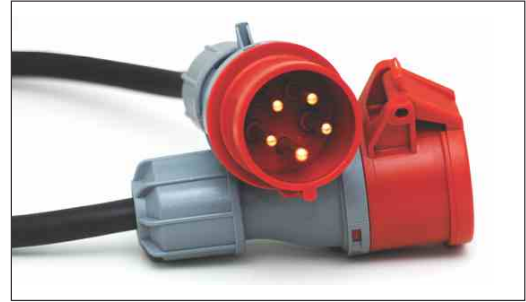


# INDUSTRIAL PLUGS & SOCKETS (CEE CONNECTORS)



Industrial Plugs and Sockets from Controlwell provide a versatile and robust connection system for industrial field and factory connection applications. These Plugs and Sockets are designed and manufactured as per IEC 60309-1 and IEC 60309-2 standards and are compliant with the CEE system ensuring that they are 100% cross compatible with products from other manufacturers.

Controlwell Industrial Plugs & Sockets (CEE Connectors) confirm to European norms. These Industrial Plugs & Sockets are CE marked and are RoHS compliant.

The housings of these Industrial Plugs and Sockets are made of halogen free, V0 grade Polyamide 6 material and hence are non-flammable with a very high impact resistance.

The contacts are made from electroplated copper alloy offering high corrosion resistance and very low contact resistance (<1mΩ). By virtue of their design these Industrial Plugs and Sockets enable low insertion and extraction forces while maintaining excellent electrical contact.

These Plugs & Sockets are available in a choice of IP 44 & IP 67 class of Protection ensuring that your connections always get the optimum level of protection.

They are available in 3, 4 & 5 pin configurations with rated current capacity of upto 125 A.

## Position of Earthing Contact and colour coding in CEE system

Connectwell Industrial Plugs & Sockets adhere to the CEE system in which the position of the earthing contact is determined by an 'hour position' based on the number of pins and the voltage rating of the product. Examples of such an 'hour position' are shown in fig. 1.

**Red colour** indicates a voltage range of **380 to 480 volts**.

**Blue colour** indicates a voltage range of **200 to 250 volts**.

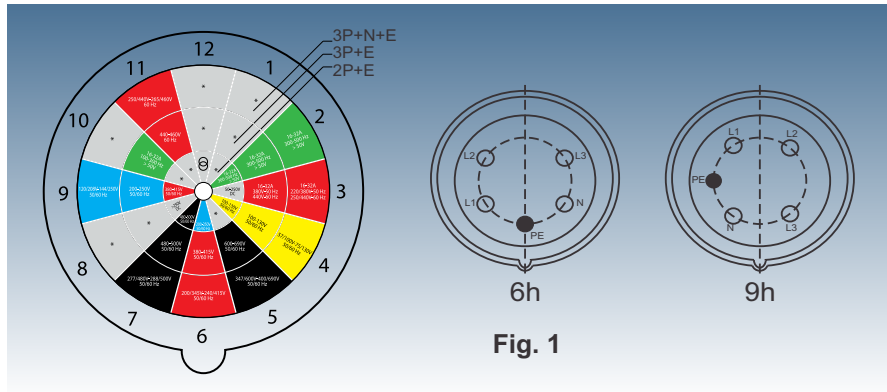


Fig. 1

## Product Specifications

### Housing & Contact Carrier

Material	Halogen Free Polyamide 6 Plastic Material
Insulation	>5 <sup>10</sup> Ω
Flammability Grade	V0
Environmental Compliance	RoHS
Ingress Protection	IP44 and IP67
Glow wire tested at 850° C	

### Contacts

Material	Copper Zinc Alloy (MS 58)	
Contact Resistance	< 1mΩ	
Connection Type	Screw Connection	
Suitable Wire Cross Section	Stranded	Solid
16 A	4 mm <sup>2</sup>	6 mm <sup>2</sup>
32 A	6 mm <sup>2</sup>	10 mm <sup>2</sup>
63 A	16 mm <sup>2</sup>	25 mm <sup>2</sup>
125 A	50 mm <sup>2</sup>	70 mm <sup>2</sup>

### Product Features

Connectwell Industrial Plugs & Sockets are carefully designed to ensure superb ergonomics, ease of assembly and superior performance.

The screwless locking system of Connectwell Industrial Plugs & Sockets provides a 1 -2 -3 step locking and unlocking of the contact carrier from the housing.



1

The locking system is easily released by inserting screwdriver and turning it counter clockwise.



2

The contact carrier is separated from the main housing by simply turning it counter clockwise.

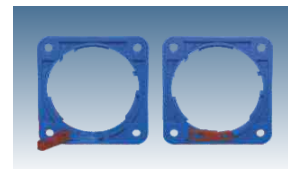


3

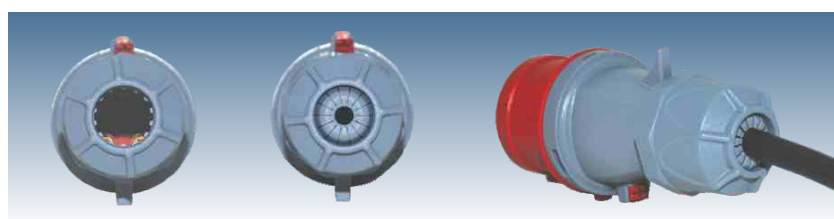
After cable connection, contact carrier is placed according to the position indicator, sealed by turning clockwise and locked by turning the locking system clockwise with a screwdriver.



