Equipped with the RUN output for checking the operation status, as well as the replacement notification function for easy maintenance.

Lineup of five models including the AC power supply (25W).

• Stable power supply is available from the CJ-series CPU Unit to each I/O Units via the dedicated bus. The most suitable Power Supply Unit can be selected among various I/O specifications and/or options.

Features

• The replacement notification function can prevent an overflow of the system due to the power lifetime. (CJ1W-PA205C only)
• Power Supply Unit provides wide variations according to the system scale up to maximum 25 W.
• Power Supply Unit provides wide variations according to the power supply (100 to 240 V AC/ 24 V DC) status.
• The output contact during operation enables you to check the CPU operation. (CJ1W-PA205R only)
• Conforming to the SEMI-F47 Standard. *

* AC input type, 200 V min. input.
# Ordering Information

## Power Supply Units

<table>
<thead>
<tr>
<th>Product name</th>
<th>Output capacity</th>
<th>Options</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Power Supply Unit</td>
<td>5 VDC</td>
<td>No</td>
<td>UC1, N, L, CE</td>
</tr>
<tr>
<td>24 VDC</td>
<td>25 W</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>DC Power Supply Unit</td>
<td>24 VDC</td>
<td>2 A</td>
<td></td>
</tr>
<tr>
<td>0.4 A</td>
<td>19.6 W</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

### Accessories

There is no accessory for the CJ series Power Supply Unit.

