Slim Safety Door Switch

C33I-E-02

Slim Safety Door Switches with IP67 Rating

- Slim design with a width of only 17 mm (three-contact models).
- Reversible design allowing either front or rear mounting.
- Built-in Switches with two- or three-terminal contact construction are available.
- Operation Key with rubber mounting hole to absorb vibration and shock.
- IP67 degree of protection.
- Conforms to ISO 14119

Be sure to read the *"Safety Precautions"* on page 8.



Model Number Legend

Switch

D4GS-N

- 123
- 1. Built-in Switch
 - 1: 1NC/1NO (slow-action)
 - 2: 2NC (slow-action)3: 2NC/1NO (slow-action)
 - 4: 3NC (slow-action)
- 2. Direction of Operation Key Insertion R: Horizontal
 - T: Vertical
- 3. Cable Length Blank: 1 m 3: 3 m 5: 5 m
- 1 1. Operation Key Type

Operation Key

D4GS-NK

- 1: Horizontal mounting
- 2: Vertical mounting
- 4: Adjustable mounting (Vertical)

: Models with certified direct opening contacts.

Ordering Information

List of Models

Switches (Operation Keys are sold separately.)

Consult with your OMRON representative when ordering any models that are not listed in this table.

Appearance	Direction of Operation Key insertion	Cable length	1NC/1NO (Slow-action)	2NC (Slow-action)	2NC/1NO (Slow-action)	3NC (Slow-action)
	Horizontal	1 m	D4GS-N1R	D4GS-N2R	D4GS-N3R	D4GS-N4R
		3 m	D4GS-N1R-3	D4GS-N2R-3	D4GS-N3R-3	D4GS-N4R-3
		5 m	D4GS-N1R-5	D4GS-N2R-5	D4GS-N3R-5	D4GS-N4R-5
	Vertical	1 m	D4GS-N1T	D4GS-N2T	D4GS-N3T	D4GS-N4T
		3 m	D4GS-N1T-3	D4GS-N2T-3	D4GS-N3T-3	D4GS-N4T-3
		5 m	D4GS-N1T-5	D4GS-N2T-5	D4GS-N3T-5	D4GS-N4T-5

Operation Keys

Туре	Model	Туре	Model
Horizontal mounting	D4GS-NK1	Adjustable mounting (Vertical)	D4GS-NK4
Vertical mounting	D4GS-NK2		



Specifications

Standards and EC Directives

Conforms to the following EC Directives:

- Machinery Directive
- Low Voltage Directive
- EN ISO 14119
- EN60204-1
- GS-ET-15

Certified Standards

Certification body	Standard	File No.
TÜV SÜD	EN60947-5-1 (certified direct opening)	Consult your OMRON representative for details.
UL *	UL508 CSA C22.2 No. 14	E76675
CQC (CCC)	GB14048.5	2003010305064262

 $\ensuremath{\ast}$ Certification for CSA C22.2 No. 14 is authorized by the UL mark.

Certified Standard Ratings

TÜV (EN60947-5-1), CCC (GB14048.5)

Item	Utilization category	AC-15	DC-13
Rated operating current (le)		0.75 A	0.27 A
Rated or	perating voltage (U _e)	240 V	250 V

Note: Use a 10 A fuse type gI or gG that conforms to IEC60269 as a short-circuit protection device.

UL/CSA (UL508, CSA C22.2 No. 14)

C300

Rated voltage	Correcourrent	Curre	ent (A)	Volt-amperes (VA)	
	Carry current	Make	Break	Make	Break
120 VAC	2.5 A	15	1.5	1,800	180
240 VAC	2.5 A	7.5	0.75	1,000	

Q300

Rated voltage	Correct	Curre	nt (A)	Volt-amperes (VA)			
	Carry current	Make	Break	Make	Break		
125 VDC	2.5 A	0.55	0.55	60	69		
250 VDC	2.3 A	0.27	0.27	69			

