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### Descriptions :

The full plastic explosion-proof plug and sockets can be used in the explosive gas atmospheres where the locations of local power supply control and electrical installation and mobile machinery place often need to be moved and transformed.

The flexible shutter spring that has a lot of contact surface can guarantee the small contact resistance and low temperature rise meanwhile the force of inserting in and pulling out can be reduced minimally which ensure the normal functions and permanent self-cleaning effect of the plug and socket device is designed at the joint of insert sleeve in the socket of the plug and socket device due to the contact resistance between the plug and socket is changed greatly and the electrical transport properties can be effected directly when the plug and socket device is affected by the surrounding environment (such as temperature, dust, corrosion, etc.). The exclusive interlock device is equipped with the plug and socket device. The switch is not turned on if it is not rotated and the plug can not be pulled out when the switch is turned on after the plug is inserted into the socket, which the non-live action is realized.

The protective covers are equipped on both plug and socket, which ensure the reliability of the protective degree.

Therefore, the plug and socket device can be used under the extreme conditions.

- IECEx, ATEX International certification.
- Self-cleaning inserting sleeve, low transmission resistance.
- Protective covers ensure high degree of protection.
- Small force of inserting and pulling.

Zone 1 and zone 2    Zone 21 and zone 22



• Product confluence:



CZ0552 Full plastic explosion-proof mobile power branch connection socket box



CZ0551 Explosion-proof combined power socket boxes



CZ0551 Full plastic Explosion-proof combined power socket boxes



- CZ0251-16A/2P, 3P, 4P, 5P  
Plug, Wall type socket, Coupler type socket, Panel type socket
- CZ0252-32A/4P, 5P  
Plug, Wall type socket, Coupler type socket, Panel type socket
- CZ0253-63A/4P, 5P  
Plug, Wall type socket
- CZ0254-125A/4P, 5P  
Plug, Wall type socket



CZ0555/8 Explosion-proof plug with transformer



CZ0555/7 Explosion-proof socket with transformer



CZ0551 Explosion-proof combined power socket boxes

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## • Diagram:



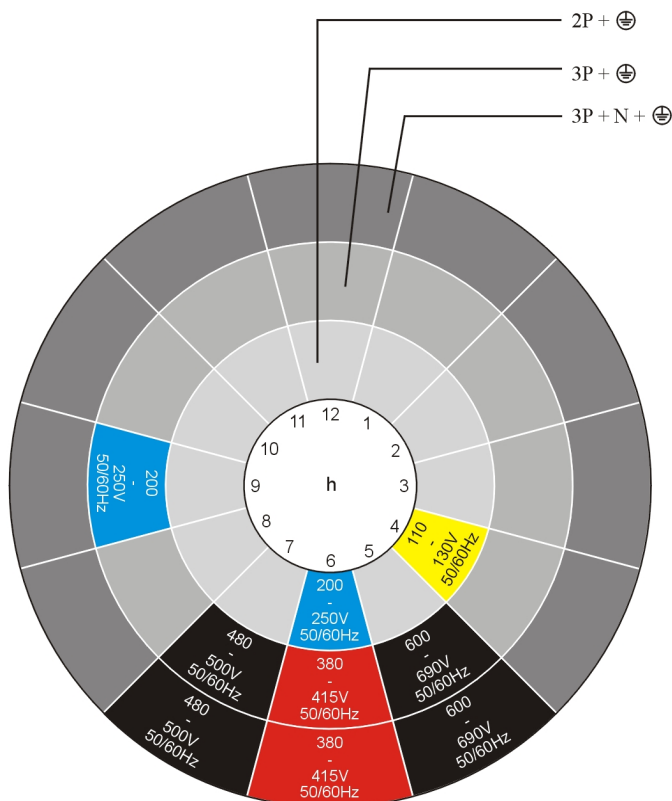
Explosion-proof plugs and sockets have the feature of self-cleaning. An elastic shutter type spring casing is mounted in the inserting sleeve of the socket, which ensure low contact resistance and low temperature rise while reducing the force of inserting and pulling.

