Certificate no.:
TAA00003SR

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Programmable Controller

with type designation(s)
Foxboro DCS Standard & Compact 200 Series

issued to
Schneider Electric Systems USA Inc.
Foxboro, MA, USA

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.
Location classes:

Temperature	**A**
Humidity	**B**
Vibration	**A**
EMC	**A**
Enclosure	**B (IP43)**

Issued at **Hamburg** on **2025-11-19**
This Certificate is valid until **2030-11-10**.
DNV local unit: **Certification & Inspection Services**

for **DNV**

Approval Engineer: **Jens Dietrich**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

Controller and I/O and communication components listed below to be mounted in closed cabinet G12A/10126ZZ/ G148/10139FM, (see Application/Limitation):

Part	Description
RH924YA	FCP280 Control Processor
RH101FQ	FDC280 Field Device Controller
RH924YF	FCP280 Vertical Baseplate
P0922YC	Power Supply, FPS 400-24/24
P0922YU	Power Supply, FPS 400-24
RH101CR	Compact FPS480-24 Power Supply, AC/DC Input
RH926DZ	Power Connection Kit For FPS 400-24
RH101BY	DC Power Distribution Assembly
P0927BL	Power Distribution Terminal Blocks
RH100EB	Cable, 2.1m, 24VDC, 18AWG, DC Distribution to BP
RH101KF	FDC280 Baseplate
RH914YZ	FCM2F 2KM Fiber Optic Fieldbus Extender
RH926JM	8 Slots Vert. Baseplate, Time Strobe, 8 FBM
RH101AA	Compact 200 Series 16-Slot Horizontal Baseplate
RH924WA	FCP280 Fiber Optic Network Adapter
RH924UQ	FCP280 Copper Network Adapter
RH926KW	Fieldbus Baseplate Terminator/Splitter
RH916RB	Fieldbus Baseplate Terminator
RH926EQ	FBM202 Channel Isolated 8 Input Thermocouple/mV
RH927AM	FBM203d Channel Isolated 8 Input RTD
RH917GY	FBM207c Ch Isolated 16 DIN 48 Vdc Contact Sense
RH914TR	FBM217, Discrete Inputs, 32 Channels
RH916RH	FBM219, Discrete I/O, 32 Channels, 24 DIN+8 DOUT
RH914TG	FBM241 Ch Isolated Vmon DI + External Source DO
RH914WP	FBM241d Ch Isolated CSense DI + Internal Source DO
RH927AL	FBM245, Redundant Ready HART 4 Input + 4 Output Channels
RH927BN	FBM247, Crnt/Vlt, Anlg/Dig/Plse+HART Config.
RH100KG	FBM248 Crnt/Vlt, Anlg/Dig/Plse+HART Redundant
RH101DB	Compact FBM202 Channel Isolated 8 Input Thermo./mV
RH101GB	Compact FBM203d Channel Isolated 8 Input RTD
RH101GD	Compact FBM207c Ch Isolated 16 DIN 48Vdc Contact Sense
RH101AB	Compact FBM214b, HART Inputs, 8 Channels
RH101RP	Compact FBM214e, HART Inputs, 16 Channels
RH101DF	Compact FBM217, Discrete Inputs, 32 Channels
RH101AE	Compact FBM218 (HART Output Module FBM218)
RH101GG	Compact FBM219, Discrete I/O, 32Channels, 24DIN+8 DOUT
RH101DH	Compact FBM241 Ch Isolated Vmon DI+External Source DO
RH101GL	Compact FBM 241d, Ch Isolated Csense DI + Internal Source DO
RH101EY	Compact FBM247 Crnt/Vlt, Anlg/Dig/Plse+HART
RH101LJ	Compact FBM248 Crnt/Vlt, Anlg,Dig/Plse+HART Redund
RH926ZY	Redundancy Adapter For FBM207/217
RH924DU	Redundancy Adapter For FBM245
RH101AZ	Compact-FBM207b/FBM217 Redundancy Adapter
RH101AY	Compact-FBM218/FBM237 Redundancy Adapter
RH101LN	Redundancy Adapter for Compact FBM248
RH916XH	Compression Term Assembly, Poly Amide, FBM202
RH924EX	FBM203d T/A
P0917MJ	Ring Lug Term Assy, FBM207c, Non-PVC
RH917MG	Comp TA FBM207c 48 Vdc Contact Sense, PolyAmide
RH924JH	FBM214b/216b Compression Term Assembly, Poly Amide
RH101RY	FBM214e Compression Ter Assembly Int Powered
RH926SP	FBM215/218 Compression Term Assembly, PolyAmide
RH916QA	Compression Term Assy, FBM217, 240 Vac Switch DI
P0916PT	Ring Lug Term Assy, FBM217, 120/125V Vmon
RH917LE	Comp TA FBM219 60V Vmon In + 0.25A Fused 60V Out
RH917LH	Comp TA FBM219 24 Vdc CSense+0.25A Fused 60V Out