Characteristics

	-				
Degree of protection	*1	IP67 (EN60947-5-1)			
Durability *2	Mechanical	1,000,000 operations min.			
Durability #2	Electrical	100,000 operations min. (1 A resistive load at 125 VAC) *3			
Operating speed		0.1 to 0.5 m/s			
Operating frequency		30 operations/minute max.			
Direct opening force	* 4	60 N min.			
Direct opening travel	* 4	10 mm min.			
Contact resistance		300 m Ω max. (with 1 m cable)			
Minimum applicable I	oad * 5	Resistive load of 4 mA at 24 VDC (N-level reference value)			
Rated insulation volta	age (Ui)	250 V			
Rated frequency		50/60 Hz			
Protection against ele	ectric shock	Class II (double insulation) (IEC60536)			
Pollution degree (operating environment)		3 (EN60947-5-1)			
	Between terminals of same polarity	2.5 kV			
Impulse withstand voltage	Between terminals of different polarity	4 kV			
(EN60947-5-1)	Between each terminal and non-current carrying metallic parts	6 KV			
Insulation resistance		100 M Ω min. (at 500 VDC) between terminals of the same polarities, between terminals of different polarities, and between each terminal and non-current carrying metal parts			
Contact gap		2 × 2 mm min.			
Vibration resistance	Malfunction	10 to 55 Hz, 0.35 mm single amplitude			
Shock resistance	Destruction	1,000 m/s ² min.			
Shock resistance	Malfunction	300 m/s ² min.			
Conditional short-cire	cuit current	100 A (EN60947-5-1)			
Conventional free air	thermal current (Ith)	2.5 A (EN60947-5-1)			
Ambient operating te	mperature	–30 to 70°C (with no icing)			
Ambient operating hu	ımidity	95% max.			
Cable		UL2464 No. 22 AWG, finishing O.D.: 7.2 mm			
Weight		Approx. 120 g (D4GS-N1R, with 1 m cable)			

Note: 1. The above values are initial values.

2. The Switch contacts can be used with either standard loads or microloads. Once the contacts have been used to switch a load, however, they cannot be used to switch smaller loads. The contact surfaces will become rough once they have been used and contact reliability for smaller loads may be reduced.

*1. The degree of protection shown above is based on the test method specified in EN60947-5-1. Be sure to confirm in advance the sealing performance under the actual operating environment and conditions.

Although the switch box is protected from dust, oil, or water penetration, do not use the D4GS-N in places where dust, oil, water, or chemicals may enter through the key hole on the head, otherwise Switch damage or malfunctioning may occur.

*2. The durability conditions are an ambient temperature of 5 to 35°C and an ambient humidity of 40% to 70%. For more details, consult your OMRON representative.

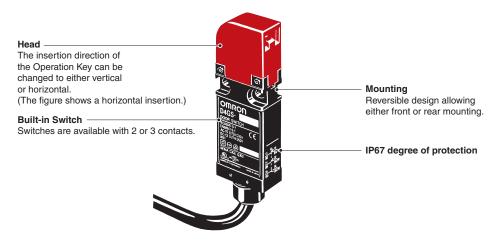
*3. When the ambient temperature is 35°C or higher, do not apply 1 A at 125 VAC to more than one circuit.

***4.** These figures are minimum requirements for safe operation.

***5.** The value given for minimum applicable load is a reference value for microloads. The value will vary depending on factors such as the switching frequency, the ambient environment, and the reliability level. Be sure to confirm correct operation with the actual load before application.

Structure and Nomenclature

Structure



Contact Form (Diagrams Show State with Key Inserted.)