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Inserting sleeve

Shutter type spring casing

## • Clock position and colour of explosion-proof plugs and sockets:

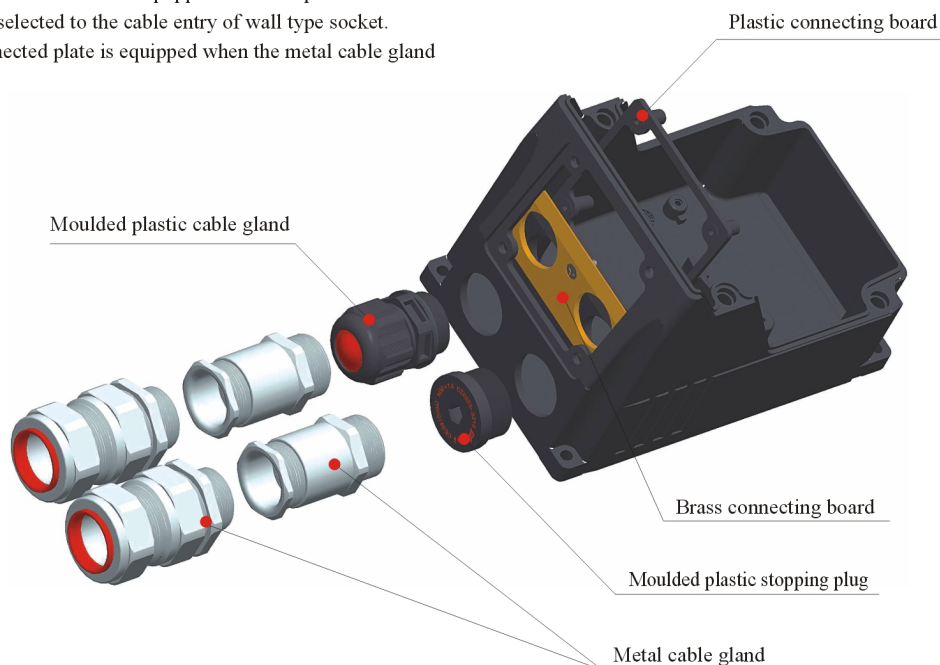


Sockets and plugs for industry are designed to conform to the international standard IEC60309, CEE publication, "Standard Requirements of sockets and plugs for industry" and GB/T11918-2001 "Couplers of plugs and sockets for Industry" part 1: General Requirements.

When selecting plugs and sockets in the present range of standard for manufacturing, the circular socket and plug should be selected of clock and colour mis-inserting proof according to different voltage, current and number of pole.

## • Diagram:

The plastic connected board is equipped when the plastic moulded cable gland is selected to the cable entry of wall type socket.  
The brass connected plate is equipped when the metal cable gland is selected.



## • The mutual exchange of explosion-proof and weather-proof plug and socket is as following

Explosion-proof socket

Weather-proof socket



It can be inserted



It can't be inserted

Note: The explosion-proof plug can be inserted into the weather-proof socket but the weather-proof plug can't be inserted into the explosion-proof socket to use.

