A309
3,4,5 contacts power connectors up to 100A

Amphenol
Oil & Gas Technologies

A309 (UL and CSA listed)
Datasheet http://www.amphenol-industrial.com/c/images/datasheets/IDS-33%20Amphe-309.pdf
3d Models http://www.amphenol-industrial.com/literature/aogt-3d
UL/CSA http://www.amphenol-industrial.com/company/quality

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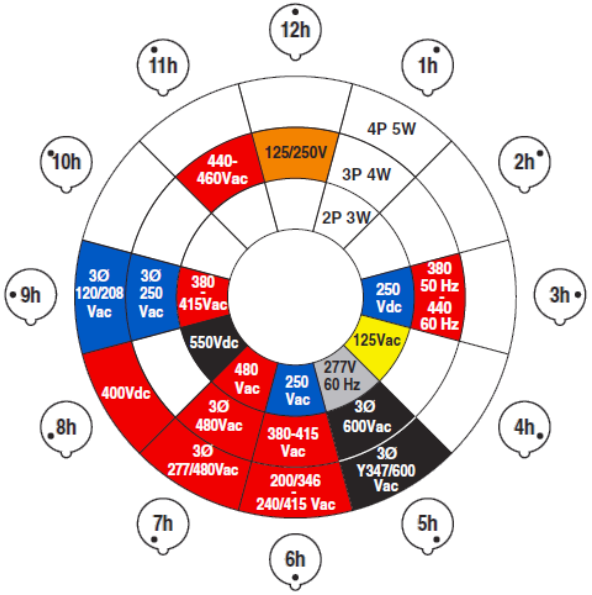
How To Order: A309

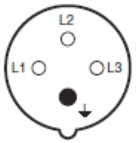
3	16	P	3	W	SC

Number of Wires	2P+E	3
	3P+E	4
	3P+N+E	5
Amperage	16A	16
	20A	20
	30A	30
	32A	32
	60A	60
	63A	63
	100A	100
	125A	125
Type	Plug, straight	P
	Connector Receptacle, straight	C
	Receptacle, surface	RS
	Receptacle for Panel Mounting, straight	R
	Inlet, surface	BS
	Inlet for Panel Mounting, straight	B

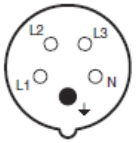
Modification	
SC	Screw Terminals
PE	Perforating Terminals
SP	Spring Terminals
MA	Mantle Terminals
LV	Extra Low Voltage
MF	Minimized Flange
Protection	
S	IP44
W	IP67
1 to 12	Clock Keyway position of female Grounding



(*) 2P+E
2P3W



(*) 3P+E
3P4W



(*) 3P+N+E
4P5W

RATED VOLTAGE	COLOUR
110-130V	
208-250V	
380-480V	
500-690V	
277V	
125/250V	

- **UL listed range**
  - **20A**
  - **30A**
  - **60A**
  - **100A**

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Amphe-309 UL listed

NEW

- **No Tools, No Screws**
  - Snap-on locking handle saves 75% on assembly time

- **Easy Single-Wiring Access point**
  - All terminal screws face in same direction

- **Easy gland**
  - Watertight onion ring bushing fits a wide variety of outside diameters.

