

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

19 MAR 1928

Date of writing Report 19 When handed in at Local Office Mar 14 1928 Port of Trieste
 No. in Survey held at Trieste Date, First Survey 6 Aug 1927 Last Survey 24 Feb 1928
 Reg. Book. "CONTE GRANDE" (Number of Visits 19)
 40225 on the
 Built at Trieste By whom built Stabilimenti Tecnici Yard No. 764 Tons { Gross 25661
 Owners Lloyd Sabaudo Port belonging to Genoa Net 15303
 Electric Light Installation fitted by Stabilimenti Tecnici Contract No. When fitted 1928

System of Distribution Two wire insulated - Ring main situated in engine & boiler space.

Pressure of supply for Lighting 110 volts, Heating 110 volts, Power 110 volts.

Direct or Alternating Current, Lighting Direct. Power Direct.

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 ✓

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 Machinery space at aft main engine room.

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 ✓ and ✓, are the generators protected from mechanical injury and damage from water, steam or oil

are their axes of rotation fore and aft Yes.

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 No main switchboard. There is a control switchboard near generators with distant control of circuit breakers on branches from ring main.

If the generators and RING MAIN 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 No. Circuit breakers with overload trip near generator

DISTRIBUTION 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 ✓ and ✓, are they constructed wholly of durable, non-ignitable non-absorbent materials Marble, 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 On each set of generator

main - a double pole circuit breaker with overload & reverse current trips and interlocked equalizing switch.

On each outgoing circuit from ring main - a circuit breaker with distant & local control & overload and

no voltage trips Instruments on CONTROL switchboard 4 ammeters 5 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 a milliammeter.

will change over switch with six positions attached to various parts of ring main.

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.

Cables: Single, twin, concentric, or multicore all are the cables insulated and protected as per Tables IV or V of the Rules Yes.

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 4-5 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 None

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 Large cables are armoured & lead covered and supported by galvanised iron clips suitably spaced.

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 Made by means of clamped sleeves in watertight joint boxes.

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 1 cable 1.5 mm² copper, through change over switch and milliammeter to main section of ring main.

are their connections made as per Rule

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 Situated on E deck immediately above main engine room casing. Emergency supply switchboard with change over switch to ring main and emergency generator. Generator driven by petrol paraffin engine.

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. 1 battery from nickel for telephone

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 None

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected None

how are the cables led

where are the controlling switches situated ✓

Searchlight Lamps, No. of None, whether fixed or portable, are their fittings as per Rule

Arc Lamps, other than searchlight lamps, No. of None, are their live parts insulated from the frame or case ✓, are their fittings as per Rule ✓

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 in most cases.

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 ✓, if not of this type, state distance of the combustible material horizontally or vertically above the motors ✓ and ✓.

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. ✓

If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office ✓

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	200	110	1820	950	Steam Turbine			
AUXILIARY	1								
EMERGENCY	2	35	110	320	500	Gasoline m. com. eng.	petrol paraffin		
ROTARY TRANSFORMER	2	1	25	40	1800				

LIGHTING AND HEATING CONDUCTORS.									
Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor Sq. MM.	COMPOSITION OF STRAND.		Total Maximum Current Amperes.	Approximate Length (Lead and Return) METRES.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	3	8 x 700	127	2.63	1820	68	India Rubber.	Lead, steel wire, braiding
	EQUALISER CONNECTIONS	1	400				15	do	do
	RING MAIN	AFT-3x670	(127 x 2.6)			FORW=2x485	(91 x 2.6)	X Conn. 3x670	
	EMERGENCY GENERATOR	1	324	61	2.6	320	20	India Rubber.	Lead, steel wire, braiding
	EQUALISERS	1	161	87	3.35		10	do	do
	ROTARY TRANSFORMER	2	2.5	1.8	16.3	40	50	do	do
	ROTARY SWITCHES	2	7.3	1.6	33	25	12	do	do
	ENGINE ROOM	2	2	67	7	1.1	14	do	do
	BOILER ROOM	2	2	4.5	7	0.9	14	do	do
	ACCOMMODATION	3 types							
	Terminal cables in								
	A1234, B4, E2345 G								
	K25 L1245 S123	2	1.5	1	1.4	6	80 max	do	do
	B23 C2 E, G, K3 L3	2	2.5	1	1.8	14		do	do
	G 8x7 K14.	2	4.5	7	0.9	20		do	do
	See description of main Distribution Boards.								
	There are twenty branches from the Ring Main, which pass through circuit breakers with distant and local control, and supply distribution boards. The distant control is effected from the control switchboard situated near the generators.								
	WIRELESS	2	14.5	7	1.6	32	200	India Rubber.	Lead, steel wire, braiding
	SEARCHLIGHT	1							
	MASTHEAD LIGHT	2	2.5	1	1.8	1.6	250	do	do
	SIDE LIGHTS	2	2.5	1	1.8	1.6	36	do	do
	COMPASS LIGHTS	2	2.5	1	1.8	1.6	12	do	do
	POOP LIGHTS	2	2.5	1	1.8	1.6	290	do	do
	CARGO LIGHTS	1	14.5	7	1.6	40	50	do	do
	ARC LAMPS	1							
	HEATERS	2	4.5	7	0.9	9	10	do	do