RH917LS	Comp TA FBM219 125V Switch DI + 5A Relay Out
RH924HF	FBM 219/239 TA. 8 dc Input:Cont./VM; 8 dc Outputs
RH924HH	FBM 219/239 TA. 8 ac In:VM@120Vac; 8 out Switches
RH924HK	FBM 219/239 TA. 8 ac In:VM@240Vac; 8 out Switches
RH924HP	FBM 217/219 TA. 16 dc Input:Contact sense @ 48Vdc
RH924HY	FBM 219/239 TA. 8 dc In:CS@125Vdc; 8 out Switches
RH924JB	FBM 219/239 TA. 8 HP Cont/VM@60Vdc; 8 out Switches
RH916AQ	Comp TA FBM241 60V Vmon In + 2A 60 V Fused Out
RH916AR	Ring Lug TA FBM241 60V Vmon In + 2A 60V Fused Out
RH916QJ	Compression Ta, FBM241, 240V Vmon + 5A Relay Out
RH916QL	Comp TA, FBM241, 240V Vmon + Fused Relay Out
RH916QT	Comp TA, FBM241, 125V Switch DI + 5A Relay Out
RH917MX	Comp TA FBM241,8DI 120/125+8DO 120/125 SS
RH916YW	Comp TA, FBM241d, PlyA, CSense In + Int Source DO
RH924QU	FBM244/245 T/A
RH924HX	FBM 219/239 TA. 8 dc In:VM@125Vdc; 8 out Switches
RH924WG	FBM247 T/A baseplate mount, 16 compress term.
RH924WW	FBM247 T/A, 8 compression term.
RH101KA	Compact FBM247 T/A baseplate mount, spring cage
RH100KR	FBM248 T/A baseplate mount, 16 compress term
RH926GH	FBM224 / FBM230 / FBM231 Compression PolyAmide TA
TBUM297218	RS-232 Cable, RJ45 to DE9P, 1ft.(0.3m)
RH101CS	Fan Tray Assembly, 120 Vac
P0915VN	Pagoda Fan 240V
RH916AQ	Comp TA FBM241 60V Vmon In+2A 60V Fused Out
P0915VM	Pagoda Fan, 120V
RH916YA	Comp Ter Assy, FBM217, Polyamide, 120/125Vmon
RH924YL	FCP280 Horizontal Baseplate
RH914SV	FBM203 Channel Isolated 8 Input RTD
RH922UA	FBM203b Channel Isolated 8 Input Extended RTD Range
RH922UD	FBM203c Channel Isolated 8 Input 10 ohm RTD Range
RH914TD	FBM207 Channel Isolated 16 DIN Voltage Monitor
RH914WH	FBM207b Ch Isolated 16 DIN 24 Vdc Contact Sense
RH927AH	FBM214b, HART Inputs, 8 Channels
RH922VU	FBM215, HART Output, 8 Channels
RH927AJ	FBM216b, Redundant Ready HART Inputs, 8 Channels
RH922VW	FBM218, Redundant Ready HART Output, 8 Channels
RH927AF	FBM238, Discrete I/O 32 Channels, 8 In-8 Out-8 In-8 In
RH927AG	FBM239, Discrete I/O 32 Channels, 8 In-8 Out-8 In-8 Out
RH914WK	FBM241b Ch Isolated Vmon DI + Internal Source DO
RH914WM	FBM241c Ch Isolated CSense DI + External Source DO
RH916TA	FBM242 Channel Isolated External Source DO
RH927AK	FBM244, HART 4 Input + 4 Output Channels
RH101DC	Compact FBM203 Channel Isolated 8 Input RTD
RH101GA	Compact FBM203c Channel Isolated 8 Input 10 ohm RTD Range
RH101GB	Compact FBM203d Channel Isolated 8 Input RTD
RH101GC	Compact FBM207 Channel Isolated 16 DIN Voltage Monitor
RH101AF	Compact FBM207b (Digital Input Module FBM207b)
RH101AC	Compact FBM215, HART Output, 8 Channels
RH101AD	Compact FBM216b (HART Input Module FBM216b)
RH101GJ	Compact FBM238,Discrete I/O 32Channels,8In-8Out-8In-
RH101GK	Compact FBM239,Discrete I/O 32Channels,8In-8Out-8In-
RH101DJ	Compact FBM241c Ch Isol CSenseDI+External SourceDO
RH101AG	Compact FBM242 (Digital Output Module FBM242)
P0917JL	Ring Lug Term Assy, FBM202, Non-PVC
RH928CN	FBM202 pair, T/A baseplate mount, 16 term.
RH916XJ	Compression Term Assembly, Poly Amide, FBM203
P0917JM	Ring Lug Term Assy, FBM203, Non-PVC
RH924WN	FBM203b/c pair TA baseplate mount, 16 term.
RH926KZ	Fieldbus & Time Strobe Baseplate Terminator
RH924DT	Redundancy Adapter For FBM216b
RH916QD	Redundancy Adapter For FBM218/FBM237

