

**CCGS F. C. G. Smith**

Port generator	Reading at	L1	L2	L3
Stator	500V			

Disconnect the AVR, 1FU3 and 1FU4.

Disconnect the connectors going to the EMCP 3.1 diesel control panel (engine room above the generator).

Starboard generator	Reading at	L1	L2	L3
Stator	500V			

**Note**

Disconnect the AVR, 3FU3 and 3FU4.

Disconnect the connectors going to the EMCP 3.1 diesel control panel (engine room above the generator).

Only the ground insulation values on the main stator and the excitation inductor may be used.

This is because in the case of a brushless alternator, these two components are the only ones accessible.

Main panel, control room, section 230 V											1000V
Circuit	Device	Device location	L1	L2	L3	G1	G2	G3	G4	G5	G6
2CB1	Panel P1, Heating	Aft cross alley									
2CB2	Panel P2, Galley	Dining room									
2CB3	MCC #1 Essential	Control room									
2CB4	MCC #3 Non-Essential	Control room									
2CB5	Port steering gear	Control room									
2CB6	XFO 230/115 scientific									primary secondary	
4CB17	XFO 230/115 Service									primary secondary	
4CB18	XFO 230/115 UPS									primary secondary	
4CB19	24-V DC emergency charger										
4CB20	Stbd. steering gear	Steering compt. Stbd.									
4CB21	MCC #2 Essential	Control room									
4CB22	A/C unit, computer room										
4CB23	Domestic water heater										
4CB24	Air plenum heater										
4CB25	Switchboard heater										
4CB26	Sweep room A/C unit										
4CB27	A/C Accommodations									primary secondary	
4CB28	Cathodic protection										

Main panel, control room, section 120 V	250V
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#4	Fuel oil transfer pump										
#5	Accommodation supply fan										
#6	Welder										
#7A	Port sewage treatment #1	Port aft hold									
#7B	Stbd. sewage treatment #2	Starboard aft hold									
#8A	Oily water separator										
#8B	Hydraulic pump	Starboard engine room									
#9A	M/E sea water pump (port)	Port engine room									
#9B	M/E sea water pump (stbd.)	Starboard engine room									

600-V distribution panel – Starboard aft hold			1000V		
Circuit	Device	G1	G2	G3	
P601-1	Starboard forward hold heating				
P601-3	Port forward hold heating				
P601-5	Spare				
P601-2	Port aft hold heating				
P601-4	Starboard aft hold heating				
P601-6	Spare				

120-V UPS distribution panel – sound room			500V		
Circuit	Device	G1	G2	G3	
UPS-1	Intercom, lighting,				
UPS-3	Control room receptacles				
UPS-5	Gyrocompass				
UPS-7	Alarm monitoring				
UPS-2	DEC Alpha, screen, gyro repeater				
UPS-4	Centre cons. recept., elec. chart, *Stbd. centre cons. power bar*				
UPS-6	alarm printer, sweep rm. recept.				
UPS-8	alternate supply, Nav. Lts. panelboard				

P1 heating panel, port aft cross alley			500V		
Circuit	Location	G1	G2	G3	
P1-1	Bridge				
P1-3	Chief engineer				
P1-5	Port fwd. 2 man cabin				
P1-7	Stbd. side fwd. 2 man cabin				
P1-9	Control room				
P1-11	Hydro store				
P1-13	Fwd. passage				
P1-2	Sweep room				
P1-4	Captain				

P1-6	Stbd. Fwd. 2 man cabin			
P1-8	Stbd. Aft 2 man cabin			
P1-10	Galley			
P1-12	Paint store			
P1-14	Dry stores			
P1-15	Washroom			
P1-17	Stbd. steering gear compt.			
P1-19	Port engine room			
P1-21	Stbd. fwd. hold			
P1-23	Stbd. aft hold			
P1-16	Computer room			
P1-18	Port steering gear compt.			
P1-20	Stbd. engine room			
P1-22	Port fwd. hold			
P1-24	Port aft hold			

Heating panel and galley P2, dining room				500V
Circuit	Location/equipment	G1	G2	G3
P2-1	Shower heating, room 206			
P2-3	Washroom heating, room 213			
P2-5	Hotplate + oven + fryer			
P2-7	Spare			
P2-2	Dishwasher			
P2-4	Toaster			
P2-6	Clothes dryer			
P2-8	Spare			

120-V S1 panel, room 212				500V
Circuit		G1	G2	G3
1	Receptacle A			
3	Spare			
5	Receptacles I + J			
7	Receptacle B			
9	Receptacle F			
11	Spare			
2	Spare			
4	Receptacle G			
6	Unknown			
8	Receptacle D			
10	Receptacle H, port + headboard outlets			
12	Spare			

120-V S2 panel, sweep room				500V
Circuit		G1	G2	G3
1	Receptacle A			

3	Starboard floor outlet			
5	Receptacle E			
7	Receptacle G			
9	Receptacle I			
11	Spare, Rack mounts A and B			
2	Spare			
4	Port floor outlet			
6	Receptacle B			
8	Receptacle F			
10	Rack mount C **unplug UPS.**			
12	Spare			

