OP3044-V01

selec

RPS40-48-CE
Operating Instruction



FEATURES

- AC 100-240V Wide-range Input.
- Cost optimized without compromising quality or reliability.
- Full power between -25°C and +50°C.
- Compact size.

INTENDED USE

This device is designed for installation in an enclosure and is intended for the general professional use such as in instrumentation equipment, office, industrial control and communication .
Do not use this power supply in equipment where malfunction may cause severe personal injury or threaten human life.

INPUT SPECIFICATIONS

INPUT VOLTAGE RANGE	100 - 240 VAC ± 10 %; 127 - 370 VDC
FREQUENCY RANGE	50 / 60 Hz
EFFICIENCY (TYP.)	Up to 85 % @ 230 VAC
AC CURRENT (TYP.)	0.80 A @ 115 VAC; 0.5 A @ 230 VAC
INRUSH CURRENT (TYP.)	<60 Amps; Measured at 264 VAC, 25°C Ambient, Cold Start

OUTPUT SPECIFICATIONS

OUTPUT VOLTAGE	48 VDC
OUTPUT CURRENT	0.83 A
RIPPLE AND NOISE	< 1 % of Vout*
LINE AND LOAD REGULATION	± 1 %
START UP TIME	< 1 sec@ 230 VAC & < 3 sec@ 115 VAC; Full Load
HOLD UP TIME	≥ 25 ms @ 230 VAC & ≥ 6 ms @ 115 VAC, Full Load
SERIES OPERATION	Possible for up to two power supplies (with external diode)

* Ripple & Noise measured at 20 MHz of bandwidth by using 0.1 uF & 10 uF parallel capacitor.

PROTECTIONS

INPUT FUSE	1.25 A - 250 VAC Internal
OUTPUT OVER LOAD	≥ 110 % of rated output current; Hiccup mode; Autorecovery type.
OUTPUT SHORT CIRCUIT	Hiccup mode when output over voltage occur; Autorecovery type.
OUTPUT OVER VOLTAGE	61 VDC ± 2 VDC Hiccup mode when output is shorted; Autorecovery type.
OVER TEMPERATURE	Power supply shuts down when the temperature of PCB below main transformer reaches typically 120°C; Turns on only after the temperature falls below 90°C typically and AC power is recycled thereafter.

ENVIRONMENT

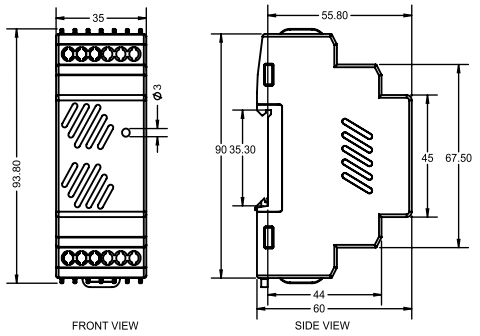
OPERATING TEMPERATURE	-25°C to + 70°C; De-rate linearly above 50°C from 100 % load at 50°C to 50 % load at 70°C . -25°C to + 0°C; startup is guaranteed with specifications deviations (Output ripple can be more than 10 % of the output voltage.)
STORAGE TEMPERATURE	- 40°C to + 85°C.
HUMIDITY	5 to 95 % RH, Non Condensing
ALTITUDE	2000 m

SAFETY & EMC

SAFETY STANDARDS	Designed to meet IEC 62368-1
DIELECTRIC WITHSTAND VOLTAGE	I/P to Earth : 2500VAC I/P to O/P : 4000VAC O/P to Earth : 1500VAC
INSULATION RESISTANCE	100 MΩ min. (between all outputs and all inputs / PE terminals) at 500 VDC
CONDUCTED EMISSION	CISPR11; Class B
RADIATED EMISSION	CISPR22; Class A
EMS IMMUNITY	Compliance to IEC61000-4-4,5,11

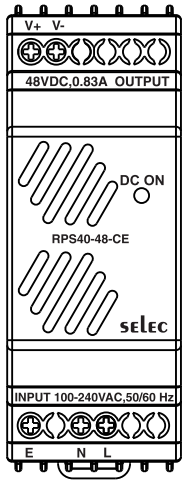
DIMENSIONAL DIAGRAM

DIMENSION	35 mm x 90 mm x 60 mm (W x H x D)
WEIGHT	150 gms



*All dimensions are in mm

WIRING DIAGRAM



WIRING INSTRUCTIONS

1. To prevent risk of electric shock, power supply equipment must be kept OFF while wiring.
2. Terminals and electrically charged parts must not be touched when the power is ON.
3. Wiring shall be done strictly according to terminal layout provided in the operating manual.

