



120W Single Output Industrial DIN RAIL Power Supply

EDR-120 series



■ Features

- Universal AC input / Full range
- Protection: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508 (industrial control equipment) approved
- EN61000-6-2 (EN50082-2) industrial immunity level
- 100% full load burn-in test
- 2 year warranty

■ Applications

- Industrial control systems
- Semiconductor fabrication equipment
- Factory automation and control
- Electro-mechanical apparatus

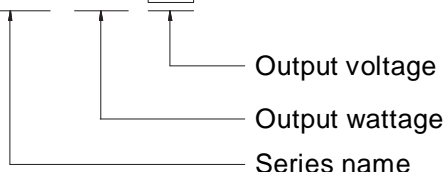
■ Description

The EDR-120 is an economical and slim 120W DIN rail power supply, designed to be installed on TS-35/7.5 or TS-35/15 mounting rails. The body is only 40mm wide which provides much space saving inside the electrical cabinet. The unit features a full range AC input capability from 90VAC to 264VAC and conforms to EN61000-3-2, the norm for EU regulations for harmonic current.

The EDR-120 has a metal housing that enhances the unit's power dissipation. With a working efficiency up to 88.5%, the unit can operate at the ambient temperatures between -20°C and 60°C using air convection cooling only. It is equipped with constant current mode for over-load protection making it ideal for a wide variety of inductive or capacitive load conditions. With all the protection functions and relevant certificates for industrial control apparatus (UL508, TUV EN60950-1 etc.) the EDR-120 provides a very competitive power supply solution for industrial applications.

