on a DIN rail or on a mounting plate and a fastening lug set. For instance the Ensto Cubo T1 enclosed terminal includes 14 different ordering numbers which you earlier had to buy separately!



All-in-One products are displayed in racks at wholesalers and distributor outlets.



The latest addition to our All-in-One concept is a 95 mm² universal terminal mounting kit, KE62SET including three grey terminals, one blue and one yellow-green terminal. Similar mounting kit is also available for 50 mm² terminals; KE61SET.



KE53.2 is an equipment terminal for 16 – 95 mm² Al/Cu conductors. In the All-in-One concept the product number is KE53.2T including 3 pcs of KE53.2 terminal, and the screws and nuts needed for installation.



Ensto Cubo T1 is an enclosed terminal. The enclosure is of high-quality polycarbonate with a grey cover, IP 66/67 – therefore being suitable also for outdoor use. The terminal is KR8121 compact terminal block, 12-pole. One product number includes 14 different items which you earlier had to buy separately! Considerable amount of time is saved!

Please, note that the product code means one bag of products!

Cross-section mm ²	Product code	EAN 13 code	Description	Weight kg
Universal terminals				
Cu 2,5 - 50 mm ²	KE61SET	6418677191800	Mounting kit, KE61.03 + KE61.2 + KE61.3	0.137
Al 6 - 50 mm ²	KE61T	6418677192326	Universal terminal, grey, a bag of 3 pcs	0.090
	KE61.03T	6418677192357	Universal terminal, grey, 3-pole, a bag of 2 pcs	0.154
	KE61.2T	6418677192333	Universal terminal, blue, a bag of 3 pcs	0.090
	KE61.3T	6418677192340	Universal terminal, yellow-green, a bag of 3 pcs	0.090
Cu/Al				
16 - 95 mm ²	KE62SET	6418677192432	Mounting kit, 3 x KE62 + KE62.2 + KE62.3	0.338
	KE62T	6418677192364	Universal terminal, grey, a bag of 3 pcs	0.222
	KE62.2T	6418677192371	Universal terminal, blue, a bag of 3 pcs	0.222
	KE62.3T	6418677192388	Universal terminal, yellow-green, a bag of 3 pcs	0.222
Cu 2,5 - 50 mm²				
Al 6 - 50 mm ²	KE66T	6418677192395	Tapping block, grey, a bag of 3 pcs	0.147
	KE66.2T	6418677192401	Tapping block, blue, a bag of 3 pcs	0.147
	KE66.3T	6418677192418	Tapping block, yellow-green, a bag of 3 pcs	0.147
Equipment terminals				
Cu 2,5 - 50 mm ²	KE12.12T	6418677181764	Al transition terminal for MCB, a bag of 3 pcs	0.039
Al 6 - 50 mm ²	KE12.20T	6418677181771	Al transition terminal for KSM- and KSR/KST3.63-3.80 switches, a bag of 3 pcs	0.042
Cu/Al 16 - 95 mm²	KE52.2T	6418677192494	Equipment terminal, a bag of 3 pcs + screw kits	0.297
Cu/Al 35 - 150 mm²	KE53.2T	6418677192500	Equipment terminal, a bag of 3 pcs + screw kits	0.503
Cu/Al 35 - 240 mm²	KE54.2T	6418677192517	Equipment terminal, a bag of 3 pcs + screw kits	0.701
Cu/Al 2 x (16 - 95 mm²)	KE56.1T	6418677181726	Equipment terminal, a bag of 3 pcs	0.235
Terminal blocks				
Cu 6 mm ²	KR8121T	6418677167980	12-pole terminal block, a bag of 3 pcs	0.190
Screwless terminals				
Cu 1 x 35 mm ² + 3 x 16 mm ² + 2 x (10 x 2,5 mm ²)	KNN20T	6418677193156	All-in-One set with DIN 35 adapters, supply module and N-busbar	0.106
	KNP20T	6418677193163	All-in-One set with DIN 35 adapters, supply module and PE-busbar	0.114
	KNF20T	6418677193170	All-in-One set with DIN 35 adapters, supply module and tapping terminal	0.106
Enclosed terminals				
Cu 12 x 6 mm ²	TPM131308G001	6418677182372	Cubo T1, enclosure size 125 x 125 x 75 mm	0.474
Al/Cu 5 x 6 - 35 mm ²	TPCF203013G002	6418677182389	Cubo T2, enclosure size 200 x 300 x 130 mm	1.862
Al/Cu 5 x 16 - 95 mm ²	TPCF304013G003	6418677182396	Cubo T3, enclosure size 300 x 400 x 130 mm	3.319
Al/Cu 2 x (5 x 16 - 70 mm ²)	TPCF304013G004	6418677182402	Cubo T4, enclosure size 300 x 400 x 130 mm	3.560
Al/Cu 2 x (5 x 35 - 150 mm ²)	TPCF306013G005	6418677182419	Cubo T5, enclosure size 300 x 600 x 130 mm	5.769

