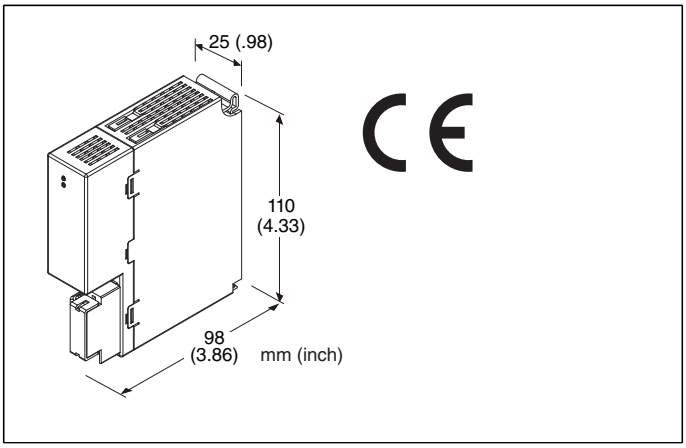
Remote I/O R30 Series

POWER SUPPLY MODULE

(Current capacity 750 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 ±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 mm^2

Screw terminal: Nickel-plated steel

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

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

RUN indicator LED: Green light 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 ø = 1)

30 V DC @ 0.5 A (resistive load)

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

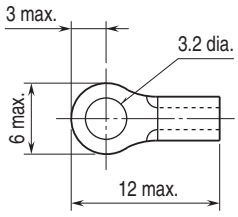
Maximum switching voltage: 250 V AC or 30 V DC

Maximum switching power: 250 VA or 30 W

Minimum load: 5 V DC @ 10 mA

Mechanical life: 2×10^7 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 / 750 mA

(The total current consumption of all mounted network and I/O modules must be within 750 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: ≥ 100 MΩ with 500 V DC

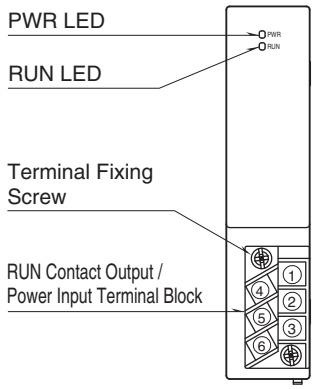
Dielectric strength: 1500 V AC @ 1 minute (Internal bus or internal power to power input to RUN contact output to FE)

STANDARDS & APPROVALS

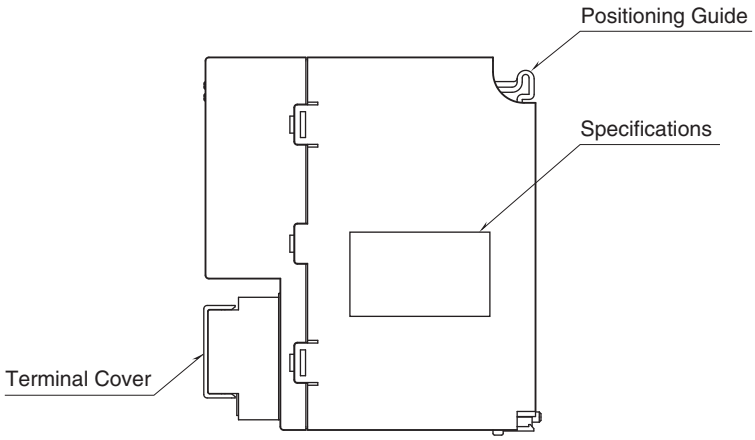
EU conformity:
EMC Directive
EMI EN 61000-6-4
EMS EN 61000-6-2
RoHS Directive
EN 50581

EXTERNAL VIEW

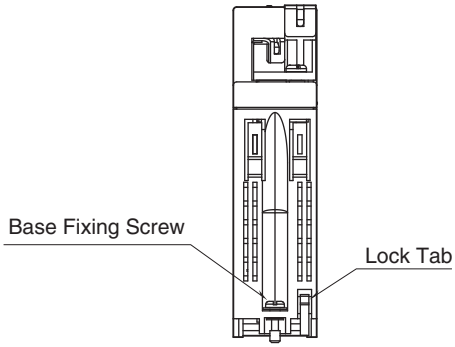
■ **FRONT VIEW**



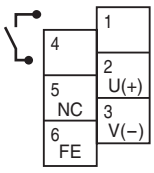
■ **SIDE VIEW**



■ **BOTTOM VIEW**

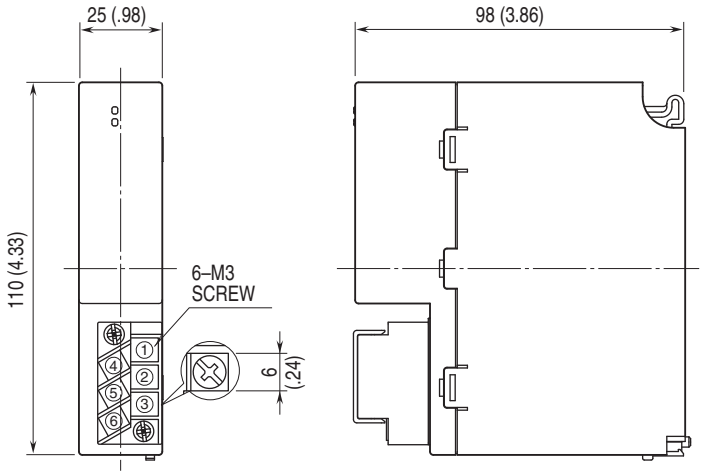


TERMINAL ASSIGNMENTS



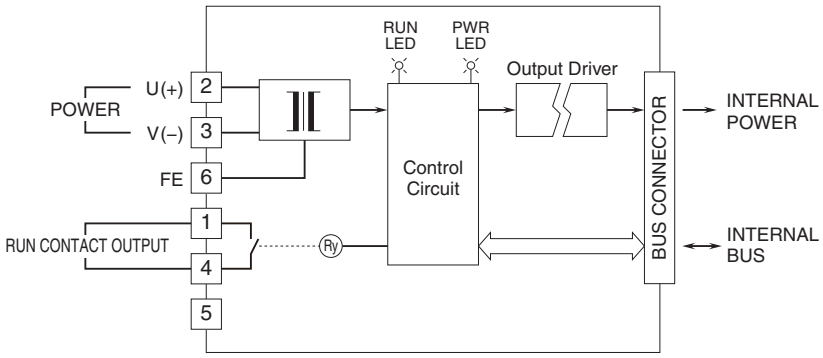
NO.	ID	FUNCTON
1	RUN contact output	RUN contact output
2	U (+)	Power supply (24 V DC)
3	V (−)	Power supply (0 V DC)
4	RUN contact output	RUN contact output
5	NC	Not used
6	FE	Functional earth

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.