



## catalogue

**ELECTRO-TECHNICAL CONNECTING MATERIAL** 

### **COMPANY PROFILE**

### **Basic information:**

### Trade name:

ELEKTRO, výrobní družstvo v Bečově nad Teplou (ELEKTRO, production cooperative in Bečov nad Teplou)

### Legal form:

Cooperative

Co. Id. No.: 00028886 VAT No.: CZ00028886

### Registered office:

Bečov nad Teplou, Tovární 128, 364 64, The Czech Republic

### **Contacts:**

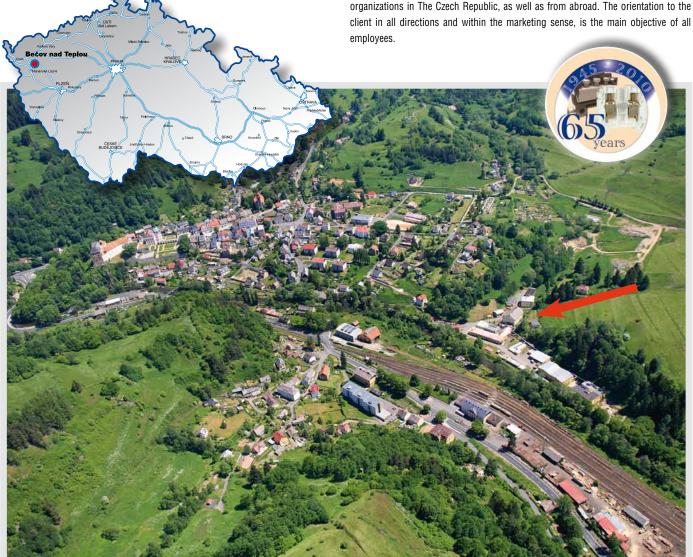
Phone: +420 353 361 111 Fax: +420 353 361 122 E-mail: info@elektrobecov.cz www.elektrobecov.com

### **Company history**

ELEKTRO, prod. coop. in Bečov nad Teplou belongs among the most important Czech manufacturers of electro-technical connecting material with a long tradition. It was founded on 18<sup>th</sup> August 1945. The original objective to create an electrical assembly plant was expanded to building a production facility shortly after founding. Since 1948 the production program of terminal blocks is beginning to develop that has gradually become the bearing program and the cooperative gained a dominant position in the former Czechoslovakia. In 1992, transformation of the cooperative to the cooperative of owners takes place according to Law No. 42/1992 Coll. A new conception of enterprise and innovation of both the existing production program and the development of new products is created in the new conditions.

The cooperative is a purely Czech company, 100% owners are the members of the cooperative. The production and technical background allows reacting to the market requirements. It disposes with its own development and design base, technical production preparation, a tool-making workshop. The investments in the recent years were aimed at renewal and modernization of the production facilities. The most significant contribution to the qualitative changes of the electrical assortment was the construction of the new galvanization plant allowing performing surface finishes of metals using a modern, automatic line. The cooperative has production technologies for pressing plastics and metals, a screw-making facility (production of screws by shaping and splinter machining). Production of electro-technical connecting materials represents the main production program.

Part of the available production capacities is used for additional production programs – the most important is the production of angular joints for the automotive industry. The remaining capacities are used for production orders and services for other organizations in The Czech Republic, as well as from abroad. The orientation to the client in all directions and within the marketing sense, is the main objective of all employees.



### **QUALITY AND ENVIRONMENTAL POLICY**

80% of the production represents the production of electro-technical connecting material. This assortment is characterized by high demands not only on functionality and reliability, as well as the safety of persons against injury by electric current and the protection of the property of clients against the origination of fire due to defects to electrical equipment. Therefore, the announced policy reflects these increased requirements and is directed to the permanent improvement of the quality of our production.

Procedures and processes are used during production activities which can threaten the environment under certain circumstances. These are mainly for the surface treatment of metals by galvanizing, metal tooling, pressing of metals and plastics. These technologies use chemical substances and oil products which are also stored before use. During these activities hazardous waste originates. The main part of these processes is performed in Bečov nad Teplou, which is located in the Protected landscape area Slavkovský les (Slavkov Forest). Near the site of the company is the Teplá River which is a water source for towns located in the lower stream. Bečov is on the list of memorial towns and villages. This requires from us, that during the development of business activities it is necessary to pay close attention about the environment; search for sources of possible threats, decrease risks by preventive actions and be prepared to reduce any impact on the environment to the minimum in the case of accidents. In 2008 the Quality System was successfully re-certified according to ČSN EN 9001:2009. The Environmental Management System was successfully re-certified in 2005 within the supervising audit according to ČSN EN ISO 14001:2005 for all production activities.

The quality and environmental policy is expressed by the business strategy of the company following the basic business objective - the achievement of the highest turnover while spending optimal costs and minimizing the impact of activities and products of cooperative into the environment.

The senior management of the company, accepting full responsibility for further development and with the belief that it will be understood and positively accepted by all employees, business partners and other participating parties,

in the future intends to implement the Quality and Environmental Policy using specific programs whose objective in relation to clients will be:

- Introduce on the market products and provide services that will have the expected quality level
- 2. Products will be available within the deadlines required by clients
- 3. The price of products will correspond to the qualitative and utility properties
- 4. Products and services will always be in accordance with the valid legislation particularly directed to safety and with a minimum impact on the environment during the whole phase of the service life
- 5. To provide according to the nature of the products and services, exact and clear information concerning properties, safe use and liquidation after expiration of the service life
- 6. The creation of conditions for mutual communication and measurement of the satisfaction of clients to ensure the understanding of the requirements of clients, including the expected requirements and to ensure the processes of permanent improvement.



### TESTING OF PRODUCTS AND THEIR INFLUENCE ON THE ENVIRONMENT

### **Testing of products**

The electro-technical products are product-tested according to CSN EN in the national test facility EZU Prague (AO 201). In cases where European standards are harmonized with the IEC, CB certificates are issued for these products on the basis of tests. These products are marked with the mark ESC on the basis of the granted license. A declaration of conformity is issued for the products pursuant to Law No. 22/97 Coll. and the governmental directive no. 168/97 and 178/97 Coll. Products are marked with the CE symbol. RSA terminal boards fulfill seismic resistance according to ČSN IEC 980:1993 and related standards.

Selected products are furthermore certified also in foreign test laboratories (EVPÚ Nová Dubnica, Slovak Republic; GOST-R, Russia).







### Influence of products on the environment

### During the service life of products:

Products contained in this catalogue are produced from materials which do not have a significant negative impact on any element of the environment if they are used under the conditions as they were tested and according to the recommendations of the producer.

The mentioned products are not subjects mentioned in Regulation No. 352/2005 Coll., on details regarding the use of electrical equipment and electrical waste. Despite this fact, we declare as the producer that our products fulfill the limits for hazardous elements as stated in Appendix No.5 of this Regulation.

### After expiration of service life - liquidation of products and packages:

Metal parts of products – it is possible to use the materials through the licensed subjects in accordance with Act on Waste No. 185/2001 Coll., in the valid wording.

Plastic parts – after separation, it is possible to use the materials in accordance with the Act on Waste No. 185/2001 Coll.

### Meaning of marks used on plastic parts:

PP – polypropylene, PA – polyamide, PE polyethylene, PS – polystyrene Packages – fulfill the norms for the introduction of packages on the market stated by Act No. 477/2001 Coll., as amended. If they are not contaminated it is possible to dispose of them according to the marks on the package.



### PRODUCTION PROGRAMME

### MAIN PRODUCTION PROGRAMME



### Production of electro-technical parts and components

ELEKTRO, v.d. in Bečov nad Teplou is an important Czech producer of electro-technical connecting materials – terminal boards with accessories, grounding clamps, equipotential and branching terminal boards, terminal boards for lamp poles and other clamping electric installation materials. Production of these products represents the main production program. All information regarding electro-technical materials can be found in this catalogue and in the extended version on the websites www.elektrobecov.com.

### ADDITIONAL PRODUCTION PROGRAM



### Production of angular joints, pressing of metals and plastics, metal production

Angular joints are delivered in series and non-typical variants of various sizes. These parts are mainly used in the automotive industry (a separate product catalogue is issued for these products).

Within free capacities while fulfilling the main production program, the following activities are offered: pressing and injection of plastics, cold pressing of metals and the production of connecting material, in particular screw bolts.\*



### Surface treatment of metals by galvanizing

On the modern automated line, the surface treatment of metals is performed by the following types of galvanizing: zinc + yellow of blue chromate, zinc + yellow chromate + cobalt, and nickel. The surface treatment is performed on lines with the option of mass galvanizing in drums or on suspended equipment with the possibility to galvanize the part with maximum dimensions of 1000 x 600 x 200 mm (length / height / width).\*

\* The demands of the character for cooperation are evaluated individually according to technological possibilities.

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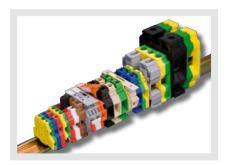
Summary table for the order numbers of terminal blocks and equipotential terminal boards4	
Terminal blocks type RSA6	
Power terminal blocks BNP	
Terminal blocks RSA PE, RSA PEN	
Multi-level terminal blocks RSA, two-levels terminal blocks EURO D	
Fuse terminal blocks type RSP	
Fuse terminal strips 1106-F	
Terminal blocks special	
Screwless terminal blocks EURO Q	
Accessories for terminal blocks	
Fastening and other installation material	
Wire-nut wire connectors IDEAL	
Marking system, tools	
Grounding elements	
Equipotential, branching terminal boards	
Branching insulated blocks HPS	
Main branch terminal block type HVS44	



### MAIN PRODUCT GROUP OF TERMINAL BLOCKS - Type RSA

### The power of simplicity

The range of product series RSA, EURO, and BNP covers, according to a survey, 96.5 % of the customer requirements for connection of conductors into terminal blocks. The simple catalogue offer in comparison with some other producers is, however, our guarantee of immediate delivery, select care at both inputs and outputs. Take advantage of the simplicity and clarity.







Product range RSA

Product range EURO

Product range BNP

### Uniqueness

Delimitation against the competition. Beside the absolute customer orientation, the terminal blocks from the RSA bearing product group are exception and characteristic in several traits:

- Quality careful selection of suppliers, quality certified by the Quality System ISO 9001 for many years and elimination of negative factors are the guarantee of certainty. Our intention is a long-term cooperation and a narrower tie, not one time sales.
- Durability solid, massive, reliable. The most popular in segments of switchboard production, transport, energy. The basic RSA series in regular offer
  resistant up to a temperature of minus 40 °C.
- Screws the screw head of the RSA product series sized from 2,5 to 35 is of the PH design. For a perfect and comfortable tightening of the conductor, it is possible to use manual or automatic tools with a flat groove or the PH cross blade.
- Surface treatment exceptional surface treatment on steel parts of the ZnCrCo design globally secures increased corrosion protection and higher resistance to external effects.





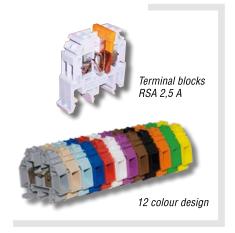


### Noveltv

The combination of the screw and screw-less connection. The terminal block RSA 2,5 A. The bestseller of the RSA product range. A five-millimetre screw block with a deflected bridge, into which a stainless spring is inserted. Allows for mutual connection using insulated combs securing IP 20 covering under all circumstances. Three types of connecting bridges offer connection into an infinite uninterrupted series.

### **Diversity**

Twelve colour designs of insulating cases, twelve different terminal blocks, the identical price for every colour design. Offered with all types of the RSA product range. Including accessories and end clamps. For immediate delivery. With a possibility of supplying other colour variants according to the customer's wish, for your differentiation from the competition.





### **SUMMARY TABLE FOR THE ORDER NUMBERS OF TERMINAL BLOCKS**

### **Terminal blocks RSA**















		* .				_	
Order No.	RSA 2,5 A	RSA 4 A	RSA 6	RSA 10	RSA 16 A	RSA 35 A	RSA 70 A
White	A 121111	A 131111	A 141110	A 151110	A 161116	A 171111	A 181111
Light blue	A 121121	A 131121	A 141120	A 151120	A 161126	A 171121	A 181121
Dark blue	A 121131	A 131131	A 141130	A 151130	A 161136	A 171131	A 181131
Beige	A 121141	A 131141	A 141140	A 151140	A 161146	A 171141	A 181141
Chocolate brown	A 121151	A 131151	A 141150	A 151150	A 161156	A 171151	A 181151
Red	A 121161	A 131161	A 141160	A 151160	A 161166	A 171161	A 181161
Orange	A 121171	A 131171	A 141170	A 151170	A 161176	A 171171	A 181171
Black	A 121181	A 131181	A 141180	A 151180	A 161186	A 171181	A 181181
Violet	A 121191	A 131191	A 141190	A 151190	A 161196	A 171191	A 181191
Grey	A 121211	A 131211	A 141210	A 151210	A 161216	A 171211	A 181211
Green	A 821255	A 831265	A 141250	A 151250	A 861256	A 871250	-
Yellow	A 821265	A 831255	A 141260	A 151260	A 861266	A 871260	A 581231 (Yellow-green)

### Terminal blocks RSA PE, RSA PEN















Order	No.	

A 521230

RSA PE 2,5 A F

**RSA PE 4 A** A 531231

RSA PE 6
A 542230

RSA PE 10 A 552230

RSA PE 16 A A 561116

**RSA PE 35 A** A 571231

**RSA PEN 70 A** A 591231

### **Fuse terminal blocks**









Order No.

RSP 4

A 631210

**RSP 4-LED** A 681210

F

RSP 4-LED/24-48V

A 691210

RSP A 4

A 631140

### **Power terminal blocks BNP**





	BNP 70	BNP 95	BNP 120	BNP 150	BNP 240	BNP 120	BNP 150
	- flat bridge	- reduced bridge	- reduced bridge				
Order No.	J 441980	J 441990	J 442000	J 442100	J 442200	J 442001	J 442101



### SUMMARY TABLE FOR THE ORDER NUMBERS OF TERMINAL BLOCKS AND EQUIPOTENTIAL TERMINAL BOARDS

### **Multi-level terminal blocks**









	EURO D4		EURO Z2,5		EURO W2,5	
A 121214	EURO D4/P2H	A 133214	EURO Z2,5/P3	A 123210	EURO W2,5/P3H	A 123219
A 121218	EURO D4/P2V2	A 133218	EURO Z2,5 LED LN	A 124214		
A 121219	EURO D4/LED	A 183210	EURO Z2,5 LED LN	A 125214		
	EURO D4/P1-2	A 133210	EURO Z2,5 LED LP	A 126214		
			EURO Z2,5 LED LP	A 127214		
	A 121218	A 121214 EURO D4/P2H A 121218 EURO D4/P2V2 A 121219 EURO D4/LED	A 121214 EURO D4/P2H A 133214 A 121218 EURO D4/P2V2 A 133218 A 121219 EURO D4/LED A 183210	A 121214 EURO D4/P2H A 133214 EURO Z2,5/P3  A 121218 EURO D4/P2V2 A 133218 EURO Z2,5 LED LN  A 121219 EURO D4/LED A 183210 EURO Z2,5 LED LN  EURO D4/P1-2 A 133210 EURO Z2,5 LED LP	A 121214 EURO D4/P2H A 133214 EURO Z2,5/P3 A 123210  A 121218 EURO D4/P2V2 A 133218 EURO Z2,5 LED LN A 124214  A 121219 EURO D4/LED A 183210 EURO Z2,5 LED LN A 125214  EURO D4/P1-2 A 133210 EURO Z2,5 LED LP A 126214	A 121214 EURO D4/P2H A 133214 EURO Z2,5/P3 A 123210 EURO W2,5/P3H  A 121218 EURO D4/P2V2 A 133218 EURO Z2,5 LED LN A 124214  A 121219 EURO D4/LED A 183210 EURO Z2,5 LED LN A 125214  EURO D4/P1-2 A 133210 EURO Z2,5 LED LP A 126214

Terminal blocks with	ı varistor			Terminal block	ks disconnect	Terminal bl. fo	r terminal disconnector
RSA 4 AV	V W		Tu Tu	EURO T		EURO N	
RSA 4 AV-250 (Grey)	S 113111	RSA 4 AV-24 (Orange)	S 123211	EURO T2,5	A 923210	EURO N4	A 133134

### Screwless terminal blocks







EURO Q		EURO PE Q		EURO Q/1+2	
EURO Q2,5 (Grey)	A 123212	EURO PE Q2,5	A 523232	EURO Q2,5/1+2 (Grey)	A 223212
EURO Q2,5 (Dark blue)	A 123132	EURO PE Q4	A 533232	EURO Q2,5/1+2 (Dark blue)	A 223132
EURO Q4 (Grey)	A 133212	EURO PE Q6	A 543232		
EURO Q4 (Dark blue)	A 133132				
EURO Q6 (Grey)	A 143212				
EURO Q6 (Dark blue)	A 143132				

### Screwless terminal blocks









EURO PE Q/1+2		EURO Q/2+2		EURO PE Q/2+2		EURO QD/P2H	
EURO PE Q2,5/1+2	A 223232	EURO Q2,5/2+2 (Grey)	A 323212	EURO PE Q2,5/2+2	A 323232	EURO QD2,5/P2H (Grey)	A 123218
		EURO Q2,5/2+2 (Dark blue)	A 323132			EURO QD2,5/P2H (Dark blue)	A 123138

### **Equipotential terminal boards**





- Job de		0
EPS 2	_	







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		2 16	n e	20/	
ĸn -	I N N F				

	3					E (6.10 )	,
EPS 1		EPS 2		EPS 3		EPS 3 in KO 100 E	
With cover	I 223407	With cover	I 223507	With cover	-	With cover	-
Without cover	I 223400	Without cover	I 223500	Without cover	I 226700	Without cover	I 226703

### **TERMINAL BLOCKS RSA**

### **Application**

Terminal blocks RSA are used for connection low and extra low voltage electric circuits with copper solid, stranded eventual aluminum conductors. The range of possible connectible conductors is from 0,15mm2 to 95 mm2. Stranded conductors need not be terminated with contacts. It is possible to apply terminal blocks according to ČSN 33 2000-3 in the environment AB 7, AF 2 and selected terminal blocks in the environment according to AG 2 and AH 2. The temperature range of terminal blocks RSA is -40° to +55°C.

Selected blocks are tested for seismic resistance according to ČSN IEC 980:1993 and related standards and according to GOST R certification. The RSA terminal blocks are used in all segments of the electro-technical industry, including the most demanding power operating units.

Standards according to which the terminal blocks are tested:

ČSN EN 60998-1, 60998-2-1, ČSN EN 60947-1 and 60947-7-1

IEC 60947-7-1, 60998-2-1 (CB certificates)

ČSN IEC 980:1993 (seismic resistance test)



For RSA 6 and RSA 10 types, a brass piece is used for clamping of the conductor with Ni galvanic surface treatment. For all other types, a steel bracket with ZnCrCo galvanic surface is used for reliable clamping of conductors

### Screws

In terminal blocks RSA 2,5 A to RSA 35 A, screws are used with a combined screw head – a screwdriver with flat blade or cross type PH can be used. According to the size of the terminal block it is recommended to use various sizes of screwdrivers (the producer of terminal blocks offers professional tools directly recommended for use during work with RSA terminal blocks, including specially modified bits). RSA 70 A terminal blocks have screws with a hexagonal hole for tightening by an Allen key.

