

CERTIFICATE NUMBER 16-HG1527910-PDA DATE 14 Jun 2016

ABS TECHNICAL OFFICE Hamburg Engineering Department

# CERTIFICATE OF DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of

## SAIA-BURGESS CONTROLS AG

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

#### Product: Programmable Logic Controller

#### Model: PCD 3

This Product Design Assessment (PDA) Certificate 16-HG1527910-PDA, dated 14/Jun/2016 remains valid until 13/Jun/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Ulf Numirski Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010). Electronically published by ABS Hamburg. Reference T1527910, dated 14-JUN-2016.

#### SAIA-BURGESS CONTROLS AG

**BAHNHOFSTRASSE 18** MURTEN Switzerland CH-3280 Telephone: +41-26-580-30-00 Fax: +41-26-580-34-99 Email: info@saia-pcd.com Web: www.saia-pcd.com

**Tier: 5 - Unit Certification Required** 

#### **Product: Programmable Logic Controller** Model: PCD 3 **Intended Service:** Process control units for Marine, Offshore and Industrial Applications

#### **Description:**

The PCD3 Process Control Device can be configured as a centralized system consisting of the CPU unit, communication modules and up to 1023 associated analogue, digital and motion I/O channels, or decentralized system. In the decentralised configuration, the PCD3 CPU could communicate with other PCD3.T66x (via Ethernet) or PCD3.T76x extension modules with each up to 256 associated I/O channels and or a PCD2 control device via Profibus or Profi-S-Net.

The PCD.M20/21/22/23xx compact CPUs offers a set of digital and analogue I/O's already included in the base unit. The I/O extension connector gives the possibility to use one PCD3.C200 or PCD3.C110 extension.

Rating: Nominal voltage: 24 V DC; Operating Temperature: 0 to 55 Deg.C; Protection Rating: IP20

#### Service Restriction:

Unit Certification is required for this product by the user to customize this equipment where it is used for Category II or III services as described in Section 4-9-3/Table 1 of the Steel Vessel Rules. PCD3.T76X series requires montage with ferrites to comply with EMC requirements. Installation to be made according to manufacturer instruction.

#### **Comments:**

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. Each particular application/ configuration and the user operating software is to be specifically approved in conjunction with the relevant system in which the PC units are being used.

System Category III. Manufacturer is to keep evidence of quality plan for software, inspection of hardware components from sub-suppliers and quality control in production. Performance integration, fault simulation, final system factory acceptance tests, on-board system and integration tests to be witnessed by the Surveyor.

#### Notes/Drawing/Documentation:

Drawing No. 16009-LOM-ABS based on 06-LD147305-2-PDA sent 20160606, List of Modules, Revision: 02, Pages: 4

Drawing No. 26-215\_ENG13\_SBC-SystemCatalogue, System Catalogue SBC PCD, Revision: 13, Pages: 301 Drawing No. PCD3\_M\_26-215\_EN12\_CC14\_ChA0160\_Standby-Controller, Manual Standby Controller, Revision: 01, Pages: 8

Drawing No. PCD3 M 26-215 EN12 ChA0120 AutomationStations PCD3, Manual PCD3, Revision: 12, Pages: 26

Drawing No. PCD3\_M\_26-789\_EN\_Manual\_PCD3\_01, Manual PCD3, Revision: 12, Pages: 26 Drawing No. PCD3\_M\_26-789\_EN\_Manual\_PCD3\_01, Manual PCD3, Revision: 18, Pages: 145 Drawing No. PCD3\_M\_2nd\_ETH\_Extension\_463672220b\_Module, Hardware Module / BOM, Revision: a, Pages: 3 Drawing No. PCD3\_M\_2nd\_ETH\_Extension\_conn\_124466137a\_Schematics, Hardware Module / Schematics, Revision: a, Pages: 1

Drawing No. PCD3 M 2nd ETH Extension main 124466136a Schematics, Hardware Module / Schematics, Revision: a, Pages: 5

Drawing No. PCD3 M 2nd ETH Extension main 463672210c Module, Hardware Module / BOM, Revision: 01, Pages: 7

Drawing No. PCD3 M BatteryModule 124465902 Schematics, Hardware Module / Schematics, Revision: b, Pages:

Drawing No. PCD3\_M\_BatteryModule 463667940 Module, Hardware Module / BOM, Revision: b, Pages: 5 Drawing No. PCD3\_M\_BatteryModule\_463948980\_Module\_molded, Hardware Module / Construction / Test, Revision: c, Pages: 2 Electronically published by ABS Hamburg. Reference T1527910, dated 14-JUN-2016.

