PRODUCT CATALOGUE



INDUSTRIAL SOCKETS AND PLUGS



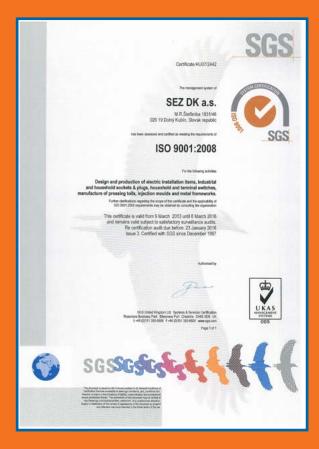
SEZ DK a.s. is a Slovak company that represents more than 65 – years history and tradition in development, production and sales of electroinstallation material. It employs more than 200 people and with the regular exports of its products to more than 25 countries, including Africa and Asia, it keeps the leading position in Central and Eastern Europe.

Company uses its own R&D as well as the tool-workshop with modern machines, that provide construction and production of injection moulds and tools. It offers these services for external clients too. SEZ DK a.s. has production technology for metal processing, its own galvanization to provide surface plating of metal parts and holds a high quality plastic injection technology for production of components up to the weight of 1,3 kg.

The offered product range is extremely wide, containing industrial plugs and sockets, distribution boxes, household switches and sockets, terminal clamps, installation boxes, cable glands, terminal components, terminal switches, wall and portable lights and ceramic lampholders, wall and flush-mounted distributors and installation pipes. All product groups have their own catalogues K1-K10.

The company is certified according to ISO 9001:2008 and ISO 14001:2004.







CONNECTING ENERGY



K₁





INDUSTRIAL SOCKETS AND PLUGS

Our industrial plugs and sockets have been designed to connect electrical devices and consumers to low voltage in a broad spectrum of human activities. They are frequently applied in civil engineering, electric assembly sector, engineering industry, chemical and cosmetic industry, pharmaceutical industry and health service, agriculture, food industry and textile industry, as well as in cinemas, theatres, sports facilities, holiday resorts, etc.

Sockets and plugs are of circular shape and can be used within the following ranges:

- ° nominal current: 16A, 32A, 63A, 125A
- $^{\circ}\,$ nominal voltage: 230 V, 400 V, 500 V
- ° nominal frequency: 50Hz a 60Hz
- ° degree of protection: IP 44, IP 54, IP 67
- ° number of poles: 3P (2P+PE)

4P (3P+PE)

5P(3P+N+PE)

° temperature between -25 °C till +40 °C

Our sockets, plugs and connectors are manufactured under the STN EN 60309 - 1, 2 norms which comply with European norms EN 60309 - 1, 2 and international recommendation IEC 60309 - 1, 2.

Quality first

The construction of our devices respects the demands on their strong reliability and durability as well as the requirements of health protection. Let us now summarise the fundamental security principles, which will be appreciated by all users of our industrial sockets and plugs.

1. Insulation resistance and dielectric strength of the devices must be sufficient

Tests are carried out to check the fulfilment of these requirements which immediately follow after the tests in the humidity chamber or room where the testing samples have been adjusted to prescribed temperature. Insulation resistance is measured by the voltage of approximately 500V; the measuring begins one minute after the voltage has been applied.

The insulation resistance must not be lower than 5 MOhm. Dielectric strength is measured by the 50 Hz/60 Hz frequency sinusoid voltage of 2 000V (2 500V respectively, for the devices with the nominal voltage of 500V), which is applied for 1 minute. Neither flash-over nor breakdown must appear during the test.

2. Non-blocked devices must have adequate disconnecting capacity

A plug or a mobile socket is inserted into a built-in (wall) socket or a connecting buit-in appliance, inlet (wall inlet) and subsequently pulled out with the frequency of 7.5 strokes per minute. The electric contact is maintained for not longer than

4 seconds and not shorter than 2 seconds.

There are 50 cycles set for the 16 A and 32 A devices, 20 cycles for 63 A and 125 A devices, respectively. The samples are tested at the 1.1 level of nominal working voltage, and 1.25 level of nominal current values and line current factor 0.6. A persistent arc must not appear during testing. After testing, the samples must not show any damage that would disable their further operation and plug pin inlets must not show any serious damage either. Our 63 A (types IV, IVG, IVGN, IZ, IZGN, IZG, IPGN, IPG 63xx) sockets and plugs have a sufficient switching capacity, so their electrical blocking by a control (pilot) contact is therefore unnecessary.

3. Normal operation

The devices must be resistant to the effects of mechanical, electric and heat stress which may appear during normal operation without any excessive wear or other damaging effects. The non-blocked devices tested as described in Point 2 above are further tested in the following cycles:

- ° devices 16A 5000 cycles under load only
- ° devices 32 A and 63 A 1000 ccycles under load, 1000 cycles unloaded
- $^{\circ}\,$ devices 125A 250 cycles under load, 250 cycles unloaded
- ° loading condition: load of nominal voltage and nominal current under line current factor 0.6

After test the samples must not show:

- ° any wear preventing further operation of the device and its possible blocking, respectively
- ° any damage of cover or barriers
- ° any damage of plug pin inlets which could cause malfunction
- ° any loosening of electric or mechanical connections

WARNING – Disconnecting capacity is required as protection in case of accidental insertion or release of a plug under load. According to STN 33 2180, industrial sockets and plugs are not designed for the operational switching on and off of electrical appliances.

4. Mechanical resistance

Dismantling devices are equipped with the lighttest Type of power supply cable of the smallest suitable cross-section. They are then frozen at the temperature of –25 °C. Subsequently, the free end of the 2.25 metre-long cable is attached to the wall at 75 cm over the ground. The sample is held so that the cable remains in horizontal position and then is dropped onto the concrete floor. The process is repeated eight times, while the cable is twisted of 45 ° in the point of attachment before each trial. After tests the samples must not show any damage, chiefly, none of the parts may be loosened or separated.

5. Heat and combustion resistance

5.1 Parts made of insulation material are tested by static burden by an appropriate testing device. The surface of tested parts



is placed in horizontal position and a steel ball with 5 mm diameter is pressed into that surface with the force of 20 N.

Testing takes place in a heat chamber at the temperatures of.

