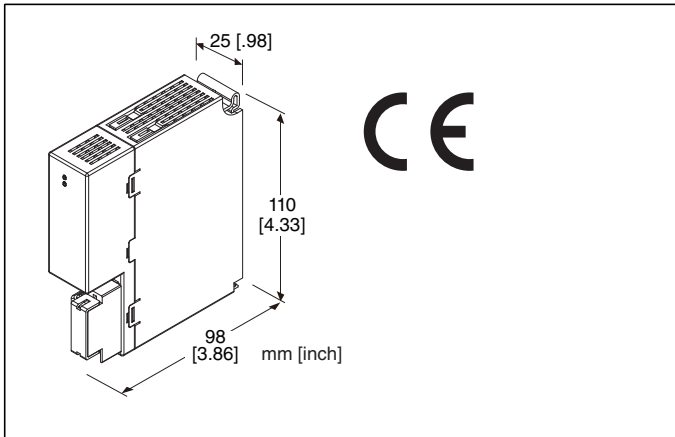


Remote I/O R30 Series

POWER SUPPLY MODULE

(Current capacity 800 mA)



MODEL: R30PS1-R[1]

ORDERING INFORMATION

- Code number: R30PS1-R[1]
Specify a code from below for [1].
(e.g. R30PS1-R/Q)
- Specify the specification for option code /Q
(e.g. /C01)

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 M-System's web site.)

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

GENERAL SPECIFICATIONS

Connection

Internal bus: Via the Installation Base (model: R30BS)

RUN contact output: M3 separable screw terminal (torque 0.5 N·m)

Internal power: Via the Installation Base (model: R30BS)

Solderless terminal: Refer to the drawing at the end of the

section.

Recommended manufacturer: Japan Solderless Terminal MFG. Co., Ltd., Nichifu Co., Ltd.

(Solderless terminals with insulation sleeve do not fit.)

Applicable wire size: 0.25 to 0.75 mm²

Screw terminal: Nickel-plated steel

Isolation: Internal bus or internal power to power input to RUN contact output to FE

Power indicator LED: Green LED turns on when the power is supplied.

RUN indicator LED: Green LED turns on when the RUN contact output is closed.

■ RUN CONTACT OUTPUT

RUN contact output: Turns ON (closed) while the network module operates normally.

Rated load: 250 V AC @ 0.5 A (cos ϕ = 1)

30 V DC @ 0.5 A (resistive load)

(Less than 50 V AC to conform with EU Directive)

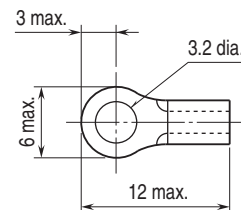
Maximum switching voltage: 250 V AC or 30 V DC

Maximum switching power: 250 VA or 30 W

Minimum load: 5 V DC @ 10 mA

Mechanical life: 2 \times 10⁷ cycles (rate 300 cycles/min.) When driving an inductive load, external contact protection and noise quenching recommended.

■ Recommended solderless terminal size - M3 (unit: mm)



INSTALLATION

Power consumption

- DC: Approx. 21 W (approx. 0.9 A at 24 V)

Internal power

- Max. rated output voltage / current: 21 V DC / 800 mA
(The total current consumption of all mounted network and I/O modules must be within 800 mA.)

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

Storage temperature: -20 to +65°C (-4 to +149°F)

Operating humidity: 10 to 90 %RH (non-condensing)

Atmosphere: No corrosive gas or heavy dust

Mounting: Installation Base (model: R30BS)

Weight: 150 g (0.33 lb)

PERFORMANCE

Insulation resistance: \geq 100 M Ω with 500 V DC

Dielectric strength: 1500 V AC @ 1 minute (internal bus or internal power to power input to RUN contact output to FE)

STANDARDS & APPROVALS

EU conformity:

EMC Directive

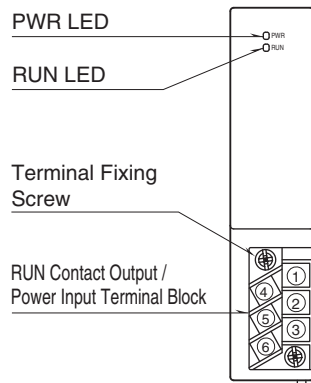
EMI EN 61000-6-4

EMS EN 61000-6-2

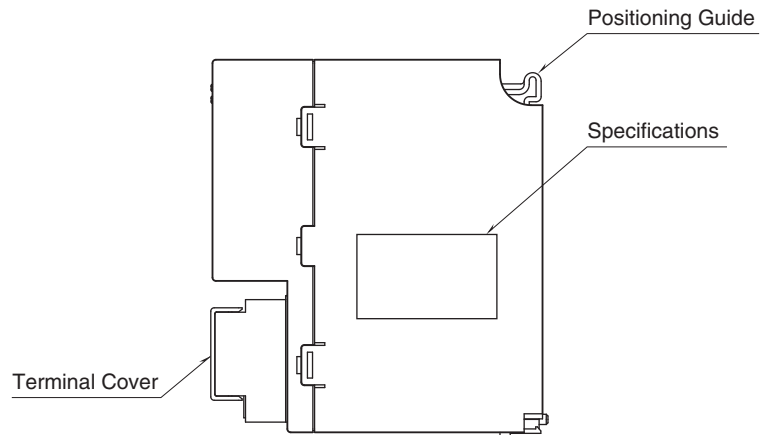
RoHS Directive

EXTERNAL VIEW

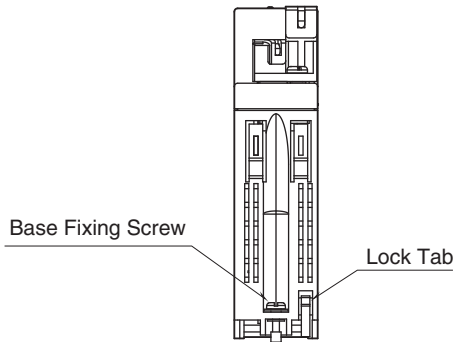
FRONT VIEW



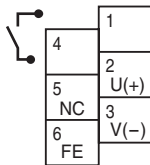
SIDE VIEW



BOTTOM VIEW

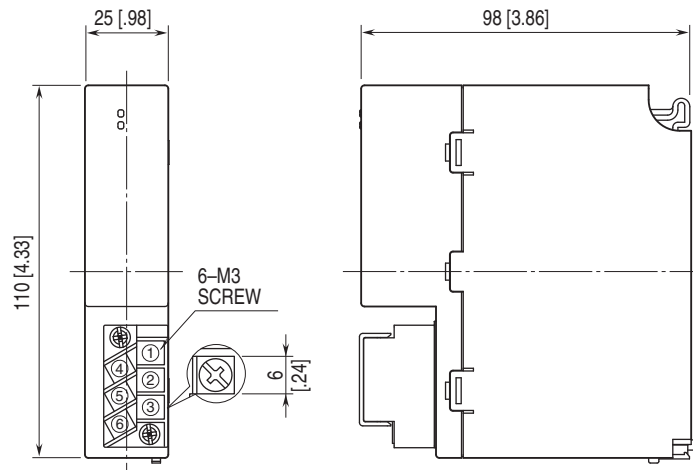


TERMINAL ASSIGNMENTS



NO.	ID	FUNCTON
1	RUN contact output	RUN contact output
2	U (+)	Power supply (24 V DC)
3	V (-)	Power supply (0 V DC)
4	RUN contact output	RUN contact output
5	NC	Not used
6	FE	Functional earth

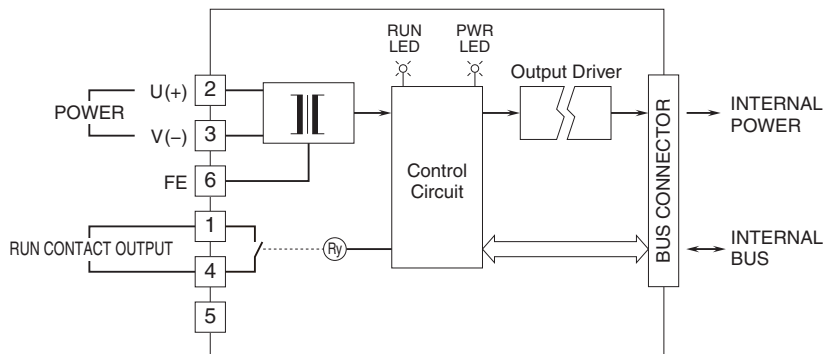
EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

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

Caution: FE terminal is NOT a protective conductor terminal.



Specifications are subject to change without notice.