The contact carriers are provided with captive screws ensuring that the screws do not fall off when they are loosened.



The unique locking system on the base plates provides an easy and secure connection to the contact carrier.



The inbuilt cable gland system ensures that cables various sizes can be easily accommodated while providing superior strain relief to the contacts.

### FEMALE CONNECTORS

These connectors act as floating female connectors and can be mated with either male plugs or male inlets. Controlwell connectors offer a wide internal space for terminating wires into contacts. The female connector housing is provided with a cable gland to sustain the IP protection grade after insertion of cable.



#### FEMALE CONNECTORS

		3 PIN			4 PIN				5 PIN			
IP 67	Cat. No.	CS3166	CS3326	CS3636	CS4166	CS4326	CS4636	CS41256	CS5166	CS5326	CS5636	CS51256
	Current Rating (A)	16	32	63	16	32	63	125	16	32	63	125
	Voltage (V)	230	230	230	400	400	400	400	400	400	400	400
IP 44	Cat. No.	CS3164	CS3324	CS3634	CS4164	CS4324	CS4634	-	CS5164	CS5324	CS5634	-
	Current Rating (A)	16	32	63	16	32	63	-	16	32	63	-
	Voltage (V)	230	230	230	400	400	400	-	400	400	400	-

### PLUGS

These plugs act as floating male connectors and can be mated with either female connectors or female socket outlets. Connectwell Plugs offer a wide internal space for terminating wires into contacts. The male plug housing is provided with a cable gland to sustain the IP protection grade after insertion of cable.



#### PLUGS

		3 PIN			4 PIN				5 PIN			
IP 67	Cat. No.	CP3166	CP3326	CP3636	CP4166	CP4326	CP4636	CP41256	CP5166	CP5326	CP5636	CP51256
	Current Rating (A)	16	32	63	16	32	63	125	16	32	63	125
	Voltage (V)	230	230	230	400	400	400	400	400	400	400	400Cat.
IP 44	No.	CP3164	CP3324	CP3634	CP4164	CP4324	CP4634	-	CP5164	CP5324	CP5634	-
	Current Rating (A)	16	32	63	16	32	63	-	16	32	63	-
	Voltage (V)	230	230	230	400	400	400	-	400	400	400	-



**PANEL MOUNTING STRAIGHT SOCKETS**

These sockets act as fixed female connectors and can be mated with male plugs. Connectwell straight sockets are suitable for mounting onto panels which have a 'recess' behind them. The straight sockets ensure that on mating the plugs remain perpendicular to the panel surface.

PANEL MOUNTING STRAIGHT SOCKETS												
		3 PIN			4 PIN				5 PIN			
IP 67	Cat. No.	CPSS	CPSS	CPSS	CPSS	CPSS	CPSS	CPSS	CPSS	CPSS	CPSS	CPSS
		31667	33267	36368	41667	43267	46368	412568	51667	53268	56368	512568
	Current Rating (A)	16	32	63	16	32	63	125	16	32	63	125
	Voltage (V)	230	230	230	400	400	400	400	400	400	400	400
IP 44	Cat. No.	CPSS	CPSS	CPSS	CPSS	CPSS	CPSS	-	CPSS	CPSS	CPSS	-
		31647	33247	36347	41647	43247	46347	-	51647	53248	56348	-
	Current Rating (A)	16	32	63	16	32	63	-	16	32	63	-
	Voltage (V)	230	230	230	400	400	400	-	400	400	400	-



**PANEL MOUNTING INCLINED SOCKETS**

These sockets act as fixed female connectors and can be mated with male plugs. Connectwell inclined sockets are suitable for mounting onto panels which have a 'recess' behind them. The inclined sockets ensure that on mating the plugs remain at an angle to the panel surface thereby reducing the total space required for installation.

PANEL MOUNTING INCLINED SOCKETS												
		3 PIN			4 PIN				5 PIN			
IP 67	Cat. No.	CPSA	CPSA	CPSA	CPSA	CPSA	CPSA	CPSA	CPSA	CPSA	CPSA	CPSA
		31668	33268	36368	41668	43268	46368	412568	51668	53268	56368	512568
	Current Rating (A)	16	32	63	16	32	63	125	16	32	63	125
	Voltage (V)	230	230	230	400	400	400	400	400	400	400	400Cat.
IP 44	No.	CPSA	CPSA	CPSA	CPSA	CPSA	CPSA	-	CPSA	CPSA	CPSA	-
		31648	33248	36348	41648	43248	46348	-	51648	53248	56348	-
	Current Rating (A)	16	32	63	16	32	63	-	16	32	63	-
	Voltage (V)	230	230	230	400	400	400	-	400	400	400	-



**SURFACE MOUNTING SOCKETS**

These sockets act as fixed female connectors and can be mated with male plugs. Connectwell surface mounting sockets are suitable for mounting onto surfaces which do not have a 'recess' behind them. The surface mounting sockets ensure that on mating the plugs remain at an angle to the surface thereby reducing the total space required for installation. The surface mount housing is provided with a nipple to sustain the IP protection grade after insertion of cable.