- $^{\circ}~125\,^{\circ}\mathrm{C}$ for parts which carry the live parts of dismantling device
- ° 80 °C for other parts

The ball is removed after one hour and the diameter of the impression is measured. If the material has been deformed, the diameter must not exceed $2\,\mathrm{mm}$.

5.2 The external parts of insulation material and insulation parts that carry the live parts of device must be resistant to excessive heat and combustion. The hot wire test, described in IEC 60695-2-1, is used to check if this requirement is fulfilled.

The temperature of hot wire is:

- $^{\circ}~650\,^{\circ}\text{C}$ for insulation material parts not needed to keep the conducting parts and protection circuit parts in their position even though they touch them
- $^\circ~850\,^\circ\text{C}$ for insulation material parts needed to keep the conducting parts and protection circuit parts in their position.

The contact lasts 30 seconds.

A device passed the hot wire test, if:

- ° neither perceivable flame nor permanent heating had appeared; or
- ° the flame or the heating of the sample or its surroundings ceased within 30 seconds after the hot wire had been removed and the surrounding parts did not burn completely.

6. The Resistance of rubber and thermoplastic to ageing

The devices with rubber or thermoplastic covers and elastomeric parts, such as joint rings and washers, must show sufficient resistance to ageing which is checked by accelerated ageing test in the atmosphere with normal air composition and pressure.

The samples hung freely in a heat chamber with the natural circulation of air:

- ° 70 °C and 10 days for rubber
- ° 80 °C and 7 days for thermoplastic

The samples are examined after the chamber has been cooled to standard room temperature. No cracks may be visible to the naked eye and the surface must not be sticky or greasy. The samples must not show any damage which would lead to the failure of standard requirements.

The design of the devices ensures that the devices with different working voltages are not interchangeable. The working voltage of a device is determined by the position of the key groove and the protective contact, the so-called hour angle, when the key groove is always in the position of 6 hours. The figure of the hour angle is derived from the position of the protective contact compared to the clock face, the socket being observed from the front. To prevent fault connection, the socket is fitted with a key groove, while the plug is fitted with a key. The diameter of protective pin is different from that of phase pin, wrong insertion is therefore completely excluded.

The Installation of sockets and connectors on flammable surfaces

To meet the requirements of STN 33 2312, sockets and inlets cannot be installed directly on flammable or easily combustible surfaces. It is necessary to separate them from such surfaces by a non-flammable, heat-insulating plate at least 5 mm thick, protruding at least 10 mm on each side, or they must be installed in at least 30 mm distance from the flammable surface, e.g. on consoles in accordance with STN 33 2312.

Implemented innovations

The 16 and 32A, 400V, IP44, devices in 5 and 4-pole version were introduced into our production portfolio such as connecting sockets ISN, plugs IVN, wall sockets IZN, wall inlets IPN and built-in flange sockets IEN (the letter "N" stands for New design). The screws of terminals of the built-in flange sockets are accessible from the same direction and when they are installed on the flat wall of the distribution box, they wires can be connected without their prior dismantling.

Dimensioning of connecting terminals

Socket system	Motor [k'	output W]	Connecting terminals for conductor $[\ mm^2\]$			
IEC [A]	400 V	500 V	connecting outlets flexible conductor	full installations full conductor		
16	7	9	1 - 2,5 Cu	1,5 - 4 Cu/Al		
32	15	20	2,5 - 6 Cu	2,5 - 10 Cu/Al		
63	30	40	4 – 16 Cu	6 - 25 Cu/Al		
125	60	80	16 - 50 Cu	25 - 70 Cu/Al		

kW data are approximate

In 63 A devices we have widen the assortment by the 5-pole appliances in protection IP67 distinguished from the IP44 versions by the letter G., i.e. connecting sockets ISGN, plugs IVGN, wall sockets IZGN, wall inlets IPGN and built-in sockets IEGN. The shape is adjusted to 16 A and 32 A series. The authentic technical solutions of the connecting terminals and the cable fixing and its sealing have been used also in these sockets and plugs.

Reversing adapters RA, A

Reversing adapters "RA" 32A and 16A providing the change of the phase sequence and the adapter "A" from 5-pole socket into a 4-pole socket have been added to the range of goods of our production. Its use is allowed on the symmetric load since the 4-pole socket has the 3P + PE Type of connection.

The straight Types of the flange built-in sockets and inlets – IERN, IRRN and IRRNO

The fixing frames are $75 \times 75 \, \text{mm}$ in size with the distance of $60 \times 60 \, \text{mm}$ among the fixing openings. Terminal components are identical with the sockets and the plugs.



Industrial socket with a box under the plaster - IZV

The IZV socket is specifically designed for use in the tidy-looking interiors above all, where the emphasis is put on the accurate implementation and a decent presence of industrial sockets. The box embedded in the plaster is common for all the Types. 6 openings for conductors input are situated on the box – 4 of them of an oval shape on the side walls and 2 of a round shape on the bottom of the box. The boxes can be linked together by means of the connecting element PR-10 and athe bolts on the boxes that enable their mutual connecting in a row).

Combined socket IZVZ

Our new product of a Type designation IZVZ combines 400 V and 230 V socket in one product. It finds its use in all the cases when the situation calls for a simultaneous connection of a single-phase and three-phase device. A special emphasis was put on the electric capability, safety and user-friendliness in course of the development of the device. IZVZ is supplied on the market in the cover of IP44 and in versions 16 A 4P (IZVZ 1643), 16 A 5P (IZVZ 1653). The 32-amper variants (IZVZ 3243, IZVZ 3253) are delivered with a case for a tube fuse 16 A for single phase 230 V /16 A socket safety.

Industrial plugs and sockets 125 A

In 2008 we added into our range of products the following products: industrial plugs, inlets and sockets of current 125A in 3, 4, 5 poles with voltage 230V, 400V and 500V in protection IP67.

New series of $16A/230\ V$, 3P industrial plugs, sockets and inlets

Our production portfolio has been completed by the newly developed industrial plugs and sockets under Types IVN, ISN, IZN, IPN, IRRN, IERN with the nominal current of 16A, 3P, 230V

and the degree of protection IP 44 which are fully compatible with the new design of our 16 A, 4 P and 5 P, 400 V appliances.

Screwless series LEADER Plus

In 2009-2011 company SEZ DK expanded its assortment in new screwless range 16A and 32A – 5-poles industrial sockets and plugs IVB, ISB, IZB, IPB, IEB, IERB, IRRB (letter B means screwless). This range was introduced on the market under the commercial name LEADER Plus.

