SCAME INFOTECH

> INDUSTRIAL PLUGS AND SOCKETS

> VERSIONS

Plugs

Connectors

Appliance inlets

> REFERENCE STANDARDS

EN 60309-1
Plugs, socket-outlets and couplers for industrial purposes
Part 1: general requirements

EN 60309-2
Plugs, socket-outlets and couplers for industrial purposes
Part 2: dimensional interchangeability requirements for pin and contact-tube accessories.

> QUALITY MARKS

03

> TECHNICAL CHARACTERISTICS

Rated current:	**16A - 32A - 63A - 125A**
Rated voltage:	**100÷690V~**
Frequency:	**c.c - 50÷500Hz**
Insulating voltage:	**500/690V~**
Protection degree:	**IP44 - IP66/IP67**
Operating temperature according to the reference standard:	**-25°C+40°C**
Max operating temperature:	**60°C**
Glow Wire test:	**650°C/850°C**
Material:	**Engineering plastic**
IK degree at 20°C:	**IK08**
Cable inlets:	**Cable gland**
Halogen free:	**Yes**
Terminals:	**Screw (16A-32A-63A-125A)** **Insulation perforating (16A)**
Safe-in device:	**16A**
Snap-on device:	**16A**

> BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Limited Resistance	Resistant	Resistant	Resistant	Not Resistant	Not Resistant	Not Resistant	Limited Resistance	Resistant	Limited Resistance

> WIRING AND INSTALLATION

Wiring capacity of the terminals (mm²)

Rated voltage	Rated current (A)	Plugs, connectors and appliance inlets		Socket outlets	
		Min	Max	Min	Max
Over 50V	16A	1	2,5	1,5	4
	32A	2,5	6	2,5	10
	63A	6	16	6	25
	125A	16	50	25	70

Max. cable size accepted by the cable clamp:

Rated current (A)	Outside Ø mm	
	Min	Max
16A	8	15
32A	11,5	21
63A	17	31
125A	26	48

> APPLICATION EXAMPLES

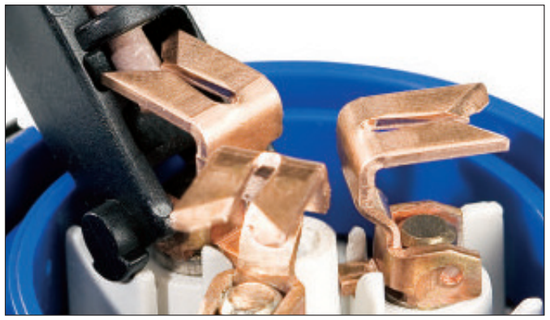
Lid equipped with special tab to facilitate single-hand opening.

IP66/IP67 socket cover equipped with slots to facilitate and improve closure of the socket.

"Snap-on" device with stainless steel spring to guarantee frequent opening/closing (possibility to inspect the terminals).

External cable stay with tulip clamping having IP66/IP67 cable gland functions (the device is used on both IP44 and IP66/IP67 products).

Insertion of the conductor with insulation into the perforating terminal.



Insulation piercing terminal made in highly elastic phosphor bronze.

Socket/plug module with screw terminals.

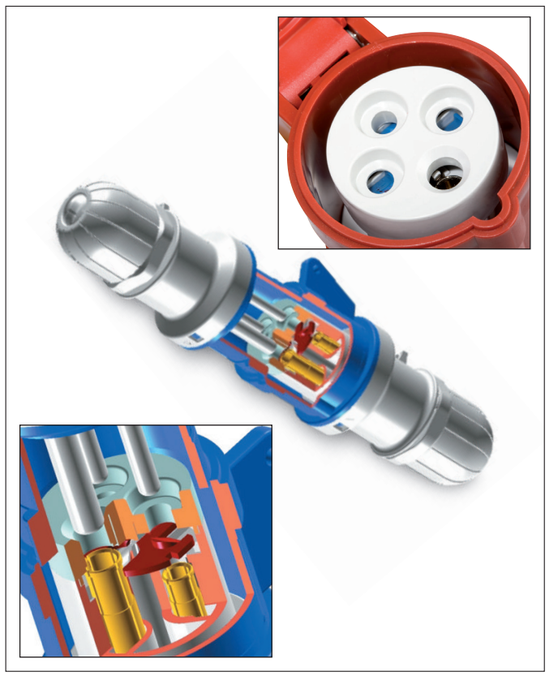
Profilo interno dell'impugnatura che impedisce la riapertura accidentale del contatto.

