

## KUPO CEE form Connector

CEE form (IEC 60309) industrial plugs and sockets, formerly known as “CEE 17”, are standardized, heavy-duty connectors engineered for reliable power distribution across harsh and varied environments. KUPO’s range covers 16–125 A and 110–400 V with keyed clock positions for correct mating, and is offered in IP44 splash-proof and IP67 watertight versions with CE marking for regulatory compliance.

Optimized for mainstream industrial use, these connectors serve manufacturing lines, construction sites and temporary power, generator and rental fleets, shipyards/shore power, utilities and water treatment, HVAC and pump systems, logistics hubs, and agricultural equipment. The B&B variant (blue lid /black body) provides clear 230–250 V visual identification while the low-glare black housing hides dirt and wear, ideal for heavy-duty installations.

### Technical Information

Amperage Rating	16-125 A	Contact Material	Nickel-Coated Brass (RoHS Certified)
Voltage Rating	110-400 V	No. of Pole	2P+E(3P), 3P+E(4P), 3P+N+E(5P)
IP Rating	IP44 / IP67	Base Compound	PA6(RoHS Certified)
Standard	IEC60309-1, IEC-60309-2 Compliance		

### IP67 - Watertight

#### Reliable Watertight Performance

A molded-in-place cover gasket preserves a long-lasting seal in demanding conditions.

#### Enhanced Safety with Earth Contact Design

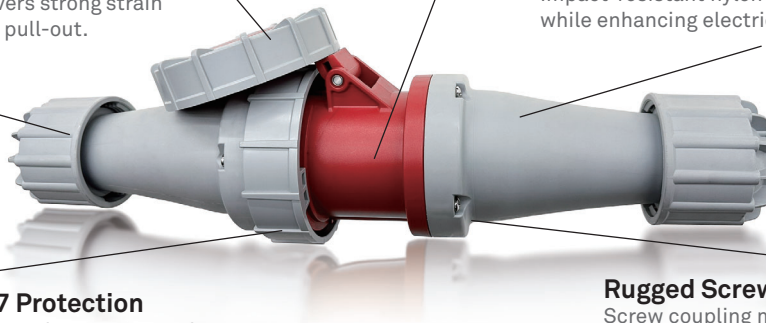
Protective earth engages first and releases last to safeguard every mating cycle.

#### Secure Cable Retention

A heavy-duty cable grip delivers strong strain relief and resists accidental pull-out.

#### High-Strength, Non-Conductive Housing

Impact-resistant nylon construction boosts durability while enhancing electrical safety.



#### Sealed Grip with IP67 Protection

A turreted grip with an integral neoprene gasket provides dust-tight, watertight IP67 sealing.

#### Rugged Screw-Type Fitting

Screw coupling maximizes mechanical strength for stable performance in harsh use.

### IP44 - Splashproof

#### Enhanced Safety with Earth Contact Design

Protective earth engages first and releases last to safeguard every mating cycle.

#### Anti-Loosening Fin Structure

Fin-shaped housing resists loosening during mating, improving connection reliability.

#### Secure Cable Retention

Heavy-duty grip provides strong strain relief and prevents cable pull-out.



#### Quick-Lock Housing with Tool-Free Operation

Bayonet twist-lock enables tool-free open/close for faster installation.

#### High-Strength, Non-Conductive Housing

Impact-resistant nylon construction boosts durability while enhancing electrical safety.



### IP44 Watertight

- A practical and reliable solution for indoor and light-duty environments, the IP44 series provides splash-proof protection and versatile performance.
- Rated to IP44, offering resistance against splashing water and solid contaminants.
- Ideal for heavy commercial applications and light industrial use, where moderate protection is sufficient.
- Available in 16A and 32A versions, meeting the needs of various equipment and power distribution setups.

