

8th May 18

Port of

Copenhagen

Received at London Office

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 5545

of Copenhagen Date of First Survey 18th Decbr. 1917 Date of Last Survey 7th May 1918 No. of Visits 25
on the ~~Iron or Steel~~ Twin Sp. 3 Mst. Sr. "LIMA" Port belonging to Stockholm
Built at Copenhagen By whom Akt. Burmeister & Wain's Maskin- og Skibsbyggeri When built 1917-18
Rederiktedlagt Nordstjernen (A. A. Johansson) Owners' Address Stockholm
313 Electric Light Installation fitted by Akt. Burmeister & Wain's Maskin- og Skibsbyggeri When fitted 1917-18

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Compound wound dynamo driven by a shaft wound motor taking current from one of three compound wound motors - each driven by an auxiliary Diesel oil engine.
No. of Dynamo 150 Amperes at 110 Volts, whether continuous or alternating current Continuous
Is Dynamo fixed In the engine room Whether single or double wire system is used Double wire system
No. of Main Switch Board In the engine room having switches to groups 7 of lights, &c., as below
Nos. of auxiliary switch boards and numbers of switches on each 2 switch boards in the engine room each having 10 switches. One in the chartroom having 3 switches. One switch board in the crew space forward, one do. in the pantry to saloon, 2 do. in the galleys to the officers accommodations - and one do. in the store room aft each having no switches.
Are switches fitted on main switch board to the cables of main circuit yes and on each auxiliary switch board to the cables of auxiliary circuits yes and at each position where a cable is branched or reduced in size yes and to each lamp circuit yes.
Is the system wired on the double wire system are fuses fitted to both flow and return wires or cables of all circuits including lamp circuits yes.
Are the fuses of non-oxidizable metal yes and constructed to fuse at an excess of 100 per cent over the normal current
Are all fuses fitted in easily accessible positions yes Are the fuses of standard dimensions yes If wire fuses are used
Are there permanent instructions fitted on or near each switch board giving particulars of proper size of fuse for each circuit Edison tools used.
Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases yes.

Number of lights provided for		arranged in the following groups :-			
18	lights each of	16	candle power requiring a total current of	9	Amperes
12	lights each of	16-32	candle power requiring a total current of	8	Amperes
37	lights each of	16-25	candle power requiring a total current of	18	Amperes
32	lights each of	16-25	candle power requiring a total current of	16	Amperes
16	lights each of	16	candle power requiring a total current of	8	Amperes
42	" " "	16-100	" " " " "	29	" "
2	Mast head light with	1	lamps each of	32	candle power requiring a total current of
2	Side light with	1	lamps each of	32	candle power requiring a total current of
10	Cargo lights of	100	candle power, whether incandescent or arc lights		incandescent.
5	Cargo lights of 6 amperes are lamps.				
The arcs are entirely enclosed with glass globes and lamps provided with wire guarded lanterns.					
Where are the switches controlling the masthead and side lights placed <u>In the chart room.</u>					

DESCRIPTION OF CABLES.

1 cable carrying	150	Amperes, comprised of	19	wires, each	2.52	m/m S.W.G. diameter,	95	square inches total sectional area
2 cables carrying	29	Amperes, comprised of	7	wires, each	1.35	m/m S.W.G. diameter,	10	square inches total sectional area
2 cables carrying	18	Amperes, comprised of	7	wires, each	1.05	m/m S.W.G. diameter,	6	square inches total sectional area
2 cables carrying	8	Amperes	7	"	0.85	m/m diameter	4	square inches total sectional area
2 cables to lamps carrying	6	Amperes, comprised of	one	wire, each	1.38	m/m S.W.G. diameter,	1.5	square inches total sectional area
2 cargo light cables carrying	6	Amperes, comprised of flexible		wires, each		S.W.G. diameter,	1.5	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Copper wires are tinned and insulated with pure and vulcanized india rubber, then taped and lead covered.
Copper wires are tinned and insulated with pure and vulcanized india rubber, taped and lead covered, then taped and armoured
galvanized wire or armoured with two layers of steel tape according to the Rule requirement.
Joints in cables, how made, insulated, and protected In watertight junction boxes with screwed connections and covers.
Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances yes Are all joints in accessible positions, none being made in bunks, cargo spaces, or spaces which may at any time be used for carrying cargo, stores, or baggage In cargo spaces and in spaces used for carrying stores or baggage made in watertight junction boxes with screwed connections and covers
Are there any joints in or branches from the cable leading from dynamo to main switch board no
How are the cables led through the ship, and how protected Secured by screwed clips, cables armoured and where necessary protected by iron tubes or casings.

