

Automation Systems





- Wiring Systems
- Industrial Communication
- Remote I/O
- Industrial Information Technology
- Machine Management Tools
- Software

Advanced Industrial Automation

Cat. No.Y201-EN2-02 AS

WELCOME TO OMRON'S

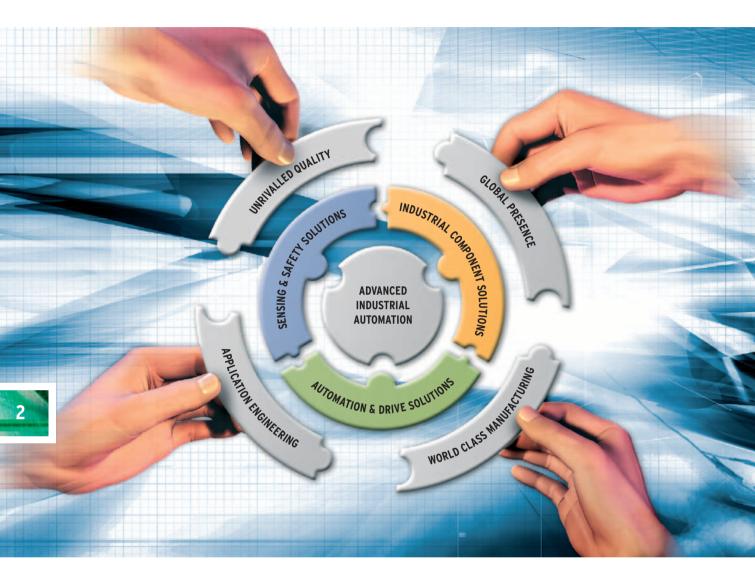
AUTOMATION SYSTEMS CATALOGUE

This catalogue features products that are ideally suited for future-oriented plant and machinery automation. All products are perfectly matched to provide full compatibility. The open, interlevel communication structure of DeviceNet and the latest CJ-1 generation of PLCs are two prime examples of this. More about the very latest products such as the PROFIBUS-DP units and the NS range of advanced terminals can be found on pages 4-7 of this catalogue.



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ADVANCED INDUSTRIAL AUTOMATION



Today's industrial manufacturers are constantly faced with new challenges posed by ever increasing demands on performance, quality and cost. In an environment where every movement, every component and every assembly operation must be immediately and automatically recorded, checked and documented for maximum efficiency, Omron can provide the solution. Omron's industrial automation product range includes optical sensors and measuring systems, high-speed industrial-grade image processing systems, controlling and switching devices, highly dynamic drives and product tracking systems for information interchange, all of which meet today's industrial automation challenges.

Omron also caters to the logistics and information processing sectors by developing advanced network and field bus systems, which ensure that relevant data collected in the field by sensors and other equipment can be easily accessed and analysed by production managers through standard Office applications.

Omron is your one-stop shop for future-oriented products matched to perform in perfect unison. We are constantly developing new products and enhancing existing ones. Each year sees the introduction of at least 20 new product ranges in industrial components, safety engineering, sensors, image processing, drives and automation systems.



Our close relations with customers and partners in industry mean we are well-placed to quickly identify new trends which we can incorporate in the development of our own new products. In this we are helped by our Research and Development (R&D) Centres and our highly efficient production sites in the major regions of the world. With such distributed facilities, Omron can achieve customerspecific solutions and modifications with a very short time to market. In fact our customers see us

more as joint developers for their own machinery and plant and as solution providers for their increasingly complex automation requirements, while we see our customers as providing the product ideas and development impetus so vital to our own future. It's a partnership that works very well on both sides.

You too can choose such a partnership. Choose Advanced Technology & Services – choose Omron.

NEW PRODUCTS



Increased functionality, reduced size: The NS range - it's more than an HMI



The new NS product range now offers greatly increased functionality with several patented features, while also offering faster performance and screen updating. The patented features allow the NS terminals to actually embed pre-tested communications components (Smart Active Parts) into the NS application simply with a drag-and-drop operation.

The components are created and tested by Omron engineers and will be available for free from the Omron website. Once you have downloaded the Smart Active Parts library you'll be able to create, in minutes, functionality for your machine that previously took skilled programmers hours to create. This can be combined with the possibility to program the PLC, monitor the existing control program,

reconfigure settings for the complete control system, all from the HMI without any PCs or programming software. That's why we call it to Machine Management Tool, and that's why it's more than just an HMI!

Portfolio extended

Also new is a smaller 5.7" STN model to complement the 8", 10" and 12" TFT screens already available to allow this powerful 'Machine Management' functionality to be used on a wide range of machines and to fully complement the range of Omron PLC's. The advantage with Omron is that application code written for NS5 will work on all products in the family allowing a scalable display solution without extra costs.

The fieldbus connectivity of Omron's CS1 and CJ1 PLC family ranges is now extended with PROFIBUS. For CS1 and CJ1 both a PROFIBUS-DP master and for CJ1 also a PROFIBUS-DP slave is available, developed and produced in Europe. Both the CS1 and CJ1 PLC ranges now feature a PROFIBUS-DP Master Unit. In addition, a Slave Unit is available for CJ1.

Advanced supporting tool

Today's fieldbus configuration tools have evolved to support a wide range of functions that include engineering, commissioning, operation, diagnostics and maintenance. Omron's PROFIBUS solution uses FDT/DTM (Field Device Tool & Device Type Manager) open technology to fulfill these tasks.

This technology enables control system manufacturers to provide customers with an optimized display of all functions and data. It is implemented in Omron's CX-PROFIBUS software tool.

FDT/DTM provides an open standard for interfaces for software components that support the field device. The core of the concept is the DTM, which can be used in all software tools supporting the FDT interface. The DTM is the configuration and management component for a field device. It contains all configuration information, diagnostics, maintenance information and even graphical user dialogs of the specific device. As FDT/DTM is a open interface, any supplier's DTM can be loaded in Omron's CX-PROFIBUS.

NEW PRODUCTS

100Base-Tx Ethernet Units



The latest 100Base-Tx Ethernet Units for both the CS1 and CJ1 series PLC's now offer greater flexibility in communication functions, plus improved security and higher data transfer speed. For multi-layer transparent FINS communication you can now select UDP/IP for optimal speed, or

TCP/IP for higher reliability. The unit can also be set up as a password-protected FTP server, to allow remote access to PLC file memory areas or the optional CompactFlash card in the CPU unit.

There are many new possibilities to exchange data with the PLC by e-mail, such as sending or receiving file attachments. You can send commands to the PLC by e-mail, e.g. to read PLC memory areas, and receive the requested data by reply mail. Or the PLC can automatically send e-mails triggered by events in the PLC. For security, e-mail access can be password-protected.

Despite all newly added functionality, setting up these functions is easier than ever, using the step-by-step configuration screens of the latest version of CX-Programmer.





Two new models have been added to Omron's unique series of DRT2 DeviceNet I/O

The DRT2-ID16S is an input unit that has a new type of quick and easy to use connectors, called E-CON. This is a new standard connector in the industry to plug sensors in a very simple way onto the I/O module.

The DRT2-ROS16 is an output unit with 3 A relays. The relays can be replaced manually, making it easy to replace them upon failure, or, with the smart functions in the DRT2, replace then even before the relay fails.

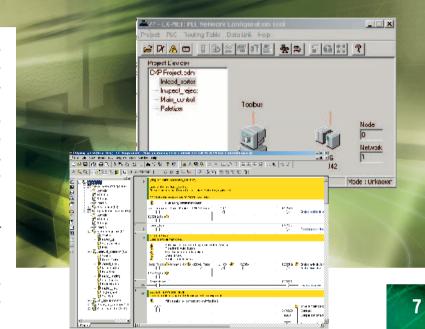
About Omron's smart DeviceNet slaves

Omron's DRT2 DeviceNet Smart Slaves give you powerful tools to diagnose network problems and establish preventive maintenance plans. Omron Configuration Software provides the ability to constantly monitor and update this information without any control system programming at all. The combination of much greater information capability, plus parallel access to that information, removes the barriers to gaining maximum benefit from your investment in a DeviceNet installation.

Reduce application development and testing time with the new CX-Programmer

Reduce the time you spend changing and reusing application code and the testing needed, by creating customized function blocks that can be pre tested and verified. Then spend the time you saved to increase the functionality and operation of the machine by using some of the advanced features such as time-trace monitoring to see, scanby-scan, the machine operation (information is buffered inside the PLC to allow accuracy). This information can then be used to either fine-tune the performance

Furthermore, CX-Programmer software supports any OMRON PLC, from a 10-point compact CPM1A to CS1D duplex systems with over 5000 I/O.



Ultra-compact CJ1 PLCs: more versatile than ever

Omron has expanded the popular CJ1 series PLCs with new entry-level CJ1M CPU models. Using the same processing power, instruction set and I/O units as their larger relatives, the new CJ1M-CPU11 and CPU21 are only restricted in their program memory size and I/O capacity.

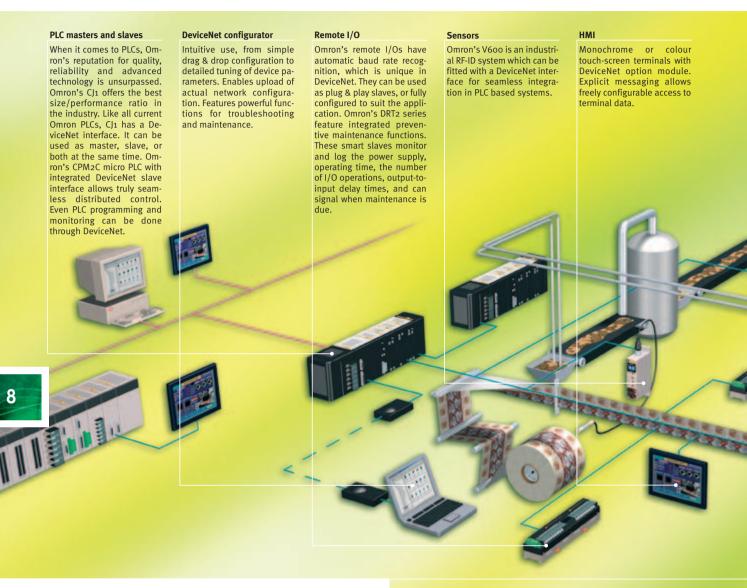
For simple control tasks, you don't need to pay for what you won't use.

The CJ1 series ranges from powerful CPU models for total machine control, to small CPUs ideal for controlling modular machines. You can always find a CPU and a combination of I/Os to provide an efficient control solution for each machine section. The broad range of CPU's make it easy to scale machines up or down, without having to rewrite your control code.



Programming and data transfer are transparent and seamless, through multi-layered open networks like Ethernet, PROFIBUS-DP and DeviceNet, as well as OMRON's costeffective proprietary networks.

