

No. 5893

Knab Rpt.

110 AUG 1943

Received at London Office

95

current protection devices been tested under working conditions **Yes** **Joint Boxes, Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule** **Yes approved**

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

If the cables are insulated otherwise than as per Rule, are they of an approved type **-** **Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load** **3V** **Cable Sockets, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets** **Yes** **Paper Insulated and Varnished Cambric Insulated Cables.**

If conductors are paper or varnished cambric insulated, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound **-**, or waterproof insulating tape **-** **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** Are cables in machinery spaces, galleys, ~~ladders~~, bathrooms and lavatories lead covered or run in conduit **Yes**

Support and Protection of Cables, state how the cables are supported and protected **RCDB in conduit throughout Vessel and secured by metal clips and spaced in accordance with Rules. Generator Cables run under floor plates to switchboard in conduit.**

If cables are run in wood casings, are the casings and caps secured by screws **No**, are the cap screws of brass **-**, are the cables run in separate grooves **-**. If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VIII **Yes**

Refrigerated Chambers, are the cables and fittings in accordance with the special requirements. **Domestic Refrig. only**

Joints in Cables, state if any, and how made, insulated, and protected **At Lugs soldered and taped**

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 bushings**

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

Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule **None** **Emergency Supply, state position and method of control of the emergency supply and how the generator is driven** **None**

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, Navigation Bridge**

has each navigation lamp an automatic indicator as per Rule **Yes** **Secondary Batteries, are they constructed and fitted as per Rule** **None**

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever 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 **Batteries for**

Bells and Wireless only,

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected **No**

where are the controlling switches situated **-**

are all fittings suitably ventilated **-**, are all switches and lampholders constructed wholly of non-ignitable, non-absorbent materials **-**

Heating and Cooking Appliances, are they constructed and fitted as per Rule **-**, are air heaters constructed and fitted as per Rule **-**

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

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

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 **-**, 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 **-**

have machines of over 100 BHP been inspected by the Surveyors during manufacture and testing **None** **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** **None** **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** **-** are all fuses of the filled cartridge type **-** are they of an approved type **-**

If portable lamps for use in dangerous spaces are supplied, are they of a self-contained, battery-fed type approved by the Home Office **Yes**

Spare Gear, if the vessel is for open sea service have spares been supplied as per Rule **Yes**

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	15	115	130	575	Steam Engine	Coal		
AUXILIARY ...						Vertical Type			
EMERGENCY ...									
ROTARY TRANSFORMER	2	10	30	333	1500	Motor Driven	15 BHP		

GENERATOR, LIGHTING AND HEATING CONDUCTORS.									
DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Nominal Area per Pole Sq. Ins.	No.	Diameter.	Circuit.	Rule.			
MAIN GENERATOR ...	1	.1320	19	.0940	130	142	80 ft.	RCDB	Flame Proof Conduit
D/G Rotary Motor	1	.1045	19	.0837	115	121	40 "	RCDB	"
TRANSFORMER GEN.	1	.98	91	.1172	333	580	40 "	RCDB	"
EMERGENCY GENERATOR									
ROTARY TRANSFORMER									
ENGINE ROOM...									
BOILER ROOM...									
AUXILIARY SWITCHBOARDS									
Swit. to Section Box	1	.0330	7	.0772	22	57.7	40 ft.	RCDB	"
Section Box to DL	1	.0205	7	.0612		43.3	60 ft.	"	"
Section Box to T.T.	1								
Nav. Chart Room & Accom. 6 off. D1	1	.003	7	.0242		12.9	60 "	RILC	part conduit
ACCOMMODATION									
Degaussing	1	.98	91	.1172	180	569	4200 "	RILC	special conduit throughout
Section Box to D2	1	.008	7	.0385		26.4		RCDB	
Amd. Accom. 6 off. D2	1	.003	7	.0242		12.9	50 "	RILC	Part conduit
S/B to D3	1	.0205	7	.0612		43.3	90 "	"	conduit
Ford Lighting & Cargo	1	.0205	7	.0612	6	43.4	90 "	RCDB	"
5 off. D3...	1	.0330	7	.0772	12	57.7	400 "	RCDB	"
S/B to D4	1	.003	7	.0242	2	12.9	400 "		Part conduit
Masthead Light Acc.	1	.0130	7	.0486	10	34.8	15 "	RCDB	Conduit
S/B to D5	1								
POOP LIGHTS ...	1	.003	7	.0242		12.9	130 "	RILC	Part conduit
CARGO LIGHTS Wireless	1	.0205	7	.0612	12	43.3	320 "	RCDB	Conduit
REFRIGERATION	1	.008	7	.0385	8	26.4	120 "		Conduit & Flex steel
ALARM CIRCUITS	1	.003	7	.0242	2	12.9	2400 "	RILC	Part Conduit

MOTOR CONDUCTORS.										
DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Nominal Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
ROCKING PUMP Cabin bells & Telephones	1	.003	7	.0242	2	12.9	1350 ft.	RILC	Part conduit	
GENERAL SERVICE PUMP										
EMERGENCY BILGE PUMP										
SANITARY PUMP										
CIRC. SEA WATER PUMPS										
CIRC. FRESH WATER PUMPS										
AIR COMPRESSOR										
FRESH WATER PUMP										
ENGINE TURNING GEAR										
ENGINE REVERSING GEAR										
LUBRICATING OIL PUMPS										
OIL FUEL TRANSFER PUMP										
WINDLASS										
WINCHES, FORWARD										
WINCHES, AFT										
STEERING GEAR—										
(a) MOTOR GENERATOR										
(b) MAIN MOTOR										
WORKSHOP MOTOR										
VENTILATING FANS										

All Conductors are of annealed copper conforming to British Standard Specification No. 7 (or International Electro-technical Commission Publication No. 28).

The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.

The foregoing is a correct description.

Geo. T. Davie & Sons Ltd.

PER Charles Davie

Electrical Engineers.

Date 22/6/43

COMPASSES.

Distance between electric generators or motors and standard compass 70 feet approx.

Distance between electric generators or motors and steering compass 65 " "

The nearest cables to the compasses are as follows:—

A cable carrying 3 Ampères 4 feet from standard compass 4 feet from steering compass.

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A cable carrying 3 Ampères 4 feet from standard compass 4 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 3 East degrees on North East course in the case of the standard compass, and 9 East degrees on North West course in the case of the steering compass.

Geo. T. Davie & Sons Ltd.

PER Charles Davie

Builder's Signature.

Date 22/6/43

Is this installation a duplicate of a previous case No If so, state name of vessel Approved letter 5/8/42

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

The electrical equipment of this Vessel has been fitted on board under special survey and in accordance with the approved plans. Testing under full working conditions and found satisfactory.

The material and workmanship are good and sound.

Noted
23/8/43

Total Capacity of Generators 30 Kilowatts.

The amount of Fee ... £ 95⁰⁰ : When applied for, July 16, 43

Travelling Expenses (if any) Included When received, 19

with Hull Rpt.

W. A. Hargreaves
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 17 SEP 1943

Assigned

see minute
on L.R. Rpt.