### International Standards

- The standards are abbreviated as follows: U: UL, U1: UL(Class I Division 2 Products for Hazardous Locations), C: CSA, UC: cULus, UC1: cULus (Class I Division 2 Products for Hazardous Locations), CU: cUL, N: NK, L: Lloyd, and CE: EC Directives.
- Contact your OMRON representative for further details and applicable conditions for these standards.
## Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
<th>CJ1W-PA205R</th>
<th>CJ1W-PA205C</th>
<th>CJ1W-PA202</th>
<th>CJ1W-PD025</th>
<th>CJ1W-PD022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power Supply Unit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Supply voltage</strong></td>
<td>100 to 240 V AC (wide-range), 50/60 Hz</td>
<td>100 to 240 V AC (wide-range), 50/60 Hz</td>
<td>100 to 240 V AC (wide-range), 50/60 Hz</td>
<td>100 to 240 V AC (wide-range), 50/60 Hz</td>
<td>100 to 240 V AC (wide-range), 50/60 Hz</td>
<td>100 to 240 V AC (wide-range), 50/60 Hz</td>
</tr>
<tr>
<td><strong>Operating voltage and frequency ranges</strong></td>
<td>85 to 264 V AC, 47 to 63 Hz</td>
<td>85 to 264 V AC, 47 to 63 Hz</td>
<td>85 to 264 V AC, 47 to 63 Hz</td>
<td>85 to 264 V AC, 47 to 63 Hz</td>
<td>85 to 264 V AC, 47 to 63 Hz</td>
<td>85 to 264 V AC, 47 to 63 Hz</td>
</tr>
<tr>
<td><strong>Power consumption</strong></td>
<td>100 VA max.</td>
<td>100 VA max.</td>
<td>100 VA max.</td>
<td>50 VA max.</td>
<td>50 W max.</td>
<td>35 W max.</td>
</tr>
<tr>
<td><strong>Inrush current</strong></td>
<td>At 100 to 120 V AC: 15 A/8 ms max. for cold start at room temperature</td>
<td>At 100 to 120 V AC: 20 A/8 ms max. for cold start at room temperature</td>
<td>At 200 to 240 V AC: 30 A/8 ms max. for cold start at room temperature</td>
<td>At 24 V DC: 30 A/20 ms max. for cold start at room temperature</td>
<td>At 24 V DC: 30 A/20 ms max. for cold start at room temperature</td>
<td>At 24 V DC: 30 A/20 ms max. for cold start at room temperature</td>
</tr>
<tr>
<td><strong>Output capacity</strong></td>
<td>5.0 A, 5 V DC (including supply to CPU Unit)</td>
<td>2.8 A, 5 V DC (including supply to CPU Unit)</td>
<td>2.8 A, 5 V DC (including supply to CPU Unit)</td>
<td>0.8 A, 24 V DC</td>
<td>0.8 A, 24 V DC</td>
<td>0.8 A, 24 V DC</td>
</tr>
<tr>
<td><strong>Output terminal (service supply)</strong></td>
<td>Not provided.</td>
<td>Not provided.</td>
<td>Not provided.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RUN output</strong></td>
<td>Contact configuration: SPST-NO Switch capacity: 250 V AC, 2 A (resistive load) 120 V AC, 0.5 A (inductive load), 24 V DC, 2A (resistive load) 24 V DC, 2 A (inductive load)</td>
<td>Not provided.</td>
<td>Not provided.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Replacement notification function</strong></td>
<td>Not provided.</td>
<td>With Alarm output (open-collector output) 30 V DC max., 50 mA max.</td>
<td>Not provided.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Insulation resistance</strong></td>
<td>20 MΩ min. (at 500 V DC) between AC external and GR terminals #3</td>
<td>20 MΩ min. (at 500 V DC) between AC external and GR terminals #3</td>
<td>20 MΩ min. (at 500 V DC) between AC external and GR terminals #3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dielectric strength</strong></td>
<td>2,300 V AC 50/60 Hz for 1 minute between AC external and GR terminals #3 Leakage current: 10 mA max.</td>
<td>2,300 V AC 50/60 Hz for 1 minute between AC external and GR terminals #3 Leakage current: 10 mA max.</td>
<td>2,300 V AC 50/60 Hz for 1 minute between AC external and GR terminals #3 Leakage current: 10 mA max.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Noise immunity</strong></td>
<td>2 kV on power supply line (conforming to IEC61000-4-4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vibration resistance</strong></td>
<td>Conforms to IEC60068-2-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shock resistance</strong></td>
<td>Conforms to IEC60068-2-27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ambient operating temperature</strong></td>
<td>0 to 55°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ambient operating humidity</strong></td>
<td>10% to 90% (with no condensation)</td>
<td>10% to 90% (with no condensation)</td>
<td>10% to 90% (with no condensation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Atmosphere</strong></td>
<td>Must be free from corrosive gases.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ambient storage temperature</strong></td>
<td>-20 to 70°C (excluding battery)</td>
<td>-20 to 75°C (See note 5.)</td>
<td>-20 to 75°C (excluding battery)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grounding</strong></td>
<td>Less than 100 Ω</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Enclosure</strong></td>
<td>Mounted in a panel.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>All models are each 5 kg max.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**1.** Disconnect the Power Supply Units LG terminal from the GR terminal when testing insulation and dielectric strength. Testing the insulation and dielectric strength with the LG terminal and the GR terminals connected will damage internal circuits in the CPU Unit.

**2.** Supported only when mounted to CPU Rack.

**3.** The inrush current is given for a cold start at room temperature. The inrush control circuit uses a thermistor element with a low-temperature current control characteristic. If the ambient temperature is high or the PLC is hot-started, the thermistor will not be sufficiently cool, and the inrush currents given in the table may be exceeded by up to twice the given values. When selecting fuses or breakers for external circuits, allow sufficient margin in shut-off performance.

**4.** Maintain an ambient storage temperature of $-25$ to $30^\circ C$ and relative humidity of 25% to 70% when storing the Unit for longer than 3 months to keep the replacement notification function in optimum working condition.

**5.** Change the applied voltage gradually using the adjuster on the Tester. If the full dielectric strength voltage is applied or turned OFF using the switch on the Tester, the generated impulse voltage may damage the Power Supply Unit.

**6.** CJ1W-PD022 is not insulated between the primary DC power and secondary DC power.

**7.** Internal components in the Power Supply Unit will deteriorate or be damaged if the Power Supply Unit is used for an extended period of time exceeding the power supply output capacity or if the outputs are shorted.