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#### **Tier: 5 - Unit Certification Required**

Drawing No. PCD3 M CAN Extension 463669100 Module, Hardware Module / BOM, Revision: a, Pages: 6 Drawing No. PCD3 M CAN Extension c 124465936 Schematics, Hardware Module / Schematics, Revision: a, Pages: 3 Drawing No. PCD3 M DP Master Extension 463669490 Module, Hardware Module / BOM, Revision: a, Pages: 8 Drawing No. PCD3 M DP Master Extension e 124466005 Schematics, Hardware Module / Schematics, Revision: a. Pages: 5 Drawing No. PCD3 M Extension 463667920 Module, Hardware Module / BOM, Revision: c, Pages: 6 Drawing No. PCD3\_M\_Extension\_g\_124465900\_Schematics, Hardware Module / Schematics, Revision: b, Pages: 3 Drawing No. PCD3\_M\_Manual\_Standby System User Manual, Manual Standby System, Revision: 01, Pages: 42 Drawing No. PCD3\_M\_Testreport\_14022-MP-PCD3\_M6860\_DNV\_TATR, Testreport, Revision: 01, Pages: 53 Drawing No. PCD3\_M\_Testreport\_7375 PCD3 Vibration-Shock.pdf, Testreport Vibration, Revision: 01, Pages: 17 Drawing No. PCD3\_M\_Testreport\_MES\_Saia\_13-MO-0070\_PCD3.M6860\_2014-09-23, Testreport EMC, Revision: 01, Pages: 3 Drawing No. PCD3\_M\_Testreport\_MES\_Saia\_13-MO-0070\_PCD3.M6860\_HWD\_2014-07-03, Testreport EMC, Revision: 01, Pages: 7 Drawing No. PCD3 M Testreport MES Saia 13-MO-0070 PCD3.M6860 HWD 2014-11-07, Testreport EMC, Revision: 01, Pages: 3 Drawing No. PCD3 M Testreport MES Saia 13-MO-0070 PCD3.M6860 HWD 2015-03-05, Testreport EMC, Revision: 01, Pages: 12 Drawing No. PCD3\_Mxx6x\_CPU\_124466058\_Schematics, Hardware Board / Schematics, Revision: d, Pages: 9 Drawing No. PCD3\_Mxx6x\_CPU\_124466076\_F\_Main\_List\_of\_Parts, Hardware Board / Main List of Parts, Revision: f, Pages: 4 Drawing No. PCD3 Mxx6x CPU 463670680 Board, Hardware Board / BOM, Revision: f, Pages: 9 Drawing No. PCDxF2xxx\_124465978\_PCD3F2xx\_Schematics, F2xxx Module / Schematics, Revision: c. Pages: 4 Drawing No. PCDxF2xxx\_124465979\_PCD3F21x\_Main\_List\_of\_Parts, F21xx Module / List of Parts, Revision: e, Pages: 1 Drawing No. PCDxF2xxx 124465980 PCD3F22x Main List of Parts, F22xx Module / List of Parts, Revision: d, Pages: 1 Drawing No. PCDxF2xxx 124466014 PCD3F28x Schematics, F28xx Module / Schematics, Revision: b, Pages: 4 Drawing No. PCDxF2xxx\_124466015\_PCD3F28x\_Main\_List\_of\_Parts, F28xx Module / List of Parts, Revision: d, Pages: 1 Drawing No. PCDxF2xxx 124466084 PCD3F27x Schematics, F27xx Module / Schematics, Revision: a. Pages: 8 Drawing No. PCDxF2xxx<sup>-</sup>124466095<sup>-</sup>PCD3F27x<sup>-</sup>Main List of Parts, F27xx Module / List of Parts, Revision: c, Pages: 6 Drawing No. PCDxF2xxx 124466099 PCD3F26x Schematics, F26xx Module (DALI) / Schematics, Revision: e. Pages: 4 Drawing No. PCDxF2xxx\_124466114\_PCD3F26x\_Main\_List\_of\_Parts, F26xx Module (DALI) / List of Parts, Revision: c, Pages: 1 Drawing No. PCDxF2xxx\_124466145\_PCD3F24x\_Schematics, F24xx Module / Schematics, Revision: b, Pages: 4 Drawing No. PCDxF2xxx 124466181 PCD3F24x Main List of Parts, F24xx Module / List of Parts, Revision: a, Pages: 2 Drawing No. PCDxF2xxx 27-603 EN Manual M-Bus-Module PCD2F27x-PCD3F27xx, Manual M-Bus, Revision: 01, Pages: 15 Drawing No. PCDxF2xxx 463669870 PCD3F21x Module, F21xx Module / BOM, Revision: e, Pages: 5 Drawing No. PCDxF2xxx\_463669880\_PCD3F22x\_Module, F22xx Module / BOM, Revision: e, Pages: 4 Drawing No. PCDxF2xxx\_463670250\_PCD3F22x\_Module, F22xx Module / BOM, Revision: c, Pages: 4 Drawing No. PCDxF2xxx\_463670250\_PCD3F28x\_Module, F28xx Module / BOM, Revision: c, Pages: 4 Drawing No. PCDxF2xxx\_463671600\_PCD3F27x\_Module, F27xx Module / BOM, Revision: c, Pages: 6 Drawing No. PCDxF2xxx\_463671830\_PCD3F26x\_Module, F26xx Module (DALI) / BOM, Revision: e, Pages: 10 Drawing No. PCDxF2xxx\_463672380\_PCD3F24x\_Module, F24xx Module / BOM, Revision: b, Pages: 6 Drawing No. PCDxF2xxx\_Testreport\_12011-MP\_DNV\_TATR-PCD3F27x, Testreport Type Approval M-Bus, Revision: 01, Pages: 33 Drawing No. PCDxF2xxx\_Testreport\_12012-MP\_DNV\_TATR-PCD3F2xx, Testreport Type Approval, Revision: 01, Pages: 31 Drawing No. PCDxF2xxx\_Testreport\_MES\_Saia\_M-Bus\_20120285\_MaC, Testreport EMC, Revision: 01, Pages: 17

