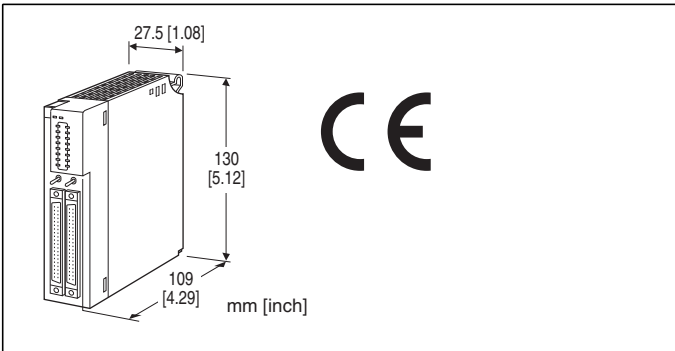


Remote I/O R3 Series

DISCRETE OUTPUT MODULE

(PNP transistor output, 64 points, shortcircuit protection)



MODEL: R3-DC64C[1][2]

ORDERING INFORMATION

- Code number: R3-DC64C[1][2]
- Specify a code from below for each of [1] and [2].
(e.g. R3-DC64CW/CE/Q)
- Specify the specification for option code /Q
(e.g. /C01)

NO. OF CHANNELS

64: 64

OUTPUT

C: PNP transistor

[1] COMMUNICATION MODE

S: Single
W: Dual

[2] OPTIONS (multiple selections)

Standards & Approvals

blank: Without CE

/CE: CE marking

Other Options

blank: none

/Q: Option other than the above (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

- Connector terminal block (model: CNT)
- Special cable with 40-pin connector (model: FCN)

GENERAL SPECIFICATIONS

Connection

Internal bus: Via the Installation Base (model: R3-BSx)

Output: 40-pin connector (OTAX N365P040AU
(Fujitsu FCN-365P040-AU...discontinued))

Internal power: Via the Installation Base (model: R3-BSx)

Isolation: Do11 thru Do18 to Do21 thru Do28 to Do31 thru Do38 to Do41 thru Do48 to Do51 thru Do58 to Do61 thru Do68 to Do71 thru Do78 to Do81 thru Do88 to internal bus or internal power

Output hold setting: Setting for communication error with side DIP SW

RUN indicator: Bi-color (red/green) LED;
Red when the bus A operates normally;
Green when the bus B operates normally;
Amber when both buses operate normally.

ERR indicator: Green LED turns on in normal operating conditions.

Output status indicator: Red LED; turns on with the output ON.

Group selector: Switches the output status indicator

CN1:

A. 1 - 8: Do11 - Do18, 9 - 16: Do21 - Do28

B. 1 - 8: Do31 - Do38, 9 - 16: Do41 - Do48

CN2:

A. 1 - 8: Do51 - Do58, 9 - 16: Do61 - Do68

B. 1 - 8: Do71 - Do78, 9 - 16: Do81 - Do88

OUTPUT SPECIFICATIONS

Output: Open collector, 64 points

Isolation: Optical isolator

Rated load voltage

Nominal: 19.2 to 30 V DC

Absolute: 45 V DC

Rated load current: 0.25 A per point, 1.0 A per common

Voltage drop at ON: ≤ 2.0 V

Leakage current at OFF: ≤ 0.3 mA

(24 V DC load, all points OFF)

ON delay: ≤ 1.0 msec.

OFF delay: ≤ 3.5 msec.

Shortcircuit protection: Works for 0.7 A or more;
automatically resets after recovery

(When driving an inductive load, connect a diode in parallel with the load.)

INSTALLATION

Operating temperature: -10 to +55°C (14 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Atmosphere: No corrosive gas or heavy dust

Mounting: Installation Base (model: R3-BSx)

Weight: 200 g (0.44 lb)

PERFORMANCE

Data allocation: 4

Current consumption: 160 mA

Insulation resistance: $\geq 100 \text{ M}\Omega$ with 500 V DC

Dielectric strength: 500 V AC @ 1 minute

(Do11 thru Do18 to Do21 thru Do28 to Do31 thru Do38 to Do41 thru Do48 to Do51 thru Do58 to Do61 thru Do68 to Do71 thru Do78 to Do81 thru Do88)

1500 V AC @ 1 minute (output to internal bus or internal power)

2000 V AC @ 1 minute (power input to FG; isolated on the power supply module)

STANDARDS & APPROVALS

EU conformity:

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

RoHS Directive

FUNCTIONS

■ OUTPUT HOLD or OUTPUT OFF

In normal conditions, the module outputs the signal from the preferred bus A.

When an error is detected, the output is switched to the data from the bus B.

- **Output Hold**

If both are in error, the module holds the signal and stands by until one of the communications recovers.