IP67 **IP44**

Plugs and Connectors

Inlets

Receptacles Panel Mount

Accessories

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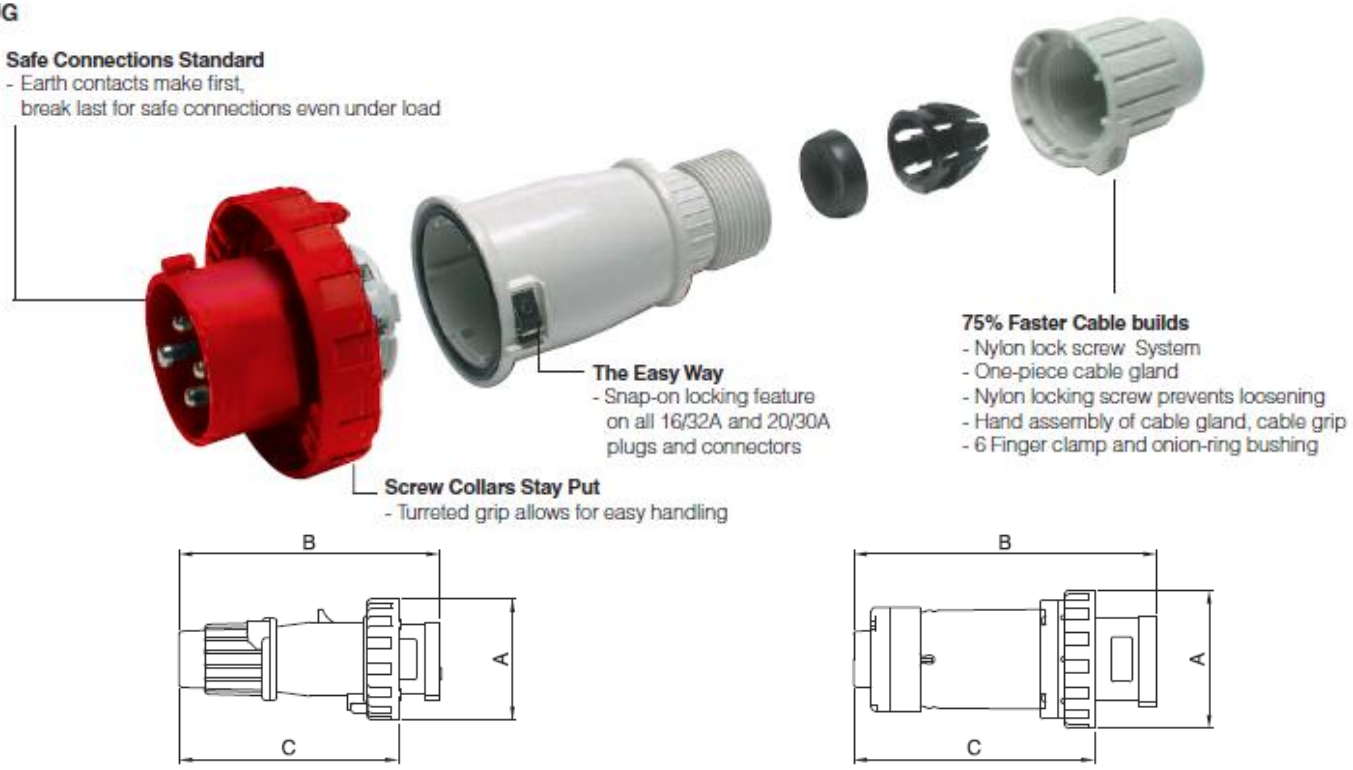
A309-XXPXW -> PLUG STRAIGH WITH PINS IP67

PLUG



PLUG IP67 16/20A AND 30/32A

	A		B		C		Corp grip range	
	inches	mm	inches	mm	inches	mm	inches	mm
16/20A 2P3W	2.87	73	6.20	157	5.23	133	.570-.710	14-18
16/20A 3P4W	3.17	81	6.47	164	5.51	140	.570-.710	14-18
16/20A 4P5W	3.48	88	7.02	178	6.06	154	.570-.710	14-18
30/32A 2P3W	3.66	93	7.37	187	6.13	156	.675-.910	17-23
30/32A 3P4W	3.66	93	7.37	187	6.13	156	.675-.910	17-23
30/32A 4P5W	3.96	101	8.15	207	6.91	176	.675-.910	17-23