The material of the screws is steel, galvanic-surfaced ZnCrCo. When using the recommended tool and tightening torque, the supplier will guarantee non-damaging of the screw even in the case of repeated tightening of the screw.

### Insulating body

For all types the material for the insulating body is polyamide PA 6, inflammability V0 according to UL 94, halogen-free. Hot loop 960°C.

There are 12 colours standard.

### Clamping on the DIN rail

It is possible to clamp the terminal blocks on DIN rails TS 15, TS 35x7,5, TS 35x15 and TS 32 (the RSA 70 A type can be only clamped on TS 35x15 and TS 35x7,5).

### Interconnection

Neighbouring terminal blocks can be mutually connected by screw interconnections (a multiple of two to ten for the RSA 4 A types; a multiple of two to three for the RSA 6 to RSA 35 A types and a multiple of two for the RSA 70 A type), or by a plug-in bridge (RSA 4 A). The RSA 2,5 A terminal block is connected exclusively by the plug-in bridge (delivered as multiples of 2,3 and 4) with the possibility of interconnection in infinity series, which are inserted from above between the pressing spring and the joining bridge. The assembly is performed by the simple insertion of the plug-in bridge into the spring of the terminal block which will speed up the connection of the terminal blocks. For dismantling it is recommended to use a screwdriver.

### Protection against injury from electric current

Covering IP 20 is ensured for RSA 2,5 A to RSA 35 A types. For the RSA 35 A type to achieve the IP 20 covering it is necessary to use additional accessories – a side cover - in the case that in the terminal block the conductor is not connected or the conductor with the cross-section 10 mm² and lower is connected – otherwise the terminal block has IP 10 covering. The terminal block RSA 70 A has IP 10 covering.

Terminal blocks RSA 2,5 A, RSA 4 A to RSA 16 A have IP 20 covering also in the case of connection by screwing interconnections or by plug-in bridges when they are ended with routinely delivered profile ending. RSA 2,5 A plug-in bridges have IP 20 covering without further modification also by applied plug-in bridge.

### Marking

Terminal blocks RSA, RSA PE can be marked by means of a RSA / RVA marking strip delivered by the producer. Terminal blocks can also be marked by standardized labels which are offered by other suppliers of terminal blocks or suppliers and producers of marking elements for electrotechnics in general - for example DEK (Weidmüller), WGO (Wago), KMR (Murrplastik).

There are several methods for printing the marking elements inserted into RSA terminal blocks. An RSA / RVA marking strip can be printed directly at the supplier on request, it is possible to print on the plotter, mark with special self-adhesive foil printable by a standard printer or self-adhesive sets of numbers. Standardized marking labels can be printed on most common inkjet plotters. More information about printing and marking is available in the Marking system section in this catalogue.



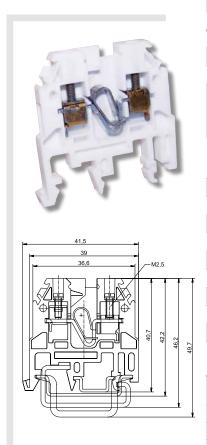












### **RSA 2,5 A** Technical data Nominal current [A] Nominal voltage [V] 750 ~ ; 830 = Width / height / length [mm] 5 / 40,5 / 41,5 Conductor cross section [mm<sup>2</sup>] Cu (D-solid) $0,2 \div 2,5$ Cu (L-stranded) 0,15 ÷ 1,5 Max. number of conductors x cross section [mm²] Cu (D-solid) 2x (0,2 ÷ 1) Cu (L-stranded) $2x(0,2 \div 1)$ Rated surge voltage [kV] Short-circuit current strength [A] 300 2 Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3) Tightening torque [Nm] $0,4 \div 0,6$ Stripping length [mm] min. 6,5 Recommended ferrule length [mm] Max. ferrule outside diameter [mm] 2,6 Screwdriver blade (cross / flat) PH 0 / $0.5 \times 3$ Packing (pc) / weight (g / pc) 100 / 7

Insulating body		Polyamid (PA), inflam- mability V0, halogen-fre		
Conductivity part			galvanic surfaced inless steel sprin	
Fastening part	Thermally treated steel (galvanic surfaced ZnCoCr - bracket)			
Order No.				
White			A 121111	
Light blue			A 121121	
Dark blue			A 121131	
Beige			A 121141	
Chocolate brow	n		A 121151	
Red			A 121161	
Orange			A 121171	
Black		Ī	A 121181	
Violet			A 121191	

A 121211

A 821255

A 821265

Grey

Green

Yellow

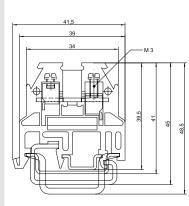
### Accessories

Accessories

Plug-in-bridges	Partitions
2-mult. C 427100	End partitions (12 colours)
3-mult. C 427200	Middle partitions (10 colours)
4-mult. C 427300	

 $A \ complete \ list \ of \ accessories, \ including \ technical \ and \ ordering \ data \ can \ be \ found \ in \ the \ Accessories \ section.$ 





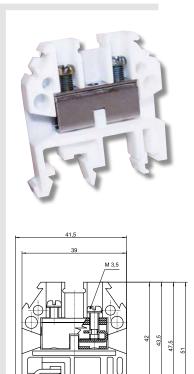
Technical data	
Nominal current [A]	41
Nominal voltage [V]	1600
Width / height / length [mm]	6,6 / 39 / 41,5
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,5 ÷ 6 0,5 ÷ 4
Max. number of conductors x cross section [mm²] Cu (D-solid) Cu (L-stranded)	3 x (0,5 ÷ 1); 2 x 1,5 3 x (0,5 ÷ 1); 2 x 1,5
Rated surge voltage [kV]	4
Short-circuit current strength [A]	480
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2
Tightening torque [Nm]	0,5
Stripping length [mm]	9,5
Recommended ferrule length [mm]	10
Max. ferrule outside diameter [mm]	3,6
Screwdriver blade (cross / flat)	PH 0 / 0,5 x 3
Packing (pc) / weight (g / pc)	100 / 9,6

Insulating body	Polyamid (PA), inflam- mability V0, halogen-fre		
Conductivity part	Brass (galvan	ic surfaced Ni)	
Fastening part	(galvan	Thermally treated steel (galvanic surfaced ZnCoCr)	
Order No.			
White		A 131111	
Light blue		A 131121	
Dark blue		A 131131	
Beige		A 131141	
Chocolate brow	olate brown A 131151		
Red		A 131161	
Orange		A 131171	
Black		A 131181	
Violet		A 131191	
Grey		A 131211	
Green		A 831265	
Yellow		A 831255	

Interconnections	Measuring jack bushes	Cover labels 3	Covers	Partitions	Plug-in- bridges
2-mult. C 131112	C 235010	G 420025	4-mult. G 520026	End partitions (12 colours)	C 431911
3-mult. C 131212			5-mult. G 620026	Middle partitions (10 colours)	
4-mult. C 135312					
10-mult. C 135912					

A complete list of accessories, including technical and ordering data can be found in the Accessories section.





### RSA 6 (new type RSA 6 A available in August 2011)

Technical data		Design
Nominal current [A]	41	Insulatin
Nominal voltage [V]	1600	body
Width / height / length [mm]	7,5 / 41,5 / 41,5	Conducti
Conductor cross section [mm²]		part
Cu (D-solid)	0,5 ÷ 10	Fastening
Cu (L-stranded)	0,5 ÷ 6	
Al	2,5 ÷ 6	Order No
Max. number of conductors x cross section [mm²]		White
Cu (D-solid)	3 x (0,75 ÷ 1,5)	Light blu
Cu (L-stranded)	3 x (0,75 ÷ 1,5)	Dark blu
Rated surge voltage [kV]	6	Beige
Short-circuit current strength [A]	720	Chocolat
Contamination class (acc. ČSN EN 60947-7-1, art.7.1.3)	2	Red
Tightening torque [Nm]	0,8	Orange
Stripping length [mm]	10,5	Black
Recommended ferrule length [mm]	10	Violet
Max. ferrule outside diameter [mm]	4	Grey
Screwdriver blade (cross / flat)	PH 1 / 0,8 x 4	Green
Packing (pc) / weight (g / pc)	100 / 13	Yellow

Insulating body	,	Polyamid (PA), inflam- mability V0, halogen-free		
Conductivity part		Brass (galvanic surfaced Ni)		
Fastening part	Steel (galvanic surfaced ZnCoCr)			
Order No.				
White		_	A 141110	
Light blue			A 141120	
Dark blue			A 141130	
Beige	eige A 141140		A 141140	
Chocolate brow	n		A 141150	
Red			A 141160	
Orange			A 141170	
Black	Black		A 141180	
Violet			A 141190	
Grey			A 141210	
Green			A 141250	
Yellow			A 141260	

Interconnec-

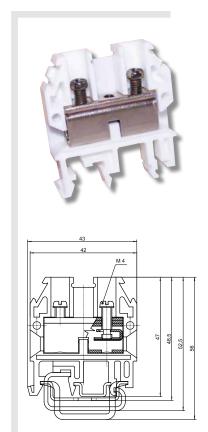
2-mult. C 151112

3-mult. C 151212

Interconnections	Measuring jack bushes	Cover labels	Short circuit interconnection	Partitions
2-mult. C 141112	C 246020	G 420030	ZP 6: C 346124	End partitions (10 colours)
3-mult. C 141212			Jack bush for ZP 6: C 246020	Middle partitions (10 colours)

A complete list of accessories, including technical and ordering data can be found in the Accessories section.

### RSA 10 (new type RSA 10 A available in August 2011)



Nominal current [A]	57
Nominal voltage [V]	1600
Width / height / length [mm]	8,8 / 46,5 / 43
Conductor cross section [mm²]	
Cu (D-solid)	2,5 ÷ 16
Cu (L-stranded)	2,5 ÷ 10
Al	2,5 ÷ 10
Max. number of conductors x cross section [mm²]	
Cu (D-solid)	3 x (1 ÷ 2,5)
Cu (L-stranded)	3 x (1 ÷ 2,5)
Rated surge voltage [kV]	4
Short-circuit current strength [A]	1200
Contamination class (acc. ČSN EN 60947-7-1, art.7.1.3)	2
Tightening torque [Nm]	1,2
Stripping length [mm]	13
Recommended ferrule length [mm]	14
Max. ferrule outside diameter [mm]	5
Screwdriver blade (cross / flat)	PH 1 / 0,8 x 4
Packing (pc) / weight (g / pc)	50 / 23

Insulating body	Polyamid (PA), inflam- mability V0, halogen-free			
Conductivity part	Brass (galva	Brass (galvanic surfaced Ni)		
Fastening part	Steel (galvanic surfaced ZnCoCr)			
Order No.				
White			A 151110	
Light blue			A 151120	
Dark blue			A 151130	
Beige			A 151140	
Chocolate brow	Chocolate brown		A 151150	
Red			A 151160	
Orange			A 151170	
Black			A 151180	
Violet			A 151190	
Grey			A 151210	
Green			A 151250	
Yellow			A 151260	

Partitions

End partitions (10 colours)

Middle partitions (10 colours)

 $A\ complete\ list\ of\ accessories,\ including\ technical\ and\ ordering\ data\ can\ be\ found\ in\ the\ Accessories\ section.$ 

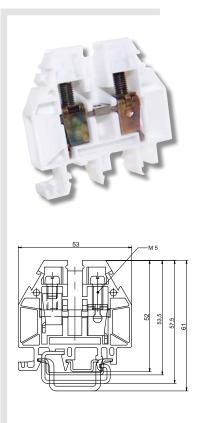
Cover labels

G 420040



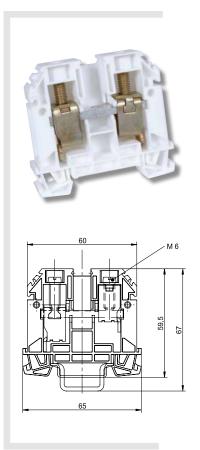
Measuring jack

C 281020



Technical data			Design		
Nominal current [A]	76		Insulating body		mid (PA), inflam- ity V0, halogen-free
Nominal voltage [V]	1600		Conductivity		ty vo, nalogen-nee
Width / height / length [mm]	12,1 /	51,5 / 53	part		nic surfaced Ni)
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	1,5 ÷ 2 1,5 ÷ 1		Fastening pa		ally treated (galvanic surfaced Cr)
AI `	2,5 ÷ 1	16	Order No.		_
Max. number of conductors x cross section [mm²]			White		A 161116
Cu (D-solid) Cu (L-stranded)		÷ 6); 3 x (1,5 ÷ 4) ÷ 6); 3 x (1,5 ÷ 4)	Light blue		A 161126
Rated surge voltage [kV]	4		Dark blue		A 161136
Short-circuit current strength [A]			Beige		A 161146
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2		Chocolate b	rown	A 161156
Tightening torque [Nm]	2		Red		A 161166
Stripping length [mm]	9,5		Orange		A 161176
Recommended ferrule length [mm]	10		Black		A 161186
Max. ferrule outside diameter [mm]	7		Violet		A 161196
Screwdriver blade (cross / flat)	PH 1 /	0,8 x 4	Grey		A 161216
Packing (pc) / weight (g / pc)	50 / 27		Green		A 861256
			Yellow		A 861266
Accessories					
Interconnections Measuring jack bushes		Cover labels	4	Partitions	
2-mult. C 167111 C 267020		G 410056		End partitio	ons (12 colours)
3-mult. C 167211				Middle part	titions (10 colours)

A complete list of accessories, including technical and ordering data can be found in the Accessories section.

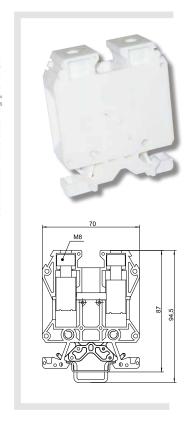


RSA 35 A				
Technical data		Design		
Nominal current [A]	125	Insulating body		nid (PA), inflam- y VO, halogen-free
Nominal voltage [V]	1600	Conductivity	Copper	, ,
Width / height / length [mm]	16,5 / 58,9 / 65	part		ic surfaced Sn)
Conductor cross section [mm²] Cu (D-solid)	2,5 ÷ 50	Fastening part	Steel (galvani	ic surfaced ZnCoCr)
Cu (L-stranded)	4 ÷ 35	Order No.		
Al	2,5 ÷ 50	White		A 171111
Max. number of conductors x cross section [mm²] Cu (D-solid)	2 x (2,5 ÷ 16); 3 x (2,5 ÷ 10)	Light blue		A 171121
Cu (L-stranded)	2 x (2,5 ÷ 16); 3 x (2,5 ÷ 10)	Dark blue		A 171131
Rated surge voltage [kV]	4	Beige		A 171141
Short-circuit current strength [A]	4200	Chocolate brow	'n	A 171151
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2	Red		A 171161
Tightening torque [Nm]	2,5	Orange		A 171171
Stripping length [mm]	15	Black		A 171181
Recommended ferrule length [mm]	15	Violet		A 171191
Max. ferrule outside diameter [mm]	9,5	Grey		A 171211
Screwdriver blade (cross / flat)	PH 2 / 1 x 5,5	Green		A 871250
Packing (pc) / weight (g / pc)	20 / 54,7	Yellow		A 871260

Accessories			
Interconnections	Measuring jack bushes	Cover labels	Partitions
2-mult. C 177112	C 277020	G 412566	End partitions (12 colours)
3-mult. C 177212			Middle partitions (10 colours)

 $A complete \ list \ of \ accessories, including \ technical \ and \ ordering \ data \ can \ be \ found \ in \ the \ Accessories \ section.$ 





RSA 70 A					
Technical data		Design			
Nominal current [A]	192 Insulating		-	Polyamid (PA), inflamma-	
Nominal voltage [V]	1600	body bility V0, haloge		0, halogen-free	
Width / height / length [mm]	24,4 / 85 / 70	Conductivity Brass gart (galvanic surfaced I			
Conductor cross section [mm²]				ic surfaced Ni)	
Cu (D-solid) Cu (L-stranded) Al	10 ÷ 95 16 ÷ 70 10 ÷ 95	Fastening part	Steel (galvan	ic surfaced ZnCoCr)	
Max. number of conductors x cross section [mm²] Cu (D-solid)	2 x (10 ÷ 25)	Order No.			
Cu (L-stranded)	2 x 16	White		A 181111	
Rated surge voltage [kV]	4	Light blue		A 181121	
Short-circuit current strength [A]	8400	Dark blue		A 181131	
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2	Beige		A 181141	
Tightening torque [Nm]	6	Chocolate brow	'n	A 181151	
Stripping length [mm]	18	Red		A 181161	
Allen key No.		Orange		A 181171	
Packing (pc) / weight (g / pc)	10 / 139	Black		A 181181	
		Violet		A 181191	
		Grey		A 181211	
		Yellow-green		A 581231	
Accessories					
Interconnections	C 191110				
Covering labels 4	G 420070				

### **POWER TERMINAL BLOCKS BNP**

Power terminal blocks serve for the connecting of conductors terminated by eyes. By the using of (V-clamps, V-transition parts) it is possible to connect the conductors without terminating by eyes. Terminal blocks are used for the connecting of electric circuits by copper conductors up to a maximum connecting cross section of 240 mm². It is possible to install terminal blocks on DIN rails TS 35x7,5 and TS 35x15.

Terminal blocks consist of an insulating body (material PA6.6, colour beige, inflammability V0 according to UL94, tested by hot loop according to EN 60695-2-11, 960°C), connecting copper bridge, galvanic surfaced Ni and steel parts, galvanic surfaced Zn (screws, plates). Tightening of conductors with eyes under the screw plates is performed by the cap key or the spanner. For safety during transport are screws in the bridge turned, by the installation it is necessary to turn them. Terminal blocks BNP do not have any covering, but a protective cover is offered. The terminal blocks can be used at outdoor temperature of -30° + 150°C.

Products of this group have CE indication and are tested according to IEC 947-7-1 a IEC 947-1.

### Connection of conductors terminated by eyes

### We offer two types of terminal blocks BNP for connection of conductors terminated by eyes:

- with flat bridge (in nominal sizes 70, 95, 120, 150 and 240 mm²)
- with reduced bridge (in nominal sizes 120 and 150 mm<sup>2</sup>)

### Additional accessories to the terminal blocks:

- side cover (separates two adjacent terminal blocks BNP)
- 2-multiple interconnection (in 3 sizes with different hole diameter)
- top cover (contact prohibitive)

### Connection of conductors by V-clamp

If the conductors are not terminated by eyes, it is also possible to apply them to the terminal blocks BNP. It is necessary to use appropriate accessories – V-transition part and V-clamp.

