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RAYCORE

Q3-S342 V1.1E

Specification of DIN Rail Power Supply, 75W/DC48V, Metal Housing, -30 to +70˚C (SDR-75-48)

Part Number: APWD-MFSE-A7548-00

contact@melbye.com.tw

www.melbye.com.tw

Melbye Raycore Taiwan Co., Ltd.

- High efficiency 90% and low power dissipation
- 150% peak load capability
- Protections: 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
- 3 years warranty

Specifications

Model		APWD-MFSE-A7548-00 (SDR-75-48)
Output	DC voltage	48V
	Rated current	1.6A
	Current range	0 ~ 1.6A
	Rated power	76.8W
	Peak current	2.34A
	Peak power Note.6	112.5W (3sec.)
	Ripple & noise (max.) Note.2	120mVp-p
	Voltage ADJ. Range	48 ~ 55V
	Voltage tolerance Note.3	±1.0%
	Line regulation	±0.5%
	Load regulation	±1.0%
	Setup, rise time	1500ms, 60ms/230VAC 3000ms, 60ms/115VAC at full load
	Hold up time (Typ.)	80ms/230VAC 20ms/115VAC at full load
Input	Voltage range Note.7	88 ~ 264VAC 124 ~ 370VDC [DC input operation possible by connecting AC/L(+), AC/N(-)]
	Frequency range	47 ~ 63Hz
	Efficiency (Typ.)	90%
	AC current (Typ.)	1.4A/115VAC 0.85A/230VAC
	Inrush current (Typ.)	30A/115VAC 50A/230VAC
	Leakage current	< 1mA/240VAC

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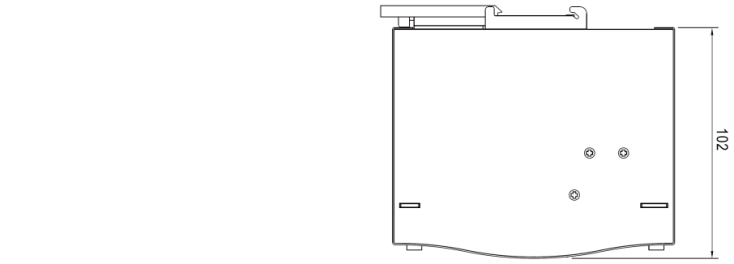
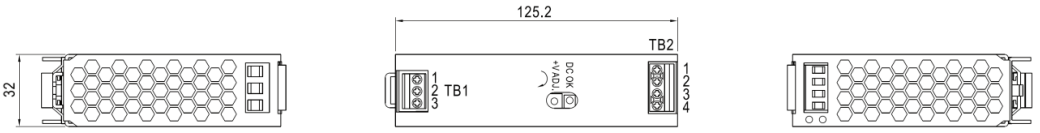
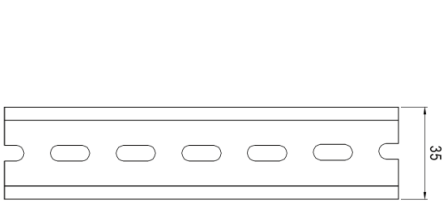
Model		APWD-MFSE-A7548-00 (SDR-75-48)
PROTECTION	Overload	Normally works within 110 ~ 150% rated output power for more than 3 seconds and then shut down o/p voltage, re-power on to recover
		150 ~ 170% rated power, constant current limiting with auto-recovery within 3 seconds and shut down o/p voltage after 3 seconds, re-power on to recover
	Over voltage	56 ~65V
		Protection type：Shut down o/p voltage, re-power on to recover
	Over temperature	100°C ±10°C (RTH2) detect on main of power switch
		Protection type：Shut down o/p voltage, re-power on to recover after temperature goes down
Environment	Working TEMP.	-30 ~ +70°C (Refer to "Derating Curve")
	Working humidity	20 ~ 95% RH non-condensing
	Storage TEMP., humidity	-40 ~ +85°C, 10 ~ 95% RH
	TEMP. Coefficient	±0.03%/°C (0 ~ 60°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 approved, design refer to GL ; (meet 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). EN61204-3 Class B, EN61000-3-2,-3, EAC TP TC 020
	EMC immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A, EAC TP TC 020, SEMI F47 approved
Others	MTBF	481.9K hrs min. MIL-HDBK-217F (25°C)
	Dimension	32*125.2*102mm (W*H*D)
	Packing	0.51Kg; 28pcs/15.3Kg/1.22CUFT
Note	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance：Includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 5. Installation clearances：40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended. 6. 3 seconds max., please refer to peak loading curves. 7. Derating may be needed under low input voltage. Please check the derating curve for more details. 8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).	