## External Interface

### CJ1W-PA205R

**POWER Indicator**
Lit when 5 V are being output from the Power Supply Unit.

### CJ1W-PA205C

**Terminals external connect**

**POWER indicator**
Lit: 5-V output from Power Supply Unit.

**TEST switch**
The TEST switch can be used to temporarily turn OFF the alarm output that notifies when replacement is needed.

**Alarm output**
(replacement notification output)
CJ1W-PA202

POWER Indicator
Lit when 5 V are being output from the Power Supply Unit.

External connection terminals

AC input

LG

GR

CJ1W-PD025

POWER Indicator
Lit when 5 V are being output from the Power Supply Unit.

External connection terminals

DC input

LG

GR

CJ1W-PD022

POWER Indicator
Lit when 5 V are being output from the Power Supply Unit.

External connection terminals

DC input

LG

GR
AC Input
Supply 100 to 240 V AC (allowable: 85 to 264 V AC). (Voltage selection is not required.)

DC Input
Supply 24 V DC.

<table>
<thead>
<tr>
<th>Model</th>
<th>Allowable power supply voltage fluctuation range</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJ1W-PD025</td>
<td>19.2 to 28.8 VDC (±20%)</td>
</tr>
<tr>
<td>CJ1W-PD022</td>
<td>21.6 to 26.4 VDC (±10%)</td>
</tr>
</tbody>
</table>

LG
Ground to a resistance of 100 Ω or less to increase noise resistance and avoid electric shock.

GR
Ground to a resistance of 100 Ω or less to avoid electric shock.

RUN Output (CJ1W-PA205R Only)
The internal contact turns ON when the CPU Unit is operating (RUN or MONITOR mode). The Power Supply Unit must be in the CPU Rack to use this output.

Alarm Output (CJ1W-PA205C Only)
The alarm output is used to notify when Power Supply Unit replacement is required. The output is normally ON. The output turns OFF when the time until replacement is 6 months or less.

Wiring

Wire
For AC/DC power supply

| Recommended wire size | AWG14 to 20 (0.517 to 2.08 mm²) |

For grounding wire

| Recommended wire size | 2 mm² min. |

For alarm output

<table>
<thead>
<tr>
<th>Recommended wire size</th>
<th>Use</th>
<th>Pushing strength (clamping operation)</th>
<th>Pulling strength (holding force)</th>
<th>Length of stripped section</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWG 22 to 18 (0.32 to 0.82 mm²)</td>
<td>Connecting to PLC terminal block models</td>
<td>30 N max.</td>
<td>30 N min.</td>
<td>7 to 10 mm</td>
</tr>
<tr>
<td>AWG 28 to 24 (0.08 to 0.2 mm²)</td>
<td>Connecting to PLC connector models</td>
<td>10 N min.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Crimp Terminals
The terminals on the Power Supply Unit are M4, self-raising terminals with screws. Use crimp terminals for wiring.

Crimp terminal for the AC power supply

Crimp terminal for the DC power supply

Crimp terminal for the grounding wire

The crimp terminal is not required for the alarm output.

Checking Current Consumption and Power Consumption

After selecting a Power Supply Unit based on considerations such as the power supply voltage, calculate the current and power requirements for each Rack.

Condition 1: Current Requirements
There are two voltage groups for internal power consumption: 5 V and 24 V.
Current consumption at 5 V (internal logic power supply)
Current consumption at 24 V (relay driving power supply)

Condition 2: Power Requirements
For each Rack, the upper limits are determined for the current and power that can be provided to the mounted Units. Design the system so that the total current consumption for all the mounted Units does not exceed the maximum total power or the maximum current supplied for the voltage groups shown in the following tables.

The maximum current and total power supplied for CPU Racks and Expansion Racks according to the Power Supply Unit model are shown below.

