

Rpt. 13.

No.

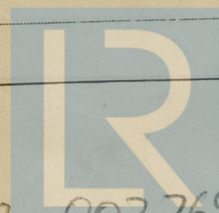
REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 25 AUG 1945

Date of writing Report 4th Aug. 1945 When handed in at Local Office 10 Port of Copenhagen
No. in Survey held at Odense Date, First Survey 25th June 1945 Last Survey 22nd July 1945
Reg. Book. on the Steel Single Screw Motor Vessel SALLY MERSE Tons { Gross 5170.22
Net 3056.01
Built at Odense By whom built Odense Haalskibsværft Yard No. 92 When built -
Owners 21/5 Dampskibsselskabet "Svendborg" Port belonging to Copenhagen
Electric Light Installation fitted by Dansk Elektricitets Compagni Contract No. When fitted 1945-
Is the Vessel fitted for carrying Petroleum in bulk No.

System of Distribution Two wire
Pressure of supply for Lighting 220 volts, Heating 220 volts, Power 220
Direct or Alternating Current, Lighting direct current Power direct current
If alternating current system, state frequency of periods per second
Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off yes
Generators, do they comply with the requirements regarding rating yes, are they compound wound yes
are they over compounded 5 per cent. yes, if not compound wound state distance between each generator yes
Where more than one generator is fitted are they arranged to run in parallel yes, is an adjustable regulating resistance fitted in
series with each shunt field yes
Are all terminals accessible, clearly marked, and furnished with sockets yes, are they so spaced or shielded that they cannot be accidentally earthed,
short circuited, or touched yes Are the lubricating arrangements of the generators as per Rule yes
Position of Generators In the engine room, 7 kw generator in deck house after deck,
is the ventilation in way of the generators satisfactory yes, are they clear of all inflammable material yes
if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the generators
No work and, are the generators protected from mechanical injury and damage from water, steam or oil yes
are their axes of rotation fore and aft yes 7 kw generator at workshop.
Earthing, are the bedplates and frames of the generating plant efficiently earthed yes are the prime movers and
their respective generators in metallic contact yes
Main Switch Boards, where placed In the engine room
If the generators and main switchboard are not placed in the same compartment, is each generator provided with
a fuse on each insulated pole as near as possible to the terminals of the generator, additional to that provided on the main switchboard yes
Switchboards, are they placed in accessible positions, free from inflammable gases and acid fumes yes
are they protected from mechanical injury and damage from water, steam or oil yes, if situated near unprotected
woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards No work and
are they constructed wholly of durable, non-ignitable non-absorbent materials yes, is all insulation of high dielectric strength and of
permanently high insulation resistance yes, if semi-insulating material is used, are all conducting parts insulated from the slab
with mica or micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework yes
and is the frame effectively earthed yes Are the fittings as per Rule regarding:— spacing or shielding of live parts
yes, accessibility of all parts yes, absence of fuses on back of board yes, proportion of omnibus
bars yes, individual fuses to voltmeter, pilot or earth lamp yes, connections of switches yes
Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches For each generator:
A three pole circuit breaker with overload and reverse current trips.
For each outgoing circuit: A double pole switch and a fuse in each pole.
Instruments on main switchboard 6 ammeters 3 voltmeters synchronising device for paralleling purposes.
Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system 1 set of earth
lamps and 1 Voltmeter provided with Ohm scale.
Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules yes
Joint Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule yes



