

RDS180A-24

SPECIFICATIONS (1/2)

A283-01-01A

MODEL		RDS180A-24-5	RDS180A-24-12	RDS180A-24-15	RDS180A-24-24
ITEMS					
INPUT					
Input Voltage Range	-	18 - 32VDC			
Efficiency (Typ)	(*1) %	81	85	86	86
Input Current (Typ)	(*1) A	9.3	8.9	8.8	8.8
Inrush Current (Typ)	(*1) -	30A at Cold Start			
OUTPUT					
Nominal Output Voltage	V	5	12	15	24
Output Voltage Initial Set Accuracy	(*9) -	±1%			
Maximum Output Current	A	36.0	15.0	12.0	7.5
Maximum Output Power	W	180.0	180.0	180.0	180.0
Maximum Line Regulation	(*2) mV	40	96	120	192
Maximum Load Regulation	(*3) mV	50	120	150	240
Temperature Coefficient	-	Less than 0.02% / °C			
Maximum Ripple	(*4) mV	50	80	80	100
Maximum Ripple & Noise	(*4) mV	100	170	200	290
Output Voltage Range	V	4.0 - 6.0	9.6 - 14.4	12.0 - 18.0	19.2 - 28.8
Over Current Protection	(*5) -	105% - 135%			
Over Voltage Protection	(*6) V	6.2 - 7.3	15.0 - 17.4	18.7 - 21.8	30.0 - 34.8
FUNCTION					
Remote ON/OFF Control	-	Possible			
Remote Sensing	-	Possible			
Parallel Operation	-	Possible			
Series Operation	-	Possible			
ENVIRONMENT					
Operating Temperature	(*7) -	-20 to +60°C (-20 to +50°C:100%, +60°C:70%)			
Storage Temperature	-	-25 to +75°C			
Operating Humidity	-	20 to 95%RH (No Condensing)			
Storage Humidity	-	20 to 95%RH (No Condensing)			
Vibration	(*8) -	At No operating, 10 to 55Hz : 19.6m/s ² Constant, X,Y,Z 1hour each.			
		Designed to meet JIS E 3014-2-B			
		Designed to meet IEC61373 - Category 1 - Grade B (EN50155 requirement)			
Shock	(*8) -	196m/s ² (time : 11±5ms)			
		Designed to meet JIS E 3015-2 (294m/s ² (time : 6±3ms))			
		Designed to meet IEC61373 - Category 1 - Grade B (EN50155 requirement)			
Cooling	-	Convection Cooling			
ISOLATION					
Withstand Voltage	-	Input - Output, Input - FG : 2kVAC(10mA) for 1min., Output - CNT(RC) : 100VAC(100mA) for 1min.			
Isolation Resistance	-	Output - FG : 500VDC 100Mohm, Output - CNT(RC) : 100VDC 10Mohm			
STANDARD AND COMPLIANCE					
Safety	-	Approved by IEC/EN/CSA/UL62368-1 (Altitude≤3,000m)			
Conducted Emission	(*8) -	Designed to meet EN55011/EN55032-B, FCC-ClassB, VCCI-B, EN50121-3-2 (EN50155 requirement)			
Radiated Emission	(*8) -				
Immunity	(*8) -	Designed to meet IEC61000-4-2(Level 2,3),- 4(Level 3), -5(Level 1), -8(Level 4)			
MECHANICAL					
Weight (Typ.)	g	1100			
Size (W x H x D)	mm	80 x 95 x 220 (Refer to Outline Drawing)			

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SPECIFICATIONS (2/2)

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*Read instruction manual carefully, before using the power supply unit.

=NOTES=

*1. At 24VDC input voltage, Ta=25°C, nominal output voltage and maximum output power.

*2. 18 - 32VDC input voltage, constant load.

*3. No load-Full load, constant input voltage.

*4. Measure with JEITA RC-9141B probe, Bandwidth of scope :100MHz.

*5. OCP TYPE : Constant current limit with automatic recovery.

*6. OVP circuit will shut the output down, manual reset (CNT reset or Re power on).

*7. Ratings - Derating at standard mounting. Refer to output derating curve (A283-01-02_).