■ Model Encoding

EDR - 120 - 12



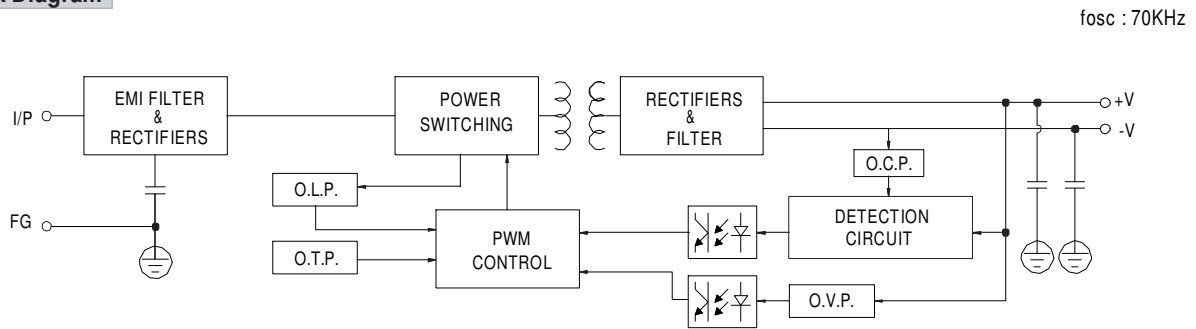


SPECIFICATION

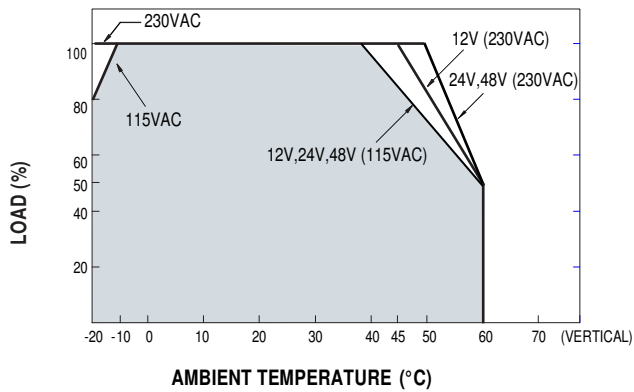
MODEL		EDR-120-12	EDR-120-24	EDR-120-48
OUTPUT	DC VOLTAGE	12V	24V	48V
	RATED CURRENT	10A	5A	2.5A
	CURRENT RANGE	0 ~ 10A	0 ~ 5A	0 ~ 2.5A
	RATED POWER	120W	120W	120W
	RIPPLE & NOISE (max) Note.2	100mVp-p	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	12 ~ 14V	24 ~ 28V	48 ~ 55V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	1200ms, 60ms/230VAC 2500ms, 60ms/115VAC at full load		
HOLD UP TIME (Typ.)	16ms/230VAC 10ms/115VAC at full load			
INPUT	VOLTAGE RANGE Note.6	90 ~ 264VAC 127 ~ 370VDC [DC input operation possible by connecting AC/L(+), AC/N(-)]		
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY (Typ.)	85%	87.5%	88.5%
	AC CURRENT (Typ.)	2.25A/115VAC	1.3A/230VAC	
	INRUSH CURRENT (Typ.)	20A/115VAC	35A/230VAC	
	LEAKAGE CURRENT	<1mA / 240VAC		
PROTECTION	OVERLOAD	105 ~ 130% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	OVER VOLTAGE	14 ~ 17V	29 ~ 33V	56 ~ 65V
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover		
	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")		
ENVIRONMENT	WORKING HUMIDITY	20 ~ 95% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)		
	VIBRATION	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6		
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL508, TUV EN60950-1, EAC TP TC 004, BSMI CNS14336-1 approved; (meets EN60204-1)		
	WITHSTAND VOLTAGE	I/P-O/P:3kVAC I/P-FG:2kVAC O/P-FG:0.5kVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: >100M Ohms / 500VDC / 25°C / 70% RH		
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class A, EN61000-3-2,3, EAC TP TC 020, CNS13438 Class A		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), heavy industry level, criteria A, EAC TP TC 020		
OTHERS	MTBF	474.6khrs min. MIL-HDBK-217F (25°C)		
	DIMENSIONS (WxHxD)	40x125.2x113.5mm		
	WEIGHT	0.6Kg		
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance: includes set up tolerance, line regulation and load regulation.</p> <p>4. The power supply is considered a component which will be installed into O.E.M. equipment. The final equipment must be re-confirmed that it still meets EMC directives.</p> <p>5. Installation clearances: 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded continuously at full power. In case the adjacent device is a heat source, 15mm clearance is recommended on the sides.</p> <p>6. Derating may be needed under low input voltage. Please check the derating curve for more details.</p>			