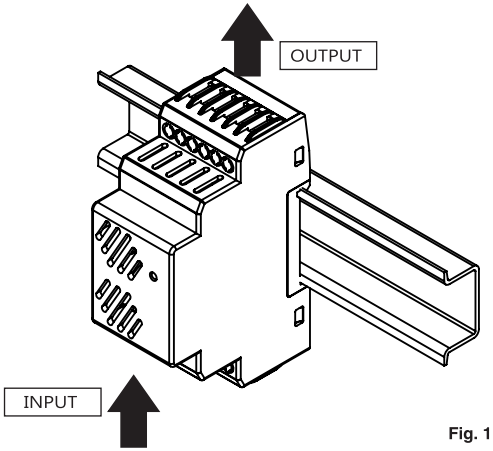


Fig. 1

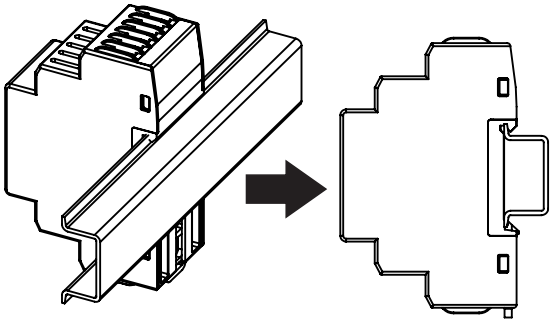


Fig. 2

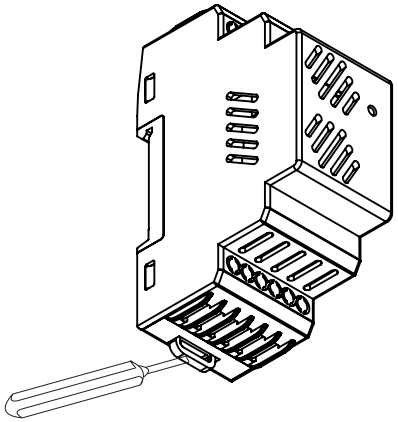


Fig. 3

INSTALLATION INSTRUCTIONS (POLLUTION DEGREE 2)

Attention:(Fig. 1)

1. Do not block the ventilation holes of power supply.
2. Keep at least 20mm clearance around the switching power supply.
3. The Equipment should not be installed in environmental conditions other than those specified in this manual.

Mounting:(Fig.2)

1. Slightly tilt the unit to engage on the top side of Din Rail mounting.
2. Press it downward until it gets locked in Din Rail.

Removal:(Fig.3)

1. Before removing power supply unit from Din Rail ensure that supply has been switched off.
2. Unscrew all the wire connections of power supply unit.
3. Insert a screw driver into the mounting clamp slot & pull it down to remove the power supply from Din Rail.

⚠ WARNING : Risk of electrical shock, fire, personal injury or death.

1. Do not use the power supply without proper grounding (Protective Earth).
2. Do not use in wet locations or in areas where moisture or condensation can be expected.
3. Make sure mains power supply is off before wiring the power supply unit. Make sure of correct wiring. Incorrect wiring may cause electrical shock or damage.
4. Do not touch the power supply during operation or immediately after turning off because some parts get hot or are at high voltage which may cause burns or electrical shock.
5. Do not install the power supply where human body may come into contact while power is supplied to the power supply.
6. Do not repair the power supply at user end. Modification or repairing of the power supply by users may cause electrical shocks, damage, & other accidents.
7. If damage or malfunction occurs during operation, immediately turn off mains power.

MEANING OF PRODUCT SAFETY SYMBOL

	Minor electric shock, fire or product failure may occasionally occur. Do not allow any pieces of metal or conductors or any clippings or cuttings resulting from installation work to enter the product. Un choc électrique mineur, un incendie ou une défaillance du produit peuvent survenir occasionnellement. Ne laissez pas de morceaux de métal ou de conducteurs ou de coupures ou de coupures résultant des travaux d'installation pénétrer dans le produit.
	WEEE symbol for Electrical and Electronic Equipment waste management Symbole DEEE pour la gestion des déchets d'équipements électriques et électroniques

SAFETY INSTRUCTIONS

- This manual is meant for personnel involved in wiring installation operation & routine maintenance of the equipment.
- Disconnect power supply of your system before starting any installation operation or wiring.
- Improper installation operation or wiring may impair safety & failure of the unit or electrical shock or damage.
- Connect the ground completely. A protective earthing terminal stipulated in safety standards is used. Electric shock or malfunction may occur if ground is not connected properly.

SR.NO./ DATE CODE IDENTIFICATION

FORMAT :- YYMMLPP - XXXX

YY	Year of Manufacturing
MM	Month of Manufacturing
L	Manufacturing Location
PP	Plan Month
XXXX	Serial number of unit

? SERVICE DETAILS

This power supply is not field serviceable product. In case of failure or malfunction, send back the power supply to factory.
Please contact service center for repair on the following numbers:

Tel. No. : +91-7498077172;
Email : service@selec.com

NO WARRANTY ON UNIT DAMAGED DUE TO WRONG CONNECTION OF POWER SUPPLY.

(Specifications are subject to change, since development is a continuous process.)

Factory Address :
EL-27/1, Electronic Zone, TTC Industrial Area,
MIDC, Mahape, Navi Mumbai - 400 710, INDIA.
Tel. No. : +91-22-28476443 / 1882
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