SURFACE MOUNTING SOCKETS												
		3 PIN			4 PIN				5 PIN			
IP 67	Cat. No.	CSS	CSS	CSS	CSS	CSS	CSS	CSS	CSS	CSS	CSS	CSS
		31667	33267	36368	41667	43267	46368	412568	51667	53268	56368	512568
	Current Rating (A)	16	32	63	16	32	63	125	16	32	63	125
	Voltage (V)	230	230	230	400	400	400	400	400	400	400	400
IP 44	Cat. No.	CSS	CSS	CSS	CSS	CSS	CSS	-	CSS	CSS	CSS	-
		31647	33247	36347	41647	43247	46347	-	51647	53248	56348	-
	Current Rating (A)	16	32	63	16	32	63	-	16	32	63	-
	Voltage (V)	230	230	230	400	400	400	-	400	400	400	-

### PANEL MOUNTING STRAIGHT INLET

These inlets act as fixed male connectors and can be mated with female connectors. Connectwell straight inlets are suitable for mounting onto panels which have a 'recess' behind them. The straight inlets ensure that on mating the plugs remain perpendicular to the panel surface.



### PANEL MOUNTING STRAIGHT INLET

		3 PIN			4 PIN				5 PIN			
IP 67	Cat. No.	CPIS	CPIS	CPIS	CPIS	CPIS	CPIS	CPIS	CPIS	CPIS	CPIS	CPIS
		31667	33268	36368	41667	43268	46368	412568	51668	53268	56368	512568
	Current Rating (A)	16	32	63	16	32	63	125	16	32	63	125
	Voltage (V)	230	230	230	400	400	400	400	400	400	400	400
IP 44	Cat. No.	CPIS	CPIS	CPIS	CPIS	CPIS	CPIS	-	CPIS	CPIS	CPIS	-
		31647	33247	36347	41647	43247	46347	-	51647	53248	56348	-
	Current Rating (A)	16	32	63	16	32	63	-	16	32	63	-
	Voltage (V)	230	230	230	400	400	400	-	400	400	400	-

### PANEL MOUNTING INCLINED INLET

These inlets act as fixed male connectors and can be mated with female connectors. Connectwell inclined inlets are suitable for mounting onto panels which have a 'recess' behind them. The inclined inlets ensure that on mating the plugs remain at an angle to the panel surface thereby reducing the total space required for installation.



### PANEL MOUNTING INCLINED INLET

		3 PIN			4 PIN				5 PIN			
IP 67	Cat. No.	CPIA	CPIA	CPIA	CPIA	CPIA	CPIA	CPIA	CPIA	CPIA	CPIA	CPIA
		31668	33268	36368	41668	43268	46368	412568	51668	53268	56368	512568
	Current Rating (A)	16	32	63	16	32	63	125	16	32	63	125
	Voltage (V)	230	230	230	400	400	400	400	400	400	400	400
IP 44	Cat. No.	CPIA	CPIA	CPIA	CPIA	CPIA	CPIA	-	CPIA	CPIA	CPIA	-
		31648	33248	36348	41648	43248	46348	-	51648	53248	56348	-
	Current Rating (A)	16	32	63	16	32	63	-	16	32	63	-
	Voltage (V)	230	230	230	400	400	400	-	400	400	400	-

### SURFACE MOUNTING INLET

These inlets act as fixed male connectors and can be mated with female connectors. Connectwell surface mounting inlets are suitable for mounting onto surfaces which do not have a 'recess' behind them. The surface mounting inlets ensure that on mating the connectors remain at an angle to the surface thereby reducing the total space required for installation. The surface mount housing is provided with a nipple to sustain the IP protection grade after insertion of cable.



### SURFACE MOUNTING INLET

		3 PIN			4 PIN				5 PIN			
IP 67	Cat. No.	CSI	CSI	CSI	CSI	CSI	CSI	CSI	CSI	CSI	CSI	CSI
		31667	33268	36368	41667	43268	46368	412568	51668	53268	56368	512568
	Current Rating (A)	16	32	63	16	32	63	125	16	32	63	125
	Voltage (V)	230	230	230	400	400	400	400	400	400	400	400
IP 44	Cat. No.	CSI	CSI	CSI	CSI	CSI	CSI	-	CSI	CSI	CSI	-
		31647	33247	36348	41647	43247	46348	-	51647	53248	56348	-
	Current Rating (A)	16	32	63	16	32	63	-	16	32	63	-
	Voltage (V)	230	230	230	400	400	400	-	400	400	400	-