V-transition part is to apply to the terminal block BNP with the flat bridge as well as to the terminal block BNP with the reduced bridge (only for type BNP 120, 150). The basic difference is in the placing of the protection top cover – you can use them by the terminal block BNP supplemented by V-transition part and V-clamp with reduced bridge. The cover is not to apply by the terminal block BNP supplemented by V-transition part and V-clamp with flat bridge. The side cover is to use also to the terminal blocks BNP with V-transition part and V-clamp.

Important notice: V-transition part and V-clamp are not components of the Terminal block BNP. It is necessary to order them separately like other accessories.









<b>Power terminal blocks with</b>	flat bridge	)			
Technical data	BNP 70	BNP 95	BNP 120	BNP 150	BNP 240
Nominal current [A]	192	232	269	309	415
Nominal voltage [V]	800	800	800	800	800
Width / height / length of terminal block [mm]	42 / 60 / 90	42 / 60 / 90	42 / 65 / 90	42 / 65 / 90	42 / 65 / 105
Width / height / length of the bridge [mm]	25 / 3 / 90	25 / 4 / 90	25 / 5 / 90	25 / 6 / 90	25 / 8 / 90
Max. Cu conductor cross section [mm²]	70	95	120	150	240
Rated surge voltage [kV]	3	3	3	3	3
Short-circuit current strength [A]	8400	11400	14400	18000	28800
Tightening torque [Nm]	6	6	10	10	14
Spanner size	M8	M8	M10	M10	M12
Packing (pc) / weight (g / pc)	5 / 138	5 / 172	5 / 202	5 / 218	5 / 375
Testing	IEC 947-7-1				
Order No.	J 441980	J 441990	J 442000	J 442100	J 442200



Technical data	BNP 120 - reduced bridge	BNP 150 - reduced bridge
Nominal current [A]	269	309
Nominal voltage [V]	800	800
Width / height / length of terminal block [mm]	42 / 48 / 105	42 / 48 / 105
Max. Cu conductor cross section [mm²]	120	150
Rated surge voltage [kV]	3	3
Short-circuit current strength [A]	14400	18000
Tightening torque [Nm]	10	10
Spanner size	M10	M10
Packing (pc) / weight (g / pc)	5 / 237	5 / 265
Testing	IEC 947-7-1	IEC 947-7-1
Order No.	J 442001	J 442101



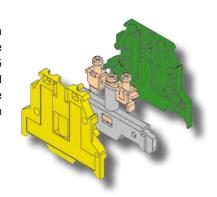
Accessories BN	P		
	Application	Order No.	Packing (pc) / weight (g / pc)
Cover	BNP 70, BNP 95, BNP 120, BNP 150, BNP 240	G 420000	5 / 77
Plastic holder	To install on DIN rails TS 35	J 473700 (Beige) J 473702 (Grey)	1 / 26
Side cover	BNP 70, BNP 95, BNP 120, BNP 150, BNP 240	B 483145	5 / 24
V-transition part	BNP 120, BNP 150 (∅ of hole 11mm) BNP 240 (∅ of hole 12 mm)	K 305207 K 305307	5 / 43 5 / 41
Interconnections	BNP 70, BNP 95 (Ø of hole 9 mm) BNP 120, BNP 150 (Ø of hole 11 mm) BNP 240 (Ø of hole 12 mm)	C 191112 C 191111 C 101111	5 / 55 5 / 50 5 / 36
V-clamp (16÷240 mm²)	BNP 120, BNP 150, BNP 240	K 372900	5 / 66



### **Terminal blocks RSA PE, RSA PEN**

### **Application**

These products are designed for connection of protective conductors in systems TN-C, TN-S. They are constructional designed with a conductive connection of the protective conductor to the DIN rail TS 35x7,5 a TS 35x15 steel, galvanized using ZnCr. The conductive connection is reliably secured by the contact while adhering to the assembly instructions supplied with the product. All types of RSA PE terminal blocks are identical in outline (length and height) with the basic types of RSA terminal blocks.



# PRSA P

### Construction design

For these multi-level terminal blocks the construction is similar as for basic RSA terminal blocks. The insulating body is different from the basic types and consists of two colour parts, green and yellow which achieve a green-yellow colour design. The terminal block is packed in both sides. The integrity of both parts of the terminal block is ensured by pins for innovated types and special arresters.

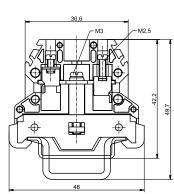
### Conductive connection to the DIN rail

The conductive connection to the DIN rail is ensured by jaw contact where the tightening is performed by a centre screw located between the side screws for tightening of the conductor.

The supporting rails can be used as a bus for PEN function only when the material of the rail is Cu and Cu conductor cross section is 10 mm<sup>2</sup> and greater. Steel rail, galvanized using Zn and passivated using chromate can be used only for the PE function.







### RSA PE 2,5 A

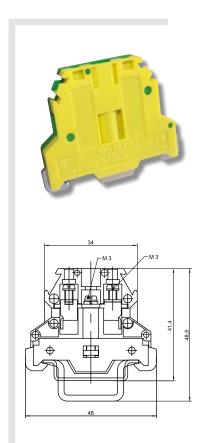
Technical data	
Max. conductor cross section [mm²]	2,5 (Cu D)
Nominal voltage [V]	750 ~ ; 830 =
Width / height / length [mm]	7 / 40,5 / 48
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,2 ÷ 2,5 0,15 ÷ 1,5
Max. number of conductors x cross section [mm²] Cu (D-solid) Cu (L-stranded)	2x (0,2 ÷ 1) 2x (0,2 ÷ 1)
Rated surge voltage [kV]	4
Short-circuit current strength [A]	300
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2
Tightening torque [Nm]	0,4 ÷ 0,6
Tightening torque for fastening on DIN rail [Nm]	0,5
Stripping length [mm]	6,5
Recommended ferrule length [mm]	7
Max. ferrule outside diameter [mm]	2,6
Screwdriver blade (cross / flat)	PH 0 / 0,5 x 3
Packing (pc) / weight (g / pc)	20 / 24

Design	
Insulating body	Polyamid (PA), inflammability V0, halogen-free
Conductivity part	Brass (galvanic surfaced)
Fastening part	Thermally treated steel (galvanic surfaced ZnCoCr-bracket)



Green-yellow A 521230





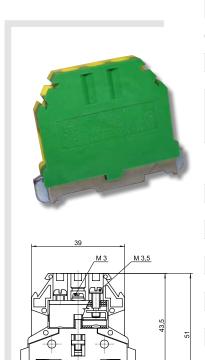
Conductivity part

Fastening part

Technical data		
Max. conductor cross secti	ion [mm²]	6 (Cu D)
Nominal voltage [V]		1600
Width / height / length [mn	n]	7,6 / 39,4 / 48
Conductor cross section [n Cu (D-solid) Cu (L-stranded)	nm²]	0,5 ÷ 6 0,5 ÷ 4
Max. number of conductors Cu (D-solid) Cu (L-stranded)	s x cross section [mm²]	3 x (0,5 ÷ 1); 2 x 1,5 3 x (0,5 ÷ 1); 2 x 1,5
Rated surge voltage [kV]		4
Short-circuit current streng	yth [A]	480
Contamination class (acc. (	ČSN EN 60947-7-1, art. 7.1.3)	2
Tightening torque [Nm]		0,5
Tightening torque for faste	ning on DIN rail [Nm]	0,5
Stripping length [mm]		9,5
Recommended ferrule leng	th [mm]	10
Max. ferrule outside diame	ter [mm]	3,6
Screwdriver blade (cross /	flat)	PH 0 / 0,5 x 3
Packing (pc) / weight (g / p	oc)	20 / 26
Design		Order No.

Brass (galvanic surfaced Ni)

Thermally treated steel (galvanic surfaced ZnCoCr)



Technical data			
Max. conductor cross	section [mm²]	10 (Cu D)	
Nominal voltage [V]		1600	
Width / height / length	[mm]	8,3 / 39,4 / 48	
Conductor cross secti Cu (D-solid) Cu (L-stranded) Al	on [mm²]	0,5 ÷ 10 0,5 ÷ 6 2,5 ÷ 6	
Max. number of condo Cu (D-solid) Cu (L-stranded)	uctors x cross section [mm²]	3 x (0,75 ÷ 1,5 3 x (0,75 ÷ 1,5	,
Rated surge voltage [I	kV]	6	
Short-circuit current s	trength [A]	720	
Contamination class (	acc. ČSN EN 60947-7-1, art. 7.1.3)	2	
Tightening torque [Nn	1]	0,8	
Tightening torque for	fastening on DIN rail [Nm]	0,5	
Stripping length [mm]		10,5	
Recommended ferrule	length [mm]	10	
Max. ferrule outside d	iameter [mm]	4	
Screwdriver blade (cr	oss / flat)	PH 1 / 0,8 x 4	ļ
Packing (pc) / weight	(g / pc)	20 / 30	
<b>.</b>		0.1.11.	
Design		Order No.	
Insulating body	Polyamid (PA), inflammability V0, halogen-free	Green-yellow	A 542230



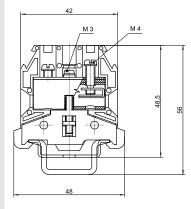
Brass (galvanic surfaced Ni)

Steel (galvanic surfaced ZnCoCr)

Conductivity part

Fastening part





### RSA PE 10 (new type RSA PE 10 A available in August 2011)

Technical data	
Max. conductor cross section [mm²]	16 (Cu D)
Nominal voltage [V]	1600
Width / height / length [mm]	10 / 45,6 / 48
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded) Al	2,5 ÷ 16 2,5 ÷ 10 2,5 ÷ 10
Max. number of conductors x cross section [mm²] Cu (D-solid) Cu (L-stranded)	3 x (1 ÷ 2,5) 3 x (1 ÷ 2,5)
Rated surge voltage [kV]	4
Short-circuit current strength [A]	1200
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2
Tightening torque [Nm]	1,2
Tightening torque for fastening on DIN rail [Nm]	0,5
Stripping length [mm]	13,5
Recommended ferrule length [mm]	14
Max. ferrule outside diameter [mm]	5
Screwdriver blade (cross / flat)	PH 1 / 0,8 x 4

Design	
Insulating body	Polyamid (PA), inflammability V0, halogen-free
Conductivity part	Brass (galvanic surfaced Ni)
Fastening part	Steel (galvanic surfaced ZnCoCr)

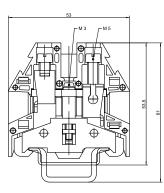
Packing (pc) / weight (g / pc)

RSA PE 16 A Technical data

Green-yellow	A 552230
	Green-yellow

20 / 40





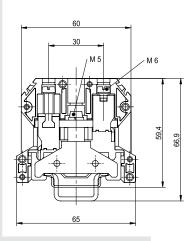
### Max. conductor cross section [mm²] 25 (Cu D) Nominal voltage [V] 1600 Width / height / length [mm] 12,1 / 50,5 / 53 Conductor cross section [mm²] 1,5 ÷ 25 1,5 ÷ 16 Cu (D-solid) Cu (L-stranded) 2,5 ÷ 16 Max. number of conductors x cross section [mm²] 2x (1,5 ÷ 6); 3x (1,5 ÷ 4) 2x (1,5 ÷ 6); 3x (1,5 ÷ 4) Cu (D-solid) Cu (L-stranded) Rated surne voltage [kV]

Rated surge voltage [KV]	4
Short-circuit current strength [A]	1920
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2
Tightening torque [Nm]	2
Tightening torque for fastening on DIN rail [Nm]	0,5
Stripping length [mm]	9,5
Recommended ferrule length [mm]	10
Max. ferrule outside diameter [mm]	7
Screwdriver blade (cross / flat)	PH 1 / 0,8 x 4
Packing (pc) / weight (g / pc)	20 / 45

Design Order No.			
Insulating body	Polyamid (PA), inflammability V0, halogen-free	Green-yellow	A 561116
Conductivity part	Brass (galvanic surfaced Ni)		
Fastening part	Thermally treated steel (galvanic surfaced ZnCoCr)		







### RSA PE 35 A Technical data Max. conductor cross section [mm

Technical data	
Max. conductor cross section [mm²]	50 (Cu D, AI)
Nominal voltage [V]	1600
Width / height / length [mm]	16,5 / 57 / 65
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded) Al	2,5 ÷ 50 4 ÷ 35 2,5 ÷ 50
Max. number of conductors x cross section [mm²] Cu (D-solid) Cu (L-stranded)	2 x (2,5 ÷ 16); 3 x (2,5 ÷ 10) 2 x (2,5 ÷ 16); 3 x (2,5 ÷ 10)
Rated surge voltage [kV]	4
Short-circuit current strength [A]	4200
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2
Tightening torque [Nm]	2,5
Stripping length [mm]	15
Recommended ferrule length [mm]	15
Max. ferrule outside diameter [mm]	9,5
Screwdriver blade (cross / flat)	PH 2 / 1 x 5,5
Packing (pc) / weight (g / pc)	20 / 73,2

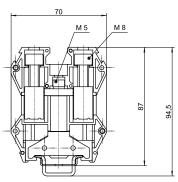
### Design

Insulating body	Polyamid (PA), inflammability V0, halogen-free	
Conductivity part	Brass (galvanic surfaced Ni)	
Fastening part	Steel (galvanic surfaced ZnCoCr)	

### Order No.

Green-yellow A 571231





### RSA PEN 70 A

Technical data	
Max. conductor cross section [mm²]	95 (Cu D)
Nominal voltage [V]	1600
Width / height / length [mm]	24 / 85 / 70
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded) Al	10 ÷ 95 16 ÷ 70 10 ÷ 95
Max. number of conductors x cross section [mm²] Cu (D-solid) Cu (L-stranded)	2 x (10 ÷ 25) 2 x 16
Rated surge voltage [kV]	3,5
Short-circuit current strength [A]	8400
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2
Tightening torque [Nm]	6
Tightening torque for fastening on DIN rail [Nm]	2
Stripping length [mm]	18
Allen key No.	○ 6
Packing (pc) / weight (g / pc)	10 / 190

D	esi	g١

Insulating body	Polyamid (PA), inflammability V0, halogen-free
Conductivity part	Brass (galvanic surfaced Ni)
Fastening part	Steel (galvanic surfaced ZnCoCr)

Order No.

Green-yellow A 591231



### **MULTI-LEVEL TERMINAL BLOCKS - type RSA**

### **Application**

Multi-level terminal blocks are used for connection the low and extra low voltage electric circuits with copper solid or stranded conductors in cases where there are demands for economy of space. The range of possible connectible conductors is from 0,15mm² to 2,5 mm². Stranded conductors need not be terminated with ferrules. They are constructed as three-level with the option of either a horizontal connection of the individual levels of blocks (RSA 2,5 A P3H), which are located one beside the other the plug-in bridges (accessories), or the vertical connection of the individual levels of the blocks. In this design, 2 types are produced – connected two levels – RSA 2,5A P3V2 type, or connected all 3 levels – RSA 2.5 A P3V3 type. No type has a conductively connected level with a DIN rail. All the types are 5 mm wide. It is possible to apply terminal blocks according to ČSN 33 2000-3 in the AB 7, AF 2, AG 2 and AH 2 environment. Temperature range is from -40 to +55°C.

### Clamping on the DIN rail

It is possible to clamp the terminal blocks to TS 35x7,5, TS 35x15 steel DIN rail. Terminal blocks are clamped on the DIN rail individually or in blocks – for better stability on the insulating bodies there are arresting pins and holes by which it is possible to connect individual terminal blocks before mounting on the DIN rail. Removing from the DIN rail is performed by separation of terminal blocks on the DIN rail and using a flat screwdriver, individual terminal blocks can be removed from the DIN rail.

### Interconnection

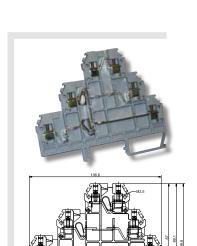
In the row located terminal block of the RSA 2,5A P3H type, it is possible to mutually connect in individual levels the two to four multiple plug-in bridges which are inserted between the pressing spring and connecting bridge. The assembly is performed by the simple insertion of the plug-in bridge into the spring of the terminal block which will speed up the connection of the terminal blocks. For dismantling it is recommended to use a screwdriver. Connection of individual levels of the terminal block – RSA 2.5A P3V2 and RSA 2.5A P3V3 types are performed by the producer. The terminal block RSA 2,5 A P3V3 can be connected also horizontally in the lower level.

### Protection against injury from electric current

IP 20 covering is ensured, including the plug-in bridges.