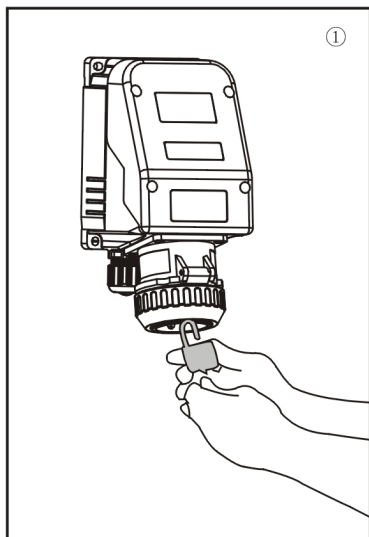


Explosion-proof plug

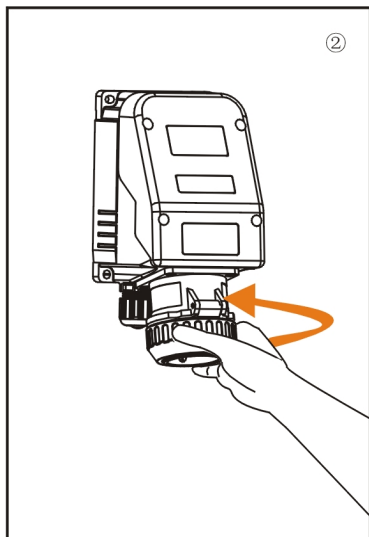
Weather-proof plug



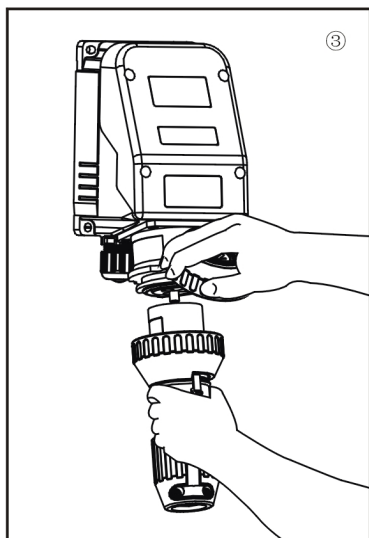
## • CZ0251、CZ0252 Operation:



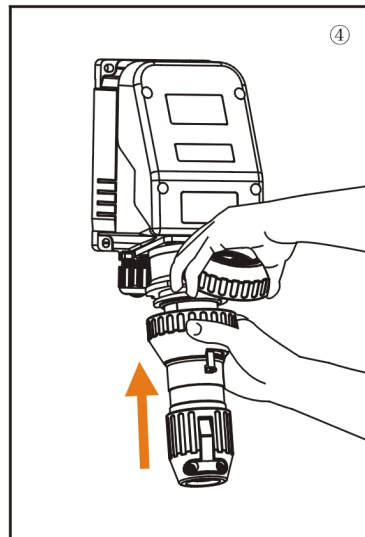
◀ The protective cover of the explosion-proof wall type sockets are fitted with openings for padlocks.



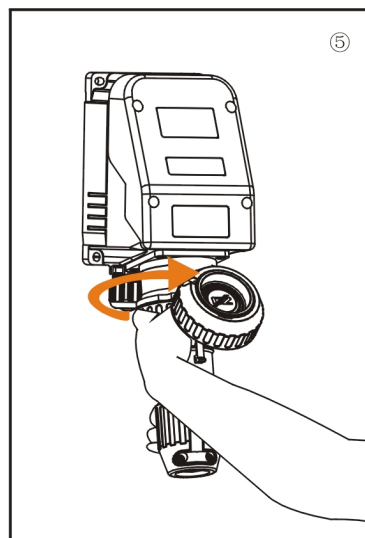
◀ Wall type sockets are fitted with protective covers which secure degree of protection IP66. When using it, turn round the cover according to arrow, and the cover will be opened, then the plug can be inserted.



◀ The pins of the plugs are opposite to the sockets.

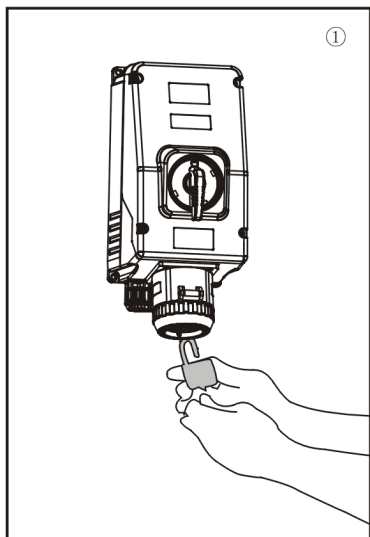


▲ Plugs insert wall type sockets completely.

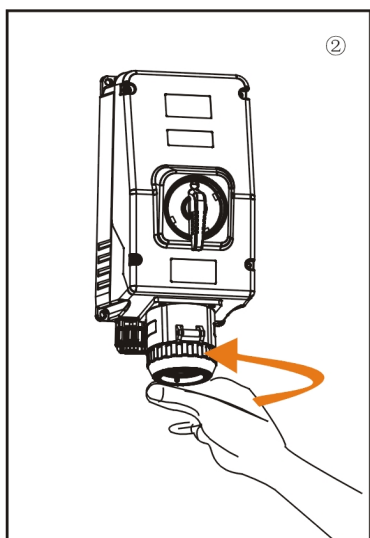


▲ Turn right the plugs, when hearing the sound of "kaca", while the power is connected. In this case, it's impossible to pull out the plug from the socket. Last revolve the plug and lock it on the socket to comply with the requirement of IP66.