Amper	Poles	Wire	Clock position	Voltage/ Color coding	Plug (Inline Male)	Connector (Inline Female)	Inlet (Panel Male)	Receptacle (Panel Female)	IP Rating
16	3	2P+E	4h	110V	KHTN013-4	KHTN213-4	KHTN613-4	KHTN413-4	IP44
16	3	2P+E	6h	230V	KHTN013	KHTN213	KHTN613	KHTN413	IP44
16	4	3P+E	9h	230V	KHTN014-9	KHTN214-9	KHTN614-9	KHTN414-9	IP44
16	4	3P+E	6h	400V	KHTN014	KHTN214	KHTN614	KHTN414	IP44
16	5	3P+N+E	6h	400V	KHTN015	KHTN215	KHTN615	KHTN415	IP44
32	3	2P+E	4h	110V	KHTN023-4	KHTN223-4	KHTN623-4	KHTN423-4	IP44
32	3	2P+E	6h	230V	KHTN023	KHTN223	KHTN623	KHTN423	IP44
32	4	3P+E	9h	230V	KHTN024-9	KHTN224-9	KHTN624-9	KHTN424-9	IP44
32	4	3P+E	6h	400V	KHTN024	KHTN224	KHTN624	KHTN424	IP44
32	5	3P+N+E	6h	400V	KHTN025	KHTN225	KHTN625	KHTN425	IP44

### Reference Standard

#### EC 60309-1

Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes - Part 1: General requirements

#### IEC 60309-2

Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes - Part 2: Dimensional compatibility requirements for pin and contact-tube accessories



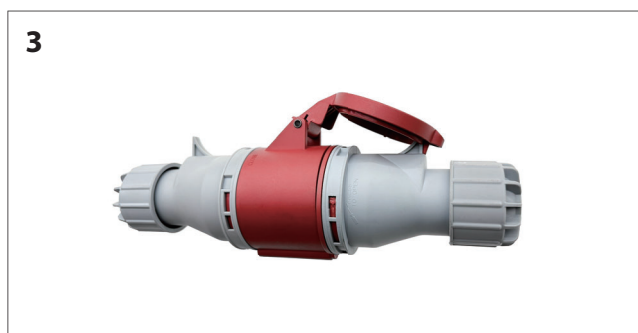
#### Tool-Free & Quick-Lock Housing

Use a tool such as a screwdriver to press the latch inward, then twist the front housing to open.



#### Easy Wiring and Secure Connections

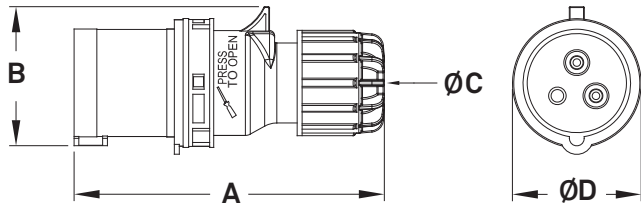
All terminal screws face the same direction for faster installation. Using wire ferrules on bare copper ensures maximum contact, stronger pull resistance, and safer connections.



#### Anti-Loosening Fin Structure

The fin-shaped housing design keeps the connector cover securely locked after mating, preventing loosening and ensuring a stable connection.

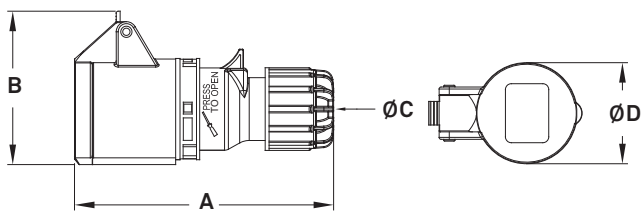
### IP44 Plug (Male)



- Housing Material: PA6
- Contacts: Nickel-Coated Brass
- IP44 Splash-proof
- Equipped with screw terminals

Poles	16A			32A		
	3	4	5	3	4	5
A [mm]	120	125	133	150	150	155
B [mm]	57	68	76	81	81	90
C [mm]	12	12	15	17	17	17
D [mm]	54	61	68	72	72	80
Wire flexible [mmsq]	1-2.5	1-2.5	1-2.5	2.5-6	2.5-6	2.5-6
Weight [g]	111	137	158	112	205	240

