



Product manual plug, sockets and coupler 16 A.- Z0251



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Purpose of these instructions

Working in hazardous areas, the safety of personnel and plant depends on complying with all relevant safety regulations. Assembly and maintenance staff working on installations therefore have a particular responsibility. They require precise knowledge of the applicable standards and regulations. These instructions give a brief summary of the most important safety measures. It supplements the corresponding regulations which the staff must study.



SAFETY INSTRUCTIONS

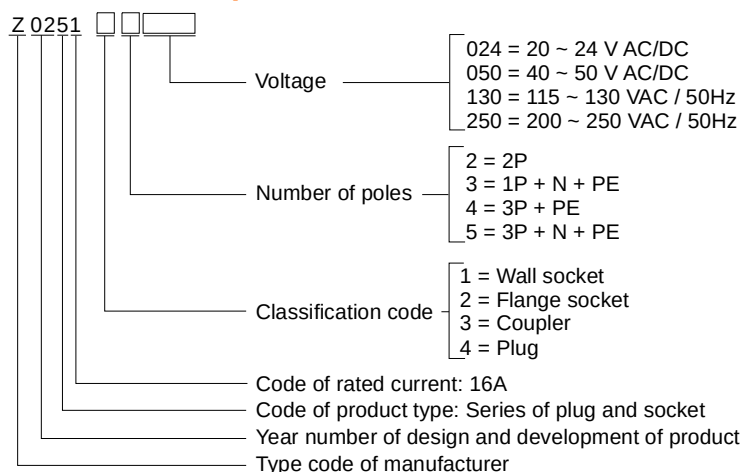
- Use the explosion-proof plug and socket only for its intended purpose
- Incorrect or impermissible use or non-compliance with these instructions invalidates our warranty provision.
- No changes to the device impairing its explosion protection are permitted.
- Use the indicating unit only if they are clean and undamaged.
- Any damage can invalidate the Ex-protection.
- Observe the following during installation and operation:
 - * National safety regulations
 - * National accident prevention regulations;
 - * National installation regulations (e.g. IEC 60079-14);
 - * Generally recognized technical regulations;
 - * Safety guidelines in these operating instructions;
 - * Characteristic values given on the explosion-proof plug and sockets.

Conformity to standards

The explosion-proof indicating unit is designed and manufactured according to standard of ISO 9001. The indicating unit is conformity to the directive 94/9/EC, ATEX and the following standards:

IEC60079-0 : 2011	EN60079-0 : 2012
IEC60079-1 : 2014	EN60079-1 : 2014
IEC60079-7 : 2006	EN60079-7 : 2015
IEC60079-31 : 2013	EN60079-13 : 2014

Model and implication



Technical data

Socket, Plug and Coupler

II 2GD Ex db eb IIC T6 Gb Ex tD A21 T80 Ta≤45°C
II 2GD Ex db eb IIC T5 Gb Ex tD A21 T95 Ta≤55°C

Test certificate Wall type socket, Plug and Coupler - Presafe16ATEX 9155X - Protection degree IP66/IP65

Test certificate Flange socket - Presafe16ATEX 8120U

Ambient temperature -40°C < Ta < 55°C

Material of enclosure: Polyamide and Glass fibre reinforced polyester

Rated current 16A

Rated voltage: 2-pole 50VDC - 50VAC 50/60Hz

3-pole-415V 50/60Hz

4-pole-690V 50/60Hz

5-pole-415V 50/60Hz

Rated switch capacity: AC3 2-pole 250V/16A

DC1 2-pole 50V/16A

AC3 3-pole 250V/16A

AC3 4-pole 690V/16A

AC3 5-pole 415V/16A

Cable entry:

Wall type socket 1 pcs cable gland M25 + 1 plug M25

Plug/Coupler type socket:

- 3 pole 6.5-10.5mm/10-15.5mm/15-18.5mm

- 4-5 pole 6.5-10.5mm /10-15.5mm/15-20mm

Suggested moment of screw down

M25 Stopping plug 2.5 Nm

M25 Cable gland 2.5 Nm

M4 Cover bolt 2.5 Nm

Terminal bolt 2.5 Nm

Size 4 Self tapping screw 2.0 Nm

Size 5 Self tapping screw 3.0 Nm

Airproof nut 2.5 Nm

Comparison table of poles, clock position, colour and service voltage see table 1.