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#### **Tier: 5 - Unit Certification Required**

Drawing No. PCDxF2xxx\_Testreport\_RUAG-5286 PCD3C Vibration-Shock, Testreport Vibration, Revision: 01, Pages: 11

Drawing No. PCDxF2xxx\_Testreport\_Rap\_MES\_Saia\_M-Bus\_20120285\_05.06.2012, Testreport EMC Immunity, Revision: 01, Pages: 4

#### **Terms of Validity:**

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#### STANDARDS

#### **ABS Rules:**

2016 Steel Vessel Rules 1-1-4/7.7, 1-1-Appendix 3 and 4, 4-9-3/1/11 and 4-9-8/13 2016 Mobile Offshore Drilling Unit Rules 1-1-4/9.7, 1-1-Appendix 2 and 3, 4-3-4/5

National: UL 508 (Edition 1999)

International: NA

Government: NA

EUMED: NA

OTHERS: NA

PDA Certificate No:	16-HG1527910-PDA
Company:	Saia-Burgess Controls AG
Product/Equipment:	Programmable Logic Controller
Model:	PCD3

The certificate as mentioned above makes reference to the following list of Certified Modules. Each version of PCD3.M, .C or .T may be followed by <u>Z05</u>, which designates the model being electrically isolated from earth/ protective ground.