Note: 1. For CPU Racks, include the CPU Unit current and power consumption in the calculations. When expanding, also include the current and power consumption of the I/O Control Unit in the calculations.
2. For Expansion Racks, include the I/O Interface Unit current and power consumption in the calculations.

Conditions 1 and 2 below must be satisfied.

**Condition 1: Maximum Current**
1. Total Unit current consumption at 5 V ≤ (A) value
2. Total Unit current consumption at 24 V ≤ (B) value

**Condition 2: Maximum Power**
(1) × 5 V + (2) × 24 V ≤ (C) value
**Example: Calculating Total Current and Power Consumption**

**Example: When the Following Units are Mounted to a CJ-series CPU Rack Using a CJ1W-PA202 Power Supply Unit**

<table>
<thead>
<tr>
<th>Unit type</th>
<th>Model</th>
<th>Quantity</th>
<th>Voltage group</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Unit</td>
<td>CJ1G-CPU45H</td>
<td>1</td>
<td>5 V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24 V</td>
</tr>
<tr>
<td>I/O Control Unit</td>
<td>CJ1W-IC101</td>
<td>1</td>
<td>5 V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24 V</td>
</tr>
<tr>
<td>Basic I/O Units (Input Units)</td>
<td>CJ1W-ID211</td>
<td>2</td>
<td>5 V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24 V</td>
</tr>
<tr>
<td></td>
<td>CJ1W-ID231</td>
<td>2</td>
<td>5 V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24 V</td>
</tr>
<tr>
<td>Basic I/O Units (Output Units)</td>
<td>CJ1W-OC201</td>
<td>2</td>
<td>5 V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24 V</td>
</tr>
<tr>
<td>Special I/O Unit</td>
<td>CJ1W-DA041</td>
<td>1</td>
<td>5 V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24 V</td>
</tr>
<tr>
<td>CPU Bus Unit</td>
<td>CJ1W-CLK23</td>
<td>1</td>
<td>5 V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24 V</td>
</tr>
</tbody>
</table>

**Note:** For details on Unit current consumption, refer to Ordering Information.

**Using the CX-Programmer to Display Current Consumption and Width**

CPU Rack and Expansion Rack current consumption and width can be displayed by selecting Current Consumption and Width from the Options Menu in the CS/CJ/CP Table Window. (The width can be displayed for the CJ/CP Series only.) If the capacity of the Power Supply Unit is exceeded, it will be displayed in red characters. For details, refer to the CX-Programmer Operation Manual (Cat. No. W446).

**Example:**

<table>
<thead>
<tr>
<th>Power Supply Unit model</th>
<th>Current consumption at 5 V</th>
<th>Current consumption at 24 V</th>
<th>Total current consumption</th>
<th>Long-distance expansion</th>
<th>Width</th>
</tr>
</thead>
</table>

Total current consumption:

\[
0.910 + 0.020 + 0.080 \times 2 + 0.090 \times 2 + 0.120 + 0.350 + 0.048 \times 2
\]

Result:

\[
1.92 \text{ A} \leq 2.8 \text{ A}
\]

\[
0.096 \text{ A} \leq 0.4 \text{ A}
\]

Power consumption:

\[
1.92 \times 5 \text{ V} = 9.60 \text{ W}
\]

\[
0.096 \times 24 \text{ V} = 2.304 \text{ W}
\]

Result:

\[
9.60 + 2.304 = 11.904 \text{ W} \leq 14 \text{ W}
\]
CJ1W-PD025

CJ1W-PD022

Related Manuals

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Name</th>
<th>Contents</th>
</tr>
</thead>
</table>
Terms and Conditions of Sale

1. Offer; Acceptance. These terms and conditions (these "Terms") are deemed part of all quotes, agreements, purchase orders, acknowledgments, price lists, catalogs, manuals, brochures and stated in documents, whether electronic or in writing, relating to the sale of products or services (collectively, the "Products") by Omron Corporation and any direct or indirect subsidiaries, affiliates, exclusive distributors or other Omron Companies ("Omron"). These Terms shall supersede any terms or conditions proposed by Buyer to any terms or conditions proposed in Buyer's purchase order or other documents which are inconsistent with, or in addition to, these Terms.