TOTAL SOLUTION

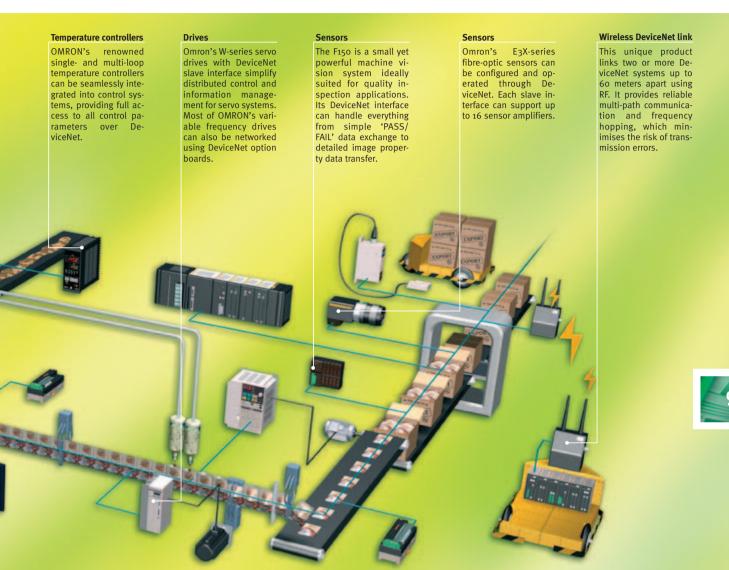


DeviceNet and Omron - the benefits

Traditional industrial automation systems require a matrix of multi-core cables, cable supports, junction boxes, control cabinets and data cables. A DeviceNet network simplifies wiring by using just a dual twisted pair cable to provide both power and data. This saves on wiring costs and the time needed for materials installation. What's more, Omron now revolutionises machine maintenance with the smart slave concept, which can assist in the machine breakdowns by monitoring, logging and reporting statistical operation data.

DeviceNet and Omron – affordable and state-of-the-art All of Omron's products are optimised for seamless integration into a DeviceNet system. You can configure Omron's devices over the network on-the-fly, and add a device or machine to a production line without powering down. DeviceNet is a flexible network, designed to accommodate your growing needs. Omron is a dedicated developer of DeviceNet core technologies, so you'll always have access to state-of-the-art devices. The result is that you get an affordable, state-of-the-art solution for optimising your industrial automation system!

Device**Net**



Omron - the ideal one-stop-shop

Omron has seamlessly integrated DeviceNet interfaces into all of its core products, including PLCs, I/O modules, HMI terminals, wireless data links, temperature controllers, sensors, and drives. With such a comprehensive selection of DeviceNet compatible products available, Omron is a virtual onestop shop for any customer.

First with wireless interfacing - unique

As a leading global player in developing DeviceNet products, it's no surprise that Omron should be the first company to introduce a wireless interface to this network. Operating on the standard 2.4 GHz frequency band, this unique interface is the ideal wireless solution between two or more DeviceNet bus segments, particularly when using a wired product is difficult.



Programmable Controllers

Compact PLC's

- CPM₁A
- CPM₂A
- CPM₂C

Modular PLC's

- CQM₁H
- CJ1

Rack PLC's

• CS1/C200H



Wiring Systems

I/O terminal blocks

- G70D
- G7TC
- G79
- XW2_

Connecting cables

- G79
- XW2_

Serial I/O terminals

• B7A



Industrial Communications

- Ethernet
- Controller Link
- Serial
 Communication
- PROFIBUS-DP
- DeviceNet
- CompoBus/S



Remote I/O

- GT₁ I/O Terminals
- DeviceNet I/O
- CompoBus/S I/O

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Industrial Information Technology

- Open Network controllers
- PC-based PLC control
- PC interface boards



Machine Management Tool

- NS₁₂
- NS10
- NS8
- NS5



HMI

- NT631/NT31 V2
- NT21S
- NT11S
- NT2S
- PC Based HMI



Software

- CX-Programmer
- CX-Simulator
- CX-Protocol
- CX-Motion
- CX-Position
- CX-Process
- CX-PROFIBUSDeviceNet
- Configurator
 NX-Server
- NS-Designer
- NS-Face Plate Autobuilder
- NT-Shell
- CX-Server Lite/OPC
- CX-Supervisor

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Industrial Information Technology

Open Network Controller

CS1 Bus Interface Board

SYSMAC Board

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Personal Computer Software

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Classification	
Personal computer software	

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Information

Discontinued Products

OMRON continuously updates its lineup of products. As a consequence, the production of older products that no longer meet market requirements, or which can be replaced by a next generation of products, will be discontinued. The following tables list the products that have been or will be discontinued.

Note: Refer to information in this and other relevant catalogs and manuals for information on the recommended replacement product.

Programmable Controllers

Name	Discontinued models	Recommended replacement
PLC Units	CJ1G-CPU44	CJ1G-CPU44H
	CJ1G-CPU45	CJ1G-CPU45H
Analog Input Units	CS1W-AD041	CS1W-AD041-V1
	CS1W-AD081	CS1W-AD081-V1
	CJ1W-AD081	CJ1W-AD081-V1
Memory Cards	HMC-EF171	HMC-EF172
(compact flash	HMC-EF371	HMC-EF372
memory)	HMC-EF571	HMC-EF672
PLC Units	C200HS-CPU□□(-E)	C200HG-CPU43(-Z)E CS1G-CPU4□H CJ1G-CPU4□H C200HW-PA204S C200HW-PD024
	C1000H-CPU01-V1 C1000H-CPU01-E(2)V1 C2000H-CPU01-V1 C2000H-CPU01-E(2)V1 C500-CPU11-E(2)V1 3G2C3-CPU11-EV1 C500-CPUK1	CVM1-CPU01-(-E)V2 CVM1-CPU11-(-E)V2 CVM1D-CPU21 CS1G-CPU□□H
Floppy Hard Disk Drive	CV500-FHD0□(-E)	
Hard Disk Unit V1	CV500-HDD11-V1	
RAM Disk Board	CV500-MR261	
PC Card Interface Board	CV500-MP602	
CPU Backplane (for Personal Computer Unit)	CV500-BC105	
Connecting Cable	CV500-CN116	
ISA Bus Expander	CV500-ISX01	
ISA Control Unit	CV500-ISP0□	
ISA Sub-backplane	CV500-ISB0□	
PLC Units	CPM1-30CDR-A/D	CPM1-30CDR-A-V1/D-V1
	CPM1A CPU Unit	CPM1A-V1
	CPM1A-20EDR	CPM1A-20EDR1
	CPM2C-CIF01	CPM2C-CIF01-V1
	CQM1-CPU□	CQM1H-CPU□
	CQM1-SEN01	
	CQM1-TU001	
	CQM1H-CPU42	CQM1H-CPU51 +
	OGWITT-OF 042	CQM1H-AVB41
	CQM1H-CPU43	CQM1H-CPU51 + CQM1H-PLB21
	CQM1H-CPU44	CQM1H-CPU51 + CQM1H-ABB21
	CS1G-CPU□□(-E) CS1H-CPU□□(-E)	CS1G-CPU - (E)V1 CS1H-CPU - (E)V1
	CS1G-CPU□□-(E)V1 CS1H-CPU□□-(E)V1	CS1G-CPU□□H CS1H-CPU□□H
	CS1W-CLK11	CS1W-CLK12
	CS1W-HCP22 CS1W-HCA22 CS1W-HIO01	CS1W-HCP22-V1 CS1W-HCA22-V1 CS1W-HIO01-V1
	CS1W-PTS01	CS1W-PTS01-V1
	CS1W-17601	CS1W-SCB21-V1
	CS1W-SCB41 CS1W-SCU21	CS1W-SCB41-V1 CS1W-SCU21-V1
	CVM1-PRS21-V1 CVM1-PRO01 CVM1-MP201-V1	CVM1-PRS21-V2 CVM1-PRO01-V1 CVM1-MP201-V2
	CV500-HDD11	CV500-HDD11-V1
Memory Card Writer	CV500-MCW01(-E)	CV/CVM1-CPU
SYSMAC NET Link Unit	CV500-SNT31	Ask your OMRON representative.
Programmable Controllers	C20/3G2C7	CPM1A CPM2A CQM1H

Name	Discontinued models	Recommended replacement
C120 Units (Input,	C120-DUM01	CQM1 Series
Output, Dummy,	C120-IA121/-IA222	
and Spacer Units)	C120-ID212 C120-OC223	
	C120-OC223 C120-OD211/-OD212	
	C120-SP001	
PLC Units	C200H-APS01/02	Ask your OMRON representative.
	C200H-CPU□□(-E)	C200HE-CPU□□(-E)
		Ask your OMRON representative.
	C200H-ETL13-E	C200HE-ETL12
	C200H-FIM01	
ID Sensor Units and	C200H-IDS21 C500-IDS21/-IDS22	CS1W-SCU21 CS1W-SCB21/41
ID Adapter (micro- wave models)	C500-IDS21/-IDS22 C500-IDA22	CS1W-SCB21/41
PLC Units	C200H-OC222V	C200H-OC222N
i LO Offito	C200H-OC224V	C200H-OC224N
	C200H-OC226	C200H-OC224N
	C200HS-CPU01-(E)C	
	C200HS-CPU21-(E)C	C200HG-CPU43(-Z) C200HG-CPU43-(Z)F
	C200HS-CPU33(-E)	C200HG-CPU43-(Z)E C200HW-PA204S
		C200HW-PD024
SYSMAC NET Link Unit	C200HS-SNT32	Ask your OMRON representative.
PLC Units	C200HW-BC101	C200HW-BC101-V1
	C200HW-BC081	C200HW-BC081-V1
	C200HW-BI101	C200HW-BI101-V1
	C200HW-BI081	C200HW-BI081-V1
PC Card Units	C200HW-PCS01-V1 C200HW-PCS01-EV1	C200HW-PCS01-V2
PC Card Unit Ether-	C200HW-ZW4MX2	
net Set, NEXAS- compliant Package		
Open PLCs	C200PC-CPU01-R	C200PC-CPU01-R-V1
	C200PC-CPU15-G	C200PC-CPU15-G-V1
SYSMAC Boards	C200PC-ISA01(-E)	C200PC-ISA03(-E)
	C200PC-ISA01-DRM(-E)	C200PC-ISA02-DRM(-E)
	C200PC-ISA02-DRM(-E)	C200PC-ISA03-DRM(-E)
	C200PC-ISA02-SRM(-E)	C200PC-ISA03-SRM(-E)
	C200PC-ISA12-DRM(-E)	C200PC-ISA13-DRM(-E)
	C200PC-ISA12-SRM(-E)	C200PC-ISA13-SRM(-E)
PLC Units	C40P-CDR-AT	
	C500-LD211	
	C500-LK010(-P)	
C-series Optical	C500-LK101-(P)V1	C200H-LK101-PV1
C-series Optical Host Link Units (for large PLCs)	C500-LK103(-P) 3G2A5-LK101-(P)EV1	020011 21110 1 1 1 1
GPC C-series Lad-	C500-MP303-EV2	SYSMAC Support Software
der-type System Memory Cassette	C300-WF 303-L V2	3 1 SIMAC Support Software
PLC Unit	C500-OA223	C500-OA225
SYSMAC NET Link	C500-SNT31-V4	Ask your OMRON representative.
Unit	0000 011101 11	, tok your on to troprocontaine.
PLCs	C□□H	CPM2A
	C□□K	CPM1A
	C□□P	
FI Ceiling Crane Swing Control Unit	FIMC2-SET01	
PLC Unit	FIT10-KBA02-T	
Voice Pack for FIT10	FIT10-MF321	
Terminal Pack for	FIT10-MF331-V2	
FIT10	FIT10 MEQ41 MG	
NC Pack for FIT10	FIT10-MF341-V2	
CV/CVM1 Memory Cards	HMC-EP161	HMC-EE151
	HMC-EP551	HMC-EE151