### Standards according to which the terminal blocks are tested:

ČSN EN 60998-1, 60998-2-1, ČSN EN 60947-1 and 60947-7-1 IEC 60947-7-1, 60998-2-1 (CB certificate)

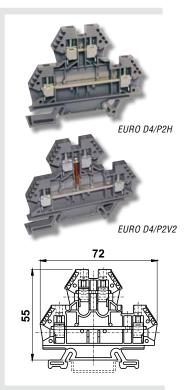


Design	
Insulating body	Polyamide PA 6, inflam- mability V0, halogen-free
Conductivity part	Copper (galvanic surfaced Sn)
Fastening part	Thermally treated steel (galvanic surfaced ZnCoCr)

	<u> </u>	••••	
Technical data	RSA 2,5 A P3H	RSA 2,5 A P3V2	RSA 2,5 A P3V3
Max. value [A / mm²]	24 / 2,5 (Cu D)	24 / 2,5 (Cu D)	24 / 2,5 (Cu D)
Nominal voltage [V]	750 ~; 830 =	750 ~; 830 =	750 ~; 830 =
Width / height / length [mm]	5 / 87 / 106,6	5 / 87 / 106,6	5 / 87 / 106,6
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,2 ÷ 2,5 0,15 ÷ 1,5	0,2 ÷ 2,5 0,15 ÷ 1,5	0,2 ÷ 2,5 0,15 ÷ 1,5
Max. Cu conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	2x (0,2 ÷ 1) 2x (0,2 ÷ 1)	2x (0,2 ÷ 1) 2x (0,2 ÷ 1)	2x (0,2 ÷ 1) 2x (0,2 ÷ 1)
Rated surge voltage [kV]	4	4	4
Short-circuit current strength [A]	300	300	300
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2	2	2
Tightening torque [Nm]	0,4	0,4	0,4
Stripping length [mm]	6	6	6
Recommended ferrule length [mm]	7	7	7
Max. ferrule outside diameter [mm]	2,1	2,1	2,1
Screwdriver blade (cross / flat)	PH 0 / 0,5 x 3	PH 0 / 0,5 x 3	PH 0 / 0,5 x 3
Packing (pc) / weight (g / pc)	20 / 26	20 / 27	20 / 28
Order No. (Grey)	A 121214	A 121218	A 121219
Accessories			
Plug-in bridges	2-mult. C 427100 3-mult. C 427200 4-mult. C 427300	- - -	- - -
Partitions (Grey)	End B 121213	End B 121213	End B 121213



### TWO-LEVELS TERMINAL BLOCKS - type EURO D



	• <del>•</del>	<b>-</b> 0	
Fechnical data	EURO D4/P2I	Н	EURO D4/P2V2
Iominal current [A]	32		32
lominal voltage [V]	800 ~; =		800 ~; =
/idth / height / length [mm]	6 / 55 / 72		6 / 55 / 72
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,5 ÷ 4 0,5 ÷ 2,5		0,5 ÷ 4 0,5 ÷ 2,5
ated surge voltage [kV]	8		8
nort-circuit current strength [A]	480		480
ghtening torque [Nm]	0,6		0,6
ripping length [mm]	10		10
ecommended ferrule length [mm]	12		12
rewdriver blade (flat)	0,5 x 3		0,5 x 3
cking (pc) / weight (g / pc)	50 / 18,4		50 / 20,7
rder No. (Grey)	A 133214		A 133218
ccessories			
Plug-in bridge 2-multiple - Yellow Plug-in bridge 3-multiple - Yellow Plug-in bridge 4-multiple - Yellow Plug-in bridge 6-multiple - Yellow	111111	C 431117 C 431217 C 431317 C 431517	

Accessories
Plug-in bridge 2-multiple - Yellow Plug-in bridge 3-multiple - Yellow Plug-in bridge 4-multiple - Yellow Plug-in bridge 6-multiple - Yellow Plug-in bridge 12-multiple - Yellow Plug-in bridge 24-multiple - Yellow
Partitions end (Grey)
Marking moultinged for tune FUDO D

PI PI PI PI PI

C 431317 C 431517 C 435017 C 438017 B 133211

Marking multicard for type EURO D (50 labels/1card) Cover label (transparent)

G 230009 (with marking), G 240009 (without marking)



	o—o o— →o	⊕ *** • • • • • • • • • • • • • • • • •
Technical data	EURO D4/P1-2	EURO D4/LED12-24
Nominal current [A]	32	32
Nominal voltage [V]	800 ~; =	12 / 24 ~; =
Width / height / length [mm]	6 / 55 / 72	6 / 55 / 72
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,5 ÷ 4 0,5 ÷ 2,5	0,5 ÷ 4 0,5 ÷ 2,5
Rated surge voltage [kV]	8	8
Short-circuit current strength [A]	480	480
Tightening torque [Nm]	0,6	0,6
Stripping length [mm]	10	10
Recommended ferrule length [mm]	12	12
Screwdriver blade (cross / flat)	0,5 x 3	0,5 x 3
Packing (pc) / weight (g / pc)	50 / 18,3	50 / 26,0
Order No. (Grey)	A 133210	A 183210

C 431117 C 431217 C 431317 C 431517 C 435017 C 438017

ccessories	
lug-in bridge 2-multiple - Yellow lug-in bridge 3-multiple - Yellow lug-in bridge 4-multiple - Yellow lug-in bridge 6-multiple - Yellow lug-in bridge 12-multiple - Yellow lug-in bridge 24-multiple - Yellow	11111
artitions end (Grey)	

Marking multicard for type EURO D (50 labels/1card) Cover label (transparent)

B 133211 G 230009 (with marking), G 240009 (without marking) G 410020



### **FUSE TERMINAL BLOCKS RSP**

### **Application**

The structure of these terminal blocks allows inserting a fuse element into the circuit - a tube protective fuse that is inserted into the tilted holder between the conductive contacts. The range of possible connectible conductors is from 0,5 mm² to 6 mm². The fuse terminal blocks of all offered types can be classified into the circuits either with alternating, as well as direct voltage. The terminal block can be fastened to DIN rails TS 15, TS 35x7,5, TS 35x15 and TS 32. The recommended position during an assembly of horizontally placed terminal blocks is such that the fuse holder is tilted downwards.

### Design

In the fuse terminal blocks, screws are used with a combined head of the screw - a screwdriver with a flat blade or cross type PH can be used. The material of the screw is steel, hardened, galvanic surfaced ZnCrCo. During the application of the recommended tools and tightening torque, the supplier will guarantee the resistance of the screw against damage even in the case of several applications. The material of the insulating body is polyamide PA 6, inflammability V0 according to UL 94, halogen-free. The electric conductive part is brass, galvanic-nickel, the contact part is tin-bronze. It is possible to clamp the terminal blocks to TS 15, TS 35x7,5, TS 35x15 and TS 32 DIN rails



Detail of the insert into the holder

### Specifics by the application of terminal blocks with LED

These terminal blocks can find application in circuits where by the fuse interruption the circuit that powers the LED diode, stay closed through connected load (e.g. a inductor relay, contactor, etc.). This state is signaled by alight of LED diode. The circuit is therefore not galvanic disconnected. If the circuit is interrupted at the same time with the fuse interruption, the LED diode will not be lit. By direct voltage it is necessary to keep the polarity of the positive pole, marked on the terminal block.

### Protection against injury from electric current

The covering of the fuse terminal blocks is IP 20. In the case of an opened fuse holder, the covering of the parts under voltage is IP 10.

### Interconnection

In the row of the neighbouring terminal blocks, it is possible to mutually interconnect by plug-in bridges; it is not possible to interconnect by screw interconnections as basic terminal blocks.



Connecting and contact parts of the terminal block RSP

### **Testing of products:**

RSP 4, RSP 4-LED, RSP 4-LED/24V according to ČSN EN 60947-7-3 according to ČSN EN 60947-1

RSP A 4 according to ČSN EN 60127-6







RSP 4	
Technical data	
Nominal current [A]	6,3
Nominal operating voltage [V]	250 ~ ; 250 =
Nominal insulating voltage [V]	400
Nominal impulse voltage [kV]	4
Width / height / length [mm]	9 / 46,3 / 55
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,5 ÷ 6 0,5 ÷ 4
Max. number of conductors x cross section [mm²] Cu (D-solid) Cu (L-stranded)	3 x (0,5 ÷ 1); 2 x 1,5 3 x (0,5 ÷ 1); 2 x 1,5
Type of appliance fuse	F, M, T Ø size 5 x 20
Type of recommended fuse	SIBA (ceramic)
Min. recommended loading [W]	
Rated surge voltage [kV] 4	
Short-circuit current strength [A]	1500
IP code by open / closed fuse holder	IP 10 / IP 20
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2
Tightening torque [Nm]	0,5
Stripping length [mm]	9,5
Recommended ferrule length [mm]	10
Max. ferrule outside diameter [mm]	3,5
Screwdriver blade (cross / flat)	PH 0 / 0,5 x 3
Packing (pc) / weight (g / pc)	10 / 12

Design	
Insulating body	Polyamid (PA), inflam- mability V0, halogen-free
Conductivity part	Brass (galvanic surfaced Ni)
Fastening part	Steel (galvanic surfaced ZnCoCr)
Accessories	

Accessories	
C 438911	Plug-in bridge Type HP-RSP 4
C 431015	Ending of plug-in bridge

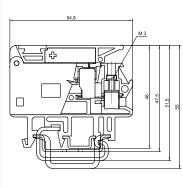
### Order No.

Design

Terminal block with
Grey insulating body

A 631210





Taskaisal data	
Technical data	
Nominal current [A]	6,3
Nominal operating voltage [V]	250 ~ ; 250 =
Nominal insulating voltage [V]	400
Nominal impulse voltage [kV]	4
Width / height / length [mm]	9 / 46,3 / 55
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,5 ÷ 6 0,5 ÷ 4
Max. number of conductors x cross section [mm²] Cu (D-solid) Cu (L-stranded)	3 x (0,5 ÷ 1); 2 x 1,5 3 x (0,5 ÷ 1); 2 x 1,5
Type of appliance fuse	F, M, T ∅ size 5 x 20
Type of recommended fuse	SIBA (ceramic)
Min. recommended loading [W]	0,5
Rated surge voltage [kV]	4
Short-circuit current strength [A]	1500
IP code by open / closed fuse holder	IP 10 / IP 20
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2
Tightening torque [Nm]	0,5
Stripping length [mm]	9,5
Recommended ferrule length [mm]	10
Max. ferrule outside diameter [mm]	3,5
Screwdriver blade (cross / flat)	PH 0 / 0,5 x 3
Packing (pc) / weight (g / pc)	10 / 14,5

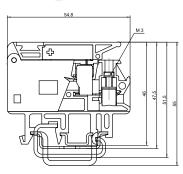
Insulating body	Polyamid (PA), inflam- mability V0, halogen-free
Conductivity part	Brass (galvanic surfaced Ni)
Fastening part	Steel (galvanic surfaced ZnCoCr)

## Accessories C 438911 Plug-in bridge Type HP-RSP 4 C 431015 Ending of plug-in bridge

Order No.	
Terminal block with Grey insulating body	)







### RSP 4-LFD/24-48V

Packing (pc) / weight (g / pc)

NOP 4-LED/24-40V		
Technical data		
Nominal current [A] 6,3		
Nominal operating voltage [V] 48 ~ ; 48 =		
Nominal insulating voltage [V]	400	
Nominal impulse voltage [kV]	4	
Width / height / length [mm]	9 / 46,3 / 55	
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,5 ÷ 6 0,5 ÷ 4	
Max. number of conductors x cross section [mm²] Cu (D-solid) Cu (L-stranded)	3 x (0,5 ÷ 1); 2 x 1,5 3 x (0,5 ÷ 1); 2 x 1,5	
Type of appliance fuse	F, M, T ∅ size 5 x 20	
Type of recommended fuse	SIBA (ceramic)	
Min. recommended loading [W]	0,125	
Rated surge voltage [kV]	4	
Short-circuit current strength [A]	1500	
IP code by open / closed fuse holder	IP 10 / IP 20	
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2	
Tightening torque [Nm]	0,5	
Stripping length [mm]	9,5	
Recommended ferrule length [mm]	10	
Max. ferrule outside diameter [mm]	3,5	
Screwdriver blade (cross / flat)	PH 0 / 0,5 x 3	

10 / 14,5

### Design

Insulating body	Polyamid (PA), inflam- mability V0, halogen-free
Conductivity part	Brass (galvanic surfaced Ni)
Fastening part	Steel (galvanic surfaced ZnCoCr)

### Accessories

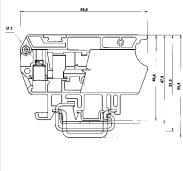
C 438911	Plug-in bridge Type HP-RSP 4
C 431015	Ending of plug-in bridge

### Order No.

Terminal block with Orange insulating body

A 691210





Technical data	
Nominal current [A]	12,5
Nominal operating voltage [V]	500 ~ ; 500 =
Width / height / length [mm]	10,5 / 46 / 68,5
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,5 ÷ 6 0,5 ÷ 4
Max. number of conductors x cross section [mm²] Cu (D-solid) Cu (L-stranded)	3 x (0,5 ÷ 1); 2 x 1,5 3 x (0,5 ÷ 1); 2 x 1,5
Type of appliance fuse	F, T ∅ size 6,3 x 32
Type of recommended fuse	SIBA (ceramic)
Min. recommended loading [W]	-
Rated surge voltage [kV]	4
Short-circuit current strength [A]	1500
IP code by open / closed fuse holder	IP 10 / IP 20
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2
Tightening torque [Nm]	0,5
Stripping length [mm]	9,5
Recommended ferrule length [mm]	10
Max. ferrule outside diameter [mm]	3,5
Screwdriver blade (cross / flat)	PH 0 / 0,5 x 3
Packing (pc) / weight (g / pc)	10 / 21

### Design

Insulating body	Polyamid (PA), inflam- mability V0, halogen-free
Conductivity part	Brass (galvanic surfaced Ni)
Fastening part	Steel (galvanic surfaced ZnCoCr)

### Accessories

C 438911	Plug-in bridge Type HP-RSP 4	himmi
C 431015	Ending of plug-in bridge	

### Order No.

Terminal block with
Beige insulating body

A 631140



### **FUSE TERMINAL STRIPS 1106-F**

The terminal strips with fuse holders are used for connection of electric conductors and enable to connect the protecting element (fuse 5 x 20 mm) into the circuit.

The terminal strips 1106-F with fuse holders are used for connection of electric circuits by copper conductors in cases where it is not possible to apply a DIN TS rail with the terminal block RSP 4 (e.g. in small installation boxes, for lights, etc.). They are delivered in five designs – 1, 2, 3, 4 and 5-pole. Each terminal strip delivered contains a fuse holder.

Single-pole design of the terminal strip with a fuse holder is equipped on the side on the insulating body with a dovetail which enables to perform the connection with another, one or more pole terminal strip. In this manner it is possible to mount the terminal strip into a compact unit with more fuse holders.

The insulating material of the terminal strip is polyamide PA6 with a transparent colour (inflammability V2 according to UL94); the insulating material of the fuse holder is polyamide PA6.6 black colour (inflammability V2 according to UL94). The connecting parts are steel, galvanic-zinc (screws are in this case arrested and any falling is prevented), the electric conductive parts are brass, galvanic-nickel surfaced and the electric-conductive parts in the holder are made of stainless steel. They can be used at outdoor temperatures of -5° +100°C.

Products of this group are produced in the EU, they hold the mark, and are tested according to EN 60598-1 and EN 6017-6.

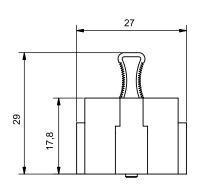


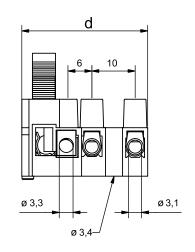
FUSE TERMINAL STRIPS	
Technical data	
Nominal current [A]	10
Nominal voltage [V]	400
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	1 ÷ 2,5 1 ÷ 2,5
Rated surge voltage [kV]	2,5
Fuse size [mm]	5 x 20
Short-circuit current strength [A]	300
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2
Tightening torque [Nm]	0,5
Screwdriver blade (flat)	0,5 x 3
Packing pc	1 pc

Design	
Insulating body	Polyamid (PA), inflam- mability V2, halogen-free
Conductivity part	Brass (galvanic surfaced Ni)
Fastening part	Steel (galvanic surfaced ZnCr)

Type of terminal strip	1106-F/1P	1106-F/2P	1106-F/3P	1106-F/4P	1106-F/5P
Terminal strip length "d" [mm]	16,5	20	30	40	50
Order No.	J 453000	J 453100	J 453200	J 453300	J 453400
Weight [g]	5	7	10	12	14



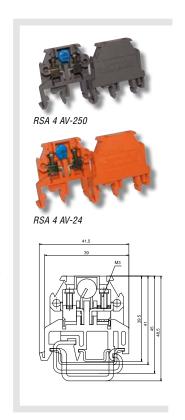






### **TERMINAL BLOCKS WITH VARISTOR**

Terminal blocks with a varistor are used for restriction of voltage peaks originated in the switching of electric circuits, for protection of circuits against pulse overvoltage, restriction of over-voltage waves on the phase voltage or restriction of the source of the intervention voltage on the switching contacts. Terminal blocks with varistors are not traditional protection against over-voltage by a lightning current. They include side covers – the terminal block is fully cased. The covering is IP 20.



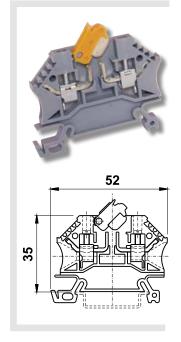
Type of terminal	RSA 4 AV-24	RSA 4 AV-250
Nominal voltage [V]	24 ~ ; 24 =	230 ~ ; 230 =
Width / height / length [mm]	7,8 / 39 / 41,5	7,8 / 39 / 41,5
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,5 ÷ 6 0,5 ÷ 4	0,5 ÷ 6 0,5 ÷ 4
Max. Cu conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	3 x (0,5 ÷ 1); 2 x 1,5 3 x (0,5 ÷ 1); 2 x 1,5	
Rated surge voltage [kV]	4	4
Short-circuit current strength [A]	250	1200
Contamination class (acc. ČSN EN 60947-7-1, art. 7.1.3)	2	2
Tightening torque [Nm]	0,5	0,5
Stripping length [mm]	9,5	9,5
Recommended ferrule length [mm]	10	10
Max. ferrule outside diameter [mm]	3,6	3,6
Screwdriver blade (cross / flat)	PH 0 / 0,5 x 3	PH 0 / 0,5 x 3
Colour design	Orange	Grey
Packing (pc) / weight (g / pc)	20 / 9,5	20 / 9,5
Technical data of varistor		
Max. allowed working voltage [V]	35	250
Voltage of varistor by 1 mA [V]	56	390
Max. peak value of interference voltage [V]	93	645

Order No.	RSA	4 AV-250
Terminal with varistor		S 113111
Terminal without varistor	ı	S 113113
Separate varistor with bridges (Custom made only)		S 213011
Order No.	RSA	4 AV-24
0.40	RSA	<b>4 AV-24</b> S 123211
Order No. Terminal with varistor Terminal without varistor	RSA	

Design	
Insulating body	Polyamide (PA), inflam- mability V0, halogen-free
Conductivity part	Brass (galvanic surfaced Ni)
Fastening part	Steel (galvanic surfaced ZnCoCr)

made only)

### TERMINAL BLOCKS DISCONNECT WITH BLADE



Fechnical data	EURO T2,5
Nominal current [A]	16
Nominal voltage [V]	800 ~ ; 800 =
Nidth / height / length [mm]	5,3 / 35 / 52
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,5 ÷ 4 0,5 ÷ 2,5
Rated surge voltage [kV]	8
Short-circuit current strength [A]	300
ightening torque [Nm]	0,5
tripping length [mm]	10
lecommended ferrule length [mm]	12
crewdriver blade (flat)	0,5 x 3
acking (pc) / weight (g / pc)	50 / 9,1
order No. (Grey)	A 923210

Design	
Insulating body	Polyamide PA 6, inflam- mability V0, halogen-free
Conductivity part	Brass (galvanic surfaced Sn)
Fastening part	Thermally treated steel (galvanic surfaced ZnCr)

### Accessories

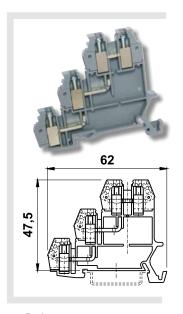
Marking multicard EURO T (card with 20 pcs of labels)

Partition end (Grey) B 123211





### FEED-THROUG TERMINAL BLOCKS FOR SENSORS



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Technical data	EURO Z2,5/P3	EURO Z2,5/P3 LED (LP)	EURO Z2,5/P3 LED (LN)	EURO W2,5/P3H
Nominal current [A]	24	16	16	24
Nominal voltage [V]	250 ~ ; 250 =	12-24 ~ ; =	12-24 ~ ; =	250 ~ ; 250 =
Width / height / length [mm]	5,3 / 47,5 / 62	5,3 / 47,5 / 62	5,3 / 47,5 / 62	5,3 / 47,5 / 78,5
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,5 ÷ 4 0,5 ÷ 2,5	0,5 ÷ 4 0,5 ÷ 2,5	0,5 ÷ 4 0,5 ÷ 2,5	0,5 ÷ 4 0,5 ÷ 2,5
Rated surge voltage [kV]	4	4	4	1,5
Short-circuit current strength [A]	300	300	300	300
Tightening torque [Nm]	0,5	0,5	0,5	0,5
Stripping length [mm]	7	7	7	7
Recommended ferrule length [mm]	12	12	12	12
Screwdriver blade (cross / flat)	0,5 x 3	0,5 x 3	0,5 x 3	0,5 x 3
Packing (pc) / weight (g / pc)	25 / 11,9	25 / 12,5	25 / 12,5	25 / 18,2
Order No. (Grey)	A 123210	A 126214 (LED) A 127214 (LED)	A 124214 (LED) A 125214 (LED)	A 123219