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Lloyd's Register

002762-002769-0132 Foundation

Single
Cables: Single, twin, concentric, or multicore *are the cables insulated and protected as per Tables IV, V, XI & XIII of the Rules* *yes*
Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load *5 Volts*
Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets *yes*
Paper Insulated Cables. If cables are paper covered, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound *yes*
Cable Runs, are the cables fixed as far as possible in accessible positions not exposed to drip or accumulation of water or oil, or to high temperature from boilers, steam pipes, uptakes or other hot objects, or to avoidable risk of mechanical damage *yes*
Support and Protection of Cables, state how the cables are supported and protected *The cables are supported by galvanised clips, where necessary protected by sheet iron plating or tube. Lead covered and wire armoured cables used.*
 If cables are run in wood casings, are the casings and caps secured by screws *yes*, are the cap screws of brass *yes*, are the cables run in separate grooves *yes*. If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VIII *yes*
Refrigerated Chambers, if lights are fitted, are the cables and fittings in accordance with the special requirements *yes*
Joints in Cables, state if any, and how made, insulated, and protected *No joints in cables*
Watertight Glands and Deck Tubes, are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands *yes*
Bushes in Beams and Non-watertight Partitions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed *yes* state the material of which the bushes are made *lead*
Earthing Connections, state what earthing connections are fitted and their respective sectional areas *yes*
 are their connections made as per Rule *yes*
Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule *yes*
Emergency Supply, state position and method of control of the emergency supply and how the generator is driven *yes*
Navigation Lamps, are these separately wired *yes*, controlled by separate switch and separate fuses *yes*, are the fuses double pole *yes*, are the switches and fuses grouped in a position accessible only to the officers on watch *yes*, has each navigation lamp an automatic indicator as per Rule *yes*
Secondary Batteries, are they constructed and fitted as per Rule *yes*
Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight *yes*, are any fittings placed in spaces in which goods are liable to be stacked in close proximity to them; if so, how are they protected *No*
 are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected *No*
 how are the cables led *yes*
 where are the controlling switches situated *yes*
Searchlight Lamps, No. of *yes*, whether fixed or portable *yes*, are their fittings as per Rule *yes*
Arc Lamps, other than searchlight lamps, No. of *yes*, are their live parts insulated from the frame or case *yes*, are their fittings as per Rule *yes*
Motors, are their working parts readily accessible *yes*, are the coils self-contained and readily removable for replacement *yes*, are the brushes, brush holders, terminals and lubricating arrangements as per Rule *yes*, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material *yes*, are they protected from mechanical injury and damage from water, steam or oil *yes*, are their axes of rotation fore and aft *yes*, if situated near unprotected woodwork or other combustible material, are the motors of the totally enclosed, pipe ventilated, forced draught, drip or flame proof type *No wood*, if not of this type, state distance of the combustible material horizontally or vertically above the motors *yes* and *yes*
Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed and fitted as per Rule *yes*
Lightning Conductors, where lightning conductors are required, are these fitted as per Rule *yes*
Ships carrying Oil having a Flash Point less than 150° F. Have the special requirements of the Rules been complied with regarding switches, joint boxes, section and distribution boards, protection of cables, method of distribution, lead of cables, lights and fittings *yes*
 If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office *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	3	3x110	220	500	365	3yds. 25CSA heavy oil eng.	heavy oil	above 150° F.	
AUXILIARY	1	7	220	32	1200	2yds 45CSA	- - - -	- - - -	
EMERGENCY									
ROTARY TRANSFORMER									

GENERATOR, LIGHTING AND HEATING CONDUCTORS.									
DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Effective Area per Pole Sq. Ins. %	No.	Diameter.	In Circuit.	Rule.			
MAIN GENERATOR	2	200			500	490	14 28 14	Vulcanized	Lead covered
EQUALISER CONNECTIONS	1	200				245	7 18 7	rubber	steel wire
AUXILIARY GENERATOR	2	25			32	63	6		armoured.
EMERGENCY GENERATOR									
MAIN DISTRIBUTION CABLES.									
ROTARY MOTOR	1	150			220	230	142	"	"
25HP WINCH MOTORS	1	95			124	150	120	"	"
33 - - - -	1	120			163	175	120	"	"
BOILER ROOM	1	70			129	124	144	"	"
WINDING WINCH	1	70			123	124	32	"	"
AUXILIARY SWITCHBOARDS	1	10			32	38	80	"	"
LIGHT	1	6			20	29	20	"	"
LIGHT AND AUX BOARD	1	16			48	48	62	"	"
WORKSHOP	1	16			32	48	40	"	"
PUMPS AUX MOTORS									
TO AUX BOARD									
LIGHTING AND HEATING EC CABLES.									
ACCOMMODATION									
LIGHT AND SHIP	1	25			35	63	3	"	"
- - - AFT	1	10			10	38	145	"	"
- - - MOTOR ROOM	1	10			23	38	32	"	"
	1	16			20	48	40	"	"
WIRELESS SEARCHLIGHT	1	50			50	98	6	"	"
NAVIGATION MASTHEAD LIGHT	1	2.5			5	13	36	"	"
SIDE LIGHTS									
COMPASS LIGHTS									
POOP LIGHTS									
CARGO LIGHTS									
ARC LAMPS									
HEATERS									

