CERTIFICATE NUMBER 22-2247242-PDA-EUMR-DE

EFFECTIVE DATE 26-07-2022

EXPIRATION DATE 25-07-2027

ABS TECHNICAL OFFICE Rio de Janeiro Engineering - Machinery

CERTIFICATE OF

European Union Recognized Organization (EU RO) Mutual Recognition Design Evaluation

(in accordance with Article 10.1 of EU Regulation 391/2009)

This is to certify to the Manufacturer named below, that the Product referred to herein has been inspected for the Manufacturer, pursuant to the relevant requirements of the European Union Recognized Organization Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those requirements.

ROCKWELL AUTOMATION ASIA PACIFIC BUSINESS CENTER PTE LTD

who maintains a plant at

NO. 2 CORPORATION ROAD, #06-05/10 CORPORATION PLACE, Singapore, 618494

Product **Computer Programmable Logic Controllers (PLCs)**

Model **5069 Ethernet/IP Controllers and Adapters, High Speed Counters/Digital Input & Output Modules, Field Power Distribution Modules and Address Reserve Modules - 5069-L306ER, 5069-L306ERM, 5069-L310ER, 5069-L310ERM, 5069-L310ER-NSE, 5069-L320ER, 5069-L320ERM, 5069-L320ERP, 5069-L330ER, 5069-L330ERM, 5069-L340ER, 5069-L340ERM, 5069-L340ERP, 5069-L350ERM, 5069-L380ERM, 5069-L3100ERM, 5069-AENTR, 5069-ARM, 5069-FPD, 5069-HSC2XOB4 and their "K" variants.**

This certificate, by itself does not reflect that the product is Type Approved. The scope and limitations of this evaluation are detailed on the pages attached to this certificate.

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

In accordance with Article 10 of Regulation (EC) No 391/2009 of the European Parliament and of the Council of 23 April 2009 "on common rules and standards for ship inspection and survey organizations", the following

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organizations, recognized by the EU on this date, have agreed on the technical and procedural conditions under which they will mutually recognize this certificate:

- American Bureau of Shipping (ABS);
- Bureau Veritas (BV);
- China Classification Society (CCS);
- Croatian Register of Shipping (CRS);
- DNV GL;
- Indian Register of Shipping (IRS);
- Korean Register (KR);
- Lloyd's Register Group Ltd. (LR);
- Nippon Kaiji Kyokai General Incorporated Foundation (ClassNK);
- Polish Register of Shipping (PRS);
- RINA Services S.p.A. (RINA);
- Russian Maritime Register of Shipping (RS).

The scheme for the mutual recognition of class certificates for materials, equipment and components laid down by Article 10(1) of Regulation (EC) No 391/2009 is only enforceable within the Union in respect of ships flying the flag of a Member State. As far as foreign vessels are concerned, the acceptance of relevant certificates remains at the discretion of relevant non-EU flag States in the exercise of their exclusive jurisdiction, notably under the United Nations Convention on the Law of the Sea (UNCLOS). (In accordance with COMMISSION IMPLEMENTING REGULATION (EU) No 1355/2014 amending Regulation (EC) No 391/2009 - recital (25)).

This EU RO Mutual Recognition Design Evaluation Certificate remains valid until 25-07-2027 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

American Bureau of Shipping

João Claudio Machado

João C. Bastos Machado, Engineer/Consultant

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Product: Computers and Programmable Logic Controllers (PLCs)

Model: 5069 Ethernet/IP Controllers and Adapters, High Speed Counters/Digital Input & Output Modules, Field Power Distribution Modules and Address Reserve Modules - 5069-L306ER, 5069-L306ERM, 5069-L310ER, 5069-L310ERM, 5069-L310ER-NSE, 5069-L320ER, 5069-L320ERM, 5069-L320ERP, 5069-L330ER, 5069-L330ERM, 5069-L340ER, 5069-L340ERM, 5069-L340ERP, 5069-L350ERM, 5069-L380ERM, 5069-L3100ERM, 5069-AENTR, 5069-ARM, 5069-FPD, 5069-HSC2XOB4 and their "K" variants.

