finder 78.x1

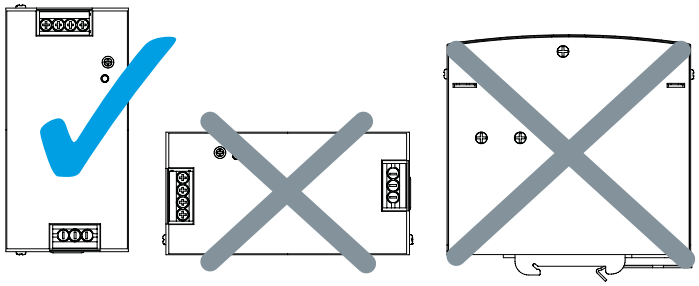
RELAYING INNOVATION

ENGLISH

Industrial switching power supply for general use

INSTALLATION

1. Din rail mounting, always allow good ventilation clearances, 5 mm left and right, 40 mm above and 20 mm on the bottom, around the top.
Mounting orientations other than that, such as upside down, horizontal, or table-top mounting, is not the unit in use to prevent it from overheating.
Also a 10-15 cm clearance must be kept when the adjacent device is a heat source.

2. 

3. Pollution Degree 2 applies where there is only non-conductive pollution that might temporarily become conductive due to occasional condensation.
Generally refer to dry, well-ventilated locations, such as control cabinets.
Indoor use, up to 5.000 m, 10-95% RH, overvoltage category II.

4. Use copper wire only. Recomended wires are shown in the table

AWG	18	16	14	12
Rated Current of Equipment (A)	7 A	10 A	15 A	20 A
Cross-section of Lead (mm^2)	0.8	1.3	2.1	3.3

The FG (⏚) must be connected to PE (Protective Earth)

5. Suggested fuse and maximum number of power supply that can be connected to a circuit breaker at 230V are shown as below.

Model	Fuse	Circuit breaker	
		C16	D16
78.J1	T3.15A/L250V	6	13
78.W1	T4A/L250V	5	10
78.X1	T5A/L250V	4	10
78.Y1	T8A/L250V	3	5

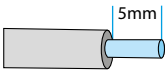
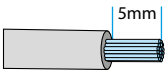
78.x1.1.230.24x2											
INPUT	78.x1	U_N	100...240 V AC (50/60) Hz 140... 338 V DC				PROTECTION TYPE				
		U_{min} U_{max}	90...264 V AC (50/60) Hz 127...370 V DC	B		U_N OK/LED A	Short circuit/LED A		Thermal protection/LED A		Overvoltage
OUT	78.J1	I_N	3.2 A (@50°C)	24-28 V DC	77 W		Hiccup		Re-power	OFF	Re-power
	78.W1	I_N	5 A (@50°C)	24-28 V DC	120 W		Hiccup		Re-power	OFF	Re-power
	78.X1	I_N	10 A (@50°C)	24-28 V DC	240 W		Hiccup		T.A.R.	OFF	Re-power
	78.Y1	I_N	20 A (@50°C)	24-28 V DC	480 W		Re-power	OFF	T.A.R.	OFF	Re-power
	78.x1		(–20...+70)°C (with derating)								
IP20											

DOWNLOAD USER MANUAL

SHORT CIRCUIT
Hiccup mode: recovers automatically after fault condition is removed.
Re-power: constant current limiting circuit will shut down after 3s.
Switch off and on (re-power) to recovery.

THERMAL PROTECTION
Re-power: shuts down output voltage, re-power on (switch off and on the power supply) to recover.
T.A.R.: Thermal Auto Recovery function, shuts down output voltage and recovers automatically after temperature goes down.

OVERVOLTAGE
Re-power: shuts down output voltage, re-power on (switch off and on the power supply) to recover.

	Power Supply model	Input		Output			
		Nm	Lb-in	Nm	Lb-in		
	78.J1	0.68	6	0.68	6		80°C UL1007
	78.W1	0.7	6.2	0.7	6.2		
	78.X1	0.7	6.2	0.7	6.2		
	78.Y1	1	8.85	1	8.85		

Make sure that all strands of each stranded wire enter the terminal connection and the screw terminals are securely fixed to prevent poor contact. If the power supply possesses multi-output terminals, please make sure each contact is connected to wires to prevent too much current stress on a single contact.
Use wires that can withstand temperatures of at least 80°C, such as UL1007.