Design	
Insulating body	Polyamide PA 6, inflam- mability V0, halogen-free
Conductivity part	Brass (galvanic surfaced Sn)
Fastening part	Thermally treated steel (galvanic surfaced ZnCr)

CC	es	sori	es

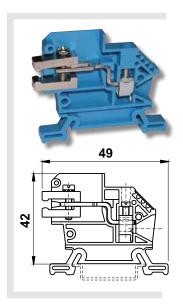
Plug-in bridge 2-mult Blue / Red Plug-in bridge 3-mult Blue / Red Plug-in bridge 4-mult Blue / Red Plug-in bridge 12-mult Blue / Red	M
Partition end (Grey) EURO Z	
Partition end (Grey) EURO W	
Marking multicard EURO Z, W (card with 50 p	ocs of labels)

C 421132 / C 421162 C 421133 / C 421163 C 421134 / C 421164 C 425137 / C 425167 B 123213

B 723213

G 230000 (with marking), G 240000 (without marking)

### TERMINAL BLOCKS FOR NEUTRAL DISCONNECTOR



Technical data	EURO N4
Max. value [A / mm²]	24
Nominal voltage [V]	250 ~ ; 250 =
Width / height / length [mm]	6 / 42 / 49
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	0,5 ÷ 6 0,5 ÷ 4
Rated surge voltage [kV]	8
Short-circuit current strength [A]	480
Tightening torque [Nm]	0,6
Stripping length [mm]	10
Recommended ferrule length [mm]	18
Screwdriver blade (cross / flat)	0,5 x 3
Packing (pc) / weight (g / pc)	50 / 16
Order No. (Blue)	A 133134

Design	
Insulating body	Polyamide PA 6, inflam- mability V0, halogen-free

Conductivity part | Brass (galvanic surfaced Ni) |
Fastening part | Thermally treated steel (galvanic surfaced ZnCr)

Accessories	
Ms rail, size 10x3 mm (lenght 100 cm)	C 331018
Ms rail support (Blue)	B 133136
Partition end (Blue)	B 133131
Marking multicard EURO N, D (card with 50 pcs of labels)	G 230009 (with marking), G 240009 (without marking)



### **SCREWLESS TERMINAL BLOCKS EURO Q**

Screwless terminal blocks EURO Q are designed for copper conductors with cross section from 0.5 to 6 mm². It is possible to clamp the conductors on DIN rails TS 35x7, 5 and TS 35x15. Interconnection of terminal blocks is possible with using of screwless plug-in bridges in infinite series (the bridge of the terminal block with one plug-in bridge can be used together for the adjacent, continuable plug-in bridge. Screwless terminal blocks EURO Q are tested according to EN 60998-1, EN 60998-2-1, EN 60998-2-2, EN 60947-7-1 and EN 60947-7-2 and are certified in accordance with VDE, UL, CSA and KEMA certification, including use in explosive environments. Products in this group are manufactured in the EU.



Technical data	EURO Q2,5	EURO Q4	EURO Q6
Nominal current [A]	24	32	41
Nominal voltage [V]	630	630	630
Width / height / length [mm]	5 / 28,5 / 53	6 / 34,5 / 58	8 / 38,5 / 63
Conductor cross section [mm²] Cu (D-solid) / Cu (L-stranded)	0,5 ÷ 2,5 / 0,5 ÷ 2,5	1,5 ÷ 4 / 1,5 ÷ 4	2,5 ÷ 6 / 2,5 ÷ 6
Rated surge voltage [kV]	3,5	3,5	3,5
Short-circuit current strength [A]	24	32	41
Stripping length [mm]	12	15	18
Recommended ferrule length [mm]	12	12	12
Packing (pc) / weight (g / pc)	50 / 6,2	50 / 11,4	50 / 18,4
Order No. (Grey / Dark blue)	A 123212 / A 123132	A 133212 / A 133132	A 143212 / A 143132
Technical data	EURO PE Q2,5	EURO PE Q4	EURO PE Q6
Nominal voltage [V]	630	630	630
Width / height / length [mm]	5 / 28,5 / 53	6 / 34,5 / 58	8 / 38,5 / 63
Conductor cross section [mm²] Cu (D-solid) / Cu (L-stranded)	0,5 ÷ 2,5 / 0,5 ÷ 2,5	1,5 ÷ 4 / 1,5 ÷ 4	2,5 ÷ 6 / 2,5 ÷ 6
Stripping length [mm]	12	15	18
Recommended ferrule length [mm]	12	12	12
Packing (pc) / weight (g / pc)	50 / 9,2	50 / 14,2	50 / 21,2
Order No. (Green-yellow)	A 523232	A 533232	A 543232



Technical data	EURO Q2,5/1+2	EURO PE Q2,5/1+2	EURO Q2,5/2+2	EURO PE Q2,5/2+2
Nominal current [A]	24	-	24	-
Nominal voltage [V]	630	630	630	630
Width / height / length [mm]	5 / 28,5 / 68,5	5 / 28,5 / 68,5	5 / 28,5 / 87,5	5 / 28,5 / 87,5
Conductor cross section [mm²] Cu (D-solid) / Cu (L-stranded)	0,5 ÷ 2,5 / 0,5 ÷ 2,5	0,5 ÷ 2,5 / 0,5 ÷ 2,5	0,5 ÷ 2,5 / 0,5 ÷ 2,5	0,5 ÷ 2,5 / 0,5 ÷ 2,5
Rated surge voltage [kV]	3,5	-	3,5	-
Short-circuit current strength [A]	24	-	24	-
Stripping length [mm]	12	12	12	12
Recommended ferrule length [mm]	12	12	12	12
Packing (pc) / weight (g / pc)	25 / 9,4	25 / 12,2	25 / 12,2	25 / 14,8
Order No. (Grey) Order No. (Dark blue) Order No. (Green-yellow)	A 223212 A 223132	- - A 223232	A 323212 A 323132	- - A 323232



Technical data	EURO QD2,5	Accessories	Application	Order No.
Nominal current [A]	24		EURO Q2,5; PE Q2,5	B 923211
Nominal voltage [V]	500		EURO Q4; PE Q4	B 933211
Width / height / length [mm]	5 / 37,5 / 98	Partition end	EURO Q6; PE Q6	B 943211
Conductor cross section [mm²]		(Grey)	EURO Q2,5/1+2; PE Q2,5/1+2	B 223218
Cu (D-solid) / Cu (L-stranded)	0,5 ÷ 2,5 / 0,5 ÷ 2,5		EURO Q2,5/2+2; PE Q2,5/2+2	B 323219
Rated surge voltage [kV]	3,5		EURO QD2,5/P2H	B 723211
Short-circuit current strength [A]	24	Plug-in bridge	EURO Q2,5; EURO Q4	C 421127
Stripping length [mm]	12	2-mult Yellow	EURO Q6	C 441127
Recommended ferrule length [mm]	12	Marking multicard	Terminal block type EURO Q	G 210000
Packing (pc) / weight (g / pc)	25 / 14	EURO Q (card with	- (with marking)	G 210000
Order No. (Grey / Dark blue)	A 123218 / A 123138	50 pcs of labels)	Terminal block type EURO Q - (without marking)	G 220000



### **ACCESSORIES FOR TERMINAL BLOCKS RSA**

Accessories for terminal blocks RSA are offered in a wide range which ensures for the user the application of terminal blocks RSA in most projects. The important fact for users is the prompt availability of accessories for terminal blocks RSA in recommended distribution points or directly by the producer. In the case of necessity, the producer resolves the requirements of clients and is able to deliver on request, any non-typical elements which can be characterized as accessories for terminal blocks RSA.

### Interconnection of terminal blocks RSA

In the row of neighbouring terminal blocks it is possible to interconnect them by screw interconnection (a multiple of two to ten for type RSA 4 A, a multiple of two to three for types RSA 6 to RSA 35 A and a multiple of two for the type RSA 70 A), terminal block RSA 2,5 A is possible to interconnect only with plug-in bridges from above (2-, 3- and 4-multiple) with the possibility of interconnection in infinity series. The screw interconnections include high-quality hardened screws with a combined head (slot + module PH).

Type RSA 4 A and all types fuse terminal blocks RSP can be interconnected also with the side plug-in bridges which are delivered in multiples of ten. These plug-in bridges are insulated in the connecting part and it is possible to shorten them to the required length or to cut individual poles (teeth). The ends of the plug-in bridges can be terminated by a protective ending. The plug-in bridges are applied from side into the terminal blocks.

The covering (IP code) of terminal blocks RSA is not changed in the case of an application of screw interconnections and plug-in bridges, IP 20.

### **Partitions**

Terminal blocks RSA are offered with end and middle partitions for each type in 12 colours (with the exception of terminal block RSA 70 A which is wholly cased). End partitions serve for closing the terminal blocks and ensure the protection of the parts under voltage if the terminal block is at the end of the terminal board or beside the other device. If there is another terminal block of any size beside it, this represents the second wall of the first terminal block and closes and insulates it. In the case that with respect to the nature of the application it is necessary to separate two neibouring terminal blocks and to prolong the air distances between the parts under voltage, a middle partition is used.

### Cover labels and covers

This accessory for terminal blocks RSA is used for the front (upper) covering of insulating bodies. The application of the cover label or cover is performed by the clamping of the legs in the lower part of the label into the cutting in the insulating body.

Cover labels are used for individual terminal blocks in the types RSA 4 A to RSA 70 A. Covers are used for groups of four or five terminal blocks and are offered for the type RSA 4 A in yellow with the symbol of a lightning flash. On the request of the client it is possible to deliver labels or covers with text or symbols.

### Measuring jack bushes

Measuring jack bushes are brass elements which have a neck in the bottom part with the thread and are screwed into the central hole in the bridge of the terminal block. In the upper part they have a hollow for insertion of the measuring pin with the diameter of 4 mm. Measuring jack bush for RSA 2,5 A is not offered. They are delivered for all types of terminal blocks with the exception of the type RSA 70 A, which has a 4 mm hole for the measuring pin in one of the bolt heads. It is possible to use measuring jack bush in the case of interconnected terminal blocks by screw interconnection, the covering in the case of a screwed measuring jack bush is IP 10 (if the insulating body is not covered by the cover label).

### Short circuit interconnection ZP 6

Short circuit interconnection ZP 6 is used for the application with terminal block RSA 6. It serves for mutual interconnection of two neighbouring terminals which must be equipped with a measuring jack bush for ZP 6. The short circuit interconnection is inserted into jack bushes and can be removed without the application tool. The ZP 6 can be permanently connected in the set of terminal blocks and its removing performs a short circuit. The measuring jack bush, from which the ZP 6 was removed, makes it possible to apply measuring devices (the hole in the jack bush for the pin is 4 mm).

### **End clamps RSA and EURO**

These serve for the fixation of the set of terminal blocks or other devices on a DIN rail. According to the type of DIN used, it is necessary to choose the type of end clamp depending also on the type of terminal blocks used and with respect to its size (for terminal blocks greater than, e.g., RSA 35 A and RSA 70 A it is recommended to use end clamp RSA L 35-2). End clamps are produced from polyamide PA6, inflammability V0 according to UL94.

End clamp EURO L35 is equipped with steel jaws for superior tightening on the DIN rail width 35 mm. Width of end clamp EURO L35 is only 6 mm and it is possible to place the marking label type EURO D on it. Terminal block has within the walls of body four special clips to clamping bus rails size 10x3 and 6x6 mm, which allows this end clamp to use as a holder of bus rails.

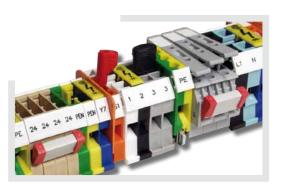
### DIN rails

DIN rails are delivered in type length and type holes as mentioned in the catalogue and with full design (not perforated) in types TS 15x5,5 and TS 35x7,5.

The advantage of deliveries in the type length up to 1000 mm is the fact that the rails are galvanic surfaced after the cutting of the length and the cutting of the holes. The above-standard surface treatment of 12 microns ZnCr is in all parts of the rail and side cuts.

It is also possible to deliver non-typical designs of rails according to the actual client specification:

- non-typical size (length)
- holes in the rail according to the requirements
- rounding sharp edges
- stainless steel design







Interconnections						
	RSA 4 A	RSA 6	RSA 10	RSA 16 A	RSA 35 A	RSA 70 A
2-multiple	C 131112	C 141112	C 151112	C 167111	C 177112	C 191110
Packing (pc)	50	50	50	50	20	10
3-multiple	C 131212	C 141212	C 151212	C 167211	C 177212	
Packing (pc)	50	50	50	50	20	
4-multiple	C 135312					
Packing (pc)	10					
5-multiple	C 135412					
Packing (pc)	10					
6-multiple	C 135512					
Packing (pc)	10					
7-multiple	C 135612					
Packing (pc)	10					
8-multiple	C 135712					
Packing (pc)	10					
9-multiple	C 135812					
Packing (pc)	10					
10-multiple	C 135912					
Packing (pc)	10					

### Note:

The maximum current load of individual interconnections corresponds to the maximum current load of the corresponding terminal blocks RSA. Type of the screw is the same like in the terminal blocks (except for the length). The same type of interconnection can be attached through each other if needed.

Plug-in bridge for RSA 2,5 A
MANAGEMENT .
Plug-in bridge for RSA 4 A
Plug-in bridge for RSP 4
- N.S.
Plug-in bridge for RSP A 4
Profile ending

Plug-in bridges for type RSA	, RSP			
Туре	RSA 2,5 A	RSA 4 A	RSP 4	RSP A 4
Application for terminal blocks	RSA A A		RSP 4, RSP 4-LED, RSP 4-LED/24-48V	RSP A 4
Nominal voltage [V]	750 ~ ; 830 =	750 ~ ; 830 =	250 ~ ; 250 =	500 ~ ; 500 =
Maximum load current [A]	24	41	32	32
IP code (with terminating by ending)	IP 20 (plug-in bridge is wholly cased)	IP 20	IP 20	IP 20
The manner of application of the plug-in bridge	From above-without screws into the connecting spring	o the From the side into the terminal block		ıl blocks
The range of conductor connectivity without a ferrule	The plug-in bridge is			
The range of conductor connectivity with a ferrule	inserted from above			
Material of the insulating part	Cover profile (PA)	Cover profile (PE), ending (PA)		
Material of the conductivity part	Cu	Си		
Design	2, 3, 4-mult.	10-mult.with the possibility of own modification for number of links or cutting off a tooth from the plug-		
Order No.	2-mult.: C 427100 3-mult.: C 427200	Plug-in bridge: C 431911	Plug-in bridge: C 438911	Plug-in bridge: C 439911
	4-mult.: C 427300	Ending: C 431015	Ending: C 431015	Ending: C 431015
Packing: plug-in bridge / ending (pc)	10 / insulating material plug-in bridge component	5 / 10	5 / 10	5 / 10



Measuring jack bushes							
	RSA 4 A	RSA 6	RSA 10	RSA 16 A	RSA 35 A	RSA 70 A	
Order No.	C 235010	C 246020	C 281020	C 267020	C 277020	One screw	
Packing (pc)	5	5	5	5	5	has an opening for	
Maximum load current [A]	6	6	6	6	6	a measuring pin in the	
IP code of terminal block with jack bush	IP 00	IP 10	IP 10	IP 10	IP 10	head	
Measuring pin [mm]	4	4	4	4	4	4	

Note: The maximum current load of the measuring jack bushes without the connected measuring pin corresponds to the maximum current load of the corresponding terminal blocks. The measuring jack bushes can also be used for interconnected blocks. The measuring jack bush for RSA 2,5 A is not offered.





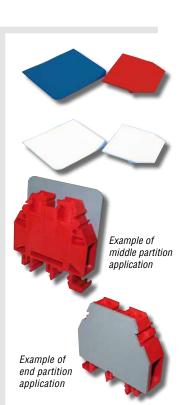
### **Cover labels** (for single terminal blocks)

	RSA 4 A	RSA 6	RSA 10	RSA 16 A	RSA 35 A	RSA 70 A
Order. No.	G 420025	G 420030	G 420040	G 410056	G 412566	G 420070
Packing (pc)	10	10	10	10	10	10

Note: Cover labels for RSA 2,5 A are not offered.



Type of the cover	For a group of four blocks	For a group of five blocks
Symbol: "Lighting flash"	G 520026	G 620026
Packing (pc)	10	10



<b>Partitions</b>							
		RSA 2,5 A	RSA 4 A	RSA 6	RSA 10	RSA 16 A	RSA 35 A
Mhita	End	B 621111	B 631111	B 141111	B 151111	B 661113	B 671111
White	Middle	B 621112	B 631112	B 141112	B 151112	B 661114	B 671112
Links bloo	End	B 621121	B 631121	B 141121	B 151121	B 661123	B 671121
Light blue	Middle	B 621122	B 631122	B 141122	B 151122	B 661124	B 671122
Davis blue	End	B 621131	B 631131	B 141131	B 151131	B 661133	B 671131
Dark blue	Middle	B 621132	B 631132	B 141132	B 151132	B 661134	B 671132
Daine	End	B 621141	B 631141	B 141141	B 151141	B 661143	B 671141
Beige	Middle	B 621142	B 631142	B 141142	B 151142	B 661144	B 671142
Oh a a a lata	End	B 621151	B 631151	B 141151	B 151151	B 661153	B 671151
Chocolate	Middle	B 621152	B 631152	B 141152	B 151152	B 661154	B 671152
Dad	End	B 621161	B 631161	B 141161	B 151161	B 661163	B 671161
Red	Middle	B 621162	B 631162	B 141162	B 151162	B 661164	B 671162
0	End	B 621171	B 631171	B 141171	B 151171	B 661173	B 671171
Orange	Middle	B 621172	B 631172	B 141172	B 151172	B 661174	B 671172
Dii-	End	B 621181	B 631181	B 141181	B 151181	B 661183	B 671181
Black	Middle	B 621182	B 631182	B 141182	B 151182	B 661184	B 671182
\(\text{C} = 1 = 4	End	B 621191	B 631191	B 141191	B 151191	B 661193	B 671191
Violet	Middle	B 621192	B 631192	B 141192	B 151192	B 661194	B 671192
0	End	B 621211	B 631211	B 141211	B 151211	B 661213	B 671211
Grey	Middle	B 621212	B 631212	B 141212	B 151212	B 661214	B 671212
Croon	End	B 921251	B 931251	-	-	B 961251	B 971251
Green	Middle	-	-	-	-	-	-
Vallan	End	B 921261	B 931261	-	-	B 961261	B 971261
Yellow	Middle	-	-	-	-	-	-
Packing (pc)		50	50	50	50	50	20

Terminal block RSA 70 A is encased on both sides.



