

MODEL: R7F4HC-DA32-K

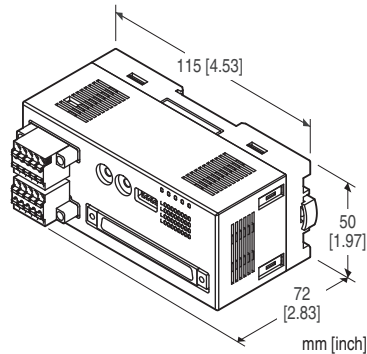
Remote I/O R7F4H Series

CC-Link I/O MODULE

(NPN/PNP discrete input, 32 points, FCN connector)

Functions & Features

- Remote I/O module to input/output digital I/O signal to field bus (CC-Link)



MODEL: R7F4HC-DA32-K-R[1]

ORDERING INFORMATION

- Code number: R7F4HC-DA32-K-R[1]
Specify a code from below for [1].
(e.g. R7F4HC-DA32-R/Q)
- Specify the specification for option code /Q
(e.g. /C01)

I/O TYPE

DA32: NPN/PNP discrete input, 32 points

TERMINAL BLOCK

K: Tension clamp terminal block for power supply
Tension clamp terminal block for power supply for communication
FCN connector for I/O

POWER INPUT

DC Power
R: 24 V DC
(Operational voltage range 24 V \pm 10 %, ripple 10 %p-p max.)

[1] OPTIONS

blank: none
/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to our web site.)
/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

RELATED PRODUCTS

- CSP+ file
The CSP+ file are downloadable at our web site.
CSP+ file is also downloadable at CC-Link Partner Association's web site.

GENERAL SPECIFICATIONS

Connection

- CC-Link:** Tension clamp terminal block
- Power supply:** Tension clamp terminal block
- Input signal, exc. supply:** FCN connector
- Housing material:** Flame-resistant resin (gray)
- Isolation:** Input to CC-Link to power supply to FE1
- Discrete input status indicator LED:** Green LED turns on with input ON

CC-Link COMMUNICATION

- Transmission:** CC-Link Ver.1.10
- Network cable:** CC-Link cable designated by Mitsubishi Electric
- Station Type:** Remote I/O device
- Data allocation:** 1
- Station number:** 1 - 64 (rotary switch, default:00)
- Baud rate setting:** 156 kbps (default), 625 kbps, 2.5 Mbps, 5 Mbps, 10 Mbps (DIP switch)
- Terminating resistor:** Built-in (DIP Switch, default: disable)
- Status indicator LEDs:** Power, Run, Error, SD, RD
For details, refer to the users manual.

INPUT SPECIFICATIONS

- Common:** Positive or negative common (NPN/PNP) per 32 points
- Number of inputs:** 32
- Maximum inputs applicable at once:** No limit (at 24 V DC)
- Rated input voltage:** 24 V DC \pm 10 %; ripple 5 %p-p max.
- ON voltage / current:** \geq 17 V DC (input - COM) / \geq 2.3 mA
- OFF voltage / current:** \leq 5 V DC (input - COM) / \leq 0.75 mA
- Input current:** \leq 3.5 mA per point at 24 V DC
- Input resistance:** Approx. 7.2 k Ω
- ON delay:** \leq 0.5 msec.
- OFF delay:** \leq 0.5 msec.

INSTALLATION

- Current consumption**
 - DC (@ 24 V DC): \leq 40 mA
(contact I/O load charge is not included)
- Operating temperature:** -10 to +55°C (14 to 131°F)

Storage temperature: -20 to +65°C (-4 to +149°F)
Operating humidity: 30 to 90 %RH (non-condensing)
Atmosphere: No corrosive gas or heavy dust
Mounting: Surface or DIN rail (35 mm rail)
Weight: 160 g (0.35 lb)

