

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 9 OCT 1941

Date of writing Report 1st SEPT 41 When handed in at Local Office 6.10.41 Port of GLASSGOW

No. in Survey held at GLASSGOW Date, First Survey 10.6.41 Last Survey 4.9.41
(Number of Visits 11)

Reg. Book. 87773 on the M.V. "DINGLEDALE" Tons { Gross 8100
Net 4755

Built at GOVAN, GLASSGOW By whom built HARLAND & WOLFF LTD. Yard No. 1044 When built 1941

Owners THE ADMIRALTY Port belonging to LONDON

Electrical Installation fitted by HARLAND & WOLFF LTD. Contract No. — When fitted 1941

Is vessel fitted for carrying Petroleum in bulk YES Is vessel equipped with D.F. YES E.S.D. YES Gy.C. — Sub.Sig. —

Have plans been submitted and approved YES System of Distribution TWO WIRE DC Voltage of supply for Lighting 110

Heating — Power 110 Direct or Alternating Current, Lighting DC Power DC If Alternating Current state frequency — Prime Movers, —

has the governing been tested and found efficient when the whole load is suddenly thrown on and off YES Are turbine emergency governors fitted with a trip switch as per Rule — Generators, are they compound wound YES, are they level compounded under working conditions YES,

if not compound wound state distance between generators — and from switchboard — Where more than one generator is fitted are they arranged to run in parallel No, are shunt field regulators provided YES Is the compound winding connected to the negative or positive pole

POSITIVE Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing — Have certificates of test for machines under 100 kw. been supplied YES and the results found as per rule YES Are the lubricating arrangements and the construction of the generators as per rule YES Position of Generators IN ENGINE ROOM

is the ventilation in way of generators satisfactory YES are they clear of inflammable material YES, if situated near unprotected combustible material state distance from same horizontally — and vertically —, are the generators protected from mechanical injury and damage from water, steam and oil YES, are the bedplates and frames earthed YES and the prime movers and generators in metallic contact YES Switchboards, where are main switchboards placed NEAR GENERATOR

are they in accessible positions, free from inflammable gases and acid fumes YES, are they protected from mechanical injury and damage from water, steam and oil YES, if situated near unprotected combustible material state distance from same horizontally — and vertically —, what insulation material is used for the panels SINDANYO, if of synthetic insulating material is it an Approved Type YES, if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule — Is the frame effectually earthed YES

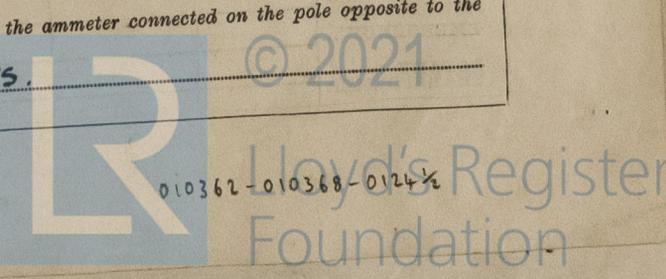
Is the construction as per Rule YES, including accessibility of parts YES, absence of fuses on the back of the board YES, individual fuses to pilot and earth lamps, voltmeters, etc., YES locking of screws and nuts YES, labelling of apparatus and fuses YES, fuses on the "dead" side of switches YES Description of Main Switchgear for each generator and arrangement of equaliser switches —

200 AMPERE DOUBLE POLE CIRCUIT BREAKER FITTED WITH OVERLOAD RELEASE

and for each outgoing circuit DOUBLE POLE CHANGEOVER SWITCH

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule YES Instruments on main switchboard 2

ammeters 2 voltmeters — synchronising devices — For compound machines in parallel is the ammeter connected on the pole opposite to the equaliser connection — Earth Testing, state means provided EARTH LAMPS



Switches, Circuit Breakers and Fuses, are they as per Rule YES, are the fuses an approved type YES, are all fuses labelled as per Rule YES, are the reversed current protection devices connected on the pole opposite to the equaliser connection —, have they been tested under working conditions —. Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule YES.

Cables, are they insulated and protected as per the appropriate Tables of the Rules YES, if otherwise than as per Rule are they of an approved type —, state maximum fall of pressure between bus bars and any point under maximum load 5 Volts, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets YES. Are paper insulated and varnished cambric insulated cables sealed at the exposed ends — with insulating compound — or waterproof insulating tape —. 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 YES, are cables laid under machines or floorplates No, if so, are they adequately protected —. Are cables in machinery spaces, galleys, laundries, etc., lead covered YES or run in conduit —. State how the cables are supported and protected LEAD COVERED ARMOURD AND BRAIDED ON MAIN DISTRIBUTION CABLES AND LEAD COVERED ON SUB DISTRIBUTION CABLES ALL CLIPPED TO PERFORATED STEEL TRAYS. IN EXPOSED POSITIONS CABLES ARE RUN IN GALVANISED IRON PIPES.