#### **Product description**

Module	Module related	Description
	Subcategories	ble Controller
PCD3	.M2030V6	Compact PLC with 512 KB user program memory, 20 dig. IN, 12 dig. OUT, 4 analog IN, 2 analog OUT. Expandable to max. 102 I/Os, backup with onboard Flash memory, 1 MByte file system, USB port for programming with PG5, RS485, 2 Interrupts, integral Web & FTP server, 1 port (socket A) for communication interface PCD7 Flax, lithium battery
	.M2130V6	Same as .M2030, but with Ethernet TCP/IP
	.M2137V6	Same as .M2130, but programmable with Siemens Step 7
	.M2330A4T1 .M2330A4T3 .M2330A4T5	Compact PLC with 512 KB user program memory, 8 dig. IN, 2 dig. OUT, 4 analog IN, 1 Telecom port for PSTN ( $\rightarrow$ T1), ISDN ( $\rightarrow$ T3) or GSM/GPRS ( $\rightarrow$ T5), expandable to max. 78 I/Os
	.M2230A4T5	Same as .PCD3.M2330A4T5, but without Ethernet TCP/IP
	Series PCD3.M3 Programmable Controller	
PCD3	.M3020 .M3120 .M3160 .M3230 .M3330 .M3360	PLC with 128/256/256 Kbytes of user memory, Backup with internal flash memory, USB port for PG5, max. 64/1023/1023 digital I/O, 2 interrupt inputs, Web-server, RS485 for Profi-S-Net or S-bus, PCD3.M3120 and PCD3.M330 with Ethernet TCP/IP Models PCD3.Mxx60 are the high power CPU version of the corresponding standard CPU
	.R010	Battery module for PCD3.M3xxx

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Product Design Assessment (PDA) Certificate for Component Details

PDA Certificate No:	16-HG1527910-PDA
Company:	Saia-Burgess Controls AG
Product/Equipment:	Programmable Logic Controller
Model:	PCD3

#### **Product description (continued)**

Module	Module related	Description
	Subcategories	
	Series PCD3.M5 Programmable Controller	
PCD3	.M5340	PLC with 512 Kbytes of user memory, max. 1023 digital I/O,
	.M5360	2 interrupt inputs, run/stop switch. Web server, backup
	.M5440	option with PCD7.R500 flash card
	.M5540	Data protection 1 3 years with lithium battery.
		USB port for PG5, RS232, RS485 for Profi-S-Net and RS485
		for S-bus, .M5340 with switchable RS485/RS422,
		.M5340/.M5540 is with Ethernet TCP/IP
	.M5447	Similar to .M5440 but programmable with Siemens Step 7
	.M5547	Similar to .M5540 but programmable with Siemens Step 7
	.M5560	High power CPU basic module with Ethernet TCP/IP, 2 MB
		of program memory
	.M5567	Similar to .M5560 but programmable with Siemens Step 7
	Series PCD3.M6 Programmable Controller	
PCD3	.M6340	Similar to .M5540 but with CAN interface
	.M6347	Similar to .M6340 but programmable with Siemens Step 7
	.M6360	High power CPU basic module with Ethernet TCP/IP and
		CAN interface, 2 MB of program memory
	.M6367	Similar to .M6360 but programmable with Siemens Step 7
	.M6560	High power CPU basic module with Ethernet TCP/IP and
		Profibus-DP master 12 Mbits, 2 MB of program memory
	.M6567	Similar to .M6560 but programmable with Siemens Step 7
	.M6860	Standby controller with 2 Ethernet TCP/IP ports and
		coprocessor for standby operation
	.M6880	Similar to .M6860 but for standby operation
	.M5	Holder for lithium battery and LED for CPU status
	Battery Module	

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Model:	PCD3

#### **Product description (continued)**

Module	Module related Subcategories	Description
	RIO Head Station	
PCD3	.T660	PCD3 Ethernet RIO Head station (as PCD3.M3330)
	.T665	PCD3 Ethernet RIO Head station (strip down version of PCD.M3330), 32 KB program memory, 256 KB on-board-file system
	.T666	PCD3 Ethernet RIO Head station (strip down version of PCD3.M3330), 128 KB program memory, 512 KB on-board-file system, onboard RS485 interface
	.T667	Same as .T66x, compatible with Siemens Step 7
	.T668	Smart RIO, as .T666, but for operation with standby CPU
	.T76x .T26x	Profibus DP RIO head station with 4 I/O module slots, Profibus DP/ Profi-S-Net connection and integral web server, 24 V DC supply
	Extension Module	
PCD3	.C100	Extension housing with 4 I/O module sockets
	.C110	Extension housing with 2 I/O module sockets
	.C200	Similar to PCD3.C100, with 24 V DC power supply