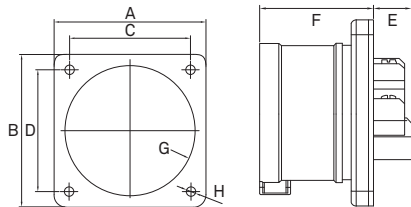
### IP44 Connector (Female)



- Housing Material: PA6
- Contacts: Nickel-Coated Brass
- IP44 Splash-proof
- Equipped with screw terminals

Poles	16A			32A		
	3	4	5	3	4	5
A [mm]	130	135	142	162	162	155
B [mm]	76	83	90	94	94	100
C [mm]	12	12	15	17	17	17
D [mm]	52	58	63	65	65	71
Wire flexible [mmsq]	1-2.5	1-2.5	1-2.5	2.5-6	2.5-6	2.5-6
Weight [g]	149	177	200	245	262	305

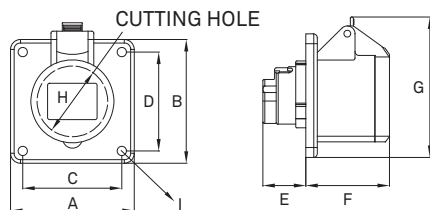
### IP44 Inlet (Panel Male)



- Housing Material: PA6
- Contacts: Nickel-Coated Brass
- IP44 Splash-proof
- Equipped with screw terminals

Poles	16A			32A		
	3	4	5	3	4	5
A/B [mm]	75	75	75	75	75	75
C/D [mm]	60	60	60	60	60	60
E [mm]	17	17	17	17	17	17
F [mm]	46	46	46	55	55	55
G [mm]	64	64	64	64	64	64
H [mm]	4.5	4.5	4.5	4.5	4.5	4.5
Wire flexible [mmsq]	1.5-4	1.5-4	1.5-4	2.5-10	2.5-10	2.5-10
Weight [g]	96	111	130	135	150	183

### IP44 Receptacle (Panel Female)



- Housing Material: PA6
- Contacts: Nickel-Coated Brass
- IP44 Splash-proof
- Equipped with screw terminals

Poles	16A			32A		
	3	4	5	3	4	5
A/B [mm]	62	75	75	75	75	75
C/D [mm]	47	60	60	60	60	60
E [mm]	26	27	27	30	30	30
F [mm]	52	52	52	63	52	63
G [mm]	85	87	91	64	64	64
H [mm]	43	50	56	93	87	100
I [mm]	4.5	4.5	4.5	4.5	4.5	4.5
Wire flexible [mmsq]	1.5-4	1.5-4	1.5-4	2.5-10	2.5-10	2.5-10
Weight [g]	123	148	168	188	210	242

### IP67 Watertight Series



- Engineered for maximum reliability in harsh environments, the IP67 series combines watertight construction with rugged durability.
- Certified to IP67 protection standards, ensuring complete resistance against dust and temporary immersion in water.
- High-strength thermoplastic housings withstand impact, mechanical stress, and corrosion, making them suitable for demanding applications.
- Advanced strain relief and sealing system guarantees superior cable retention and watertight conductor termination.
- Designed for outdoor, marine, and wash-down environments, where moisture and contaminants are a constant challenge.

