

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

11 SEP 1944

Received at London Office.....

Date of writing Report... 30th Aug 1944 When handed in at Local Office... 19... Port of... IPSWICHNo. in Survey held at... Rowhedge Date, First Survey... 17 June Last Survey... 25th Aug 1944
Reg. Book. (Number of Visits... 2...)on the "EMPIRE BARKIS" Tons { Gross 340.32
Net 138.75

Built at Rowhedge By whom built Rowhedge Ironworks Ltd Yard No. 639 When built 1944

Owners Ministry of War Transport Port belonging to London

Electrical Installation fitted by Central Electrical Co (Bolton) Contract No. When fitted 1944

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

Have plans been submitted and approved... yes System of Distribution 2-wire Voltage of supply for Lighting 110

Heating ... Power 110 Direct or Alternating Current, Lighting Direct Power Direct 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... 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 1 on port side - 1 on starboard 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 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 Sindanyp, 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 1-D.P. SWITCH (100AMP)

and 2-S.P. fuses for 10K.W. generator; 1-D.P. switch (60 amp) and 2-S.P.

fuses for 5K.W. generator.

and for each outgoing circuit 1-D.P. switch (100 amp) + 2-S.P. fuses for windlass; 1-D.P.

change-over switch and 2-S.P. fuses (30 amp) for each outgoing circuit.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule... yes Instruments on main switchboard 3

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 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... yes

state maximum fall of pressure between bus bars and any point under maximum load 4.8 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 ends... yes

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. Flame proof fittings installed where within 10 ft of tanks etc. access only from outside Pump room and where are the controlling switches fitted. In wheelhouse, are all fittings suitably ventilated. ✓ 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. ✓ Are motors connected 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. ✓ 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. yes 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 Are the fittings for pump rooms, tween deck spaces, etc., in accordance with the special requirements for such ships. yes Are the cables lead covered as per Rule. yes Spare Gear, if the vessel is for open sea service have spares been provided as per Rule. ✓, are they suitably stored in dry situations. ✓ Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory. yes

| DESCRIPTION OF GENERATOR. | No. of | RATED AT | | | | DRIVEN BY | WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE. | |
|---------------------------|--------|------------|--------|--------|----------------|--------------|--|----------------------|
| | | Kilowatts. | Volts. | Amps. | Revs. per Min. | | Fuel Used. | Flash Point of Fuel. |
| MAIN ... | ONE | 10 ✓ | 110 ✓ | 91 ✓ | 1000 ✓ | aux diesel ✓ | Heavy oil | over 150°F. |
| EMERGENCY ... | ONE | 5 ✓ | 110 ✓ | 45.5 ✓ | 1000 ✓ | aux diesel ✓ | Heavy oil | over 150°F. |

ROTARY TRANSFORMER

| DESCRIPTION. | KILOWATTS. | CONDUCTORS. | | MAXIMUM CURRENT | | APPROX. LENGTH (lead plus return feet). | INSULATED WITH. | HOW PROTECTED. |
|----------------------------------|------------|---------------------------|--|-----------------|-----------------|---|-----------------|-----------------------|
| | | No. in Parallel Per Pole. | Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm. | IN AMPERES. | In the Circuit. | | | |
| MAIN GENERATOR | 10 | ONE | .045" | 91 | 104 | ✓ 80 | V.C. | Lead covered & S.W.A. |
| " " EQUALISEE | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| EMERGENCY GENERATOR | 5 | ONE | .0225" | 45.5 | 75 | ✓ 100 | V.C. | Lead covered & S.W.A. |
| ROTARY TRANSFORMER: MOTOR | | | | | | | | |
| GENERATOR | | | | | | | | |

[illegible][illegible][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. **CENTRAL ELECTRICAL Co.**

(Limited) LTD.

Johnson
DIRECTOR

Electrical Engineers.

Date 5th September 1944

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..... no If so, state name of vessel..... ✓

Plans. Are approved plans forwarded herewith..... no If not, state date of approval..... 12-5-44

Certificates. Are certificates of test for motors engaged on essential services and generators forwarded herewith..... no

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

has been installed in accordance with the approved plans +
Rule requirements.

The materials & workmanship are sound and of
good description quality.

The installation has been examined under full
working conditions & found satisfactory.

Notes

Thru

5.10.44

Total Capacity of Generators..... 15 Kilowatts.

The amount of Fee £15.0.0 : :
+ 25% £3.15.0 18 : 15 : 0

Travelling Expenses (if any) £ : : :

When applied for,
11 SEP 1944

When received.

.....19.....

SE. Turpie & Bunyan.

Surveyor to Lloyd's Register of Shipping.

FRI 6 OCT 1944

Committee's Minute

Assigned.....

see minute
on J.E. Rpt.



© 2021

Lloyd's Register
Foundation