### **Short circuit interconnection ZP 6**

For terminal blocks RSA 6 only

Order No.	C 346124
Packing - ZP 6 (pc)	5
Maximum load current [A]	41
Max. voltage ~ / = [V]	750 /830

Note: Application of the interconnections is impossible without two pcs of jack bush for ZP 6.

Jack bush for ZP 6	
Order No. of jack bush for ZP 6	C 246020
Packing - jakc bush (pc)	1
Measuring pin [mm]	4



### Side face cover for RSA 35 A

For terminal blocks RSA 35 A only

Order No.	G 420066
Packing (pc)	1

Note: By application of the side cover and the covering label, IP 20 coverage is quaranteed with terminal block RSA 35 A (in case of connecting a conductor of section 16  $\rm mm^2$  and larger, a side cover is not needed in order to ensure IP 20 covering, but only the covering label).



### **FASTENING AND OTHER INSTALLATION MATERIAL**



End clamps				
Type of clamp	RSA L 15	RSA L 35	RSA L 35-2	EURO L 35
Designed for DIN rails	TS 15	TS 35 x 7,5; TS 35 x 15; TS 35 Cu	TS 35 x 7,5; TS 35 x 15; TS 35 Cu	TS 35
Width / height / length [mm]	9 / 33,5 / 46	9 / 33,5 / 46	12 / 62 / 53	6 / 36 / 56
Weight [g]	5	5	22,2	11,4
Tightening torque [Nm]	0,5	0,5	0,8	0,8
Materials	PA 6 (V0); Steel (ZnCrCo)	PA 6 (V0); Steel (ZnCrCo)	PA 6 (V0); Steel (ZnCrCo)	PA 6 / Steel (Zn)
Screwdriver blade (cross / flat)	PH 0 / 0,5 x 3	PH 0 / 0,5 x 3	PH 2 / 1 x 5,5	PH 1 / 1 x 5,5
Recommended application for terminal blocks	RSA 2,5 A ÷ RSA 16 A	RSA 2,5 A ÷ RSA 16 A	RSA 35 A ÷ RSA 70 A	RSA 2,5 A ÷ RSA 35A
Contamination class	2	2	2	3
Order No.				
White	F 121110	F 111110	F 141110	-
Light blue	F 121120	F 111120	_	-
Dark blue	F 121130	F 111130	-	-
Beige	F 121140	F 111140	_	-
Chocolate	F 121150	F 111150	-	-
Red	F 121160	F 111160	_	_
Orange	F 121170	F 111170	-	-
Black	F 121180	F 111180	F 141180	F 142180
Violet	F 121190	F 111190	-	-
Grey	F 121210	F 111210	F 141210	_



### **Sealing screws**

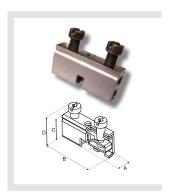
	M4x10	M5x10	M5x20	M6x10
Screw	M4	M5	M5	M6
Length of blade [mm]	10	10	20	10
Head screw (height / diameter) [mm]	5 / 7	6,5 / 8,5	6,5 / 8,5	8 / 10
Holes in the screw head	4	4	4	4
Blade screwdriver (flat)	0,8 x 4	1 x 5,5	1 x 5,5	1 x 5,5
Materials of screw	Steel of class 11 (ZnCr)			
Packing (pc) / weight [g]	100 / 2,1	100 / 3,6	100 / 4,1	100 / 5,5
Order No.	K 354892	K 354992	K 355192	K 355092



### Box conduit fitting HPS 16 - 1 pole version

Technical	data
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Connection cross section [mm²]	6÷16	Nominal voltage [V]	500
Conductor cross section [mm²]		Maximum load current [A]	76
Cu (D-solid) 2 x 6÷16 Cu (L-stranded) 2 x 6÷10	Screw (for screwdriver with flat blade)	M8	
	Order No.	J 441301	



### **Connecting terminals**

They serve for connecting two or more conductors, wires, cables, etc. These are separate metallic fastening bodies of terminal blocks RSA 4, RSA 6, RSA 10 a RSA 16

Technical data	Connecting terminal RSA 4	Connecting terminal RSA 6	Connecting terminal RSA 10	Connecting terminal RSA 16
Connection cross section [mm²]	0,5 ÷ 6 3 x (0,5 ÷ 1); 2 x 1,5	0,75 ÷ 10 3 x (0,75 ÷ 1,5)	2,5 ÷ 16 3 x (1 ÷ 2,5)	4 ÷ 16 3 x (1,5 ÷ 4)
Maximum load current [A]	41	57	76	76
Size [mm] A / B / C / D (max)	5,4 / 21 / 10,2 / 17,4	5,7 / 24 / 11,4 / 19	7,4 / 30 / 13,8 / 23	8,9 / 31 / 15,4 / 27,6
Screw type	M3 (PH 0 / 0,5 x 3)	M3,5 (PH 1 / 0,8 x 4)	M4 (PH 1 / 0,8 x 4)	M5 (PH 1 / 0,8 x 4)
Order No. base design design for adverse climatic conditions	K 152301 K 152302	K 152401 K 152402	K 251101 K 251302	K 251201 K 251602

The basic design consists of the brass body of the terminal (nickel surfaced) and steel screws (galvanic ZnCrCo). The design of terminals for adverse climatic conditions is all-brass and is only custom supplied. IP code 00.





### Panel outlet PVM 10

Passing opening for cable diameter [mm]	10
Wall opening diameter [mm]	16,5
Maximum wall thickness [mm]	6
Packing (pc)	1 free
Material	fenoplast
Order No.	I 151470



Label bracket	
Application: For marking of a sother instruments located on a	set of terminal boards, possibly a DIN rail.
Width / height / length [mm]	18 / 39 / 43
Designed for DIN rail	TS 15; TS 35 x 7,5; TS 35 x 15; TS 35 Cu
Colour design / material	Grey / PA6
Packing (pc) / weight (g / pc)	5 / 5,8
Order No.	G 310000



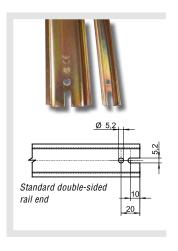
Clip type	Serial clip without screw RPB 25	Suspended cable clip ZJV 12	Simple suspended cable clip without screw ZJV 12-E
Application for clipping cables of diameter [mm]	10 ÷ 25	12 ÷ 16	10 ÷ 12
Bearing rope diameter [mm]	-	2 ÷ 5	2 ÷ 5
Packing (pc)	1 free	1 free	1 free
Material	PP-various colours	Steel (galvanic ZnCr)	Steel (galvanic ZnCr)
Order No.	I 121290	I 161680	I 161580

Note: RPB 25 is designed for screw-less clipping to NIEDAX rails.



Mounting brackets for DIN rails - flat, sloping					
Type of the bracket	TS/20 flat	TS/30 flat	TS/50 flat	TS/30 sloping	TS/50 sloping
Height [mm]	20	30	50	30	50
Width [mm]	18	20	20	18	18
Length [mm]	84	80	80	53	72
Mounting opening Pitch / diameter [mm]	65 / 7	64 / 7	64 / 7	42 / 5,3	60 / 7
Opening for fastening DIN rails	M5	M6	M6	Ø 5,3 mm (without screw)	M5
Packing (pc)	1	1	1	1	1
Strength of material [mm]	1,8	2,0	2,0	1,5	1,8
Weight [g]	30	40	55	18	35
Order No.	E 741110	E 741111	E 741112	E 841110	E 741113

Mounting brackets serve for fastening DIN rails of various designs. Using the sloping mounting brackets (TS / 30 sloping or TS / 50 sloping) it is possible to fasten DIN rails under an angle of 35°. Using flat mounting brackets (TS / 20 flat, TS / 30 flat or TS / 50 flat), it is possible to fasten a DIN rail to the mounting bracket horizontally. They are made of steel and surface treated with ZnCr. All mounting brackets (except for type TS / 30 sloping) have an opening for DIN rail fastening equipped with a metric thread with a ramp for easier assembly (screws for fastening are not offered).



DIN rails				
Length rail [mm]	TS 15 x 5,5	T\$ 35 x 7,5		
100	-	E 111120		
140	-	E 137120		
160	-	E 166120		
200	-	E 113120		
235	-	E 138120		
250	-	E 138120  E 114120  E 115120  E 116120  E 117120  F 119120		
300	-	E 115120		
350	-	E 116120 E 117120 E 117120 F 119120		
400	-	E 117120		
500	-	E 119120		
600	E 222120	E 122120		
800	E 224120	E 124120		
1000	E 226120	E 126120		
Material	Steel of	Steel of class 11 (galvanic ZnCr yellow, 12 micron)		
Packing (pc)		5		

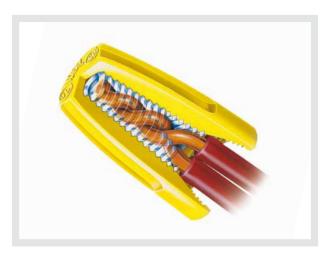
Note: We supply custom rails TS 35x7,5 in any length up to 1 m, rails with rounded edges or design in stainless steel also can be supplied.



### **WIRE-NUT WIRE CONNECTORS IDEAL**

Wire-nut wire connectors are used to connect two or more wires in the installation boxes, drawers, appliances, switch boards etc. This is a screw demountable connection, connectors can be reused. Wire-nut wire connectors are supplied in basic serie IDEAL in five type designs for connecting sections of the range from 0,34 to 6 mm². The range of possible connecting sections is extremely wide and completely indicated on our company websites in the Table of combinations. Limiting the possibility of connection types are listed in the specification table on this page below. The various types differ in colour design that determines the nominal cross section. Connectors can be used for copper wire - stranded and solid. In one connector can be combined stranded and solid wires and also different cross sections. Products are certified in accordance with standards IEC 60998-1 (ČSN EN 60998-2-4 (ČSN EN 60998-2-4).

- Demountable connection for reuse
- Wide variability of cross sections from 0,34 to 6 mm<sup>2</sup>
- Perfect twisting and protection against pulling out guaranteed
- · Combinations of wire cross sections in various types
- · Fast and easy installation without using of tools
- · Easy grip plastic housing of connector
- Wide throat of connector for easy wire installation



Wire-nut wire connector cross section

### Wire-nut wire connectors IDEAL











Technical data	IDEAL 71B-1,5	IDEAL 72B-2,5	IDEAL 73B-2,5	IDEAL 74B-4	IDEAL 76B-6
Nominal voltage [V]	300	300	600	600	600
Nominal current [A]	17,5	24	24	32	41
Stripping length [mm] solid stranded	6,4 7,9	9,5 9,5	7,9 7,9	9,5 9,5	13 (cross section ≤ 1,5) 11 (cross section ≥ 1,5)
Connectivity range [mm <sup>2</sup> ]	0,34 ÷ 1,5	0,34 ÷ 2,5	0,34 ÷ 2,5	0,75 ÷ 4	0,75 ÷ 6
Connectivity combination (number / cross section) min. $\mbox{\it max}.$	2 x 0,34 3 x 1,5	2 x 0,34 3 x1,5; 2 x 2,5	1 x 0,75 + 1 x 0,5 4 x 1,5; 2 x 2,5	2 x 0,75 4 x 2,5; 3 x 4	2 x 2,5 2 x 4; 1 x 6 + 1 x 4
Dielectric strength [kV]	4	4	6	6	6
Size (length / lower outside diameter) [mm]	15 / 8,3	18 / 10	22 / 11	24 / 14	27 / 15
Color design	Grey	Dark blue	Orange	Yellow	Red
Order No. (packing 100 pcs)	J 513900	J 514000	J 514100	J 514200	J 514300
Order No. (multipack, packing 1000 pcs)	J 513901	J 514001	J 514101	J 514201	J 514301

 $A \ complete \ table \ of \ combinations \ of \ connectivity \ cross \ sections \ you \ can \ find \ on \ www.elektrobecov.com$ 

Design	
Insulating part	PP, Inflammability V2 acc.to UL94
Fastening part	Steel of class 11, surface treated ZnCr
Temperature range	- 40 ÷ 105 °C

Packing	
J 513900	
J 514000	
J 514100	PE bag, 100 pcs
J 514200	
J 514300	

J 513901  J 514001  PE bag, multipack, impartible packing. 1pc  J 514201  (1packing) = 1000 pcs	Packing	
J 514101 impartible packing. 1pc  J 514201 (1packing) = 1000 pcs	J 513901	
J 514201 (1packing) = 1000 pcs	J 514001	PE bag, multipack,
	J 514101	impartible packing. 1pc
L 51/301	J 514201	(1packing) = 1000 pcs
0.014001	J 514301	



### **MARKING SYSTEM**

### Terminal blocks marking

Terminal blocks RSA (also RSA PE) can be marked using marking elements that are designed for the description and identification of the wiring of a specific terminal block. All terminal blocks RSA are equipped in the upper parts from both sides of the insulating body with a special fastening, which serves for placement of the marking element.

### Possibilities of terminal blocks RSA marking:

### Terminal blocks RSA 2,5 A - RSA 70 A (also types RSA PE)

- · Marking strips RSA / RVA
  - undivided with printing
  - undivided without printing
  - divided with printing
  - divided without printing
- Self-adhesive label 10 mm
- · Marking label delivered in multicards

### Terminal blocks EURO

- . Marking multicards EURO
  - multicards with printing
  - multicards without printing



Comparison of origin and innovative insulating body

Detail of the new design of fastening for marking elements

### Versatile fastening for marking elements in the insulating body of terminal blocks RSA allows for fixing:

- continuous marking strips RSA / RVA undivided supplied by ELEKTRO Bečov
- continuous marking strips RSA / RVA divided supplied by ELEKTRO Bečov
- marking labels in the multicard supplied by ELEKTRO Bečov (versatile label width is 5 mm)
- marking labels in the multicard from other manufacturers (possible to fasten marking labels with a width of 5 mm from other suppliers with compatible fasteners)





Multicard and marking strips RSA / RVA (with example of printing)

### Alternative marking labels compatible with terminal blocks RSA Type of label Label width [mm] For terminal blocks RSA KMR 5 (Murrplastik) 5 RSA 2,5 A ÷ RSA 70 A KMR 6 (Murrplastik) 6 RSA 4 A ÷ RSA 70 A 5 DEK 5 (Weidmüller) RSA 2,5 A ÷ RSA 70 A DEK 6 (Weidmüller) 6 RSA 4 A ÷ RSA 70 A SA 4330 (ACS) 5 RSA 2,5 A ÷ RSA 70 A SA 4390 (ACS) 6 RSA 4 A ÷ RSA 70 A MC SB 5, PMC SB 5 (Conta Clip) 5 RSA 2,5 A ÷ RSA 70 A MC SB 6, PMC SB 6 (Conta Clip) 6 RSA 4 A ÷ RSA 70 A DK/Z5 (Simet, Pokój) 5 RSA 2,5 A ÷ RSA 70 A DK/Z6 (Simet, Pokój) 6 RSA 4 A ÷ RSA 70 A WGO 5 (Wago) 5 RSA 2,5 A ÷ RSA 70 A SI HF51 LW (Grafoplast) 6 RSA 2,5 A ÷ RSA 70 A



Comparison of the sizes of the marking label from multicard (on the left) and marking strip



### Manners and possibilities of describing the marking elements of terminal blocks RSA

### **Plotter**

For customers who want to describe terminal blocks and other elements separately and do not have to watch related secondary costs – for those, a plotter is designed.

The plotter is a multifunctional describing device that allows for describing not only of marking labels for terminal blocks RSA or other elements, but also the marking strip for the terminal blocks RSA (the plotter is supplied with software modified exactly for the marking strip RSA / RVA). Using the plotter, it is also possible to describe various types of labels, plates, tightening strips, cable sleeves, and many other components regularly used in switchboards or generally in electrical equipment. Two base plates, special ink, and a describing pen are also supplied with the plotter as a unit.

Labelling plotter

### Universal thermal transfer printer

For customers who want flexible and variable to describe the various types of labels and other marking elements used in electrotechnics – for those, a universal thermal transfer printer has been designed.

Economically-friendly version of printer for printing of marking material for terminal blocks, for conductors and marking of equipment. Easy to use, fast and extremely durable printing, small sizes, low maintenance and long life of the printer. The printer is used for printing of marking terminal boards, terminal blocks, conductors, cable harnesses and various electrical appliances. User-friendly software allows easy creation of print in different font styles, creating continuous marking series, inserting electro-technical symbols, draw your own symbols, inserting graphics from a file, and especially easy import of ready databases (.xls., txt). The printer can also print self-adhesive labels for marking connectors or terminal blocks. In addition, labels for marking cables for fastening by an adjustable strip, labels for insertion into a plastic holder for fastening on the cable and labels for sleevs (slip or snap).



Universal thermal transfer printer

### Self-adhesive foil

For customers who want to describe terminal blocks separately, but are interested in savings in consumer material – for those, a self-adhesive foil has been designed.

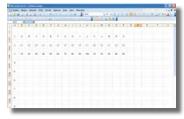
Printing of marking strips using a self-adhesive foil is very simple for users. In the offer, there is a modified self-adhesive foil with a format of A4, which can be printed on using a regular laser printer. The foil is also pre-cut into strips with a width of 10 mm, which can be simply removed after printing and glued on the marking strip for terminal blocks RSA.

For an accurate description of this foil, you can also use the templates that are available on the internet pages of Elektro, v. d. The templates are set for individual types of terminal blocks, i.e. the gaps between descriptions will correspond to the terminal block width. Testing papers are also supplied with the self-adhesive foil for easier printer setting.

The location of the self-adhesive strips is expected on the marking tape RSA / RVA or a similar label system.

### Example of application of self-adhesive strips for description of terminal blocks

The sheet contains 19 strips with a length of 190 and a width of 10 mm. Using one strip, it is possible to mark 27 terminal blocks RSA 4 A, with the entire sheet 513 of these terminal blocks.



Template for printing self-adhesive foil



Self-adhesive strip 10 mm, sheet A4

### On-line system for ordering marking strips with description

For customers who want to fully reduce costs while preserving the highest quality of services – for those the on-line ordering system of custom descriptions has been designed.

Via the ordering system, it is possible to order the marking tapes RSA / RVA directly with the description according to the customer's wishes. The on-line ordering system is available on the company website www.elektrobecov.cz. The interface for the actual ordering was specially programming modified for customer needs in accordance with the requirements for simplicity, reliability, and especially practicality.

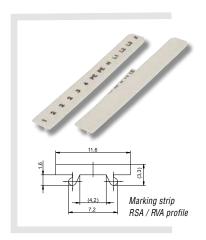
The user is not forced to do any installation. Logging into the system takes place via an access password, which is supplied upon customer request, free of charge, of course. The customer after logging in enters his profile. When ordering, he proceeds simply step by step as with a regular electronic purchase. An important advantage is the possibility of customer identification of individual assemblies (e.g.: if you create a description for the terminal board of a standard switchboard that you regularly produce, you can name it as needed and upon the next system visit, you call it up from the history, identify it according to the name, and order repeatedly, only editing the quantity).

Order processing is guaranteed within 24 hours on workdays, in exceptional cases, e.g. order of a larger quantity, the ready describing is dispatched within 48 hours.