RH916PH	Compression Term Assembly, FBM207, 240 Vac Vmon
RH916PK	Compression Term Assy, FBM207, 120/125V Switch DI
RH916PM	Compression Term Assy, FBM207, 240 Vac Switch DI
RH916XN	Comp Term Assy FBM207, 15-60 Vdc Vmon PolyAmide
RH916XP	Comp Term Assy, Poly Amide FBM207, 120/125 V Vmon
P0917JS	Ring Lug Term Assy, FBM207, 120/125V Vmon, Non-PVC
P0917JT	Ring Lug Term Assy FBM207 120/125V, PA, Switch DI
P0917JU	Ring Lug Term Assy, FBM207, 240 Vac Mon, PolyAmide
P0916PP	Ring Lug Term Assy, FBM207b, Contact Sense
RH916XT	Comp TA FBM207b, 24Vdc Contact Sense, PolyAmide
P0926EK	FBM215/218 Ring Lug Termination Assembly
RH916CA	Compression Term Assy, FBM217, 15-30 Vdc Vmon
RH916YA	Comp Term Assy, FBM217, Poly Amide, 120/125V Vmon
RH916PU	Compression Term Assy, FBM217, 240 Vac Vmon
P0916PX	Ring Lug Term Assy, FBM217, 24 Vdc Contact Sense
RH916XZ	Comp Term Assy, FBM217, Poly Amide, Contact Sense
RH916YB	Comp Term Assy, FBM217, PolyAm, 120/125V Switch DI
RH924HA	FBM217/219 TA. 16 dc Input:Contact In/Voltage Mon.
RH924HB	FBM217/238 TA. 16 dc Input:Contact In/Voltage Mon.
RH924HC	FBM 217/219 TA. 16 ac Input: Voltage Mon. @ 120Vac
RH924HD	FBM 217/238 TA. 16 ac Input: Voltage Mon. @ 120Vac
RH924HL	FBM 217/219 TA. 16 ac Input: Voltage Mon. @ 240Vac
RH924HM	FBM 217/238 TA. 16 ac Input: Voltage Mon. @ 240Vac
RH924HN	FBM 217/219 TA. 16 dc Input: Voltage Mon. @ 125Vdc
RH924HQ	FBM 217/219 TA. 15 dc Input:Contact sense @125Vdc
RH924HR	FBM 217/238 TA. 16 dc Input: Voltage Mon. @ 125Vdc
RH924HS	FBM 217/238 TA. 16 dc Input:Contact sense @ 48Vdc
RH924HT	FBM 217/238 TA. 15 dc Input:Contact sense @125Vdc
RH917LL	Comp TA FBM219 125V Vmon + 5A Relay Out
RH917LP	Comp TA FBM219 125V Vmon + Relay Out w/Pwr Dist
RH917LV	Comp TA FBM219 125V Switch DI+Relay Out w/Pwr Dis
RH924HE	FBM 238/239 TA. 8 dc Input:Cont./VM; 8 dc Outputs
RH924HG	FBM 238/239 TA. 8 ac In:VM@120Vac; 8 out Switches
RH924HJ	FBM 238/239 TA. 8 ac In:VM@240Vac; 8 out Switches
RH924HU	FBM 238/239 TA. 8 dc In:VM@125Vdc; 8 out Switches
RH924HV	FBM 238/239 TA. 8 dc In:CS@125Vdc; 8 out Switches
RH924HW	FBM 238/239 TA. 7 dc In:CS@125Vdc; 8 out Switches
RH924HZ	FBM 219/239 TA. 7 dc In:CS@125Vdc; 8 out Switches
RH924JA	FBM 238/239 TA. 8 HP Cont/VM@60Vdc; 8 out Switches
RH924VD	FBM238 TA. 24 dc In: Voltage Monitor.; Out: 8 DO
RH924VG	FBM 238 TA. 24 dc In: Contact Sense; Out: 8 DO
RH924VJ	FBM 239 TA. 16 dc In: Voltage Monitor; Out:16 DO
RH924VM	FBM239 TA. 16 dc In: 16 Contact Sense; Out:16 DO
P0916AT	Ring Lug TA FBM241 125V Vmon + 5A Relay Out
P0916NZ	RingLug TA FBM241 240V Switch DI+RelayOut w/P Dist
RH916QE	Compression TA, FBM241, 60V Vmon + 5A Relay Out
P0916QF	Ring Lug TA FBM241 60V Vmon + 5A Relay Out
RH916QG	Comp TA, FBM241, 125V Vmon + Fused Relay Out
P0916QH	Ring Lug TA FBM241 125V Vmon+Relay Out w/Pwr Dist
P0916QM	Ring Lug TA FBM241 240V Vmon+Relay Out w/Pwr Dist
P0916QU	Ring Lug TA FBM241 125V Switch DI + 5A Relay Out
RH916QV	Comp TA, FBM241, 125V Switch + Fused Relay Out
RH916QX	Comp TA, FBM241, 240V Switch DI + 5A Relay Out
P0916QY	Ring Lug TA FBM241 240V Switch DI + 5A Relay Out
RH916QZ	Comp TA, FBM241, 240V Switch DI + Fused Relay Out
RH916UY	Comp TA FBM241 60V Vmon In+2A 60V Non Fused Out
RH916YH	Comp TA FBM241 125V Vmon + 5A Relay Out PolyAmide
RH926DS	Comp TA FBM241, 8DI+8DO 120/125/30V Relay
RH916JV	Compression TA FBM241b 60V Vmon In + Int Source DO
P0916QN	Ring Lug TA FBM241b 60V Vmon In + Int Src DO
RH916AW	Compression TA FBM241c CSense In + 5A Relay Out
RH916JW	Comp TA FBM241c CSense In + 2A 60V Fused Out