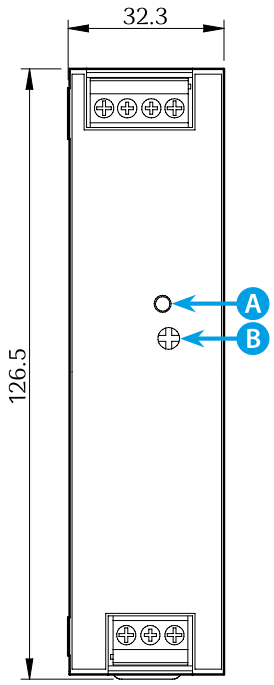
WARNING

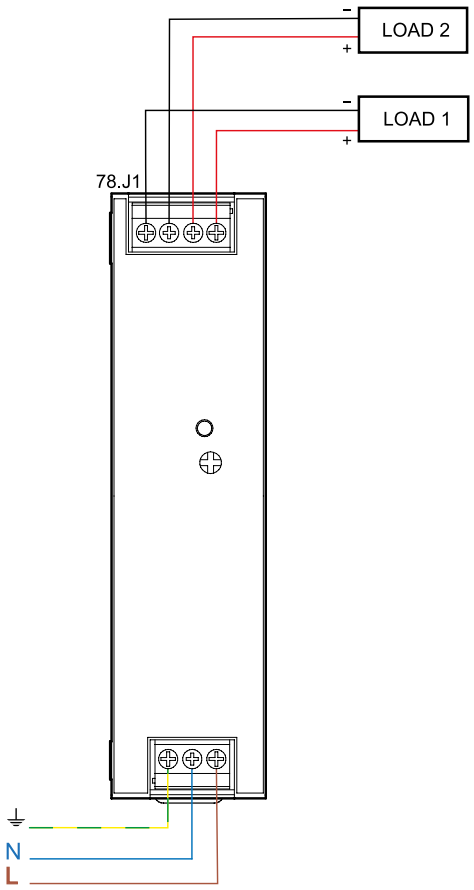
1. Risk of electrical shock and energy hazard. All failure should be examined by a qualified technician. Please do not remove the case of the power supply by yourself.
2. Risk of electric arcs and electric shock (danger to life).
3. Risk of burn hazard. Do not touch the unit in operation and shortly after disconnection.
4. Risk of fire and short circuit. The openings should be protected from foreign objects or dripping liquids.
5. Only install the unit in a pollution degree 2 environment.
6. Please do not install the unit in places with high moisture or near the water.
7. The FG (⏚) must be connected to PE (Protective Earth).
8. Output current and output wattage must not exceed the rated value on its specification.
9. Disconnect system from supply voltage before installation, maintenance or changing of the system.
10. For continued protection against risk of fire, replace only with same type and rating of fuse.

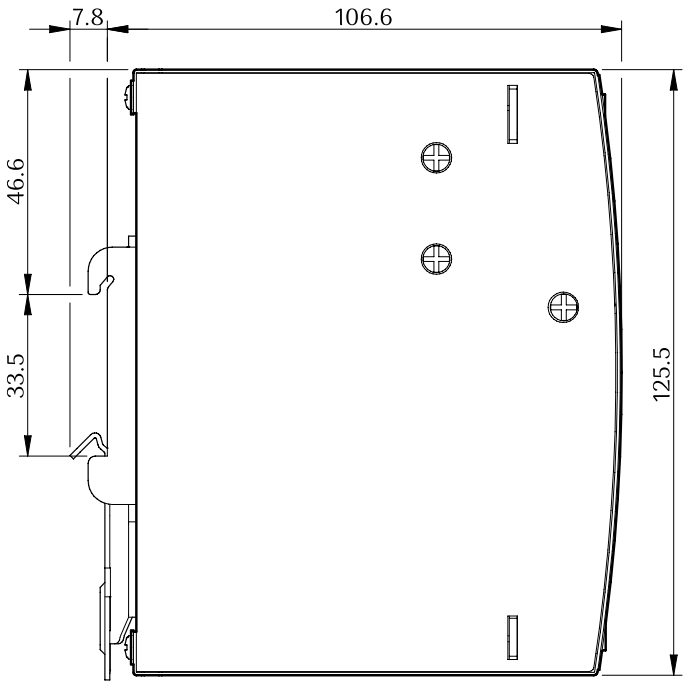
NOTE

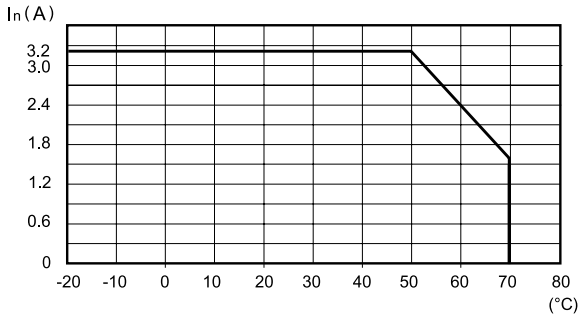
If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