MOTOR CONDUCTORS. BRANCHES FROM RING MAIN.									
Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor Sq. MM.	COMPOSITION OF STRAND.		Total Maximum Current Amperes.	Approximate Length (Lead and Return) METRES.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	TO CIRCUIT BREAKER A.	1	670	127	2.6	600	90	India Rubber.	Lead, steel wire, braiding
	- B	1	670	127	2.6	600	36	do	do
	- C	1	670	127	2.6	600	80	do	do
	- D	1	322	61	2.6	44	12	do	do
	- E	1	670	127	2.6	600	70	do	do
	- F	1	322	61	2.6	44	12	do	do
	- G	1	670	127	2.6	600	56	do	do
	- H	1	670	127	2.6	228	12	do	do
	- J	1	670	127	2.6	228	12	do	do
	- K	1	670	127	2.6	600	36	do	do
	- L	1	670	127	2.6	600	140	do	do
	- M	1	670	127	2.6	240	60	do	do
	- N	1	670	127	2.6	240	60	do	do
	- O	1	670	127	2.6	240	60	do	do
	- P	1	670	127	2.6	240	60	do	do
	- Q	1	670	127	2.6	322	12	do	do
	- S	1	322	61	2.6	300	40	do	do
	- R	1	670	127	2.6	322	12	do	do
	- U	1	670	127	2.6	345	60	do	do
	TO EMERGENCY SWITCH B.	3	670	127	2.6	1800	30	do	do

MOTOR CONDUCTORS. (MACHINERY)									
Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor Sq. MM.	COMPOSITION OF STRAND.		Total Maximum Current Amperes.	Approximate Length (Lead and Return) METRES.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	EMERGENCY OIL PUMP	1	195	37	2.6	240	80	do	do
	ENGINE TURNING GEAR 2 nd No.	1	161	37	2.85	200	25	do	do
	BOAT WINCHES 8 th No	1	77	37	1.6	120	30	do	do
	ROTARY STEERING GEAR	1	322	61	2.6	320	180	do	do
	ELECTROHYDRAULIC								
	WORKSHOP MOTORS	1	48.5	19	1.85	88	40	do	do

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.

Luigi Massimo Monteggi.

Electrical Engineers.

Date 5-3-28-

COMPASSES.

Distance between electric generators ~~on motor~~ and standard compass 115m

Distance between electric generators ~~on motor~~ and steering compass 110m

The nearest cables to the compasses are as follows:-

A cable carrying .5 Amperes 3 feet from standard compass 4 feet from steering compass. } non inductive circuits.
A cable carrying ✓ Amperes ✓ feet from standard compass ✓ feet from steering compass.
A cable carrying ✓ Amperes ✓ 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 Yes.

The maximum deviation due to electric currents was found to be 300 degrees on ✓ course in the case of the standard compass, and 800 degrees on ✓ course in the case of the steering compass.

Stabilimento Tecnico Triestino

Builder's Signature.

