



PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE	
		Kilowatts	Volts	Ampères	Revs. per Min.		Fuel Used	Flash Point of Fuel
MAIN	2	100	220	454.5	300	Diesel Engine	Diesel oil	above 150°F
AUXILIARY	1	66	220	300.0	300	-	-	-
EMERGENCY								
ROTARY TRANSFORMER								

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION	No. of Conductors	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND		Total Maximum Current Amperes	Approximate Length (Lead and Return) Feet	Insulated with	HOW PROTECTED
				No.	Diameter				
	MAIN GENERATOR	2	2 x 0.308	2 x 300	SWG 20#	454.5	160	Rubber	Armoured
	EQUALISER CONNECTIONS	1	2 x 0.152	2 x 150	-	300.0	100	-	-
	AUXILIARY GENERATOR								
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER								
3	AUXILIARY SWITCHBOARDS	1	0.152	150	20#	150	120	Rubber	Armoured
	ENGINE ROOM	1	0.007	7	20#	12	130	-	-
	BOILER ROOM								
	ACCOMMODATION	1	0.015	15	20#	15	120	-	-
4	Aux. S.W. BP	1	0.254	250	20#	200	100	Rubber	Armoured
5	" " "	1	0.152	150	20#	130	80	-	-
	Navigation light main	1	0.003	1	16#	1	200	-	-
13	Bath heater	1	0.061	60	20#	70	120	Rubber	Armoured
14	WIRELESS	1	0.015	15	20#	25	180	-	-
	SEARCHLIGHT								
	MASTHEAD LIGHT	3 core	0.0018	1	18#	0.3	580	-	-
	SIDE LIGHTS	3 "	0.0018	1	18#	0.3	100	-	-
	COMPASS LIGHTS	1	0.0018	1	18#	0.3	50	-	-
	POOP LIGHTS	3 core	0.0018	1	18#	0.3	600	-	-
	CARGO LIGHTS (Fore)	1	0.015	15	20#	14	480	-	-
	" " (Aft)	1	0.007	7	20#	10	300	-	-
12	HEATERS (Room)	1	0.112	110	20#	130	120	-	-

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION	No. of Motors	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND		Total Maximum Current Amperes	Approximate Length (Lead and Return) Feet	Insulated with	HOW PROTECTED
				No.	Diameter				
3	BALLAST PUMP	1	0.061	60	SWG 20#	76	40	Rubber	Armoured
3	MAIN BILGE LINE PUMPS	1	0.03	30	-	40	18	-	-
4	Diesel oil purifier motor	1	0.007	7	-	12	16	-	-
4	" " " pump motor	1	0.003	1	16#	2	16	-	-
5	" " " pump motor	1	0.003	1	16#	8	10	-	-
5	" " " pump motor	1	0.003	1	16#	1	10	-	-
	CIRC. FRESH WATER PUMPS								
	AIR COMPRESSOR								
	FRESH WATER PUMP	1	0.003	1	16#	6	60	-	-
3	ENGINE TURNING GEAR	1	0.0153	15	20#	32	80	-	-
	ENGINE REVERSING GEAR								
	LUBRICATING OIL PUMPS								
	OIL FUEL TRANSFER PUMP	1	0.03	30	20#	36	160	-	-
6	WINDLASS	1	0.254	250	20#	240	580	-	-
8	WINCHES, FORWARD (Nos. 1+2)	2	2 x 0.254	2 x 250	20#	600	480	-	-
9	WINCHES, AFT (Nos. 5+6)	2	2 x 0.203	2 x 200	20#	480	300	-	-
7	STEERING GEAR								
	(a) MOTOR GENERATOR								
	(b) MAIN MOTOR	1	0.061	60	20#	72	400	-	-
3	WORKSHOP MOTOR	1	0.003	1	16#	8	20	-	-
	VENTILATING FANS								
2	Comb. Cooling Water & Lub. Oil motor	1	0.203	200	20#	160	60	-	-
1	Supercharger blower motor	1	0.305	300	20#	220	240	-	-
10	Poop winch	1	0.305	300	20#	360	400	-	-
4	Diesel oil purifier heater	1	0.081	80	20#	95	20	-	-
4	" " settling tank heater	1	0.081	80	20#	82	140	-	-
3	Lub. oil purifier heater	1	0.081	80	20#	95	10	-	-
3	" " settling tank heater	1	0.03	30	20#	27	80	-	-
11	Winch (Nos. 3+4)	1	2 x 0.254	2 x 250	20#	600	300	-	-

**Cables:** Single, twin, concentric, or multicore Bath are the cables insulated and protected as per Tables IV or V of the Rules Yes

**Fall of Pressure,** state maximum between bus bars and any point of the installation under maximum load

**Cable Sockets and other connections,** are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets Yes

**Paper Insulated Cables,** If cables are paper covered, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound not used

**Cable Runs,** are the cables fixed as far as possible in accessible positions not exposed to drip or accumulation of water or oil, or to high temperature from boilers, steam pipes, uptakes or other hot objects, or to avoidable risk of mechanical damage Yes

**Support and Protection of Cables,** state how the cables are supported and protected by brass clips, protected by galvanized piping on weather deck.