MOTOR CONDUCTORS.										
DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Effective Area per Pole Sq. Ins. %	No.	Diameter.	In Circuit.	Rule.			
BALLAST PUMP	25	1	50			94	98	63	Vulcan	Lead covered
MAIN BILGE LINE PUMPS	10	1	10			41	38	52	rubber	steel wire
GENERAL SERVICE PUMP										armoured.
EMERGENCY BILGE PUMP	1	1	6			24	29	8	"	"
COOLING W. AUX MOTOR	2	1	50			94	98	68	"	"
SANITARY PUMP	6	1	50			94	98	72	"	"
CIRC. SEA WATER PUMPS	25	1	50			94	98	54	"	"
CIRC. FRESH WATER PUMPS	2	1	185			235	233		"	"
AIR COMPRESSOR	66	1	10			34	38	72	"	"
FRESH WATER PUMP	1	1	4			13	21	53	"	"
ENGINE TURNING GEAR	3	1	4			237	240	59	"	"
OIL PURIFIERS	3	2	150 + 10			44	48	52	"	"
ENGINE REVERSING GEAR	65	2	16			218	230	142	"	"
LUBRICATING OIL PUMPS	1	1	150			94	114	12	"	"
OIL FUEL TRANSFER PUMP	58	1	50			125	150	12	"	"
WINDLASS	28	1	70			94	114	12	"	"
WINCHES, FORWARD	33	2	50							
WINCHES, AFT	25	4								
STEERING GEAR—										
(a) MOTOR GENERATOR						16	29	24	"	"
(b) MAIN MOTOR										
WORKSHOP MOTOR	4	1	6							
VENTILATING FANS						115	150	40	"	"
DEEP TANK PUMP	30	1	95			3.3	6	10	"	"
COOLING WAT. PUMP	6	1	1.5			21	29	70	"	"
COMP. REF. 4	5	1	6			10	13	14	"	"
DONKEY BOILER	2.5	1	2.5			7.4	13	9	"	"
HYDROPHOR PUMPS	1.75	2	2.5							

All Conductors are of annealed copper conforming to British Standard Specification No. 7.
The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.
The foregoing is a correct description.

Electrical Engineers.

Date

August 1945

COMPASSES.

Distance between electric generators or motors and standard compass 65 metres

Distance between electric generators or motors and steering compass 60 metres

The nearest cables to the compasses are as follows:—

A cable carrying 0.2 Ampères 2 feet from standard compass 3 feet from steering compass.

A cable carrying 0.4 Ampères 8 feet from standard compass 5 feet from steering compass.

A cable carrying 0.2 Ampères 6 light in feet from standard compass and in 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 0 degrees on all course in the case of the standard

compass, and 0 degrees on all course in the case of the steering compass.

Odense Stølskibsværft A/S

Builder's Signature.

Date

August 1945

Is this installation a duplicate of a previous case *yes*. If so, state name of vessel *1/2 Lise Mark of Copenhagen*
Odense yard No 90

General Remarks (State quality of workmanship, opinions as to class, &c.)

The electric installation has

been constructed and fitted under special survey and in accordance with the Rules 1939-40 and the approved plans.
The material used and the workmanship are of good description.
On completion the whole installation was tested under full power working conditions and found satisfactory.

Direction finder and echo sounding device fitted.

Total Capacity of Generators 337 Kilowatts.

The amount of Fee ... *£ 1106.80*

	When applied for,
	<i>2/8 19.45</i>
	When received.
	<i>8/8 19.45</i>

Travelling Expenses (if any) £

L. L. L. L.
Surveyor to Lloyd's Register of Shipping.

FRI. 11 JAN 1946

Committee's Minute

Assigned

see minute on L.R. Rpt.



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