Name	Discontinued models	Recommended replacement
PLC Units	SP10-ETL01	
	SP16-ETL01 SP20-ETL01	
	SRM1-C01(-V1)	SRM1-C01-V2
	SRM1-C02(-V1)	SRM1-C02-V2
	S3200-CAT2700/2702	
	S3200-CAT3200/3201	
	S3200-CAT3202/	
	S3200-CAT2000/2001H S3200-CAT2002/2822	
	S3200-CAT2820/2821	
H-PCH Optical Con-	S3200-COCF2511/2011	S3200-COCF2571/2071
nectors		
	S3200-COCH62M S3200-COCF62M/62F	
Optical Connector Assembly Tool	S3200-CAK1062	
SYSMAC NET Pow- er Supply	S3200-CPS05	Ask your OMRON representative.
PLC Units	S3200-FH-L-C22T-□□□	
H-PCF Optical Fiber	S3200-HBCB101/501	S3200-HCCB101/501/
Cords/Cables	/102/502/103 S3200-HCCB101/501	102/502/103 S3200-HCCB101/501/
	/102/502N	102/502
SYSMAC NET H-	S3200-HCLB101/501/	S3200-CN102-□□-□□
PCF Cables (with- out connectors)	102/502/103 S3200-HCLO101/501/	\$3200-CN-□□-□□
out connectors)	102/502/103	
SYSMAC NET Link Server	S3200-LSU03-V1/-01E	Ask your OMRON representative.
SYSNET NSB	S3200-NSB03-V2/11-E	Ask your OMRON representative.
SYSNET NSU	S3200-NSUA1-10/-00E	Ask your OMRON representative.
SYSMAC NET Bridge	S3200-NSUG4-10/-00E	Ask your OMRON representative.
PLC Units	T1000H-ATT01(-E)	
	T1000H-CN131/221	
	T1000H-LK103-P	
	T1000H-MP□02-V1	
	T200H-IA121	C200H-IA121
	T200H-IA122	C200H-IA122
	T200H-ID211	C200H-ID211
	T200H-OC221	C200H-OC221
	T200H-OC224	C200H-OC224
	3G2A5-LD211	
	3G2A5-LK010-E	
	3G2A5-LK010-PE	
Programming Console	3G2A6-PRO20-E	3G2A5-PRO19-E
GPC C2000 Lad- der-type System	3G2C5-MP304-EV3	SYSMAC Support Software
Memory Cassette		
PLC Units	3G2T4-IA121	3G2A5-IA121
	3G2T4-IA122	3G2A5-IA122
	3G2T4-IA221	
	3G2T4-ID112	3G2A5-ID112
	3G2T4-ID213	3G2A5-ID213
	3G2T4-ID215	3G2A5-ID218
	3G2T4-OD215	2C2AE OD411
	3G2T4-OD411	3G2A5-OD411
	3G2T9-LK101-P/201	
	3G2T9-MP301-S 3G2T9-MP701-S	
	3G2T9-MP401-V1 3G2T9-MP601-V1	
Panel FC Set	3G8F5-SET31/32/33	Panel FC + SYSMAC Board + Al- MAX
NSB for SYSMAC NET	3G8F5-SNT31	Ask your OMRON representative.

Note: The contents of the above table may differ slightly from similar information provided on the Internet.

Wiring Devices

Name	Discontinued models	Recommended replacement
BABUS Personal Computer Interface	BN800-PIF10	
B1TS Sensor Chain	B1TS-E/-M/-S	
DeviceNet Cable	DCA1-3C10	DCA1-5C10
	DCA2-3C10	DCA2-5C10
CompoBus/S Slaves	SRT1-series products with func- tionality supported by SRT2-series products	SRT2 Series

Note: The contents of the above table may differ slightly from similar information provided on the Internet.

I/O Relay Terminals

Name	Discontinued models	Recommended replacement
G730-□□□□C (Remote Sensor Terminals with 4 or 8 points)	G730-ID04C(-A/-B) G730-ID08C(-B)	SRT2-ID08S/-ND08S
I/O Terminals	P79C-ID16 P79C-OD16	XW2B-□□G4/G5 XW2C-20G5-IN16

Note: The contents of the above table may differ slightly from similar information provided on the Internet.

Connectors

Name	Discontinued models	Recommended replacement
FA Connectors	SC-4F4/-4F	SC-4F4D/-4FD
Servo Relay Units	XW2B-20J6-1	XW2B-20J6-1B
	XW2B-40J6-2	XW2B-40J6-2B
	XW2B-20J6-3	XW2B-20J6-3B

Programmable Terminals

Name	Discontinued models	Recommended replacement
Connecting Cables	NT20M-CNP222	
for NT Series	NT20M-CNP712	
Key Sheet for NT20M	NT20M-CKF01	
Communications Interface	NT600M-LMP31	
Expansion I/O Unit	NT600M-MD211	
System ROM	NT600M-SMR05	
Key Sheet	NT600M-CKF01	
Dust/Chemical-re- sistant Cover	NT600M-KB02	
Water/Oil-proofing Kit for NT610C	NT610C-KBA03	
Programmable Ter- minal	NT612G-DT211(B)	NT620S-ST211(B) NS10-TV00(B)-V1 NS8-SV00(B)
Image Memory Board for NT610G	NT610G-MF□□1	
NT610G System	NT610G-SMR0□	
ROM	NT610G-SMR3□-V21	
	NT610G-SMR3□-(M)V21	
	NT610G-SMR3□-EV2	
	NT610G-SMR33-V2	
	NT610G-SMR33B-V1	
System Key Unit for NT610C	NT-FK200	
Expansion I/O Unit for NT20M	NT20M-IF001 NT20M-MD211	
NT Support Soft- ware	NT20M-ZA3PC-V4 NT20M-ZA5PC-V4	NT-ZA3PC-V2
Programmable Ter-	NT2000M-DT131(B)	NS10-TV00(B)-V1
minals	NT2000M-DN131(B)	NS10-TV00(B)-V1
Programmable Ter-	NT31-ST121(B)(-E)	NT31-ST121(B)-(E)V2
minals	NT31-ST121(B)-(E)V1	NT31-ST121(B)-(E)V2
	NT31C-ST141(B)(-E)	NT31C-ST141(B)-(E)V2
	NT31C-ST141(B)-(E)V1	NT31C-ST141(B)-(E)V2
Memory Unit for NT600M	NT600M-MR641	NT600M-MR151
System ROM (Host Link) for NT600MS	NT600MS-SMR31	
Programmable Ter-	NT600MV-DT211	
minals	NT600MV-SMR06V	
	NT610C-DT151(B)-V2	NT625C-ST152(B)
	NT610C-SMR□□	
	NT610G-DT211	NT612G-DT211(B)
	NT631-ST211(B)(-E)	NT631-ST211(B)-(E)V2
	NT631-ST211(B)-(E)V1	NT631-ST211(B)-(E)V2
	NT631C-ST141(B)(-E)	NS10-TV00(B)-V1
	NT631C-ST141(B)-(E)V1	NS10-TV00(B)-V1
	NT631C-ST151(B)(-E)	NS10-TV00(B)-V1
	NT631C-ST151(B)-(E)V1	NS10-TV00(B)-V1
		•

Note: The contents of the above table may differ slightly from similar information provided on the Internet.

Software

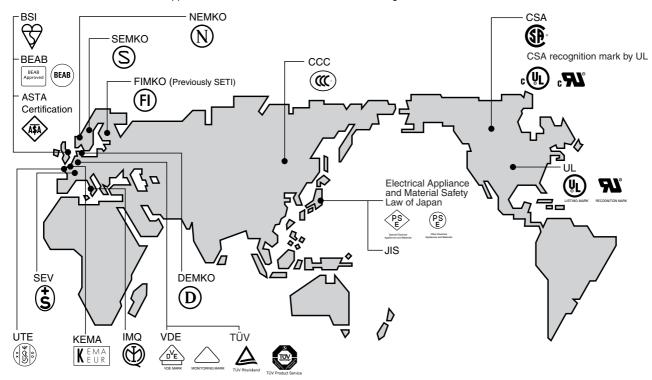
Name	Discontinued models	Recommended replacement
Data Collection/Dis- tribution Software	ITNC-DL1Q-EF	ITNC-DL1Q-EF-V2
CX-Programmer	WS02-CXPC□-□V2□	WS02-CXPC□-□V3□
CX-Process Tool	WS02-LCTC1-J□	WS02-LCTC1-EV3□
MC Support Soft- ware	CV500-ZN3AT1-E CV500-ZN3DV1 CV500-ZN3PC1	WS02-MCTC1-JV2 WS02-MCTC1-EV2
Data Collection/Dis- tribution Software	ITNC-DL1Q-F	ITNC-DL1Q-CD-V2
Open Network Con- troller Optional Soft- ware: Web & Mail Service Software	ITNC-WE1Q-EF	ITNC-RK1Q-ECD
FinsGateway Version 2, Runtime version	SFGW-RT-V2(E) SFGW-RT-HLV2(E)	SFGW-RT-V3(E)
Sion	SFGW-RT-V210	SFGW-RT-V310
	SFGW-SDK-V2(E)	SFGW-SDK-V3(E)
NT30/620 System Installer	NT-ZS3AT-EV1 NT30-ZS3DV-V1 NT620-ZS3AT-EV1 NT620-ZS3AT-EMV1 NT620-ZS3PC-V1	NT-ZJCAT1-EV4 NT-ZJCMX1-V4
FinsServer	SJ1DR-FSVN4-D SJ1DR-FSV95-EXC SJ1DR-FSVN4-EXC SFSV-COMN4	SFSV-SDK99
	SJ1DR-FSV95-RT SJ1DR-FSVN4-RT SJ1DR-FSV-RT	SFSV-RT99
	SJ1DR-FSVN4-D-E SJ1DR-FSV95-RT-E SJ1DR-FSVN4-RT-E SJ1DR-FSV95-EXC-E SJ1DR-FSVN4-EXC-E	
Programming Soft- ware	WS01-CPTC1-J WS01-CPTF1-J WS01-CPTB1-E	WS02-CXPC□-JV3 WS02-CXPC□-EV3
MS Support Soft- ware	WS02-MCTC1-J WS02-MCTC1-E	WS02-MCTC1-JV2 WS02-MCTC1-EV2

Note: The contents of the above table may differ slightly from similar information provided on the Internet.

Standards

National Standards

Note: For detailed information about applicable standards, refer to the relevant catalog.



International Standards

International Standards consist of the IEC standards for electricity and the ISO standards for other areas.

IEC (International Electrotechnical Commission)

- The IEC is a standardization commission founded in 1908 to promote unification and coordination of international standards relating to electricity. It is headquartered in Geneva, Switzerland.
- Based on reports from member nations on the latest science technologies in those nations, IEC standards are issued as technological standards relating to electricity. Established international safety standards provided by various countries and accepted worldwide are based on IEC standards.
- Among the authoring committees for IEC standards is the CISPR (International Special Committee on Radio Interference). This committee is responsible to author standards for EMC (Electro-Magnetic Compatibility).
- In order to simplify approval procedures for electrical devices and promote smooth international trade, there is an international scheme called CB Scheme (Certification Body Scheme), which is authorized by IEC standards. Based on the CB Scheme, safety tests on electrical devices are conducted and certificates are issued if the devices are proved to meet IEC standards.

