

Max-Gard interconnection systems

400 A standard service



Device ratings and polarizations

Pole	Wire	Conductor placement	Voltage 60 hz	Cat. no. ▼	Standard bushing I.D.† (in.)	Cat. no. ▼	Standard bushing I.D.† (in.)
Product type				Male plug††		Female connector	
2	3		277	DS4104MP000	2¾	DF4104FP000	2¾
2	3		125	DS4107MP000	2¾	DF4107FP000	2¾
2	3		480	DS4204MP000	2¾	DF4204FP000	2¾
2	3		250	DS4207MP000	2¾	DF4207FP000	2¾
2	3		600	DS4214MP000	2¾	DF4214FP000	2¾
2	3		208	DS4216MP000	2¾	DF4216FP000	2¾
3	4		277/480	DS4304MP000	3	DF4304FP000	3
3	4		125/250	DS4307MP000	3	DF4307FP000	3
3	4		120/208	DS4316MP000	3	DF4316FP000	3
3	4		3Ø 480	DS4404MP000	3	DF4404FP000	3
3	4		3Ø 250	DS4407MP000	3	DF4407FP000	3
3	4		3Ø 600	DS4414MP000	3	DF4414FP000	3
3	4		3Ø 208	DS4416MP000	3	DF4416FP000	3
3	4		3Ø 440	DS4421MP000	3	DF4421FP000	3
4	5		3ØY 277/480	DS4504MP000	3¾	DF4504FP000	3¾
4	5		3ØY 347/600	DS4514MP000	3¾	DF4514FP000	3¾
4	5		3ØY 110/208	DS4516MP000	3¾	DF4516FP000	3¾
4	5		3ØY 250/440	DS4521MP000	3¾	DF4521FP000	3¾

Maximum 600 V AC or 250 V DC.

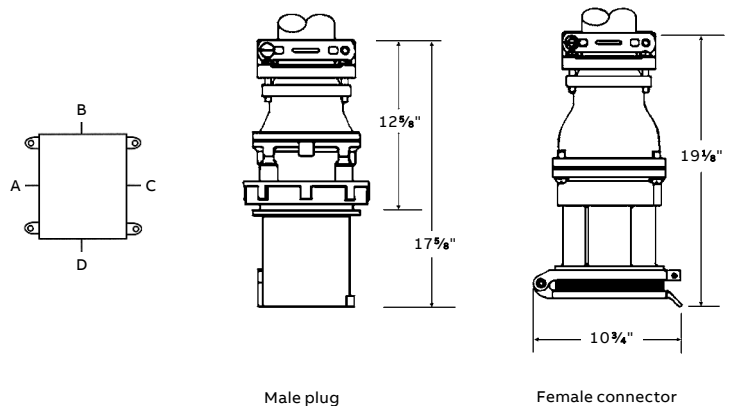
** If receptacle is desired with a straight adapter instead of standard angle adapter, substitute "S" for the "A" in the catalog number of the receptacle with angle adapter or adapter and box.

† Standard cable bushings shown; see page 32 for other sizes available at no extra cost if specified on order.

†† Always furnished with screw collar. We recommend cup cap with male plug; order catalog number DS4CC.

▼ Control contacts for plug/receptacles: Use "K" where noted. Ex: DS4104MP00K. For adapters, junction boxes and accessories, see pages 32–35.

Diagrams





Shore-to-ship power Solution 400 A



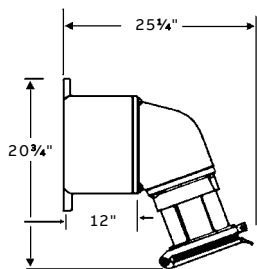
Application:
Shore power to marine vessels – Sightseeing boats. When docked, marine vessels need shore power when their engines aren't running. Dockside designs need to be as safe as possible during heavy use, rough treatment and adverse weather conditions. High amperage-rated systems are installed using parallel power delivery with cross-network protection.