Generally, the system of screwless terminal can be solved in many ways and our system uses the principle of a spring terminal, featuring a screwless spring clamp which allows to connect rigid conductors up to cross section 4mm² in 16A appliances and stranded wires up to 2,5 mm². In 32A the cross section are 10 mm² for rigid and 6 mm² for stranded wires respectively. Connection of male or female pin with holder of spring clamp is realized by a special riveting. Successful implementation of this technical principle we achieved firm and fast connection with no further need of continuos control of connection quality and safety during its use.

New technical solution markedly shortens time of montage in 39% in compare with screw sockets and plugs. Reduction of this time isachieved that covers of plugs and sockets are in transport unlocked position (opening without using of screwdriver) and also plugs, inlets and sockets contacts are delivered in open position (operating levers are detached) and after putting of stripped wire (rated lenght is 12mm) you just to push the operating levers down and the wire is fastened. Particular operating levers are distinguished by respective colours and together with the indicative marking on the plastic body the chance of a wrong connection of individual wires is minimalized.

Pilot contact:

Plugs and sockets with nominal current 63A (type IRGN1) and

- Faster and more comfortable installation, average mounting time shortened by 39%. The total lenght of plugs and sockets was significantly shortened.
- Body covers of plugs and sockets are supplied in unlocked but still transport-safe position for faster mounting.
- A new design of a cable inlet bushing as well as the ergonomic shape of a sealing nut improves manipulation while mounting the cable and its sealing.



- The appropriate colours of actuating levers are used for clear identification: L1, L2, L3, N, and PE. Contacts are supplied in open stand-by position for faster wires mounting.
- The lamellar clasp remains safely locked by two serrations in the body of the product even during the manipulation with a cable.



types 125A are offered also with pilot contacts. They are placed in the middle of socket and they interrupt input by the contactor from the network during pulling the plug out. Contacts are disconnected without current and there is no burning on them.

Degree of protection IP

Stated in the catalogue our plugs and sockets with the nominal current 16 A, 32 A meet the degree of protection of IP 44, IP 54 or IP 67 and 63 A, 125 A reach IP 67 in compliance with

STN EN 60529.

The degree of protection is tested:

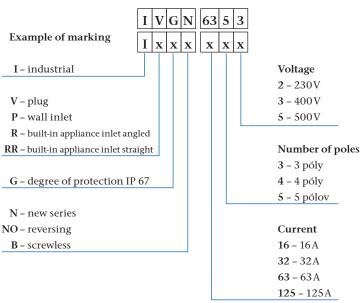
- * on the plugs and sockets itself and also in their coupled position
- * on plugs and inlets in their full coupling with the corresponding sockets



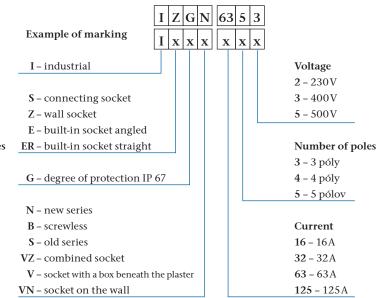
1st digit	Protection against solid bodies	2nd digit	Protection against water
0	Non protected	0	Non protected
1	Protected against solid foreign objects of ø 50 mm and greater	1	Protected against vertically falling water drops
2	Protected against solid foreign objects of ø 12,5 mm and greater	2	Protected against vertically falling water drops when enclosure tilted up to 15°
3	Protected against solid foreign objects of ø 2,5 mm and greater	3	Protected against spraying water
4	Protected against solid foreign objects of ø 1 mm and greater	4	Protected against splashing water
5	Dust-protected	5	Protected against water jets
6	Dust-tight	6	Protected agains powerful water jets
		7	Protected agains the effects of temporary immersion in water
		8	Protected agains the effects of continuous immersion in water

Marking of products:

Key for industrial plugs and inlets



Key for industrial sockets



Colour codes:

To facilitate the identification of different voltages are all CEE plugs and sockets color coded.

Nominal voltage	Colour code
20 - 25 V	violet
200 - 250 V	blue
380 - 480 V	red
500 - 690 V	black





IZGN 6353



16 A	250 V	3	IP 44	6 h	IZVN 16, IZVN 16S	8	221	21/16
16 A	400 V	4	IP 44	6 h	IZVN 1643	8	317	21/16
16 A	400 V	5	IP 44	6 h	IZVN 1653	8	328	21/16
32 A	230 V	3	IP 44	6 h	IZVN 3232	8	345	21/16
32 A	400 V	4	IP 44	6 h	IZVN 3243	8	370	21/16
32 A	400 V	5	IP 44	6 h	IZVN 3253	8	390	21/16



IE 1632

IE 1645

IE 3232

IEN 3243

IEN 1653

IEN 1643



117

117

122

136

176

188

22/19

22/20

22/19

22/20

22/19

22/20

12

12

12

12

12

12

IE 1632

32 A	500 V	4	IP 44	7 h	IE 3245	12	187	22/19				
32 A	400 V	5	IP 54	6 h	IEN 3253	12	209	22/20				
Built-in socket angled.												
16 A	400 V	5	IP 54	6 h	IEB 1653	12	151	22/20				
32 A	400 V	5	IP 54	6 h	IEB 3253	10	262	22/20				
Built-in socket a	analed.											

230 V

400 V

500 V

400 V

230 V

400 V

4

5

16 A

16 A

16 A

16 A

32 A

32 A

Built-in socket angled.

IP 54

IP 54

IP 44

IP 54

IP 54

IP 54

6 h

6 h

7 h

6 h

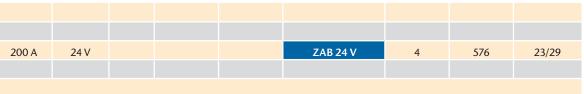
6 h

6 h











 $Battery\ socket\ is\ used\ for\ connection\ of\ auxiliary\ source\ of\ electric\ current\ designed\ for\ starting\ of\ gas\ engines.$

ZAB 24V

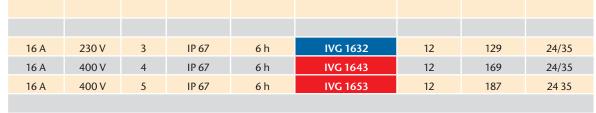
16 A	400 V	5	IP 44	6 h	BZS 1653	8	580	23/30		
32 A	400 V	5	IP 44	6 h	BZS 3253	8	787	23/30		
The switch cannot be switched on without inserted plug.										
The plug cannot be pulled out when the switch is on.										