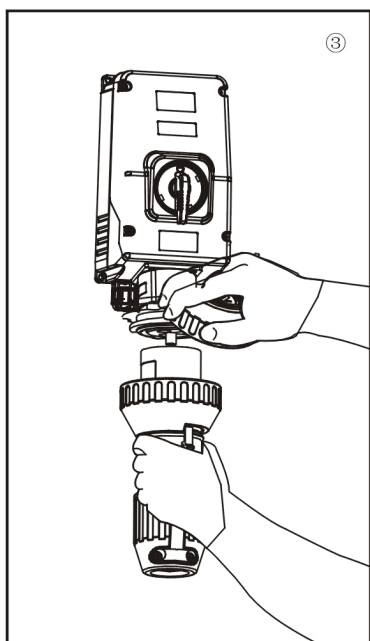
## • CZ0253、CZ0254 Operation:



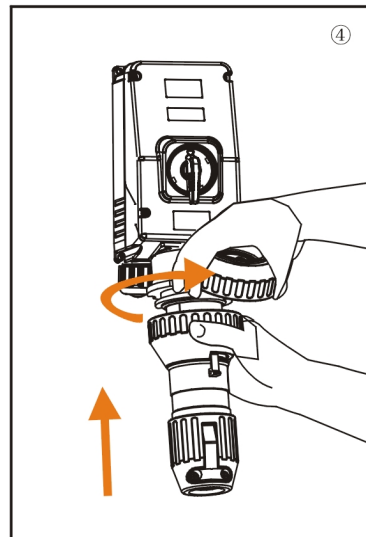
◀ The protective cover of the explosion-proof wall type sockets are fitted with openings for padlocks.



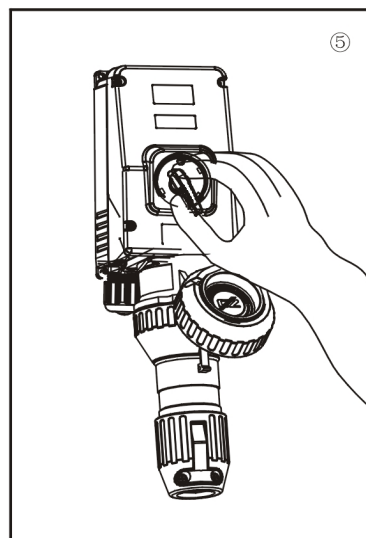
◀ Wall type sockets are fitted with protective covers which secure degree of protection IP66. When using it, turn round the cover according to arrow, and the cover will be opened, then the plug can be inserted.



◀ The pins of the plugs are opposite to the sockets.



▲ Plugs insert wall type sockets completely, revolve the plug and lock it on the socket to comply with the requirement of IP66.



▲ Turn right the plugs, when hearing the sound of "kaca", while the power is connected. In this case, it's impossible to pull out the plug from the socket. Last revolve the plug and lock it on the socket to comply with the requirement of IP66.



Refuses to circumgyrate the switch handle, when the plug is not insert in the socket.



## CZ0251 Full plastic Explosion-proof plugs and sockets

### • Main technical data:

Certification | Ex mark | Meet the standard

China (PCEC Ex)	Ex ed II C T6 DIP A21 TA, T6	GB3836 GB12476
IECEX	Under approval	IEC60079
ATEX	Under approval	EN60079

Intended use: Can be used in zone 1 and zone 2, Can be used in zone 21 and zone 22

Ambient temperature use:  $-40^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$

Degree of protection: IP66

Rated voltage: up to 50V

Rated current: maximum 16A

Switch capacity: AC3 16A DC-21A 16A

Cable entry: Wall type socket ( Standard configure )  $1 \times \text{M25 } \Phi 8 \sim 17\text{mm}$






