

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office - 3 OCT 1929

Date of writing Report 19.9.29 When handed in at Local Office 1.10.29 Port of **GLASGOW.**

No. in Survey held at **DUMBARTON.** Date, First Survey 12.8.29 Last Survey 23.9.29  
Reg. Book. **M.V. "ARMADALE"** (Number of Visits 5)

39235 on the **M.V. "ARMADALE"** Tons { Gross 5066

Built at **DUMBARTON.** By whom built **W. DENNY BROS LTD** Yard No. 1223 When built 1923

Owners **MESSRS AUSTRALIND. SS. CO. LTD** Port belonging to **LONDON.**

Electric Light Installation fitted by **MESSRS W. DENNY BROS LTD** Contract No. 1223 When fitted 1923

System of Distribution **TWO WIRE SYSTEM.**

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

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 **✓**

Where more than one generator is fitted are they arranged to run in parallel **NO**, 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 **BASED PLATFORM IN 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 **YES**

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 **BASED PLATFORM IN 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 **✓**

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 **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**

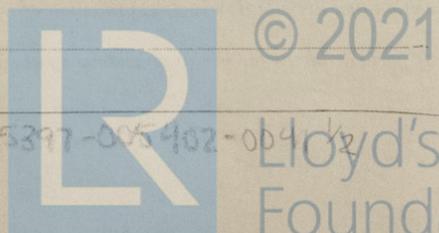
Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches

**FOR GENERATORS:— 100 AMP D.P. SWITCHES AND FUSES FOR POWER:— 100 AMP S.P.C. SWITCHES AND D.P. FUSES. FOR ARRANGEMENT. 50 AMP S.P. SWITCHES AND D.P. FUSES.**

Instruments on main switchboard **TWO** ammeters **TWO** 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 **EARTH LAMPS AND SWITCHES**

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.**





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.

*Wm Denny & Bros Ltd Dumbarton* Electrical Engineers. Date *27-9-29*

**COMPASSES.**

Distance between electric generators or motors and standard compass *30 ft*  
 Distance between electric generators or motors and steering compass *96 ft*  
 The nearest cables to the compasses are as follows:—  
 A cable carrying *25* Amperes *1* feet from standard compass *24* feet from steering compass.  
 A cable carrying *25* Amperes *1* feet from standard compass *24* 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 *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 *1/4* degrees on \_\_\_\_\_ course in the case of the standard compass, and *1/4* degrees on \_\_\_\_\_ course in the case of the steering compass.

For WILLIAM DENNY & BROTHERS Limited.

*William Denny* Director. Builder's Signature. Date *27/9/29*

Is this installation a duplicate of a previous case *Yes* If so, state name of vessel *H.V. Australia*

General Remarks (State quality of workmanship, opinions as to class, &c.) *This installation has been fitted on board under special survey tested under full working conditions and found satisfactory. The materials and workmanship were found to be good and sound.*

*See Light*  
*27/9/29*

Total Capacity of Generators *20* Kilowatts.

The amount of Fee ... £ *17.00* : *2* **OCT 1929** When applied for.  
 Travelling Expenses (if any) £ : : *11.10.29* When received.

*J. S. Rankin*  
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute *GLASGOW 2 OCT 1929*  
 Assigned *See Light*

Im. 9.98.—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)