Date 5-3-28-

Is this installation a duplicate of a previous case If so, state name of vessel *Stato simile a Conte Biancamano*

General Remarks (State quality of workmanship, opinions as to class, etc.) *The electric installation of this vessel has been fitted on board in accordance with the requirements of the Rules and approved plans. The generators were tested in the shops before being placed on board and on completion, the whole installation was tested under full working conditions with satisfactory results.*

bonewire fitted

Elec Light

2/3/28.

J. J.

Total Capacity of Generators 670 Kilowatts.

The amount of Fee ... £ 4463. When applied for, 15/3/28

Travelling Expenses (if any) £ 2.5.28 When received, 19/3/28

V. Lockrey.

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUES. 3 APR 1928

Assigned

Elec Light

Rpt. 9a.

Port of Trieste

Continuation of Report No. 7869

dated 14.3.28

on the

DISTRIBUTION BOARD A.	No. OF CONDUCTORS	EMF. AREA (SQ. INCHES)	COMPOSITION STRAND NO.	DIA.	TOTAL MAX. CURRENT AMPS.	APPROX. LENGTH METRES.	INSULATED WITH.	HOW PROTECTED.
MAIN DISTRIBUTION BOARDS (A.B.C.E.G.K.L.S.)								
1 EXT. LIGHT. DECKS 4 D. FORT	2	2.5	1	1.8	4.5 ✓	20	India. Rubber	Lead, steel wire, braiding
2 " " " F.G. PORT	1	25	19	1.3	36. ✓	10	do	do
3 " " " E	2	9.8	7	1.3	34. ✓	10	do	do
4 " " " F.G.	1	38.7	19	1.6	68. ✓	50	do	do
5 Clusters hatchway 142.	1	25	19	1.3	60 ✓	14	do	do
6 Deck E.F.G. 4th d. lining	2	9.3	7	1.3	31 ✓	20	do	do
7 Gun deck O.E.F. G.H.	2	4.5	7	0.9	15 ✓	44	do	do
9 Thermotank motor	1	25	19	1.3	56 ✓	30	do	do
10 do	1	25	19	1.3	56. ✓	30	do	do
11 Sounding apparatus.	2	4.5	7	0.9	12. ✓	44	do	do
12 Thermotank motor	1	38	19	1.6	76 ✓	60	do	do
13 Gun motor	2	4.5	7	0.9	20. ✓	40	do	do
14 do	2	6.4	7	1.1	28 ✓	60	do	do
15 Gun pump motor	2	4.5	7	0.9	4. ✓	44	do	do
16 Radiator deck D.	1	65	19	2.1	108 ✓	86	do	do
17 Gun.	1	25	19	1.3	56. ✓	86	do	Lead, steel wire net.
18 Radiator. 1st. ll.	1	65	19	2.1	108 ✓	86	do	do
19 Radiator. 1st. ll.	1	65	19	2.1	108 ✓	86	do	do
20 Thermotank motor.	1	25	19	1.3	56. ✓	94	do	Lead, steel wire braiding.
8 Light. 3rd ll. DEFGH.	2	4.5	7	0.9	15. ✓	14		do.
DISTRIBUTION BOARD B								
1 Navigation lights	2	6.7	7	1.1	5 ✓	80		Lead, steel wire, braiding
2 1st. ll. Cabin Deck D.	1	25	19	1.3	54 ✓	20		Lead steel wire net.
3 do	1	38.5	19	1.6	70 ✓	30		do
4 1st. ll. Trussie Room.	1	65	19	2.1	90 ✓	80		do
5 1st. ll. Deck B, O, 3rd.	2	14.5	7	1.6	35 ✓	30		do
6 Officer Deck A. Crew bridge	1	48.5	19	1.85	75 ✓	50		do.
7 Chart Room, Trussie Room C.	2	6.7	7	1.1	20. ✓	20		do.
8 Light. shiping passage.	2	4.5	7	0.9	12. ✓	44		Lead, steel wire braiding.
9 1st. ll. Deck D.	2	4.5	7	0.9	14. ✓	20		Lead, steel wire net.
10 Passage left.	1	25	19	1.3	64 ✓	12		Lead, steel wire, braiding.
11 Gun motor.	2	9.3	7	1.3	31. ✓	25		do.
12 do.	2	6.4	7	1.1	28. ✓	25		do.
13 do.	2	6.4	7	1.1	28. ✓	25		do.
14 do	2	9.3	7	1.3	31. ✓	35		do.
15 Gun frame Hall.	2	9.3	7	1.3	30 ✓	25		Lead, steel wire net.
16 Gun, Gunny saloon	2	9.3	7	1.3	20 ✓	25		do.
17 Radiators H.C. 2nd. B.	1	65	19	2.1	108 ✓	30		do
18 do 2nd. D	1	65	19	2.1	108 ✓	20		do
19 " 1st. ll. B.	1	65	19	2.1	108 ✓	20		do.