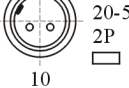
See page C/10 for other forms

Plug: Cable outside diameter  $\Phi 8 \sim 18.5\text{mm}$

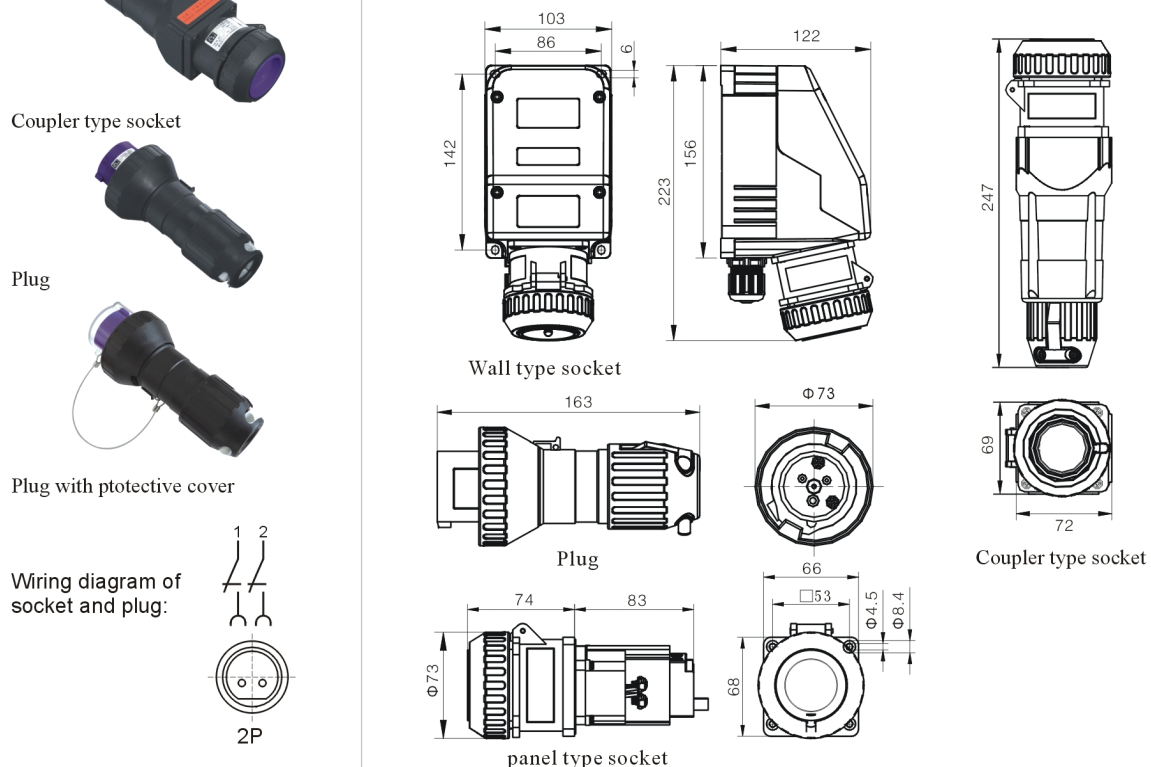
Coupler type: Cable outside diameter  $\Phi 8 \sim 18.5\text{mm}$

### • Order specifications:

16A-2 Poles

Illustration	Clock h and voltage	Frequency	Type	Weight	Order No.
		50/60Hz	Wall type socket	1.2kg	<b>CZ0251 4200 0001</b>
			Panel type socket	0.4kg	<b>CZ0251 8200 0001</b>
			Coupler type	0.7kg	<b>CZ0251 3200 0001</b>
			Plug	0.35kg	<b>CZ0251 7200 0001</b>
			Plug with ptective cover	0.37kg	<b>CZ0251 7200 8034</b>
		50/60Hz	Wall type socket	1.2kg	<b>CZ0251 4212 0001</b>
			Panel type socket	0.4kg	<b>CZ0251 8212 0001</b>
			Coupler type	0.7kg	<b>CZ0251 3212 0001</b>
			Plug	0.35kg	<b>CZ0251 7212 0001</b>
			Plug with ptective cover	0.37kg	<b>CZ0251 7212 8034</b>
		DC	Wall type socket	1.2kg	<b>CZ0251 4210 0001</b>
			Panel type socket	0.4kg	<b>CZ0251 8210 0001</b>
			Coupler type	0.7kg	<b>CZ0251 3210 0001</b>
			Plug	0.35kg	<b>CZ0251 7210 0001</b>
			Plug with ptective cover	0.37kg	<b>CZ0251 7210 8034</b>

### • Outline dimensions:



• Accessories: For plastic mounting board and rain-proof guard see page C/19.