> THE "SAFE-IN" SAFETY DEVICE

The "**SAFE-IN**" safety device assembled on the 16A industrial sockets is the most innovative element of the new OPTIMA Series.
The "**SAFE-IN**" device works like the protection installed on household sockets, i.e., by means of an appropriate shutter, it closes the input of the socket contact tubes and prevents accidental and voluntary contact of live parts of the socket with slim objects, such as screwdrivers or wires. This protection offers an additional safety guarantee, in addition to that already provided by the spring-loaded cover assembled on the mobile sockets.

> SAFETY LEVEL OF THE OPTIMA SERIES SOCKETS

The OPTIMA Series sockets with the "SAFE-IN" safety device guarantee a higher level of safety in comparison with ordinary industrial sockets, especially in environments where there may be children present or people who have not been trained about electrical dangers (public areas, amusement parks, campgrounds, open markets, etc.).
Dangerous situations, such as the important examples illustrated in the figure to the side, can be resolved thanks to the new OPTIMA Series sockets equipped with the "**SAFE-IN**" safety device.

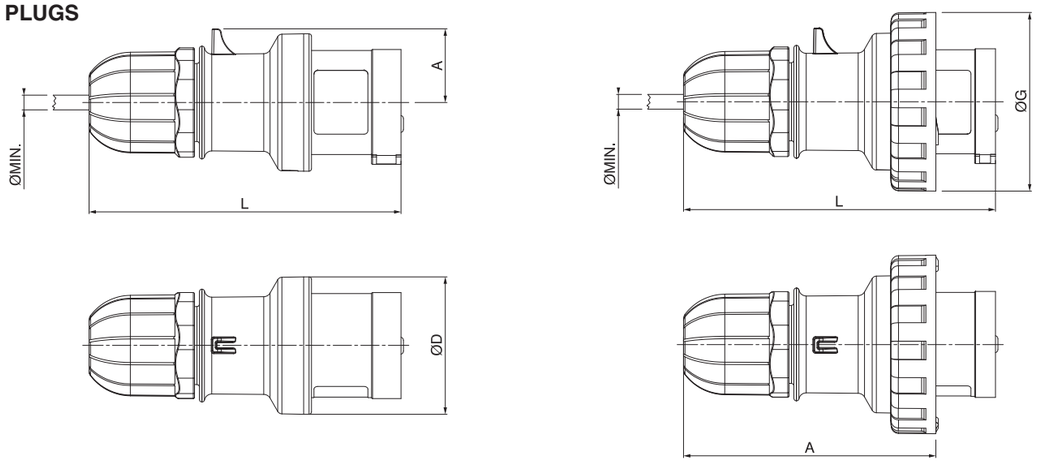


Connector tube protective shutter for greater safety against direct contacts. (The SAFE-IN safety device).