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Lloyd's Register

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	No. of CONDUCTORS	EFFECTIVE AREA SQUARE MM.	COMPOSITION OF STRAND. NO.	DIAM.	TOTAL MAX. CURRENT AMPS.	APPROX. LENGTH LEAD RETURN METRES.	INSULATED WITH.	HOW PROTECTED.
DISTRIBUTION BOARD C.								
1. 1st. Class Deck E.	1	38.5	19	1.6	48 ✓	10	India Rubber	Lead steel wire net.
2. do Deck B.	1	48.5	19	1.85	81 ✓	60	do	do.
3. Illum. for deck boiler	2	4.5	7	0.9	13 ✓	60	do	Lead steel wire trailing.
4. Illum. for Cargo opening	2	14.5	7	1.6	40 ✓	74	do	do.
5. Photo machine	2	4.5	7	0.9	20 ✓	10	do	do.
6. Pumping lift.	2	14.5	7	1.6	44 ✓	74	do	do.
7. Fan motor	2	14.5	7	1.6	40 ✓	90	do	do.
8. do	1	38.5	19	1.6	80 ✓	80	do	do.
9. do	1	38.5	19	1.6	80 ✓	80	do	do.
10. Sonolux.	1	25	19	1.3	55 ✓	80	do	do.
11. do	1	25	19	1.3	55 ✓	80	do	do.
12. Pumping lift.	2	14.5	7	1.6	44 ✓	60	do	do.
13. Coal hoist	2	4.5	7	0.9	12 ✓	38	do	do.
14. Radiators 1st. Cl.	1	64	19	2.1	108 ✓	38	do	Lead steel wire net.
15. Fans. 1st. Cl.	1	25	19	1.3	55 ✓	38	do	do.
16. Radiators 1st. Cl.	1	64	19	2.1	108 ✓	38	do	do.
17. Plate washer. 1st. Cl.	2	14.5	7	1.6	36 ✓	16	do	Lead steel wire trailing.
18. Radiators 1st. Cl.	1	64	19	2.1	110 ✓	10	do	Lead steel wire net.
DISTRIBUTION BOARD E								
1. 1st. Cl. Deck B.	1	38.5	19	1.6	48 ✓	50	do.	Lead steel wire net.
2. 1st. Light Deck B-C.	2	2.5	1	1.8	14 ✓	45	do	Lead steel wire trailing.
3. 1st. Cl. Dining Room.	1	48.5	19	1.85	80 ✓	40	do	Lead steel wire net.
4. 2nd. Cl. Dining Room. 4.	1	25	19	1.3	50 ✓	10	do	Lead steel wire trailing.
5. Hall	1	48.5	19	1.85	85 ✓	60	do	Lead steel wire net.
6. 1st. Cl. Dining Room. 1st. Cl.	1	38.5	19	1.6	75 ✓	40	do	do.
7. Illum. for deck boiler	2	4.5	7	0.9	13 ✓	40	do	Lead steel wire trailing.
8. Illum. for Cargo opening	2	9.3	7	1.3	30 ✓	24	do	do.
9. 1st. Cl. Dining Room. 1st. Cl.	2	9.3	7	1.3	30 ✓	10	do	Lead steel wire net.
10. Passengers Gangway. A.B.	2	4.5	7	0.9	12 ✓	50	do	Lead steel wire trailing.
11. Engine & 2nd. Cl. light	2	2.5	1	1.8	8 ✓	16	do	do.
12. Fans Deck E.	1	25	19	1.3	38 ✓	10	do	do.
13. Sawage machine 4.	1	25	19	1.3	54 ✓	60	do	do.
14. Ice cream machine 4.	2	14.5	7	1.6	36 ✓	60	do	do.
15. Thermotank motor.	1	25	19	1.3	56 ✓	80	do	do.
16. Plate lift.	2	4.5	7	0.9	16 ✓	60	do	do.
17. Fan motor.	2	14.5	7	1.6	40 ✓	80	do	do.
18. Thermotank motor.	1	25	19	1.3	56 ✓	80	do	do.
19. Radiators 1st. Cl.	1	65	19	2.1	108 ✓	70	do	Lead steel wire net.
20. Fans 1st. Cl.	2	14.5	7	1.6	25 ✓	70	do	do.
21. Radiators 1st. Cl.	1	65	19	2.1	108 ✓	70	do	do.