Installation:
400 A male inlets and power connectors with control contacts. Watertight devices are necessary for dockside installations. Max-Gard connections go further with O-rings on both pins and interiors for environmental separation and true waterproof performance. The male inlet center ground pin feature and keyed entry design align easily, make ground first and break last, while quarter-turn insertion delayed-action removal and locking screw collars provide accidental pull-out protection. Upon connector insertion, two auxiliary control contacts complete a contactor circuit, which powers the line through a make-last-and-break-first configuration. Contactors are installed separately in an on-shore sheltered power distribution panel. This can be wired for each contactor or for multiple connections; if one plug is removed, power is cut off.

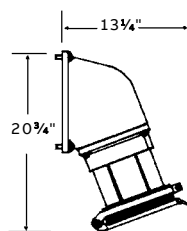
Pole	Wire	Cat. no. ▼	Cat. no. ▼	Cat. no. ▼
Product type		Female receptacle with angle adapter** and junction box	Female receptacle with angle adapter**	Female receptacle
2	3	DF4104FRABØ	DF4104FRAØØ	DF4104FRØØØ
2	3	DF4107FRABØ	DF4107FRAØØ	DF4107FRØØØ
2	3	DF4204FRABØ	DF4204FRAØØ	DF4204FRØØØ
2	3	DF4207FRABØ	DF4207FRAØØ	DF4207FRØØØ
2	3	DF4214FRABØ	DF4214FRAØØ	DF4214FRØØØ
2	3	DF4216FRABØ	DF4216FRAØØ	DF4216FRØØØ
3	4	DF4304FRABØ	DF4304FRAØØ	DF4304FRØØØ
3	4	DF4307FRABØ	DF4307FRAØØ	DF4307FRØØØ
3	4	DF4316FRABØ	DF4316FRAØØ	DF4316FRØØØ
3	4	DF4404FRABØ	DF4404FRAØØ	DF4404FRØØØ
3	4	DF4407FRABØ	DF4407FRAØØ	DF4407FRØØØ
3	4	DF4414FRABØ	DF4414FRAØØ	DF4414FRØØØ
3	4	DF4416FRABØ	DF4416FRAØØ	DF4416FRØØØ
3	4	DF4421FRABØ	DF4421FRAØØ	DF4421FRØØØ
4	5	DF4504FRABØ	DF4504FRAØØ	DF4504FRØØØ
4	5	DF4514FRABØ	DF4514FRAØØ	DF4514FRØØØ
4	5	DF4516FRABØ	DF4516FRAØØ	DF4516FRØØØ
4	5	DF4521FRABØ	DF4521FRAØØ	DF4521FRØØØ

Maximum lug wire 500 kcmil 37-strand or flexible, cable entrance 0.937" diameter.
 Receptacles furnished with flap cap also have screw thread to accept male collar on plug.
 Catalog numbers shown are for flap cap receptacles; change "DF" to "DS" for ordering screw cap.
 Boldface figures are for voltage assignment. For different ratings, see page 38.
 Outlet furnished at location "B" unless otherwise specified. 4" NPT.
 For full polarization, see page 38.