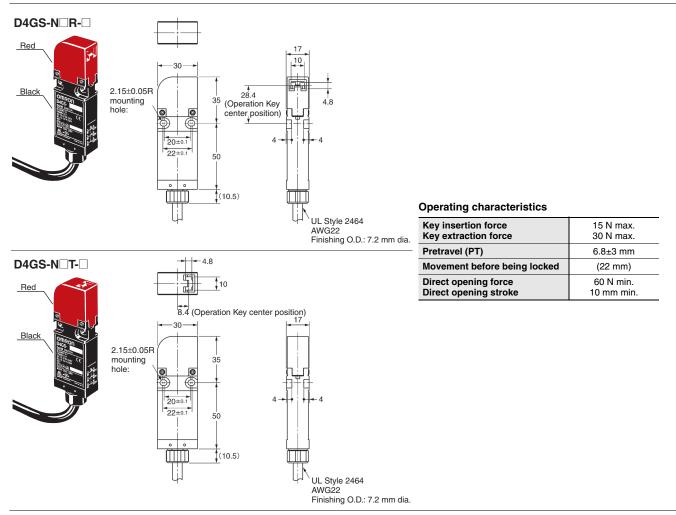
Model	Contact	Contact form	Operating pattern	Remarks
D4GS-N1□-□	1NC/1NO	11 12 33 34	11-12 33-34 Operation Key insertion completion position ON ON ON ON ON ON ON ON ON ON	Only NC contact 11-12 has a certified direct opening mechanism.
D4GS-N2□-□	2NC	11 12 31 32	11-12 31-32 Operation Key insertion completion position Stroke Operation Completion Stroke Completion Stroke Completion Stroke Completion Stroke Completion Stroke Completion Stroke Completion Stroke Completion Stroke Completion Stroke Stroke Completion Stroke Strok	NC contacts 11-12 and 31-32 have a certified direct opening mechanism. The terminals 11-12 and 31-32 can be used as unlike poles.
D4GS-N3⊡-□	2NC/1NO	11 12 21 22 33 34	11-12 21-22 33-34 Operation Key insertion completion position	Only NC contacts 11-12 and 21-22 have a certified direct opening mechanism. The terminals 11-12, 21-22 and 33-34 can be used as unlike poles.
D4GS-N4⊡-⊡	3NC	11 22 21 22 31 32	11-12 ON 21-22 ON 31-32 Stroke Operation Extraction Key insertion completion position position	NC contacts 11-12, 21-22 and 31-32 have a certified direct opening mechanism. The terminals 11-12, 21-22 and 31-32 can be used as unlike poles.

Note: The terminal numbers are according to EN50013, and the contact symbols are according to IEC 60947-5-1.

D4GS-N

Dimensions and Operating Characteristics

Switches

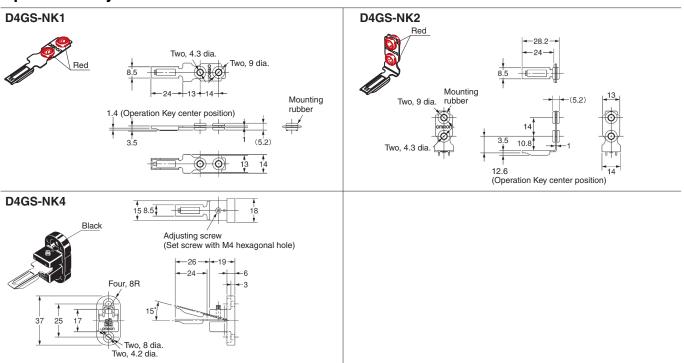


Note: 1. Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions. Dimensions in parentheses are reference values.
2. There are fluctuations in the contact ON/OFF timing for Switches with multiple poles (2NC, 2NC/1NO, or 3NC). Confirm performance before application.

(Unit: mm)