Contact arrangement see figure 1.

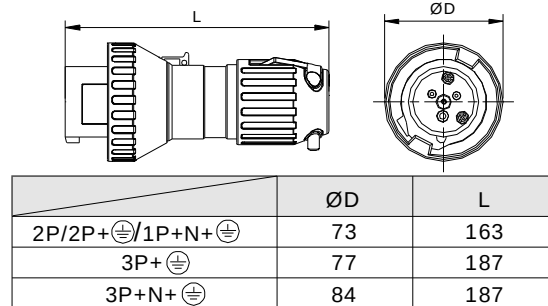
Operation / installation

- Transport and storage in original packaging only. National safety and installations regulations and the generally accepted rules of engineering practice must be observed when mounting and using this equipment.
- Explosion-proof plug and sockets are suitable for use in hazardous areas, zone 1, 2, 21 and 22.
- The plug and sockets should be used under the following atmospheric conditions:
 - * The pressure is 80kPa(0.8bar)~110kPa(1.1bar)
 - * The volume ratio of standard oxygen content is 21% air;
 - * The Ambient air relative humidity is less than: 95%;
 - * There is no obvious shake and impact vibration place;
- All screws on the connection terminals, including unused ones, must be fully tightened.
- To prevent accumulation of electrostatic charge, only damp cloth can be used during the cleaning!

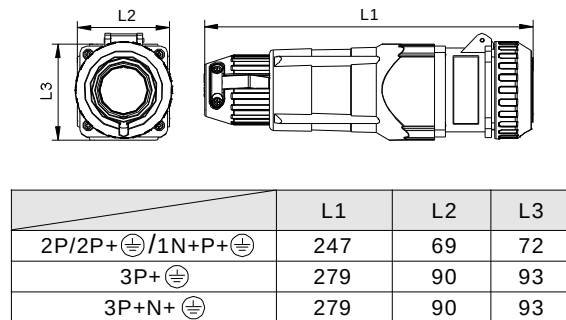
Table1

Poles	Clock position	Colour	Service voltage
2 pole	/	Purple	$\leq 24V$ AC/DC
	12h	White	40-50VAC
	10h	White	20-50VDC
3 pole	4h	Yellow	110-130V
	6h	Blue	200-250V
4 pole	9h	Blue	200-250V
	6h	Red	380-415V
	7h	Black	480-500V
	5h	Black	600-690V
5 pole	6h	Red	200-250V 380-415V