BZS 3253









IVG 1632

32 A	230 V	3	IP 67	6 h	IVG 3232	12	238	24/35
32 A	400 V	4	IP 67	6 h	IVG 3243	12	238	24/35
32 A	400 V	5	IP 67	6 h	IVG 3253	12	275	24/35



IVG 3253

63 A	400 V	4	IP 67	6 h	IVG 6343	8	623	24/36
63 A	500 V	4	IP 67	7 h	IVG 6345	8	692	24/36
63 A	400 V	5	IP 67	6 h	IVGN 6353	2	795	24/37



IVGN 6353

125 A	230 V	3	IP 67	6 h	IVGN 12532	2	940	24/38
125 A	400 V	4	IP 67	6 h	IVGN 12543	2	1050	24/38
125 A	500 V	4	IP 67	7 h	IVGN 12545	2	1050	24/38
125 A	400 V	4	IP 67	6 h	IVGN 12553	2	1160	24/38
125 A	500 V	5	IP 67	7 h	IVGN 12555	2	1160	24/38
IVGN 125A hav	e a pilot contact	·						



IVGN 12553

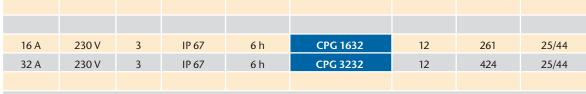
16	4 250	/ 3	IP 67	6 h	PVG 16	14	120	25/39			
The plug	The plug UNI-SCHUKO PVG16 is protected in IP67 and compatible with built-in sockets VZG16, VZG16C, VZG16S.										



PVG 16









CPG 1632

63 A	400 V	4	IP 67	6 h	IPG 6343	8	849	25/45
63 A	500 V	4	IP 67	7 h	IPG 6345	8	850	25/45
63 A	400 V	5	IP 67	6 h	IPGN 6353	4	1017	25/46



IPGN 6353

125 A	230 V	3	IP 67	6 h	IPGN 12532	1	1760	26/47
125 A	400 V	4	IP 67	6 h	IPGN 12543	1	1800	26/47
125 A	500 V	4	IP 67	7 h	IPGN 12545	1	1800	26/47
125 A	400 V	5	IP 67	6 h	IPGN 12553	1	1840	26/47
125 A	500 V	5	IP 67	7 h	IPGN 12555	1	1840	26/47
IPGN 125 A hav	e a pilot contact	t.						



IPGN 12553

16 A	400 V	5	IP 44	6 h	VPS 1653	8	587	26/48
32 A	400 V	5	IP 44	6 h	VPS 3253	8	852	26/48



VPS 1653



Built-in appliance inlet angled

230V 50-60Hz 3p = 6h 400V 50-60Hz 4p, 5p = 6h 500 V 50-60 Hz 4p,5p = 7h







Current

Voltage

Degree of protection

f Hour n angle

Type

Packing pcs

Weight g/pc

Dimensions page/pic.



16 A	230 V	3	IP 54	6 h	IRRN 1632	6	93	26/49
16 A	400 V	4	IP 54	6 h	IRRN 1643	6	113	26/49
16 A	400 V	5	IP 54	6 h	IRRN 1653	6	127	26/49

IRRN 1632

•	
100	

32 A	230 V	3	IP 54	6 h	IRRN 3232	6	134	26/49
32 A	400 V	4	IP 54	6 h	IRRN 3243	6	157	26/49
32 A	400 V	5	IP 54	6 h	IRRN 3253	6	179	26/49

IRRN 3253



16 A	400 V	5	IP 54	6 h	IRRB 1653	6	114	26/50
32 A	400 V	5	IP 54	6 h	IRRB 3253	6	188	26/50

16 A	400 V	5	IP 44	6 h	IRRNO 1653	6	127	26/51
32 A	400 V	5	IP 44	6 h	IRRNO 3253	6	183	26/51
3271	100 1	3		011	1111110 3233		103	20/31
			ing the retary part					

IRRNO 1653

Reversing plug allows change phases by turning the rotary part.



16 A	400 V	5	IP 44	6 h	IRR 1653	12	174	26/52
32 A	400 V	5	IP 44	6 h	IRR 3253	12	255	26/52

16 A	230 V	3	IP 44	6 h	IR 1632	12	122	26/53
16 A	400 V	4	IP 44	6 h	IR 1643	12	144	26/53
16 A	400 V	5	IP 44	6 h	IR 1653	12	153	26/53
16 A	400 V	5	IP 44	6 h	IR 1653	12	153	26/53

IR 1632

IR 3253

32 A	400 V	3	IP 44	6 h	IR 3232	12	191	26/53
32 A	400 V	4	IP 44	6 h	IR 3243	12	196	26/53
32 A	400 V	5	IP 44	6 h	IR 3253	12	235	26/53

Built-in appliance inlet angled 230V 400V 500V $^{\circ}$

3P+PE





50-60Hz 3p = 6h

50-60Hz 4p, 5p = 6h

50-60Hz 4p,5p = 7h



Current

2P+PE

16 A

16 A

16 A

Voltage

230 V

400 V

400 V

Poles

3

5

Degree of Hour protection angle

6 h

6 h

6 h

IP 67

IP 67

IP 67

Type

IRG 1632

IRG 1643

IRG 1653

Packing pcs

10

10

10

Weight g/pc

136

175

200

Dimensions page/pic.

26/54

26/54

26/54



IRG 1632

32 A	230 V	3	IP 67	6 h	IRG 3232	12	240	26/54
32 A	400 V	4	IP 67	6 h	IRG 3243	12	237	26/54
32 A	400 V	5	IP 67	6 h	IRG 3253	12	292	26/54



IRG 3253

16 A	400 V	5	IP 67	6 h	IRGR 1653	12	166	27/55
32 A	400 V	5	IP 67	6 h	IRGR 3253	12	293	27/55



IRGR 3253

63 A	400 V	4	IP 67	6 h	IRG 6343	8	813	27/56



IRG 6343

63 A	400 V	5	IP 67	6 h	IRGN1 6353	2	617	27/57
Built-in socket angled.								



IRGN1 6353

125 A	230 V	3	IP 67	6 h	IRGN 12532	2	790	27/58		
125 A	400 V	4	IP 67	6 h	IRGN 12543	2	900	27/58		
125 A	500 V	4	IP 67	7 h	IRGN 12545	2	900	27/58		
125 A	400 V	5	IP 67	6 h	IRGN 12553	2	1000	27/58		
125 A	500 V	5	IP 67	7 h	IRGN 12555	2	1000	27/58		
IRGN 125 A	IRGN 125 A have a pilot contact.									