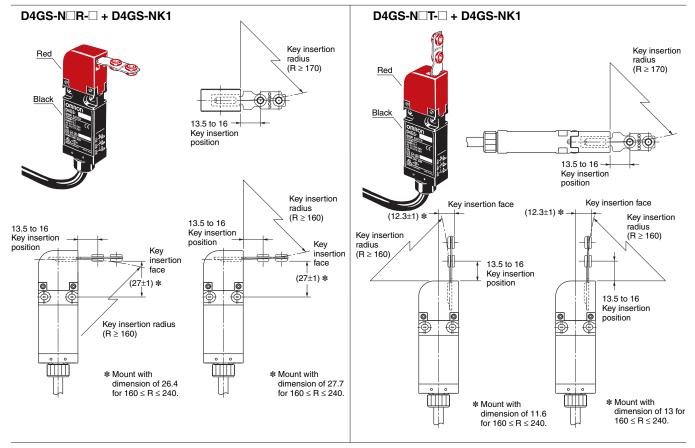
D4GS-N

Operation Keys



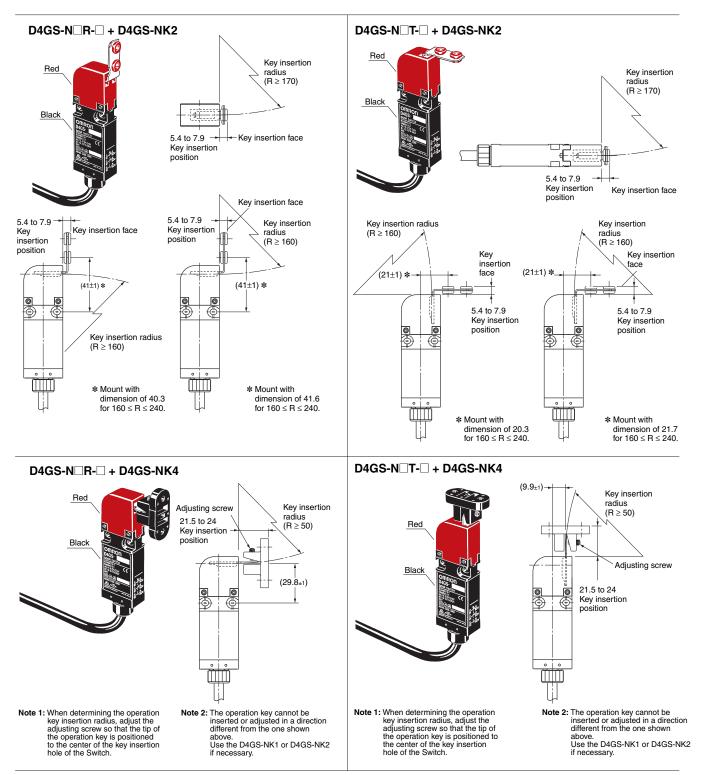
Note: Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions. Dimensions in parentheses are reference values.

With Operation Key Inserted



Note: Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions. Dimensions in parentheses are reference values.

D4GS-N



Note: Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions. Dimensions in parentheses are reference values.

Safety Precautions

Be sure to read the precautions for All Safety Door Switches in the website at:http://www.ia.omron.com/.

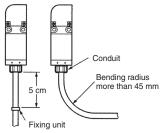
Precautions for Safe Use

Supplementary comments on what to do or avoid doing, to use the product safely.

- Do not use the Switch submersed in oil or water or in locations continuously subject to splashes of oil or water. Doing so may result in oil or water entering the Switch. (The IP67 degree of protection of the Switch specifies the amount of water penetration after the Switch is submerged in water for a certain period of time.)
- Although the Switch body is protected from the ingress of dust or water, the head is not protected. Do not allow foreign substance to enter through the head. Otherwise, accelerated wear or breaking may result.
- Do not switch circuits for two or more standard loads (125 VAC, 1 A). Doing so may adversely affect insulation performance.
- Do not use the D4GS-N Switch or D4GS-NK Operation Key (rubber color: red) in combination with the D4GS- Switch or D4GS-K Operation Key (rubber color: black).

Handling Cables

- Cables must not be bent repeatedly.
- A cable is fixed with sealing materials on the bottom of the D4GS-N. When excessive force may be imposed on the cable, fix the cable with a fixing unit at the distance of 5 cm from the bottom of the D4GS-N as shown.
- When bending the cable, secure the cable with more than 45 mm bending radius so as not to cause damage to the insulator or sheath of the cable. Otherwise, fire or electrical shock may result.