Amper	Poles	Wire	Clock position	Voltage/ Color coding	Plug (Inline Male)	Connector (Inline Female)	Inlet (Panel Male)	Receptacle (Panel Female)	IP Rating
63	3	2P+E	4h	110V	KHTN0331-4	KHTN2331-4	KHTN6331-4	KHTN4331-4	IP67
63	3	2P+E	6h	230V	KHTN0331	KHTN2331	KHTN6331	KHTN4331	IP67
63	3	2P+E	9h	400V	KHTN0331-9	KHTN2331-9	KHTN6331-9	KHTN4331-9	IP67
63	4	3P+E	4h	110V	KHTN0341-4	KHTN2341-4	KHTN6341-4	KHTN4341-4	IP67
63	4	3P+E	9h	230V	KHTN0341-9	KHTN2341-9	KHTN6341-9	KHTN4341-9	IP67
63	4	3P+E	6h	400V	KHTN0341	KHTN2341	KHTN6341	KHTN4341	IP67
63	5	3P+N+E	4h	110V	KHTN0351-4	KHTN2351-4	KHTN6351-4	KHTN4351-4	IP67
63	5	3P+N+E	9h	230V	KHTN0351-9	KHTN2351-9	KHTN6351-9	KHTN4351-9	IP67
63	5	3P+N+E	6h	400V	KHTN0351	KHTN2351	KHTN6351	KHTN4351	IP67
125	3	2P+E	4h	110V	KHTN0431-4	KHTN2431-4		KHTN4431-4	IP67
125	3	2P+E	6h	230V	KHTN0431	KHTN2431		KHTN4431	IP67
125	3	2P+E	9h	400V	KHTN0431-9	KHTN2431-9		KHTN4431-9	IP67
125	4	3P+E	4h	110V	KHTN0441-4	KHTN2441-4		KHTN4441-4	IP67
125	4	3P+E	9h	230V	KHTN0441-9	KHTN2441-9		KHTN4441-9	IP67
125	4	3P+E	6h	400V	KHTN0441	KHTN2441		KHTN4441	IP67
125	5	3P+N+E	4h	110V	KHTN0451-4	KHTN2451-4	KHTN6451-4	KHTN4451-4	IP67
125	5	3P+N+E	9h	230V	KHTN0451-9	KHTN2451-9	KHTN6451-9	KHTN4451-9	IP67
125	5	3P+N+E	6h	400V	KHTN0451	KHTN2451	KHTN6451	KHTN4451	IP67

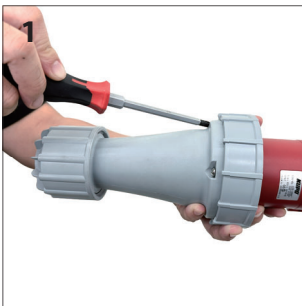
### Reference Standard

#### EC 60309-1

Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes - Part 1: General requirements

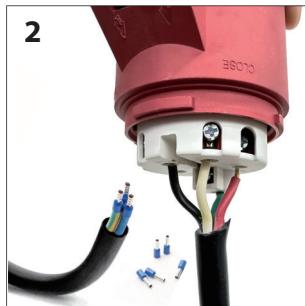
#### IEC 60309-2

Plugs, fixed or portable socket-outlets and appliance inlets for industrial purposes - Part 2: Dimensional compatibility requirements for pin and contact-tube accessories



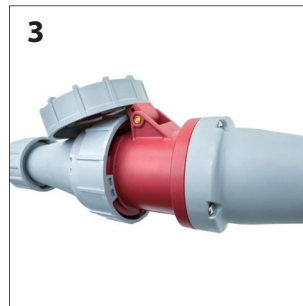
#### Rugged Screw-Fastened Housing

Screw-secured housing and coupling for 63A/125A CEE form connectors, ensuring maximum strength and reliable performance in harsh conditions.



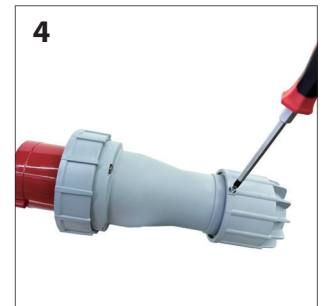
#### Easy Wiring and Secure Connections

All terminal screws face the same direction for faster installation. Using wire ferrules on bare copper ensures maximum contact, stronger pull resistance, and safer connections.



#### Sealed Grip with IP67 Protection

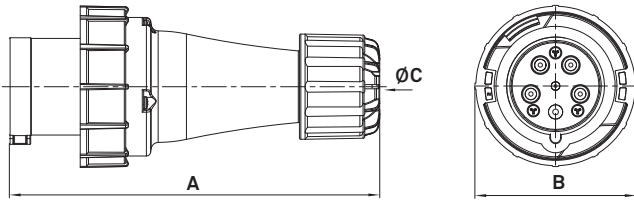
Rotate the plug's turreted grip after mating to lock, ensuring dust-tight and watertight IP67 protection.



