

Marine & Offshore

Certificate number: 50016/A1 BV

File number: AP4750 Product code: 2643H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

Weidmüller Interface GmbH & Co. KG

Detmold - GERMANY

for the type of product

CONTROL AUXILIARIES

Electronic control and load monitoring devices for 24V DC distribution maxGUARD

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships

EC Code: 31B

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 13 Nov 2022

For Bureau Veritas Marine & Offshore, At BV HAMBURG, on 27 Apr 2018, Dirk Hoepfner





This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

Certificate number: 50016/A1 BV

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The maxGUARD is a modular system designed to distribute 24VDC control voltages. It consists of electronic load monitors, potential distribution terminals, and feed-in, control and alarm modules.

The load monitoring modules switches the output depending on when the output load exceeds the current-limit threshold or when a load-side short-circuit is present.

Number of bus participants:

max 25 (incl. control or active feed-in module)

Rated current of cross-connectors:

32 A (2 contacts for 40 A feed-in required)

Current capacity of load connections: max. 12 A total current (load monitors, potential distribution terminals)

Degree of protection:

IP20

PCB's:

Coated

Feed - In modules, control and monitoring modules

Order No.	Designation	Description	HVN
2082540000	AMG FIM-C EX	Feed-in module with PCB	1.0.x
2082530000	AMG FIM-0 EX	Feed-in module without PCB	-
2083360000	AMG CM EX	Control module	1.0.x
2082770000	AMG AM CO	Alarm module	1.0.x

Load Montoring Modules

Order No.	Designation	Rated current	HVN
2082000000	AMG ELM-6 EX	1-6A	1.1.x
2082010000	AMG ELM-12 EX	4-12A	1.1.x
2082440000		1-6A	1.1.x
2082470000	AMG ELM-10D CO	4-10A	1.1.x
	AMG ELM-1F EX	1A	1.1.x
		2A	1.1.x
2082060000	AMG ELM-4F EX	4A	1.1.x
		6A	1.1.x
2082320000	AMG ELM-8F EX	8A	1.1.x
2082430000	AMG ELM-10F EX	10A	1.1.x

HVN: Hardware Version Number

Accessories

Order No.	Designation	Description
2495090000	AMG OD EX	Distribution terminal
2495070000	AMG PD EX	Distribution terminal
2495040000	AMG MD EX	Distribution terminal
2495080000	AMG XMD EX	Distribution terminal
2495100000	AMG DIS EX	Distribution terminal
2123000000	AMG PP	Partition plate
2500760000	AMG EP KIT	End plate/bracket
2495380000	AMG EP	End plate
1479000000	WEW 35/2 V-0	End bracket
	ZQV 4N/	Cross connectors

2. DOCUMENTS AND DRAWINGS:

- Manual: 2526740000 dated 01/04.2017
- SCMP_5604587 version 1.0 dated 2017-03-08, Univ_11821841 version 1.0 dated 2017-09-04
- Univ_4200798 version 2.0 dated 2016-08-08
- PCB's: 4 62475 (issue 04 / 29.01.2016), 4 63601 (issue 00 / 16.11.2016), 4 62474 (issue 04 / 28.01.2016)
- 4 60396 (issue 06 / 15.09.2015), 4 60395 (issue 06 / 15.09.2015), 4 62471 (issue 03 / 28.01.2016) 4 62470 (issue 03 / 28.01.2016), 4 62469 (issue 03 / 28.01.2016), 4 62468 (issue 04 / 28.01.2016) 4 62467 (issue 04 / 28.01.2016), 4 62466 (issue 04 / 28.01.2016), 4 62473 (issue 04 / 28.01.2016)

- 4 62472 (issue 04 / 28.01.2016)
- Data: 4 62460 (issue 04 / 28.01.2016), 4 62461 (issue 04 / 28.01.2016), 4 62458 (issue 04 / 10.11.2015)
- 4 62445 (issue 04 / 11.11.2015), 4 62444 (issue 04 / 11.11.2015), 4 62456 (issue 03 / 10.11.2015)
- 4 62457 (issue 05 / 10.11.2015), 4 62451 (issue 01 / 11.11.2015), 4 62449 (issue 04 / 11.11.2015)
- 4 62448 (issue 04 / 11.11.2015), 4 62450 (issue 04 / 11.11.2015), 4 62447 (issue 04 / 11.11.2015) 4 62446 (issue 04 / 11.11.2015), 2 64416 (issue 00 / 18.11.2016)

Certificate number: 50016/A1 BV

3. TEST REPORTS:

Weidmüller:

- LAB20880E dated 2017-03-16, LAB21001D dated 2017-04-11

RS Schwarze:

- 2017015 dated 2. März 2017

4. APPLICATION / LIMITATION:

- 4.1 Bureau Veritas Rules and Regulations for the Classification of Steel Ships.
- 4.2 Approval valid for ships intended to be granted with the following additional class notations: AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.
- 4.3 Bureau Veritas Environmental Category, EC Code: 31B
- 4.4 Documents relating to each application are to be submitted to the Society's examination prior fitting on board.
- 4.5 Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The above mentioned products are to be supplied by Weidmüller Interface GmbH & Co. KG in compliance with the type described in this certificate.
- 5.2 This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 Weidmüller Interface GmbH & Co. KG has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

Weidmüller Interface GmbH & Co. KG Klingenbergstr. 16 32758 Detmold, GERMANY

5.4 - Each equipment is to be supplied with manual(s) for installation, use and maintenance.

6. MARKING OF PRODUCT:

- Maker's name or trademark.
- Date of manufacture and/or serial number.
- Equipment type or model identification.

7. OTHERS:

7.1 - It is the responsibility of Weidmüller Interface GmbH & Co. KG to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.
7.2 - This certificate supersedes the Type Approval Certificate N° 50016/A0 BV issued on 13 Nov 2017 by the Society.

*** END OF CERTIFICATE ***