Interface of the on-line system for ordering the description





Marking strips undivided - with and without printing		
Type of terminal block	Order No.	
Marking strip RSA undivided (without printing)	G 120000 (1pc =20 strips á 50cm)	
Marking strip RSA can be supplied also in atypical lengths according to the s	pecific customer request.	
RSA 2,5 A; RSA 2,5 A P3 (with printing)	G 110096	
RSA PE 2,5 A (with printing)	G 110097	
RSA 4 A (with printing)	G 110026	
RSA 6; RSA PE 4 A (with printing)	G 110030	
RSA PE 6 (with printing)	G 110032	
RSA 10; RSP 4; RSP 4-LED; RSP 4-LED/24-48V; RSPA 4 (with printing)	G 110040	
RSA PE 10 (with printing)	G 110042	
RSA 16 A; RSA PE 16 A (with printing)	G 110056	
RSA 35 A; RSA PE 35 A; RSA PE 35 A IS (with printing)	G 110066	
RSA 70 A; RSA PEN 70 A; RSA PEN 70 A IS (with printing)	G 110070	



Marking strips divided - without printing	
Type of terminal block	Order No.
RSA 2,5 A; RSA 2,5 A P3	G 140096
RSA PE 2,5 A	G 140097
RSA 4 A	G 140026
RSA 6, RSA PE 4 A	G 140030
RSA 4 AV 24, RSA 4 AV 250	G 140027
RSA PE 6; RSP 4; RSP 4-LED; RSP 4-LED/24-48V (on the fuse holder)	G 140032
RSA 10; RSP 4; RSP 4-LED (on the side); RSP A 4 (on the fuse holder)	G 140040
RSA PE 10	G 140042
RSA 16 A, RSA PE 16 A	G 140056
RSA 35 A, RSA PE 35 A	G 140066
RSA 70 A, RSA PEN 70 A	G 140070



Marking strips divided - with printing	
Type of terminal block	Order No.
RSA 2,5 A; RSA 2,5 A P3	G 130096
RSA PE 2,5 A	G 130097
RSA 4 A	G 130026
RSA 4 A (row of numbers 0 to 9)	G 132226
RSA 4 A (row of numbers 10 to 100)	G 132326
RSA 6; RSA PE 4 A	G 130030
RSA 4 AV 24; RSA 4 AV 250	G 130027
RSA PE 6; RSP 4; RSP 4-LED; RSP 4-LED/24-48V (on the fuse holder)	G 130032
RSA 10; RSP 4; RSP 4-LED (on the side); RSP A 4 (on the fuse holder)	G 130040
RSA PE 10	G 130042
RSA 16 A, RSA PE 16 A	G 130056
RSA 35 A, RSA PE 35 A	G 130066
RSA 70 A, RSA PEN 70 A	G 130070

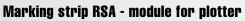


Marking multicards for terminal blocks type EURO		
Type of terminal block	Order No.	
EURO Z, W (with printing) / EURO Z, W (without printing)	G 230000 / G 240000	
EURO D, N (with printing) / EURO D, N (without printing)	G 230009 / G 240009	
EURO T (with printing) / EURO T (without printing)	G 250000 / G 260000	
EURO Q (with printing) / EURO Q (without printing)	G 210000 / G 220000	

Multicard EURO Z, D, N, W, Q contains 50 pcs of labels. Multicard EURO T contains 20 pcs of labels. Minim. supply is one multicard = 1pc (for example in your order of 50 pcs you receive 50 pcs of multicards = in total 2500 pcs of labels).







Туре	Order No.	Length and Packing
Marking strips undivided for plotter EB	G 160000	20x110mm (20 pcs of strips in length 110mm)

These marking modules are supplied as standard-undivided. Supply in package - 20 pcs of strips in length 110 mm.

If needed divided marking strips on plotter, you can use order number from the type MARKING STRIPS DIVIDED - without printing.

### Universal thermal transfer printer

Туре	Order No.
Printer THERMOMARK	J 385408

More information about consumer materials for the Thermomark Printer we offer on request.



### Self-adhesive label with printing

	Order No.	Sheet	Recommended application
Small set of numbers	J 461100	One sheet has 100 numbers. One row has 10 numbers (1-10, 11-20, 21-30) range from 1-200. One mark (one position) has 5x11,5 mm.	RSA 2,5 A ÷ RSA 6
Big set of numbers	J 461200	One sheet has 100 numbers. One row has 10 numbers (1-10, 11-20, 21-30) range from 1-200. One mark (one position) has 8x11,5 mm.	RSA 10 ÷ RSA 70 A

### **Self-adhesive foil**

	Order No.	Describing and packing	Recommended application
Sheet with self- adhesive strips 10 mm	J 462100	Sheet A4, 1 pc free	RSA 2,5 A ÷ RSA 70 A

Note: Self-adhesive foil A4 is divided in 19 strips (width 10 mm). It is possible to print on the laser printer.



### **Examples of customer marking**

Labeled characters can be letters (lower case, capitals), single- and multi-digit numbers, characters used in electrical equipment (voltage marking, grounding...), combinations of letters and numbers, mathematical symbols, etc. The printed characters can be placed in a horizontal or vertical row (which is suitable expecially in case of a multi-digit combination with narrower types of terminal blocks). The marking strip can be labeled even in two rows, one above the other.

### Example of customer order for marking elements with printing

If the customer cannot choose from the special web interface, it is necessary to specify the set preferably in graphical form.

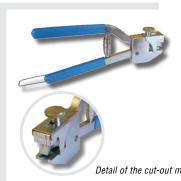
Marking labels	Printing for type RSA 6, undivided, horizontally, 30 pcs acc.set, Order No. G 110030: L1 / L2 / L3 / N / PE / PEN / 0101 / 011 /012 / 013 / 013 / 014 / A1 / A2	
Self-adhesive label with printing	It is necessary to specify size of sheet and numbered series, for example: Small set of numbers 1 - 10 (20 pcs), 101 - 110 (40 pcs) etc.	



Example of printing



# **TOOLS**

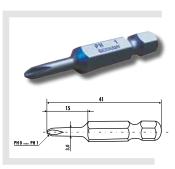


Cut-out tongs				
The size of the cut-out tongs' jaws (mm)	7	8		
Order No.	J 430000	28623006112		
Recommended for terminal block	RSA 4 A RSA 6 RSA 16 A	RSA 10		

The cut-out tongs serve for removing (cutting out) the side wall of terminal blocks and therefore allow for the installation of interconnections. The tongs are supplied in sizes 7 and 8 mm (according to the jaw width for cutting out).

Note: For cutting side wall for installation of RSA 35 A connectors can be used normal pliers size 9 mm.

Detail of the cut-out mechanism



Bit Witte with prolonged blade	PHO	PH1
Recommended use	RSA 2,5 A; RSA PE 2,5 A	RSA 4 A; RSA PE 4 A
Weight (g)	7,4	7,4
Packing (pc)	1	1
Order No.	J 423519	J 423520

The atypical bit is specially designed for tightening screws used in terminal blocks of types RSA 2,5 A, RSA PE 2,5 A (PH 0) and RSA 4 A, RSA PE 4 A (PH1). Thanks to the narrow 3x15 mm stem, it enables trouble-free tightening of terminal blocks.



#### **Screwdrivers PROFI-EB** Screwdriver blade size PH 0 PH 2 PH 1 Order No. J 423310 J 423320 J 423330 RSA 16 A; RSA 35 A Recommended for terminal block RSA 2,5 A; RSA 4 A RSA 6; RSA 10



Screwdriver blade type Philips (PH)

### Screwdrivers PROFI-EB

The screwdrivers are individually tested at 10 000 V in water bath, are designed for works under power up to 1 000 V, meet all conditions of standarts EN 609000/IEC 60900 and are certified by VDE, GS. The screwdriver is fitted with a Philips (PH) blade.



Screwdrivers MAXXPR	0		
Screwdriver blade size	0,5 x 3,0 mm	0,8 x 4,0 mm	1,0 x 5,5 mm
Order No.	J 423610	J 423620	J 423630
Recommended for terminal block	RSA 2,5 A; RSA 4 A	RSA 6; RSA 10	RSA 16 A; RSA 35 A



Flat screwdriver blade

The screwdrivers are individually tested at 10 000 V in water bath, are designed for works under power up to 1 000 V, meet all conditions of standarts EN 609000/IEC 60900 and are certified by VDE, GS. The screwdriver blade is flat.



# **GROUNDING ELEMENTS**

### **Grounding clamp ZSA 16**

Using this clamp, it is possible to connect the protective conductor to metallic objects and structures of circular shape (e.g. pipes). The product consists of the actual clamp (internal and external part), two liners, and one screw (these parts are made of steel and galvanic surfaced with ZnCr). Parts of the product is also two nuts M6 for fastening a conductor between the clamp liners.

Perfect contact with the bonded structure, free of paints and corrosion, is guaranteed by wrapping copper or stainless tape and tightening it in the clamp. The clamp is not recommended to be cast with concrete or another material.

The copper or stainless tape is not a part of the grounding clamp ZSA 16 and it is supplied in a length of 0,5 m in coils of 10 m or 50 m. According to request of customer it is possible to deliver the tape in non-typical length. The product is tested according to ČSN EN 60998-2-1 and ČSN 33 0360.

#### Assembly procedure of the grounding clamp ZSA 16



1. Pull the copper tape through the insert and bend



2. With the other end of the tape, wrap the pipe and pull through the insert according to the picture



3. The copper tape must be pretensioned, the clam shell pulled on the screw. By tightening the nut, the copper tape will be tightened around the pipe



4. Between the liner and the shape pad, it is possible to subsequently fasten a conductor

### **Grounding clamp ZS 4**

This clamp was developed based on the need for connecting metallic water faucets and similar objects in premises where it is necessary to perform complementary local bonding and water distributions are made of plastic. The clamp consists of a steel body with a screw and a liner (these parts are galvanic surfaced with ZnCr) and brass ½" nut (this nut is a part of the product – in case of need, it is possible to supply a separate clamp without a nut). The brass nut is screwed onto the metallic part of the bonded faucet Js ½", on it the clamp body is pulled with the connected conductor and the faucet is installed into the water mains system.

A reliable connection with the bonded object is achieved by tightening the brass nut. The product is tested according to the ČSN EN 60998-2-1 and ČSN 33 0360

### Equipotential terminal boards EPS 1, EPS 2 and EPS 3

They are designed for application in house and industrial distributions as terminal boards of main bonding. EPS 1 and EPS 2 are offered either with a cover (with the possibility of sealing) or without a cover. EPS 3 is offered only without a cover and in design EPS 3 + KO 100E (EPS 3 and electro-installation box KO 100E with cover and connecting material for assembly is included in this package). The terminal board can be fastened using screws M5 (not a part of the product) on

BODY OF GROUNDING CLAMP
WITH CLIP

NUT

NUT

PIPE FITTING WITH
EMBED METAL INLAY

NUT

PLASTIC PIPE 1/2\*

CONNECTED
CONDUCTOR

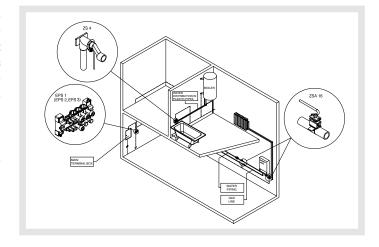
Cu SOLID 2,5-4 mm²

the wall, switchboard, etc. The fastening screws are not insulated from the terminal board bridge. The terminal boards without cover can also be placed into installation boxes (for EPS 1 and EPS 2, the recommended types are KO 125E and KT 250L, for type EPS 3, the recommended type is KO 100E). The connecting and branching part of the terminal board consists of a connecting brass bridge (galvanic nickel surfaced) and fastening brackets of steel (galvanic surfaced with ZnCoCr). Types EPS 1 and EPS 2 are dimensionally equal, but differ in the number of brackets of various sizes (EPS 1 has more brackets for fastening conductors of larger sections, EPS 2 has, on the contrary, more smaller brackets for conductors of smaller sections).

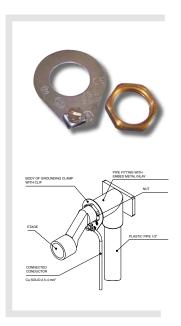
Both types have a special bracket for fastening a tape conductor. Type EPS 3 is dimensionally smaller and the fastening sections are limited compared to the previous two types. **The connecting bridge is designed with EPS 3 so that the bracket falling out from the actual bridge upon loosening of the screw is prevented** (this design is protected as an industrial design). The number or type of brackets cannot be changed. The insulating material of the socles and covers of terminal boards is polyamide PA 6, inflammability V0 according to UL 94. Plastic colour: EPS 1 grey, EPS 2 beige, EPS 3 dark grey.

### Product testing:

The equipotential terminal boards comply with the requirements of standards ČSN EN 60998-1:05 ed.2, ČSN EN 60998-2-1:05 ed.2, ČSN EN 60947-1:08 ed.4, ČSN EN 60974-7-1:03 ed. 2. All types it is possible to apply in environment AB7 (-25 +55°C) an AF1-2. By EPS 2 is AH2 and u EPS 3 is AH2 + AG2.





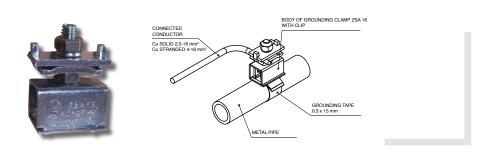


Grounding clamp ZS 4	Groundin	Grounding screws			
Application to pipes with the screw	Js 1/2"	ZS 10 S	ZS 10 P	ZÚP 16	
Conductor cross section [mm²] - screw Cu (D-solid) Cu (L-stranded)	- 2,5 ÷ 4 2,5 ÷ 4	2,5 ÷ 16 -	2,5 ÷ 16 2,5 ÷ 16 4 ÷ 16	- 2,5 ÷ 16 4 ÷ 16	
Weight [g]	16	25	21	18	
Packing (pc)	10	10	10	10	
Order No. (clamp nut)	I 132707	I 294407	I 304507	I 314607	
Order No. of atypical supply (only clamp)	I 132706	-	-	-	





Grounding clamp ZSA 16	
Application to metallic objects (e.g. pipes)	Js 1/2" ÷ 2"
Conductor cross section [mm²] Cu (D-solid) Cu (L-stranded)	2,5 ÷ 16 4 ÷ 16
Tightening torque [Nm]	3
Weight [g]	46
Packing (pc)	300
Order No.	I 131307





Stainless roll

<b>Grounding tape</b>					
Application: for fastening of grounding clamp ZSA 16	Material Cu (0,3 x 15 mm) Order No.	Material stainless (0,3 x 15 mm) Order No.	Weigh Cu	t [g] Stainless	Packing (pc)
Strip 0,5 m	I 142708	I 141368	20	17	100
Roll 10 m	I 142709	I 141379	411	357	1
Roll 50 m	I 142719	I 141369	2073	2020	1

Recommended tape length	1:	
Length [mm]	Nominal bore of pipe	Outside diameter of pipe [mm]
120	1/2"	min. 21
140	3/4"	27
160	1"	34
190	1 1/4"	42
210	1 1/2"	48
250	2"	max. 61

# Equipotential terminal boards - type EPS 1

Technical data	
Weight [g]	286 (318 with cover)
Width / height / length [mm]	60 / 50 (60,5 with cover) / 125
Colour design of plastic parts	Grey
Fastening (on the wall etc.)	Recommended screw with cylindrical head M5 (min.L = 40 mm). The pitch of the assembly openings of the teminal board bridge: 103 mm
The option for placing (without cover only)	Electro-installation box KO 125 E, KT 250 L
Packing (pc)	1
Order No. EPS 1 with cover	I 223407
Order No. EPS 1 without cover	I 223400



Example for application in installation boxes KO 125 E and KT 250 L (the producer of boxes www.kopos.cz)

## The options for conductors connecting Bracket type (their quantity in the teminal board)

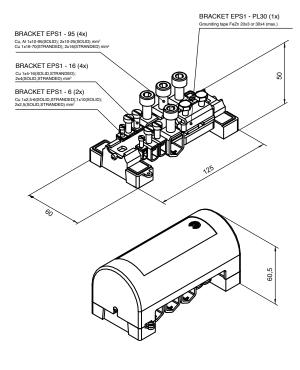
	EPS 6 mm <sup>2</sup> (2x)	EPS 16 mm <sup>2</sup> (4x)	EPS 95 mm <sup>2</sup> (4x)	EPS - PL30 (1x)
Quantity of conductors x type of conductors [mm²]				
1 x Cu (D-solid)	2,5 ÷ 10	4 ÷ 16	10 ÷ 95	
2 x Cu (D-solid)	2,5	4 ÷ 6	10 ÷ 25	Grounding tape:
1 x Cu (L-stranded)	2,5 ÷ 6	4 ÷ 16	10 ÷ 70	FeZn 20 x 3 mm (1x) or 30 x 4 mm (1x)
2 x Cu (L-stranded)	2,5	4 ÷ 6	16	
1 x AI	-	-	10 ÷ 95	
Tightening torque [Nm]	0,8	2	6	6
Recommended screwdriver type	Flat (0,8 x 4 mm)	Flat (1 x 5,5 mm)	O Allen key No.6	Allen key No.5

Note: With the use of grounding steel tape 20 x 3 mm it is necessaery to place the tape in the bracket along one side and tighten only by one screw. In case of need it is possible to use the EPS 95 bracket for connecting the round conductor FeZn with a diameter 8 - 12 mm.



Brackets EPS 6 and EPS 16 are locked on the bridge against falling out







# **Equipotential terminal boards - type EPS 2**

Technical data	
Weight [g]	245 (279 with cover)
Width / height / length [mm]	60 / 50 (60,5 with cover) / 125
Colour design of plastic parts	Beige
Fastening (on the wall etc.)	Recommended screw with cylindrical head M5 (min.L = $40$ mm). The pitch of the assembly openings of the teminal board bridge: $103$ mm
The option for placing (without cover only)	Electro-installation box KO 125 E, KT 250 L
Packing (pc)	1
Order No. EPS 2 with cover	I 223507
Order No. EPS 2 without cover	I 223500



Example for application in installation boxes KO 125 E and KT 250 L (the producer of boxes www.kopos.cz)

### The options for conductors connecting

## Bracket type (their quantity in the teminal board)

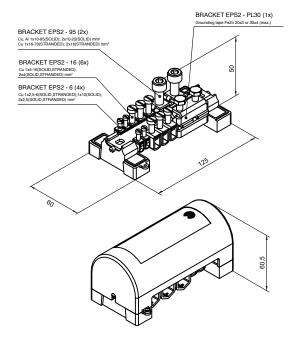
	EPS 6 mm <sup>2</sup> (4x)	EPS 16 mm <sup>2</sup> (6x)	EPS 95 mm <sup>2</sup> (2x)	EPS - PL30 (1x)
Quantity of conductors x type of conductors [mm²]				
1 x Cu (D-solid)	2,5 ÷ 10	4 ÷ 16	10 ÷ 95	
2 x Cu (D-solid)	2,5	4 ÷ 6	10 ÷ 25	Grounding tape: FeZn 20 x 3 mm (1x) or 30 x 4 mm (1x)
1 x Cu (L-stranded)	2,5 ÷ 6	4 ÷ 16	10 ÷ 70	
2 x Cu (L-stranded)	2,5	4 ÷ 6	16	
1 x Al	-	-	10 ÷ 95	
Tightening torque [Nm]	0,8	2	6	6
Recommended screwdriver type	Flat (0,8 x 4 mm)	Flat (1 x 5,5 mm)	Allen key No.6	Allen key No.5

Note: With the use of grounding steel tape 20 x 3 mm it is necessaery to place the tape in the bracket along one side and tighten only by one screw. In case of need it is possible to use the EPS 95 bracket for connecting the round conductor FeZn with a diameter of 8 - 12 mm.