#### Rugged Screw-Type Fitting

Tighten the screw coupling to achieve maximum mechanical strength and stability, ensuring reliable performance in demanding conditions. (For 125A Version Only)

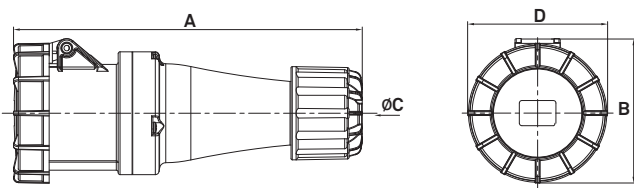
### IP67 Plug (Male)



- Housing Material: PA6
- Contacts: Nickel-Coated Brass
- IP67 watertight-rated
- Equipped with screw terminals

Poles	63A			125A		
	3	4	5	3	4	5
A [mm]	260	260	260	301	301	301
B [mm]	114	114	114	126	126	126
C [mm]	32	32	32	45	45	45
Wire flexible [mmsq]	6-16	6-16	6-16	16-50	16-50	16-50
Weight [g]	680	690	790	1090	1200	1260

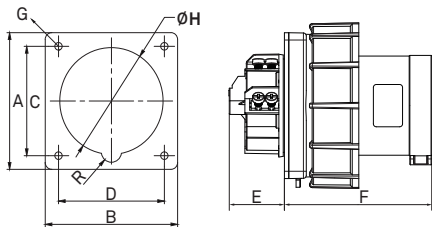
### IP67 Connector (Female)



- Housing Material: PA6
- Contacts: Nickel-Coated Brass
- IP67 watertight-rated
- Equipped with screw terminals

Poles	63A			125A		
	3	4	5	3	4	5
A [mm]	260	260	260	319	319	319
B [mm]	114	114	114	130	130	130
C [mm]	32	32	32	45	45	45
D [mm]	111	111	111	127	127	127
Wire flexible [mmsq]	6-16	6-16	6-16	16-50	16-50	16-50
Weight [g]	770	820	860	1200	1380	1400

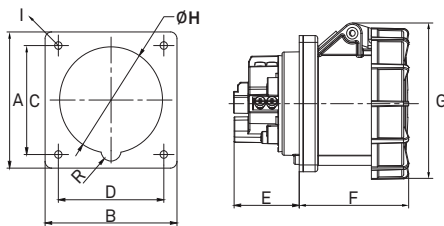
### IP67 Inlet (Panel Male)



- Housing Material: PA6
- Contacts: Nickel-Coated Brass
- IP67 watertight-rated
- Equipped with screw terminals

Poles	63A			125A		
	3	4	5	3	4	5
A/B [mm]	100	100	100	120	120	120
C/D [mm]	80	80	80	100	100	100
E [mm]	39	39	39	58	58	58
F [mm]	101	101	101	131	131	131
G [mm]	5.5	5.5	5.5	5.5	5.5	5.5
H [mm]	73	73	73	73	73	73
Wire flexible [mmsq]	6-25	6-25	6-25	25-70	25-70	25-70
Weight [g]	625	650	680			1250

### IP67 Receptacle (Panel Female)



- Housing Material: PA6
- Contacts: Nickel-Coated Brass
- IP67 watertight-rated
- Equipped with screw terminals

Poles	63A			125A		
	3	4	5	3	4	5
A/B [mm]	100	100	100	120	120	120
C/D [mm]	80	80	80	100	100	100
E [mm]	39	39	39	58	58	58
F [mm]	95	95	95	107	107	107
G [mm]	115	115	115	130	130	130
H [mm]	73	73	73	87	87	87
I [mm]	5.5	5.5	5.5	5.5	5.5	5.5
Wire flexible [mmsq]	6-25	6-25	6-25	25-70	25-70	25-70
Weight [g]	450	560	607	750	945	1060