Intended Service: Control, monitoring, alarm, and safety functions provided by computer / PLC based systems subject to classification requirements.

Description:
Components Comprised of Ethernet/IP Controllers and Adapters, High Speed Counters/Digital Input & Output Modules, Field Power Distribution Modules and Address Reserve Modules.

Ratings:

Catalog Number	Description	Product Ratings
This list includes products from the Rockwell Automation Compact 5000 Product family of products to be submitted for type approval. Additional explanation can be found in the marine report. Engineering and user documentation is identified to the right.		
5069-L306ER	600KB Dual Channel Ethernet/IP Controller	MOD: 18-32VDC@450mA SA: 0-32VDC@10mA 0-240VAC@25mA
5069-L306ERM	600KB Dual Channel Ethernet/IP Motion Controller	
5069-L310ER	1MB Dual Channel Ethernet/IP Controller	
5069-L310ERM	1MB Dual Channel Ethernet/IP Motion Controller	
5069-L310ER-NSE	1MB Dual Channel Ethernet/IP Controller w/o Cap	
5069-L320ER	2MB Dual Channel Ethernet/IP Controller	
5069-L320ERM	2MB Dual Channel Ethernet/IP Motion Controller	
5069-L320ERP	2MB Dual Channel Ethernet/IP Controller	
5069-L330E	3MB Dual Channel Ethernet/IP Controller	
5069-L330ERM	3MB Dual Channel Ethernet/IP Motion Controller	
5069-L340ER	4MB Dual Channel Ethernet/IP Controller	
5069-L340ERM	4MB Dual Channel Ethernet/IP Motion Controller	
5069-L340ERP	4MB Dual Channel Ethernet/IP Controller	
5069-L350ERM	5MB Dual Channel Ethernet/IP Motion Controller	
5069-L380ERM	8MB Dual Channel Ethernet/IP Motion Controller	
5069-L3100ERM	10MB Dual Channel Ethernet/IP Motion Controller	
5069-AENTR	10/100/1000Mb Dual Port Ethernet/IP Adapter	MOD: 18-32VDC@220mA SA: 0-32VDC@5mA 0-240VAC@2mA
5069-ARM	Address Reserve Module	MOD: 18-32VDC@45mA
5069-FPD	Field Power Distribution Module	SA: 0-32VDC@10mA 0-240VAC@25mA
5069-HSC2XOB4	High Speed Counter/Digital Output Module	MOD: 18-32VDC@50mA SA: 10-32VDC@3A

Note:
1. List also includes products with Suffix K which denotes conformal coating.

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Restrictions:

1. This approval covers hardware only. This excludes firmware, application software, and hardware designed for specific applications subject to classification. Firmware, system software, and application software are subject to additional separate approval, according to UR E22 and the rules of the classing EU RO (FAT and on-board review/tests).
2. The term PLC is here meant to comprise of elements such as backplanes, power supplies, CPUs, I/O units and bus communication units when these are considered an integral part, or natural extension, of the PLC. Sensors and actuators typically connected to the PLC in a system are not considered part of the PLC and are excluded from the scope of this program.
3. Use of this product in radio- or navigational applications where testing according to IEC Publication 60945 is required is excluded from the scope of this program. E.g. use in systems covered by the Marine Equipment Directive.
4. The product is not tested for installation in weather exposed areas or navigation bridge. Salt mist (test no. 12), Compass safe distance measurement (test no. 22) and Acoustic noise and signals measurement (test no. 23) tests per EU RO MR TR for Computers and Programmable Logic Controllers (PLCs) Table 2 have not been conducted.
5. The subject communication modules are powered by a dedicated and regulated power supply unit via a proprietary backplane (not in the scope of this certificate). The Power supply variations (test no. 4) and the Surge immunity (test no. 18) tests per EU RO MR TR for Computers and Programmable Logic Controllers (PLCS) Table 2.3 have not been conducted on the subject communication modules based on IEC 61131-2 standard, as these modules do not have user accessible power ports.
6. An external enclosure of suitable ingress protection rating is to be provided and is to be to the satisfaction of the Class Society that will classify the ship, as per EU RO MR TR for Computers and Programmable Logic Controllers (PLCs) 2.a i.d.
7. 5069 controllers are to be installed inside a standard metal enclosure when located in the general power distribution or in the bridge and deck zone.
8. 5069-AENTR Ethernet/IP adapters are to be installed inside a standard metal enclosure when located in the general power distribution zone and inside an EMI shielded enclosure when located in the bridge and deck zone.
9. 5069-ARM, 5069-FPD and 5069-HSC2XOB4 modules are to be installed inside a standard metal enclosure when located in the general power distribution or in the bridge and deck zone. A Corcom EMI filter is to be used when these models are located in the bridge and deck zone.
10. Application of the control, monitoring, alarm, and safety systems are subject for approval of the individual EU RO classing the vessel.