IRGN 12553





Adapter – chan	Adapter – change of 5P to 4P.										
16 A	400 V	5/4	IP 44	6 h	A 1653/43	9	284	27/59			
32 A	400 V	5/4	IP 44	6 h	A 3253/43	6	457	27/59			

The use of the adapter A 5p/4p is determined by the symmetrical load since the 4-pole socket connection is 3P+PE.



Adapter – change 16A to 32A.										
16 A/32A	400 V	4	IP 44	6 h	A 16-32/4	8	343	27/60		
16 A/32A	400 V	5	IP 44	6 h	A 16-32/5	8	386	27/60		



Adapter with a	Adapter with a phase changer.									
16 A	400 V	4	IP 44	6 h	RA 1643	9	296	27/61		
16 A	400 V	5	IP 44	6 h	RA 1653	9	336	27/61		
32 A	400 V	4	IP 44	6 h	RA 3243	6	450	27/61		
32 A	400 V	5	IP 44	6 h	RA 3253	6	507	27/61		



Adapter – chan	Adapter – change 16 A/32 A or 5 to 4P + possibility of changing the phases.										
16A/32A	400 V	5	IP 44	6 h	A 16-32/5 -0	8	386	27/62	l		
16 A	400 V	5/4	IP 44	6 h	A 1653/43-0	9	284	27/62			
32 A	400 V	5/4	IP 44	6 h	A 3253/43-0	6	470	27/62			

Pin position can be changed by turning the screwdriver in 180 degrees and achieved the phase change.

The use of the adapter A 5p/4p is determined by the symmetrical load since the 4-pole socket connection is 3P+PE.



Adopting from	Adopting from industrial plug 3P/16A/ 230V to house socket 250V/16A, S – Schuko.											
16A	230 V	3	IP 44	6 h	SA-1	4	219	28/63				
16A	230 V	3	IP 44	6 h	SA-1S	4	219	28/63				

	Adopting from industrial plug 5P/16A/ 400V to house socket 250V/16A, S – Schuko.										
ì	16A	400 V	5	IP 44	6 h	SA-2	4	243	28/63		
	16A	400 V	5	IP 44	6 h	SA-2S	4	243	28/63		

SA-2

SA-1

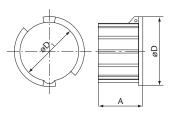


Adopting from plug UNISCHUKO 250V/16A to industrial plug 3P/16A/230V respectively 3P/32A/230V.									
16 A	250 V	3	IP 44	6 h	SA-3	4	241	28/64	
32 A	250 V	3	IP 44	6 h	SA-4	4	322	28/64	

SA-3



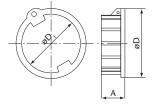
Use			1	Dimension (mm)			
plugs and inlets	Туре	Picture	А	øD	ØD ₁		
16A – 3P	ND 105-0757	1	39,5	60	44,5		
16 A – 4P	ND 16CPG1	1	39,5	68	50,5		
32A – 3P, 4P	ND 32CPG1	1	48	82	58,5		
63 A – 3P, 4P, 5P	ND 63CPG1	1	70,5	95,5	71,5		





Picture 1

sockets					
16A – 4P	ND 16CZG1	2	16,5	78	68,5
32A – 3P, 4P	ND 32CZG1	2	19,5	94	82,5
63 A – 4P	ND 63CZG1	2	22,5	111,5	99,5





Note: Covers are available only in grey colour.

Picture 2

Type / mm	Α	В	øD1	
KV 1643	54,7	16,1	49,5	
KV 1653	62,1	16,2	56,1	
KV 3243	63,3	16,2	57,3	
KV 3253	70	16,4	63,4	

Used for IVN, IVNO, IV, IVG, IPN,

a



Lid KV

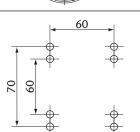
Fixing frame

Note:

For all types of the built-in sockets IEN, IE and IERN.

IPNO, IP, IPG, IR, IRRN, IRRNO, IRR, IRG, IRGR

Use a Ø 4mm screw for plastic materials during the assembling.



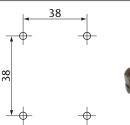


ND 105-2177

Fixing frame

Note: For the built-in socket VZ16 and VZ16S.

Use a **Ø 4mm** screw for plastic materials during the assembling.

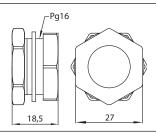




ND 105-2677

Flange SPg 16

To be used for the connection of IZVN 16xx, IZVN 32xx. Note:

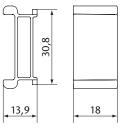




SPg16

Connecting part PR10



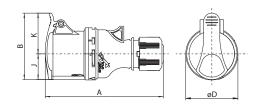




PR 10

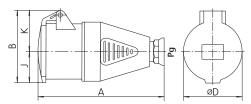
Note: To be used for **6400-5x**, **IZV 16**, **IZV 16xx**, **IZV 32xx**.