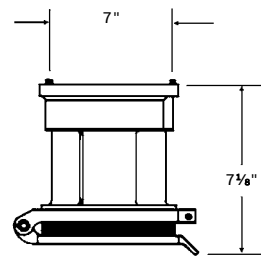
Diagrams



Female receptacle with angle adapter and junction box



Female receptacle with angle adapter



Female receptacle

Max-Gard interconnection systems

400 A reverse service



Device ratings and polarizations

Pole	Wire	Conductor placement	Voltage 60 Hz	Cat. no. ▼	Standard bushing I.D. [†] (in.)	Cat. no. ▼	Standard bushing I.D. [†] (in.)
Product type				Female connector		Male plug ^{††}	
2	3		277	DF4104FP000	2¾	DS4104MP000	2¾
2	3		125	DF4107FP000	2¾	DS4107MP000	2¾
2	3		480	DF4204FP000	2¾	DS4204MP000	2¾
2	3		250	DF4207FP000	2¾	DS4207MP000	2¾
2	3		600	DF4214FP000	2¾	DS4214MP000	2¾
2	3		208	DF4216FP000	2¾	DS4216MP000	2¾
3	4		277/480	DF4304FP000	3	DS4304MP000	3
3	4		125/250	DF4307FP000	3	DS4307MP000	3
3	4		120/208	DF4316FP000	3	DS4316MP000	3
3	4		3Ø 480	DF4404FP000	3	DS4404MP000	3
3	4		3Ø 250	DF4407FP000	3	DS4407MP000	3
3	4		3Ø 600	DF4414FP000	3	DS4414MP000	3
3	4		3Ø 208	DF4416FP000	3	DS4416MP000	3
3	4		3Ø 440	DF4421FP000	3	DS4421MP000	3
4	5		3ØY 277/480	DF4504FP000	3¾	DS4504MP000	3¾
4	5		3ØY 347/600	DF4514FP000	3¾	DS4514MP000	3¾
4	5		3ØY 120/208	DF4516FP000	3¾	DS4516MP000	3¾
4	5		3ØY 250/440	DF4521FP000	3¾	DS4521MP000	3¾

Maximum 600 V AC or 250 V DC

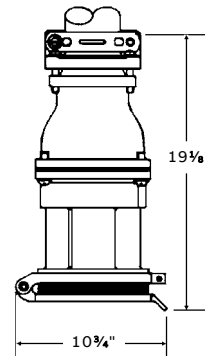
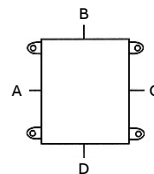
** If receptacle is desired with a straight adapter instead of standard angle adapter, substitute "S" for the "A" in the catalog number of the receptacle with angle adapter or adapter and box.

† Standard cable bushings shown; see page 32 for other sizes available at no extra cost if specified on order.

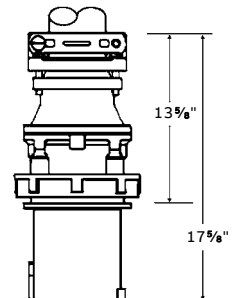
†† Always furnished with screw collar. We recommend cup cap with male plug; order catalog number DS4CC.

▼ Control contacts for plug/receptacles: Use "K" where noted. Ex: DS4104MR00K. For adapters, junction boxes and accessories, see pages 32–35.