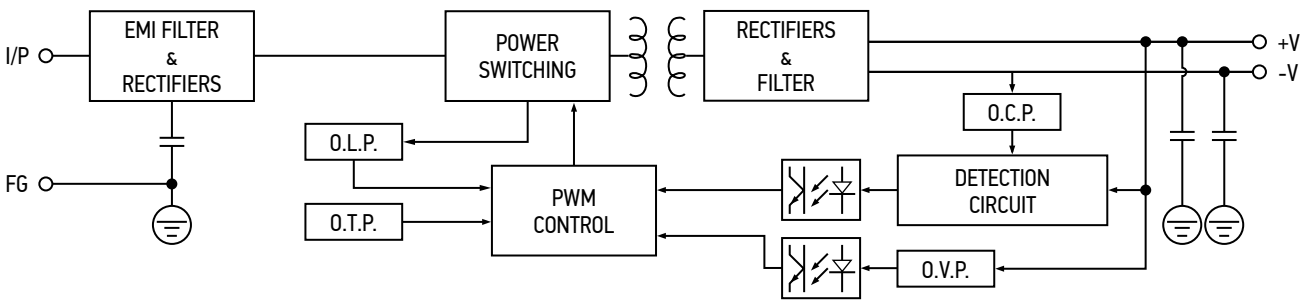
78.J1.1.230.2402



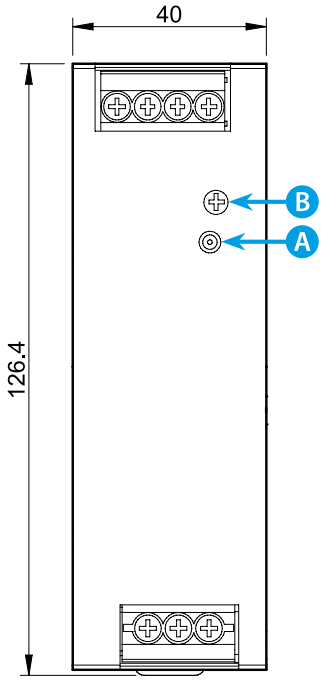


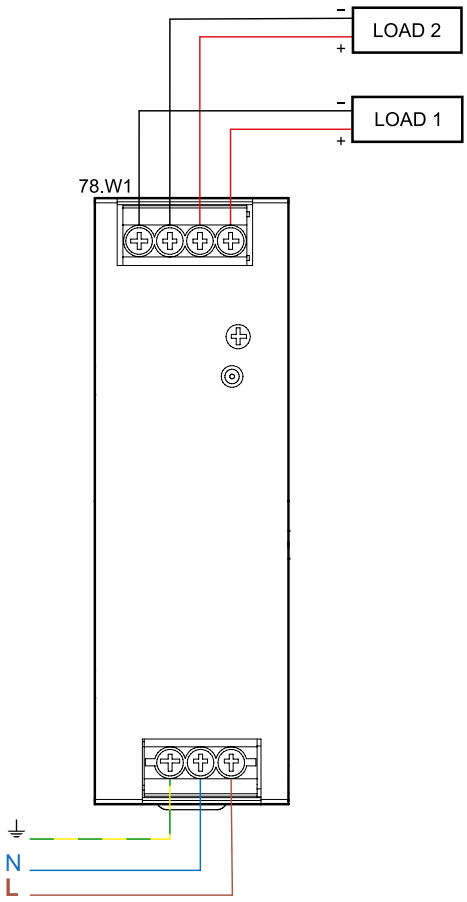


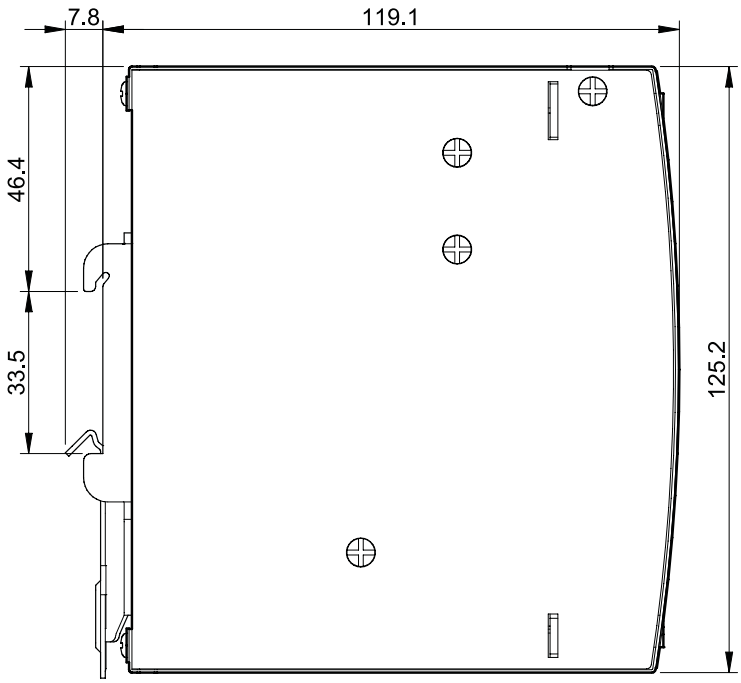