ISO (International Organization for Standardization)

The ISO is a standardization commission that officially started activities in 1947 to promote unification and coordination of international standards in all fields (such as machinery and management) except for electricity, which is covered by the IEC. The ISO issues ISO standards, and is headquartered in Geneva, Switzerland.

North America

UL (Underwriter's Laboratories Inc.)





LISTING MARK

 A nonprofit organization established in 1894 by the American association of fire insurance companies.

Underwriters Laboratories (abbreviated to UL hereafter) conducts approval testing on all kinds of electrical products. In many U.S. cities and states, UL approval is legally required on all electrical items sold. In order to obtain UL approval on an electrical product, all major internal components also require UL approval.

 UL offers two classifications of approvals, the listing mark and the recognition mark.

A Listing Mark constitutes an approval of a complete and final product. Products display the Listing Mark shown at the left above.

A Recognition Mark constitutes an approval of a product built into a device or machine. Products display the Listing Mark shown at the right above.





- Since October 1992, UL has been approved as a CO (council organization) and TO (test organization) by the SCC (Standard Council of Canada). This authorizes UL to conduct safety tests and certify products conforming to Canadian standards. The above marks are UL marks for products certifying that the products meet Canadian standards.
- The designs of the listing marks and recognition marks have been revised as shown below. These marks have been effective since November 1998. The previous marks are valid until November 2007.

LISTING MARKS

	Marks for US	Marks for Canada	Marks for US and Canada
Previous mark	(UL)	. (UL)	
New mark	(ŲL)	t (ÎF)	c (UL) us

RECOGNITION MARKS

	Marks for US	Marks for Canada	Marks for US and Canada
Previous mark	<i>LR</i> ₈	\$1	<i>LR</i> ₀ <i>LR</i> ₀
New mark	Яľ	. 9U °	c FL °us

CSA (Canadian Standards Association)



- This association descended from a nonprofit, non-government standardization organization established in 1919. In addition to industrial standardization, the association now carries out safety testing on electrical products.
- Specification authoring: The Canadian Standards Association
- Product testing and certification: CSA International
- CSA approval is known as "certification," and consequently, CSAapproved equipment is referred to as "certified equipment." Products display the mark shown below.

Europe

EN (Europäische Norm = European Standard)

- Of the EN standards, EN6xxxx standards are based on IEC standards and EN55xxx standards are based on IEC-CISPR standards.
 Other EN5xxxx standards are unique European standards not found in IEC standards.
- The marks of the Certification Bodies based on the EN standards in individual countries are shown below.

VDE (Verband der Elektrotechnik Elektronik Informationstechnik e. V.), Germany





TÜV (Technischer Überwachungs Verein e. V.), Germany





TÜV Product Service

DEMKO (Danmarks Elektriske Materielkontrol), Denmark

FIMKO (Finlands Material Kontroll), Finland



BSI (British Standards Institution) (applicable to industrial products), United Kingdom



BEAB (British Electrotechnical Approvals Board) (applicable to home electronics products), United Kingdom



BEAB

ASTA (ASTA Certification Services) (applicable to general products), United Kingdom



KEMA (Keuring van Electrotechnische Materialen Nederland B. V.), Netherlands



UTE (Union Technique De Electricite), France



IMQ (Istituto Italiano del Marchio di Qualita), Italy



SEMKO (Svenska Elektriska Materielkontroll Anstalten), Sweden



SEV (Schweizerischer Electrotechnischer Verein), Switzerland



EC (European Community) Directives



CE MARKING

- EC directives are officially announced to direct the establishment of laws and regulations for the member countries of the EU (European Union).
- Under one of the EC Directives called the New Approach Directive that covers the Machinery Directive, Low Voltage Directive, and EMC Directive, and other directives, a product must comply with all applicable directives to display the CE marking. Evaluation of compliance with the directives is based on EN standards released as Harmonized Standards in the Official Journal of the European Communities.

China

CCC (China Compulsory Certification) Mark



CCC MARK

- When China joined the WTO (World Trade Organization) in 2001, the certification system for export products and the certification system for nationally distributed products were combined into a new system called the China Compulsory Certification System. The new system was officially announced on 3 December 2001 and started operation on 1 May 2002. From 1 May 2003, importing to or selling products in China is prohibited for any products that have not been certified under the new system.
- Items for compulsory certification: 19 groups divided into totally 132 product categories are specified as initial items.
- Applicable standards: GB (Guojia Biaozhun) Chinese National Standards (Electrical standards are based on IEC standards.)
- Compulsory Certification Mark: Displaying the CCC Mark is required.

Shipping Standards

There are more than 20 maritime societies in the world that independently establish standards and undertake certification activities. There is also an international organization called the IACS (International Association of Classification Societies). At present, the IACS has 10 members and two associate members. The member societies of the IACS certify and register approximately 90% of the ships in the world.

The ship class is specified by the owner of the ship and the manufacturer undergoes certification according to the request of the owner. Certification for a ship class is closely related to maritime insurance. Only ships that are certified for a specific ship class will be handled by underwriters. Ships without a class will not be underwritten.

It is thus necessary for all automated devices on a ship to comply with the maritime standards of each country according to the request of the owner. Although common requirements for results from test implemented by the various maritime societies is recognized between societies, there are differences in standards between societies that make mutual certification impossible. The required maritime standards must thus be meet, and to register with two or more ship classes requires certification in all of the classes.

Members of the IACS

- ABS (American Bureau of Shipping), USA
- BV (Bureau Veritas), France
- · CCS (China Classification Society), China
- DNV (Det Norske Veritas), Norway
- · GL (Germanischer Lloyd), Germany
- KR (Korean Register of Shipping), Korea
- LR (Lloyd's Register of Shipping), United Kingdom
- NK (Nippon Kaiji Kyokai), Japan
- RINA (Registro Italiano Navale), Italy
- RS (Russian Maritime Register of Shipping), Russia

Associate Members of the IACS

- CRS (Croatian Register of Shipping), Croatia
- IRS (Indian Register of Shipping), India

Other Maritime Societies

• CR (China Corporation Register of Shipping), China

Japar

Electrical Appliance and Material Safety Law of Japan





Special Electrical Other Electrical
Appliances and Materials Appliances and Materials

- Laws governing electrical appliances and materials were revised on 1 April 2001 with the Electrical Appliance and Material Safety Law and previous laws were abolished. New marks were also implemented with the new law. The law covers 112 special items and 340 other items.
- Paragraph 2 in the Ordinance Concerning Technical Requirements for Electrical Appliances and Materials establishes technical standards (IEC-J) in line with IEC standards.

JIS (Japanese Industrial Standards)

National standards in Japan are established according to the Industrial Standardization Law. Particularly from 1995, many standards have been established in line with international IEC and ISO standards.

List of Approved Models

When ordering, specify the standards that are required. Refer to Ordering Information for information on the standards applicable to each product.





Note: Boxes in model numbers are either blank or replaced with alphanumeric characters in actual model numbers.

Programmable Controllers

	I
Model	File No.
CPM2A	E95399 (UL508)
CPM2C	
CQM1H	
CS1W/CS1H/CS1G	
SP10/SP16/SP20	
CV500/CV1000/CV2000/ CVM1/CVM1D	
CPM1	
CPM1A	
C1000H/C2000H	
C16P	
C20K/P	
C20H	
C200H/C200HS	
C200HX/C200HG/ C200HE	
C28K/C28P	
C28H	
C200PC	
C40K/C40P	
C40H	
C60K/C60P	

Model	File No.
C60H	E95399 (UL508)
C20HB	
C500	
C20/3G2C7	
3G8F7	
SK20	
IDSC	
C200H-DSC	
C200H-TC	
C200H-TV	
C200H-PID	
CV500-TDL21	
CQM1-TC	
SRM1-C01-V2	
SRM1-C02-V2	
CQM1	E198998 (UL508)
CJ1W/G/H/M	(UL1604) (See note.)
C200HW/C200HX/ C200HG/C200HE	,
CS1W/CS1G/ CS1H/CS1D	E95399 (UL508)/ E198998 (UL1604)/
	CSA C22.2
CQM1	No. 142/143
C200HW	
CPM2B	

Note: Models that comply with UL1604 are also certified for C-UL.

Programmable Terminals

Model	File No.
NT11S	E95399 (UL508)
NT20S	
NT600S	
NT620S/620C	
NT625C	
NT31/31C	
NT631/631C	
NT25/25C	
NTE31/31C	

Model	File No.
NS7/NS10/NS12	E95399 (UL508)/ E198998 (UL1604)
NT30-ST131B-E	E198998 (UL1604) (See note.)
NT21-ST121-E	(Gee Hote.)
NT-DRT21	E95399 (UL508)
NTH25(C)	

Note: Models that comply with UL1604 are also certified for C-UL.

Field Network and Wiring Devices

Model	File No.
DRT1-ID	E95399 (UL508)
DRT1-OD	
DRT1-MD	
DRT1-WD	
DRT1-MND	
DRT1-AD	
DRT1-DA	
DRT1-TS	
DRT1-232C2	
DRT1-COM	
GT1-ID	
GT1-OD	
GT1-RD	
GT1-AD	1
GT1-AD	
GT1-DA	
GT1-T3	
GIII-OIVI	

Model	File No.
DRT1-B7AC	E95399 (UL508)
SRT1 Series	
SRT2-ID	
SRT2-OD	
SRT2-MD	
SRT2-ROC	
SRT2-ROF	
SRT2-VID	
SRT2-VOD	
SRT2-AD	
SRT2-DA	
B7A Series	
B7AP	
G72C(-V)	
G71	

Remote I/O Terminals and Relay Terminals

Model	File No.
G7TC	E95399 (UL508)
G70A-ZOC16-□	
G70D-VSOC16	
G70D-VFOM16	

Servo Systems

Model	File No.
R88M-W R88D-WT	Motors: E179189 (UL1004)
R88M-U R88D-U	Drivers: E179149 (UL508C)
FND-X	E179149 (UL508C)
R7D	
R7M	E179189 (UL1004)

Inverters

Model	File No.
3G3EV-A2□/-AB□/ -A4□	E179149 (UL508C)
3G3FV-□4	
3G3HV-□4	
3G3JV	
3G3MV-A	
3G3MV-AB	
3G3RV-A	
3G3RV-B	
3G3MV-PDRT2	
3G3RV-PDRT2	

Positioners

ſ	Model	File No.
	3F88L	E95399 (UL508)

IT Peripheral Devices

Model	File No.
ITNC	E95399 (UL508)

CSA Standards

Programmable Controllers



Model	File No.
CPM2A	LR51460 (CSA C22.2 No. 142)
CPM2C	LR59623
CQM1H	LR51460 (CSA C22.2
CS1W/CS1H/ CS1G	No. 142)
SP10/SP16/SP20	
CV500/CV1000/ CV2000/CVM1/ CVM1D	
CPM1	
CPM1A	
CQM1	
C1000H/C2000H	
C16P	
C20K/P	
C20H	
C200H/C200HS	
C200HW/ C200HX/	
C200HG/C200HE	
C28K/C28P	
C28H	

Model	File No.
C40K/C40P	LR51460 (CSA C22.2
C40H	No. 142)
C60K/C60P	
C60H	
C500	
C20/3G2C7	
3G8F7	
SK20	
IDSC	
C200H-DSC	LR59623 (CSA C22.2
C200H-TC	No. 14)
C200H-TV	
C200H-PID	
CV500-TDL21	
CQM1-TC	LR59623 (CSA C22.2
SRM1-C01-V2	No. 142)
SRM1-C02-V2	
C200PC	LR51460 (CSA C22.2
C20HB	No. 142)
CJ1W/CJ1M	(CSA C22.2 No. 142/143)
	NO. 142/143)

Programmable Terminals

Model	File No.
NT11S	LR10527 (CSA C22.2
NT20S	No. 14)
NT30/30C	
NT600S	
NT620S/620C	
NT625C	
NT31/31C	
NT631/631C	
NTE31/31C	
NS12	

Model	File No.
	LR152731 (CSA C22.2 No. 142)

Programmable Terminals

Model	File No.
NT631C	02/10008
NT31	01/10095

DNV Standards (Det Norske Veritas)

Programmable Controllers

Model	File No.
C1000H	A-8492
C200H	
C20K/C28K/	
C40K/C60K	
CQM1	A-8280
C200HW/C200HX/	A-8491
C200HG/C200HE	
CPM1	A-7425
CPM1A	Ī

Model	File No.
CQM1H	A-8490
CS1W/CS1G/CS1H	A-8470
CJ1	A-8472
CV500/CVM1	A-8540

Inverters

Model	File No.
3G3MV-PDRT2	CSA C22.2
3G3RV-PDRT2	No. 142/143 (See note.)

