

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No.

37 068 - 12 HH

Company

VB Autobatterie GmbH & Co. KGaA

Am Leineufer 51

30419 Hannover, GERMANY

**Product Description** 

Lead Acid Accumulator

Type

Varta Professional DC (Deep Cycle)

**Environmental Category** 

Technical Data /

Range of Application

Voltage

12V

**Battery Capacity** 

60 Ah (20h) **LFD 60** 51Ah (5h) **LFD 75** 64Ah (5h) 75 Ah (20h)

77Ah (5h) 90 Ah (20h) LFD 90 140 Ah (20h) LFD 140 119Ah (5h) LFD 180 153Ah (5h) 180 Ah (20h) 230 Ah (20h)

LFD 230 196Ah (5h)

Sealed, maintenance free flooded batteries

General power supply on board ships and marine facilities. Also suitable for high current discharging as for electrical starting of combustion engines.

12V blocks can be combined to battery sets with desired voltage and/or capacity

Manufacturer: Johnson Controls

Test Standard

Guidelines for the Performance of Type Approvals Chapter 2, Edition 2003

EN 50342-1:2006

**Documents** 

Test report: GL Test note 37231 dated 2011-09-22

Data sheet: 2011

Remarks

Charging conditions of the manufacturer have to be considered

Valid until

2017-03-05

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Type Approval Symbol

File No.

I.M.01

Hamburg, 2012-03-07

Germanischer Lloyd

Christoph Kutzner

Joachim Zipfel



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Certificate No.

44 216 - 07 HH

Company

VB Autobatterie GmbH & Co. KGaA

Am Leineufer 51

30419 Hannover, GERMANY

**Product Description** 

Valve Regulated Lead Acid accumulators, AGM technology, Series from 60 to 105

Ah (C20), 12 Volt

Type

VARTA Professional AGM: 60; 70; 80; 95; 105 Ah

**Environmental Category** 

Α

Technical Data / Range of Application Sealed, maintenance-free VRLA-batteries (Valve Regulated Lead Acid), with grid plates and with Absorbent Glas Mats (AGM).

The 12 V block batteries can be combined to battery-sets with the desired voltage

and/or capacity.

Application: General power supply on board of ships and marine facilities. Also suitable for high current discharging as for electrical starting of combustion

engines.

For charging conditions manufacturer's instruction has to be considered.

Manufacturer: Johnson Controls

**Test Standard** 

Guidelines for the Performance of Type Approvals Part 2, Edition 2003

**Documents** 

Data sheet of VB Autobatterie

Test reports: Johnson Controls 29.11.2006; Tüv Nord 16.05.2006

Remarks

None

Valid until

2017-03-06

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37 069 - 12 HH

Company

VB Autobatterie GmbH & Co. KGaA

Am Leineufer 51

30419 Hannover, GERMANY

**Product Description** 

Valve Regulated Lead Acid accumulators,

AGM technology

Type

Varta Professional DC AGM

**Environmental Category** 

A

Technical Data /
Range of Application

Voltage

12V

Battery Capacity

LAD 24 20Ah (5h) 24Ah (20h) LAD 60 49Ah (5h) 60Ah (20h) LAD 70 58Ah (5h) 70Ah (20h)

LAD 70 58Ah (5h) 70Ah (20h) LAD 85 70Ah (5h) 85Ah (20h) LAD 115 91Ah (5h) 115Ah (20h) LAD 150 123Ah (5h) 150Ah (20h)

LAD 260 214Ah (5h)

260Ah) (20h)

Sealed, maintenance free VRLA batteries (Valve regulated Lead Acid) , with grid

plates and with Absorbent Glas Mats(AGM)

General power supply on board ships and marine facilities. Also suitable for high

current discharging as for electrical starting of combustion engines.

12V blocks can be combined to battery sets with desired voltage and/or capacity

**Test Standard** 

Guidelines for the Performance of Type Approvals Chapter 2, Edition 2003

EN 50342-1: 2006

Documents

Test report : GL Test note 37231 dated 2011-09-22

Data sheet: 2011

Remarks

Charging conditions of the manufacturer have to be considered

Valid until

2017-03-06

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This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No.

37 070 - 12 HH

Company

VB Autobatterie GmbH & Co. KGaA

Am Leineufer 51

30419 Hannover, GERMANY

**Product Description** 

Valve Regulated Lead Acid Accumulator

**AGM Technology** 

Type

**OPTIMA** 

**Environmental Category** 

Α

Technical Data / Range of Application Voltage

12V

Battery Capacity (20h) 38Ah

YT2.7

55Ah 66Ah

h BT DC4.2 h BT DC5.0

48Ah YT3.7 55Ah YT4.2 66Ah YT5.0 75Ah YT5.5

75Ah BT DC5.5 44Ah RT 3.7 50Ah RT 4.2

YT2.1(6V) 50Ah BT SLI 4.2

55Ah

50Ah RT 2.1 (6V)

**AGM Spiralcell Type** 

Sealed, maintenance free VRLA batteries (Valve regulated Lead Acid)

General power supply on board ships and marine facilities. Also suitable for high

current discharging as for electrical starting of combustion engines.

The 12V blocks can be combined to battery sets with desired voltage and/or

capacity

Manufacturer: Enertec, Johnson Controls

**Test Standard** 

Guidelines for the Performance of Type Approvals Chapter 2, Edition 2003

EN 50342-1: 2006

**Documents** 

Test report :GL Test note 37231 dated 2011-10-22

Data sheet: June 2005

Remarks

Charging conditions of the manufacturer have to be considered

Valid until

2017-03-06

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