PLUG IP67 60/63A AND 100/125A

	A		B		C		Corp grip range	
	inches	mm	inches	mm	inches	mm	inches	mm
60/63A 2P3W	4.41	112	9.68	246	7.67	195	.937-1.375	24-35
60/63A 3P4W	4.41	112	9.68	246	7.67	195	.937-1.375	24-35
60/63A 4P5W	4.41	112	9.68	246	7.67	195	.937-1.375	24-35
100/125A 3P4W	5.06	129	12.16	309	9.83	250	1.265-1.790	32-45
100/125A 4P5W	5.06	129	12.16	309	9.83	250	1.265-1.790	32-45

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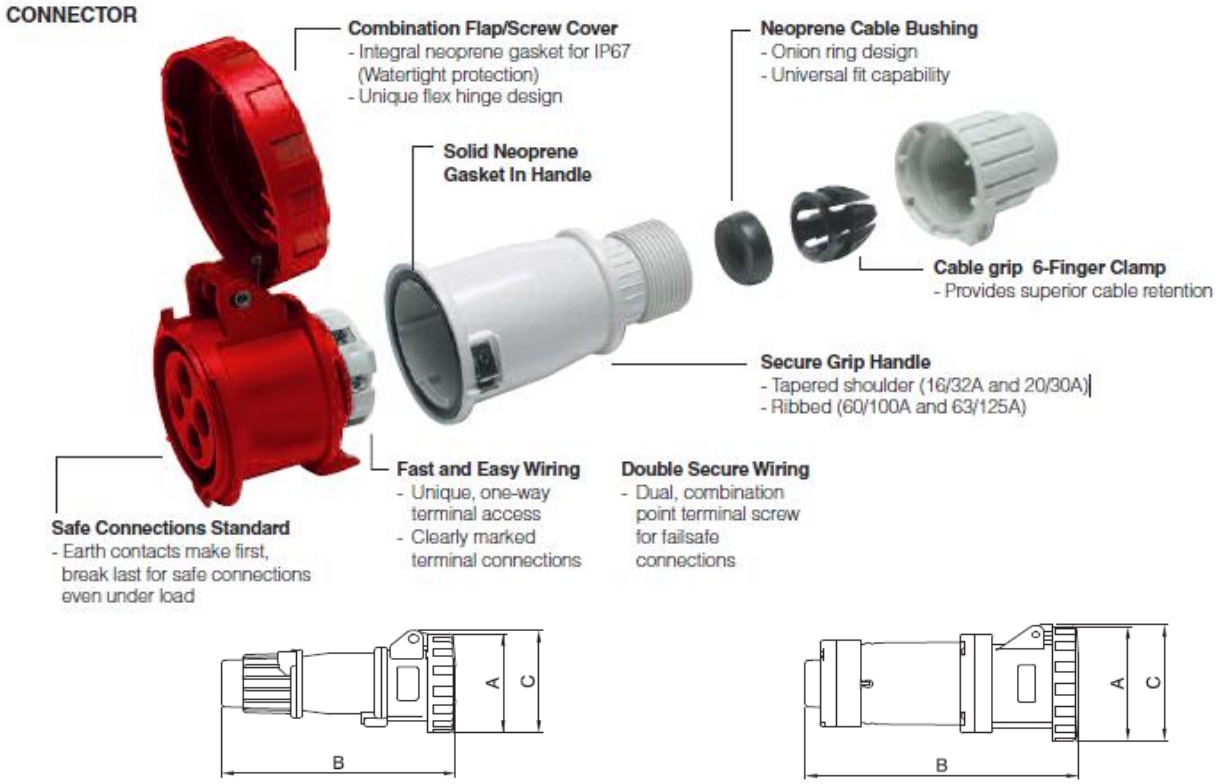
A309-XXCXW -> RECEPTACLE CONNECTOR WITH SOCKETS IP67