Note: These Inverters are certified under C-UL, and not CSA.

Field Network and Wiring Devices

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Model	File No.
DRT1-ID	LR35535 (CSA C22.2
DRT1-OD	No. 14)
DRT1-HD	
DRT1-ND	
DRT1-WD	
DRT1-MD	
DRT1-AD	LR59623 (CSA C22.2
DRT1-DA	No. 142)
DRT1-TS	
DRT1-232C2	
DRT1-COM	
GT1-ID	LR35535 (CSA C22.2
GT1-OD	No. 14)
GT1-RO	
GT1-AD	LR59623 (CSA C22.2
GT1-DA	No. 142) `
GT1-TS	
GT1-CT01	
·	

Model	File No.
SRT1 Series	LR35535 (CSA C22.2
SRT2-ID	No. 14)
SRT2-OD	
SRT2-MD	
SRT2-ROC	
SRT2-ROF	
SRT2-VID	
SRT2-VOD	
SRT2-AD	LR59623 (CSA 22.2
SRT2-DA	No. 142)
B7A Series	LR105257
G72C(-V)	LR35535 (CSA C22.2
G71	No. 14)

Programmable Terminals

Model	File No.
NT31	A-8540

NK Standards (Nippon Kaiji Kyokai)

Programmable Controllers

•	
Model	File No.
C2000 (H)	A-223
C500	A-161
C200H/C200HS	A-240
C20	A-188
C20P/C28P/ C40P/C60P	A-193
SP10/SP16/SP20	A-292
CVM1D	A-384
CPM1	A-423
CPM1A	A-423
CPM2A	A-423
C200HW/C200HX/ C200HG/C200HE	A-389

Model	File No.
CQM1	A-370
CQM1H	A-467
CS1W/CS1H/ CS1G/CS1D	A-445
CV500/CV1000/ CV2000/CVM1	A-384
CJ1	A-545

Remote I/O Terminals and Relay Terminals

Model	File No.
G7TC	LR35535 (CSA C22.2
G70A-ZOC16-□	No. 14)
G70D-VSOC16	
G70D-VFOM16	1

Positioners

Model	File No.
	LR51460 (CSA C22.2 No. 142)

Programmable Terminals

Model	File No.
NT620C/NT620S	A-413
NT631	A-542

VDE Standards (9876)



LR Standards (Lloyd's Register of Shipping)



Relay Terminals

Model	File No.
G70A	No. 124796
	(EN50178)

KR Standards (Korean Register of Shipping)

Programmable Controllers

Model	File No.
C200H	TKY05265-AC001
C200HW/C200HX/ C200HG/C200HE	TKY05265-AC003
C500	TKY05265-AC004
C2000 (H)	(See note.)
CQM1	TKY05265-AC005
CQM1H	TKY05265-AC007
CS1W/CS1G/CS1H	TKY05265-AC006

Note: Check the certificate for actual model numbers. The standard is applicable only to the models that were certified together with the C2000H.

Programmable Controllers

Model	File No.
C2000 (H)	88/10278 (E2)
C500	88/10171 (E2)
C20P/C28P/C40P	99/10031
C200H/C200HS	95/10014 (E3)
CQM1	00/10020
CV500/CV1000/ CV2000/CVM1	95/10015 (E3)
CPM1	97/10014
CPM1A	97/10014
CS1W/CS1H/CS1G	99/10005, 99/ 10005 (E1)

Model	File No.
C200HW/C200HX/ C200HG/C200HE	96/10036, 96/ 10036 (E1)
CVM1D	00/10036
CQM1H	00/10021
CJ1	02/10021
CS1D	02/10031

BV Standards (Bureau Veritas)

Programmable Controllers

Model	File No.
C500	06610/B0 (See note.)
CV500/CV1000/CVM1	06610/B0
CS1W/CS1G/CS1H	09322/A1

Note: Check the certificate for actual model numbers. The standard is applicable only to the models that were certified together with the CV500/CV1000/CVM1.

CR Standards (China Corporation Register of Shipping)

Programmable Controllers

Model	File No.
C20H/C28H/C40H/60H	Q-03-128
CPM1/CPM1A	Q-03-140

GL Standards (Germanischer Lloyd)

Programmable Controllers

Model	File No.
CQM1	15379-00HH
CPM1/CPM1A	15378-00HH

ABS Standards (American Bureau of Shipping)

Programmable Controllers

Model	File No.
C200HW/C200HX/ C200HG/C200HE	02-Y0326609-PDA
CS1W/CS1H/ CS1G/CS1D	03-Y0352116-PDA



List of Models Conforming to EN/IEC Standards (as of September 2002)

Programmable Controllers

	B	Applicable standard No.	Application	Approving			I=110		
es es	В		standard No.	agency	File No./ Applica- ble period	EMI standard No.	EMS standard No.	Approving agency	File No./ Appli- cable period
		EN61131-2	Self-certification ance Declaration	(EC Compli-	Compliance confirmed.	EN50081-2	EN61131-2	Self-certifica- tion (EC Compliance Declaration)	Compliance confirmed.
 /es									

Note: Consult your OMRON representative concerning compliance levels. An EC Compliance Declaration will be issued.

Model	CE mark- ing	Safety category	Basic requiren	nents of Machine	ery Directive/Lov	v-voltage Direc-	Basic requirements of EMC Directive				
			Applicable standard No.	Application standard No.	Approving agency	File No./ Appli- cable period	EMI standard No.	EMS standard No.	Approving agency	File No./ Appli- cable period	
CPM2C-8EDC CPM2C-16EDC CPM2C-16ETC CPM2C-8ETC CPM2C-8ETC CPM2C-8ET1C CPM2C-8ET1C CPM2C-8ET1C CPM2C-8ET CPM2C-8ET CPM2C-16ET1C CPM2C-8ER CPM2C-PA201 CPM2C-CIF01 CPM2C-COC1F11 CPM2C-20CDR-D CPM2C-10CDTM-D CPM2C-10CDTM-D CPM2C-10CDT1M-D CPM2C-10C1DT1M-D CPM2C-10C1DT1M-D CPM2C-10C1DT1M-D CPM2C-20CDTM-D CPM2C-20CDTM-D CPM2C-20CDTM-D CPM2C-20CDTM-D CPM2C-20CDTM-D CPM2C-32CDTC-D CPM2C-32CDTC-D CPM2C-32CDTC-D CPM2C-32CDTM-D CPM2C-32CDTM-C CPM2C-32CDTM-C CPM2C-33CDTM-C	Yes	В	EN61131-2	Self-certification ance Declaratio	(EC Compli- n)	Compliance confirmed.	EN50081-2	EN61000-6-2	TÜV Product Service	Compliance confirmed.	
CPM2C-32EDT1M CPM2C-8EDM CPM2C-16EDM CPM2C-8ETM											
CPM2C-CIF01-V1 COM1H-CPU11 COM1H-CPU21 COM1H-CPU51 COM1H-CPU51 COM1H-CPU51 COM1-CPU11-E COM1-CPU11-E COM1-CPU11-E COM1-CPU21-E COM1-CPU21-E COM1-CPU21-E COM1-CPU21-E COM1-CPU21-EV1 COM1-CPU42-V1 COM1-CPU42-V1 COM1-CPU42-V1 COM1-CPU42-V1 COM1-CPU42-V1 COM1-CPU42-V1 COM1-CPU42-V1 COM1-CPU42-V1 COM1-D216 COM1-D216 COM1-D217 COM1-D218 COM1-D218 COM1-D218 COM1-D219 COM1-D219 COM1-D211 COM1-D211 COM1-D211 COM1-D211 COM1-D212 COM1-D213 COM1-D214 COM1-D215 COM1-D215 COM1-D216 COM1-D216 COM1-D217 COM1-D217 COM1-D218 COM1-D218 COM1-D219 COM1-D219 COM1-D322 COM1-C201 COM1-TC201 COM1-TC201 COM1-TC201 COM1-TC302								EN61131-2	Self-certifica- tion (EC Com- pliance Declaration)		
CGM1-TC303 COM1-TC304 CQM1-PR001 CGM1-PR001-E CGM1H-AVB41 COM1H-CLK21 CGM1H-SCB41 CGM1H-TER01 CGM1H-TER01 CGM1H-PR001 CGM1H-PR001-E											
COM1H-III01 COM1H-ME16K COM1H-ME16R COM1-ME04K COM1-ME04R COM1-ME08R COM1-ME08R COM1-MP08R COM1-MP08R COM1-IP02 COM1-MP08R COM1-MP08R COM1-MP08R											
CQM1H-MAB42	Yes]				l				

Model	CE mark-		Basic requirentive	nents of Machine	ery Directive/Lo	w-voltage Direc-	Basic requirements of EMC Directive				
		,	Applicable	Application standard No.	Approving	File No./ Appli-	EMI standard	EMS standard	Approving	File No./ Appli-	
CS1H-CPU67 CS1H-CPU66 CS1H-CPU66 CS1H-CPU66 CS1H-CPU68 CS1H-CPU64 CS1G-CPU44 CS1G-CPU43 CS1G-CPU42 CS1G-CPU42 CS1H-CPU66-E CS1H-CPU66-E CS1H-CPU66-E CS1H-CPU63-E CS1H-CPU63-E CS1H-CPU63-E CS1H-CPU63-E CS1G-CPU43-E CS1G-CPU43-E CS1G-CPU43-E CS1G-CPU43-E CS1G-CPU43-E CS1G-CPU43-E CS1G-CPU43-E CS1G-CPU43-E CS1G-CPU43-E CS1H-CPU66-V1 CS1H-CPU66-V1 CS1H-CPU66-V1 CS1H-CPU66-V1 CS1H-CPU68-V1 CS1H-CPU68-V1 CS1H-CPU68-V1 CS1G-CPU44-V1 CS1G-CPU44-V1 CS1G-CPU44-V1 CS1G-CPU44-V1 CS1G-CPU44-V1 CS1G-CPU44-V1 CS1G-CPU44-V1 CS1G-CPU45-V1 CS1H-CPU66-E-V1 CS1H-CPU66-E-V1 CS1H-CPU66-E-V1 CS1H-CPU66-E-V1 CS1H-CPU68-V1 CS1G-CPU43-E-V1 CS1G-CPU43-E-V1 CS1G-CPU43-E-V1 CS1G-CPU43-E-V1 CS1G-CPU43-E-V1 CS1G-CPU43-E-V1 CS1G-CPU43-E-V1 CS1G-CPU43-E-V1 CS1G-CPU43-E-V1 CS1G-CPU43-V1N CS1G-CPU43-V1N CS1H-CPU66-V1N CS1H-CPU66-V1N CS1H-CPU66-V1N CS1G-CPU43-V1N CS1H-CPU68-V1N CS1G-CPU43-V1N CS1G-C	Yes	B B	tive		Approving agency					File No./ Applicable period Compliance confirmed.	
CS1W-CN133 CS1W-CN523 CS1W-CN323 CS1W-CN223 CS1W-CN713											