Diagrams



Female connector



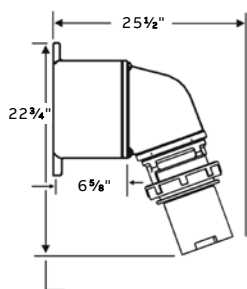
Male plug^{††}



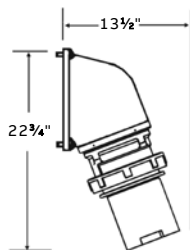
Pole	Wire	Cat. no. ▼ Male inlet with angle adapter** and junction box	Cat. no. ▼ Male inlet with angle adapter**	Cat. no. ▼ Male inlet**
2	3	DS4104MRABØ	DS4104MRAØØ	DS4104MRØØØ
2	3	DS4107MRABØ	DS4107MRAØØ	DS4107MRØØØ
2	3	DS4204MRABØ	DS4204MRAØØ	DS4204MRØØØ
2	3	DS4207MRABØ	DS4207MRAØØ	DS4207MRØØØ
2	3	DS4214MRABØ	DS4214MRAØØ	DS4214MRØØØ
2	3	DS4216MRABØ	DS4216MRAØØ	DS4216MRØØØ
3	4	DS4304MRABØ	DS4304MRAØØ	DS4304MRØØØ
3	4	DS4307MRABØ	DS4307MRAØØ	DS4307MRØØØ
3	4	DS4316MRABØ	DS4316MRAØØ	DS4316MRØØØ
3	4	DS4404MRABØ	DS4404MRAØØ	DS4404MRØØØ
3	4	DS4407MRABØ	DS4407MRAØØ	DS4407MRØØØ
3	4	DS4414MRABØ	DS4414MRAØØ	DS4414MRØØØ
3	4	DS4416MRABØ	DS4416MRAØØ	DS4416MRØØØ
3	4	DS4421MRABØ	DS4421MRAØØ	DS4421MRØØØ
4	5	DS4504MRABØ	DS4504MRAØØ	DS4504MRØØØ
4	5	DS4514MRABØ	DS4514MRAØØ	DS4514MRØØØ
4	5	DS4516MRABØ	DS4516MRAØØ	DS4516MRØØØ
4	5	DS4521MRABØ	DS4521MRAØØ	DS4521MRØØØ

Maximum lug wire 500 kcmil 37-strand or flexible, cable entrance 0.937" diameter.
 Receptacles furnished with flap cap also have screw thread to accept male collar on plug.
 Catalog numbers shown are for flap cap receptacles; change "DF" to "DS" for ordering screw cap.
 Boldface figures are for voltage assignment. For different ratings, see page 38.
 Outlet furnished at location "B" unless otherwise specified. 4" NPT.
 For full polarization, see page 38.

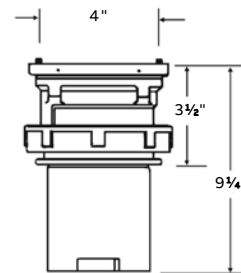
Diagrams



Male inlet with angle adapter and junction box



Male inlet with angle adapter



Male inlet

Max-Gard interconnection systems

Cable bushings for Max-Gard plugs and connectors



Size No. 3 and 6
(identification letter
inside hole)



Size No. 10, 20 and 40

- To order non-standard bushing, add cable bushing number to the end of a catalog number. The bushing is furnished at no additional cost at time of order.

Ex: DF2504FP000/DF2032.

- Shaded areas show cable bushings provided with a strain-relief neck; larger bushings are collar style.

Cable bushings for Max-Gard plugs and connectors

Hole diameter for cable (in.)	Size 3 30 A	Size 6 60 A	Size 10 100 A	Size 20 200 A	Size 40 400 A
0.625	JG63	–	–	–	–
0.750	JG64	JG104	–	–	–
0.875	Std. 2P3W JG65	JG105	–	–	–
1.000	Std. 2P3W JG66	JG106	DF1020	DF2020	–
1.188	Std. 3P4W JG67	Std. 2P3W JG107	DF1022	DF2022	–
1.313	–	Std. 3P4W JG108	DF1024	DF2024	–
1.375	JG69	–	–	–	–
1.500	JG610	Std. 4P5W JG1010	DF1026	DF2026	–
1.625	–	–	–	–	–
1.688	–	JG1011	Std. 2P3W DF1027	DF2027	–
1.813	–	–	Std. 3P4W DF1029	DF2029	–
1.875	–	JG1013	DF1030	Std. 2P3W DF2032	–
2.000	–	–	Std. 4P5W DF1032	–	–
2.125	–	–	–	Std. 3P4W DF2034	–
2.250	–	–	–	Std. 4P5W DF2036	–
2.500	–	–	–	DF2040	–
2.625	–	–	–	–	DF4042
2.750	–	–	–	–	DF4044
3.000	–	–	–	–	Std. 3P4W DF4048
3.250	–	–	–	–	Std. 4P5W DF4054

Standard cable bushings

Notes: When ordering, select bushing size slightly larger than your cable O.D. for best fit.
Material – Neoprene

Max-Gard interconnection systems

Adapters for conduit and fittings & replacement flap covers and screw covers



JPA conduit adapters

- Adapters are tapped NPT standard pipe thread to accommodate rigid conduit or standard connectors for armored and non-metallic cable or flexible conduit.

