

Rpt. 13.

No. 51291

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

20 AUG 1941

Received at London Office.....

Date of writing Report..... 18-7-41 When handed in at Local Office..... 18 AUG 1941 Port of.....

No. in Survey held at..... Hove Date, First Survey 30 5 41 Last Survey 9.7.1941
Reg. Book. (Number of Visits..... 7.....)on the M.V. EMPIRE ISLE Tons { Gross 402
Net 183

Built at Hove By whom built Hy Leam Ltd Yard No. 416 When built 1941.7

Owners The Ministry of Shipping Port belonging to Hull

Electrical Installation fitted by Humber Electric Engineers Ltd Contract No. When fitted 40

Is vessel fitted for carrying Petroleum in bulk? No Is vessel equipped with D.F. E.S.D. Gy.C. Sub.Sig.

Have plans been submitted and approved? Yes System of Distribution Parallel, constant pressure Voltage of supply for Lighting 110

Heating? Power? Direct or Alternating Current, Lighting Direct Power? 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? Yes, 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? Yes 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, port side

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? Adjacent to Generators in Engine room

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? Sandalwood, 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 switch & fuses

and for each outgoing circuit Double pole switch & fuses

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? Earth Testing, state means provided? Earth lamps & switches

Insulation Tests, has the insulation resistance of all circuits and apparatus been megger tested and found satisfactory.....

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 ...	Cine	6 K.W.	110	55	1000	Heavy oil Engine	Heavy oil	Above 135° F
EMERGENCY ...								
ROTARY TRANSFORMER								

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT		APPROX. LENGTH (lead plus return feet).	INSULA- TED WITH.	HOW PROTECTED.
		No. in Parallel Per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR	6	6	19/052	55	64	20	V.I.R.	L.C. + enclos
" " EQUALISER	1							
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

[illegible]

WIRELESS	ONE	1/044	1 max	5	260 max	V.I.R.	L.C. (Grewer wheels)
NAVIGATION LIGHTS	ONE	1/044	3 max	5	60 max	"	L.C.
LIGHTING AND HEATING	ONE	3/029	"	"	"	"	"
ALL SUB CIRCLES	ONE	1/044	3 max	5	60 max	"	L.C.
	"	3/029	"	"	"	"	"

[illegible]

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.

By **W. E. Shuttleworth**

Electrical Engineers.

Date

COMPASSES.

Minimum distance between electric generators or motors and standard compass.

and

Minimum distance between electric generators or motors and steering compass.

50 feet.

The nearest cables to the compasses are as follows:—

1 cable carrying ~~not less than~~ 1 Ampères 6 feet from standard compass 4 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

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 Nil degrees on any 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

No

If so, state name of vessel

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

This electrical installation has been fitted on board under Special Survey in accordance with the approved plan, the Society's Rules & the Specification & when subjected to the tests prescribed in the Rules. & under working conditions it was found satisfactory in every respect.

W. E. Shuttleworth
12/8/41

Total Capacity of Generators 6 Kilowatts.

The amount of Fee ... £ 7 : 10 :
+ 25%
Travelling Expenses (if any) £ : :
When applied for, 14.8.1941
When received, 19

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

See H.L. J.E. 51291