Model	CE mark-	Safety category						Basic requirements of EMC Directive				
			Applicable standard No.	Application standard No.	Approving agency	File No./ Appli- cable period	EMI standard No.	EMS standard No.	Approving agency	File No./ Appli- cable period		
CS1W-AD041-V1 CS1W-AD081-V1	Yes	В	EN61131-2	Self-certification ance Declaration	(EC Compli-	Compliance confirmed.	EN50081-2	EN61131-2	Self-certifica- tion (EC Com-	Compliance confirmed.		
CS1W-SCU21-V1 CS1W-SCB21-V1					,				pliance Declaration)			
CS1W-SCB41-V1 CS1W-MC421-R1 CS1W-CIF31												
CJ1W-PRT21 CJ1W-PRM21												
HMC-EF172 HMC-EF372												
HMC-EF672 CJ1G-CPU45	4							EN61000-6-2	TÜV Product			
CJ1G-CPU44 CJ1W-PA205R								EIN01000-0-2	Service			
CJ1W-IC101 CJ1W-II101												
CJ1W-ID211 CJ1W-ID231												
CJ1W-ID232 CJ1W-ID261												
CJ1W-OD211 CJ1W-OD212												
CJ1W-OD231 CJ1W-OD232												
CJ1W-OD261 CJ1W-OC201												
CJ1W-OC211 CJ1W-AD081 CJ1W-DA041												
CJ1W-SCU41 CJ1W-CLK21												
CJ1W-ETN11 CJ1W-TER01												
CJ1W-TC001 CJ1W-TC002												
CJ1W-TC003 CJ1W-TC004												
CJ1W-TC101 CJ1W-TC102												
CJ1W-TC103 CJ1W-TC104												
CJ1W-NC113 CJ1W-NC133												
CJ1W-NC213 CJ1W-NC233												
CJ1W-NC413 CJ1W-NC433 CJ1W-SRM21												
CJ1W-DRM21 CJ1H-CPU66H												
CJ1H-CPU65H CJ1G-CPU45H												
CJ1G-CPU44H CJ1G-CPU43H												
CJ1G-CPU42H CJ1W-PA202												
CJ1W-ID262 CJ1W-INT01												
CJ1W-IA111 CJ1W-IA201 CJ1W-OD233												
CJ1W-OD263 CJ1W-OD201												
CJ1W-OD202 CJ1W-OA201												
CJ1W-CT021 CJ1W-AD081-V1												
CJ1W-AD041-V1 CJ1W-DA021												
CJ1W-DA08V CJ1W-MAD42												
CJ1W-SP001 CJ1W-PD025 CJ1W-SCU21												
CJ1M-SC021 CJ1M-CPU12 CJ1M-CPU13												
CJ1M-CPU22 CJ1M-CPU23												
CJ1W-IDP01 CJ1W-CIF11												
CS1W-IA111 CS1W-IA211	1											
CS1W-OC211 CS1W-OC201												
CS1W-OA211 CS1W-OA201												
CS1W-OC211S CS1W-OC201S												
CS1H-CPU67H CS1H-CPU66H												
CS1H-CPU65H CS1H-CPU64H												
CS1H-CPU63H CS1G-CPU45H												
CS1G-CPU44H CS1G-CPU43H												
CS1G-CPU42H CS1W-ETN11 CS1W-GPI01												
CS1W-GPI01 CS1W-MD561 CS1W-HCA12												
CS1W-HCA12-V1 CS1D-CPU67H												
CS1D-CP067H CS1D-CPU65H CS1D-BC052												
CS1D-BI092 CS1D-PA207R												
CS1W-LCB01 CS1W-LCB05												
CS1D-LCB05D CS1W-LC001												

Model	CE mark-	Safety category	Basic requirements of Machinery Directive/Low-voltage Directive				Basic requirements of EMC Directive				
			Applicable standard No.	Application standard No.	Approving agency	File No./ Appli- cable period	EMI standard No.	EMS standard No.	Approving agency	File No./ Appli- cable period	
CS1W-ID211 CS1W-ID231 CS1W-ID261 CS1W-ID261 CS1W-ID701 CS1W-OD211 CS1W-OD211 CS1W-OD212 CS1W-OD232 CS1W-OD262 CS1W-OD262 CS1W-MD261 CS1W-MD261 CS1W-MD261 CS1W-MD261 CS1W-MD261 CS1W-MD261 CS1W-MD261 CS1W-PTS01 CS1W-PTS01 CS1W-PTS01 CS1W-PTS02 CS1W-PTF001 CS1W-PTR01 CS1W-PTR01 CS1W-PTR01 CS1W-PTR01 CS1W-NC113 CS1W-NC113 CS1W-NC133 CS1W-NC233 CS1W-NC233 CS1W-NC233 CS1W-NC433 CS1W-NC433 CS1W-MC412 CS1W-MC421 CS1W-HC422	Yes	В	Not applicable.	standard No.	цаденоў		EN50082-2	EN50082-2	Self-certifica- tion (EC Com- pliance Declaration)	Compliance confirmed.	
CS1W-II102 CS1W-PTS01-V1			EN61131-2	Self-certification	n (EC Compli-	Compliance		EN61000-6-2	TÜV Product	-	
C200HX-CPU85-Z C200HX-CPU65-Z C200HX-CPU64-Z C200HX-CPU64-Z C200HX-CPU54-Z C200HX-CPU34-Z C200HX-CPU34-Z C200HX-CPU34-Z C200HX-CPU33-Z C200HC-CPU33-Z C200HC-CPU33-Z C200HC-CPU32-Z C200HC-CPU32-Z C200HC-CPU32-Z C200HC-CPU32-Z C200HX-CPU65-ZE C200HX-CPU65-ZE C200HX-CPU66-ZE C200HX-CPU64-ZE C200HC-CPU33-ZE C200HC-CPU33-ZE C200HC-CPU33-ZE C200HC-CPU34-ZE C200HC-CPU33-Z C200HC-CPU33-Z C200HC-CPU33-Z C200HC-CPU33-Z C200HC-CPU33-Z C200HC-CPU33-Z C200HC-CPU42-Z C200HC-CPU33-Z				ance Declaration	· vn)	confirmed.		EN61131-2	Service Self-certifica- tion (EC Com- pliance Declaration)		

Model	CE mark- ing	Safety category	Basic requirements of Machinery Directive/Low-voltage Directive				·				
			Applicable standard No.	Application standard No.	Approving agency	File No./ Appli- cable period	EMI standard No.	EMS standard No.	Approving agency	File No./ Appli- cable period	
C200H-ASC02	Yes	В	EN61131-2	Self-certification	(EC Compli-	Compliance	EN50081-2	EN61131-2	Self-certifica-	Compliance	
C200H-AD002 C200H-AD003				ance Declaratio	n)	confirmed.			tion (EC Com- pliance	confirmed.	
C200H-DA002 C200H-DA003						1			Declaration)		
C200H-DA004											
C200H-MAD01 C200H-MC221											
C200H-CT001-V1											
C200H-CT002 C200H-CT021											
C200H-NC112 C200H-LK201-V1											
C200H-LK202-V1 C200H-B7AI1											
C200H-B7AO1											
C200H-RM201 C200H-RT201-C											
C200H-RT202 C200H-LK401											
C200H-PRO27											
C200H-PRO27-E C200H-ASC11											
C200H-ASC21 C200H-ASC31											
C200H-MC211-KJ C200H-TC001											
C200H-TC002											
C200H-TC003 C200H-TC101											
C200H-TC102						1			1		
C200H-TC103 C200H-TV001											
C200H-TV002 C200H-TV003						1			1		
C200H-TV101											
C200H-TV102 C200H-TV103											
C200H-PID01											
C200H-PID02 C200H-PID03											
C200H-B7A02 C200H-B7A21											
C200H-B7A22											
C200HS-ME16K C200HS-MP16K											
C200H-CN311											
C200H-CN711 C200H-CN221											
C200HS-CN222 C200HS-CN422											
C200H-CN521											
C200H-CN131 ROM-JD-B											
ROM-KD-B C200H-OC222N	Vee										
C200H-OC224N	Yes										
C200H-OC226N CVM1-CPU01-V2											
CVM1-CPU01-EV2											
CVM1-CPU11-V2 CVM1-CPU11-EV2											
CVM1-CPU21-V2											
CVM1-CPU21-EV2 CV500-CPU01-V1											
CV500-CPU01-EV1 CV1000-CPU01-V1											
CV1000-CPU01-EV1 CV2000-CPU01-V1											
CV2000-CPU01-EV1											
CVM1-PA208 CVM1D-CPU21						1			1		
CV500-PS211 CVM1D-PA208						1			1		
CV500-BC101											
CV500-BI112 CVM1D-BC051											
CVM1D-BI101 CVM1D-BI102											
C500-ID218											
C500-ID219 C500-ID501CN											
C2000-ID216 C500-IA121											
C500-IA222						1			1		
C500-IM212 C500-OD219						1					
C500-OD411 C500-OD218						1					
C500-OD412						1					
C500-OD212 C500-OD213						1			1		
C500-OD501CN						1			1		
C500-OA226 C500-OC221						1					
C500-OC223 C500-OC224						1					
C500-OC224-E						1			1		
C500-MD211CN C500-AD101						1			1		
C500-DA101						1					
C500-CT021 CV500-MC221						1					
CV500-MC421 CV500-BSC21						1			1		
CV500-BSC21 CV500-LK201				<u> </u>		<u> </u>			<u> </u>	<u> </u>	