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### Product description (continued)

Module	Module related	Description
	Subcategories	
PCD3	Flyx	Incl. PCD7 FlyxS
I CD5	F110/ F121/ F130/ F150	Serial interface modules RS422/485 RS232 current loop 20
		mA. RS485 with galvanic isolation
	.F1xxR500	F1xx Serial interface module as above with Flash memory
		for user program backup
	.F180	Serial interface module for Belimo MP-Bus, max 8 actuators
	F210	BS422/ BS485 and ontional BCD7 E1xxS
	.F210 F215	R A Creet® MS/TP and optional PCD7.F1xxS
	.F215 F221	BAChele Mis/IF and optional PCD7.FlxxS
	F240	LONEET10 and optional PCD7 E1xxS
	F261	DALLing hus nower supply
	F270	M Bus Master interface for up to 240 slaves
	F271	M-Bus Master interface for up to 240 slaves
	F272	M-Bus Master interface for up to 60 slaves
	F272	M Bus Master interface for up to 120 sloves
	.F275 E281	Relimo MD Rus and antional PCD7 Elvys
	.1201	Bennio MF-Bus and optional FCD7.F1XXS
	Digital I/O Modules	
PCD3	.A200	Digital output module, 4 relays, 250VAC / 2A, make contact with contact protection
	.A210	Digital output module, 4 relays, 250VAC / 2A, brake contact with contact protection
	.A220	Digital output module, 2 x 3 relays, 250VAC / 2A, make contact w/o contact protection
	.A25x	Digital output module, 8 relays 48VAC / 2A or 50VDC / 2A with 6 change-over contacts and 2 make contacts. Connection via 24-pole cage clamp terminal block
	.A300	Digital output module, 6 transistor outputs 1032VDC / 2A
	.A400	Digital output module, 8 transistor outputs 532VDC / 0.5A
	.A410	Digital output module, 8 transistor outputs 532VDC / 0.5A, electrically isolated from PCD3 bus
	.A460	Digital output module, 16 transistor outputs 1032VDC / 0.5A, ribbon cable connector for PCD3.K2xx
	.A465	Digital output module, 16 transistor outputs 1032VDC / 0.5A, connection for spring terminals
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PDA Certificate No:	16-HG1527910-PDA
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Product/Equipment:	Programmable Logic Controller
Model:	PCD3

#### **Product description (continued)**

Module	Module related Subcategories	Description
	Digital I/O Module	L
PCD3	.A810	Digital manual control module with 4 relays outputs: 2 x 'changeover' contacts, 2 x 'make' contacts
	.A860	Light and shades control module with 2 x relay outputs 250 V AC/ 12 A, 2 x digital inputs 24 V DC
	.B100	Digital input/output module, 2 inputs, 2 outputs and 4 configurable inputs / outputs, Inputs : 24 VDC / delay 8 ms, outputs: breaking capacity 0.5 A / 532 VDC
	.E110	Digital input module, 8 inputs, 24 VDC, source and sink operation, 8 ms input delay
	.E111	As .E110 with 0.2 ms input delay
	.E116	Digital input modules, 8 inputs, 5 V DC, source and sink operation, 0.2 ms input delay
	.E160	Digital input module, 16 inputs, 24 VDC, source and sink operation, 8 ms input delay, cable with ribbon cable connector for PCD3.K2xx/.K3xx
	.E161	As E160 with 0.2 ms input delay
~	.E165	Digital input module, 16 inputs, 24 VDC, source and sink operation, 8 ms input delay, connection for spring terminals
	.E166	Digital input module, 16 inputs, 24 VDC, source and sink operation, 0.2 ms input delay, connection with spring terminals to max 0.5 mm <sup>2</sup>
	.E500	Digital input module, 6 inputs, 110240 VAC, electrically isolated, source operation
	.E610	Digital input module, 8 inputs, 24 VDC, electrically isolated, source and sink operation, 8 ms delay