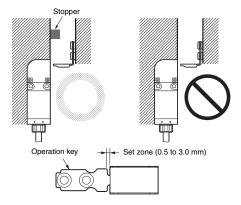
- Do not fasten or loosen the conduit at the bottom of the D4GS-N.
- When wiring, be sure not to allow a liquid such as water or oil into the tip of cable.

Stopper Installation

Do not use a Switch as a stopper.

Be sure to install a stopper as shown in the following illustration when mounting the Switch and adjust the stopper so that the Operation Key is within the setting zone.

Do not subject the Switch to a shock that exceeds the Switch's shock resistance of 1,000 $\mbox{m/s}^2.$



Precautions for Correct Use

Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction or undesirable effect on product performance.

The Switch contacts can be used with either standard loads or microloads. Once the contacts have been used to switch a load, however, they cannot be used to switch smaller loads. The contact surfaces will become rough once they have been used and contact reliability for smaller loads may be reduced.

Mounting Methods

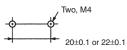
Appropriate Tightening Torque

• Loose screws may result in malfunction. Tighten the screws to the specified torques.

Туре	Torque	Size
Body mounting screw	0.75 to 1.15 N·m	M4 screw
Operation Key mounting screw	0.75 to 1.15 N⋅m	M4 screw

• Use the specified sizes of mounting screws flat or spring washers to mount the Switch and Operation Key, and tighten the screws to the proper tightening torque. To ensure safety, use screws that cannot be easily removed or another means to prevent the Switch and Operation Key from easily being removed.

Mounting Hole Dimensions for Switches



Mounting Hole Dimensions for Operation Keys



14+0 .

D4GS-NK4



Operation Key

 As shown below, mount the Operation Key after matching the concave surface of the Operation Key with the convex surface of the insertion face.



• Depending on the conditions in which the Switch is used, the rubber of the Operation Key may deteriorate. If the rubber becomes deformed or cracked, replace it as soon as possible.

Wiring

Identifying Wires

Identify wires according to the color (with or without white lines) of the insulation on the wire.



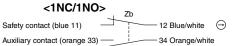
Core Insulator Colors

Blue/white, Brown/white, Orange/white, Orange, Brown, and Blue Example: Orange/white is an orange insulator with a white line.

Dummy insulator (black) External insulation sheath

Terminal Numbers

- Identify terminal numbers based on the color of the insulation on the wire.
- The safety and auxiliary contacts of D4GS-N models of three-terminal contact construction and those of two-terminal contact construction are described below. The following shows contact form with key inserted.
- The auxiliary contacts (orange) can be used as safety contacts.
- The safety contacts are direct opening contacts certified by EN and each of them is indicated with the mark (----).



<2NC>		Zb		
Safety contact (blue 11)		1	12 Blue/white	\ominus
Auxiliary contact (orange 31)	_i		⊜⊖
<2NC/1NC)> ˈ	Zb		
Safety contact (blue 11)		1	12 Blue/white	\ominus
Safety contact (brown 21)		+	22 Brown/white	\ominus
Auxiliary contact (orange 33) —	j	34 Orange/whit	e

<3NC>

	120	\sim
Safety contact (blue 11)	12 Blue/white	\ominus
	 ;	~
Safety contact (brown 21)	22 Brown/white	⇔
	4	-
Auxiliary contact (orange 31	1)	∍⊖

• Cut the black dummy insulator and all unused wires at the end of the external insulation sheath when wiring the cable.