	No. of CONDUCTORS	EFFECTIVE AREA SQUARE MM.	COMPOSITION OF STRAND. NO.	DIAM.	TOTAL MAX. CURRENT AMPS.	APPROX. LENGTH LEAD RETURN METRES.	INSULATED WITH.	HOW PROTECTED.
DISTRIBUTION BOARD G.								
1. 1st. & 2nd. Cl. Gallery.	2	4.5	7	0.9	16 ✓	60	India Rubber	Lead steel wire trailing.
2. 1st. Class Deck F.	1	48.5	19	1.85	84 ✓	40	do	Lead steel wire net.
3. 1st. Cl. Smoke Room.	1	65	19	2.1	100 ✓	40	do	do.
4. 1st. Class Deck E.	1	48.5	19	1.85	93 ✓	36	do	Lead steel wire net.
5. do D	1	38.5	19	1.6	70 ✓	26	do	do.
6. do D	1	38.5	19	1.6	70 ✓	26	do	do.
7. 1st. Cl. Deck C.	1	38.5	19	1.6	75 ✓	20	do	do.
8. Dining Room.	1	48.5	19	1.85	80 ✓	60	do	do.
9. Hall	1	48.5	19	1.85	85 ✓	66	do	do.
10. 1st. Class Deck C.	2	6.4	7	1.1	25 ✓	10	do	do.
11. Engine Room Vent.	2	9.3	7	1.3	38 ✓	30	do	Lead steel wire trailing.
12. Smoke Room Deck B.	2	14.5	7	1.6	40 ✓	10	do	Lead steel wire net.
13. 1st. Class Deck E & F.	2	2.5	1	1.8	9 ✓	10	do	do.
14. Lift.	1	38.5	19	1.6	64 ✓	15	do	Lead steel wire trailing.
15. Oven.	1	38.5	19	1.6	73 ✓	60	do	do.
16. 1st. Class gallery	1	38.5	19	1.6	66 ✓	50	do	do.
17. 1st. Class gallery.	1	38.5	19	1.6	72 ✓	50	do	do.
18. Salamander.	1	25	19	1.3	50 ✓	50	do	do.
19. Radiators 1st. Cl.	1	64	19	2.1	110 ✓	28	do	Lead steel wire net.
20. for photography.	1	38.5	19	1.6	80 ✓	20	do	do.
21. Fans Deck E-G.	1	38.5	19	1.6	54 ✓	30	do	do.
DISTRIBUTION BOARD K.								
1. 1st. Cl. & 2nd. Cl. Cor.	1	48.5	19	1.85	84 ✓	35	do.	Lead steel wire net.
2. Baggage Room. 1st. Cl.	2	2.5	1	1.8	14 ✓	10	do	Lead steel wire trailing.
3. 1st. Class Deck F.	1	38.5	19	1.6	70 ✓	25	do	Lead steel wire net.
4. do.	1	38.5	19	1.6	70 ✓	25	do	do.
5. 1st. Cl. Dining Room.	1	25	19	1.3	44 ✓	50	do	do.
6. Hatchway. aft.	1	25	19	1.3	50 ✓	12	do	Lead steel wire trailing.
7. Engine.	2	14.5	7	1.6	40 ✓	30	do	Lead steel wire net.
8. 1st. Class Deck F & G.	2	6.3	7	1.1	24 ✓	12	do.	do.
9. Passengers Gangway. A.B.	2	4.5	7	0.9	16 ✓	44	do	Lead steel wire trailing.
10. 1st. Cl. Smoke Room B.	2	6.4	7	1.1	25 ✓	50	do	Lead steel wire net.
11. 1st. Cl. Cor. F. D.	2	4.5	7	0.9	13 ✓	12	do.	do.
12. Radiators 1st. Cl. Deck D.	1	64	19	2.1	95 ✓	20	do	do.
13. Fans. 1st. Cl. Cor.	1	38.5	19	1.6	51 ✓	20	do	do.
14. Radiators 1st. Cl. D.	1	64	19	2.1	95 ✓	20	do	do.
15. Coffee machine. 1st. Cl.	2	9.3	7	1.3	30 ✓	26	do	Lead steel wire trailing.
16. Plate lift. 1st. Cl.	2	9.3	7	1.3	30 ✓	40	do.	do.
17. Sonolux.	1	25	19	1.3	55 ✓	40	do.	do.
18. Thermotank motor.	1	38.5	19	1.6	78 ✓	40	do.	do.
19. Thermotank motor.	1	38.5	19	1.6	78 ✓	44	do.	do.
20. Sonolux.	1	25	19	1.3	55 ✓	36	do.	do.
21. Laundry.	2	9.3	7	1.3	30 ✓	36	do.	do.

