

Switches, Circuit Breakers and Fuses, are they as per Rule 7/2, are the fuses an approved type 7/2, are all fuses labelled as per Rule 7/2, are the reversed current protection devices connected on the pole opposite to the equaliser connection 7/2, have they been tested under working conditions 7/2. Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule 7/2. Cables, are they insulated and protected as per the appropriate Tables of the Rules 7/2, if otherwise than as per Rule are they of an approved type 7/2, state maximum fall of pressure between bus bars and any point under maximum load 7/2, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets 7/2. Are paper insulated and varnished cambric insulated cables sealed at the exposed ends 7/2 with insulating compound 7/2 or waterproof insulating tape 7/2. Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil, high temperatures or risk of mechanical damage 7/2, are cables laid under machines or floorplates 7/2, if so, are they adequately protected 7/2. Are cables in machinery spaces, galleys, laundries, etc., lead covered 7/2 or run in conduit 7/2. State how the cables are supported and protected 7/2. L.C.A.B. cables clipped to surface or on transports in machinery spaces and alleyways and run in pipe-ways along fire-and-escape gangways; L.C.A.B. cables clipped to surface or wood grounds in accommodation. Are all lead sheaths, armoring and conduits effectually bonded and earthed 7/2. Refrigerated chambers, are the cables and fittings as per Rule 7/2. Are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands 7/2, where unarmoured cables pass through beams, etc., are the holes effectually bushed 7/2 and with what material Lead or zinc. Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule 7/2. Emergency Supply, state position Battery fitted in engine room near switchboard and method of control Automatic on failure of engine room lighting. Navigation Lamps, are they separately wired 7/2 controlled by separate double pole switches 7/2 and fuses 7/2. Are the switches and fuses in a position accessible only to the officers on watch 7/2, is an automatic indicator fitted 7/2. Secondary Batteries, are they constructed and fitted as per Rule 7/2, are they adequately ventilated 7/2. Fittings, are all fittings on weather decks, in stowholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof 7/2. Are fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present 7/2, if so, how are they protected "Artic" gaslight fittings installed in pumproom top. and where are the controlling switches fitted in machinery accommodation, are all fittings suitably ventilated 7/2. are all fittings and accessories constructed and installed as per Rule 7/2. Searchlight Lamps, No. of One, whether fixed or portable Com. vision fitted forward, are their fittings as per Rule 7/2. Heating and Cooking, is the general construction as per Rule 7/2. are the frames effectually earthed 7/2, are heaters in the accommodation of the convection type 7/2. Motors, are all motors constructed and installed as per Rule 7/2 and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water, steam and oil 7/2, if situated near unprotected combustible material state minimum distance from same horizontally 7/2 and vertically 7/2. Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing 7/2. Have certificates of test for motors under 100 BHP intended for essential services been supplied and the results found as per Rule 7/2. Control Gear and Resistances, are they constructed and fitted as per Rule 7/2. Lightning Conductors, where required are they fitted as per Rule 7/2. Ships carrying Oil having a Flash Point less than 150° F. Have all the special requirements of the Rules for such ships been complied with 7/2, are all fuses of the cartridge type 7/2 are they of an approved type 7/2. If portable lamps for use in dangerous spaces are supplied, are they of a self-contained battery-fed flameproof type 7/2. Spare Gear, if the vessel is for open sea service have spares been provided as per Rule 7/2, are they suitably stored in dry situations 7/2. Insulation Tests, has the insulation resistance of all circuits and apparatus been megger tested and found satisfactory 7/2.

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Amps.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	1	30	110	273		Single cyl. Steam engine		
	1	30	110	273		4 cyl. Diesel engine	Fuel Oil Above 150°F	
AUXILIARY	1	8	110	73.5	750	Single cyl. Steam engine		
EMERGENCY								
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (load plus return feet).	INSULATED WITH.	HOW PROTECTED.
		No. in Parallel For Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATORS	2 x 30	1	6/11.093	273	288	70	V.I.R.	L.C.A.B.
" EQUALISER		1	37/1.072	152	152	35	V.I.R.	L.C.A.B.
AUXILIARY GENERATOR	8	1	19/0.614	73.5	83	50	V.I.R.	L.C.A.B.
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" GENERATOR								

MAIN DISTRIBUTION CABLES.

AUX. SWITCHBOARDS AND SECTION BOARDS	KILOWATTS.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (load plus return feet).	INSULATED WITH.	HOW PROTECTED.
Chief Canal Propeller	1	19/0.52	60	64	80	V.I.R. L.C.A.B.
Separators & Filter A.B. feed	1	7/0.614	38	46	170	V.I.R. L.C.A.B.
Crank Case Fan & P. Pump A.B. feed	1	7/0.614	30	46	60	V.I.R. L.C.A.B.
Thermotank A.B. App. Misting	1	19/0.52	40+20	64	180	V.I.R. L.C.A.B.
Misting Assom. A.B.	1	19/0.52	48	64	400	V.I.R. L.C.A.B.
Crew Assom. App. A.B.	1	19/0.52	48	64	130	V.I.R. L.C.A.B.
Engine Room App. A.B.	1	19/0.52	56	64	30	V.I.R. L.C.A.B.
Emergency App. (fed from above)	1	7/0.614	20	20	36	V.I.R. L.C.A.B.