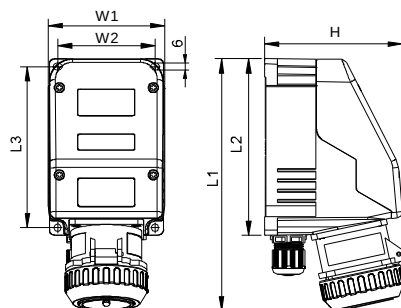
Dimensions plug



Dimensions coupler type socket

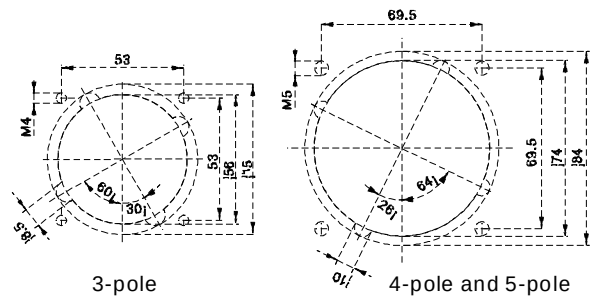


Dimensions wall type socket

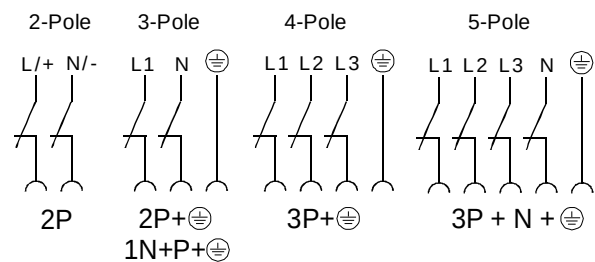


	W1	W2	L1	L2	L3	H
2P/2P+⊕/1P+N+⊕	103	86	223	156	142	122
3P+⊕	123	106	241	176	163	147
3P+N+⊕	123	106	241	176	163	147

Installation dimensions of panel type socket



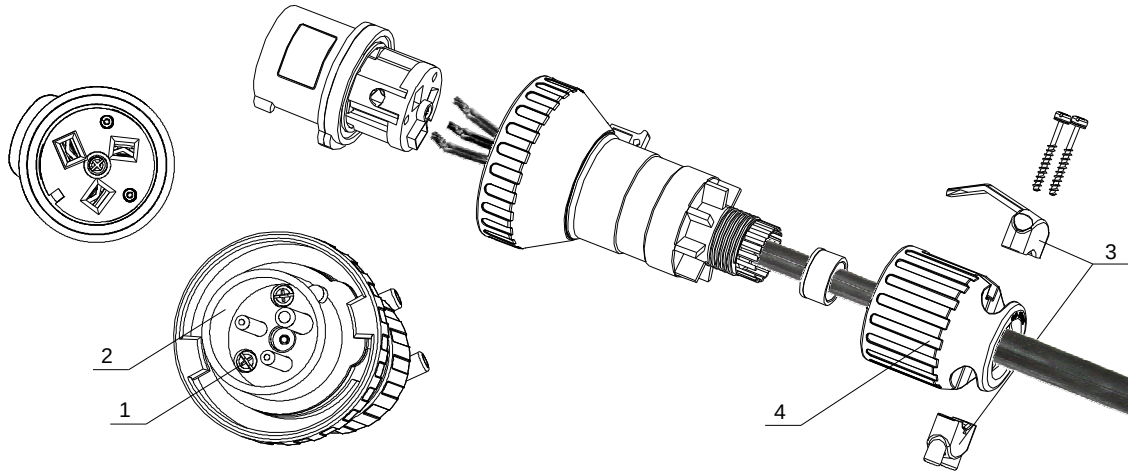
Electrical diagram



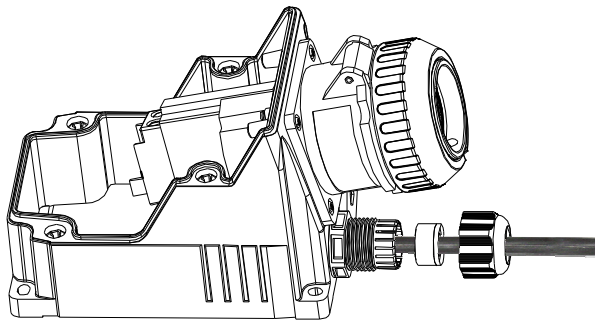
Opening the device / electrical connection of plug and coupler

The electrical connection of the full plastic plug and socket may only be carried out by skilled electrician.

- * 1 remove screws (2)
- * 2 take down the plug (1) from the cover
- * 3 remove the clamp (3) and turn loose the rotary seal (4)
- * 4 Penetrate the cable and connect the wiring
- * 5 put the plug back in the cover and tighten the screws (1-2)
- * 6 clamp the rotary seal and fix the clamp (3-4)



Opening the device / electrical connection of wall socket



The electrical connection of the full plastic plug and socket may only be carried out by skilled electrician.

- * 1 remove the cover
- * 2 Penetrate the cable to the gland and connect the wiring

Check before the devices go into service:

- All screws must be fully tightened
- The devices shall not be damaged
- Make sure the gland is properly tightened

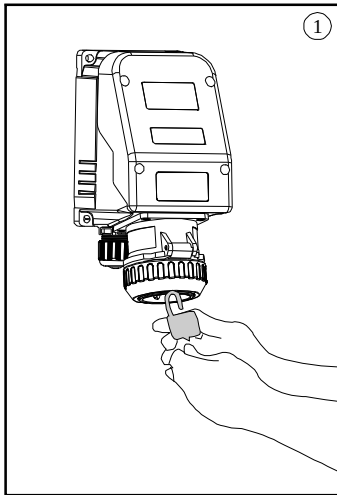
Taking into operation

before taking into operation test if its function is in accordance with the requirement and installation rules.

