

CL1Y4-R1B1 CC-Link/LT Remote I/O Module

Please read this manual thoroughly before starting to use the product and handle the product property

User's Manual

CC-Link/LT MODEL CL1Y4-R1B1 MANUAL Number JY997D05501E Date September 2008

●SAFETY PRECAUTIONS●

(Read these precautions before using) Please read this manual carefully and pay special attention to safely in order to handle this product property. Also pay careful attention to safely and handle

the module properly. These precautions apply only to Mitsubishi equipment. Refer to the user's manual of the CPU module to use for a description of the PLC system safety.

precautions. These SAFETY PRECAUTIONS classify the safety precautions into two

categories: "DANGER" and "CAUTION".

Procedures which may lead to a dangerous condition

DANGER

CAUTION Procedures which may lead to a dangerous condition and cause superficial to medium injury, or physical damage only, if not carried out properly.

Depending on circumstances, procedures indicated by ACAUTION may also be linked to serious results.

In any case, it is important to follow the directions for usage. Store this manual in a safe place so that you can take it out and read it whenever necessary. Always forward it to the end user.

IDESIGN PRECAUTIONS

DANGER

 Configure an interlock circuit in a sequence program so that the system operates on the safety side using the communication status information in the event the data link falls into a communication problem. Otherwise, erroneous output and malfunction may result in accidents.

 Remote input and output can not be switched ON or OFF when a problem occurs in the remote I/O modules. Therefore build an external monitoring circuit that will monitor any input signals that could cause a serious accident.

ACAUTION

 Do not have control cables and communication cables bundled with or placed near by the main circuit and/or power cables. Wire those cables at least 100mm(3.94 inch) away from the main circuit and/or power cables. It may cause malfunction due to noise interference.

 Use the module and the flat cable dedicated to CC-Link/LT without applying any force on them.

Otherwise, such cables may be broken or fail

[INSTALLATION PRECAUTIONS]

 Use the module in an environment that meets the general specifications contained in this manual. Using this module in an environment outside the range of the general specifications could result in electric shock, fire, erroneous operation, and damage to or deterioration of the product.

- Do not directly touch the module's conductive parts.Doing so could cause malfunction or trouble in the module.
- Tighten the module securely using DIN rail or installation screws within the specified torque range.
- If the screws are too lose, the module may drop from its installation position, short circuit, or malfunction. If the screws are too tight, the screws may be damaged, which may cause the module to drop from its installation position or short circuit.
- Install the module on a flat surface.
- If the mounting surface has concave and/or convex, an excessive force may be applied on the module, and nonconformity may be caused.

[WIRING PRECAUTIONS]

DANGER
 Perform installation and wiring after disconnecting the power supply at all phases externally. If the power is not disconnected at all phases an electric shock or product damage may result.

Terminal screws which are not to be used must be tightened always. Otherwise there will be a danger of short circuit against the bare solderless terminals.

 Do not perform wiring to an idle terminal "NC" outside the product. The product may be damaged by such external wiring.

Perform correct wiring for the module according to the product's rated voltage and terminal arrangement. Connecting to a power supply different from rating or miss-wiring may cause fire, product failure or malfunction.

Fix terminal screws securely within the regulated torque. Loose terminal screws may cause fire and/or malfunction.

operation due to damage of the screws.

Make sure foreign objects do not get inside the module, such as dirt and wire chips. It may cause fire, product failure or malfunction. Attach a warning label (hazard symbol 417-1EC-5036) concerning the electric.

Shock to the location.

DANGER

Do not touch the terminals when the power is ON. It may cause an electric shock or malfunction.
 Perform elevation and the module or retichtoning of terminal proves after turning.

 Perform cleaning the module or retightening of terminal screws after turning OFF the all external power supply for sure. Failure to do so may cause failure or malfunction of the modules

Do not disassemble or modify the module. Doing so may cause failure, malfunction, injury, or fire.

 The module case is made of resin; do not drop it or subject it to strong shock. A module damage may result.
 Make sure to switch all obases of the external power supply OFF before

installing or removing the module to/from the panel. Failure to do so may cause failure or malfunction of the modules.

[DISPOSAL PRECAUTIONS]

When disposing of this product, treat it as industrial waste.

When disposing of this product, treat it as industrial waste.
 ITRANSPORTATION AND MAINTENANCE PRECAUTIONS1

CAUTION
During transportation avoid any impact as the module is a precision
instrument. Doing so could cause trouble in the module.
If is necessary to check the operation of module after transportation, in case
of any impact damage.