CONNECTOR IP67 16/20A AND 30/32A

	A		B		C		Corp grip range	
	inches	mm	inches	mm	inches	mm	inches	mm
16/20A 2P3W	2.87	73	6.75	171	2.97	75	.570-.710	14-18
16/20A 3P4W	3.17	81	7.04	179	3.28	83	570-.710	14-18
16/20A 4P5W	3.48	88	7.62	194	3.75	95	570-.710	14-18
30/32A 2P3W	3.66	93	8.04	204	4.04	103	.675-.910	17-23
30/32A 3P4W	3.66	93	8.04	204	4.04	103	.675-.910	17-23
30/32A 4P5W	3.96	101	8.83	224	4.03	102	.675-.910	17-23

CONNECTOR IP67 60/63A AND 100/125A

	A		B		C		Corp grip range	
	inches	mm	inches	mm	inches	mm	inches	mm
60/63A 2P3W	4.41	112	10.52	267	4.47	114	.937-1.375	24-35
60/63A 3P4W	4.41	112	10.52	267	4.47	114	.937-1.375	24-35
60/63A 4P5W	4.41	112	10.52	267	4.47	114	.937-1.375	24-35
100/125A 3P4W	5.06	129	12.80	325	5.06	129	1.265-1.790	32-45
100/125A 4P5W	5.06	129	12.80	325	5.06	129	1.265-1.790	32-45

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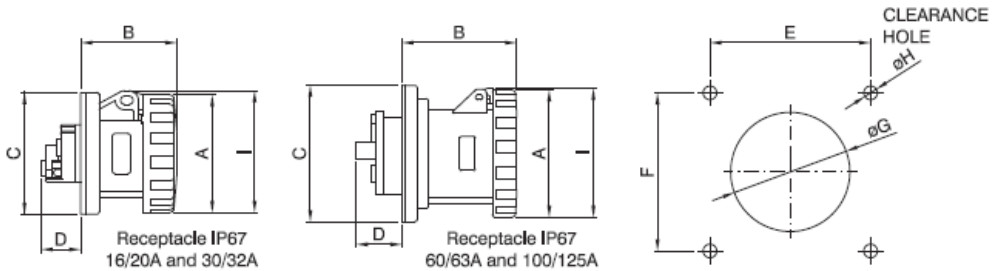
A309-XXRXW -> REPECTALCE FOR PANEL MOUNT WITH SOCKETS IP67



RECEPTACLE IP67 16/20A AND 30/32A

	A		B		C		D		E		F		G		H		I	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
16/20A 2P3W	2.87	73	2.32	59	2.97	.76	.94	24	2.36	60	2.36	60	2.38	60	.219	5.5	2.97	75
16/20A 3P4W	3.17	81	2.34	60	2.97	.76	.94	24	2.36	60	2.36	60	2.38	60	.219	5.5	3.28	83
16/20A 4P5W	3.48	88	2.37	60	2.97	.76	.94	24	2.36	60	2.36	60	2.38	60	.219	5.5	3.75	95
30/32A 2P3W	3.66	93	2.79	71	2.97	.76	1.52	39	2.36	60	2.36	60	2.38	60	.219	5.5	4.04	103
30/32A 3P4W	3.66	93	2.79	71	2.97	.76	1.52	39	2.36	60	2.36	60	2.38	60	.219	5.5	4.04	103
30/32A 4P5W	3.96	101	2.81	71	2.97	.76	1.52	39	2.36	60	2.36	60	2.38	60	.219	5.5	4.03	102

RECEPTACLE IP67 60/63A AND 100/125A

	A		B		C		D		E		F		G		H		I	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
60/63A 2P3W	4.41	112	4.16	106	4.50	114	1.68	43	3.87	98	3.87	98	3.25	83	.282	7.2	4.47	114
60/63A 3P4W	4.41	112	4.16	106	4.50	114	1.68	43	3.87	98	3.87	98	3.25	83	.282	7.2	4.47	114
60/63A 4P5W	4.41	112	4.16	106	4.50	114	1.68	43	3.87	98	3.87	98	3.25	83	.282	7.2	4.47	114
100/125A 3P4W	5.06	129	4.52	115	5.50	140	1.94	49	4.87	124	4.87	124	3.75	95	.282	7.2	5.06	129
100/125A 4P5W	5.06	129	4.52	115	5.50	140	1.94	49	4.87	124	4.87	124	3.75	95	.282	7.2	5.06	129