PERFORMANCE

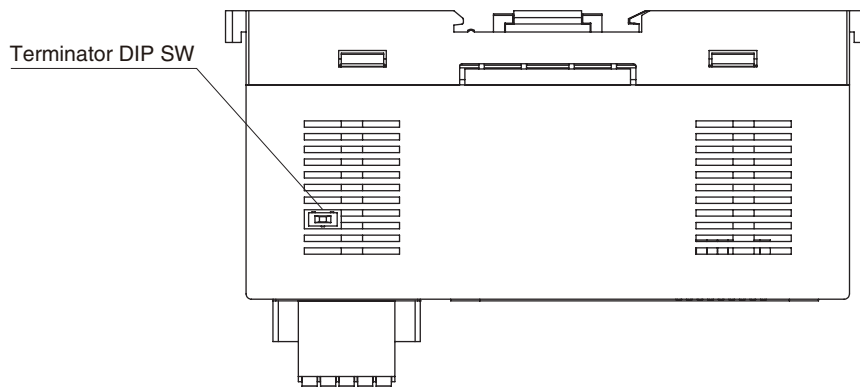
Insulation resistance: $\geq 100 \text{ M}\Omega$ with 500 V DC
Dielectric strength: 1500 V AC @ 1 minute
 (input or exc. supply to CC-Link to power supply to FE1)

STANDARDS & APPROVALS

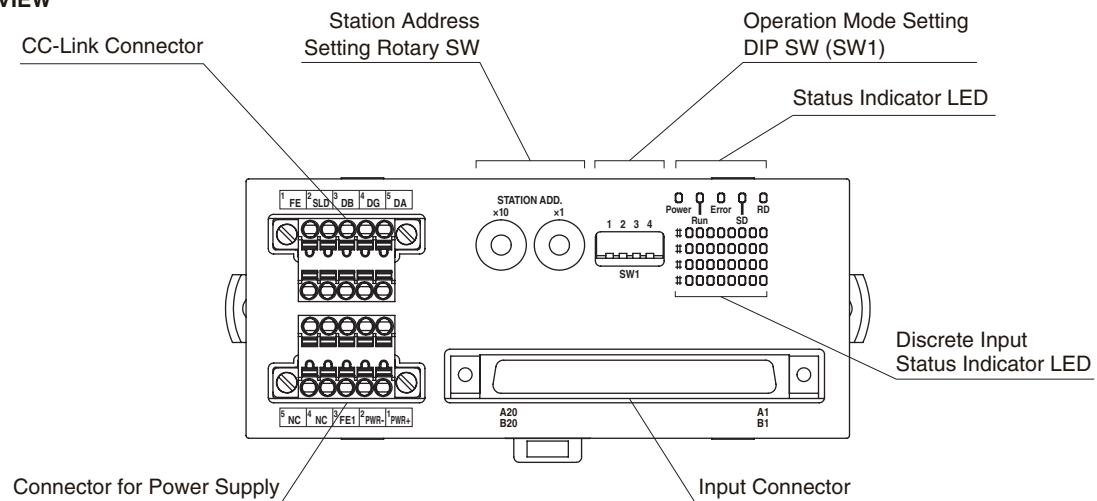
EU conformity:
 EMC Directive
 EMI EN 61000-6-4
 EMS EN 61000-6-2
 RoHS Directive

EXTERNAL VIEW

TOP VIEW

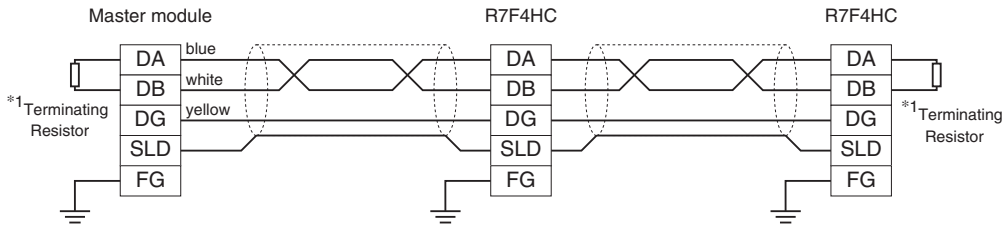


FRONT VIEW



CONNECTION DIAGRAMS

■ MASTER CONNECTION



*1. Turn on the terminator DIP switch to activate the internal terminating resistor.