> POTENTIALLY DANGEROUS SITUATIONS

> DIMENSIONS

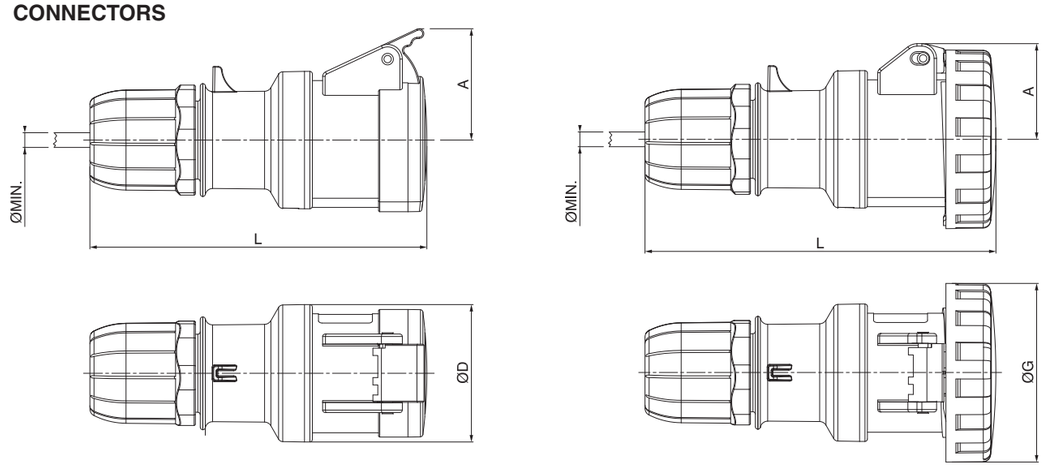
PLUGS



IP44		A	Ø D	L Min	Ø Min
16A	2P+E	30	56	128	6
	3P+E	34	60	135	6
	3P+N+E	38	65	153	9
32A	2P+E	40	65	162	9
	3P+E	40	65	162	9
	3P+N+E	45	73	176	13

IP66/IP67		A	Ø G	L Min	Ø Min
16A	2P+E	103	73	128	6
	3P+E	110	81	135	6
	3P+N+E	129	88	153	9
32A	2P+E	131	93	162	9
	3P+E	131	93	162	9
	3P+N+E	145	101	176	13
63A		160	112	220	17
125A		202	128	272	26

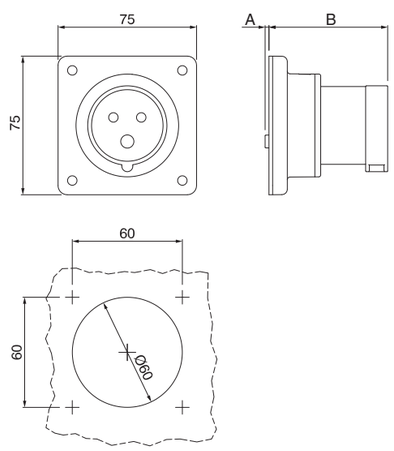
CONNECTORS



IP44		A	Ø D	L Min	Ø Min
16A	2P+E	46	56	138	6
	3P+E	49	60	145	6
	3P+N+E	54	65	165	9
32A	2P+E	54	65	175	9
	3P+E	54	65	175	9
	3P+N+E	59	73	190	13

IP66/IP67		A	Ø G	L Min	Ø Min
16A	2P+E	39	73	141	6
	3P+E	43	81	148	6
	3P+N+E	51	88	168	9
32A	2P+E	56	93	178	9
	3P+E	56	93	178	9
	3P+N+E	52	101	195	13
63A		57,5	112	230	17
125A		64,25	128	288	26

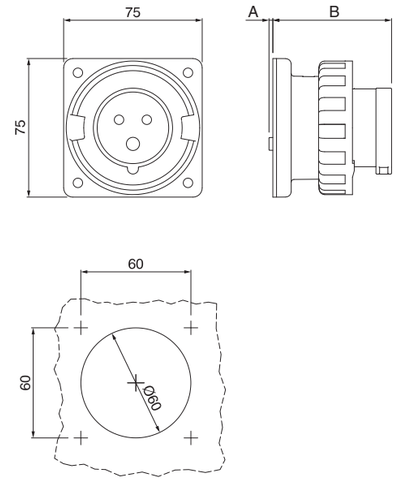
APPLIANCE INLETS - IP44



IP44		A	B
16A	2P+E	2	65
	3P+E	2	65
	3P+N+E	2	65
32A	2P+E	19	73
	3P+E	19	73
	3P+N+E	19	73

(Dimensions in mm)

APPLIANCE INLETS - IP66/IP67



IP66/IP67		A	B
16A	2P+E	2	65
	3P+E	2	65
	3P+N+E	2	65
32A	2P+E	19	73
	3P+E	19	73
	3P+N+E	19	73

(Dimensions in mm)