Model	CE mark-		Basic requirentive	nents of Machin	ery Directive/Lo	w-voltage Direc-	Basic requirements of EMC Directive			
			Applicable standard No.	Application standard No.	Approving agency	File No./ Appli- cable period	EMI standard No.	EMS standard No.	Approving agency	File No./ Appli- cable period
CWM1-DRM21-V1 CVM1-PRS21-V1 CVM1-PRS21-EV1 CVM1-PRS71 CVM1-PRO01 CVM1-DPL01 CVM10-DPL01 CV1000-DM641 CV1000-DM51 CV1000-DM251 CVM10-DM251 CVM1-MP702 CVM1-MP703	Yes	В	EN61131-2	Self-certification ance Declaration	n (EC Compli- n)	Compliance confirmed.	EN50081-2	EN61131-2	Self-certifica- tion (EC Com- pliance Declaration)	Compliance confirmed.
OV500-CN312 OV500-CN612 OV500-CN612 OV500-CN122 CV500-CN122 CV500-CN322 CV500-CN322 CV500-CN322 CV500-CN322 CV500-CN322 CV500-CN322 CV500-CN432 CV500-CN432 CV500-CN432 CV500-CN613 CV500-CN613 CV500-CN613 CV500-CN613 CV500-CN614 CV500-CN624 CV500-CN624 CV500-CN624 CV500-CN624 CV500-CS641 HMC-ES641 HMC-ES651 HMC-ES651 HMC-ES651 HMC-EE651 HMC-EF651										
CQM1-OD216 C200H-OD21B CVM1-CLK12	Yes									
CVM1-CLK52 CPM1A-MAD01										
CQM1-CPU45 CVM1-CPU01-V1 CVM1-CPU01-EV1										
SRM1-C0□-V2 (See note.) 3G8F5-CLK11 3G8F5-CLK11-E		В	Not applicable.				Not applicable. EN55022	E50082-2	Self-certifica- tion (EC Com- pliance Declaration)	
3G8F7-DRM21 3G8F7-DRM21-E 3G8F7-CLK12 3G8F7-CLK12-E 3G8F7-CLK52-E 3G8F7-CLK52-E 3G8F7-CLK21 3G8F7-CLK21-E 3G8F7-SLK21-E 3G8F7-SLK21-E 3G8F7-SLK21-E 3G8F7-SLK21-E	Yes			Self-certification ance Declaration	n (EC Compli- nn)	Compliance confirmed.	EN50081-2	EN61000-6-2	TÜV Product Service	

Note: Consult your OMRON representative concerning compliance levels. A EC Compliance Declaration will be issued.

Field Network and Wiring Devices

Model	CE mark- ing	Safety cat- egory	Basic requirem rective	Basic requirements of Machinery Directive/Low-voltage Di-Basic requirements of EMC Directive rective						
			Applicable standard No.	Application standard No.	Approving agency	File No./ Ap- plicable peri- od		EMS standard No.	Approving agency	File No./ Applicable period
DRT2 Series	Yes	В	Not applicable.				EN50081-2	EN61000-6-2	Self-certifica-	Compliance confirmed (self
DRT1 Series GT1 Series SRT1 Series SRT2 Series (See note 2.)								EN50082-2	tion (EC Com- pliance Declaration)	declaration).
B7A, PC Terminals (See note 2.)	Yes (See note 3.)	В	Not applicable.				EN50081-2	EN50082-2	TÜV Rhein- land	C9451344
B7A, Screw tightening (See note 2.)										C9451343
B7AS (See note 2.)								prEN50082-2	ASTA Test	Compliance confirmed (self
B7AP							EN50081-1		Report	declaration).
B7AC (See note 2.)										
B1T (See note 2.)										
B1TS (See note 2.)							EN50081-2	EN50082-2		
G72C-V (See note 2.)							EN55011 Class A (EN50081-2)		TÜV Product Service	VID:E8 96 04 22868 010 VOD:E8 96 04 22868 011
G72 (See note 2.)										VID:E8 96 04 22868 016 OD:E8 96 04 22868 015
G71 (See note 2.)										VID:E8 95 12 22868 009 OD:E8 95 11 22868 006

Note: 1. Consult your OMRON representative concerning compliance levels. A EC Compliance Declaration will be issued.

- 2. Inquire for detailed information.
- **3.** The B7AP displays the CE marking only when individually packaged.



Relay Terminals

Model	CE marking		Basic requirements of Machinery Directive/Low-voltage Directive			Basic requirements of EMC Directive				
			Applicable standard No. Approving agency File No./ Applicable period						File No./ Ap- plicable peri- od	
G70A	Yes	1	EN50178		VDE	No. 124796	Not applicable	-	•	•

Programmable Terminals

Model	Model CE mark- ing		Basic requirements of Machinery Directive/Low-voltage Directive				Basic requirements of EMC Directive			
			Applicable standard No.	Application standard No.	Approving agency	File No./ Appli- cable period	EMI standard No.	EMS standard No.	Approving agency	File No./ Appli- cable period
NT2S-ST122 NT2S-ST125 NT11S-SF121 NT11S-SF121(B)-V3 NT20S-ST121(B)-EV3 NT20S-ST121(B)-EV3 NT20S-ST161(B)-V3 NT20S-ST161(B)-EV3 NT20S-ST168(B) NT20S-ST168(B) NT20S-ST128(B) NT20S-ST124(B)	Yes	В	EN61131-2	Self-certificatio ance Declaration	n (EC Compli- on)	Compliance confirmed.	EN50081-2	EN61131-2	Self-certifica- tion (KEC, EMC-Japan, JQA Test Re- port))	Compliance confirmed.
NT20S-ST122(B)-V1 NT21S-ST121(B)-EV1	Yes									
NT600S-ST121(B)-V3 NT600S-ST121(B)-EV3 NT600S-ST211(B)-V3 NT600S-ST211(B)-EV3	Yes									
NT620S-ST212(B)	Yes								Self-certifica-	
NT620S-ST211(B) NT620S-ST211(B)-E NT620S-ST211(B)-EK	Yes								tion (KEC, EMC-Japan)	
NT620C-ST142(B)	Yes	1								
NT620C-ST141(B) NT620C-ST141(B)-E	Yes									
NT30-ST131(B)-V1	Yes	1								
NT30-ST131(B)-E NT30-ST131(B)-EK	Yes									
NT30C-ST141(B)-V1	Vac	4								
NT30C-S1141(B)-E NT30C-ST141(B)-E NT30C-ST141(B)-EK	Yes Yes	1								
NT31-ST121(B)-V1 NT31-ST121(B)-EV1 NT31C-ST141(B)-V1 NT31C-ST141(B)-EV1	Yes									
NT631-ST211(B)-V2 NT631-ST211(B)-EV2 NT631-ST211-EKV1 NT631-ST141(B)-V1 NT631C-ST141(B)-EV2 NT631C-ST141-EKV1 NT631C-ST151(B)-V2 NT631C-ST151(B)-V2 NT631C-ST151(B)-EV2	Yes									
NTH25-ST121B NTH25C-ST141B	Yes									
NTE31-TT121B	Yes			ĺ						
NTE31C-TT141B	Yes			ĺ						
NT30-DRT21	Yes			1		1		1		
NT3011S-SF121(B)	Yes			ĺ						
NT11S-SF121(B) NS7-SV01(B) NS7-SV00(B) NS10-TV01(B) NS10-TV00(B) NT121-ST121(B)-E	Yes									
NS-CA001 NS12-TS01(B) NS12-TS00(B)										

IT Peripheral Devices

Model	CE marking	Safety cat- egory	Basic requirem tive	Basic requirements of Machinery Directive/Low-voltage Directive			Basic requirements of EMC Directive			
			Applicable standard No.	Application standard No.	Approving agency	File No./ Appli- cable period	EMI standard No.	EMS standard No.	Approving agency	File No./ Appli- cable period
C200PC-CPU15-G C200PC-CPU01-R C200PC-BC081 C200PC-BC031 C200PC-PCM01 C200PC-FAN01	Yes	В	Not applicable				EN50081-2		Self-certifica- tion (EC Com- pliance Declaration)	Compliance confirmed (self-declaration).
ITNC-SGB01 ITNC-SGB01-E			EN61131-2					EN61000-6-2		
ITNC-EIS01 ITNC-EIS01-DRM ITNC-EIX01 ITNC-EIX01-DRM			Not applicable.					EN61131-2		
C200HW-PCU01 C200HW-PCS01-EV1 C200HW-PCS01-V1										
C200PC-EXP01 C200PC-ISA03-DRM C200PC-ISA03-SRM C200PC-ISA13-DRM C200PC-ISA13-SRM C200PC-ISA03-DRM-E C200PC-ISA03-SRM-E C200PC-ISA03-E C200PC-ISA13-DRM-E C200PC-ISA13-SRM-E C200PC-ISA13-SRM-E C200PC-ISA13-SRM-E							EN55022 Class A	EN50082-2		
ITNC-EIS01-CS1 ITNC-EIX01-CST ITBC-CST01										

Enclosure Ratings (as of July 2002)

Note: The following test methods were used for IP- \square standards. Confirm protection prior to application using the environment and operating conditions that will exist in the actually application.

IEC (International Electrotechnical Commission) Standards (IEC 529)

<u>IP - ∐ </u>	
	Protection Specification Code (International Protection) (IEC529)

1. Protection Against Solid Foreign Objects

Grade	Protection	
0	[_]	No protection
1	50 dia. mm	Full penetration of hard object with 50-mm diameter (e.g., hand) not allowed.
2	● 12.5 dia. mm	Full penetration of hard object with 12.5- mm diameter (e.g., finger) not allowed.
3	==[Full penetration of wire or hard object with 2.5-mm diameter not allowed.
4	=[] + 1 mm	Full penetration of wire or hard object with 1.0-mm diameter not allowed.
5		Ingress of dust to the extent that would interfere with normal operation or safety not allowed.
6		Totally protected against ingress of dust.

JEM (Japan Electrical Manufacturers Association Standards) Standards (JEM 1030)

IP -			
	1	2	3

3. Protection Against Oil

Grade	Protection	Criteria
F	Oil proof	Protected against improper operation due to oil drops or spray from any direction.
G	Oil resistant	Protected against penetration of oil drops or spray from any direction.

NEMA (National Electrical Manufactures Association)

Conversion from NEMA to IEC529 (Reverse conversion is not possible.)

NEMA250	IEC60529
1	IP10
2	IP11
3	IP54
3R	IP14
3S	IP54

NEMA250	IEC60529
4, 4X	IP56
5	IP52
6, 6P	IP67
12, 12K	IP52
13	IP54

Note: Based on the Appendix A of the NEMA Standard. Classification of the NEMA enclosure rating differs from that of the IEC529 in corrosion resistance, rust resistance, and watertightness.

2. Protection Against Harmful Ingress of Water

Grade	Protection	Criteria	Examination method	
0	No particular protection	No protection again ingress of water.	No test	
1	Protection against water drops	Protected against vertically falling drops of water.	Spray water downwards in vertical direction for 10 minutes usng a water-dripping test device.	200 mm
2	Protection against water drops	Protected against vertically falling drops of water with enclosure tilted 15° from the vertical.	Tilt by 15° and spray water for 10 minutes (2.5 minutes in each direction) using a water-dripping test device.	15° 200 mm
3	Protection against water spray	Protected against sprays to 60° from the vertical.	Spray water up to 60° in both directions from the vertical axis for 10 minutes using the test device shown below.	Flow per water spray hole: 0.07 //min
4	Protection against water splashes	Protected against water splashed from all directions; limited ingress permitted.	Spray water from all directions for 10 minutes using the test device shown below.	Flow per water spray hole: 0.07 //min
5	Protection against water jets	Protected against adverse affect from low-pressure jets of water from all direction.	Spray water from all directions for one minute per m² of external surface area and for a total time of no less than 3 minutes using the test device shown below.	2.5 to 3 m 12.5 //min Discharging nozzle dia.: 6.3
6	Protection against water jets	Protected against ingress of water strong jets of water from all directions.	Spray water from all directions for one minute per m² of external surface area and for a total time of no less than 3 minutes using the test device shown below.	2.5 to 3 m 100 //min Discharging nozzle dia.: 12.5
7	Protection against immersion under water	Protected against the effects of im- mersion under water at the specified depth and for the specified period of time.	Submerge for 30 minutes at the depth of 1 m (if the device is 850 mm or less in height).	1 m
8	Protection against prolonged immersion under water	Protected against long periods of immersion under water.	Test according to the conditions agreed upon bet	ween the manufacturer and user.