P0916QP	Ring Lug TA FBM241c CSense In + 2A 60V Fused Out
RH916QQ	Comp TA, FBM241c, CSense In + Fused Relay Out
P0916QR	Ring Lug TA FBM241c CSense In+Relay Out w/Pwr Dist
RH916UD	Comp TA FBM241c CSense In+2A 60V Non Fused Out
P0917KY	Ring Lug TA FBM241c, PlyA,CSense In + 5A Relay Out
P0917LA	Ring Lug TA FBM241d, PlyA, CSense In + Int Src DO
RH916JY	Comp Term Assy, FBM242, 2A 60V Fused Out
P0916RJ	Ring Lug Term Assy FBM242, 2A 60V Fused Out
P0916RK	Ring Lug Term Assy FBM242, 5A Relay Out
P0916RL	Ring Lug Term Assy FBM242, Relay Out w/Pwr Dist
RH926BE	Comp TA FBM242, 16DO 120Vac/125Vdc SS
RH926DV	FBM242 Relay Out, Knife Switch Comp Term Assy
RH916YY	Comp Term Assembly, FBM242, PolyAm, 5A Relay Out
RH916YZ	Comp TA FBM242 Fused Relay Out, PolyAmide
RH917HX	Comp Term Assy, FBM242, 2A 60V Fused Out
RH917XX	Comp TA FBM242 2A 60V Non Fused Out
RH923LH	Comp TA, FBM242, 2A 60V Fused Out w/Redun. Power
RH923LL	Comp Term Assembly, FBM242, 5A Relay Out w/LED
RH926HM	4 Slots Hor. Baseplate, Time Strobe, 4FBM
RH926HT	8 Slots Hor. Baseplate, Time Strobe, 8FBM
RH926JF	4 Slots Vert. Baseplate, Time Strobe, 4 FBM
P0973CG	2-Slot Vertical Expansion Baseplate