Jamaye.

Ontification of CE marking
This notification does not guarantee that an entire mechanical module produced in accordance with the contents of the notification comply with the following standards. Compliance to EMC standards of the entire mechanical module should be checked by the user / manufacturer. Compliance to LVD standards of the entire mechanical module should be checked by the user / manufacturer.

Standards with which this product complies

Type : Programmable Controller (Open Type Equipment) Remote I/O module Models : Products manufactured:

from February 1st, 2003 to April 30th, 2006 are compliant with EN61000-6-4 and EN61131-2:1994+A11:1996+A12:2000 after May 1st, 2006 are compliant with EN61131-2:2003

Electromagnetic Compatibility Standards (EMC)	Remark
EN61000-6-4:2001 Electromagnetic compatibility -Generic standards - Emission standard for Industrial environment	Compliance with all relevant aspects of the standard. (Radiated Emissions and Mains Terminal Voltage Emissions)
EN61131-2:1994/A11:1996/A12:2000 Programmable controllers -Equipment requirements and tests	Compliance with all relevant aspects of the standard. (RF Immunity, Fast transients, ESD and Damped oscillatory wave)
EN61131-2: 2003 Programmable controllers -Equipment requirements and tests	Compliance with all relevant aspects of the standard. (Radiated Emissions, Mains Terminal Voltage Emissions, RF immunity, Fast Transients, ESD, Surge, Voltage drops and interruptions, Conducted and Power magnetic fields)

Low Voltage Standards (LVD)	Remark
EN61131-2:1994/A11:1996 /A12:2000 :2003 Programmable controllers	The equipment has been assessed as a component for fitting in a suitable enclosure which meets the requirements of EN61131-2:1994 + 411:1996 + 412:2000 -2003

-Equipment requirements and tests A11:1996 + A12:2000, :2003 For more details please contact the local Mitsubishi Electric sales site. Notes Enc compliance to EMCI U/D regulation

It is necessary to install the CL1 series module in a shielded metal control panel. 1. Outline of Product

Outline of Product This product is a terminal block type

This product is a terminal block type output module connected to CC-Link/LT. This product has four output points (relay output).



2. Name and Setting of Each Part and Terminal Arrangement



Orange colo		no ne	/ 110	1.10	10	1	1.2	10		
Name	Description									
	PW	ON w	hile th	e pov	ver is	suppl	ied.			
	L RUN	ON w	hile n	ormal	opera	ation i	s exe	cuted		
tatus indicator ED	L ERR	Flicke When while flicker becom then C Flicke When modu	tting a ring a the s the po ing, th nes va DN ag ring a a terr le or a	error o t a co etting ower v alid wh alid wh a	occurr nstan of the vas si eration hen th ermitt resist	red t inter a DIP upplie n cont ne pov tent in cor is r	rval: switc d (eve tinues wer is nterva not at	h was en wh . The turne l: tache	d or w	ged a LED is setting F once, when the
Output operation Indicator LEDs	ON while the output is ON. Extinguished while the output is OFF. Output operation indicator									
nterface	Connector for CC-Link/LT communication line/module power supply (24G/DB/DA/+24V)									
erminal block or I/O interface	Terminal block to connect output signals and load power supply									
IP switch	Set the 10's digit of the station No. using "STATION NO. 10", "STATION NO. 20" and "STATION NO. 40", Set the 1's digit of the station No. using "STATION NO. 4", "STATION NO. 2", "STATION NO. 4" and "STATION NO. 1", "STATION NO. 2", "STATION NO. 4" and "STATION NO. 8". Factory default = All bits are OFF. Make sure to set the station No. in the range from 1 to 64. If any station No. outside the range from 1 to 64 is set, it is regarded as an error and the L ERR. LED lights. Example: When setting the station No. to "32", set the DIP switch as follows. Station 10's digit No. 40 No. 40 No. 40				digit of 2", 64.					
		110.	40	20	10	0	4	2		1

32 OFF ON ON OFF OFF ON OFF

Name		Description
DIP switch	HLD	Holds the output (when an error has occurred). ON: Holds the output. OFF: Clears the output.

3. Installation

The CL1Y4-R1B1 can be installed to DIN rail or directly installed using mounting screws.

Each installation procedure is described below.

3.1 Installation to DIN rail

Align the upper DIN rail installation groove in the module with the DIN rail 1), and press the module in that status 2).

