

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Burner Management System

with type designation(s)
SYSMAC CP1 Series

Issued to

Omron Corporation IAB Company
Kusatsu-City Shiga Pref, Japan

is found to comply with

DNV GL 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 GL.

Temperature B

Humidity B

Vibration A

EMC A*

Enclosure Required protection according to DNVGL Rules shall be applied upon installation on board

*** To be installed in standard metallic enclosure. See page 3.**

Issued at **Busan** on **2017-11-03**

This Certificate is valid until **2021-12-31**.

for **DNV GL**

DNV GL local station: **Kobe**

Approval Engineer: **Baeg Soon Choi**

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Michael Jost Auf der Stroth
Head of Section

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.



Product description

OMRON SYSMAC CP1 Series Programmable Logic Controllers, consisting of:

- CP1L – Standard Package-type PLC
- CP1H – Ultimate High-performance Package-type PLC
- CP1W – Expansion units for CP1L and CP1H

Approved models are listed in the below table:

Unit Name	Type Name		
CPU Units	CP1H-XA40DR-A		
	CP1H-XA40DT-D		
	CP1H-XA40DT1-D		
	CP1H-X40DR-A		
	CP1H-X40DT-D		
	CP1H-X40DT1-D		
	CP1H-Y20DT-D		
	CP1L-L10DR-A		
	CP1L-L10DR-D		
	CP1L-L10DT-A		
	CP1L-L10DT-D		
	CP1L-L10DT1-D		
	CP1L-L14DR-A		
	CP1L-L14DR-D		
	CP1L-L14DT-D		
	CP1L-L14DT1-D		
	CP1L-L20DR-A		
	CP1L-L20DR-D		
	CP1L-L20DT-D		
	CP1L-L20DT1-D		
	CP1L-J14DR-A		
	CP1L-J14DR-D		
	CP1L-J14DT1-D		
	CP1L-J20DR-A		
	CP1L-J20DR-D		
	CP1L-J20DT1-D		
	CP1L-M30DR-A		
	CP1L-M30DR-D		
	CP1L-M30DT-D		
	CP1L-M30DT1-D		
	CP1L-M40DR-A		
	CP1L-M40DR-D		
	CP1L-M40DT-D		
	CP1L-M40DT1-D		
	CP1L-M60DR-A		
	CP1L-M60DR-D		
	CP1L-M60DT-A		
	CP1L-M60DT-D		
	CP1L-M60DT1-D		
Interface Units	CP1W-CIF01		
	CP1W-CIF11		

Job Id: **262.1-005871-5**
Certificate No: **TAA00001GA**

Unit Name	Type Name		
Adapter Unit	CP1W-EXT01		
Memory Unit	CP1W-ME05M		
Connecting Cable	CP1W-CN811		
IN/OUT Units	CP1W-20EDR1		
	CP1W-20EDT		
	CP1W-20EDT1		
	CP1W-40EDR		
	CP1W-40EDT		
	CP1W-40EDT1		
Analog IN/OUT Unit	CP1W-MAD11		
Input Unit	CP1W-8ED		
Output Units	CP1W-8ER		
	CP1W-8ET		
	CP1W-8ET1		
	CP1W-16ER		
Compobus/S Unit	CP1W-SRT21		
Temperature Sensor Units	CP1W-TS001		
	CP1W-TS002		
	CP1W-TS101		
	CP1W-TS102		
Analog Input Unit	CP1W-AD041		
Analog Output Unit	CP1W-DA041		
Data Access Module	CP1W-DAM01		

Note 1: Type name may be followed by an "E" for export version.

Note 2: Type name may be followed by a "V" and number(s) for version identification.

Note 3: Type name may be followed by additional number(s) and/or letter(s).

Place of manufacturer

OMRON (Shanghai) Co., Ltd.,
1600 JinJi Road, Jinqiao Export Processing Zone,
Pudong, Shanghai, 201206 China

OMRON (Netherlands B.V.)
Zilverenberg 2, 5234 GM's HERTOGENBOSCH,
The Netherlands

Application/Limitation

The units shall be mounted inside a metallic enclosure to satisfy the radiated emission requirements for EMC A.

Approval conditions

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 Ships Pt.4 Ch.9 Control and Monitoring Systems.

Product certificate

Each delivery of the application system is to be certified according to Pt.4 Ch.9 Sec.1. The certification test is to be performed at the manufacturer of the application system according to an approved test program before the system is shipped to the yard. After the certification the clause for application software control will be put into force.

Clause for application software control

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Type Approval documentation

Tests carried out

Applicable tests according to Class Guideline DNVGL-CG-0339, Nov 2016.

Marking of product

Manufacturer: OMRON
Type name: As listed under product description
Rated voltage: 100-240 VAC 50/60 Hz or 24 VDC
Each unit is marked with a unique serial number

Periodical assessment

The scope of the retention/renewal survey 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 survey 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