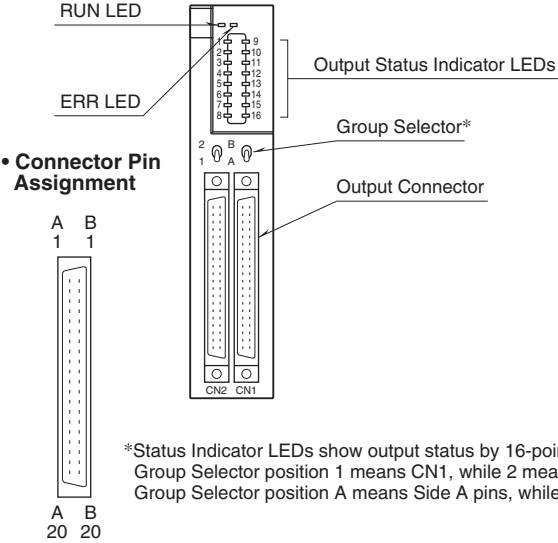
- **Output OFF**

If both are in error, the module outputs OFF signals and stands by until one of the communications recovers.

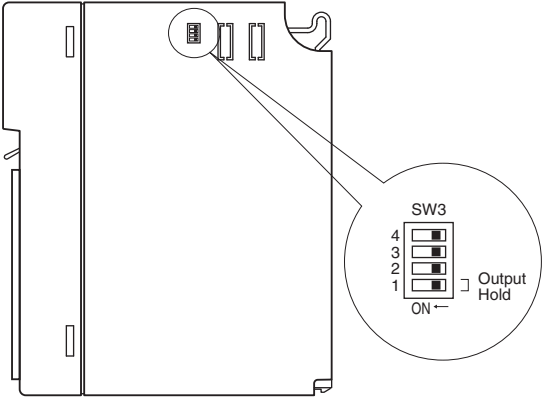
At the startup, it outputs OFF until the communication is established and normal data is received.