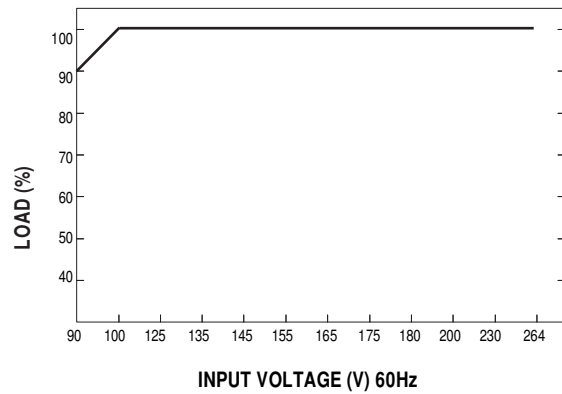
■ Block Diagram



■ Derating Curve



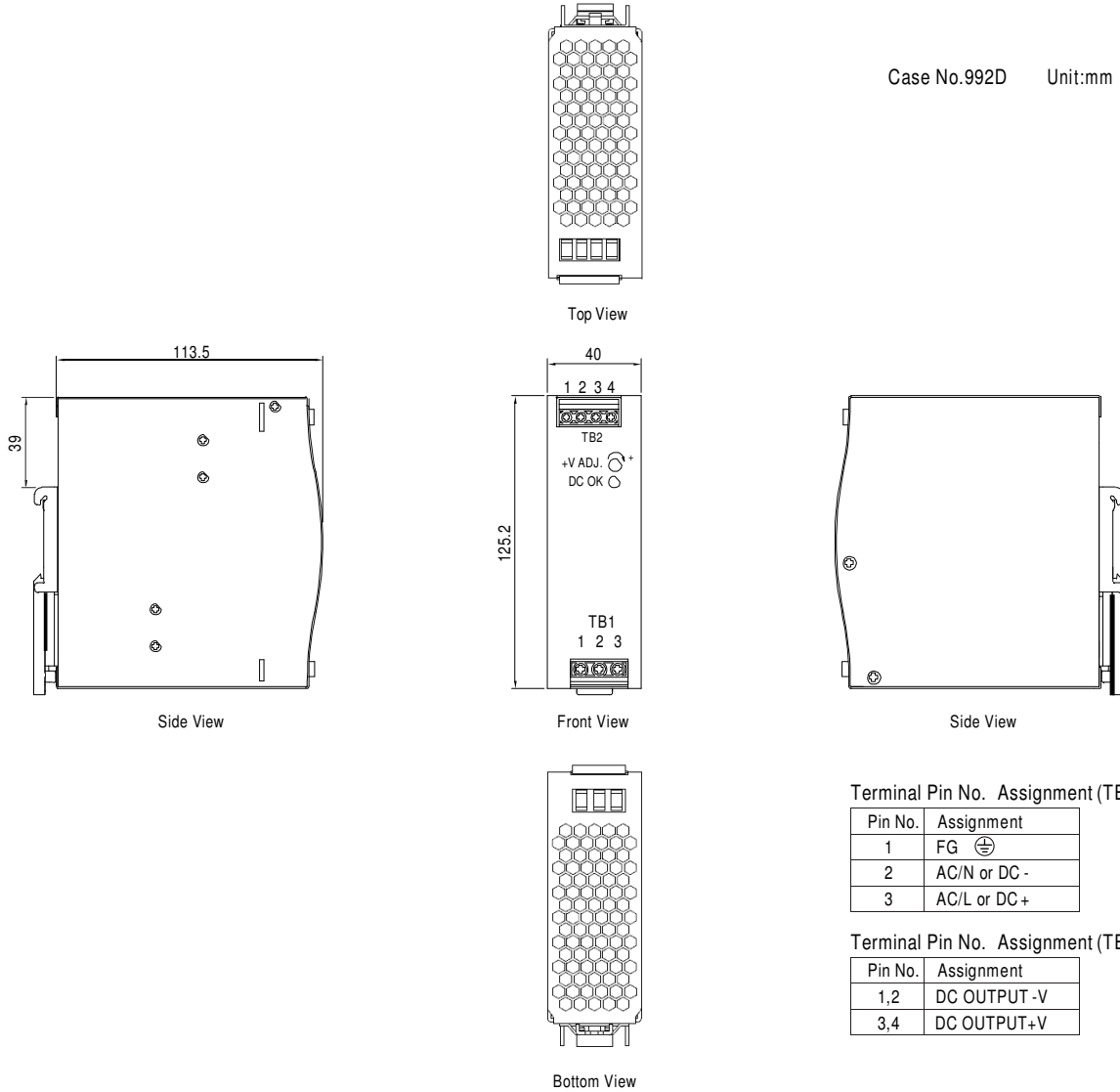
■ Static Characteristics



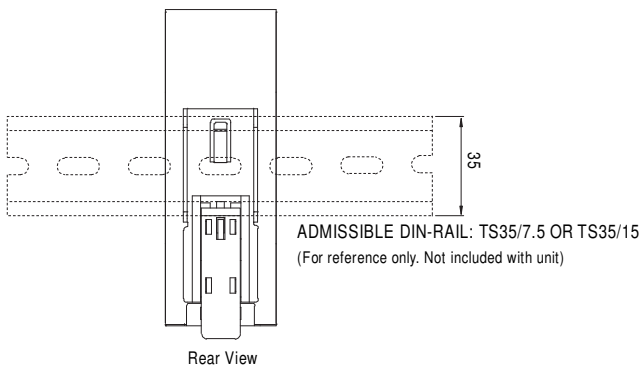


■ Mechanical Specification

Case No.992D Unit:mm



■ Installation Instructions



For installation details, please refer to the USER MANUAL
www.procontech.com.au/files/mwmanual.pdf
www.meanwell.com/Upload/PDF/EDR-120/EDR%20DIN%20rail.pdf