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 other documents, whether electronic or in catalogs, manuals, brochures and other documents, whether electronic or in writing, relating to the sale of products or services (collectively, the "Products") by Omron Electronics LLC and its subsidiary companies ("Omron"). Omron objects to any terms or conditions proposed in Buyer's purchase order or other documents which are inconsistent with, or in addition to, these Terms. Prices: Payment Terms, 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 net 30 days unless otherwise stated in the invoice. 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 allowed only if (i) the invoice is paid according to Omron's payment terms and (ii) Buyer has no past due amounts.
- 2
- 3.
- and (ii) Buyer has no past due amounts. Interest. Omron, at its option, may charge Buyer 1-1/2% interest per month or the maximum legal rate, whichever is less, on any balance not paid within the stated terms.
- Orders. Omron will accept no order less than \$200 net billing. Governmental Approvals. Buyer shall be responsible for, and shall bear all 6 costs involved in, obtaining any government approvals required for the impor-tation or sale of the Products.
- 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 7. indirectly by Omron for the manufacture, production, sale, delivery, importa-tion, consumption or use of the Products sold hereunder (including customs duties and sales, excise, use, turnover and license taxes) shall be charged to and remitted by Buyer to Omron. <u>Financial.</u> If the financial position of Buyer at any time becomes unsatisfactory
- 8. <u>Einancial</u> If the financial position of Buyer at any time becomes unsatisfactory to Omron, Omron reserves the right to stop shipments or require satisfactory security or payment in advance. If Buyer fails to make payment or otherwise comply with these Terms or any related agreement, Omron may (without liabil-ity and in addition to other remedies) cancel any unshipped portion of Prod-ucts sold hereunder and stop any Products in transit until Buyer pays all amounts, including amounts payable hereunder, whether or not then due, which are owing to it by Buyer. Buyer shall in any event remain liable for all unpaid accounts unpaid accounts.
- <u>Cancellation</u>, <u>Etc.</u> Orders are not subject to rescheduling or cancellation unless Buyer indemnifies Omron against all related costs or expenses.
 <u>Force Majeure</u>. Omron shall not be liable for any delay or failure in delivery
- Force majeure. Other shall not be lable for any delay or lating in delivery resulting from causes beyond its control, including earthquakes, fires, floods, strikes or other labor disputes, shortage of labor or materials, accidents to machinery, acts of sabotage, riots, delay in or lack of transportation or the requirements of any government authority.
 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 expert in "break down" situations.
- 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 oth-
- 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. <u>Claims</u>. Any claim by Buyer against Omron for shortage or damage to the Products occurring before delivery to the carrier must be presented in writing to Omron within 30 days of receipt of shipment and include the original transportation bill signed by the carrier received the Products
- portation bill signed by the carrier noting that the carrier received the Products from Omron in the condition claimed.
- <u>Warranties</u>. (a) <u>Exclusive Warranty</u>. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed 13 (b) <u>Limitations</u>. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABIL-

Certain Precautions on Specifications and Use

- Suitability of Use. Omron Companies shall not be responsible for conformity 1. with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request. Omron will provide application of use of the Froduct. At Buyer's application of use of the product applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Prod-uct in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. the particular Product with respect to Buyers 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: (i) Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this document. (ii) Use in consumer products or any use in significant quantities. (iii) Energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equip-ment and installicitors cubications of the consumer to construct the construction.

inent, and installations subject to separate industry or government regulations. (iv) Systems, machines and equipment that could present a risk to life or prop erty. Please know and observe all prohibitions of use applicable to this Prod-

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO

ITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or oth-erwise of any intellectual property right. (c) <u>Buyer Remedy</u>. Omron's sole obli-gation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsi-ble for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were prop-erly handled, stored, installed and maintained and not subject to contamina-tion, abuse, misuse or inappropriate modification. Return of any Products by tion, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Compa-nies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty. See http://www.omron247.com or contact your Omron representative for published information.