EXTERNAL VIEW

■ FRONT VIEW

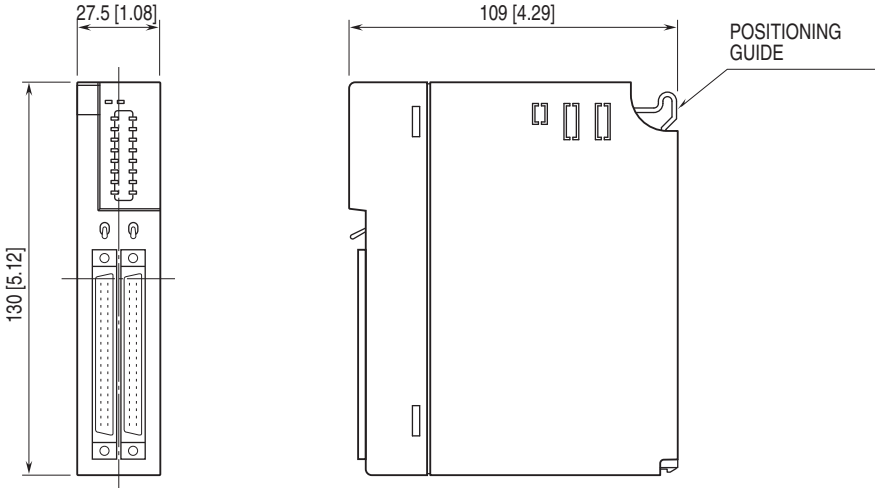


■ SIDE VIEW

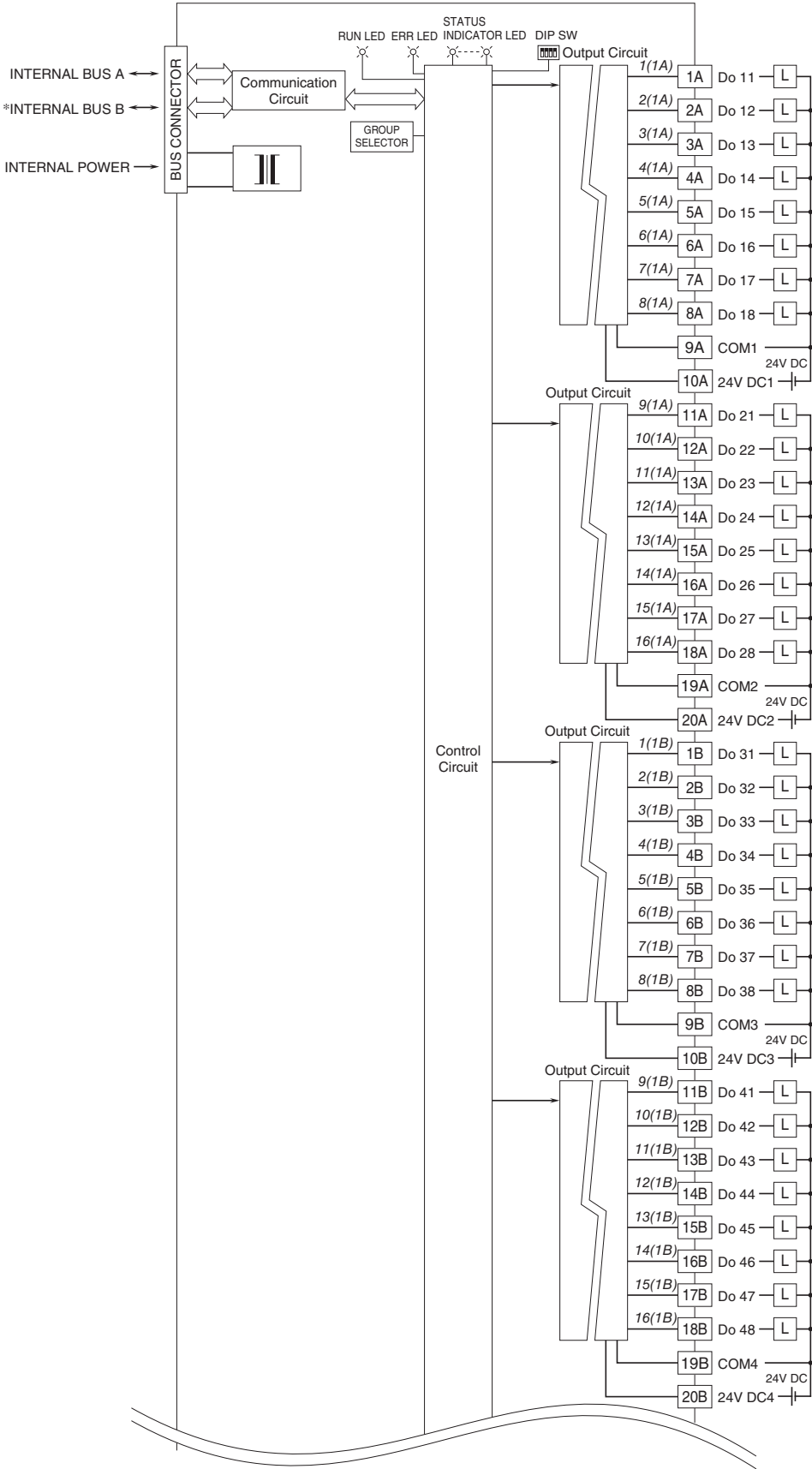


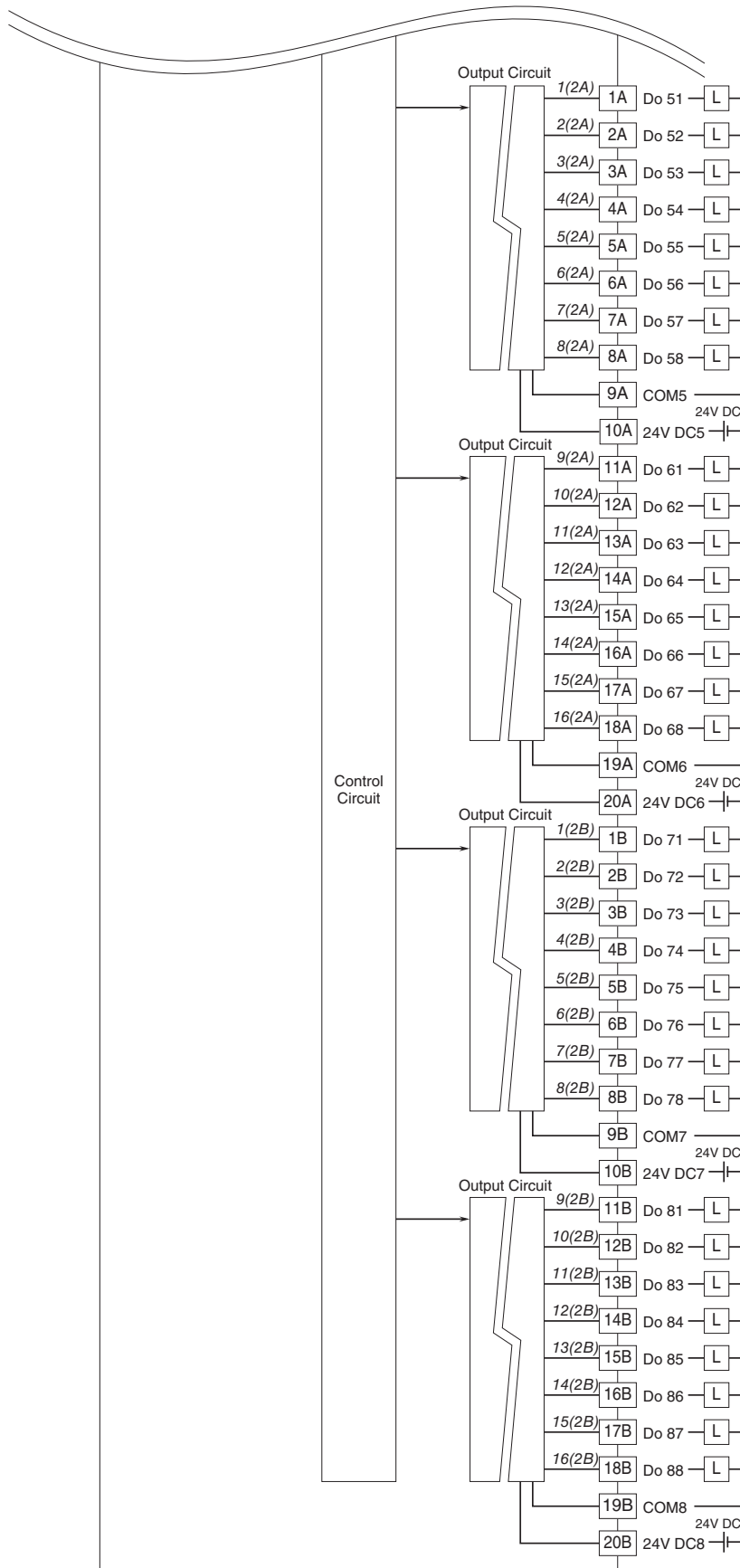
*Status Indicator LEDs show output status by 16-point group specified with Group Selector.
 Group Selector position 1 means CN1, while 2 means CN2.
 Group Selector position A means Side A pins, while B means Side B pins.

EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM





Numbers in italic indicate LED No.s assigned to the front panel LEDs.
 Indicator groups 1A, 1B, 2A or 2B selected with the front switches.
 *For dual redundant communication.

OUTPUT CONNECTOR (40-pin)

■ CN1

| PIN NO. | ASSIGNMENT | PIN NO. | ASSIGNMENT |
|---------|------------|---------|------------|
| 1A | Do 11 | 1B | Do 31 |
| 2A | Do 12 | 2B | Do 32 |
| 3A | Do 13 | 3B | Do 33 |
| 4A | Do 14 | 4B | Do 34 |
| 5A | Do 15 | 5B | Do 35 |
| 6A | Do 16 | 6B | Do 36 |
| 7A | Do 17 | 7B | Do 37 |
| 8A | Do 18 | 8B | Do 38 |
| 9A | COM1 | 9B | COM3 |
| 10A | 24V DC1 | 10B | 24V DC3 |
| 11A | Do 21 | 11B | Do 41 |
| 12A | Do 22 | 12B | Do 42 |
| 13A | Do 23 | 13B | Do 43 |
| 14A | Do 24 | 14B | Do 44 |
| 15A | Do 25 | 15B | Do 45 |
| 16A | Do 26 | 16B | Do 46 |
| 17A | Do 27 | 17B | Do 47 |
| 18A | Do 28 | 18B | Do 48 |
| 19A | COM2 | 19B | COM4 |
| 20A | 24V DC2 | 20B | 24V DC4 |

■ CN2

| PIN NO. | ASSIGNMENT | PIN NO. | ASSIGNMENT |
|---------|------------|---------|------------|
| 1A | Do 51 | 1B | Do 71 |
| 2A | Do 52 | 2B | Do 72 |
| 3A | Do 53 | 3B | Do 73 |
| 4A | Do 54 | 4B | Do 74 |
| 5A | Do 55 | 5B | Do 75 |
| 6A | Do 56 | 6B | Do 76 |
| 7A | Do 57 | 7B | Do 77 |
| 8A | Do 58 | 8B | Do 78 |
| 9A | COM5 | 9B | COM7 |
| 10A | 24V DC5 | 10B | 24V DC7 |
| 11A | Do 61 | 11B | Do 81 |
| 12A | Do 62 | 12B | Do 82 |
| 13A | Do 63 | 13B | Do 83 |
| 14A | Do 64 | 14B | Do 84 |
| 15A | Do 65 | 15B | Do 85 |
| 16A | Do 66 | 16B | Do 86 |
| 17A | Do 67 | 17B | Do 87 |
| 18A | Do 68 | 18B | Do 88 |
| 19A | COM6 | 19B | COM8 |
| 20A | 24V DC6 | 20B | 24V DC8 |



Specifications are subject to change without notice.