

REPORT ON ELECTRICAL EQUIPMENT

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

6 JUL 1950

Received at London Office

Date of writing Report. 14th JUNE 1950 When handed in at Local Office. D. 19... Port of SOUTHAMPTON

No. in Survey held at SOUTHAMPTON Date, First Survey 19th DEC¹⁹⁴⁹ Last Survey 24th APRIL 1950
Reg. Book. (Number of Visits... 3...)

02260 on the S.S. "AUTO CARRIER" Tons { Gross... 985
Net... 362

Built at GLASGOW By whom built D & W HENDERSON & CO LTD Yard No. - When built 1931

Owners BRITISH TRANSPORT COMMISSION Port belonging to LONDON

Electrical Installation fitted by D & W HENDERSON & CO, Contract No. - When fitted 1931

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

Have plans been submitted and approved... System of Distribution 2 WIRE INSULATED Voltage of supply for Lighting 110

Heating NO Power NO Direct or Alternating Current, Lighting DC Power DC If Alternating Current state periodicity - Prime Movers,

has the governing been tested and found as per Rule when full 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

NEGATIVE 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... and the results found as per rule... Are the lubricating arrangements and the construction

of the generators as per rule YES Position of Generators 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 MAIN SWITCHBOARD IN ENGINE ROOM,

EMERGENCY SWITCHBOARD IN ENGINE ROOM ENTRANCE

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 EBONISINDANYD, 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 DOUBLE POLE

RENEWABLE FUSES CONTROLLED BY A D.P. QUICK BREAK KNIFE SWITCH

and for each outgoing circuit D.P. RENEWABLE FUSES CONTROLLED BY A D.P. QUICK BREAK KNIFE

SWITCH

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

ammeters ONE voltmeters - synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection YES Earth Testing, state means provided LAMPS WITH TUMBLER SWITCHES.

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 If circuit breakers are provided for the generators, at what overload current did they open when tested... are the reversed current

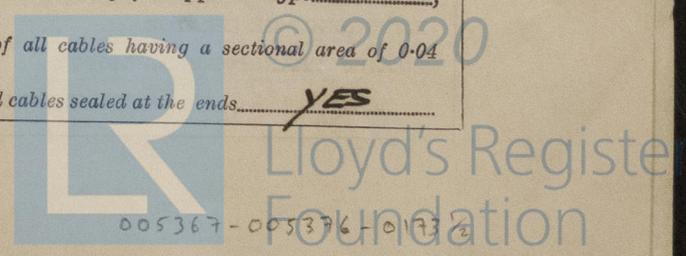
protection devices connected on the pole opposite to the equaliser connection... have they been tested under working conditions, and at what current

did they operate... 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... 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 ends YES



with insulating compound or waterproof insulating tape YES. 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 YES, if so, are they adequately protected YES. Are cables in machinery spaces, galleys, laundries, etc., lead covered YES or run in conduit YES. State how the cables are supported and protected LEAD COVERED CABLE ON PERFORATED GALVANISED IRON.

Are all lead sheaths, armouring and conduits effectually bonded and earthed YES. Refrigerated chambers, are the cables and fittings as per Rule YES.

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 effectually 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 ABOVE WATERTIGHT BULKHEADS and method of control EMERGENCY GENERATOR - MANUAL.

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 YES, are they adequately ventilated YES.

what is the battery capacity in ampere hours 100.

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 NO, if so, how are they protected NO.

and where are the controlling switches fitted NO, are all fittings suitably ventilated YES.

are all fittings and accessories constructed and installed as per Rule YES. Searchlight Lamps, No. of NO, whether fixed or portable NO.

are their fittings as per Rule NO. Heating and Cooking, is the general construction as per Rule YES.

are the frames effectually earthed YES, are heaters in the accommodation of the convection type YES. 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 NO and vertically NO. Are motors coupled to oil fuel transfer and unit pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment NO.

Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing NO. Have certificates of test for motors under 100 BHP intended for essential services been supplied and the results found as per Rule NO. Control Gear and Resistances, are they constructed and fitted as per Rule YES. Lightning Conductors, where required are they fitted as per Rule NO. 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 NO, are all fuses of the cartridge type NO.

are they of an approved type NO. Are the fittings for pump rooms, tween deck spaces, etc., in accordance with the special requirements for such ships NO. Are the cables lead covered as per Rule NO. 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 tested and found satisfactory 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	1	15	110	135	600	REPROCATING STA.	-	-
EMERGENCY	1	1 1/2	110	13	-	PETROL ENGINE	PETROL	-
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 Poles.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR	15	1	37.072	136	-	12	VIR	LEAD COVERED
" " EQUALISEE								
EMERGENCY GENERATOR	1 1/2	1	7.029	13		12	VIR	LEAD COVERED.
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

MAIN DISTRIBUTION CABLES.

DESCRIPTION.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.		
		No. in Parallel For Poles.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.				In the Circuit.	Rule.
AUX. SWITCHBOARDS AND SECTION BOARDS	A	1	7.064	40		160	VIR	LEAD COVERED
"	B	1	7.064	20		180	"	"
"	C	1	7.064	14		160	"	"
"	D	1	7.064	10		16	"	"
"	E	1	7.064	15		120	"	"
"	F	1	19.064	76.4		160	"	"
"	G	1	19.064	63.0		280	"	"

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS	1	7.064	10	40	VIR	LEAD COVERED
NAVIGATION LIGHTS	1	3.029	1	12	"	"
LIGHTING AND HEATING						
Dist. Box E1	1	3.036	5	40	"	"
" " E3	1	7.064	12	120	"	"
" " A1	1	7.064	10	16	"	"
" " A2	1	7.036	15	16	"	"
" " A3	1	7.036	15	150	"	"
" " C1	1	7.029	8	360	"	"
" " C2	1	7.029	6	60	"	"
" " F4	1	7.064	22.4	120	"	"
" " F5	1	7.036	15	40	"	"
HOTPRESS	1	7.064	27	20	"	"
TOASTER	1	7.064	27	30	"	"
RADIATOR	1	3.036	9	30	"	"

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.				
FANS	13	1/2	3.029	2.5	VIR	LEAD COVERED
"	3	1/4	7.029	13	VIR	"

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.

Electrical Engineers. Date

COMPASSES.

Minimum distance between electric generators or motors and standard compass

Minimum distance between electric generators or motors and steering compass

The nearest cables to the compasses are as follows:—

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

A cable carrying Ampères feet from standard compass 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

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.

Builder's Signature. Date

Is this installation a duplicate of a previous case. If so, state name of vessel

Plans. Are approved plans forwarded herewith. If not, state date of approval.

Certificates. Are certificates of test for motors engaged on essential services and generators forwarded herewith

General Remarks (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.)

The electrical equipment of this vessel, which has not been fitted on board under Special Survey, is in accordance with the approved plans & Rule Requirements. The materials & workmanship are good. It has been tested under full working conditions & found satisfactory. Insulation suggests test satisfactory.

Noted SWH 26/9/50

Total Capacity of Generators 15 1/4 Kilowatts.

The amount of Fee ... £ 10 : 0 : 0

Travelling Expenses (if any) £ : :

Robert W. Stonehouse Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned see minute on mechy Rpt

5m.4.39.—Transfer. (MADE AND PRINTED IN ENGLAND.) (The Surveyors are requested not to write on or below the space for Committee's Minute.)



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