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#### **Product description (continued)**

Analogue Module		
PCD3	.W200	Analogue input module, 8 inputs, 10 bits, 0 10 V
	.W210	Analogue input module, 8 inputs, 10 bits, 0 20 mA
	.W220	Analogue input module, 8 inputs, 10 bits, PT/Ni 1000
	.W300	Analogue input module, 8 inputs, 12 bits, 0 10 V
	.W305	Analogue input module, 7 inputs, 12 bits, 0 10 V, galvanic isolated
	.W310	Analogue input module, 8 inputs, 12 bits, 0 20 mA
	.W315	Analogue input module, 7 inputs, 12 bits, 0(4) 20 mA, galvanic isolated
	.W325	Analogue input module, 7 inputs, 12 bits, +/- 10 V
	.W340	Analogue input module, 8 inputs, 12 bits, 0 10 V, 0 2.5 V, 0 20 mA, Pt/Ni 1000
	.W350	Analogue input module, 8 inputs, 12 bits, Pt/Ni 100
	.W360	Analogue input module, 8 inputs, 12 bits, Pt 1000 (-50 150° C, 0.1° C)
	.W380	Analogue input module, 7 inputs, 12 bits, Pt 1000 (-50 150° C, 0.1° C)
	.W400	Analogue output module, 4 outputs, 8 bits, 0 10 V
	.W410	Analogue output module, 4 outputs, 8 bits, 0 10 V, 0 20 mA, 4 20 mA
	.W500	Analogue, combined input/output module, 2 inputs and outputs, 12 bits, 0 10 V or +/- 10 V
	.W525	Customized multifunctional module, 4 analogue inputs/ 2 analogue outputs
	.W600	Analogue outputs module, 4 outputs, 12 bits, 0 10 V
	.W605	Analogue output module with galvanic isolation, 6 outputs, 10 bits, 0 10 V
	.W610	Analogue output module, 4 outputs, 12 bits, 0 $\dots$ 10 V/ +/- 10 V/ 0 $\dots$ 20 mA
	.W615	Analogue output module with galvanic isolation, 4 outputs, 10 bits, 0(4) 20 mA
	.W625	Analogue output module with galvanic isolation, 6 outputs, 10 bits, +/- 10 V
	.W720	Weighing module with 2 systems for up to 6 weighing cells, resolution 18 bit
	.W745	Universal temperature measurement module for up to 4 measuring inputs, 16 bits, TC type J & K, Pt100/1000 and Ni 100/1000
	.W800	Analogue manual control module with 3 outputs, 0 10 V w/ manual control, 1 output 0 10 V w/o manual control

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#### **Product description (continued)**

Module	Module related	Description
	Subcategories	
	Motion Module	
PCD3	.H100	Intelligent counting module, 1 counting channel, 20 kHz, 2
		inputs
	.H11x	Intelligent fast counting module, I counting channel, 100
		KHZ, 2 inputs, measurement of period, pulse and frequency
	.H150	(SSI) module and 4 outputs 24 V DC/ 0.5 A
	.H210	Module for one stepper motor axis
	.H310	Module for 1 servomotor axis, encoder input, 24 V DC/ 100
		kHz, set-point output +/- 10 V, 12 bit
	.H311	Module for 1 servomotor axis, encoder input, 5 v DC/ 100
		kHz, set-point output +/- 10 V, 12 bit
	Memory Modules and Flash Cards	
PCD3	.R500	Back-up flash card
	.R550M04	4 Mbyte flash card with 3 Mbyte file system
	.R550M128	Flash card style R500 with 128 mbyte
	.R551M04	4 Mbyte flash card with 3 Mbyte file system
	.R560	Flashcard with BACnet®
	.R561	Flashcard with BACnet®
	.R562	Flashcard with BACnet® and 128 Mbyte file System
	.R580	Flashcard with Lon IP
	.R581	Flashcard with Lon IP
	.R582	Flashcard with Lon IP and 128 Mbyte file system
	.R600	Basic module with slot for SD flashcards

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