- Load (%) is percent of maximum output power or maximum output current, whichever is greater.

*8. This result is evaluated by TDK-Lambda standard measurement conditions.

The power supply is considered a component which will be installed into a final equipment.

The final equipment should be re-evaluated that it meets EMC, Vibration and Shock directives.

*9. At factory shipment. (At 24VDC input voltage, nominal output voltage and maximum output current.)

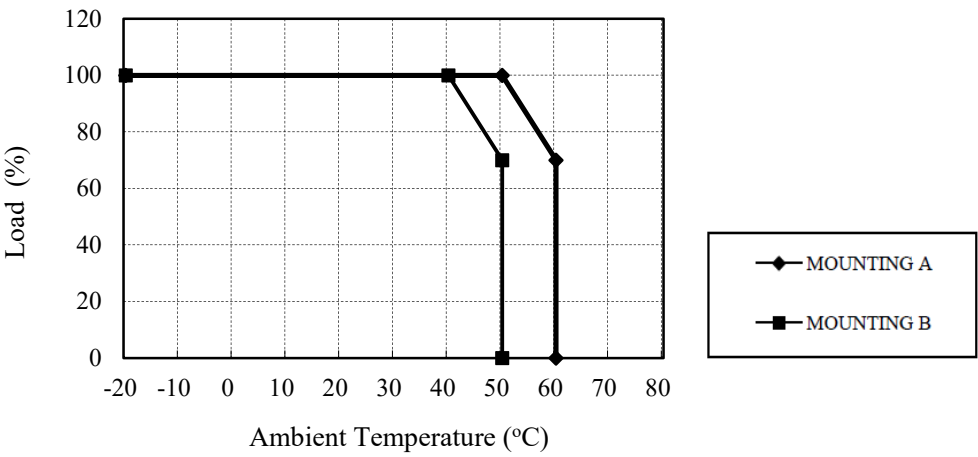
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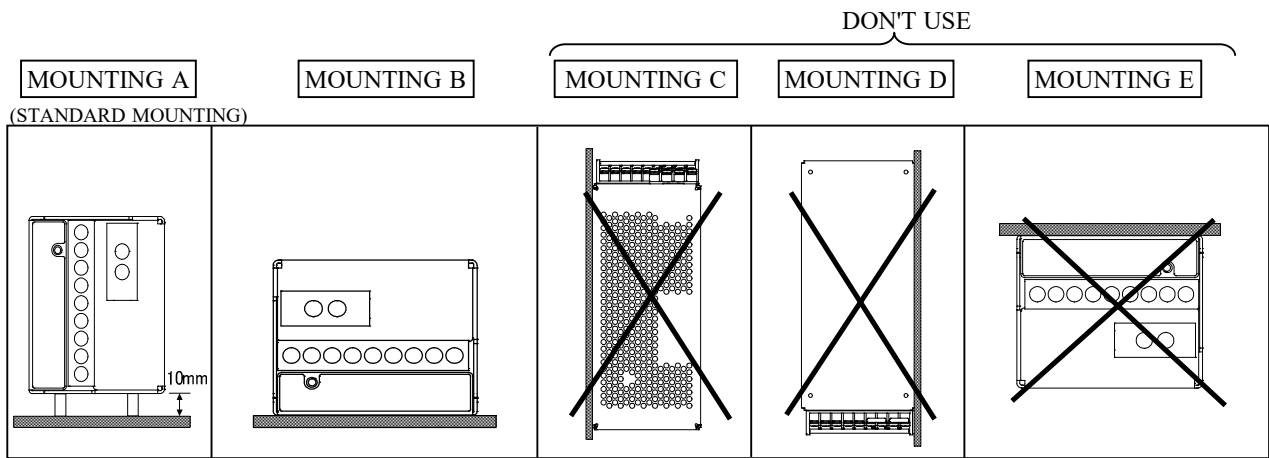
* Cooling : Convection cooling

Ta (°C)	LOAD (%)	
	MOUNTING A	MOUNTING B
-20 - +40	100	100
50	100	70
60	70	-

Output derating Curve



Mounting direction



Foot Space for mounting 'A'
must be 10mm or higher when
having an output power larger than 150W.