TERMINAL ASSIGNMENTS

■ CC-Link, POWER SUPPLY ASSIGNMENT

Unit side connector: MC1,5/5-GF-3,5 (Phoenix Contact)

Cable side connector: TFMC1,5/5-STF-3,5 (Phoenix Contact)

Applicable wire size: 0.2 - 1.5mm², stripped length 10mm

A10,25-10YE 0.25mm² (Phoenix Contact)

A0,34-10TQ 0.34mm² (Phoenix Contact)

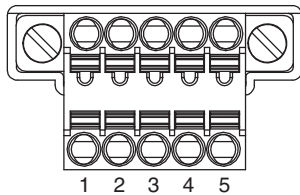
A10,5-10WH 0.5mm² (Phoenix Contact)

A10,75-10GY 0.75mm² (Phoenix Contact)

AI1-10 1.0mm² (Phoenix Contact)

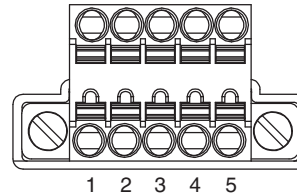
AI1,5-10 1.5mm² (Phoenix Contact)

· CC-Link



NO.	ID	FUNCTION
1	FE	Functional earth
2	SLD	Shield
3	DB	DB (white)
4	DG	DG (yellow)
5	DA	DA (blue)

· POWER SUPPLY



NO.	ID	FUNCTION
1	PWR+	Power supply +
2	PWR-	Power supply -
3	FE1	Grounding
4	NC	Unused
5	NC	Unused

Note: The numbers marked on the connector have no relationship to the pin number of the unit.

Wire according to the instruction manual of the unit.

■ INPUT, SENSOR EXC. ASSIGNMENT

Unit side connector: N365P040AU (OTAX) (FCN-365P040-AU (Fujitsu)...discontinued)

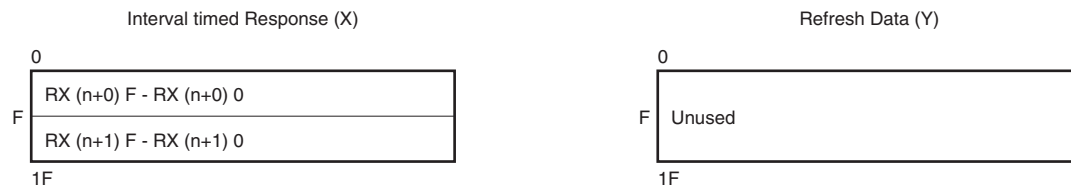
Cable side connector: N36()J040AU(OTAX) (FCN-36()J040-AU (Fujitsu)...discontinued)

(The cable connector is not included in the package. Specify wire size instead of (); refer to the specifications of the product)



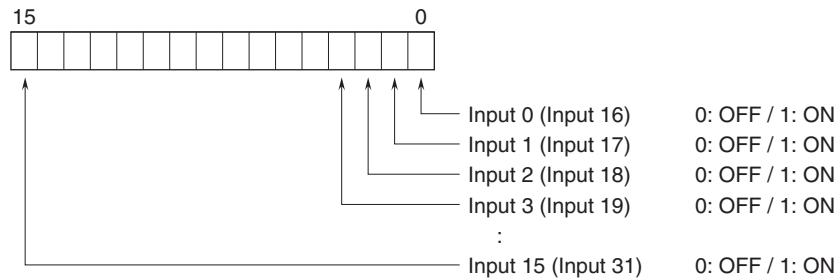
PIN NO.	ID	FUNCTION	PIN NO.	ID	FUNCTION
A1	NC	Unused	B1	COM	Common (exc. supply)
A2	NC	Unused	B2	COM	Common (exc. supply)
A3	NC	Unused	B3	NC	Unused
A4	NC	Unused	B4	NC	Unused
A5	X31	Input 31	B5	X15	Input 15
A6	X30	Input 30	B6	X14	Input 14
A7	X29	Input 29	B7	X13	Input 13
A8	X28	Input 28	B8	X12	Input 12
A9	X27	Input 27	B9	X11	Input 11
A10	X26	Input 26	B10	X10	Input 10
A11	X25	Input 25	B11	X9	Input 9
A12	X24	Input 24	B12	X8	Input 8
A13	X23	Input 23	B13	X7	Input 7
A14	X22	Input 22	B14	X6	Input 6
A15	X21	Input 21	B15	X5	Input 5
A16	X20	Input 20	B16	X4	Input 4
A17	X19	Input 19	B17	X3	Input 3
A18	X18	Input 18	B18	X2	Input 2
A19	X17	Input 17	B19	X1	Input 1
A20	X16	Input 16	B20	X0	Input 0

