



Marine & Offshore

Certificate number: 23633/B0 BV

File number: AP4180

Product code: 4501H

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

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Saia-Burgess Controls AG

Murten - SWITZERLAND

for the type of product

PROGRAMMABLE LOGIC CONTROL UNITS

PCD3.M90, PCD3.M96 series

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships

EC Code: 31

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: 16 Mar 2025

For Bureau Veritas Marine & Offshore,

At BV HAMBURG, on 16 Mar 2020,

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.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The **PCD3.M90, PCD3.M96** series are programmable logic controller with dedicated I/O Board for the installation on a DIN rail.

Main characteristics:

Power Supply:	24VDC
Degree of protection:	IP20
Connections:	Ethernet TCP/IP, RS485, RS232
Inputs:	10x digital inputs: 24V DC 5x universal inputs: digital 24V/analogue 0-10V 8x analogue inputs: 0-10V/0-20mA/PT1000/NI1000/NTC10
Outputs:	12x relay outputs: 250VAC, 4A 8x digital outputs: 24V DC, 500mA 8x analogue outputs: 0-10V
Slot for:	Flash memory module SD card memory Serial Interface modules
Back up battery:	1x CR2032
Firmware versions:	M90: 1.10.xx to 1.16.xx; M96: 1.24.xx

Variants:

Type: PCD3.M90 xxx yy z	Type: PCD3.M96 xxx yy z
xxx = Customer designation: SAG, CAR, 7AI, NES, AKT, ECN, SAI, TEM, ATA, AXI, ...	xxx = Customer designation: SAI, 7AI, AKT, AXI, BIO, CAR, FWW, NES, NOV, OPK, SAK, VIS
yy = Customer variant: 01...99	yy = Customer variant: 01...99
z = Operating system: 0 or 7	z = Operating system: 0, 1 or 2

2. DOCUMENTS AND DRAWINGS:

- User Manual PCD3.M90 Rev.10 dated: 11.01.09
- Variant list: 1 2446 6060 BL. 1g dated: 25.10.10
- Pcb board: 4 636 7060 0 dated: 10.03.2009
- Circuit diagram: 124466038 dated: 10.03.2009
- Metal enclosure: 4 100 4848 0 rev.a dated: 01.10.08, 4 101 4833 0 rev. c dated: 05.05.09

For B0 version:

- Variant list: 32334363 Rev.B dated 23.11.17
- Pcb board: 463670680 Rev. H dated 13.03.2017; 32334364 Rev. B dated 05.12.17
- Circuit diagram: 124466058 Rev. E dated: 051115
- Metal enclosure: 410048480 Rev.E dated: 25 Apr 2016

3. TEST REPORTS:

- RUAG: 6522-1 Version 1 dated: 29.September 2010
- montena: 16'108 dated: January 20, 2011
- Saia-Burgess: 10008-MP_TATR-PCD3M90 Rev. 0 dated: 2010-12-10

For B0 version:

- eurofins: MES_Saia_19CH-00015_PCD3.M96_2020-01-23_Rev01 dated 2020-01-23
- Saia-Burgess: 10008-MP_TATR-PCD3.M90/M96 dated 2020-02-03

4. APPLICATION / LIMITATION:

- 4.1 - Bureau Veritas Rules 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: 31**
- 4.4 - Each application and configuration is to be submitted to the Society's examination prior to fitting on board.
- 4.5 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.
- 4.6 - Data processing system used for machinery protection is to be independent from the control and monitoring system.
- 4.7 - 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.
- 4.8 - Depending on the application, Factory Acceptance and On-board Tests are to be performed in accordance with requirements for programmable electronic system categories II or III.
- 4.9 - Each equipment is to be supplied with manual(s) for installation, use and maintenance.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The above mentioned products are to be supplied by **Saia-Burgess Controls AG** 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 - **Saia-Burgess Controls AG** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

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6. MARKING OF PRODUCT:

- Maker's name or trademark
- Date of manufacture and/or serial number
- Equipment type or model identification
- The title and version of each software element included in the installed software system shall be either marked or displayed on command on the equipment.
- When the marking and the title and version of the software are displayed only on the display, such information shall also be included in the equipment manual.

7. OTHERS:

7.1 - It is the responsibility of **Saia-Burgess Controls AG** 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° 23633/A0 BV issued on 22 Feb 2011 by the Society.

*** END OF CERTIFICATE ***