OP1048-V01

selec

RPS240-24-CU
Operating Instruction

FEATURES

- AC 100-240V Wide-range Input.
- Active PFC
- Cost optimized without compromising quality or reliability.
- Full power between -25°C and +50°C.
- DC-OK Relay contact.
- 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 - 240VAC ±10% ; 127 - 370VDC (Refer datasheet for input de-rating)
FREQUENCY RANGE	50-60Hz
EFFICIENCY(TYP.)	93% @ 230VAC
AC CURRENT(TYP.)	2.4A @ 115VAC; 1.2A @ 230VAC
INRUSH CURRENT(TYP.)	<60Amps; Measured at 264VAC, 25°C Ambient, Cold Start
POWER FACTOR	>0.95 @ Full Load Over entire input range
START UP TIME	<2 Sec @ Full Load Over entire input range

OUTPUT SPECIFICATIONS

OUTPUT VOLTAGE	24 - 28VDC
OUTPUT CURRENT	10A at 24V; 8.6A at 28V
RIPPLE AND NOISE	<1% of Vout *
LINE AND LOAD REGULATION	±1%
HOLD UP TIME	≥25ms at 24V & ≥16ms at 28V @ 115/230VAC, Full Load
DC-OK CONTACT	30VDC 1A; 60VDC 0.5A; 125VAC 0.5A, resistive load; min. current 1mA
SERIES OPERATION	Possible for up to two power supplies (with external diode)

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

PROTECTIONS

INPUT FUSED	4A - 250VAC Internal
OUTPUT OVER LOAD	110% to 140% of rated output current Protection type : Hiccup mode; recovers automatically after fault condition is removed.
OUTPUT SHORT CIRCUIT	Hiccup mode when output is shorted; Recovers automatically after fault condition is removed.
OUTPUT OVER VOLTAGE	31VDC ± 0.5VDC Protection type : Latched; Input AC power has to be recycled to recover the power supply.
OVER TEMPERATURE	Power supply shuts down when the temperature of PCB below PFC choke reaches typically 120°C; Recovers automatically when temperature falls to typically 90°C.

ENVIRONMENT

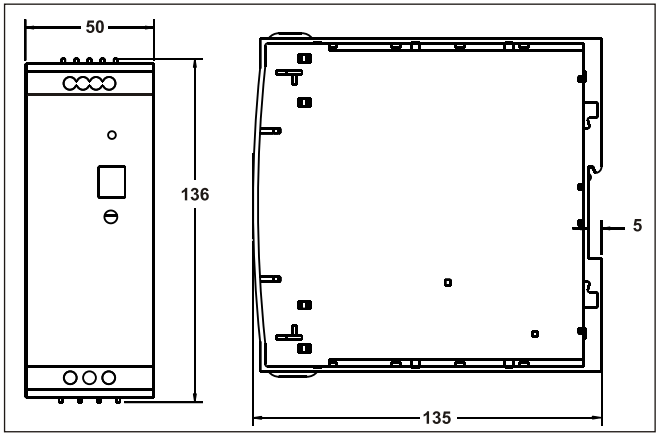
OPERATING TEMPERATURE	-25°C to +70°C *De-rate output power at 6W/°C above +50°C Ambient.
STORAGE TEMPERATURE	-40°C to +85°C.
HUMIDITY	5 to 95% RH, Non Condensing
ALTITUDE	2000m

SAFETY & EMC

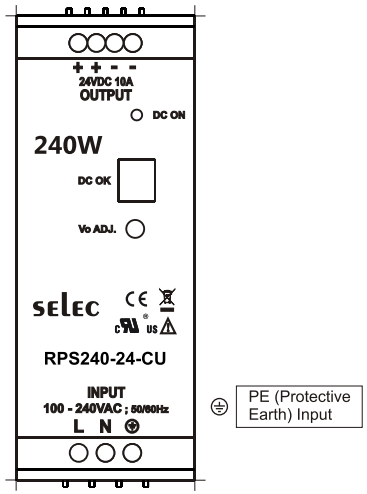
SAFETY STANDARDS	Designed to meet IEC 62368-1 Processing for UL-508
DIELECTRIC WITHSTAND VOLTAGE	I/P to Earth : 2500VAC I/P to O/P : 4000VAC O/P to Earth : 1500VAC O/P to DC-OK : 500VAC
INSULATION RESISTANCE	100 MΩ min. (between all outputs and all inputs/ PE terminals) at 500 VDC
CONDUCTED EMISSION	EN55022 ; Class B
RADIATED EMISSION	EN55022 ; Class A
CURRENT HARMONICS	Class D
EMS IMMUNITY	Compliance to IEC61000-4-4,5,11

DIMENSIONAL DIAGRAM

DIMENSION	50*136*135mm (W*H*D)
WEIGHT	645 gms



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.

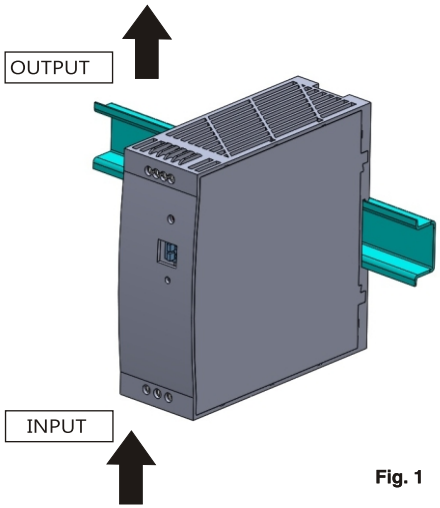


Fig. 1

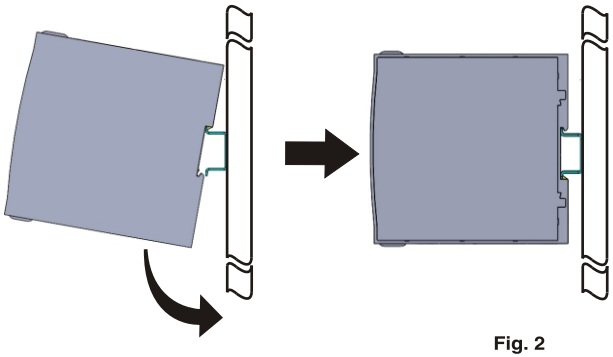


Fig. 2

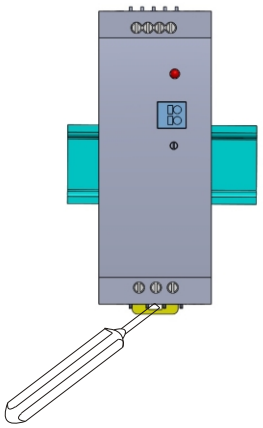


Fig. 3

INSTALLATION INSTRUCTIONS

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.

⚠ CAUTION

Minor burns may occasionally occur. Do not touch the product while power is being supplied or immediately after power is turned OFF.	
If the external breaker or fuse is tripped, the equipment may have been seriously damaged. Do not turn ON the input again.	
Minor injury due to electric shock may occasionally occur. Do not touch the terminals while power is being supplied.	
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.	

MEANING OF PRODUCT SAFETY SYMBOL

	Indicates the possibility of electrical shock under specific conditions
	Indicates the possibility of injuries by high temperature under specific condition
	Indicates the instructions of unspecified general action.

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.

? 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.
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