Quality Management System (ISO9001) (July 2002)

Beyond simple product quality to a global enterprise-wide quality assurance system.

Quality Management System (ISO9001)

The Quality Management System (ISO9001) is an international standard for quality control and quality assurance established by the ISO (International Organization for Standardization). It sets forth the requirements for an enterprise-wide quality assurance system.

Quality Assurance Certification

For ISO9001 certification, considerations such as the structure of planning, design, and production, and the soundness of the quality assurance system are evaluated. An enterprise that conforms to the standards can receive a certificate of approval.



Internationally Accepted Standards

For overseas trade, including exports to EU markets, ISO9001 certification is internationally expected. Varying standards among countries complicate the smooth flow of products across borders, so ISO9001 is used to provide formal unified standards for participating EU countries.

Quality Assurance Considerations

One of OMRON's management principles is to maximize customer satisfaction.

Management Principles

- Maximizing Customer Satisfaction
 Maximizing customer satisfaction by offering superior products and services based on a Quality First approach.
- Constant Challenges
- Shareholder Confidence
- Respect for the Individual
- Good Corporate Citizenship
- Highly Ethical Enterprise Activities

These management principles determine the fundamental quality objectives as follows:

Fundamental Quality Objectives

- Achieving a level of quality that will provide customer satisfaction.
- Establishing a quality system based on ISO9001 and upgrading support.
- Maintaining quality assurance with the participation of all employees.

ISO9001 Certification Status

OMRON has been obtaining ISO9001 certification for all of its groups, and the following table shows the certification status. OMRON continues to put effort into a quality assurance system that will maintain its high standards of reliability worldwide.

Companies with ISO9001 Certification (Only Companies and Offices Related to Control Components Are Listed

Company/Office name	Date certified
OMRON CORPORATION IAB COMPANY FA Systems Div. H.Q. MISHIMA FACTORY	June 1994
OMRON CORPORATION IAB COMPANY Sensing Devices and Components Div. H.Q. AYABE FACTORY	December 1999
OMRON CORPORATION ECB COMPANY Electronic & Mechanical Components Division H.Q. Manufacturing Development Center	December 1992
OMRON CORPORATION AYABE FACTORY	October 1993
OMRON CORPORATION Automotive Electronic Components Division	March 2000
OMRON CORPORATION ECB COMPANY Semiconductor Division H.Q. MINAKUCHI FACTORY	April 1995
OMRON OKAYAMA CO.,LTD.	September 1994
OMRON ASO CO., LTD.	December 1994
OMRON TAKEO CO., LTD.	December 1993
OMRON IZUMO CO., LTD.	February 1994
OMRON KUMAMOTO CO., LTD.	April 1994
OMRON KURAYOSHI CO., LTD.	September 1993
OMRON SANYO CO., LTD.	July 1994
OMRON IIDA CO., LTD.	December 1995
OMRON ICHINOMIYA CO., LTD.	September 1993
OMRON (SHANGHAI) CO.,LTD. (CHINA)	December 1996
OTE ENGINEERING INC.	May 2000
OMRON MANUFACTURING OF THE NETHERLANDS B.V.	October 1993
OMRON ELECTRONICS MANUFACTURING OF GERMANY G.m.b.H.	December 1997
OMRON ELECTRONICS LTD. (UNITED KINGDOM)	October 1993
OMRON ELECTRONICS B.V. (NETHERLANDS)	January 1994
OMRON ELECTRONICS A.G. (SWITZERLAND)	April 2000
OMRON ELECTRONICS N.V./S.A. (BELGIUM)	September 1994
OMRON ELECTRONICS G.m.b.H. (GERMANY)	April 1996
OMRON EUROPE B.V. EUROPEAN LOGISTICS CENTER (NETHER- LANDS)	June 1994
OMRON ELECTRONICS Ges.m.b.H. (AUSTRIA)	February 1999
OMRON ELECTRONICS Lda./S.A. (PORTUGAL/SPAIN)	August 1996
OMRON ELECTRONICS S.r.I. (ITALY)	April 1996
OMRON ELECTRONICS O.Y. (FINLAND)	February 1996
OMRON ELECTRONICS S.a.r.I. (FRANCE)	April 2001
OMRON ELECTRONICS LTD. (UNITED KINGDOM)	October 1997
OMRON ELECTRONICS PTY.LTD. (AUSTRALIA)	July 1996
OMRON ELECTRONICS CO.,LTD. (THAILAND)	May 2000
SHANGHAI OMRON AUTOMATION SYSTEM CO.,LTD.	April 2000
OMRON MANUFACTURING OF AMERICA, INC.	January 1997
OMRON MALAYSIA SDN. BHD.	April 1994
PT OMRON MANUFACTURING OF INDONESIA	May 1994
SHANGHAI OMRON CONTROL COMPONENTS CO.,LTD.	January 2002
OMRON ELECTRONIC COMPONENTS LTD. (SHENZHEN)	January 2002
OMRON ELECTRONIC COMPONENTS LTD. (UNITED KINGDOM)	August 1992
OMRON AUTOMOTIVE ELECTRONICS KOREA, CO.,LTD.	December 1999
OMRON DUALTEC AUTOMOTIVE ELECTRONICS INC. (CANADA)	May 1997
OMRON AUTOMOTIVE ELECTRONICS, INC. (USA)	
UMBON AUTOMOTIVE ELECTRONICS, INC. (USA)	May 1997

Environmental Management System (ISO14001) (July 2002)

Configuring a system that constantly reduces environment impact by utilizing environmentally friendly products and business activities.

Environmental Management System (ISO14001)

In contrast to ISO9001, which relates to the Quality Management System, ISO14001 deals with requirements for the Environmental Management System for enterprises and groups. Obtaining ISO14001 certification aims at reducing environment impact throughout the entire organization, and takes into consideration factors such as compliance with laws and regulations, disposal of waste materials, and saving energy.

In addition, it requires a commitment to preventing pollution and to continually improving the Environmental Management System and performance (with reductions in environmental impact).



Obtaining ISO14001 certification is becoming a condition for participation in business internationally, somewhat like an global business passport.

Considerations in Technological Development

OMRON is putting effort into developing technology for reducing environmental impact under the headings of the 4 R's: Reject, Reduce, Reuse, and Recycle.

- Reject (Not using materials that involve legal regulations or health issues)
- Reduce (Reducing environmental impact)
- Reuse (Reusing products, parts, and wrapping materials)
- Recycle (Reusing recyclable materials)

Technology for Lead-free Products

Lead-free Solder

From the standpoint of reliability and mass production, lead-free solder materials using Sn-Ag-Cu or Sn-Cn with trace elements added have been selected.

Construction Technology

The lead-free soldering temperature is approximately 30 degrees higher than that of existing technology. Therefore, equipment with little temperature fluctuation has been installed for reflow and flow processing. For hand soldering, special soldering guns have been installed, and equipment process control standards and operational standards have been provided.

Lead-free Plating

Plating that ensures product functionality and performance has been selected from among the possible Sn-Cu, pure Sn, and Sn reflow materials for relay, switch and connector terminal plating based on soldering reliability, whisker-prevention, long-term connection reliability, and heat resistance.

Eco-product Recognition Standards

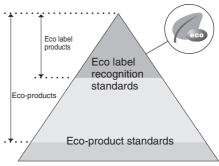
In 1998, OMRON established an eco-product recognition system conforming to ISO14021. That system has since been revised as described below.

- Eco-products up to 2001
 - Seventy-two products were recognized as eco-products under the following eco-label standards.
 - Products that reduced power consumption by 30% or more
 - Products that reduced resource consumption by 30% or more
 - Products that directly aimed at contributing to environmental considerations
- Eco-products from 2002 Onwards

Products that reduced environmental impact as much as possible at every stage of the product cycle, including planning, development, and design.

- Products Recognized with Eco Labels from 2002 Onwards
 - From among the eco-products, these are products that met the established recognition standards. The categories of recycling, reuse, and rejection of environmentally damaging materials were newly added to the existing eco label standards.

- Existing eco-products meet the eco label recognition standards.
- Relationship between Eco-products and Products Recognized with the Eco Label



Relationship between Eco-products and Products Recognized with the Eco Label

• OMRON's Eco Label



There are three types of eco labels: Type I, which is determined by third-party standards, such as Japan's Eco Mark or Germany's Blue Angel; Type II, which is a self-declared mark determined by OMRON's independent standards; and Type III, in which the environmental capacity is indicated in data sheets and other documents. OMRON's eco-product recognition system conforms to Type II.

OMRON Activities toward ISO14001 Certification

OMRON established a system in April 1995 to promote the ISO14000 Series. The following sites have been certified.

Companies with ISO14001 Certification (Only Sites Related to Control Components Are Listed)

Company/Office name	Certifica- tion or- ganizatio n	Date certified
OMRON CORPORATION MISHIMA FACTORY	BVQI	September 1997
OMRON CORPORATION AYABE FACTORY	BVQI	November 1996
OMRON CORPORATION MINAKUCHI FACTORY	BVQI	June 1997
OMRON IIDA CO., LTD.	JQA	October 1998
OMRON ICHINOMIYA CO., LTD.	BVQI	December 1996
OMRON TAKEO CO., LTD.	JACO	February 1998
OMRON SANYO CO., LTD.	JQA	January 1999
OMRON OKAYAMA CO., LTD.	BVQI	August 1997
OMRON IZUMO CO., LTD.	JACO	January 1998
OMRON ASO CO., LTD.	BVQI	September 1997
OMRON KURAYOSHI CO., LTD.	JACO	September 1997
OMRON KUMAMOTO CO., LTD.	JACO	August 1997
OMRON KYOTO TAIYO CO., LTD.	BVQI	March 1998
OMRON TAIYO CO., LTD.	BVQI	September 2000
SHANGHAI OMRON AUTOMATION SYSTEM CO.,LTD.	SCEMS	November 1998
OMRON MANUFACTURING OF THE NETHERLANDS B.V.	LRQA	November 1996
OMRON ELECTRONICS MANUFACTURING OF GERMANY G.m.b.H.	LRQA	April 1999
OMRON (SHANGHAI) CO.,LTD.	SCEMS	December 1998
OTE ENGINEERING INC.	SGS	February 1999
OMRON MANUFACTURING OF AMERICA, INC.	ΤÜV	May 1999
OMRON MALAYSIA SDN. BHD.	SIRIM	December 1998
PT OMRON MANUFACTURING OF INDONESIA	BVQI	August 1997
SHANGHAI OMRON CONTROL COMPONENTS CO.,LTD.	EIQA	February 1999
OMRON DUALTEC AUTOMOTIVE ELECTRONICS INC.	SGS	April 1999
OMRON AUTOMOTIVE ELECTRONICS, INC.	SGS	March 1999
OMRON AUTOMOTIVE ELECTRONICS KOREA, CO.,LTD.	KMA-QA	March 1999
OMRON ELECTRONICS COMPONENTS LTD.	BSI	February 1998