When removing the module, pull the hook downward for installation to DIN rail 3), then remove the module 4).

DIN rail mounting screw pitch

When installing the module to the DIN rail, tighten the mounting screws at the pitch of 200mm(7.87") or less.



Applicable DIN fall 1835-7.5Fe and 18

3.2 Direct installation

Screw-tighten the module by attaching M4 screws to the upper and lower mounting holes (two holes in all) provided in the module. Install the module so that the clearance of 1 to 2mm (0.04" to 0.08") is assured for each module.

Applicable screw (Tightening torque range: 78 to 108 N-cm)

4. Wiring

4.1 External wiring

The output terminals of the CL1Y4-R1B1 can be used with either AC or DC load voltage.



Wire nothing to the NC terminal (idle terminal).

4.2 Crimp-style terminal

For I/O wiring, use crimp-style terminals of the following dimensions.



Applicable wire size 0.3 to 1.25 mm²

Use a crimp-style terminal in a status in which no force is applied on the cable

4.3 Module terminal screw

Tighten the terminal screws (M3 screws) on the terminal block with a tightening torque of 42 to 58 N·cm.

5. Specifications

5.1 General specifications

Item		s	pecification	1		
Operating ambient temperature	0 to 55°C (32 to 131°F)					
Storage ambient temperature	-25 to 75°C (-25 to 75°C (-13 to 167°F)				
Operating ambient humidity	5 to 95%RH:	5 to 95%RH: Dew condensation shall not be considered.				
Storage ambient humidity	5 to 95%RH:	5 to 95%RH: Dew condensation shall not be considered.				
	When interm	When intermittent vibration is present Number sweep				
	Frequency	Acceleration	Half amplitude			
	10 to 57Hz	-	0.075mm			
Vibration resistance	57 to 150Hz	9.8m/s ²	-	10 times in each of		
	When contin	uous vibratio	X, Y and Z directions			
	Frequency	Acceleration	Half amplitude	(for 80 min)		
	10 to 57Hz	-	0.035mm			
	57 to 150Hz	4.9m/s ²	-			
Shock resistance	147 m/s ² , 3 times in each of X, Y and Z directions					
Operating ambience	Corrosive gas shall not be present.					
Operating altitude	2,000m(6561'8") or less (*1)					
Installation location	Inside control panel (*2)					
Overvoltage category	II or less (*3)					
Pollution level	2 or less (*4)	2 or less (*4)				

Itom Specification 20.4 to 28.8V DC (24V DC -15% to +20%) Voltage Bipple ratio: Within 5% Current 65mA (when all points are ON) Module consumption nowor Initial current 70m A . supply Max, allowable nomentary power PS1.1ms failure period Number of stations 4-, 8- or 16-point mode: 1 station occupied DC type: 500 Vp-p AC type: 1.000 Vp-p Noise durability Noise width: 1 us Cycle: 25 to 60 Hz (by noise simulator) AC type: 1.500V AC for 1 min Withstand voltage DC type: 500V DC for 1 min 10 MΩ or more between primary area (external DC terminal) and secondary area (internal circuit) by Isolation resistance 500V DC megger Protection grade IP1X

Connection with terminal block

Can be installed in six directions

0.11kg (0.24lbs)

100 000 times or more

100.000 times or more

DIN rail installation, mounted by screws of type

200V AC - 1.5 A. 240V AC - 1 A (COSo = 0.7);

200V AC - 1 A. 240V AC - 0.1 A (COSo = 0.35);

24V DC - 1 A, 100V DC - 0.1 A (L/R = 7 ms):

 $M4 \times 0.7$ mm(0.03") $\times 16$ mm(0.63") or larger

100,000 times or more

5.3 Performance specifications



I/O area connection

Module installation

method

method

Mass (weight)

Contact life





This manual confers no industrial property rights or any rights of any other kind, no does it confer any patent licenses. Mitsubishi Electric Corporation cannot be held responsible for any problems involving industrial property rights which may occur a a result of using the contents noted in this manual

Warranty

22(0.87")

Unit: mm(inches)

Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi: machine damage or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

A For safe use

- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi.
- · This product has been manufactured under strict quality control. However when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

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When exported from Japan, this manual does not require Trade and Industry for service transaction permission.	application to the Ministry of Economy,
	Specifications subject to change without notice.