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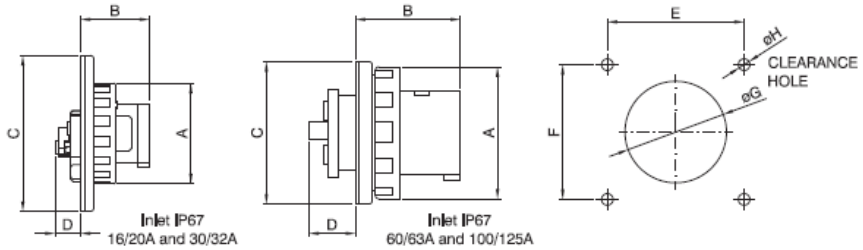
A309-XXBXW -> INLET RECEPTACLE WITH PINS IP67



INLET IP67 16/20A AND 30/32A

	A		B		C		D		E		F		G		H	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
16/20A 2P3W	2.87	73	1.96	50	4.50	114	.75	19	3.87	98	3.87	98	2.38	60	.282	7.2
16/20A 3P4W	3.17	81	1.96	50	4.50	114	.75	19	3.87	98	3.87	98	2.38	60	.282	7.2
16/20A 4P5W	3.48	88	1.96	50	4.50	114	.75	19	3.87	98	3.87	98	2.38	60	.282	7.2
30/32A 2P3W	3.66	93	2.32	59	4.50	114	1.32	34	3.87	98	3.87	98	2.38	60	.282	7.2
30/32A 3P4W	3.66	93	2.32	59	4.50	114	1.32	34	3.87	98	3.87	98	2.38	60	.282	7.2
30/32A 4P5W	3.96	101	2.32	59	4.50	114	1.32	34	3.87	98	3.87	98	2.38	60	.282	7.2

INLET IP67 60/63A AND 100/125A

	A		B		C		D		E		F		G		H	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
60/63A 2P3W	4.41	112	3.44	87	4.50	114	1.68	43	3.87	98	3.87	98	3.25	83	.282	7.2
60/63A 3P4W	4.41	112	3.44	87	4.50	114	1.68	43	3.87	98	3.87	98	3.25	83	.282	7.2
60/63A 4P5W	4.41	112	3.44	87	4.50	114	1.68	43	3.87	98	3.87	98	3.25	83	.282	7.2
100/125A 3P4W	5.06	129	3.88	99	5.50	140	1.94	49	4.87	124	4.87	124	3.75	95	.282	7.2
100/125A 4P5W	5.06	129	3.88	99	5.50	140	1.94	49	4.87	124	4.87	124	3.75	95	.282	7.2

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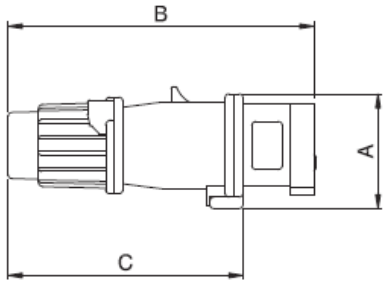
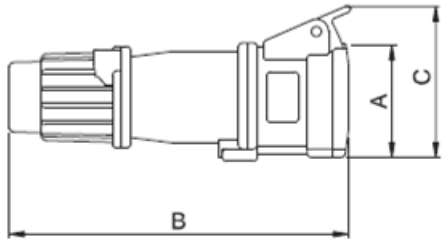
A309-XXPXS
-> PLUG STRAIGH WITH PINS IP44



