

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 12 DEC 1951

Date of writing Report 29. 10. 51 When handed in at Local Office 2 NOV 1951 Port of LIVERPOOL

No. in Survey held at BIRKENHEAD Date, First Survey 6. 10. 51 Last Survey 9. 10. 1951 (No. of Visits 3)

Reg. Book. 00362 on the T.S.M.V. "AGAMEMNON" Tons Gross 7829 Net 4806

Built at BELFAST By whom built WORKMAN CLARK (1929) LTD Yard No. - When built 1929

Owners OCEAN S.S. CO. LTD Port belonging to LIVERPOOL

Installation fitted by BUILDERS. When fitted 1929

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

Plans, have they been submitted and approved Yes System of Distribution Three wire Voltage of Lighting 220

Heating 220 Power 220 D.C. or A.C., Lighting DC Power DC If A.C. state frequency -

Prime Movers, has the governing been found as per Rule when full load is thrown on and off Yes Are turbine emergency governors fitted with a trip switch -

Generators, are they compound wound Yes, and level compounded under working conditions Yes

if not compound wound state distance between generators - and from switchboard - Are the generators arranged to run in parallel Yes

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 No Have certificates of test for machines under 100 kw. been supplied No

and the results found as per Rule -

Position of Generators In main engine room

is the ventilation in way of generators satisfactory Yes are they clear of inflammable material and protected from mechanical injury and damage from water, steam and oil Yes

Switchboards, where are main switchboards placed In main engine room on special platform.

are they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water, steam and oil Yes

what insulation is used for the panels Slate if of synthetic insulating material is it an Approved Type -

if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule Yes

Is the construction as per Rule, including locking of screws and nuts Yes Description of Main Switchgear for each generator and arrangement of equaliser switches. Single pole circuit breaker (one pole equaliser) with overload and reverse current trips.

and the switch and fuse gear (or circuit breakers) for each outgoing circuit. Double pole circuit breaker or Double pole switch & fuse.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes Instruments on main switchboard 5

ammeters 5 voltmeters - synchronising devices. For compound machines in parallel are the ammeters and reversed current protection devices connected on the pole opposite to the equaliser connection. Yes

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

make of fuses Arctic or Desco are all fuses labelled Yes

If circuit breakers are provided for the generators, at what overload do they operate. Checked at F.H. of generator 10% &c.

and at what current do the reversed current protective devices operate. Yes

Joint Boxes, Section Boards and Distribution Boards, is the construction as per Rule. Yes

Cables, are they insulated and protected as per Rule. 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. 76%

are the ends of all cables having a sectional area of 0.01 square inch and above provided with soldering sockets. Yes

Are all paper insulated and varnished cambric insulated cables sealed at the ends. 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 any 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 -

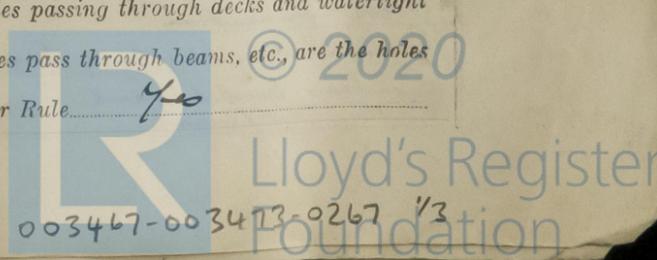
or of the "HR" type. State how the cables are supported or protected. Rains - supported on steel plating with steel covers. Machinery spaces, clipped to steel plates or trays or direct to structure. Accommodation etc. clipped to steel trays, wood grounds or direct to structure. All cables protected as necessary.

Are all lead sheaths, armouring and conduits effectually bonded and earthed. 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 effectively bushed. Yes

Refrigerated chambers, are the cables and fittings as per Rule. Yes





LIGHTING, HEATING, WIRELESS, NAVIGATION LIGHTS, ETC., CABLES.

