

C 528
YES
Rules
3/8"
APPD. 5
300 LB

Rpt. 13.

No. 3554

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

6 JUL 1942

Date of writing Report... 24th June 1942... When handed in at Local Office... 19... Port of... LISBON

No. in Survey held at... LISBON... Date, First Survey... May 1st... Last Survey... 16th June 1942
Reg. Book... (Number of Visits... 5...)

on the... Motor Trawler "PORT MADOC" Tons { Gross... 307
Net... 128

Built at... Lisbon By whom built... Cia. União Fabril Yard No... 113 When built... 1942

Owners... Koch Fishing Co. Port belonging to... Hull.

Electrical Installation fitted by... Cia. União Fabril Contract No... When fitted... 1942

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... Two Wire Voltage of supply for Lighting... 110

Heating... Power... 110 Direct or Alternating Current, Lighting... Direct Power... Direct 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... 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... Starboard side of 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... forward end of 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... Ebony Sindams, 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 linked

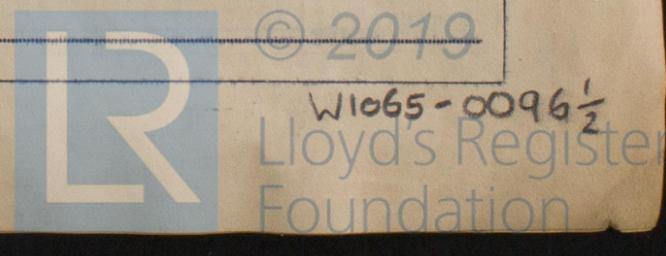
switch with fuse on each pole.

and for each outgoing circuit... Double pole linked switch with fuse on each pole.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule... Instruments on main switchboard... 1

ammeters... 1 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 Nil, 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 Yes with insulating compound Yes 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 clipped to perforated plates or bulkheads as per Rule.

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 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 ✓ 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 ✓, if so, how are they protected ✓.

and where are the controlling switches fitted ✓, are all fittings suitably ventilated ✓. are all fittings and accessories constructed and installed as per Rule ✓. 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 Yes. Control Gear and Resistances, are they constructed and fitted as per Rule Yes. Lightning Conductors, where required are they fitted as per Rule ✓. 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 ✓, 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 ✓. 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.

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	17.5	110	160	1000	Aux. OIL ENGINE	Diesel Oil Above 150°F.	
EMERGENCY ...								
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WIRE.	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 ...	17.5	1	37.083	160	296	20	Paper	Lead covered + armoured
" " EQUALISER ...								
EMERGENCY GENERATOR ...								
ROTARY TRANSFORMER: MOTOR ...								
" " GENERATOR ...								

MAIN DISTRIBUTION CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATED WIRE.	HOW PROTECTED.		
AUX. SWITCHBOARDS AND SECTION BOARDS ...								
After lighting		1	3/0.26	5	12	76	Paper	Lead covered + armoured
Forward lighting		1	3/0.26	5	12	120	"	"
Bridge lighting		1	7/0.36	5	28	90	"	"

LIGHTING AND HEATING, ETC., CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATED WIRE.	HOW PROTECTED.		
WIRELESS ...		1	7/0.36	20	24	50	Rubber	Lead covered + braided
NAVIGATION LIGHTS ...		1	7/0.36	6	28	50	Paper	" " " " " " " " " " " "
LIGHTING AND HEATING ...								
Engine room lighting		1	3/0.29	5	5	64	Rubber	Lead covered + braided
" " "		1	3/0.29	3	5	64	"	" " " " " " " " " " " "

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return feet).	INSULATED WIRE.	HOW PROTECTED.	
Windlass	1	15	19/0.83	117	191	160	Paper	Lead covered + armoured
Steering Gear	1	4	7/0.52	35	37	70	Rubber	" " " " " " " " " " " "

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.

Alexandre
 COMPANHIA UNIAO FABRIL
 Arrendataria do
 ESTABELECIRO NAVAL DA AGUAFINA

Electrical Engineers.

Date 26th JUNE 1942

COMPASSES.

Minimum distance between electric generators or motors and standard compass 24'-0"

Minimum distance between electric generators or motors and steering compass 18'-0"

The nearest cables to the compasses are as follows:—

A cable carrying 6 Ampères 5 feet from standard compass 4 feet from steering compass.

A cable carrying 17 Ampères 17 feet from standard compass 10 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 *nil* degrees on *any* course in the case of the steering compass.

Alexandre
 COMPANHIA UNIAO FABRIL
 Arrendataria do
 ESTABELECIRO NAVAL DA AGUAFINA

Builder's Signature.

Date 26 June 1942

Is this installation a duplicate of a previous case *yes* If so, state name of vessel *PORT JACKSON (herewith)*

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

The above electrical installation has been satisfactorily fitted on board this vessel in accordance with the approved plan and the Society's Rules. The insulation tested throughout and the installation examined under working conditions + found satisfactory.

The dynamo test certificate was not forwarded to this office.

The installation in my opinion is eligible to be classed.

*Noted
 Mu
 9.7.42*

Total Capacity of Generators 17.5 Kilowatts.

The amount of Fee ... *Inclusive free Hull Rpt.* When applied for, 19.....

Travelling Expenses (if any) : : When received, 19.....

Committee's Minute *JUL 10 JUL 1942*
 Assigned *See Lis No 3554*

G. Simon
 Surveyor to Lloyd's Register of Shipping.

(MADE IN ENGLAND.)
 2m.10.38.—Transfer.
 (The Surveyor are requested not to write on or below the space for Committee's Minute.)