2. Payment. Prices. Payment terms are stated on each invoice. All prices stated are current, subject to change without notice by Omron. Omron reserves the right to increase or decrease prices on any unshipped portions of outstanding orders. Payments for Products are due upon receipt of invoice by Buyer. Orders are not subject to rescheduling or cancellation by Buyer. Buyer shall have no right to set off any amounts under any agreement or otherwise. Omron shall not be liable for any delay or failure in delivery except as expressly provided herein.

3. Discounts. Cash discounts, if any, will apply only on the net amount of invoices sent to Buyer after deducting transportation charges, taxes and duties, and will be (i) the invoice is paid according to Omron's payment terms and (ii) Buyer has no past due amounts.

4. Interest. Omron, at its option, may charge Buyer 1-1/2% interest per month or any lesser interest rate permitted by law, from Buyer's account. All unpaid accounts will be subject to interest charges at a rate of 1-1/2% per month or such other rate permitted by law, from the date of invoice until paid.

5. Orders. Omron will accept no order less than $200 net billing.

6. Governmental Approvals. Buyer shall be responsible for, and shall bear all costs involved in, obtaining any government approvals required for the importation or export of the Products.

7. Taxes. All taxes, duties and other governmental charges (other than general real property and income taxes), including any interest or penalties thereon, imposed directly or indirectly on Omron or required to be collected directly or indirectly by Omron for the manufacture, production, sale, delivery, importation, consumption or use of the Products sold hereunder (including customs duties), sales and use taxes, and license taxes) shall be charged to and remitted by Buyer to Omron.

8. Financial. If the financial position of Buyer at any time becomes unsatisfactory to Omron or it determines in its sole discretion that Buyer does not have sufficient security or payment in advance, Omron shall have the right to (a) cancel any unshipped portion of Products sold hereunder and stop any Products in transit until Buyer pays all amounts payable to Omron by Buyer; and (b) require satisfactory security or payment in advance. If Buyer fails to make payment or otherwise comply with the terms of any related agreement, Omron may maintain a lien on all Products, (i) unless otherwise agreed in writing by Omron, and (ii) for a period of one year from the date of shipment of such Products, in its discretion, against the amount owing in respect of this invoice. (g) Definitions. "Keywords" mean Omron Corporation and any direct or indirect subsidiaries, affiliates, exclusive distributors or other Omron Companies.

9. Product. Buyer may not assign its rights hereunder without Omron's written consent. (c) Use. These Terms are governed by the law of the jurisdiction of the home office of the Omron company from which Omron sells Products and provisions or practices of Omron's Web site may be different. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases but the following is a non-exhaustive list of applications for which particular attention must be given:

10. Force Majeure. Omron will provide applicable third party certification documents identifying systems, machines and equipment that could present a risk to life or property. (i) Systems, machinery, acts of sabotage, riots, delay in or lack of transportation or the transportation company's own expense) shall indemnify and hold harmless Omron and defend or settle any action brought against such Companies to the extent based on a claim that any Product made to buy specifications infringed intellectual property rights of any third party.

11. Shipping, Delivery. Unless otherwise expressly agreed in writing by Omron:

a. Shipments shall be by a carrier selected by Omron; Omron will not drop ship except in "break down" situations.

b. Such carrier shall act as the agent of Buyer and delivery to such carrier shall constitute delivery to Buyer.

c. All sales and shipments of Products shall be FOB shipping point (unless otherwise stated in writing by Omron), at which point title and risk of loss shall pass from Omron to Buyer; provided that Omron shall retain a security interest in the Products until the full purchase price is paid.

d. Delivery and shipping dates are estimates only; and

e. Omron will package Products as it deems proper for protection against normal handling and extra charges apply to special conditions.