PLUG IP44

	A		B		C		Corp Grip Range	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm
16/20A 2P3W	2.26	58	6.20	157	4.76	121	.570-.710	14-18
16/20A 3P4W	2.52	64	6.47	164	5.04	128	.570-.710	14-18
16/20A 4P5W	2.85	73	7.02	178	5.58	142	.570-.710	14-18
30/32A 2P3W	2.85	73	7.37	187	5.58	142	.675-.910	17-23
30/32A 3P4W	2.85	73	7.37	187	5.58	142	.675-.910	17-23
30/32A 4P5W	3.13	80	8.15	207	6.36	162	.675-.910	17-23

A309-XXCXS
-> RECEPTACLE CONNECTOR WITH SOCKETS IP44



PLUG IP44

	A		B		C		Corp Grip Range	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm
16/20A 2P3W	2.18	55	6.53	166	3.07	73	.570-.710	14-18
16/20A 3P4W	2.43	62	6.83	173	3.33	80	.570-.710	14-18
16/20A 4P5W	2.81	71	7.41	188	3.79	91	.570-.710	14-18
30/32A 2P3W	2.81	71	781	198	3.79	91	.675-.910	17-23
30/32A 3P4W	2.81	71	781	188	3.79	91	.675-.910	17-23
30/32A 4P5W	3.09	79	8.62	219	4.17	101	.675-.910	17-23

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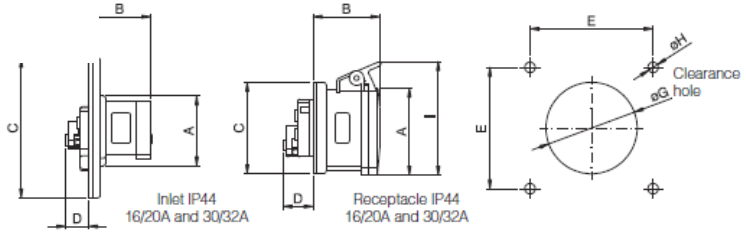
A309-XXBXS
-> INLET RECEPTACLE WITH PINS IP44

A309-XXRXS
-> REPECTALCE FOR PANEL W/ SOCKETS IP44



INLET IP44

	A		B		C		D		E		F		G		H	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
16/20A 2P3W	2.26	58	1.96	50	4.50	114	.75	19	3.87	98	3.87	98	2.38	60	.282	7.2
16/20A 3P4W	2.52	64	1.96	50	4.50	114	.75	19	3.87	98	3.87	98	2.38	60	.282	7.2
16/20A 4P5W	2.85	73	1.96	50	4.50	114	.75	19	3.87	98	3.87	98	2.38	60	.282	7.2
30/32A 2P3W	2.85	73	2.32	59	4.50	114	1.32	34	3.87	98	3.87	98	2.38	60	.282	7.2
30/32A 3P4W	2.85	73	2.32	59	4.50	114	1.32	34	3.87	98	3.87	98	2.38	60	.282	7.2
30/32A 4P5W	3.13	80	2.32	59	4.50	114	1.32	34	3.87	98	3.87	98	2.38	60	.282	7.2

RECEPTACLE IP44

	A		B		C		D		E		F		G		H		I	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
16/20A 2P3W	2.18	55	2.11	54	2.97	76	0.94	24	2.36	60	2.36	60	2.38	60	.219	5.5	3.07	73
16/20A 3P4W	2.43	62	2.13	54	2.97	76	0.94	24	2.36	60	2.36	60	2.38	60	.219	5.5	3.33	80
16/20A 4P5W	2.81	71	2.17	55	2.97	76	0.94	24	2.36	60	2.36	60	2.38	60	.219	5.5	3.79	91
30/32A 2P3W	2.81	71	2.56	65	2.97	76	1.52	39	2.36	60	2.36	60	2.38	60	.219	5.5	3.79	91
30/32A 3P4W	2.81	71	2.56	65	2.97	76	1.52	39	2.36	60	2.36	60	2.38	60	.219	5.5	3.79	91
30/32A 4P5W	3.09	79	2.60	66	2.97	76	1.52	39	2.36	60	2.36	60	2.38	60	.219	5.5	4.17	101