Support documentation:

DRAWINGS:

Drawing No. 10000677672_FPD_SCH, PCB SCH,NEO MA FPD G3 Update Schematic Drawing, Revision: 9

Drawing No. 10000677674_FPD_ASM, NEO MA FPD G3 Update PCB Assembly Drawing, Revision: 3, Pages: 1

Drawing No. 10001227188_AENTR_Pro_Bd_SCH, PCB SCH, NG69-Small AENTR Processor Bd, E3 Schematic Drawing, Revision: 3

Drawing No. 10001227189_AENTR_Pro_ASM, PCB ASM, NG69-Small AENTR Processor Bd Assembly Drawing, Revision: 1

Drawing No. 10001295632_L3Z_Comm_Bd_ASM, PCB ASM, NG69-L3z Comm Bd PCB Assembly Drawing, Revision: 2

Drawing No. 10001406820_ARM_SCH, PCB SCH,5069 ARM vE3.1 Schematic Drawing, Revision: 6
Drawing No. 10001406822_ARM_ASM, PCB Documentation Sheet Of DISCLOSED TO OTHERS, EXCEPT WITH THE AUTHORIZED WRITTEN A NEO 5069-ARM vE3.0 PCB Assembly Drawing, Revision: 1
Drawing No. 10001609344_HSC2XOB4_SCH, PCB SCH,5069-HSC2XOB4 schematic drawing, Revision: 6
Drawing No. 10001609348_HSC2XOB4_ASM, 5069-HSC2XOB4 PCB Assembly Drawing, Revision: 1
Drawing No. 10001633076_L3Z_Display_Bd_SCH, L3z / AENTR NG69 Display Board E3 Controller and Adapter Schematic Drawing, Revision: 1
Drawing No. 10001633097_L3Z_Display_Bd_ASM, PCB Documentation NG69-L3z DISPLAY BD, E3 PCB Assembly Drawing, Revision: 2
Drawing No. 10004248019_L3Z_Power_Bd_ASM, PCB ASM, NG69-L3z PWR Bd E3 PCB Assembly Drawing, Revision: 0
Drawing No. 10005958285_L3Z_Processor_Bd_Sch, L3z NG69 Processor Board NAND Redesign Schematic Drawing, Revision: 0
Drawing No. 10005958289_L3Z_Processor_Bd_ASM, PCB ASM, NG69-L3z Processor Bd Assembly Drawing, Revision: 0
Drawing No. 10006249454_L3Z_Comm_Bd_Sch, NG69-L3z Communications Controller Board Schematic Drawing, Revision: 0
Drawing No. 10006249460_L3Z_Power_Bd_Sch, PCB SCH,NG69-L3z PWR Bd, R-PCR schematic drawing, Revision: 0