■ Mechanical Specification

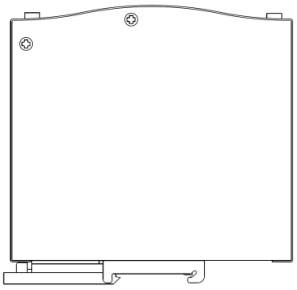
Case No. Unit:mm







ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15



Terminal Pin No. Assignment (TB1)

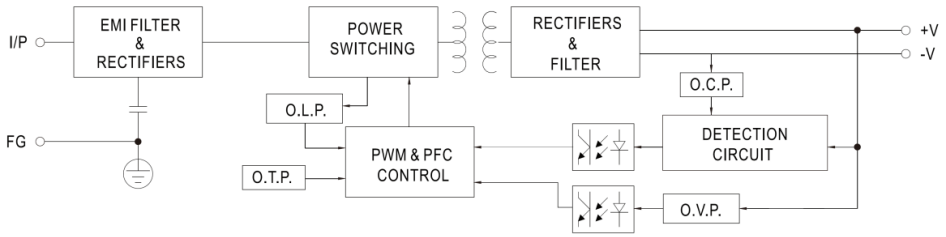
Pin No.	Assignment
1	FG ⏚
2	AC/N OR DC(-)
3	AC/L OR DC(+)

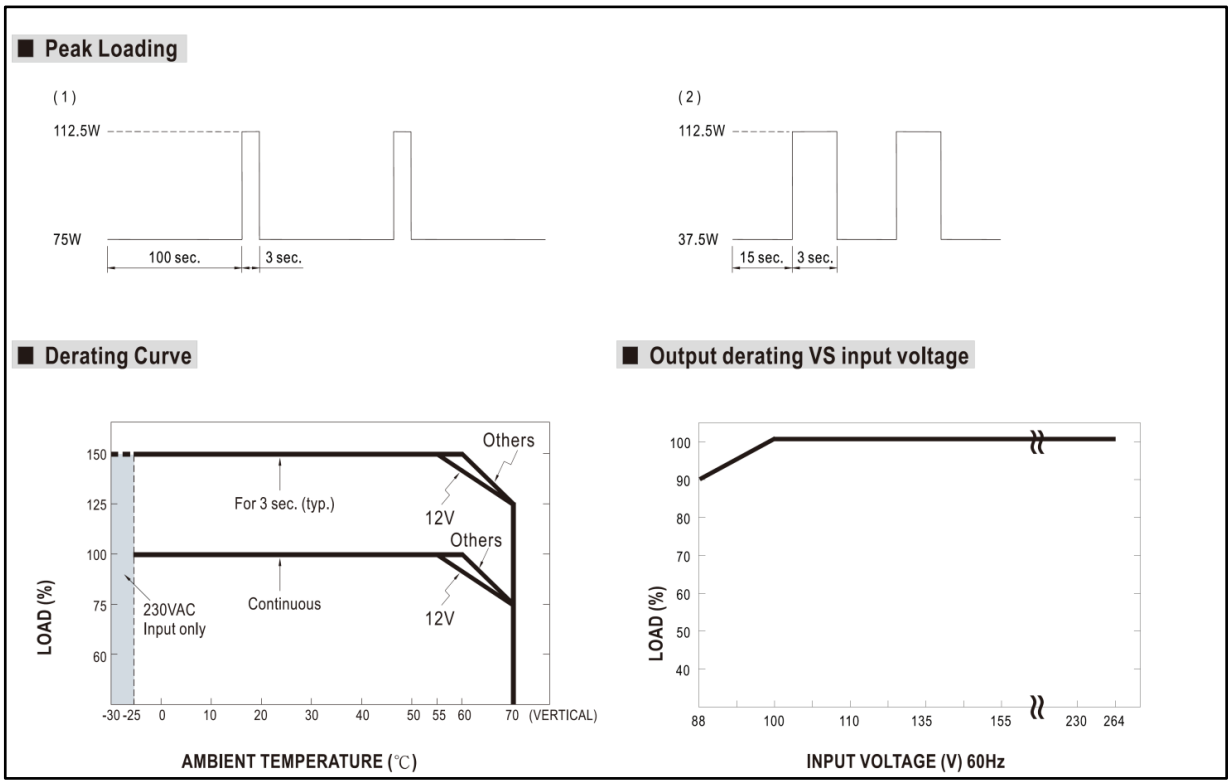
Terminal Pin No. Assignment (TB2)

Pin No.	Assignment
1,2	DC OUTPUT -V
3,4	DC OUTPUT+V

■ Block Diagram

fosc : 85KHz





Ordering Information

Part Number	Description
APWD-MFSE-A7548-00	DIN Rail Power Supply, 75W/DC48V, Metal Housing, -30 to +70°C (SDR-75-48)