Notes

- *1 The module cannot be used in an environment pressurized above the atmospheric pressure which can be generated around the altitude of 0 m. If the module is used in such an environment, it may fail.
- *2 The module can be used in any environment even outside the control panel as far as the requirements of the ambient operating temperature, the ambient operating humidity, etc. are satisfied.
- *3 This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution network and the machinery within premises. Category II applies to equipment for which electrical power is supplied from fixed facilities. The surge voltage withstand level for up to the rated voltage of 300V is 2500V.
- *4 This index indicates the degree of conductive generating substances in the environment in which the module is used. The degree of contamination 2 indicates that contamination is caused by generation of only non-conductive substances

In this degree, however, temporary conduction may be caused by accidental condensation.

5.2 Output specifications

Item		Specification
Output method		Relay output
Number of outp	outs	4 points
Insulation meth	od	Mechanical insulation
Rated load voltage		250V AC/30V DC or less
Max. load current		2A/point 2A/1common
Response	OFF→ON	Approx. 10ms or less
time	$ON \rightarrow OFF$	Approx. 10ms or less
Common wiring method		1point/1common (Mutually exclusive outputs) (terminal block one-wire type)
Internal protection for outputs		Internal protection circuit none Please connect the fuse in the connected load outside.



CL1Y4-R1B1

CC-Link/LT Remote I/O Module

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User's Manual



•SAFETY PRECAUTIONS•

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categories. DANGE	H and CAUTION .
DANGER	Procedures which may lead to a dangerous condition and cause death or serious injury if not carried out properly.

CAUTION Procedures which may lead to a dangerous condition and cause superficial to medium injury, or physical damage only, if not carried out properly.

Depending on circumstances, procedures indicated by ACAUTION may also be linked to serious results. In any case, it is important to follow the directions for usage. Store this manual in a safe place so that you can take it out and read it whenever necessary. Always forward it to the end user.

DANGER Configure an interlock circuit in a sequence program so that the system operates on the safety side using the communication status information in the event the data link falls into a communication problem. Otherwise, erroneous output and malfunction may result in accidents. Remote input and output can not be switched ON or OFF when a problem occurs in the remote I/O modules. Therefore build an external monitoring circuit that will monitor any input signals that could cause a serious accident.

Do not have control cables and communication cables bundled with or placed near by the main circuit and/or power cables. Wire those cables at least 100mm(3.94 inch) away from the main circuit and/or power cables. It may cause malfunction due to noise interference. Use the module and the flat cable dedicated to CC-Link/LT without applying any force on them. Otherwise, such cables may be broken or fail.

[INSTALLATION PRECAUTIONS]

[DESIGN PRECAUTIONS]

Use the module in an environment that meets the general specifications contained in this manual. Using this module in an environment outside the range of the general specifications could result in electric shock, fire, erroneous operation, and damage to or deterioration of the product. Do not directly touch the module's conductive parts. Doing so could cause malfunction or trouble in the module.

- Tighten the module securely using DIN rail or installation screws within
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Install the poolle on a flat surface. If the mounting surface has concave and/or convex, an excessive force may be applied on the module, and nonconformity may be caused.

WIRING PRECAUTIONS **DANGER** Perform installation and wiring after disconnecting the power supply at all phases externally. If the power is not disconnected at all phases an electric shock or product damage may result. **≜**CAUTION Terminal screws which are not to be used must be tightened always. Otherwise there will be a danger of short circuit against the bare solderless terminals. Do not perform wiring to an idle terminal "NC" outside the product. The product may be damaged by such external wiring.
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Fix terminal screws securely within the regulated torque. Loose terminal screws excurely within the regulated torque. Loose terminal screws excurely within the regulated torque. Loose terminal screws may cause fire and/or malfunction.
If the terminal screws are too tight, it may cause short circuit or erroneous operation due to damage of the screws.
Make sure foreign objects do not get inside the module, such as dirt and wire chips. It may cause fire, product failure or malfunction.
Attach a warning label (hazard symbol 417-IEC-5036) concerning the electric shock to the location. Do not perform wiring to an idle terminal "NC" outside the product. [STARTING AND MAINTENANCE PRECAUTIONS] DANGER Do not touch the terminals when the power is ON. It may cause an electric shock or malfunction. Perform cleaning the module or retightening of terminal screws after turning OFF the all external power supply for sure. Failure to do so may cause failure or malfunction of the modules Do not disassemble or modify the module. Doing so may cause failure, malfunction, injury, or fire. The module case is made of resin; do not drop it or subject it to strong shock A module damage may result. Make sure to switch all phases of the external power supply OFF before installing or removing the module to/from the panel. Failure to do so may cause failure or malfunction of the modules. [DISPOSAL PRECAUTIONS] DANGER · When disposing of this product, treat it as industrial waste [TRANSPORTATION AND MAINTENANCE PRECAUTIONS]

During transportation avoid any impact as the module is a precision instrument. Doing so could cause trouble in the module. If is necessary to check the operation of module after transportation, in case of any impact domace. of any impact damage.