Brackets EPS 6 and EPS 16 are locked on the bridge against falling out







# **Equipotential terminal boards - type EPS 3**

Technical data	
Weight [g]	128
Width / height / length [mm]	60 / 35,5 / 103,6
Colour design of plastic parts	Grey
Fastening (on the wall etc.)	Recommended screw with cylindrical head M5 (min.L = 40 mm). The pitch of the assembly openings of the teminal board bridge: 81,6 mm
The option for placing (without cover only)	Electro-installation box KO 100 E
Packing (pc)	1
Order No. EPS 3 (without cover)	I 226700
Order No. EPS 3 in KO 100 E	I 226703 (acc.note)

Note: Equipotential terminal board is free in a box. Supplied connecting materials (2x screw M5x35 and nut M5) to fix EPS 3 in the box. Includes manual instruction and mounting screw on the lid of the box.

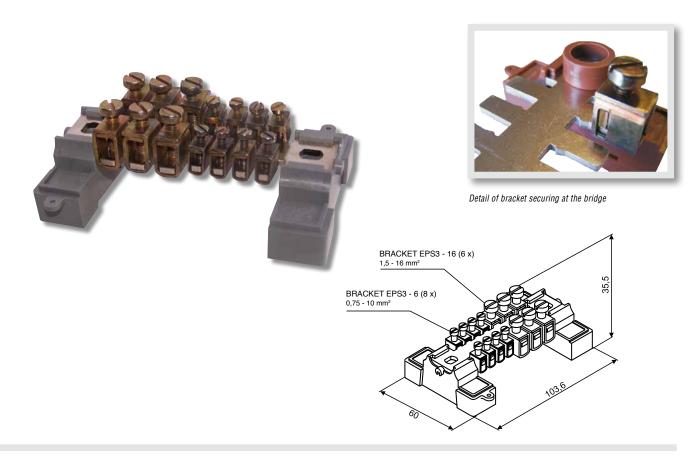


Example for application in installation boxes KO 100 E (the producer of boxes www.kopos.cz)



Equipotential terminal board type EPS 3 in KO 100 E

The options for conductors connecting	Bracket type (their quantity in the teminal board)		
	EPS 6 mm² (8x)	EPS 16 mm <sup>2</sup> (6x)	
Quantity of conductors x type of conductors			
1 x Cu (D-solid)	0,75 ÷ 10	1,5 ÷ 16	
2 x Cu (D-solid)	0,75 ÷ 2,5	1,5 ÷ 6	
3 x Cu (D-solid)	0,75 ÷ 1,5	1,5 ÷ 4	
1 x Cu (L-stranded)	0,75 ÷ 6	1,5 ÷ 16	
2 x Cu (L-stranded)	0,75 ÷ 2,5	1,5 ÷ 6	
3 x Cu (L-stranded)	0,75 ÷ 1,5	1,5 ÷ 4	
Tightening torque [Nm]	0,8	2	
Recommended screwdriver type	Flat (1 x 5,5 mm)	Flat (1 x 5,5 mm)	





# **BRANCHING TERMINAL BOARDS**

Branching terminal boards are designed for multiple branching, splitting or connecting of conductors of various sections (from 2,5 mm² to 95 mm² by the boards of the series 2, from 1,5 mm2 to 16 mm2 by the boards of the series 3). The connecting and branching part of the terminal board is formed by a connecting brass bridge (galvanic surfaced Ni) and fastening brackets of steel (galvanic surfaced ZnCoCr). The structural design is similar as with equipotential terminal boards EPS 2 and EPS 3, however, the fundamental difference from equipotential terminal boards consists in the insulation of the branching bridge from the fastening screws. They also differ in height, because the branching terminal board is higher by the insulated bridge support. The number or type of brackets cannot be changed. The insulating material is polyamide PA, inflammability V0 according to UL 94. Location is expected under the cover of the switchboard (current terminal boards PS 2 and PS 3 have no coverage). The terminal boards can be fastened using screws on the wall or with use of an adapter APS 2 on the DIN rail TS 35x15 or TS 35x7.5 (adapter APS 2 is not part of the terminal board - for fastening one terminal board to the TS rail 35 it is necessary to use two pieces of adapters). For terminal boards series 2, covers are offered as accessories.

The terminal boards are tested according to ČSN EN 60998-2-1, ČSN EN 60-947-7-1 and a vibration test (f = 10 - 50 Hz, Sa = 0.35 mm, 20 cycles).

### The individual terminal boards are designated by the colour of the foot and extension insulator for exclusive use:

Type PS 2, PS 3 (Brown)	for phase conductors
Type SN 2, SN 3 (Light blue)	for conductor "N"
Type SPE 2, SPE 3 (Green-yellow)	for protective conductors



#### **Branching terminal boards series 2** Technical data Nominal voltage [V] 750 ~ ; 830 = 232 Maximum load current [A] Weight [g] 259,5 (293,5 with cover) Width / height / length [mm] 60 / 60,3 (70,8 with cover) / 125 Colour design of plastic parts Chocolate brown Fastening (on the wall etc.) Recommended screw with cylindrical head M5 (min.L = 50 mm). The pitch of the assembly openings of the terminal board bridge: 103 mm Fastening on the DIN rail TS 35, TS 35 Cu (the terminal board is With the adapter APS 2 insulated from the DIN rail)



The options for conductorss connecting	Bracket type (their	Bracket type (their quantity in the teminal		
Quantity of conductors x type of conductors [mm²]	<b>PS-6 mm²</b> 4x	<b>PS-16 mm²</b> 6x	<b>PS-95 mm²</b> 4x	
1 x Cu (D-solid)	2,5 ÷ 10	4 ÷ 16	10 ÷ 95	
2 x Cu (D-solid)	2,5	4 ÷ 6	10 ÷ 25	
1 x Cu (L-stranded)	2,5 ÷ 6	4 ÷ 16	10 ÷ 70	
2 x Cu (L-stranded)	2,5	4 ÷ 6	16	
1 x Al	-	-	10 ÷ 95	
Tightening torque [Nm]	0,8	2	6	
Recommended screwdriver type	Flat (0,8 x 4 mm)	Flat (1 x 5,5 mm)	Allen key No.6	

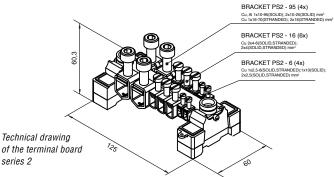


Order No.

Type of terminal board	Colour design	Terminal board	Cover
PS 2	Brown	I 233600	I 263455
SN 2	Light blue	I 243700	I 263425
SPE 2	Green-yellow	l 243800	I 263445

series 2

Note: The cover is not supplied with the terminal board. it is necessary to order it separately.



Bridge of the terminal board series 2



Branching terminal boards series 3	
Technical data	
Nominal voltage [V]	750 ~ ; 830 =
Maximum load current (PS 3) [A]	76
Weight [g]	128
Width / height / length [mm]	60 / 35,5 / 103,6
Fastening (on the wall etc.)	Recommended screw with cylindrical head M5 (min.L = 50 mm). The pitch of the assembly openings of the terminal board bridge: 81,6 mm
Fastening on the DIN rail TS 35, TS 35 Cu (the terminal board is insulated from the DIN rail)	With the adapter APS 2



The options for conductorss connecting	Bracket type (their quantity in the teminal board)		
Quantity of conductors x type of conductors [mm²]	<b>PS-6 mm²</b> 8x	<b>PS-16 mm</b> <sup>2</sup> 6x	
1 x Cu (D-solid)	0,75 ÷ 10	1,5 ÷ 16	
2 x Cu (D-solid)	0,75 ÷ 2,5	1,5 ÷ 6	
3 x Cu (D-solid)	0,75 ÷ 1,5	1,5 ÷ 4	
1 x Cu (L-stranded)	0,75 ÷ 6	1,5 ÷ 16	
2 x Cu (L-stranded)	0,75 ÷ 2,5	1,5 ÷ 6	
3 x Cu (L-stranded)	0,75 ÷ 1,5	1,5 ÷ 4	
Tightening torque [Nm]	0,8	2	
Recommended screwdriver type	Flat (1 x 5,5 mm)	Flat (1 x 5,5 mm)	

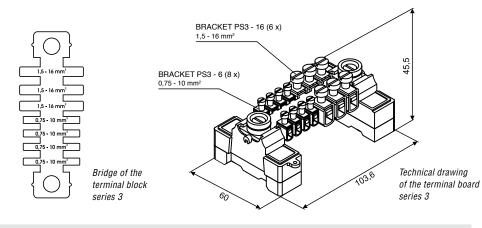


### Order No.

Type of terminal board	Colour design	Te	erminal board
PS 3	Brown	12	236900
SN 3	Light blue	12	237000
SPE 3	Green-yellow	12	236800



Detail of bracket securing at the bridge





# Accessories of the Branching terminal boards - adapter APS 2

 Order No.
 Application

 1 243907
 PS 2, SN 2, SPE 2, PS 3, SN 3, SPE 3





Using adapter APS 2, it is possible to fasten the branching terminal boards on the DIN rail TS 35x15 or TS 35x7,5. For fastening on the terminal board, two adapter pieces are needed.



# **BRANCHING INSULATED BLOCKS HPS**

Branching insulated blocks type HPS are designed for use in industrial and domestic applications for conductive connection of one or more copper conductors with cross section from 2,5 mm² to 150 mm². An important advantage of these blocks is the possibility of connecting a continuous conductor without the necessity of its interruption.



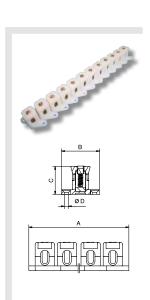
Blocks of types HPS-6, HPS-10, HPS-16, and HPS-25/35 are supplied in a twelve-pole design. Separation of individual poles is performed by simply breaking them off from the unit. The blocks are equipped with a flat slot head screw.



Blocks of types HPS-50/A, HPS-70/A, HPS-95/A, HPS-120/A, and HPS-150/A are supplied individually. Their connection into a multi-pole design can be performed by connecting the block locks, namely also of different types in the range HPS 50/A to HPS 150/A. The screws are equipped with a hexagonal opening head screw (to use an Allen key).



Insulated blocks HPS are made of polyamide PA 6, inflammability V2 according to UL94, halogen-free (hot loop 960 °C), insulating strength 3000 V. Electrically conductive internal parts of the blocks and the connecting parts are made of brass, galvanic nickel-surfaced. The colour of the insulating body is white. The products are made in the EU and hold the mark C €, they are tested according to EN 60947-1, EN 60947-7-1 and certified by EU test labs (VDE - Germany, KEMA - Holland, AENOR - Spain).



Branching insulated blocks type HPS - 12 poles version				
Technical data	HPS-6	HPS-10	HPS-16	HPS-25/35
Conductor cros section [mm²] Cu (D-solid) Cu (L-stranded)	2 x 2,5÷6 2 x 2,5÷4	2 x 4÷10 2 x 4÷6	2 x 6÷16 2 x 6÷10	2 x 16÷35 2 x 16÷25
In one type of block it is possible to combine vasctions for the block type in question.	arious conductor cross se	ctions if these section	ns have the values of	possibly connecte
Nominal voltage [V]	500	500	500	500
Max. current loading [A]	41	57	76	125
Short-circuit current strength [A]	720	1200	1920	4200
Screw (for screwdriver with flat blade)	M5	M7	M8	M15
Tightening torque [Nm]	0,8	1,2	2,5	2,5
Size A (12 poles) [mm] B [mm] / C [mm] / Diameter D [mm]	188 29 / 17 / 3,2	224 31 / 23 / 3,2	260 32 / 26 / 3,2	308 36 / 34 / 3,2
Weight [g]	75	145	200	445
Order No.	J 441100	J 441200	J 441300	J 441400



Technical data	HPS-50/A	HPS-70/A	HPS-95/A	HPS-120/A	HPS-150/A
Conductor cros section [mm²] Cu (D-solid) Cu (L-stranded)	2 x 25÷50 2 x 25÷35	2 x 35÷70 2 x 35÷50	2 x 50÷95 2 x 50÷70	2 x 70÷120 2 x 70÷95	2 x 95÷150 2 x 95÷150
In one type of block it is possible to combine sections for the block type in question.	various conductor	cross sections if t	hese sections have	e the values of pos	sibly connected
Nominal voltage [V]	1000	1000	1000	1000	1000
Max. current loading [A]	125	160	232	269	309
Short-circuit current strength [A]	6000	8400	11400	14400	18000
Screw (for Allen key)	O 5	O 6	◎ 8	◎ 8	O 14
Tightening torque [Nm]	5	5,5	10	11	50
Size A (1 pole) [mm] B [mm] / C [mm] / Diameter D [mm]	32 63 / 48 / 5,2	34 63 / 53 / 5,2	39 63 / 56 / 5,2	41 70 / 61 / 5,2	52 115 / 82 / 5,2
Weight [g]	75	95	135	175	440
Order No.	J 441500	J 441600	J 441700	J 441800	J 441900

Note: The branching insulated blocks type HPS-95/A and HPS 120/A are part of Main branch terminal block type HVS, more information on next Page - 44.



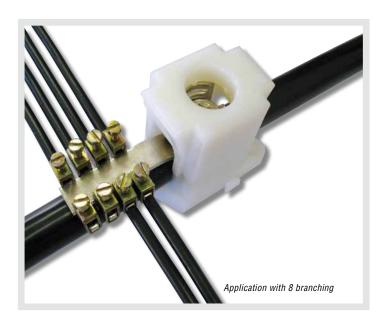
Branching insulated blocks type HPS - 1 pole version

# MAIN BRANCH TERMINAL BLOCK TYPE HVS

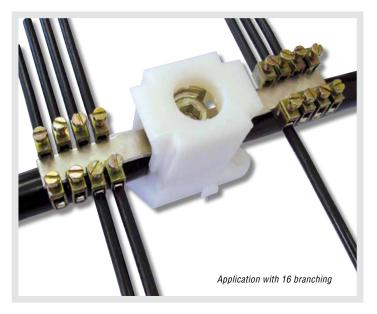
Main branch terminal block HVS 95, and HVS 120, consist of the terminal, which has a removable top. Continuous conductor is possible to insert from above without interruption. Connection bridge HVS is also accompanied by the above and, if necessary, one more bridge is to insert to the opposite side of the terminal. The tightening of the bridge at the terminal block comes by the closing of the upper part and tightening the screw using the hexagonal key (Allen). Branch conductors are attached to the bridge brackets if needed. Brackets at the bridge are secured against falling out by released state.

### Characteristic of main branch terminal block type HVS:

- Two types of models (HVS 95, HVS 120)
- For copper and aluminium continuous conductors
- Connectivity of continuous conductors 50 ÷ 120 mm<sup>2</sup>
- Up to 16 possibilities for cross section of Cu conductors 0,75  $\div$  10  $\text{mm}^2$



Technical data	HVS 95
Connecting cross section of main, Al, Cu [mm²]	50 ÷ 95
Quantity of branching points / cross section Cu	2x 8 / 0,75 ÷ 10
Nominal voltage [V]	1000 V
Max. current loading [A]	160
Screw (main) / tightening torque [Nm]	Allen key No. 8 / 10
Screw (branch conductor) / tightening torque [Nm]	M3,5 / 0,8



Order No.	Type / packing contents
I 274707	Main branch terminal block type HVS 95 (1 pc of terminal block and 1 pc of bridge in PE package)
I 274807	Main branch terminal block type HVS 120 (1 pc of terminal block and 1 pc of bridge in PE package)
I 284907	Connection bridge of HVS (1 pc)

Technical data	HVS 120
Connecting cross section of main, Al, Cu [mm²]	70 ÷ 120
Quantity of branching points / cross section Cu	2x 8 / 0,75 ÷ 10
Nominal voltage [V]	1000 V
Max. current loading [A]	160
Screw (main) / tightening torque [Nm]	Allen key No. 8 / 11
Screw (branch conductor) / tightening torque [Nm]	M3,5 / 0,8





# **BUSINESS TERMS AND CONDITIONS**

### **Product distribution:**

The electro-technical products offered can be purchased via exclusive or contractual business distributors in corresponding countries. In the event that in the country in question, the producer has no business representation, the products can be ordered directly from the producer in the Czech Republic – by e-mail, fax or via the electronic shop located at www.elektrobecov.com.

#### **Delivery times:**

All products stated in this catalogue are available for supply immediately. If the goods are delivered via the contractual logistical companies of the producer, then the time of despatch to the time of delivery to any destination in Europe, is usually within five days. To locations outside Europe, the goods are supplied within a period dependant on the method of transport and the carrier tariff.

#### Prices:

The prices of all products are stated in the price list, which is usually issued each January and updated in April, and possibly in the autumn. The stated prices are the maximum. Based on individual business cases, quantity discounts can be agreed. Invoicing is made usually in currency EURO.

### Ordering:

On the order, it is necessary to state the specification of the product as listed in this catalogue. The required data is the product ordering number and the title plus the number of pieces.

Example: A131111, terminal block RSA 4 A, 2.000 pcs.

### Packaging, transport:

Products are packaged in paper boxes or shrink-wrap PE foil. Some types of accessories for terminal blocks are packaged into PE bags. The numbers

contained in the individual packaging are stated in the catalogue. For transport, carton boxes or wooden pallets are used for packaging.

The packaging of products stated by the producer in the price list is fixed and in the case of ordering with disregard to the packaging quantity, this will be modified and rounded up to the packaging quantity.

If the client will not ensure the collection of products, the contractor will ensure transport by a contractual carrier to the location determined by the customer. All stated prices are EXW Bečov nad Teplou, CZ, unless another parameter will be determined in the contract. If the client will agree with the supply of the goods via the contractual logistical company of the producer, the producer will charge the client for the actual transport costs for the specific shipment directly within the corresponding invoice.

### Product takeover:

If the customer will collect the goods personally, the goods quantity and the type of takeover will take place at the contractor. In other cases, the takeover will take place at the client.

#### Warranty conditions:

Unless stated otherwise, a warranty of 24 months from the day of fulfilment of the supply is provided upon adherence to the storage conditions.

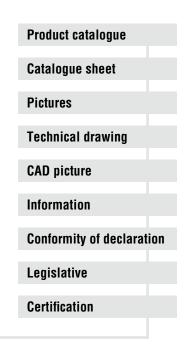
#### Storage

The products stated in the catalogue offer are recommended to be stored in their original packaging in a normal environment at temperatures +5 to +40 °C and with relative humidity up to 60 %.

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# Full-range information on the one place











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