Adapters for conduit and fittings

30 Amp cat. no.	Tapped hole size NPT (in.)	60 Amp cat. no.	Tapped hole size NPT (in.)	100 Amp cat. no.	Tapped hole size NPT (in.)	200 Amp cat. no.	Tapped hole size NPT (in.)	400 Amp cat. no.	Tapped hole size NPT (in.)
JPA62	¾	JPA104	1¼	DFA14	1¼	DFA25	1½	DFA46	2
JPA63	1	JPA105	1½	DFA15	1½	DFA26	2	DFA47	2½
JPA64	1¼	JPA106	2	DFA16	2	DFA27	2½	DFA48	3
JPA65	1½	-	-	-	-	-	-	-	-

Material – Cast aluminum, corrosion-resistant copper-free alloy, electrostatic epoxy coated. Furnished complete with gasket and screws.

To specify standard plugs or connectors equipped with one of the above adapters, add the catalog number of the adapter selected to the catalog number of the plug or connector. Complete list price is the list price of the device plus list price of the adapter.

Ex.: Cat. no. DS3107MP000 with adapter tapped 1 would be Cat. no. DS3107MP000/JPA63.



DFC6

DSC6

- For connectors, receptacles and interlocks.









Replacement flap covers and screw covers

Cat. no.	Description	Amperage
DFC3	Flap cover assembly (weathertight)	30
DFC6	Flap cover assembly (weathertight)	60
DFC10	Flap cover assembly (weathertight)	100
DFC20	Flap cover assembly (weathertight)	200
DFC40	Flap cover assembly (weathertight)	400
DSC3	Screw cap and STS – Lanyard assembly (watertight)	30
DSC6	Screw cap and STS – Lanyard assembly (watertight)	60
DSC10	Screw cap and STS – Lanyard assembly (watertight)	100
DSC20	Screw cap and STS – Lanyard assembly (watertight)	200
DSC40	Screw cap and STS – Lanyard assembly (watertight)	400

Max-Gard interconnection systems

Accessories for receptacles

Accessories for receptacles

Description	30 A Cat. no.	60 A Cat. no.	100 A Cat. no.	200 A Cat. no.	400 A Cat. no.
Cup caps					
 <p>For watertight plugs/inlets. Cup caps are used where portable equipment is on a standby basis and plugs are not in use. Effectively protect insulation and contacts from excessive moisture, dirt, dust and corrosion. Material – Cast aluminum, corrosion-resistant copper-free alloy, electrostatic epoxy coated with steel braid cable attached.</p>	DS3CC	DS6CC	DS1CC	DS2CC	DS4CC
Adapter flush frames – Single gang					
 <p>Provide suitable means for mounting box covers of junction box receptacles flush in a wall.</p>	JFA3	JFA6	JFA10	JFA20	-
Adapters for conduit box receptacles					
 <p>Adapters to fit existing boxes and for special mounting requirements can also be furnished. Consult your ABB representative.</p>					
 <p>20° Vertical angle adapter</p>	JAA6-AB6	JAA10	DAA10	DAA20	-
30° Vertical angle adapter	-	-	-	-	DAA40
45° Vertical angle adapter	JAA6-45	JAA10-45	-	-	-
Straight adapter	JRA6-AB6	JRA10	DRA10	DRA20	DRA40
Junction box – Single gang					
	JB6-1	JB10-B150	JB10-B200	DJB20	DJB40
Angle enclosure					
	JE6	JE10	JE10M	-	-
MACK adapter plates					
 <p>Enables mounting of Max-Gard receptacles to competitive existing back boxes. This involves removing the existing non-hazardous location receptacle from back box, inserting adapter plate and installing Max-Gard receptacle. Adapter plates are available for competitors' boxes including Hubbel, Killark, Appleton and Crouse-Hinds.</p>	DCCA3	DCCA6	DCCA10	DCCA20	-
Russellstoll adapter plates					
 <p>Adapt Max-Gard receptacles to existing J-Line, angle type and heavy-service Ever-Lok back boxes.</p>	DRCA3	DRCA6	DRCA10	-	-

