



# **UP SI/OS Connector Family**

**Assembled and Overmolded Connectors** 

### **TECHNICAL INFORMATION**

#### **GENERAL FEATURES**

Pitch	10 mm
Ways	3 Poles (L,N,GND)
Position of Poles	
Central Contact	Protection Grounding
Lateral Contact	Line/Neutral (not polarized)
Locking Feature	Power Socket

### VALUES & STANDARDS

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Rated Current	16 A
Rated Voltage	250 V AC
Ambient Temperature	-5°C to 40°C (max 35°C average value 24h)
Temperature Rise of Internal Contacts	<35 °K (@1,25 x rated current)
Flammability Rating	V0 / GWFI 850°C
Creeping Strength	CTI 400 V
IP Protection	IP 20
Standards	EN 60320-1
Application	For Class 1 Devices.
	Includes GND Connection
MATERIALS	
Housing Material	PBT GF20, V0
Colour	Black



- This solution allows the manufacturer to disattached the cable from the appliance using a standard connector
- The connection system is designed according to EN 60320-1.

### **ADDITIONAL INFORMATION**

PLUG		SOCKET	
Part Number	PLA633001-16	Part Number	SKA633001-16
Wires Cross Section / Type	1,5 mm² / Multi Stranded Cu Wires	Max. Temperature of Pins	<70 °C
Crimping Tool	MN8432	Fixing Thickness	0,7-0,9mm (metal panel)
Crimping Height	1,77 mm	Grounding Connection with Panel	
Crimping Width	2,87 mm	Recommended Screws	4,2 mm $\varnothing$ x 7-9,5 mm leght/TORK head
Plugging Force (Plug - Socket)	<50 N*1		ST4.1 DIN 7981c
Unplugging Force (Plug - Socket)		Max. Axial Force to Apply	30 N
min.	>30 N*1	Inner Side Connection	6,3x0,8 mm Tabs for L/N
max.	<60 N*1		6,3x0,8 mm Tabs for Grounding

<sup>\*1:</sup> Provisional Valure (with compatible socket)







# Plug intended to be overmolded as an ending connection of Power Cords



Connections between the wires of the Power Cord and Plug is made through crimped connections before being overmolded.

VIEW	PLASTIC COMPONENTS	SAP NUMBER	MATERIAL	COLOUR	OPTIONAL PART	DESCRIPTION
	Plug	2669185	PBT GF20, V0	Black		Seal for IP Protection
	Plug Cover	2669285	PBT GF20, V0	Black		

RELATED TERMINALS					
View	Serie	Type	Tab		
	8432.xx	L/N/GND Contact	6.3x0.8		







Socket intended to be assembled in a panel as an inlet connection of multiple electronic components of final appliances.



The socket is designed to adapt itself to different kind of tabs for Phase, Neutral and Earthing. (6,3x0,8 Tabs orientation and position can change according to type of appliance it is intended to be assembled.)

VIEW	PLASTIC COMPONENTS	SAP NUMBER	MATERIAL	COLOUR		
	Socket (sliding fixation)	2669085	PBT GF20, V0	Black	OPTIONAL PART	DESCRIPTION
	Socket (sliding fixation)	-	PBT GF20, V0	Black		O-Ring for IP Protection

RELATED TERMINALS							
View	Serie	Type	Tab	View	Serie	Type	Tab
	9985	L/N Contact	6.3x0.8		-	L/N Contact	6.3x0.8
33	9989	Grounding Contact	6.3x0.8		-	Grounding Contact	6.3x0.8
1	-	L/N Contact	6.3x0.8		-	Grounding Contact	6.3x0.8







The socket is designed to be assembled to the appliances from the interior without the need of any screw using the sliding fixation.





Compatible range of metal panel thickness: 0,7 - 0,9 mm.

The screws are needed just to assure the grounding contact as an obligation of EN 60320-1 Standard.





Grounding connection is made with two screws as a necessity of ST4.2 DIN 7981c.







The other option is designed to be assembled to the appliances by screwing.





With various contact and fixation method, the socket can be adapted to differents needs.



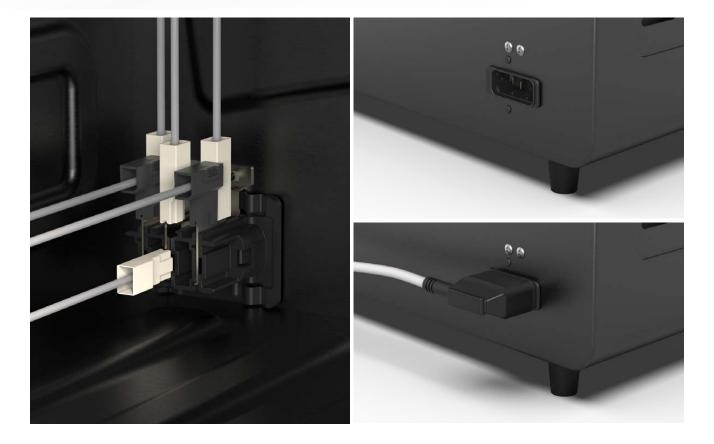






As it is assembled from the interior, you can create the harness and assemble to the socket. And afterwards, assemble the socket to the appliance easily.











## O-Ring for IP Protection requirement (only for screw fixation)



Optional part: Ready to have an o-ring if needed

### Seal for IP Protection requirement









As the connection of the plug is reversible, in case of inverted connection, the powered contacts will also remain reversed as a consequence.



Benefits of Power Plug and Socket without the need of any screw can be summarize as below

### **DUE TO**

Wide veriety of L/N/G Tabs in the socket

Without polarized contacts

Sliding fixation mechanism of socket from inside of appliance

Have an inter-contact protective protrusions of plug

Female terminal desing based on timer concept with B crimping

### **LEADS TO**

Diversity of usage area

Reversible connection for plug

Reduction of assembly cost

Assembly of main harness into the socket can be made in harness maker

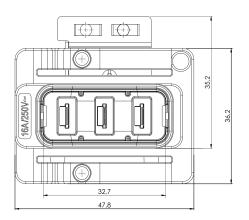
Preventing the contact failure

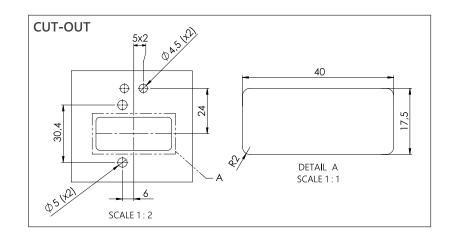
A secure connection with lower contact resistance and easy plugging

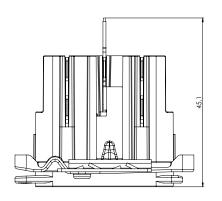


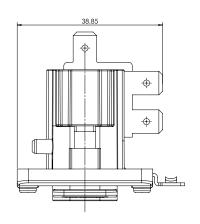






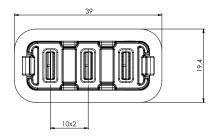


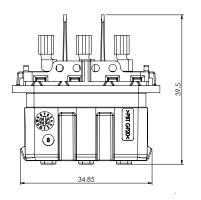


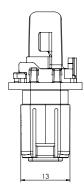


Scale 1:1

\*\* All dimensions are in millimeters.







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