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
	No. in Parallel per Pole.	Sectional Area of No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
Forward Radiator Sect. Box M1.	1	.12	148	210	260	V.C.	L.C.B.
" " Dist. " M1.D1.	1	.06	27	143	15	"	"
" " " M1.D3	1	.06	41	143	60	"	"
" " " M1.D4	1	.06	27	143	60	"	"
Midship Radiator Sect. Box M2.	1	.15	52	143	45	"	"
" " Dist. " M2.D1	1	.04	123	260	90	"	"
" " " M2.D2	1	.04	34	110	50	"	"
" " " M2.D3	1	.04	25	110	90	"	"
" " " M2.D4	1	.04	36	110	90	"	"
Packing Gear Forward. Sect. Box M3	1	.15	27.5	260	255	"	"
Belongings.	1	.01	65	31	60	V.I.R.	"
Midship Ventilation Sect. Box M4	1	.0225	27	46	135	"	"
Engine Room Ventilation. Dist. " M4.D3	1	.007	45	30	15	V.C.	"
Galley Ranges	1	.15	25.5	260	50	"	"
" " "	1	.04	85	110	20	"	"
" " "	1	.15	19	260	20	"	"
Galley Gas Sect. Box. M5.S	1	.06	94	143	75	"	"
Lub. Oil Heater etc. Sect. Box M.19.	1	.0145	45	37	150	V.I.R.	"
Turning Motors L.O. Separator. Sect. Box M24	1	.06	18	143	90	V.C.	"
Forward Lighting Sect. Box L1.	1	.04	77	110	260	"	"
" " Dist. " L1.D1	1	.01	14	31	75	V.I.R.	H.R.B.
" " " L1.D2	1	.01	4.3	31	12	"	"
" " " L1.D3	1	.01	5.1	31	50	"	"
Midship " Sect. Box L2.D1	1	.04	4.7	110	190	V.C.	L.C.B.
" " Dist. " L2.D1	1	.0145	27	37	100	"	"
" " " L2.D2	1	.0445	8.5	37.	90	V.I.R.	H.R.B.
" " " L2.D3	1	.0445	9.3	37.	60	"	"
Forward Cargo Lighting. Sect. Box L3.	1	.06	22	93	295	"	L.C.A.B.
" " Dist. " L3.S1.D1	1	.0225	3	46	240	"	"
" " " L3.S1.D2	1	.0225	10	46	124	"	"
" " " L3.D1	1	.0225	9	46	24	"	"
Aft. Cargo Lighting Sect. Box L4	1	.04	14	64	135	"	"
" " Dist. Box L4.D1	1	.04	24	64	190	"	"
" " " L4.D2	1	.0225	10	46	15	"	"
" " " L4.D3	1	.0225	10	46	90	"	"

(CONTINUED ON CONTINUATION SHEET No. 1.)

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
Refrig Compressors	2	55	1	.15	206	260	50	V.C.	L.C.B.
Bilge Pumps	3	5	1	.01	21	45	60	"	"
Refrig Fans	2	7	1	.01	28	45	190	"	"
Ballast Pump.	1	45	1	.20	169	194	160	V.I.R.	"
Belge	1	9	1	.04	36.5	64	220	"	"
Ann. Circ.	1	7	1	.03	28.5	92	100	V.C.	"
Cooling Water	2	45	1	.20	174	194	100/140	V.I.R.	"
Fire Belge	2	30	1	.18	114	152	90/135	"	"
Forward Lub.	2	40	1	.15	152	152	60/100	"	"
Forward Water	1	7	1	.03	28.5	92	160	V.C.	"
Oil Purifiers	2	4	1	.0225	15.75	46	60	V.I.R.	"
Transfer Pump.	1	20	1	.10	90	202	190	V.C.	"
Domestic Refrig Compressor	1	15	1	.06	58	93	220	V.I.R.	"
Sanitary Pump.	1	9	1	.04	36.5	110	220	V.C.	"
Turning Motors	2	8	1	.04	34	64	110/190	V.I.R.	"
L.O. Purifier	1	2	1	.0225	9	46	240	"	"
Boat Winches	4	8	1	.03	34	92	120	V.C.	L.C.A.B.
Emergency Bilge Pump.	1	12	1	.06	47.5	143	210	"	"
Steering Gear. Motor	1	40	1	.10	156	202	60	"	L.C.B.
Winchless	1	120	1	.60	275	660	60	"	"
Cargo Winches									

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 Contractors.

Date

COMPASSES.

Have the compasses been adjusted under working conditions

Yes

Builder's Signature.

Date

Have the foregoing descriptions and schedules been verified and found correct

Yes

Is this installation a duplicate of a previous case

No

If so, state name of vessel

—

Plans Are approved plans forwarded herewith

Yes

If not, state date of approval

—

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

Not Cert of 220kva  
Forwarded only.

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

This electrical equipment was installed in 1929 & certain modifications have been effected at various times subsequently. "As fitted" plans have been submitted by the owner & approved. The equipment has been surveyed and found to be in accordance with these plans & the requirements of the Society's Rules for Vessels not Built Under Survey.

The installation has been examined & tested under working conditions & an insulation resistance test made & found satisfactory.

The quality of materials and workmanship is good.

This electrical equipment appears to be in good & efficient condition and, in my opinion, it is eligible to be accepted for classification with the Society.

Noted 27.12.51

Total Capacity of Generators

760.

Kilowatts.

The amount of Fee ...

£ 30 : 0 :

When applied for,

5 DEC 1951

When received,

19

Travelling Expenses (if any) £

L. Haffner

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

LIVERPOOL 11 DEC 1951

Assigned

See Minute on Dfr. 9.

N.M.