Place of Production

Shanghai Foxboro Co., Ltd.
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Shanghai, PR CHINA

Schneider Electric MX (ECC).
Ave. Industrial del Norte S/N Suite 300CP
88736 Reynosa, MEXICO.

Approval conditions

The Type Approval covers hardware listed under Product description based on Pt.4 Ch.9 Sec.5. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

This certificate does not cover verification of Ex-protection ratings. The suitability needs to be checked during the project related design approval.

Product certificate
If specified in the Rules, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. After certification the clause for software control will be put into force.

Software control
All changes in software are to be recorded as long as the system is in use on board. Documentation of major changes is to be forwarded to DNV for evaluation and approval before implemented on board. Certification of modified functionality may be required for the particular vessel.

Application/Limitation

-Components listed under product description need to be mounted in a self-contained EMI shielded cabinet enclosure of type Rittal TS 8 series with Rittal TopTherm fan/filter, degree of protection IP43.
-Power supply of the internal components only by power supplies P0922YC, P0922YU and/or RH101CR listed above under product description.
-Installation instructions stipulated in the Marine Specification document PSS 41H-2MARCERT, Rev.A are to be observed.

Tests carried out

Applicable tests according to DNV CG-0339, 2021.

Marking of product

Cabinet: Front door: Label with “Schneider Electric Foxboro DCS”; Front & Rear side: showing “Schneider Electric Foxboro DCS”.
Label affixed inside the top front door: model code, style/rev & serial number based on the configuration (text and barcode).
Components: Stickers on the product showing Schneider Electric Systems USA, Inc. with address, Foxboro, Part number beneath the barcode, Electrical- and Ex-ratings, country of origin, Module serial number.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.
The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer’s product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE