

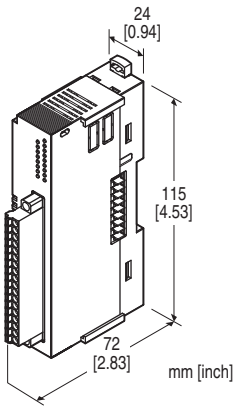
Remote I/O R80 Series

NPN TRANSISTOR OUTPUT MODULE, 16 points

(tension clamp terminal block)

Functions & Features

- 16 channels for discrete output, compact size remote I/O module
- 18 pins tension clamp connector



MODEL: R80DCT16A2[1]

ORDERING INFORMATION

- Code number: R80DCT16A2[1]
Specify a code from below for [1].
(e.g. R80DCT16A2/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[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

RELATED PRODUCTS

- PC configurator software (model: R80CFG)
Downloadable at our web site.
For connecting to PC, use commercially available Mini-B type USB cable. (provided by user)

GENERAL SPECIFICATIONS

Connection

Output: Separable tension clamp terminal

Internal bus, internal power, excitation power supply:

Connected to internal bus connector

Isolation: Output or exc. supply to internal bus or internal power

Module address: With DIP switch

Terminating resistor: Built-in (DIP Switch, default: disable)

Status indicator: Bi-color (red/green) LED; Refer to the instruction manual.

Discrete output status indicators: Green LED; Refer to the instruction manual.

OUTPUT SPECIFICATIONS

Module type: Discrete output, 16 points

Common: Negative common (NPN) per 16 points

Maximum outputs applicable at once: No limit (at 24 V DC)

Number of output: 16 points

Rated load voltage: 24 V DC $\pm 10\%$

Rated output current: 0.1 A per point, 1.6 A per common

Residual voltage: ≤ 0.5 V

Leakage current: ≤ 0.1 mA

ON delay: ≤ 0.2 msec.

OFF delay: ≤ 0.5 msec.

With shortcircuit protection

With overheat protection

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

Output when communication is lost:

Hold output (the previous output received normally is held)

Clear output (output is fixed to OFF)

(Settable with PC configurator)

(Factory setting: Hold output)

INSTALLATION

Max. current consumption: 160 mA

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: DIN rail

Weight: 110 g (0.24 lb)

PERFORMANCE

Power output (output connector): Rated current 3 A DC (rated current 3 A for internal fuse (slow blow fuse i^2t ($A^2sec.$) max. 5.04)

Insulation resistance: ≥ 100 M Ω with 500 V DC

Dielectric strength: 1500V AC @1 minute

(output or exc. supply to internal bus or internal power to ground)

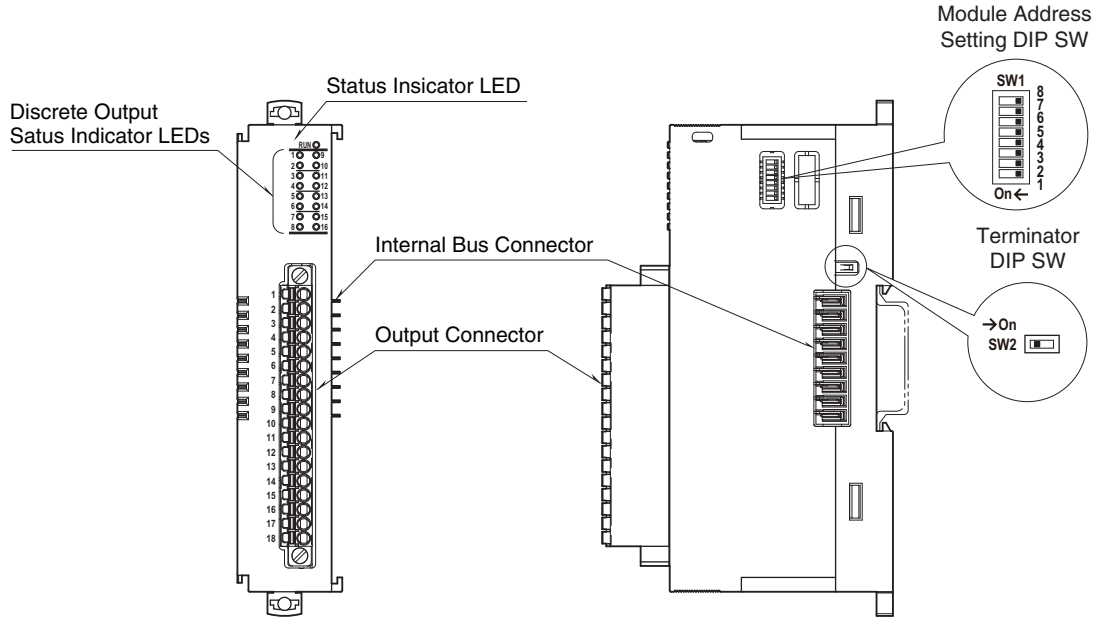
STANDARDS & APPROVALS

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

EXTERNAL VIEW

■ FRONT VIEW

■ SIDE VIEW



WIRING

• OUTPUT CONNECTOR

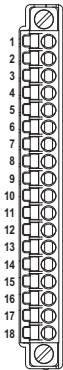
Unit side connector: MC1,5/18-GF-3,5 (Phoenix Contact)

Cable side connector: FMC1,5/18-STF-3,5 (Phoenix Contact)
(included in the package)

Applicable wire size: 0.2 – 1.5 mm²; stripped length 10 mm

Recommended solderless terminal

- AI0,25–10YE 0.25 mm² (Phoenix Contact)
- AI0,34–10TQ 0.34 mm² (Phoenix Contact)
- AI0,5–10WH 0.5 mm² (Phoenix Contact)
- AI0,75–10GY 0.75 mm² (Phoenix Contact)
- A1–10 1.0 mm² (Phoenix Contact)
- A1,5–10 1.5 mm² (Phoenix Contact)



PIN NO.	ID	FUNCTION
1	Do1	Output 1
2	Do2	Output 2
3	Do3	Output 3
4	Do4	Output 4
5	Do5	Output 5
6	Do6	Output 6
7	Do7	Output 7
8	Do8	Output 8
9	Do9	Output 9
10	Do10	Output 10
11	Do11	Output 11
12	Do12	Output 12
13	Do13	Output 13
14	Do14	Output 14
15	Do15	Output 15
16	Do16	Output 16
17	0V	Exc. supply 0V
18	24V	Exc. supply 24V

OPERATING MODE SETTING

• Module address setting

(* Factory setting)

Note) Be sure to set unused SW 1-5 through 1-8 to OFF.

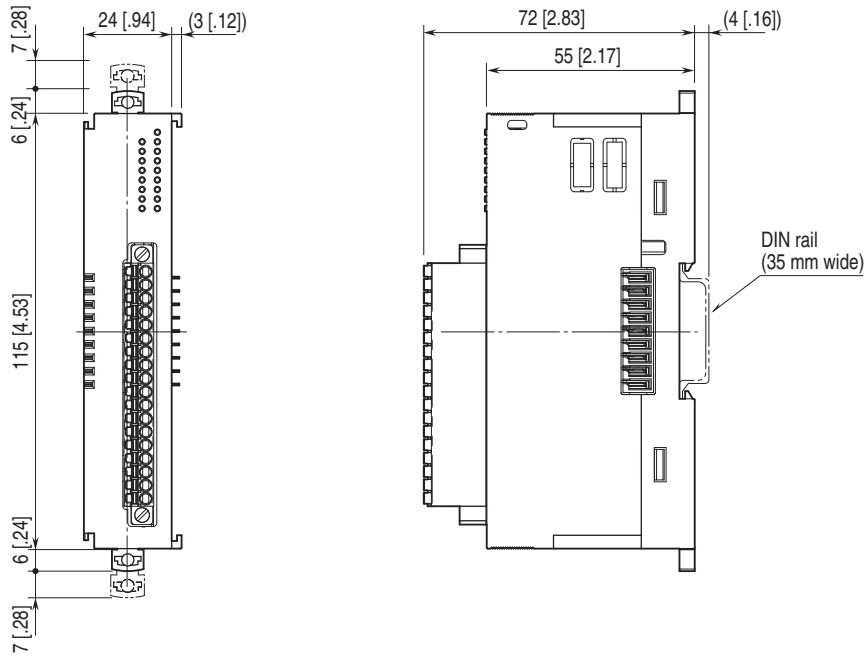
Module address: Selectable between 0 and 15, with DIP switch 1-1 to 4.

MODULE ADDRESS	SW1			
	1	2	3	4
0(*)	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF
2	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF
4	OFF	OFF	ON	OFF
5	ON	OFF	ON	OFF
6	OFF	ON	ON	OFF
7	ON	ON	ON	OFF
8	OFF	OFF	OFF	ON
9	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON
11	ON	ON	OFF	ON
12	OFF	OFF	ON	ON
13	ON	OFF	ON	ON
14	OFF	ON	ON	ON
15	ON	ON	ON	ON

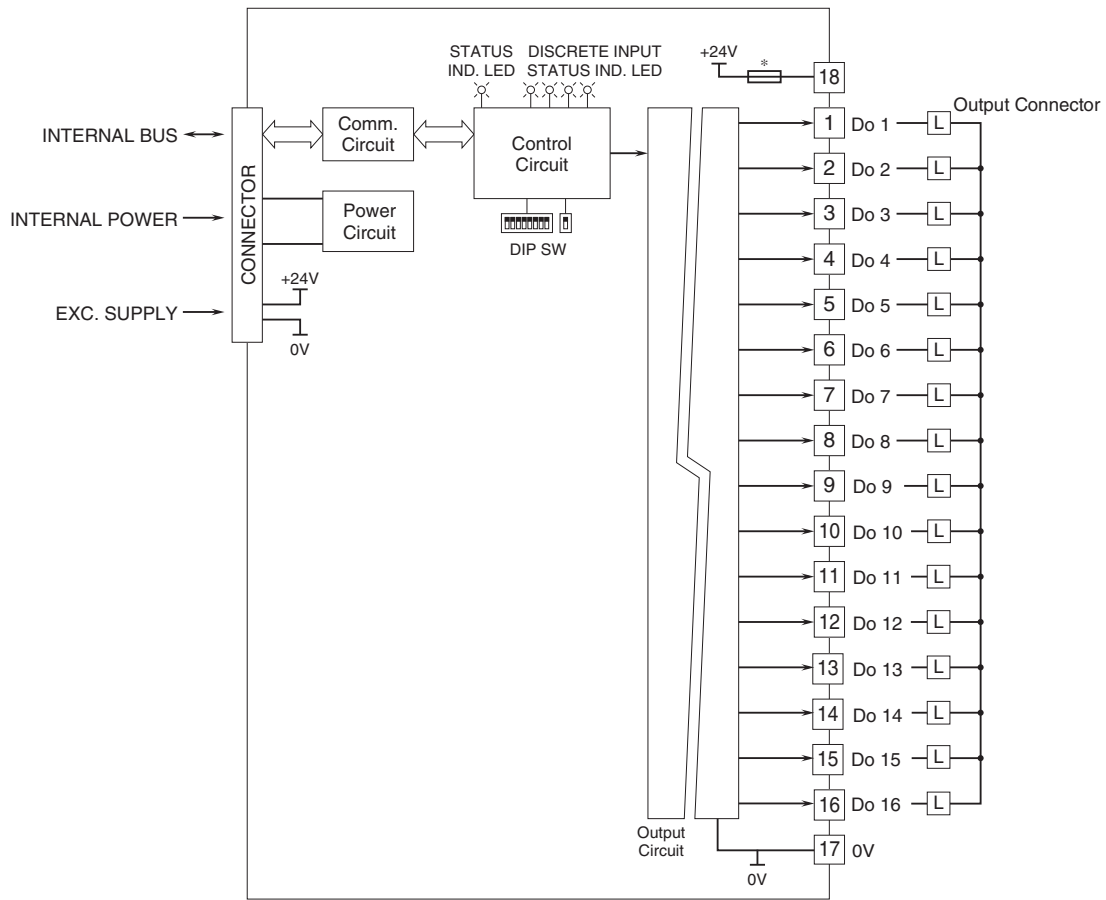
● Terminator DIP SW

TERMINATOR SW	SW2
Without (*)	OFF
With	ON

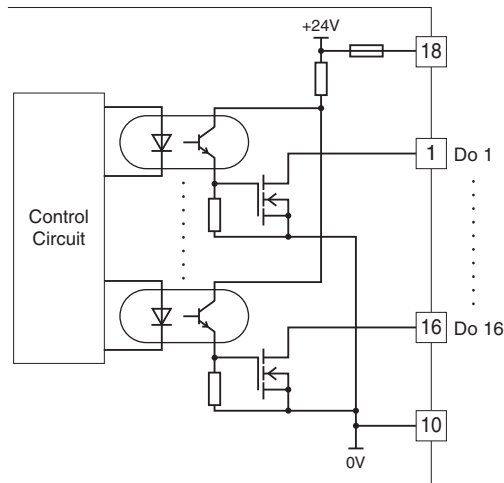
EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



■ OUTPUT CIRCUIT



Specifications are subject to change without notice.