DISTRIBUTION BOARD L									SUB-DISTRIBUTION BOARDS CONNECTED DIRECT TO RING MAIN.								
	No. OF CONDUCTORS	EFFECTIVE AREA EACH CONDUCTOR MM ²	COMPOSITION OF STRAND. No.	DIAM.	TOTAL MAX. CURRENT AMPS.	APPROX. LENGTH LEAD RETURN METRES.	INSULATED WITH.	HOW PROTECTED.	No. OF CONDUCTORS	EFFECTIVE AREA EACH CONDUCTOR MM ²	COMPOSITION OF STRAND. No.	DIAM.	TOTAL MAX. CURRENT AMPS.	APPROX. LENGTH LEAD RETURN METRES.	INSULATED WITH.	HOW PROTECTED.	
1. Ext. lights deck C.B.	2	2.5	1	1.8	14 ✓	40	India Rubber.	Lead, steel wire braid	SUB-DIST. BOARD D								
2. Dining Room II. El. con.	2	14.5	4	1.6	35 ✓	24	do	Lead steel wire net	1. Fan motor.	2	6.7	4	1.1	20 ✓	40	India Rubber.	Lead, steel wire, trailing
3. Cabin II. El. con.	2	14.5	4	1.6	40 ✓	16	do	do.	2. Oil fuel pump.	2	2.5	1	1.8	10 ✓	15	do	do.
4. Music Room II. El.	1	25	19	1.3	58 ✓	30	do	do.	3. Boiler lights. fwd.	2	4.5	4	0.9	14 ✓	12	do	do.
5. Warden Quarters.	2	2.5	1	1.8	10 ✓	20	do	do.	SUB-DIST. BOARD E								
6. II. El. con. Deck D. &.	1	25	19	1.3	47 ✓	10	do	Lead, steel wire, braid	1. Fan motor.	2	6.7	4	1.1	20 ✓	40	do	do.
7. Hatchway to 4.	2	9.3	7	1.3	30 ✓	26	do	do.	2. Oil fuel pump.	2	2.5	1	1.8	10 ✓	15	do	do.
8. II. El. con. Deck B &.	2	6.4	7	1.1	25 ✓	10	do	do.	3. Boiler lights. aft.	2	4.5	4	0.9	4.5 ✓	12	do	do.
9. Fans II. El. and F. &.	1	38.5	19	1.6	44 ✓	26	do	Lead, steel wire net.	SUB-DIST. BOARD H								
10. Coffee machine II. El.	2	9.3	4	1.3	30 ✓	10	do	Lead, steel wire, braid	1. Turning gear	1	161	37	2.35	200 ✓	25	do	do.
11. Fan motor	2	6.4	4	1.1	22 ✓	36	do	do.	2. Oil separator.	2	2.5	1	1.8	3.2 ✓	40	do	do.
12. Thermostat motor.	2	14.5	4	1.6	36 ✓	40	do	do.	3. Engine Room lights	2	6.7	4	1.1	25 ✓	16	do	do.
13. Plate washer. II. El.	2	6.4	4	1.1	24 ✓	20	do	do.	SUB-DIST. BOARD J.								
14. Laundry	2	9.3	7	1.3	30 ✓	40	do	do.	1. Turning gear.	1	161	37	2.35	200 ✓	25	do	do.
15. Coffee machine II. El.	2	9.3	4	1.3	30 ✓	50	do	do.	2. Oil separator.	2	2.5	1	1.8	3.2 ✓	40	do	do.