Max-Gard interconnection systems

Replacement interiors for receptacles, connectors, plugs and male inlets



Replacement interiors for receptacles, connectors, plugs and male inlets

Rating	Poles/ wires	Voltage polarization (V AC)	Corresponding male interior assembly		Corresponding female interior assembly	
			Plug/inlet	Male interior	Connector/receptacle*	Female interior
30 A	2P3W	125	DS3107MP000	DFPU3107	DF3107FP000	DFRU3107
	2P3W	250	DS3207MP000	DFPU3207	DF3207FP000	DFRU3207
	3P4W	125/250	DS3307MP000	DFPU3307	DF3307FP000	DFRU3307
	3P4W	3-ph 480	DS3404MP000	DFPU3404	DF3404FP000	DFRU3404
	4P5W	277/480	DS3504MP000	DFPU3504	DF3504FP000	DFRU3504
60 A	2P3W	250	DS6207MP000	DFPU6207	DF6207FP000	DFRU6207
	3P4W	125/250	DS6307MP000	DFPU6307	DF6307FP000	DFRU6307
	3P4W	3-ph 480	DS6404MP000	DFPU6404	DF6404FP000	DFRU6404
	4P5W	277/480	DS6504MP000	DFPU6504	DF6504FP000	DFRU6504
100 A	2P3W	250	DS1207MP000	DFPU1207	DF1207FP000	DFRU1207
	3P4W	125/250	DS1307MP000	DFPU1307	DF1307FP000	DFRU1307
	3P4W	3-ph 480	DS1404MP000	DFPU1404	DF1404FP000	DFRU1404
	4P5W	277/480	DS1504MP000	DFPU1504	DF1504FP000	DFRU1504
200 A	3P4W	277/480	DS2304MP000	DFPU2304	DF2304FP000	DFRU2304
	3P4W	3-ph 480	DS2404MP000	DFPU2404	DF2404FP000	DFRU2404
	4P5W	277/480	DS2504MP000	DFPU2504	DF2504FP000	DFRU2504
400 A	3P4W	277/480	DS4304MP000	DFPU4304	DF4304FP000	DFRU4304
	3P4W	3-ph 480	DS4404MP000	DFPU4404	DF4404FP000	DFRU4404
	4P5W	277/480	DS4504MP000	DFPU4504	DF4504FP000	DFRU4504

Note: For other interiors not shown, use same polarization index as plug, connector, etc. Ex: DS6416MP000 plug uses a DFPU6416 interior. If your original product had option "K - Control Contacts," include a "K" at the end of the replacement part number. Ex: If your plug/inlet is a DS3404MP00K, then the male replacement interior would be a DFPU3404K. If your connector/receptacle is a DF3404FP00K, then your female replacement/interior would be a DFRU3404K.

* To order replacement interior parts for the Max-Gard Interlock, replace "DFRU" with "DFIU".

Accessories for interlocked NEMA 12/3R receptacles

Accessories for interlocked NEMA 12/3R receptacles

Description	30 A	60 A	100 A	200 A	400 A
	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
Fused disconnect interlocked receptacle with safety switch 30-100 A					
1 NO - 1 NC contact	F34757	F34757	F34757	-	-
2 NO - 2 NC contact	F34758	F34756B	-	-	-
Copper body lugs - 6 lugs per kit	F34756A	F34756B	F34756C	-	-
Type R fuse clips - 3 per kit	F34755A	F34755B	F34755C	-	-
Neutral block	F34754A	F34754B	F34754B	-	-