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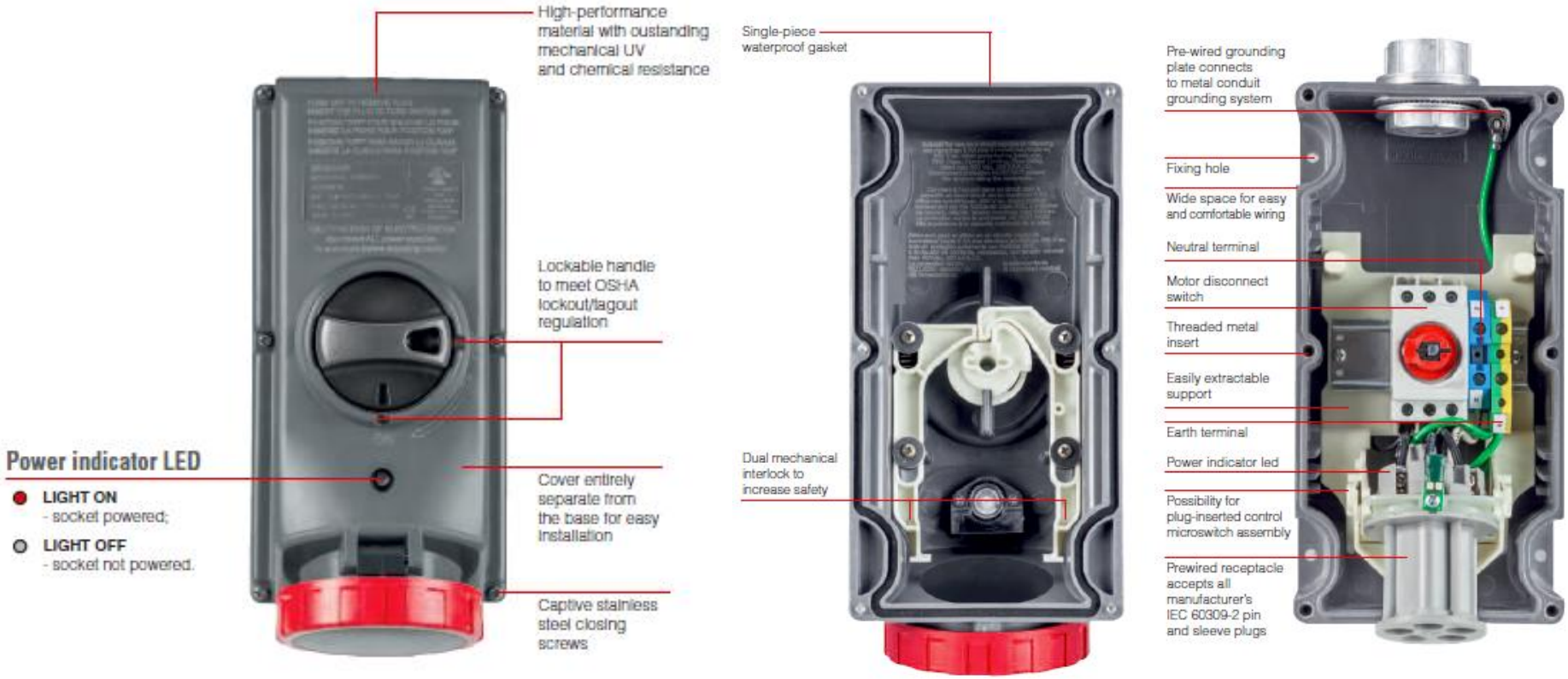
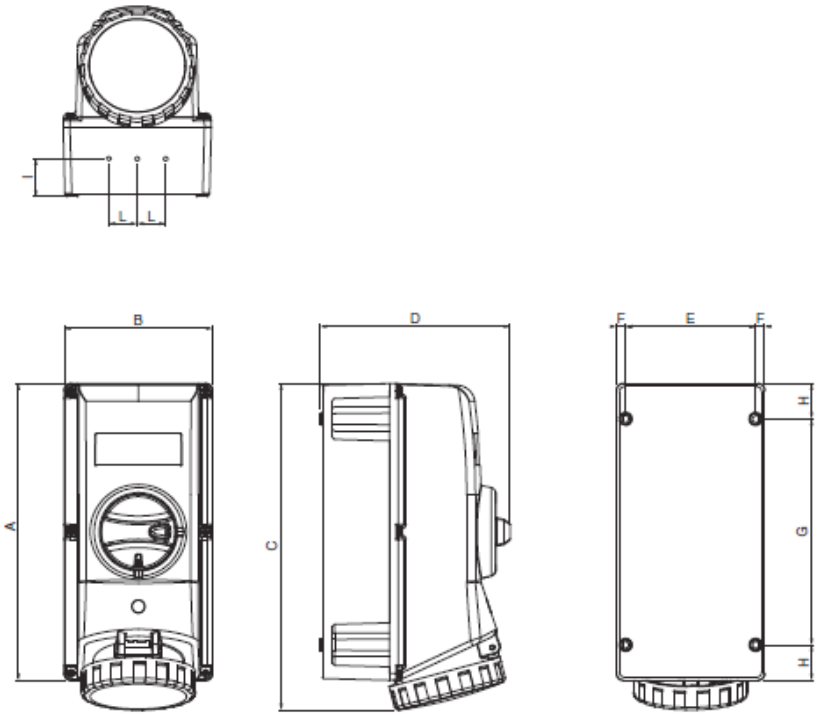
A309-XXMXW
Mecanical Interlocks IP67