DATA ALLOCATION



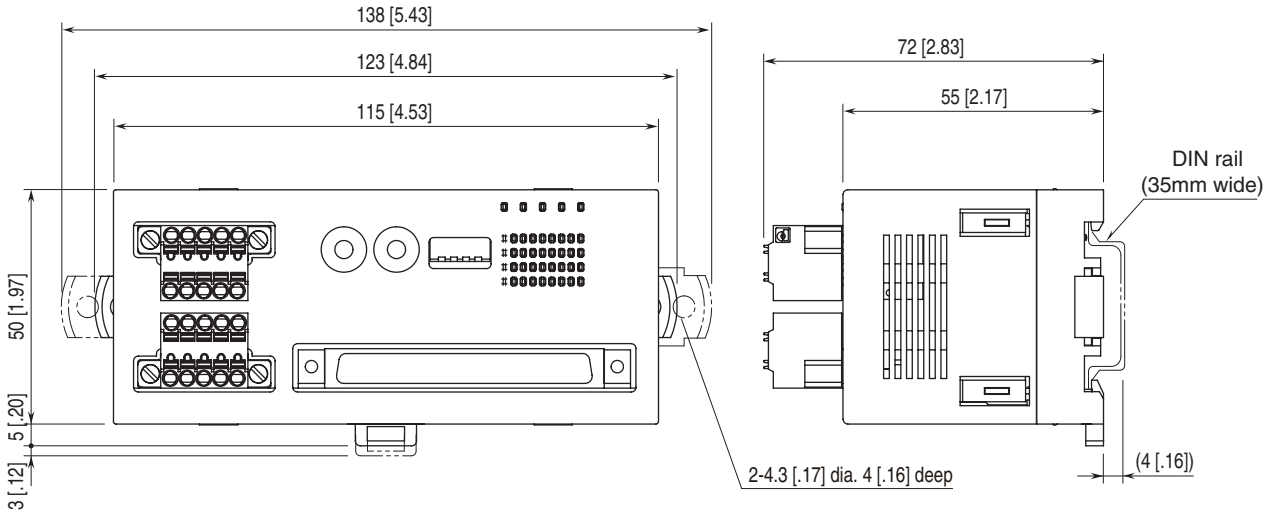
I/O DATA DESCRIPTIONS

■ DISCRETE INPUT

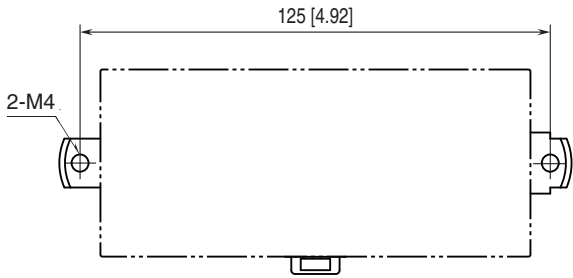


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EXTERNAL DIMENSIONS unit: mm [inch]