MANUALS:
Drawing No. 5069-in001, Compact 5000 I/O Field Potential Distributor, dated December-2021
Drawing No. 5069-in002, Compact 5000 I/O Address Reserve Module, Revision: dated December-2021
Drawing No. 5069-in003, Compact 5000 I/O EtherNet/IP Adapters, Revision: dated October-2018
Drawing No. 5069-in005, Compact 5000 High-speed Counter Module, Revision: dated December-2021
Drawing No. 5069-in013, CompactLogix 5380 Controllers, Revision: dated December-2021
Drawing No. 5069-um001, CompactLogix 5380 and Compact GuardLogix 5380 Controllers, Revision: March-2022
Drawing No. 5069-um006, Compact 5000 I/O High-speed Counter Module, Revision: January-2022
Drawing No. 5069-um007, Compact 5000 EtherNet/IP Adapters, Revision: January-2022

TEST REPORTS:
Drawing No. 654848-5069-FPD, Test Report #785813, dated 13-July-2017
Drawing No. 10679-5069-ARM, Test Report #935736, dated 13-July-2017
Drawing No. 120930-5069-AENTR, Test Report #384679, dated 13-July-2017
Drawing No. 126119-5069-ARM, Test Report #147476, dated 13-July-2017
Drawing No. 14127-5069-AENTR, Test Report #382234, dated 14-August-2018
Drawing No. 142268-5069-ARM, Test Report #666770, dated 13-July-2018
Drawing No. 149976-5069-ARM, Test Report #669412, dated 13-July-2017
Drawing No. 158071-5069-FPD, Test Report #70885, dated 13-July-2017
Drawing No. 160205-5069-ARM (RE 2GHz), Test Report #894455, dated 13-July-2017
Drawing No. 185656-5069-FPD (RE 2GHz), Test Report #23808, dated 13-July-2017
Drawing No. 19647299 001_6GHz(RI_RE)-5069-AENTR, RI & RE test report for 5069-AENTR, dated 29-September-2021

Drawing No. 198706-5069-L340 (L3Z), Test Report #315653, dated 13-July-2017
Drawing No. 224436-5069-AENTR, Test Report #504173, dated 13-July-2017
Drawing No. 235132-5069-HSC2XOB4, Test Report #868212, dated 13-July-2017
Drawing No. 270379-5069-HSC2XOB4, Test Report #157001, dated 13-July-2017
Drawing No. 282262-5069-FPD, Test Report #609621, dated 13-July-2017
Drawing No. 294642-5069-FPD_HSC, Test Report #975717, dated 05-May-2022
Drawing No. 337593-1_5069-AENTR (RE 2GHz), Test Report #912180, dated 13-July-2017
Drawing No. 337593-2_5069-AENTR (RE 2GHz), Test Report No. 7191148858-EEC16/01, dated 01-November-2016
Drawing No. 361643-5069-AENTR, Test Report #71878, dated 13-July-2017
Drawing No. 384235-5069-ARM, Test Report #876688, dated 13-July-2017
Drawing No. 394799-5069-L340 (L3Z), Test Report #426228, dated 13-July-2017
Drawing No. 39816-5069-ARM, Test Report #736032, dated 13-July-2017
Drawing No. 436796-5069-AENTR, Test Report #193752, dated 13-July-2017
Drawing No. 44361-5069-FPD, Test Report #864270, dated 13-July-2017
Drawing No. 584606-5069-ARM, Test Report #831485, dated 13-July-2017
Drawing No. 623004-5069-HSC2XOB4, Test Report #933110, dated 13-July-2017
Drawing No. 654557-5069-HSC2XOB4, Test Report #511325, dated 13-July-2017
Drawing No. 681901-5069-HSC2XOB4, Test Report #721929, dated 13-July-2017
Drawing No. 704530-5069-ARM, Test Report #647075, dated 13-July-2017
Drawing No. 713766-5069-HSC2XOB4, Test Report #988778, dated 13-July-2017
Drawing No. 717881-5069-AENTR, Test Report #557043, dated 13-July-2017
Drawing No. 774226-5069-FPD, Test Report #265, dated 13-July-2017
Drawing No. 779230-5069-L340 (L3Z), Test Report #244695, dated 13-July-2017
Drawing No. 779455-5069-L340 (L3Z), Test Report #702069, dated 27-July-2018
Drawing No. 796302-5069-L340 (L3Z), Test Report #839555, dated 13-July-2017
Drawing No. 805805-5069-AENTR, Test Report #705160, dated 13-July-2017
Drawing No. 823243-5069-ARM, Test Report #101645, dated 13-July-2017
Drawing No. 826650-5069-FPD, Test Report #643860, dated 13-July-2017
Drawing No. 840631-5069-ARM, Test Report #8896, dated 13-July-2017
Drawing No. 849513-5069-L340 (L3Z), Test Report #781089, dated 13-July-2017
Drawing No. 878150-5069-FPD, Test Report #348059, dated 13-July-2017
Drawing No. 894411-1_5069-AENTR, Test Report #129793, dated13-July-2017
Drawing No. 894411-2_5069-AENTR, 894411-2_5069-AENTR, dated 27-September-2016
Drawing No. 894411-3_5069-AENTR, Certification of Ethernet IP Adapter 5069-AENTRBS, dated 29-September-2016
Drawing No. 90418-5069-L3100ERM (L3Z), Test Report #592899, dated 14-January-2022
Drawing No. 922655-5069- L3100ERM (L3Z), Test Report #345596, dated 14-January-2022
Drawing No. 939243-5069-AENTR, Test Report #796900, dated 13-July-2013
Drawing No. 952891-5069-L3100ERM (L3Z), Test Report #864332, dated 14-January-2022
Drawing No. 977554-5069-HSC2XOB4, Test Report #825478, dated 13-July-2017
Drawing No. Flame Retardant report-4789525572, Flame Retardant report, dated 23-July-2020
Drawing No. UL20210820-000455 (RI_RE)-5069-ARM, RI and RE test report for 5069-ARM, dated 23-Sep-2021