Conductor Table

Ensto Clampo

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

- The requirements of a specific apparatus may restrict the number of conductors.
- Usually a maximum of three adjacent standard cross-sections in one space.
- In general, the conductors connected to one conductor space of a connector must be of the same type.
- Table values require careful installation.
- We recommend use of ferrules when using fine stranded conductors.
- After installation, check that all conductors are pressed into a connection.
- The nominal current of the terminal must not be exceeded.
- 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		Cross-sections of conductors (mm ²) and number of conductors/space														Nominal current (A)	Nominal insulation voltage (V)	Nominal tightening torque (Nm)		
		The conductor numbers below refer only to industrially installed																		
		1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300			

Universal terminals, Ensto Clampo Pro

KE61	Al				1	1	1	1	1	1								145	750	10
	Cu		3	3	3	3	2	1	1	1								160		
KE62	Al						1	1	1	1	1	1						220	750	14
	Cu						3	2	2	1	1	1						245		
KE63	Al								1	1	1	1	1	1				290	750	14 (35-95 mm ²)
	Cu								3	2	1	1	1	1				320		24 (120-150 mm ²)
KE64	Al							1	1	1	1	1	1	1	1	1		380	750	12 (35-70 mm ²)
	Cu							3	3	2	1	1	1	1	1	1		425		40 (95-240 mm ²)
KE66	Al				1	1	1	1	1	1								290	750	10
	Cu		3	3	3	3	2	1	1	1								320		
KE67	Al						1	1	1	1	1	1						440	750	14
	Cu						3	2	2	1	1	1						490		
KE68	Al							1	1	1	1	1	1	1				580	750	14 (35-95 mm ²)
	Cu							3	3	2	1	1	1	1				640		24 (120-150 mm ²)
KE69	Al							1	1	1	1	1	1	1	1	1		630	750	12 (35-70 mm ²)
	Cu							3	3	2	1	1	1	1	1	1		730		40 (95-240 mm ²)
KE85	Main conductor Al/Cu				1	1	1	1	1									99	750	4
	Branch conductor Cu				2	2	1													
KE86	Main conductor Al/Cu					1	1	1	1	1								171	750	8
	Branch conductor Cu					2	2	1	1											
KE87	Main conductor Al/Cu						1	1	1	1	1							215	750	10
	Branch conductor Cu						2	2	1	1										

Equipment terminals, Ensto Clampo Apparatus

KE12	Al				1	1	1	1	1	1								145	750	10
	Cu				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 mm ²)
	Cu								3	2	1	1	1	1						24 (120-150 mm ²)
KE54.2	Al							1	1	1	1	1	1	1	1	1		425		12 (35-70 mm ²)
	Cu							3	3	2	1	1	1	1	1	1				40 (95-240 mm ²)
KE55	Al												1	1	1	1	1	420		25
	Cu												1	1	1	1	1			
KE56.1	Al					1	1	1	1	1	1	1						440		16
	Cu					1	1	1	1	1	1	1						490		2 conductor spaces
KE57	Al											1	1	1	1			400		35
	Cu											1	1	1	1					2 conductor spaces
KE58	Al												1	1	1	1		630		35
	Cu												1	1	1	1				2 conductor spaces
KE73.2	Al							1	1	1	1	1	1					320	750	14 (35-95 mm ²)
	Cu							3	2	1	1	1	1							24 (120-150 mm ²)
KE74.2	Al							1	1	1	1	1	1	1	1	1		425	750	12 (35-70 mm ²)
	Cu							3	3	2	1	1	1	1	1	1				40 (95-240 mm ²)
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
	Cu											1	1	1	1					2 conductor spaces
KE78	Al												1	1	1	1	1	630	750	35
	Cu												1	1	1	1	1			2 conductor spaces