If cables are run in wood casings, are the casings and caps secured by screws Yes, are the cap screws of brass Yes, are the cables run in separate grooves Yes. If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VIII Yes

**Refrigerated Chambers,** if lights are fitted, are the cables and fittings in accordance with the special requirements Yes

**Joints in Cables,** state if any, and how made, insulated, and protected Cast iron joint Box.

**Watertight Glands and Deck Tubes,** are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands Yes.

**Bushes in Beams and Non-watertight Partitions,** where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed Yes state the material of which the bushes are made lead bushes.

**Earthing Connections,** state what earthing connections are fitted and their respective sectional areas Yes

are their connections made as per Rule

**Alternative Lighting,** are the groups of lights in the propelling machinery space arranged as per Rule Yes

**Emergency Supply,** state position and method of control of the emergency supply and how the generator is driven Small 12 volt secondary battery sufficient for 4 lamps, charged by 220 volt source.

**Navigation Lamps,** are these separately wired Yes, controlled by separate switch and separate fuses Yes, are the fuses double pole Yes, are the switches and fuses grouped in a position accessible only to the officers on watch Yes (Chart house).

has each navigation lamp an automatic indicator as per Rule Yes.

**Secondary Batteries,** are they constructed and fitted as per Rule Yes

**Fittings,** are all fittings on weather decks, in stokeholds and engine rooms and where exposed to drip or condensed moisture, watertight Yes, are any fittings placed in spaces in which goods are liable to be stacked in close proximity to them; if so, how are they protected not fitted

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected Yes

how are the cables led

where are the controlling switches situated

**Searchlight Lamps,** No. of 1, whether fixed or portable Yes, are their fittings as per Rule Yes

**Arc Lamps,** other than searchlight lamps, No. of 1, are their live parts insulated from the frame or case Yes, are their fittings as per Rule Yes

**Motors,** are their working parts readily accessible Yes, are the coils self-contained and readily removable for replacement Yes, are the brushes, brush holders, terminals and lubricating arrangements as per Rule Yes, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material Yes, are they protected from mechanical injury and damage from water, steam or oil Yes, are their axes of rotation fore and aft Yes, if situated near unprotected woodwork or other combustible material, are the motors of the totally enclosed, pipe ventilated, forced draught, drip or flame proof type Yes, if not of this type, state distance of the combustible material horizontally or vertically above the motors Yes

**Control Gear and Resistances,** are the generator field and motor speed regulators, starters and controllers constructed and fitted as per Rule Yes

**Lightning Conductors,** where lightning conductors are required, are these fitted as per Rule Yes

**Ships carrying Oil having a Flash Point less than 150° F.** Have the special requirements of the Rules been complied with regarding switches, joint boxes, section and distribution boards, protection of cables, method of distribution, lead of cables, lights and fittings Yes

If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office Yes

All Conductors are of annealed copper conforming to British Standard Specification No. 7.  
 The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.  
 The foregoing is a correct description.

*J. Chandra* Electrical Engineers.

Date April 1<sup>st</sup> 1931.

COMPASSES.

Distance between electric generators or motors and standard compass Motor to standard compass 45 ft.

Distance between electric generators or motors and steering compass Motor to steering compass 35 ft.

The nearest cables to the compasses are as follows:—

A cable carrying 1 Amperes 8 feet from standard compass 16 feet from steering compass.

A cable carrying 25 Amperes 24 feet from standard compass 10 feet from steering compass.

A cable carrying ✓ Amperes ✓ feet from standard compass ✓ feet from steering compass.

Have the compasses been adjusted with and without the electric installation at work at full power No.

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted ✓

The maximum deviation due to electric currents was found to be ✓ degrees on ✓ course in the case of the standard

compass, and ✓ degrees on ✓ course in the case of the steering compass.

*S. Mukai* Builder's Signature. Date

Is this installation a duplicate of a previous case No. If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

The electrical installation of this vessel has been installed under special survey in accordance with the Rules and approved plans, the workmanship and material are good and on completion the installation was tested under full working conditions and found to be efficient, and in my opinion, is eligible to have record of ELECTRIC LIGHT.

It is submitted that this vessel is eligible for THE RECORD.

*Electric Light*

*H. D. Buchanan*  
 2/16/31

Total Capacity of Generators 266 Kilowatts.

The amount of Fee ... ₹ 572.00 { When applied for, 1/4/1931  
 Travelling Expenses (if any) £ : : When received, 1/5/1931

H. D. Buchanan & self.

*K. Kishigami*  
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute File 12 JUN 1931

Assigned *Electric Light*

Im. 1. 26.—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)



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