12. Claims. Any claim by Buyer against Omron for shortage or damage to the Products before delivery to the carrier must be presented in writing by Buyer to Omron within 30 days of receipt of shipment and include the original transportation bill signed by the carrier noting that the carrier received the Products in good condition.

13. Warranties. (a) Exclusive Warranty. Omron's exclusive warranty is that the Products delivered hereunder will conform to the specifications stated in the purchase order, (i) Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this document.

(b) Limitations. Omron MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS.

14. Limitation on Liability; Etc. Omron Companies shall not be liable for SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY. Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

15. Inspections. Buyer shall hold Omron Companies and their employees from and against all liabilities, losses, claims, costs and expenses (including attorneys' fees and expenses) for personal injury or property damage arising out of Omron's manufacture, production, sale, delivery, importation or use (whether such claim be based on warranty, litigation, litigation or proceeding (whether or not Omron is a party) which arises or is alleged to arise from Buyer's acts or omissions under these Terms or in any way connected with the Products, whether or not liability of Omron (at its own expense) shall indemnify and hold harmless Omron and defend or settle any action brought against such Companies to the extent based on a claim that any Product made to buy specifications infringed intellectual property rights of any third party.

16. Property; Confidentiality. Any intellectual property in the Products is the exclusive property of Omron Companies and Buyer shall not attempt to duplicate it in any way without the written permission of Omron. Notwithstanding any charges to Buyer for engineering or tooling, all engineering and tooling shall remain the exclusive property of Omron Companies. All information and materials supplied by Omron to Buyer relating to the Products are confidential and proprietary, and Buyer shall limit distribution thereof to its trusted employees and strictly prevent disclosure to any third party.

17. Export Controls. Buyer shall comply with all applicable laws, regulations and licenses regarding (i) export of products or information; (ii) sale of products to (v)" (or similar words) mean Omron Corporation and any direct or indirect subsidiary or affiliate thereof.

18. Miscellaneous. (a) Waiver. No failure or delay by Omron in exercising any right and no course of dealing between Buyer and Omron shall operate as a waiver of rights by Omron. (b) Assignment. Buyer may not assign its rights hereunder without Omron's written consent. (c) Use. These Terms are governed by the law of the jurisdiction of the home office of the Omron company from which Buyer is purchasing the Products (without regard to conflict of law principles). Between Buyer and Omron relating to the Products, and no provision may be changed or waived unless in writing signed by the parties. (c) Severability. If any provision of this Agreement is held to be invalid or unenforceable under any applicable law or is in conflict with any other agreement, such invalidity or unenforceability shall not affect the enforceability of any other provision. (d) Setoff. Buyer shall have no right to set off any amounts against any amounts owed by Omron to Buyer. If Buyer claims ownership of any Product, (iv) Systems, machinery, acts of sabotage, riots, delay in or lack of transportation or the transportation company's own expense) shall indemnify and hold harmless Omron and defend or settle any action brought against such Companies to the extent based on a claim that any Product made to buy specifications infringed intellectual property rights of any third party.

Certainly Precautions on Specifications and Use

1. Suitability of Use. Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product and the use or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying systems, machinery, acts of sabotage, riots, delay in or lack of transportation or the transportation company's own expense) shall indemnify and hold harmless Omron and defend or settle any action brought against such Companies to the extent based on a claim that any Product made to buy specifications infringed intellectual property rights of any third party.

2. Programmable Products. Omron Companies shall not be responsible for the unanticipated or unforeseen programming of a Product, or any consequence thereof.

3. Performance Data. Data presented in Omron Companies’ websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's testing, consumption or use of the Products sold hereunder (including customs duties, sales and use taxes, and license taxes) shall be charged to and remitted by Buyer to Omron.

4. Change in Specifications. Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our prac- tice to change part numbers, licenses, and other materials provided is a guide for the buyer in determining suitability and does not constitute a warranty. It may represent the result of Omron's testing, consumption or use of the Products sold hereunder (including customs duties, sales and use taxes, and license taxes) shall be charged to and remitted by Buyer to Omron.

5. Errors and Omissions. Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.