- Iished information.
 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. 14
- Indemnities. Buyer shall indemnify and hold harmless Omron Companies and their employees from and against all liabilities, losses, claims, costs and expenses (including attorney's fees and expenses) related to any claim, inves-tigation, litigation or proceeding (whether or not Omron is a party) which arises 15 or is alleged to arise from Buyer's acts or omissions under these Terms or in any way with respect to the Products. Without limiting the foregoing, Buyer (at its own expense) shall indemnify and hold harmless Omron and defend or set-tle any action brought against such Companies to the extent based on a claim that any Product made to Buyer specifications infringed intellectual property rights of another party.
- rights of another party. <u>Property: Confidentiality.</u> Any intellectual property in the Products is the exclu-sive 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. 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 provent disclosure to any third party. 16
- 17
- "forbidden" or other proscribed persons; and (ii) disclosure to non-citizens of regulated technology or information. <u>Miscellaneous</u>. (a) <u>Waiver</u>. 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) <u>Assignment</u>. Buyer may not assign its rights hereunder without Omron's written consent. (c) <u>Law</u>. 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). (d) <u>Amendment</u>. These Terms constitute the entire agreement between Buyer and Omron relating to the Products, and no provision may be changed or waived unless in writing signed by the parties. (e) Severability. If any provi-18 or waived unless in writing signed by the parties. (e) <u>Severability</u>. If any provision hereof is rendered ineffective or invalid, such provision shall not invalidate any other provision. (f) Setoff, Buyer shall have no right to set off any amounts against the amount owing in respect of this invoice. (g) <u>Definitions</u>. As used herein, "<u>including</u>" means "including without limitation"; and "<u>Omron Compa-</u> nies" (or similar words) mean Omron Corporation and any direct or indirect subsidiary or affiliate thereof.

ADDRESS THE RISKS, AND THAT THE OMRON'S PRODUCT IS PROP-ERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

- Programmable Products. Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof. <u>Performance Data</u>. Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitabil-ity and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application require-2 3 ments. Actual performance is subject to the Omron's Warranty and Limitations of Liability.
- Change in Specifications. Product specifications and accessories may be 4 Change in specifications. Product specifications and accessions may be changed at any time based on improvements and other reasons. It is our prac-tice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifica-tions of the Product may be changed without any notice. When in doubt, spe-cial part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual creating of purphased Product to confirm actual specifications of purchased Product. Errors and Omissions. Information presented by Omron Companies has been
- 5 checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.



OMRON AUTOMATION AND SAFETY • THE AMERICAS HEADQUARTERS • Chicago, IL USA • 847.843.7900 • 800.556.6766 • www.omron247.com

OMRON CANADA, INC. • HEAD OFFICE Toronto, ON, Canada • 416.286.6465 • 866.986.6766 • www.omron247.com

OMRON ELECTRONICS DE MEXICO • HEAD OFFICE México DF • 52.55.59.01.43.00 • 01-800-226-6766 • mela@omron.com

OMRON ELECTRONICS DE MEXICO • SALES OFFICE Apodaca, N.L. • 52.81.11.56.99.20 • 01-800-226-6766 • mela@omron.com

OMRON ELETRÔNICA DO BRASIL LTDA • HEAD OFFICE São Paulo, SP, Brasil • 55.11.2101.6300 • www.omron.com.br OMRON ARGENTINA • SALES OFFICE Cono Sur • 54.11.4783.5300

OMRON CHILE • SALES OFFICE Santiago • 56.9.9917.3920

OTHER OMRON LATIN AMERICA SALES 54.11.4783.5300

OMRON EUROPE B.V. • Wegalaan 67-69, NL-2132 JD, Hoofddorp, The Netherlands. • +31 (0) 23 568 13 00 • www.industrial.omron.eu

Authorized Distributor:

Automation Control Systems

- Machine Automation Controllers (MAC)
 Programmable Controllers (PLC)
- Operator interfaces (HMI)
 Distributed I/O
 Software

Drives & Motion Controls

Servo & AC Drives
 Motion Controllers & Encoders

Temperature & Process Controllers

Single and Multi-loop Controllers

Sensors & Vision

- Proximity Sensors
 Photoelectric Sensors
 Fiber-Optic Sensors
- Amplified Photomicrosensors
 Measurement Sensors
- Ultrasonic Sensors
 Vision Sensors

Industrial Components

- RFID/Code Readers
 Relays
 Pushbuttons
 Indicators
- Limit and Basic Switches
 Timers
 Counters
 Metering Devices
- Power Supplies

Safety

• Laser Scanners • Safety Mats • Edges and Bumpers • Programmable Safety Controllers • Light Curtains • Safety Relays • Safety Interlock Switches