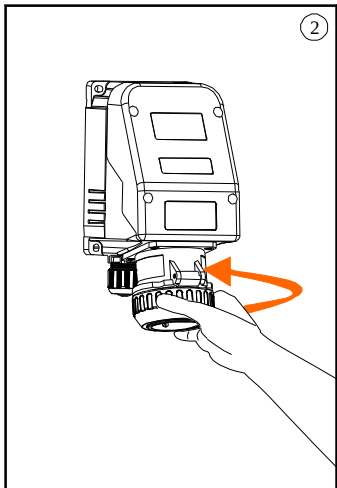
- Check the plug for any damages before putting it in the socket.
- The voltage of socket shall be checked if it is in accordance with the voltage of the plug of electric appliance equipment
- Check if the earthing is well connected before use.

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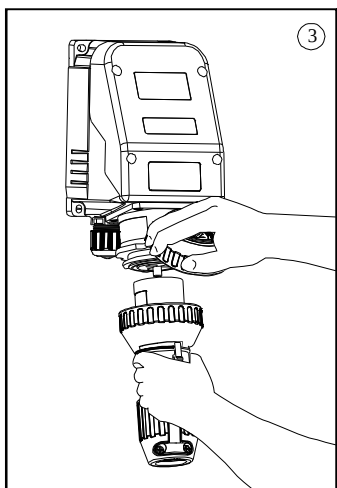
Use of plug and socket type Z0251 and Z0252



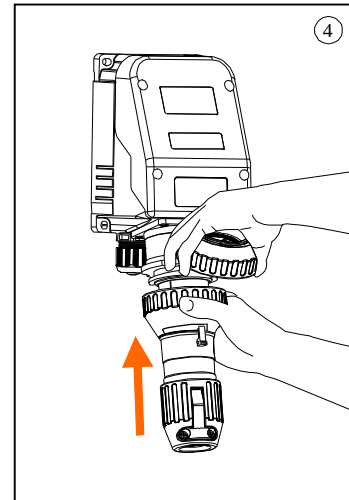
◀ The protective cover of the socket may be secured with a padlock.



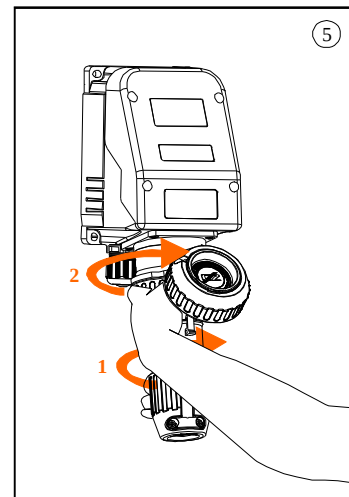
◀ The protective cover ensures IP66 protection. Turn the cover anti clock wise, so the cover can be opened and the plug can be inserted.



◀ The plug must be in line with the socket.



▲ Plug must be fully inserted.



- ▲ 1. First the plug must be turned clockwise until a clicking sound is heard. This means the power is connected and the plug cannot be removed from the socket.
2. After this, turn the ring on the top of the plug clockwise to obtain IP66 protection and lock the plug together with the socket.

Spare parts / Accessparts

- Use only original spare parts as well as original accessories made by INDEX ELEKTRO BV.

Repairs / Maintenance

- Observe the relevant national regulations for your country!
- Only parts from our company that can be used to replace or maintain, and the operation should be carried out by professional electrician!
- The following points must be checked during maintenance:
 - * Compliance with permitted temperatures;
 - * Check if the product has been fixed reliably.
 - * Check the wiring.

Recycling / Disposal

- The respective valid national regulations for waste disposal shall be observed when disposing of apparatus!
- We are pleased to answer any questions. In this case you can contact INDEX ELEKTRO BV.