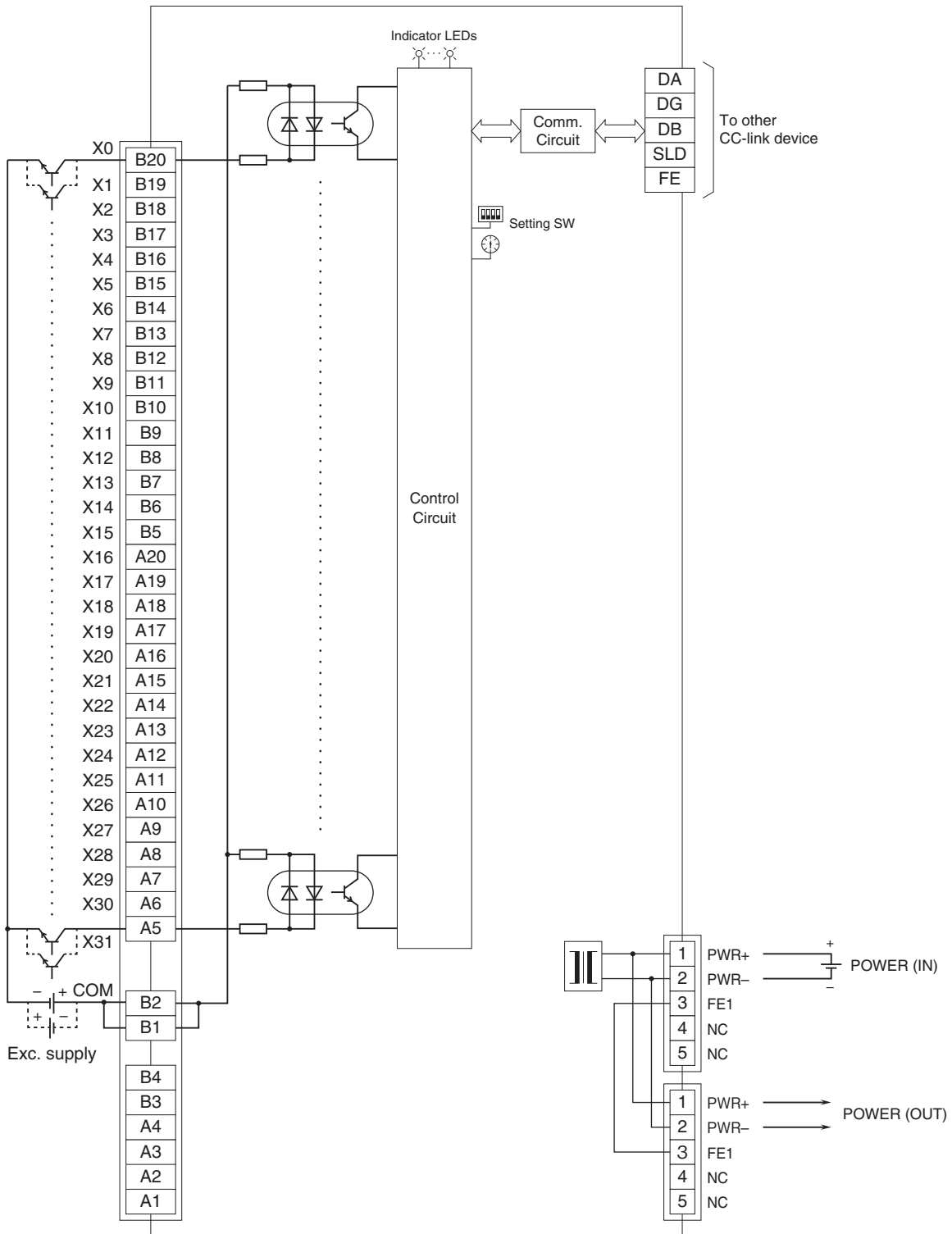
MOUNTING REQUIREMENTS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

Note: In order to improve EMC performance, bond the FE1 terminal to ground.

Caution: FE1 terminal is NOT a protective conductor terminal.



Specifications are subject to change without notice.