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Drawing No. UL20220117-000595-CIS_RE_5069-L3100ERM, RE test report for 5069-L3100ERM, dated 24-February-2022
Drawing No. UL20220117-000595-CIS_RI_5069-L3100ERM, RI test report for 5069-L3100ERM, dated 14-February-2022
Drawing No. 10005166786_5069-HSC2XOB4 OOB, Out-of-Box (OOB) Validation Checklist for 5069-HSC2XOB4, dated 09-October-2019
Drawing No. 10005204144_5069-FPD OOB Report, Out-of-Box (OOB) Validation Checklist for 5069-FPD, dated 24-October-2019
Drawing No. 10006803309, S7219 5069-L3z Nandflash Obsolescence OBA, dated 15-November-2019

OTHERS:
Drawing No. 10001560248_ARM Design Validation, NG69 Release 1 Products (2 cat#) Design Validation
Drawing No. 5069 Declaration of Equivalence for additional catalogs, 5069 Declaration of Equivalence for additional catalogs
Drawing No. 5069 K Series Declaration of Equivalence, 5069 K Series Declaration of Equivalence
Drawing No. 5069 K catalog Declaration of Equivalence, 5069 K catalog Declaration of Equivalence
Drawing No. 5069 MR Marine Test Plan 31Mar22, 5069 MR Marine Test Plan
Drawing No. 5069 P controller DOE signed, 5069 P controller DOE
Drawing No. 5069 Products for Type Approval, 5069 Products for Type Approval
Drawing No. 5069-ct029_-en-e, Confirmation of Product Type Approval mark up
Drawing No. Standards Comparison Declaration, Standards Comparison Declaration
Drawing No. SNA_5069-AENTR A FA Pilot Build_OOBA_Visiual Inspector, SNA_5069-AENTR A FA Pilot Build_OOBA_Visiual Inspector

Rules & Standards:
Technical Requirement: EU RO Mutual Recognition Technical Requirements for Computers and Programmable logic Controllers (PLCs) Version 0.6, July 2020.