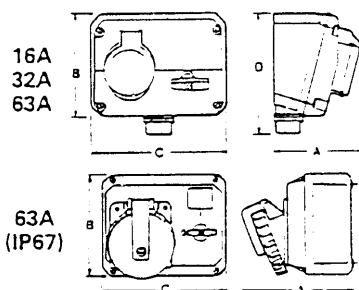


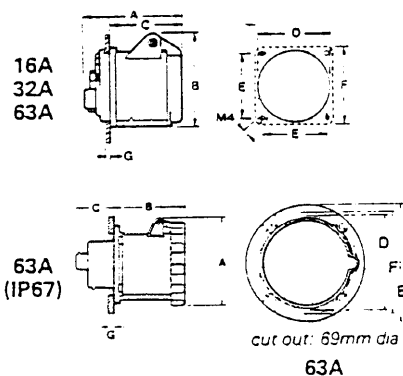
Switched socket-outlets

Rated current	Number of poles (+ Earth)	Dimensions in mm	Fixing Centres	Conduit Entry
		A B C D E F G		
16A	3	99 112 156 95 139 101	101×95	
	2	101 112 156 95 139 101	101×95	



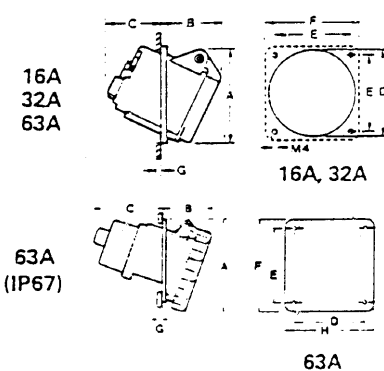
Interlocked Switchsocket-outlets

Rated current	Number of poles (+ Earth)	Dimensions in mm				Fixing Centres	FL	Conduit Entry
		A	B	C	D			
16A	2	112	129	168	149	125×91	13	Pg21-ISO 25 adaptor
	3	114	129	168	149	125×91	13	Pg21-ISO 25 adaptor
	3+N	116	129	168	149	125×91	13	Pg21-ISO 25 adaptor
32A	2,3	124	129	168	149	125×91	13	Pg21-ISO 25 adaptor
	3+N	126	129	168	149	125×91	13	Pg21-ISO 25 adaptor
63A†	2,3,3-N	165	168	206		132×152	13	2-32mm knockout
63A(IP67)	2,3,3-N	165	168	206		132×152	13	2-32mm knockout



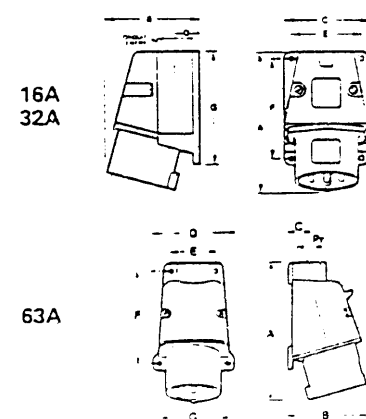
Panel mounting socket-outlets. Straight. 528-274/286

Rated current	Number Dimensions in mm							248	300
	of poles (+ Earth)	A	B	C	D	E	F		
16A	2	68	65	50	49	44	56	3	
	3	68	75	50	59	52	66	3	
	3+N	68	82	50	59	52	66	3	
32A	2	93	85	62	65	61	75	3	
	3	93	85	62	65	61	75	3	
	3+N	93	94	62	65	61	75	3	
63A†	2,3,3-N	112	87	48	83	98	86	7	
63A†(IP67)	2,3,3-N	111	89	48	83	98	86	7	
125A	2,3,3-N	170	138	64	90	115	100	7	



Panel mounting socket-outlets. Angled. 528-274/286

Rated current	Number Dimensions in mm							
	of poles A (+ Earth)	C	B	D	E	F	G (max)	H
16A	2	65	43	38	63	55	70	7
	3	74	45	38	69	60	76	7
	3+N	81	46	40	78	66	83	7
32A	2	85	50	48	82	70	88	7
	3	85	50	48	82	70	88	7
	3+N	96	53	56	87	75	93	7
63A†	2,3,3-N	143	57	86	80	84	104	7
63A†(IP67)	2,3,3-N	147	61	86	80	84	104	7



Appliance inlets for top conduit or rear cable entry (63A top conduit only). 525-316

Rated current	Number of poles (+Earth)	Dimensions in mm					F	G	Conduit Entry	
		A	B	C	D	E				
16A	2	107	67	64	18	54	76	86	ISO 20	
	3	106	76	72	18	62	76	86	ISO 20	
	3+N	107	79	72	18	62	76	86	ISO 20	
32A	2	128	91	82	22	72	90	100	ISO 25	
	3	128	91	82	22	72	90	100	ISO 25	
	3+N	129	94	82	22	72	90	100	ISO 25	
		A	B	C	D	E1	E2	F	G	Conduit Entry
63A††	2, 3, 3-N	237	115	31	111	69	90	123	90	Pg36*

*supplied with ISO 32 adaptor

Commando

Product Description

The Commando product range offers a superior solution for industrial plug and socket requirements. The polycarbonate housing (used for the manufacture of motorcycle helmets) offers high resistance to impact even at low temperatures, when other materials become brittle as well as giving protection against the attack of chemicals, salts, acids and UV degradation. The polyamide interior gives excellent tracking resistance and all pins and sleeves are made from brass and are calibrated to give the perfect contact pressure.