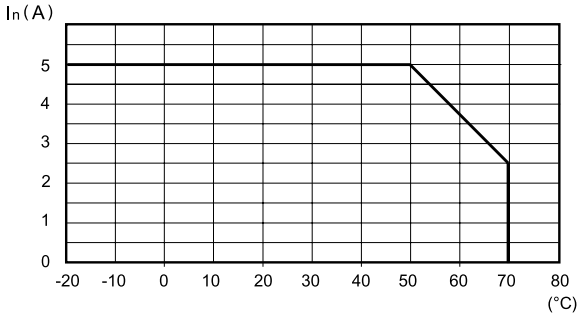


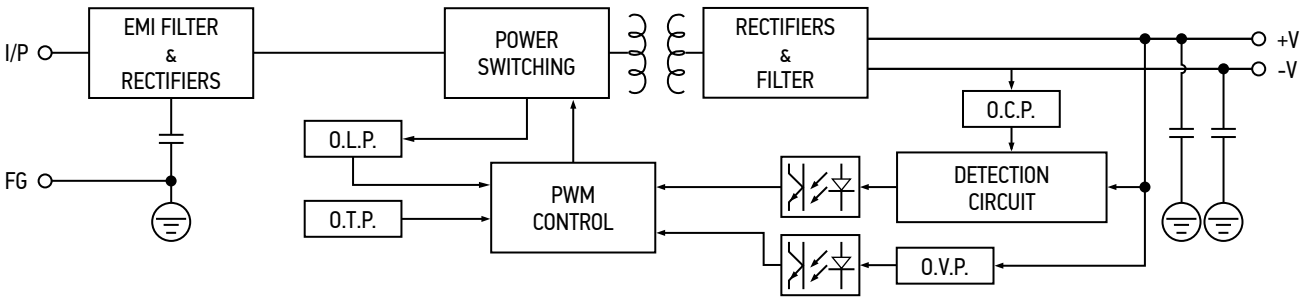
78.W1.1.230.2402



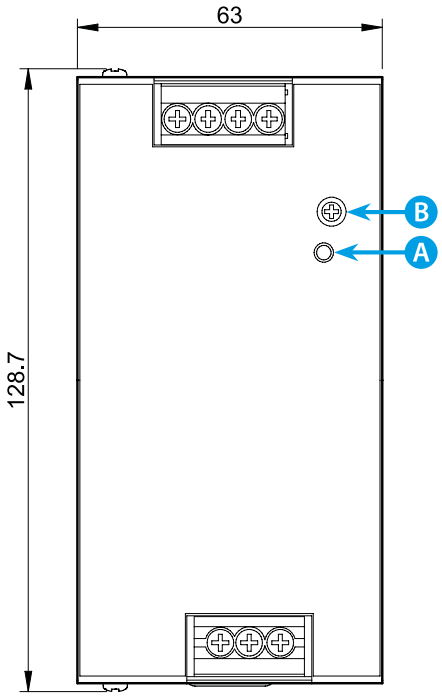


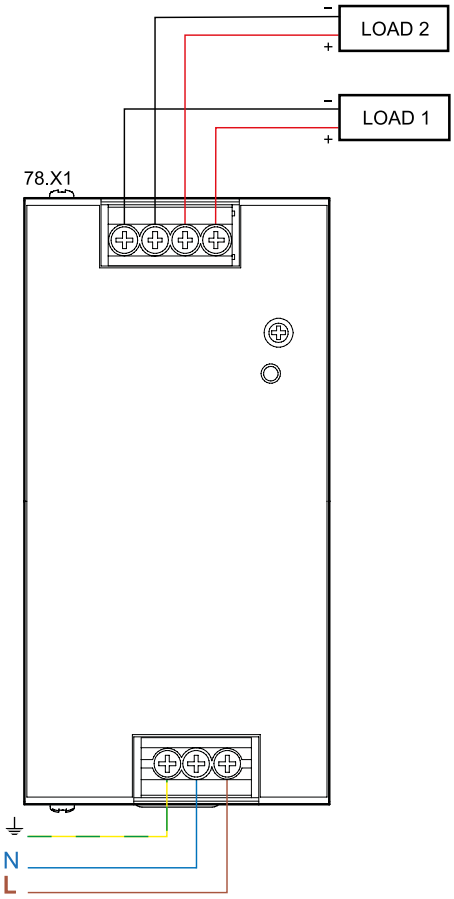