Nominal cross-sections are in bold.

Product code		Cross-sections of conductors (mm ²) and number of conductors/space														Nominal current (A)	Nominal insulation voltage (V)	Nominal tightening torque (Nm)		
		The conductor numbers below refer only to industrially installed																		
		1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300			

Distribution blocks, Ensto Clampo Tap

KE80	Cu					7	7	5	5	3	3	2						270	750	2
KE80.15	See KE80 and PPK2																	270	750	
KE81	Cu					7	7	7	7	7	5	4	3	2	2			490	750	9
KE82	Cu							7	6	6	4	4	3	2	2	2		560	750	6
KE82.15	See KE82 and PSS63																	560	750	
KF17	Cu	5	5	4	4	2	1											82	400	2
KF11	Cu	7	6	4	3	2												33	500	3.5
KF9	Cu	7	7	6	5	3	2											62	500	4
KF10	Cu		7	7	7	6	3	2										82	500	5
KF10.1	Cu		7	7	7	6	3	2										82	500	5
KF10.3	Cu			4	7	7	4	3	2									107	500	5
KF13	Cu	7	7	6	5	3	2											62	500	4
KF14	Cu		7	7	7	6	3	2										82	500	5
KF14.1	Cu		7	7	7	6	3	2										82	500	5
KF14.3	Cu			4	7	7	4	3	2									107	500	5
KF5.06	Cu	7	6	4	3	2												62	500	3.5
KF5.10	Cu		7	6	5	3	2											82	500	4
KF5.16	Cu		7	7	7	6	3	2										107	500	5
KF6.06	Cu	7	6	4	3	2												62		3.5
KF6.10	Cu		7	6	5	3	2											82		4
KF6.16	Cu		7	7	7	6	3	2										107		5
KF7.10	Cu		7	6	5	3	2											62	750	2.5
KF8.10	Cu		7	6	5	3	2											62	750	2.5
KF7.70	Cu				7	7	6	4	4	2	2	1						200	750	4
KF8.70	Cu				7	7	6	4	4	2	2	1						200	750	4

Terminal blocks, Ensto Clampo Compact

KR5031/5121	Cu	1																17.5	450	0.4
KR8031...8121	Cu	3	2	1	1													41	750	0.8
KR10021/10031	Cu				1	1	1											76	750	2.5
KE33	Cu	3	3	3	3	3	2	1	1									135	750	3.5

N- and PE-terminals, Ensto Clampo Ground

KNA4.xx	See KJ25 and KJ18																	82	500	
KN4.102...112	Cu	5	5	4	4	2	1											82	500	2
KN4.204...212	Cu	5	5	4	4	2	1											82	500	2
KNA5.108...138	See KJ25 and KJ18																	82	500	
KND4.103N, P, NP	Cu		5	5	5	4	2	1	1									135	500	4
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
KJ7	Cu	3	3	3	3	3	2	1	1									135	500	2.5
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		3
PSS63	Cu						5	5	4	3	2	2	1	1	1	1		535		6

Screwless terminals, Ensto Clampo Ground

KN20.415 and 435	See KJ18 and KJ20																	135	800	
KNN1.15 and 35	Cu	1	1															135	800	1.2 (joint screw)
KNP1.15 and 35	Cu	1	1															135	800	1.2 (joint screw)
KNF1.15 and 35	Cu	1	1															135	800	1.2 (joint screw)

Nominal cross-sections are in bold.



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