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RAYCORE

Q3-S341 V1.1E

Specification of DIN Rail Power
Supply, 40W/DC24V, Plastic
Housing, -20 to +70°C (MDR-40-24)

Part Number: APWD-MPSB-A4024-00

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- Universal AC input/Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- Class I, Div 2 Hazardous Locations T4
- LED indicator for power on
- DC PK relay contact
- No load power consumption <0.75W
- 100% full load burn-in test
- 3 years warranty

Specifications

MODEL		APWD-MPSB-A4024-00 (MDR-40-24)		
Output	DC voltage	24V		
	Rated current	1.7A		
	Current range	0 ~ 1.7A		
	Rated power	40.8W		
	Ripple & noise (max.)	Note.2	150mVp-p	
	Voltage ADJ. Range	24 ~ 30V		
	Voltage tolerance	Note.3	±1.0%	
	Line regulation	±1.0%		
	Load regulation	±1.0%		
	Setup, Rise Time	Note.5	500ms, 30ms/230VAC	500ms, 60ms/115VAC at full load
Hold up time (Typ.)		50ms/230VAC	20ms/115VAC at full load	
Input	Voltage range	Note.7	85 ~ 264VAC 120 ~ 370VDC	
	Frequency range	47 ~ 63Hz		
	Efficiency (Typ.)	88%		
	AC current (Typ.)	1.1A/115VAC	0.7A/230VAC	
	Inrush current (Typ.)	COLD START	30A/115VAC	60A/230VAC
Leakage current	< 1mA/240VAC			

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Model		APWD-MPSB-A4024-00 (MDR-40-24)
Protection	Overload	105 ~ 150% rated output power Protection type : constant current limiting, recovers automatically after fault condition is removed
	Over voltage	31.2 ~ 36V Protection type : Shut down o/p voltage, re-power on to recover
Function	DC ok signal	REALY CONTACT RATINGS (max.): 30V/1A resistive
Environment	Working TEMP.	-20 ~ +70°C (Refer to "Derating Curve")
	Working humidity	20 ~ 90% 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, UL60950-1 TUV EN60950-1, Class I, Div. Group A, B, C, D Hazardous Locations T4, EAC TP TC 004, BSMI CNS14336-1, AS/NZS 60950.1 approved
	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 EN55011, EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2, -3, EAC TP TC 020, CNS13438 Class B
	EMC immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A, EAC TP TC 020
Others	MTBF	301.7K hrs min. MIL-HDBK-217F (25°C)
	Dimension	40*90*100mm (W*H*D)
	Packing	0.3Kg; 42pcs/13.6Kg/0.82CUFT
Note	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : Includes set up tolerance, line regulation and load regulation. 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time. 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). 	

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■ Mechanical Specification Case No.962A Unit:mm

■ Block Diagram

■ DC OK Relay Contact

Contact Close	PSU turns on / DC OK.
Contact Open	PSU turns off / DC Fail.
Contact Ratings (max.)	30V/1A resistive load.

■ Derating Curve

■ Output Derating VS Input Voltage

Ordering Information

Part Number	Description
APWD-MPSB-A4024-00	DIN Rail Power Supply, 40W/DC24V, Plastic Housing, -20 to +70°C (MDR-40-24)