1 ISN, ISB / 16A, 32A



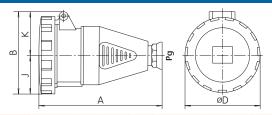
Type / mm	Α	В	øD	J	K			
ISN 1632	145	79	64	29	50			
ISN 1643	145	82	64	32	50			
ISN, ISB 1653	145	89	64	35	54			
ISN 3232	172	96	73	38	58			
ISN 3243	176	96	73	38	58			
ISN 3253	177	103	73	41	62			
ISB 3253	177	103	73	41	62			

2 IS / 16A, 32A



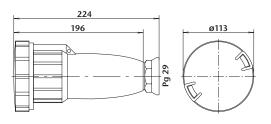
Type / mm	Α	В	øD	J	K	Gland
IS 1645	137	80	63	35	45	Pg 16
IS 3245	165	93	72	42	51	Pg 21

3 ISG / 16A, 32A

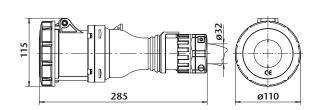


Type / mm	Α	В	øD	J	K	Gland		
ISG 1632	136	78,5	70	35	43,5	Pg 16		
ISG 1643	142	85,5	78	39	46,5	Pg 16		
ISG 1653	145	92,5	87	43,5	49	Pg 16		
ISG 3232	166	101,5	93	46,5	55	Pg 21		
ISG 3243	166	101,5	93	46,5	55	Pg 21		
ISG 3253	168	108	100	50	58	Pg 21		

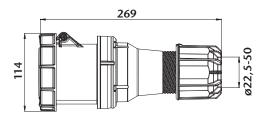
4 ISG / 63A



5 ISGN / 63A

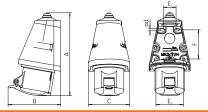


6 ISGN / 125A



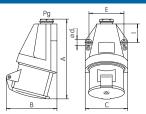
Types marked with "P" have a pilot contact. Note:

IZN, IZB / 16A, 32A



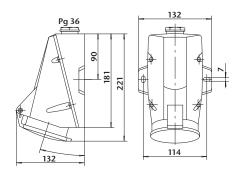
Type / mm	А	В	C	ød1	E1	E2	F		
IZN 1632	157	90	78	5	30	53	58		
IZN 1643	157	99	78	5	30	53	58		
IZN, IZB 1653	158	104	78	5	30	53	58		
IZN 3232	179	118	88	5	35	61	60		
IZN 3243	179	118	88	5	35	61	60		
IZN 3253	181	122	89	5	40	62	63		
IZB 3253	181	122	89	5	40	62	63		

8 IZS / 16A, 32A

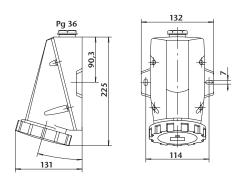


Type / mm		В	С	ød1			Gland
IZS 1645	134	87	75	5,2	60	29,5	Pg 16
IZS 3245	155	101	82	5,2	67	34	Pg 21

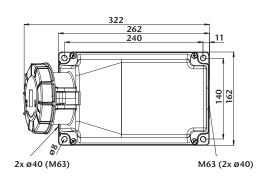
9 IZ/63A



11 IZG / 63A

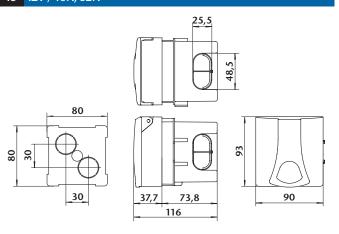


13 IZGN / 125A

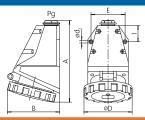


Note: Types marked with "P" have a pilot contact.

15 IZV / 16A, 32A

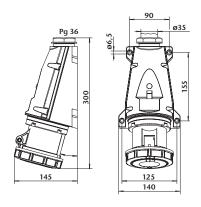


10 IZG / 16A, 32A

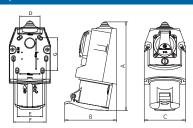


Type / mm	Α	В	D	ød1			Gland		
IZG 1632	146	90	78,5	4,8	65,6	32	Pg 16		
IZG 1643	148	92	78,5	4,8	65,6	32	Pg 16		
IZG 1653	148	96	87	4,8	65,6	32	Pg 16		
IZG 3232	173	111	92,5	5,2	71	35,5	Pg 21		
IZG 3243	173	111	92,5	5,2	71	35,5	Pg 21		
IZG 3253	175	114	100	5,2	71	35,5	Pg 21		

12 IZGN / 63 A

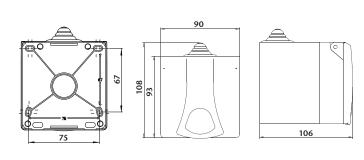


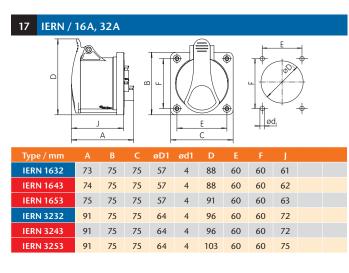
14 IZVZ / 16A, 32A

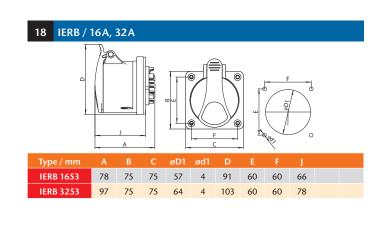


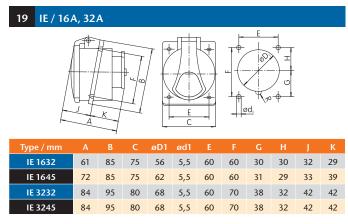
Type / mm	Α	В	С	D	E	F	G		
IZVZ 1632	182	113	90	45	55	71	67		
IZVZ 1643	182	113	90	45	55	71	67		
IZVZ 1653	182	113	90	45	55	71	67		
IZVZ 3232	193	118	90	45	55	71	67		
IZVZ 3243	193	118	90	45	55	71	67		
IZVZ 3253	193	118	90	45	55	71	67		

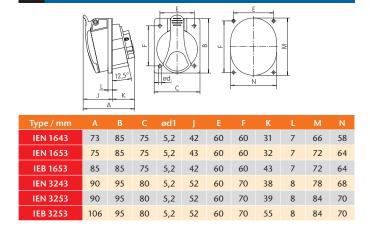
16 IZVN / 16A, 32A







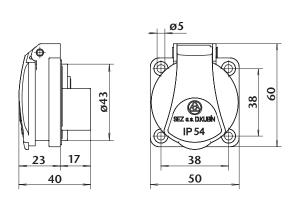


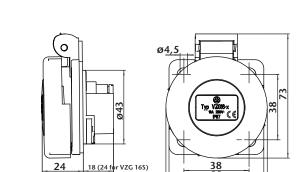


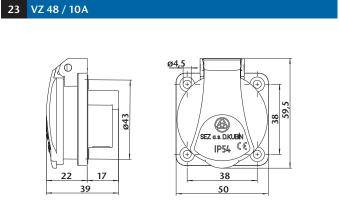
20 IEN, IEB / 16A, 32A

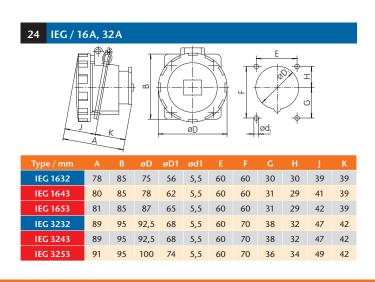
22 VZG / 16A

42 (48 for VZG 16S)