16. Printing machine	2	4.5	4	0.9	12 ✓	40	do	do.	3. Engine Room lights	2	6.7	4	1.1	25 ✓	16	do	do.
17. Fan motor.	2	9.3	7	1.3	32 ✓	46	do	do.	SUB-DIST. BOARD Q.								
18. Fan motor.	2	14.5	4	1.6	40 ✓	46	do	do.	1. Fan.	1	129	37	2.1	160 ✓	60	do	do.
19. Thermostat motor.	2	14.5	4	1.6	36 ✓	20	do	do.	2. Motor generator.	2	2.5	1	1.8	12 ✓	50	do	do.
20. Baggage lift.	2	14.5	4	1.6	44 ✓	30	do	do.	3. Fan.	1	129	37	2.1	160 ✓	60	do	do.
DISTRIBUTION BOARD S.									4. Dynamo fan.	1	64.5	19	2.1	100 ✓	60	do	do.
1. Velled light for swimming bath	1	25	multilane 16 1.38		45 ✓	32	do	Lead, steel wire net	SUB-DIST. BOARD R.								
2. do.	1	25	16 1.38		45 ✓	32	do	do.	1. Fan.	1	129	37	2.1	160 ✓	60	do	do.
3. Normal light & stairway	1	48.5	19	1.85	85 ✓	32	do	do.	2. Motor generator.	2	2.5	1	1.8	12 ✓	50	do	do.
4. Swimming bath and stairway	2	4.5	4	0.9	10 ✓	32	do	do.	3. Fan	1	129	37	2.1	160 ✓	60	do	do.
5. Corridor	2	4.5	4	0.9	8 ✓	40	do	Lead, steel wire, braid	4. Dynamo fan	2	64.5	19	2.1	100 ✓	60	do	do.
6. Horse	2	4.5	4	0.9	8 ✓	40	do	do.	SUB-DIST. BOARD M.								
7. Swimming bath pump.	2	9.3	4	1.3	32 ✓	50	do	do.	1. Boat winch	1	77.5	37	1.6	120 ✓	30	do	do.
8. Lift.	1	38.5	19	1.6	60 ✓	40	do	do.	2. Boat winch	1	77.5	37	1.6	120 ✓	30	do	do.
9. Fan motor.	1	65	19	2.1	100 ✓	35	do	do.	SUB-DIST. BOARDS N. O. AND P. AS M.								
FOR SUB-DISTRIBUTION BOARDS CONNECTED DIRECT TO RING MAIN, AND EMERGENCY SWITCHBOARD, - SEE FOLLOWING SHEET.									SUB-DIST. BOARD U								
									1. Oven.	1	38.7	91	2.35	345 ✓		do	do.
									EMERGENCY SWITCHBOARD								
									1. Main Dist. Board. A.	1	94	37	1.85	105 ✓	200	do	do.
									2. ——— B.	1	44	37	1.6	98 ✓	160	do	do.
									3. ——— C	1	38.5	19	1.6	53 ✓	100	do	do.
									4. ——— E	1	38.5	19	1.6	43 ✓	46	do	do.
									5. ——— G.	1	38.5	19	1.6	58 ✓	40	do	do.
									6. ——— L	1	48.5	19	1.85	77 ✓	140	do	do.
									7. ——— K.	1	64	19	2.1	114 ✓	40	do	do.
									8. ——— Q.E.S.A.	1	94	37	1.85	130 ✓	40	do	do.
									9. ——— K.L.	1	48.5	19	1.85	80 ✓	40	do	do.