**120-V L1 panel, starboard engine room** **500V**

Circuit	Device	G1	G2	G3
1	M/E block heater			
3	Bosun's store outlets			
5	E/R & aux. mach. space lights			
7	M/E battery charger			
9	Generator battery charger			
11	E/R & aux. mach. space lights			
13	Work bench recept.			
15	Bosun's store lights			
17	Spare			
2	Generator block heater			
4	Aux. mach. space recept.			
6	Drinking water heater			
8	Spare			
10	Tiller flat outlets			
12	Tiller flat & bosun's stores lights			
14	Engine room outlets			
16	Emergency battery pack			
18	Slop tk / sludge tk overboard transfer pump			

**120-V L2 panel, port engine room** **500V**

Circuit	Device	G1	G2	G3
1	M/E block heater			
3	Eng. stores recept.			
5	E/R & aux. mach. space lights			
7	Hot water circulating pump			
9	Generator battery charger			
11	E/R & aux. mach. space lights			
13	Work bench recept.			
15	Engineer's store lights			
17	Drinking water heater			
2	Generator block heater			

4	Aux. mach. space recept.			
6	M/E battery charger			
8	Ultraviolet purifier			
10	Tiller flat outlets			
12	Tiller flat & eng. stores lights; freezer outlet			
14	Engine room outlets			
16	Emergency battery pack			
18	Spare			

**120-V L3 lighting panel** **500V**

Circuit		G1	G2	G3
1	Range hood, galley & mess lights			
3	Presence sensor, aft cross alley, port E/R entrance			
5	Bath fan, computer room lights, hydrographers			
7	Computer room lights, aft alley			
9	Computer room outlets			
11	1 man fwd. port cabin			
2	Mess & dry stores			
4	Steering gear room, stbd. acc. space			
6	Aft washroom, elec. store			
8	Computer room outlets			
10	Elights battery pack passage			
12	Stbd. fwd. 1 man cabin			
13	Port fwd. 2 man cabin			
15	Fwd cross alley, laundry, washroom lights			
17	2 man cabin lights			
19	Stbd. deck lights			
21	Aft deck lights			
23	Spare			
14	Stbd. fwd. 2 man cabin			
16	Fwd. alley, E/R stbd. entrance lights			
18	Port deck lights			
20	Fwd. deck lights			
22	Clothes washer			
24	Spare			

**120-V L4 lighting panel, dining room** **500V**

Circuit		G1	G2	G3
1	Starboard fridge			
3	Port fridge			
5	Aft deck outlets			
7	Microwave outlet			
9	Counter outlet			
11	Port fwd. deck outlets			
13	Laundry outlets			

15	Spare			
2	Port fridge			
4	Stbd. fwd. deck outlets			
6	Stern deck outlets			
8	Counter outlet			
10	Counter outlet			
12	Mess outlets			
14	Coffee machine outlet			
16	Galley exhaust fan			

**12-V L5 distribution panel, bridge** **500V**

Circuit		G1	G2	G3
1	Aft floodlights			
3	W/H deck lights			
5	Sweep room outlets, unplug power bar port aft sweep room			
7	Sweep room lights			
9	Heated window fwd. C/L			
11	Aft floodlight			
2	Stbd .fwd. floodlight			
4	Sweep room outlets			
6	W/H lights			
8	Port fwd. heated window			
10	Stbd. fwd. heated window			
12	Port fwd. floodlight			
13	Floodlight outlets at stern			
15	Centre console outlets			
17	Sweep room lights			
19	Aft heated window			
21	Spare			
14	Gyro starboard, port repeater + TV, Saab AIS, ADS, MX200			
16	W/H lights			
18	Sweep room lights			
20	Hydraulic pump air clutch			
22				

**12-V L6 distribution panel, bridge** **500V**

Circuit		G1	G2	G3
1	Telephone system			
3	Port radar #1			
5	Speed log			
7	Echo sounder, skipper			
9	Port searchlight			
11	Wind speed/angle			
13	VHF-FM # 2			
2	Notifier, fire alarm system			

4	Spare			
6	Top bridge light			
8	Clear view screen			
10	Stbd. searchlight			
12	Unknown			
14	Stbd. radar #2			
15	Sweep sounder			
17	Navtex + cellular			
19	Clear view screen			
21	Stbd. window wiper			
23	Unknown			
25	Rudder angle indicator			
27	Whistle control			
16	12-volt battery charger			
18	Wind speed/angle indicator			
20	Port wiper + C/L + washers			
22	Gen. coverage rec.			
24	Facsimile rec., W/H cmpr., multicoupler			
26	Chart table recept.			
28	Unknown			

Note: Take the Megger in the bottom of the fuse boxes.

115-V navigation light panel, bridge					500V
Circuit	Light	A1	A2	B1	B2
	Masthead				
	Port				
	Starboard				
	Stern				
	Anchor				
	Towing 1				
	Towing 2				
	Booms				
	Red NUC RIAM				
	White NUC RIAM				
	Red NUC				
	Red NUC RIAM (Unused)				

Technician

NAME: \_\_\_\_\_  
DATE: \_\_\_\_\_  
SIGNATURE: \_\_\_\_\_

Measuring instrument

MAKE: \_\_\_\_\_  
MODEL: \_\_\_\_\_  
SERIAL #: \_\_\_\_\_  
Ambient moisture  
% HUMIDITY \_\_\_\_\_