Are all lead sheaths, armouring and conduits effectually bonded and earthed YES. Refrigerated chambers, are the cables and fittings as per Rule —. Are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands YES, where unarmoured cables pass through beams, etc., are the holes effectively bushed YES and with what material LEAD. Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule YES. Emergency Supply, state position — and method of control —.

Navigation Lamps, are they separately wired YES controlled by separate double pole switches YES and fuses YES. Are the switches and fuses in a position accessible only to the officers on watch YES, is an automatic indicator fitted YES. Secondary Batteries, are they constructed and fitted as per Rule —, are they adequately ventilated —. Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof YES. Are fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present YES, if so, how are they protected BY SPECIAL GASTIGHT PUMPROOM FITTINGS WIRED WHOLLY FROM OUTSIDE SPACES IN GASTIGHT TUBING.

and where are the controlling switches fitted AT DISTRIBUTION BOXES REMOTE FROM PUMPROOM, are all fittings suitably ventilated YES, are all fittings and accessories constructed and installed as per Rule YES. Searchlight Lamps, No. of —, whether fixed or portable —, are their fittings as per Rule —. Heating and Cooking, is the general construction as per Rule —, are the frames effectually earthed —, are heaters in the accommodation of the convection type —. Motors, are all motors constructed and installed as per Rule YES and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water, steam and oil YES, if situated near unprotected combustible material state minimum distance from same horizontally — and vertically —. Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing —. Have certificates of test for motors under 100 BHP intended for essential services been supplied and the results found as per Rule —. Control Gear and Resistances, are they constructed and fitted as per Rule YES. Lightning Conductors, where required are they fitted as per Rule YES. 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 YES, are all fuses of the cartridge type YES are they of an approved type YES. If portable lamps for use in dangerous spaces are supplied, are they of a self-contained battery-fed flameproof type YES. Spare Gear, if the vessel is for open sea service have spares been provided as per Rule YES, are they suitably stored in dry situations YES. Insulation Tests, has the insulation resistance of all circuits and apparatus been megger tested and found satisfactory YES.

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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	20	110	182	650	STEAM ENGINES.		
EMERGENCY ...								
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX LENGTH (lead 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 GENERATOR NO 1 (INBOARD)	20	1	37/083	182	184	60	RUBBER	L.C.A. + B.
" " EQUALISER								
MAIN GENERATOR NO 2 (OUTBOARD)	20	1	37/083	182	184	35	"	" "
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

MAIN DISTRIBUTION CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.		
AUX. SWITCHBOARDS AND SECTION BOARDS								
MIDSHIP SUB SWITCHBOARD		1	37/064	80	130	600 RUBBER	L.C.A. + B.	
SECTION BOX NO 3 ENG. ROOM LATS		1	7/064	43.3	46	60	"	" "
" " NO 2 AFT. ACCOM.		1	19/052	62	64	126	"	" "
DISTRIBUTION BOXES M1-ENG ROOM MOTORS AND M2-WORKSHOP MOTORS		1	19/083	110.0	118	105	"	" "
D/G. INSTALLATION		1	19/083	110.8	118	18	"	" "

LIGHTING AND HEATING, ETC., CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.		
WIRELESS								
NAVIGATION LIGHTS								
LIGHTING AND HEATING								
SECTION BOX NO 1 LIGHTING MIDSHIPS		1	7/064	43.0	46	15	"	LC.
DISTRIBUTION BOX NO 6 CARGO LIGHTS		1	7/036	16.4	24	18	"	"
" " NO 7 FLOOD LIGHTS		1	7/036	11.0	24	18	"	"
" " NO 14 FORECASTLE LIT.		1	7/052	4.0	37	450	"	LCAB.
" " NO 8 PUMP ROOMS		1	7/029	4.4	18.2	18	"	LC.
10" SIGNALLING PROTECTOR		1	7/044	18.75	31	120	"	"

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.	
TURNING GEAR	1	10	19/064	80	83	120	RUBBER	LCAB
ACCOM. VENT. FAN. MIDSHIP.	1	3	7/044	25	31	75	"	LC.
STANDBY F.O. PUMP	1	1/4	7/029	11.77	18.2	60	"	LCAB
LUB. OIL PURIFIER	1	2 1/2	7/036	21.3	24	20	"	"
FUEL OIL PURIFIER	1	3	7/044	25.1	31	50	"	"
ACCOMMODATION VENT FAN AFT	1	3	7/044	25.0	31	140	"	"
WORKSHOP MOTOR	1	3	7/044	27.0	31	65	"	"
DECONTAMINATION ROOM FAN 7 1/2 EXHAUST	1	0.5	3/036	4.6	12	140	"	LC.

