

Number of lights provided for

A.	35	lights	each	of	25	candle	power	requiring	a	total	current	of	10	Amp.	
B.	14	"	"	"	25	"	"	"	"	"	"	"	4	"	
C.	30	"	"	"	25	"	"	"	"	"	"	"	8.5	"	
D.	4	half	Watt	"	"	1000	"	"	"	"	"	"	19	"	
E.	42	"	"	"	25	"	"	"	"	"	"	"	11	"	
F.	16	"	"	"	50	"	"	"	"	"	"	"	15	"	
"	23	"	"	"	25	"	"	"	"	"	"	"	"	"	
G.	38	"	"	"	50	"	"	"	"	"	"	"	20	"	
H.	5	"	"	"	32	"	"	"	"	"	"	"	4	"	
J.	72	"	"	"	16	"	"	"	"	"	"	"	29	"	
K.	68	"	"	"	16	"	"	"	"	"	"	"	27.5	"	
L.	Cable to Searchlight												50	"	
M.	"	"	Mareni											20	"
N.	"	"	Meter ballast pump											70	"

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W 554-0282 2/3



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Description of Cables.

2 M.C. Carr <sup>65 carb</sup> 130 Amp Comp of 19 wires, each 2.17 m/m diam. 70 Sq m/m Sec Arc																
1 B.C.	"	10	"	"	"	1	"	"	2.26	"	"	4	"	"	"	"
1 "	"	4	"	"	"	1	"	"	2.26	"	"	4	"	"	"	"
1 "	"	8.5	"	"	"	7	"	"	1.35	"	"	10	"	"	"	"
1 "	"	19	"	"	"	2x7	"	"	1.35	"	"	2x10	"	"	"	"
1 "	"	11	"	"	"	7	"	"	1.70	"	"	16	"	"	"	"
1 "	"	15	"	"	"	7	"	"	2.14	"	"	25	"	"	"	"
1 "	"	20	"	"	"	7	"	"	1.70	"	"	16	"	"	"	"
1 "	"	4	"	"	"	1	"	"	1.78	"	"	2.5	"	"	"	"
1 "	"	29	"	"	"	7	"	"	1.70	"	"	16	"	"	"	"
1 "	"	27.5	"	"	"	7	"	"	1.70	"	"	16	"	"	"	"
1 "	"	to SL	50	"	"	7	"	"	1.70	"	"	16	"	"	"	"
1 "	"	Mc	20	"	"	7	"	"	1.35	"	"	10	"	"	"	"
1 "	"	MP	70	"	"	10	"	"	2.12	"	"	70	"	"	"	"

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W 554-0282 '13

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 6108. e

Port of Amsterdam Date of First Survey June 9 Date of Last Survey 7 August No. of Visits 14  
 No. in Reg. Book 903 on the Iron or Steel Screw Steamer "ROTTI" Port belonging to Amsterdam  
 Built at Amsterdam By whom Ned Scheepb. M<sup>o</sup> When built 1914  
 Owners Stoomvaart M<sup>o</sup> Nederland Owners' Address Amsterdam  
 Yard No. 118 Electric Light Installation fitted by Ally Elekt. Ges. Int. Bureau Amsterdam When fitted 1914

### DESCRIPTION OF DYNAMO, ENGINE, ETC.

2 Turbine dynamo's direct coupled to turbines

Capacity of Dynamo 130 Amperes at 115 Volts, whether continuous or alternating current continuous

Where is Dynamo fixed engine room Whether single or double wire system is used double

Position of Main Switch Board engine room P.S. having switches to groups 13 groups for lights of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each 1 for hospital - 6; aff. ship 2 with 6 & 7. pantry 1 with 5  
officer's passage 1 with 4; fore ship 1 with 4 and 2 under headstee with 6 and 2 with 6 in store rooms

If cut outs are 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

If vessel is wired on the double wire system are cut outs fitted to both flow and return wires or cables of all circuits including lamp circuits yes

Are the cut outs of non-oxidizable metal yes and constructed to fuse at an excess of 100 per cent over the normal current

Are all cut outs fitted in easily accessible positions yes Are the fuses of standard dimensions yes If wire fuses are used are permanent instructions fitted on or near each switch board giving particulars of proper size of fuse for each circuit yes

Are all switches and cut-outs constructed of incombustible materials and fitted on incombustible bases yes

Total number of lights provided for 347 lamps & 30 stop candles arranged in the following groups:—

Group	lights each of	candle power	requiring a total current of	Amperes
A				
B				
C				
D				
E				
	<u>2 Mast head light with 1 lamps each of 25</u>		<u>candle power requiring a total current of 1.2</u>	<u>Amperes</u>
	<u>2 Side light with 1 lamps each of 25</u>		<u>candle power requiring a total current of 1.2</u>	<u>Amperes</u>
	<u>15 Cargo lights of 3 of 16 each</u>		<u>candle power, whether incandescent or arc light</u>	<u>Yes.</u>

