



IP67 WATERTIGHT CONNECTORS WITH SWITCHING CAPACITY, DISCONNECTOR TYPE 3PS RANGE - MOULDED

Butt contact power connectors, combining the advantages of a plug and socket with a load switch

Type 3PS deconnectors are designed for operation up to 660 Volt AC and 250 Volt DC and are available in various sizes from 16 to 200 amp ratings. They are suitable for a wide range of applications, particularly where wet or dusty conditions are encountered or where vibration is a hazard. Typical applications are film studios, breweries, building sites and portable equipment of many kinds.

DESCRIPTION

Our 3PS range of connectors is extremely robust and supercedes the requests of IEC 60309-1, 1999 standards in terms of safety, insulation, temperature resistance, heating life duration, resistance to shocks and traction on the cables.

Safety

Female contact parts, exposed under the self-closing lid of the 3PS socket are **totally isolated** should the male plug be inserted or not. This safety feature applies to the fitted sockets as well as to the cable couplers. The plug can only be withdrawn once it is voltage free. The combined system of the various clockwise setting of the insert, of the safety disc and the asymmetrical position of the contacts make it impossible to couple connectors with incompatible voltages, amperages, frequencies or polarities.

Contacts

3PS connectors are fitted with a pistontype contact which warrants an excellent behaviour of the switching function of the sockets. The contact terminal will ensure a permanent pressure on the cable due to its elastic slotted sleeve with its expansion limited by a ring. This construction is vibration proof. All terminals have a chamfered entry for an easy insertion of large size flexible cables. The butt type contacts have a brazed silver alloy tip for low voltage drop and high arc resistance. All conductive parts are silver-plated to prevent corrosion.

Auxiliary contacts

All the 3PS connectors can be fitted with first break last make auxiliary contacts with a 16A rating.

Shells

3PS16, 3PS32, 3PS63, 3PS125 shells are injected in fibreglass reinforced virgin polyamid 6 which makes them almost unbreakable. They will resist U.V. as well as most of industrial chemical agents. 3PS200 shells are cast aluminium.

Inserts

3PS inserts are moulded in a special arc proof compound.

IP Rating

All plugs are delivered with a neoprene lip seal to ensure IP67 watertight rating.

Lid

Sockets are delivered with a self-closing lid as a standard. Self opening lids are optional.

Standards

The 3PS range complies to standards IEC 309-1 and IEC 947-3. However they are not compatible with IEC309-2, CEE17, and SAGS 1239/79 plugs and socket.

Insert

There are 24 insert settings for both the socket and the plug. A socket and a plug will only match if they have the same insert setting. A recommended international standard for the insert settings is as follows:



Position	Voltage (V)	Current nature	Frequency	Label
01	380-440	A.C.	50	Red
02	24	A.C.	60	Violet
03	220-240	A.C.	50	Blue
04	480	A.C.	50	Red
07	240	A.C.	60	Red
08	24	A.C.	50	Violet
10	130	D.C.	-	Yellow
11	200-220	A.C.	400	Blue
12	200-220	A.C.	200	Blue
14	600	A.C.	60	Black
16	208	A.C.	60	Blue
19	660	A.C.	50	Black
20	250	D.C.	-	Blue

- ① The marking opposite the <1> on the outer ring indicates the polarity of the socket (e.g. 3P+N). The central earth is always included.
- ② The number facing the latch arrow indicates the position of the insert (e.g. Pos.3 = 220/240V 50 Hz)

Safety Shutter

This shutter has 2 main functions:

- It isolates the live contacts in the socket.
- It indicates the polarity of the matching plug.

A single phase plug can not be inserted in a socket with a shutter positioned for single phase or 2 phase use.

There are six settings for the shutter:

Single phase + neutral + earth	1P+N+E	Three phases + earth	3P+E
Two phases + earth	2P+E	Three phases + neutral + earth	3P+N+E
Two phases + neutral + earth	2P+N+E	Direct current	pos+neg+E