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS	NAVIGATION LIGHTS	LIGHTING AND HEATING	WIRELESS	NAVIGATION LIGHTS	LIGHTING AND HEATING	WIRELESS	NAVIGATION LIGHTS	LIGHTING AND HEATING
1	1	1	1	1	1	1	1	1
7/0.614	7/0.614	7/0.36	7/0.614	7/0.614	7/0.36	7/0.614	7/0.614	7/0.36
15/20	10	8	15	15	7	11	15	32
46	31	24	24	24	24	24	24	31
430	480	25	50	140	40	120	180	80
V.I.R.	V.I.R.	V.I.R.	V.I.R.	V.I.R.	V.I.R.	V.I.R.	V.I.R.	V.I.R.
L.C.A.B.	L.C.A.B.	L.C.A.B.	L.C.A.B.	L.C.A.B.	L.C.A.B.	L.C.A.B.	L.C.A.B.	L.C.A.B.

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (load plus return feet).	INSULATED WITH.	HOW PROTECTED.
Oil Separator	2	2	7/0.29	17.2	18.2	60x40	V.I.R. L.C.A.B.
Trimming Pump	1	1.5	7/0.29	13.5	18.2	50	V.I.R. L.C.A.B.
Crank Case Fan	1	2	7/0.29	16	18.2	130	V.I.R. L.C.A.B.
Forward Oranged Fan	1	4.5	7/0.614	39	46	180	V.I.R. L.C.A.B.
Oil Filter	1	1/2	3/0.29	4	7.8	25	V.I.R. L.C.A.B.
Refing. Motor	1	8	19/0.52	64	64	180	V.I.R. L.C.A.B.
Engine Room Crane	1	3	7/0.614	24	31	80	V.I.R. L.C.A.B.
Thermotank Fans App.	4	1/4	7/0.29	10	18.2	40x150	V.I.R. L.C.A.B.
Thermotank Fans Feed.	2	1/4	7/0.29	10	18.2	80x90	V.I.R. L.C.A.B.
Wrenching Motor	1	3	7/0.614	24	31	130	V.I.R. L.C.A.B.
Accommodation Charging Bd.	1	1	7/0.29	5	18.2	220	V.I.R. L.C.A.B.

The Electrical Equipment is installed in accordance with the approved plans and the requirements of the Rules.
 All Insulated Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.
 The foregoing is a correct description.

Wm Sunderland Forge & Co Ltd Electrical Engineers. Date *4-5-1939*
A. J. Curran

SWAN, HUNTER, & WIGHAM RICHARDSON, LTD.
 COMPASSES.

Minimum distance between electric generators or motors and standard compass *230 feet*
 Minimum distance between electric generators or motors and steering compass *225 feet*

The nearest cables to the compasses are as follows:—
 A cable carrying *1/2* Ampères *on the* feet from standard compass *10* feet from steering compass.
 A cable carrying *1/2* Ampères *10* feet from standard compass *on the* feet from steering compass.
 A cable carrying Ampères feet from standard compass feet from steering compass.

Have the compasses been adjusted with and without the electric installation at work at full power *Yes*
 Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted *Yes*

The maximum deviation due to electric currents was found to be *two* degrees on *every* course in the case of the standard compass, and *two* degrees on *every* course in the case of the steering compass.

Builder's Signature *Wm Sunderland* Date *8th May 1939*

Is this installation a duplicate of a previous case *Yes* If so, state name of vessel *M.V. "British Gemini"*

General Remarks (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.) *The electrical equipment of this vessel has been installed under special survey. The materials used and the workmanship are good. On completion the equipment was run under working conditions, the governing, compounding, regulation and paralleling of the 30kw. generator and the governing, compounding and regulation of the 8kw generator were tested, the operation of the overload and reverse current trips of the circuit breakers was checked, the insulation resistance of all circuits was measured and the spare gas was checked. This equipment is in my opinion suitable for a closed vessel carrying petroleum in bulk.*

Noted
L.Y.
19/5/39

Total Capacity of Generators *68* Kilowatts.

The amount of Fee ... £ *29 : 6* :
 Travelling Expenses (if any) £ : :
 When applied for, *10 MAY 1939*
 When received, *20.5.1939*

Barterson
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute *TUE 23 MAY 1939*
 Assigned *See NWC. J.C. 97437*

(MADE IN ENGLAND.)
 22-10-38-Transfer.
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)