A309-XXMXW
Mecanical Interlocks IP67



VERSION		A	B	C	D	E	F	G	H	I	L
2P+E	20A	260	130	280	167	114	8	198	31	33.5	25
3P+E	20A	260	130	282	167	114	8	198	31	33.5	25
3P+N+E	20A	260	130	282	167	114	8	198	31	33.5	25
2/3P+E	30A	260	130	285	167	114	8	198	31	33.5	25
3P+N+E	30A	260	130	286	167	114	8	198	31	33.5	25
2P+E	60A	380	170	420	206	150	10	310	35	40	32.5
3P+E	60A	380	170	420	206	150	10	310	35	40	32.5
3P+N+E	60A	380	170	420	206	150	10	310	35	40	32.5

TECHNICAL CHARACTERISTICS

Rated current:	20A-30A-60A
Rated voltage:	100÷600V~
Frequency:	50÷60Hz
Insulating voltage:	500/690V~
Protection degree:	IP66/IP67/IP69 (UL 94 type 3R, 4/4X, 12)
Operating ambient temperature according to the reference standard:	-25°C +40°C
Minimum operating ambient temperature:	-40°C
Max. operating ambient temperature:	+70°C
Self-extinguishing GW test:	960°C
Self-extinguishing UL94:	V0
Material:	Thermosettting
IK degree at 20°C:	IK10 (20J)
Colour:	Grey RAL7037

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EX309 Zone 1

NEW

- **Specs**
  - 16A, 32A, 63A, 125A
  - 3,4 & 5 Pins
  - -50c up to 60c *
  - 690 V
  - Ex II 2GD (Atex/ IECEx - Zone 1)
    - Ex d e IIC
    - Ex tb IIIC
  - IP66

- **Extra Features**
  - Plug Mates to Standard IEC60309 socket
  - IEC60309 Plug doesn't mate EX309 Receptacle
  - EX309 Switched interlock doesn't go ON without full mated EX309 plug
  - EX309 Plug doesn't unmate while Switch its ON

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