## • Main technical data:

**Certification** | **Ex mark** | **Meet the standard**

<b>China (PCEC Ex)</b>	Ex de II C T5/T6 Gb ( Wall type socket, plug, coupler type socket ) Ex de II C Gb ( Panel type socket )	GB3836 GB12476
<b>IECEX</b>	Ex de II C T5/T6 Gb Ex tD A21 T 95°C/80°C Ta ≤ 55°C/45°C ( Wall type socket, plug, coupler type socket ) Ex de II C Gb Ex tD A21 ( Panel type socket )	IEC60079
<b>ATEX</b>	Ex II 2GD Ex de II C T5/T6 Gb Ex tD A21 T 95°C/80°C Ta ≤ 55°C/45°C ( Wall type socket, plug, coupler type socket ) Ex II 2GD Ex de II C Gb Ex tD A21 ( Panel type socket )	EN60079

Intended use: Can be used in zone 1 and zone 2, Can be used in zone 21 and zone 22

Ambient temperature use: -40°C ≤ Ta ≤ 55°C

Degree of protection: IP66

Frequency: 50/60Hz

Rated voltage: Up to 250V ~

Rated current: maximum 16A

Switch capacity: AC3 up to 250V/16A

Conformity to: **CE**

Cable entry: Wall type socket (Standard configure) 1 × M25 Φ8 ~ 17mm


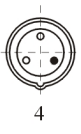


See page C/10 for other forms

Plug: Cable outside diameter Φ5 ~ 18.5mm

Coupler type socket: Cable outside diameter Φ5 ~ 18.5mm

## • Order specifications:

16A-3 Poles

Illustration	Clock h and voltage	Type	Weight	Order No.
	 110-130V 1P + N + PE 2P + PE	Wall type socket	1.2kg	<b>CZ0251 4304 0001</b>
		Panel type socket	0.4kg	<b>CZ0251 8304 0001</b>
		Coupler type socket	0.7kg	<b>CZ0251 3304 0001</b>
		Plug	0.35kg	<b>CZ0251 7304 0001</b>
		Plug with ptective cover	0.37kg	<b>CZ0251 7304 8034</b>
	 200-250V 1P + N + PE 2P + PE	Wall type socket	1.2kg	<b>CZ0251 4306 0001</b>
		Panel type socket	0.4kg	<b>CZ0251 8306 0001</b>
		Coupler type socket	0.7kg	<b>CZ0251 3306 0001</b>
		Plug	0.35kg	<b>CZ0251 7306 0001</b>
		Plug with ptective cover	0.37kg	<b>CZ0251 7306 8034</b>

Wall type socket

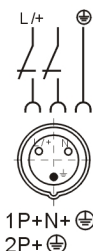
Panel type socket

Coupler type socket

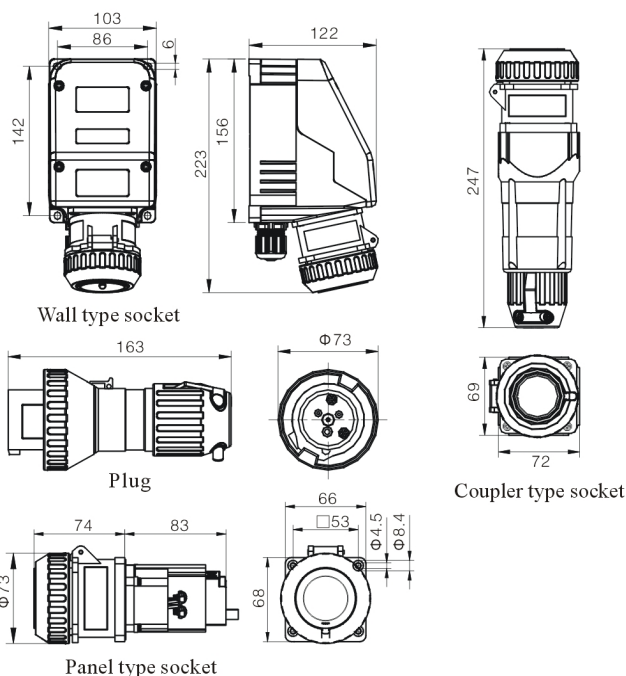
Plug

Plug with ptective cover

Wiring diagram of socket and plug:



## • Outline dimensions:



## • Accessories: For plastic mounting board and rain-proof guard see page C/19.