



Lloyd's
Register

**Lloyd's Register EMEA (Rotterdam
Office)**

*K.P. van der mandelelaan 41a
3062 MB Rotterdam
The Netherlands*

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| Page 1 of 1 |
| Document number ROT.TA.1590338 |
| Issue number 0 |

DESIGN APPRAISAL DOCUMENT

| | |
|--------------------------|---|
| Date 14 December 2015 | Quote this reference on all future communications ROT.TA.1590338 |
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LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2015.

Issued to: Mastervolt B.V.

for: Battery Chargers

Type: Mass 24/75 C and 24/100 C

TYPE APPROVAL CERTIFICATE No. 05/30015(E2)

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2015 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

See previous approval documentation

TEST REPORTS

See previous test reports

Inspections and Surveillance of Production Facilities report

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

A.W. van der Velden
Marine Technology & Engineering Services, Rotterdam
Lloyd's Register EMEA



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Type Approval Certificate Extension

This is to certify that Certificate No. 05/30002(E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER Mastervolt B.V.
Snijdersbergweg 93
1105 AN Amsterdam
The Netherlands

PLACE OF PRODUCTION -- Confidential information --

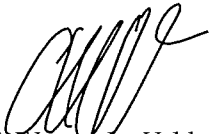
DESCRIPTION Battery Chargers

TYPE 230V 50-60 Hz
Mass 24/75 C
Mass 24/100 C

APPLICATION Marine and offshore application in Category ENV1, ENV2 as defined in LR Type Approval System Test Specification No. 1 2002 where the test specification is satisfactory for the intended operation.

| RATINGS | Type: | Mass 24/75 C | Mass 24/100 C |
|----------------|---------|---------------|---------------|
| | Input: | 230V 50-60 Hz | 230V 50-60 Hz |
| | Output: | 24V DC, 75A | 24V DC, 100A |

Certificate No. 05/30015(E2)
Issue Date 14 December 2015
Expiry Date 30 June 2020
Sheet 1 of 2


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Marine Technology & Engineering Services, Rotterdam
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"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. ROT.TA.1590338 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

When Rules and Standards mentioned in this certificate are changed within the validity of this certificate, than this certificate becomes no longer valid.

All other details remain as the previous Certificate No. 05/30015(E1) to which this extension should be attached.

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|------------------------|------------------|
| Certificate No. | 05/30015(E2) |
| Issue Date | 14 December 2015 |
| Expiry Date | 30 June 2020 |
| Sheet | 2 of 2 |

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