Technical Information

Pilot Contact

Commando accessories with pilot contacts according to BS 4343 have pilot pins and sleeves shorter than other sleeves and pins in the unit. This means that the pilot circuit makes last and breaks first related to the mains supply.

The pilot contact is positioned centrally in 3P + E and 3P + N + E accessories and diametrically opposite the earthing contact in 2P + E accessories.

The pilot may be used for a variety of purposes including connection to control circuitry for the provision of electrical interlocking.

Specification

The MK range of Industrial Plugs & Sockets conform to BS 4343: 1968. This specification is based on the second edition of CEE publication No. 17, the forerunner of specifications for this type of industrial plug and socket.

The International Electrotechnical Commission (IEC) produced Publication 309 in 1969 followed by supplement 309A in 1973. These publications were also based on the CEE Publication No. 17. IEC 309/1 (1988) details general requirements applicable to all types of plugs, socket-outlets and couplers for industrial purposes. Document 309-2, published in 1989, recommends specific requirements for the BS 4343 type industrial accessory.

The MK range, as well as conforming to the British Standard, is also designed to the recommendations of the latest publications.

Degrees of Protection

16, 32 and 63 amp accessories are of a splashproof construction to IP44 as defined in BS EN 60529 - specification of degree of protection provided by enclosures (refer to table overleaf).

A further range of 16, 32, 63 and 125 amp accessories are of a watertight construction to IP67.

The specified degrees of protection are only valid if the accessories are installed taking note of the following comments:

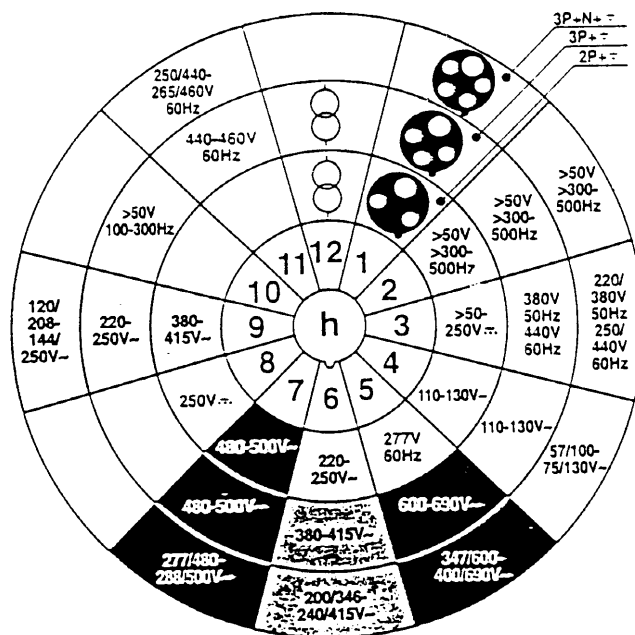
- 1) The accessories are splashproof or watertight only when correctly fitted with cable or conduit for which they are designed.
- 2) Plugs and appliance inlets are splashproof or watertight only when in complete engagement with a complementary accessory. (They cannot become live unless so engaged.)
- 3) It is recommended that the surface mounted socket-outlet or appliance inlet be mounted on a vertical surface. The knockout (drainhole) in the base must be

- removed and the accessory mounted with the drainhole in the lowest position.
- 4) Panel-mounted socket-outlets should be mounted on a vertical, flat, clean surface. If the surface is not flat a suitable gasket should be used. The enclosure to which the socket-outlet is attached should be of at least an equivalent IP rating.

Rating code

The rating code which is found on the marking pad of each accessory gives details of rated current, rated (operating) voltage (or range of voltages), rated frequency (if not 50/60 Hz) and a symbol to indicate the position of the earth contact.

- (i) For low voltage products (i.e. all colours except white and violet) the position given is that of the earth pin when a socket-outlet/connector is viewed from the front with the keyway at the bottom. When viewing a plug/appliance inlet from the front with the key at the bottom, the position of the earth pin is reversed, i.e. a 10 o'clock will appear as 2 o'clock and other positions are relative.
- (ii) For extra low voltage products (i.e. white and violet) the position given is that of the minor key when a socket-outlet is viewed from the front with the major key at the bottom. When viewing a plug/appliance inlet from the front with the major keyway at the bottom, the position of the minor keyway is reversed, i.e. 10 o'clock will appear as 2 o'clock and other positions are relative.



Key for symbols used in above table ~ a.c.
= d.c. = Isolating Transformer.

MAJOR AND MINOR KEY POSITIONS FOR ELV SOCKETS