If arc lights, what protection is provided against fire, sparks, &c. ✓

Where are the switches controlling the masthead and side lights placed Chartroom

### DESCRIPTION OF CABLES.

Main cable carrying	Amperes, comprised of	wires, each	L.S.G. diameter,	square inches total sectional area
Branch cables carrying	Amperes, comprised of	wires, each	L.S.G. diameter,	square inches total sectional area
Branch cables carrying	Amperes, comprised of	wires, each	L.S.G. diameter,	square inches total sectional area
Leads to lamps carrying	Amperes, comprised of	wires, each	L.S.G. diameter,	square inches total sectional area
Cargo light cables carrying	Amperes, comprised of	wires, each	L.S.G. diameter,	square inches total sectional area

### DESCRIPTION OF INSULATION, PROTECTION, ETC.

Tinned copper wire insulated with one layer of paraffin & 2 layers of vulcanite rubber one ditto braided cotton altogether vulcanised and protected by a steel armoured lead covering

Joints in cables, how made, insulated, and protected no joints in cable

Are all the joints of cables thoroughly soldered, resin only having been used as a flux yes Are all joints in accessible positions, none being made in bunkers, cargo spaces, or spaces which may at any time be used for carrying cargo, stores, or baggage yes

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 galvanised steel tubes



**DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.**

Are they in places always accessible yes

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture galvanized tubes

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat armed cables

What special protection has been provided for the cables near boiler casings armed cables

What special protection has been provided for the cables in engine room armed cables

How are cables carried through beams through steel tubes through bulkheads, &c. water-tight glands

How are cables carried through decks by water-tight covered tubes

Are any cables run through coal bunkers now or cargo spaces yes or spaces which may be used for carrying cargo, stores, or baggage yes

If so, how are they protected in steel tubes or armoured

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage no

If so, how are the lamp fittings and cable terminals specially protected ✓

Where are the main switches and cut outs for these lights fitted ✓

If in the spaces, how are they specially protected ✓

Are any switches or cut outs fitted in bunkers now

Cargo light cables, whether portable or permanently fixed portable How fixed with W.T. connecting boxes

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel ✓

How are the returns from the lamps connected to the hull ✓

Are all the joints with the hull in accessible positions ✓

The installation is yes supplied with 2 voltmeters and 2 an amperemeter, fixed on main bulkhead

**VESSELS BUILT FOR CARRYING PETROLEUM.**

In vessels built for carrying petroleum, are all switches and cut-outs fitted in positions not liable to the accumulation of petroleum vapour or gas ✓

Are any switches, cut outs, or joints of cables fitted in the pump room or companion ✓

How are the lamps specially protected in places liable to the accumulation of vapour or gas ✓

The copper used is guaranteed to have a conductivity of 90 per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than 600 megohms per statute mile after 24 hours' immersion in seawater.

The foregoing statements are a correct description of the Electric Light installation fitted by us on this vessel and we declare that it is at this date in good order and safe working condition.

Electrical Engineers  
**ALGEMEEINE ELEKTRICITEITS-GESELLSCHAFT**  
 INSTALLATIEMESTERS AMSTERDAM

Date August 1<sup>st</sup> 1914

**COMPASSES.**

Distance between dynamo or electric motors and standard compass 273 feet

Distance between dynamo or electric motors and steering compass 193 feet

The nearest cables to the compasses are as follows:—

A cable carrying	<u>3</u>	Amperes	<u>30</u>	feet from standard compass	<u>25</u>	feet from steering compass
A cable carrying	<u>20</u>	Amperes	<u>30</u>	feet from standard compass	<u>25</u>	feet from steering compass
A cable carrying	<u>✓</u>	Amperes	<u>✓</u>	feet from standard compass	<u>✓</u>	feet from steering compass

Have the compasses been adjusted with and without the electric installation at work at full power yes

The maximum deviation due to electric currents, etc., was found to be 0 degrees on all round course in the case of the standard compass and 0 degrees on all round course in the case of the steering compass.

**NEDERLANDSE SKELET-SHOUW-MAATSCHAPPIJ.**

Builder's Signature. Date August 1914

**GENERAL REMARKS.**

The electric installation has been fitted in an efficient manner. Dynamo driving the turbo and motors for auxiliary machinery worked satisfactory without heating whatever.

It is submitted that this vessel is eligible for THE RECORD. Elec. light.

J.W.D.  
 25/8/14  
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

TUE. SEP. -1. 1914

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



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