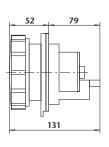


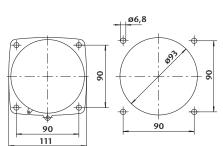


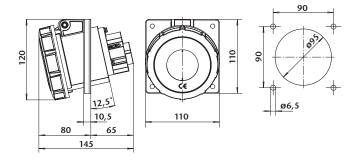




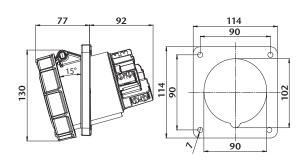
21 VZ/16A



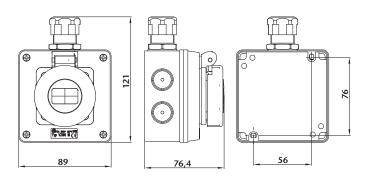




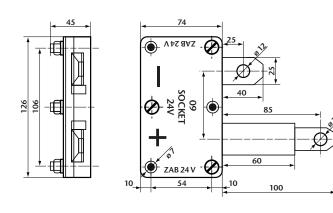
27 IEGN / 125A



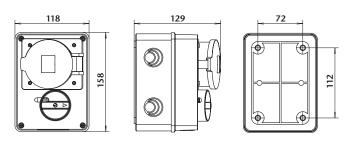
28 VZGN /16A



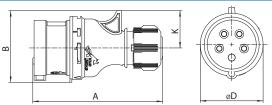
29 ZAB 24V



30 BZS / 16A, 32A





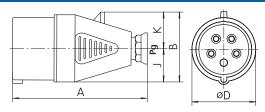


Type / mm	Α	В	øD	K	
IVN 1632	126	64	64	32	
IVN 1643	132	66	64	34	
IVN, IVB 1653	132	73	64	38	
IVN 3232	160	79	73	41	
IVN 3243	160	79	73	41	
IVN 3253	160	87	73	45	
IVB 3253	160	87	73	45	

Type / mm A B øD K IVNO 1653 132 73 64 38 IVNO 3253 160 87 73 45

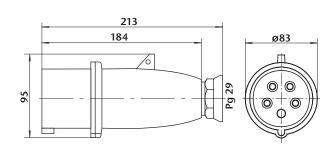
Note: Pin position can be changed by turning the screwdriver in 180 degrees and achieved the phase change.

33 IV / 16A, 32A

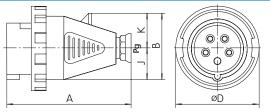


Type / mm	Α	В	øD	J	K	Gland	
IV 1645	129	67,5	65	32,5	35	Pg 16	
IV 3245	154	77	72	36	41	Pg 21	

34 IV / 63A

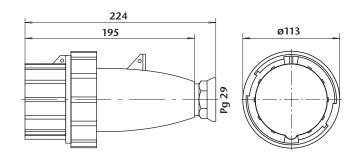


35 IVG / 16A, 32A

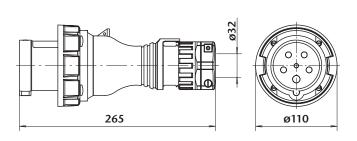


Type / mm	Α	øD	J	K	Gland	
IVG 1632	123	70	28,5	31	Pg 16	
IVG 1643	129	78	32,5	35	Pg 16	
IVG 1653	129	87	32,5	39	Pg 16	
IVG 3232	154	92,5	36	41	Pg 21	
IVG 3243	154	92,5	36	41	Pg 21	
IVG 3253	154	100	36	46	Pg 21	

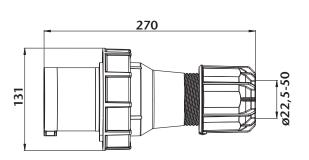
36 IVG / 63A

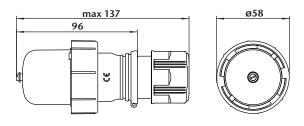


37 IVGN / 63 A

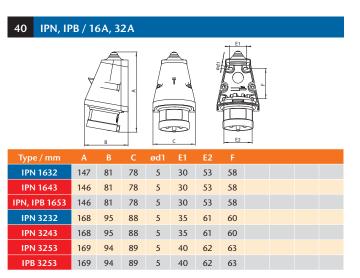


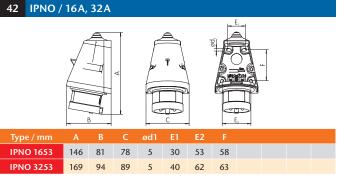
38 IVGN / 125A



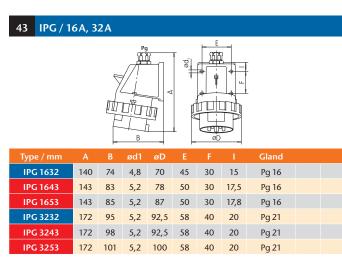


41 IP / 16A, 32A IP 1645 126 90,5 75 5,2 60 29,5 Pg 16 IP 3245 147 105 82 5,2 67 Pg 21

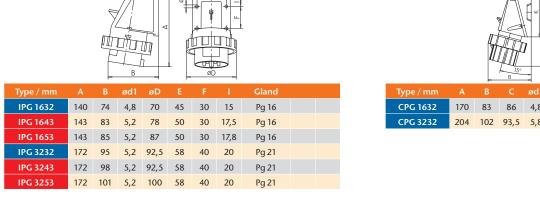


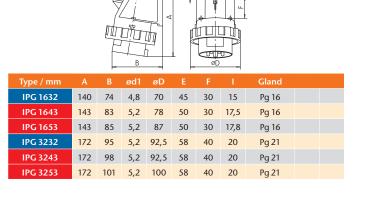


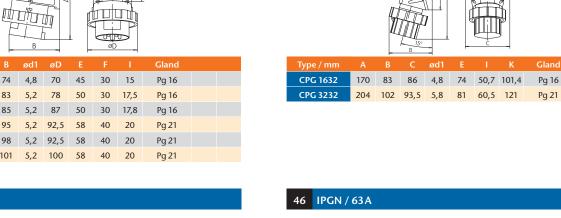
Note: Pin position can be changed by turning the screwdriver in 180 degrees and achieved the phase change.