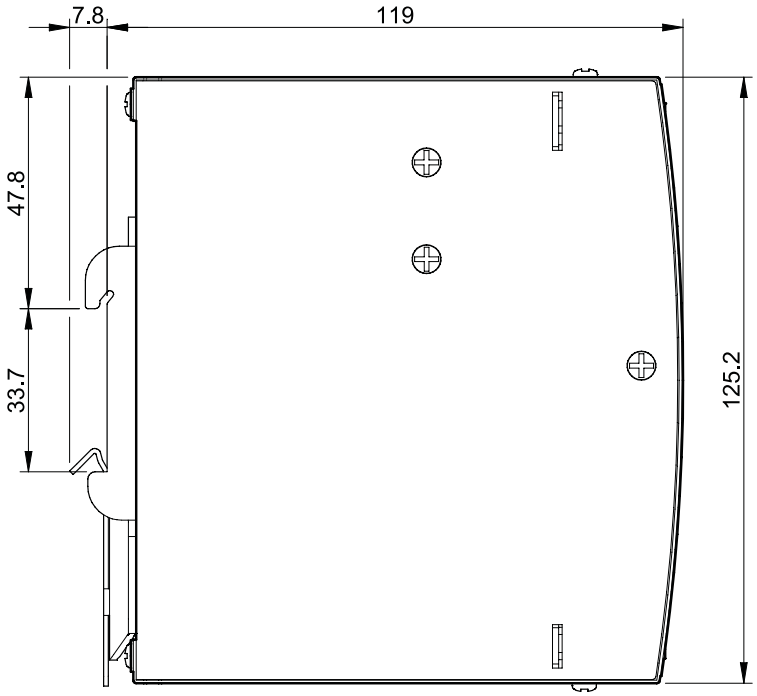


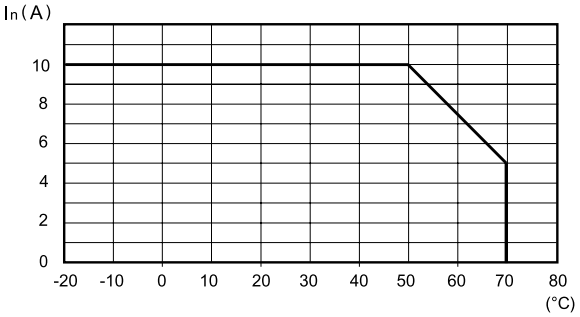


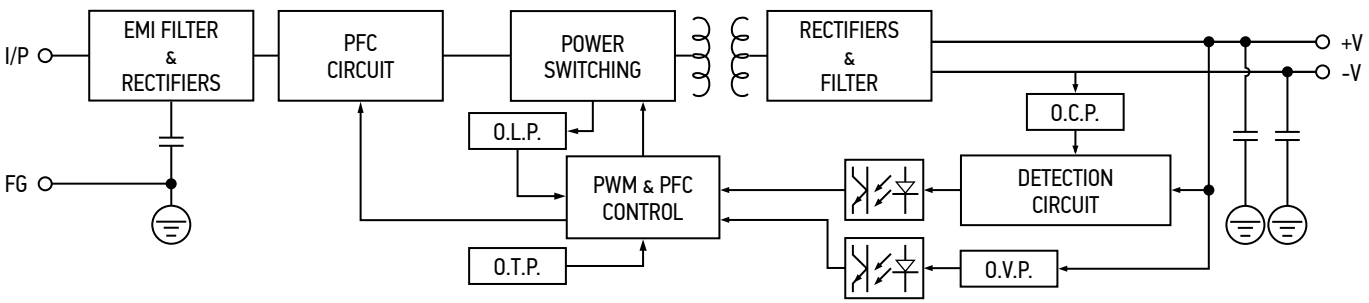
78.X1.1.230.2412











78.Y1.1.230.2412