Certificate No:
TAA000034A

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Programmable Controller

with type designation(s)
SmartWire-DT®

Issued to
Eaton Industries GmbH
Bonn, Nordrhein-Westfalen, Germany

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.

Type	Temperature	Humidity	Vibration	EMC	Enclosure
SmartWire-DT®	**B**	**B**	**A**	**A**	**A**

Issued at **Hamburg** on **2022-03-11**
This Certificate is valid until **2026-05-02**.
DNV local station: **Essen**

Approval Engineer: **Jens Dietrich**

for **DNV**

Joannis Papanuskas
Head of Section

Product description

SmartWire-DT Portfolio:
EASY806-DC-SWD Control relay, SWD, 24VDC, 4DI, 2DO, easyNet;
EASY802-DC-SWD Control relay, SWD, 24VDC;
EU5C-SWD-CAN Gateway to CANopen;
EU5C-SWD-DP Gateway to Profibus DP;
EU5E-SWD-xxxx I/O modules analogue and digital, xxxx=2A2A, 4AX, 4D2R, 4D4D, 4DX, 4PT, 4PT-2, 8DX, X8D;
EU5C-SWD-PF1-1 Power feeder module for contactor, motor starter;
EU5C-SWD-PF2-1 Power feeder module for contactor, motor starter and SWD modules;

SWD4-xxxLF8-24-xx Ribbon cable 8 pole; SWD4-8FRF-10 Cable adapter, flat cable (plug) to round cable (terminal);
SWD4-8MF2, SWD4-8SF2-5 Plugs for ribbon cable;
SWD4-8SFF2-5 Coupling for ribbon cable;
SWD4-FFR-PF1-1 Cable adapter, power supply module for modules (IP20) on a local SWD segment;
SWD4-FFR-ST1-1 Cable adapter for local SWD segment;
SWD4-RC8-10 Bus termination;
SWD4-SEL8-10 Link, for bridging open mounting locations;

M22-SWD-Kxxxx Function element, 1 or 2 changeover contact, also with LED
xxxx=11, 22, 11LED-G, 11LED-B, 11LED-R, 11LED-W, 22LED-B, 22LED-G, 22LED-R, 22LED-W;
M22-SWD-LED-x Function element, LEDs
x: B blue, G green, R red, W white; M22-SWD-NOP Non-Operation universal module;
M22-SWD-A4 Adapter 2 M22-function elements;

DIL-SWD-32-001 Contactor modules;
DIL-SWD-32-002 Contactor module with switch for manual or automatic operation;

PKE-SWD-32, -CP, -SP Modules for PKE motor-protective circuit breaker PKE motor starter combination, PKE circuit breaker; NZM-XSWD-704 Interface module for NZM; MCB-HK-SWD Auxiliary module for MCBs, RCCBs, RCBOs;
PKE-XTU(W)(A)-xx Trip block, 0,3 – 1,2A, 1 – 4A, 3 – 12A, 8 – 32A, 16 – 65A for PKE motor-protective circuit-breaker;
PKE-XTU(W)(A)CP-xx Trip block, 15 – 36A and 30 – 65A for PKE circuit breaker;

ZB4-101-GF1 Mounting accessory for EU5E, EU5C;
ZB4-102-KS1 Screen ground, binding for EMV of the cable screen;
XT-FIL1, XT-FIL2: Conducted EMC Noise filters for the external 24VDC-supply;
SL7/4-FW Support mounting brackets;
ZB4-209-DS2 Bus connector to Profibus DP Sub-D, 9 pole.

Application/Limitation

The Type Approval covers hardware listed under Product description. 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.

-System Manual to be observed with regard to appropriate installation, shielding and use of filters.
-Suitability to be checked for the respective application system
-Safety relevant functions (i.e. emergency shut-down) may require hard-wired back-up.

Product certificate
If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, 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.

Tests carried out

Applicable tests according to DNV CG-0339, August 2021

Marking of product

Manufacturer, type designation, 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