●Notification of CE marking● This notification does not guarantee that an entire mechanical module produced in accordance with the contents of the notification comply with the following standards. Compliance to EMC standards of the entire mechanical module should be checked by the user / manufacturer. Compliance to LVD standards of the entire mechanical module should be checked by the user / manufacturer. Standards with which this product complies

Type : Programmable Controller (Open Type Equipment) Remote I/O module Models : Products manufactured:

(EMC)	
EN61000-6-4:2001 Electromagnetic compatibility -Generic standards - Emission standard for Industrial environment	Compliance with all relevant aspects of the standard. (Radiated Emissions and Mains Terminal Voltage Emissions)
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5. Specifications

Low Voltage Standards (LVD) Remark The equipment has been assessed as a component for fitting in a suitable enclosure which meets the requirements of EN&1131-2:1994 + A11:1996 + A12:2000, :2003 EN61131-2:1994/A11:1996 /A12:2000 rogrammable controllers -Equipment requirements and tests

For more details please contact the local Mitsubishi Elect - Notes For compliance to EMC LVD regulation. It is necessary to install the CL1 series module in a shiel

1. Outline of Product This product is a terminal block type output module connected to





setting error occurred

setting error occurred Flickering at a constant interval: When the setting of the DIP switch was changed while the power was supplied (even while the LED is flickering, the operation continues. The new setting becomes valid when the power is turned OFF once, then ON again.) Flickering at a intermittent interval: When a terminal resistor is not attached or when the module or a connection cable is affected by noise

Connector for CC-Link/LT communication line/module power supply (24G/DB/DA/+24V)

erminal block to connect output signals and load power supply

Set the 10's digit of the station No. using "STATION NO. 20", "STATION NO. 20" and "STATION NO. 40". Set the 1's digit of the station No. using "STATION NO. 1," "STATION NO. 2", "STATION NO. 4" and "STATION NO. 8". Factory default = All bits are OFF. Make sure to set the station No. in the range from 1 to 64. If any station No. outside the range from 1 to 64 is set, it is regarded as an error and the L ERR. LED lights.

Example: When setting the station No. to "32", set the DIP switch as follows.
 Station
 10's digit
 1's digit

 No.
 40
 20
 10
 8
 4
 2
 1

 32
 OFF
 ON
 ON
 OFF
 OFF
 ON
 OFF

0 1 2 3

Output operation indicate

T A12.2000, .2000	
ectric sales site.	3. Installation
elded metal control panel.	The CL1Y4-R1B1 can be installed to DIN rail or directly installed using mounting screws. Each installation procedure is described below.
	3.1 Installation to DIN rail Align the upper DIN rail installation groove in the module with the DIN rail 1), and press the module in that status 2).

Name

DIP switch

When removing the module, pull the hook downward for installation to DIN rail 3), then remove the module 4).

ON: Holds the output.

OFF: Clears the output

Description

lolds the output (when an error has occurred

DIN rail mounting screw pitch When installing the module to the DIN rail, tighten the mounting screws at

HLD

the pitch of 200mm(7.87") or less.



Applicable DIN rail TH35-7.5Fe and TH35-7.5Al

3.2 Direct installation

Screw-tighten the module by attaching M4 screws to the upper and lower mounting holes (two holes in all) provided in the module. Install the module so that the clearance of 1 to 2mm (0.04" to 0.08") is assured for each module

pplicable screw	1/14 × 0.711111(0.05) × 1611111(0.65) 01 1101e
	(Tightening torque range: 78 to 108 Necm)

4. Wiring

4.1 External wiring The output terminals of the CL1Y4-R1B1 can be used with either AC or DC load voltage.



Wire nothing to the NC terminal (idle terminal)

4.2 Crimp-style terminal



4.3 Module terminal screw

Tighten the terminal screws (M3 screws) on the terminal block with a tightening torque of 42 to 58 N·cm.