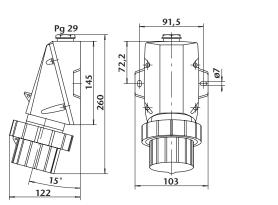
45 IPG / 63A

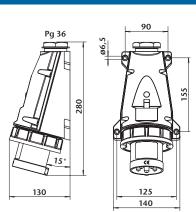


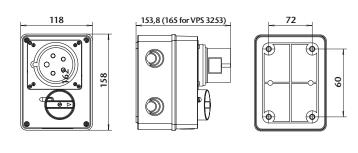


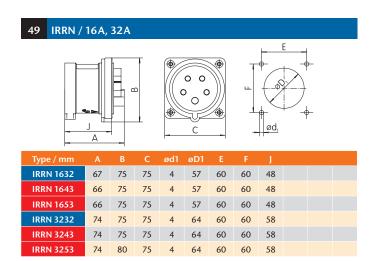


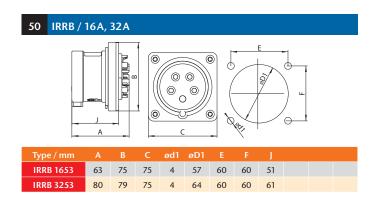
44 CPG / 16A, 32A

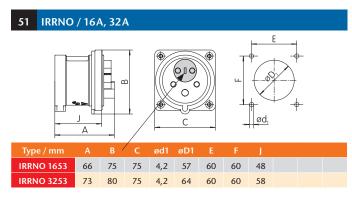


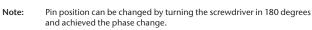


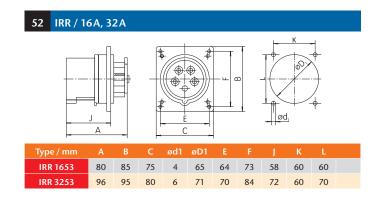


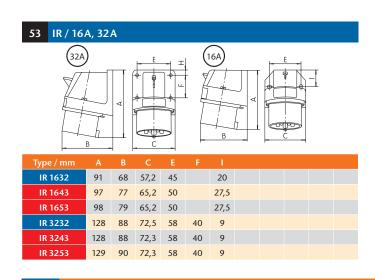


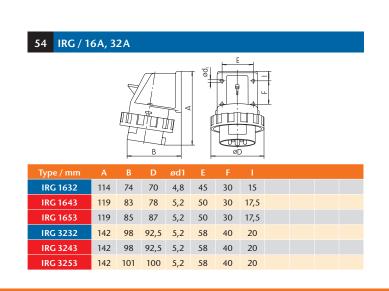




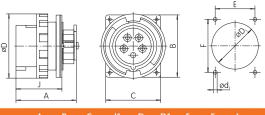








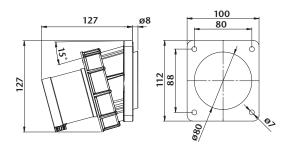




Type / mm	Α	В	C	ød1	øD	øD1				
IRGR 1653	80,5	85	75	4	87	65	64	73	59	
IRGR 3253	96	95	80	4	100	71	70	84	72	

90 1113

57 IRGN1 / 63A



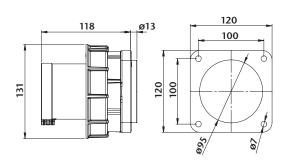


A 16-32/5

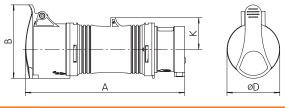
200 103

73 37

56 IRG / 63A

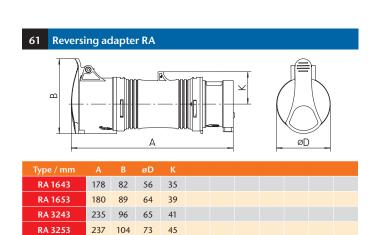


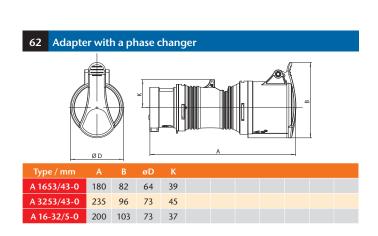




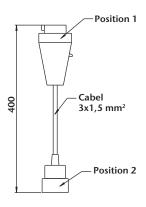
Type / mm	Α	В	øD	K	
A 1653/43	180	82	64	39	
A 3253/43	235	96	73	45	

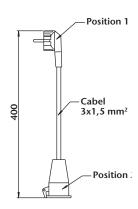
Type / mm A B øD K A 16-32/4 198 96 65 34





Note: Pin position can be changed by turning the screwdriver in 180 degrees and achieved the phase change.





Notes	
	·····
	·····
	·····
	······
	······
	······
	······



products portfolio





















- **K1** INDUSTRIAL SOCKETS AND PLUGS
- **K1.1** DISTRIBUTION BOXES AND CABLE REELS
- K2 House switches and sockets
 K2.1 Switches and sockets IP 44
 - K3 TERMINAL CLAMPS AND BOARDS
 - **K4** Installation boxes, cable glands
 - K5 TERMINAL COMPONENTS
 - **K6** TERMINAL SWITCHES
 - **K8** WALL AND PORTABLE LIGHTS AND CERAMIC LAMPHOLDERS
 - **K9** WALL AND FLUSH-MOUNTED DISTRIBUTORS
- **K10** Installation pipes



CONNECTING ENERGY

www.sez.sk











www.sgs.com

Manufacturer:

SEZ DK a. s., M. R. Štefánika 1831/46, 026 19 Dolný Kubín, Slovakia Phone: +421 43 5809 226; +421 43 5809 404; Fax: +421 43 5809 503 e-mail: sales@sk.biz

Representative for the Czech Republic: SEZ DK-CZ s.r.o., Řeznická 1486/5, 110 00 Praha 1, ČR Phone: +420 775 434 467; +420 777 532 097; +420 775 440 713 e-mail: prodej@sezdk.cz