5.1 General specifications Iten Specification Operating ambient to 55°C (32 to 131°F) emperature Storage am 25 to 75°C (-13 to 167°F) emperature Operating 5 to 95%RH: Dew condensation shall not be considered. ambient humidity Storage amb 5 to 95%RH: Dew condensation shall not be considered. Number of times of When intermittent vibration is present eep Frequency Acceleration Half amplitude 10 to 57Hz 0.075mm Vibration 57 to 150Hz 9.8m/s² 10 times in each of resistance When continuous vibration is present X. Y and Z direction (for 80 min) Frequency Acceleration Half amplitude 10 to 57Hz 0.035mm 57 to 150Hz 4.9m/s² Shock 147 m/s². 3 times in each of X. Y and Z directions resistance Operating Corrosive gas shall not be present. nbienc Operating 2,000m(6561'8") or less (*1) altitude Installation Inside control panel (*2) ocation Overvoltage II or less (*3) category

5.3 Derformance e

Status indicator

Output operation indicator LEDs

Interface Terminal block for I/O interface

DIP switch

L ERR.

ON while the output is ON.

Extinguished while the output is OFF.

LED

Item		Specification		
	Voltage	20.4 to 28.8V DC (24V DC -15% to +20%) Ripple ratio: Within 5%		
Module power	Current consumption	65mA (when all points are ON)		
supply	Initial current	70mA		
зарру	Max. allowable momentary power failure period	PS1:1ms		
Number of stations occupied		4-, 8- or 16-point mode: 1 station		
Noise durability		DC type: 500 Vp-p AC type: 1,000 Vp-p Noise width: 1 µs Cycle: 25 to 60 Hz (by noise simulator)		
Withstand voltage		AC type: 1,500V AC for 1 min DC type: 500V DC for 1 min		
Isolation resistance		10 MΩ or more between primary area (external DC terminal) and secondary area (internal circuit) by 500V DC megger		
Protecti	on grade	IP1X		
I/O area connection method		Connection with terminal block		
Module installation method		DIN rail installation, mounted by screws of type $M4 \times 0.7mm(0.03") \times 16mm(0.63")$ or larger Can be installed in six directions		
Mass (weight)		0.11kg (0.24lbs)		
Contact life		200V AC - 1.5 A, 240V AC - 1 A (COS¢ = 0.7): 100,000 times or more		
		200V AC - 1 A, 240V AC - 0.1 A (COS 0 = 0.35): 100,000 times or more		
		24V DC - 1 A, 100V DC - 0.1 A (L/R = 7 ms): 100,000 times or more		

6. Outside Dimensions

2 - \phi4.5(0.18") mounting hole (M4 mounting screw)

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Warranty Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; machine damage or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi anducture of to acted drives. products; and to other duties.

*2 The module can be used in any environ en outside the contr far as the requirements of the ambient operating temperature, the ambient operating humidity, etc. are satisfied.

*1 The module cannot be used in an environment pressurized above the

atmospheric pressure which can be generated around the altitude of 0 m. If the

2 or less (*4)

module is used in such an environment, it may fail.

Pollution level

- *3 This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution assumed to be connected between the public electrical power distribution network and the machinery within premises. Category II applies to equipment for which electrical power is supplied from fixed facilities. The surge voltage withstand level for up to the rated voltage of 300V is 2500V.
- *4 This index indicates the degree of conductive generating substances in the environment in which the module is used. The degree of contamination 2 indicates that contamination is caused by generation of only non-conductive

In this degree, however, temporary conduction may be caused by accidental condensation

5.2 Output specifications

Item		Specification		
Output method		Relay output		
Number of outputs		4 points		
Insulation method		Mechanical insulation		
Rated load voltage		250V AC/30V DC or less		
Max. load current		2A/point 2A/1common		
Response OFF→ON		Approx. 10ms or less		
time	ON→OFF	Approx. 10ms or less		
Common wiring method		1point/1common (Mutually exclusive outputs) (terminal block one-wire type)		
Internal protection for outputs		Internal protection circuit none Please connect the fuse in the connected load outside.		



40(1.58")	
, V	

Country U.S.A.

Brazil

German

U.K.

Italy

France

Unit: mm(inches)

- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
 Before using the product for special purposes such as nuclear power, electric po aerospace, medicine or passenger movement vehicles, consult with Mitsubishi.
- This product has been manufactured under strict quality control. How vever wher installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

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