



■ Features :

- High efficiency 91% and low power dissipation
- 150% peak load capability
- Built-in active PFC function, PF>0.93
- 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
- Built-in DC OK relay contact
- 100% full load burn-in test
- · 3 years warranty









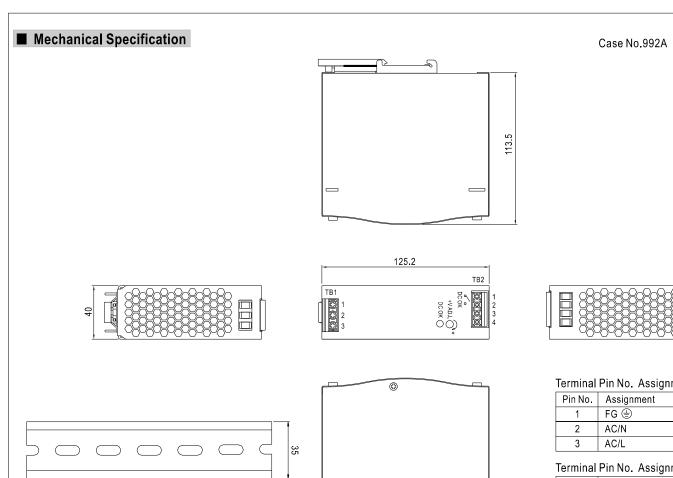
SPECIFICATION

MTBF SEMI F47, GL approved 289.9Khrs min. MIL-HDBK-217F (25℃)	MODEL		SDR-120-12	SDR-120-24	SDR-120-48	
CURRENT RANGE 0 - 10A		DC VOLTAGE	12V	24V	48V	
RATED POWER 120W		RATED CURRENT	10A	5A	2.5A	
PEAK CURRENT 15A		CURRENT RANGE	0 ~ 10A	0 ~ 5A	0 ~ 2.5A	
PEAK POWER Note.6 180W (3 sec.)		RATED POWER	120W	120W	120W	
NPUT RIPPLE & NOISE (max.) Note.2 100mVp-p 100mVp-p 120mVp-p 120m		PEAK CURRENT	15A	7.5A	3.75A	
NPUT RIPPLE & NOISE (max.) Note.2 100mVp-p 100mVp-p 120mVp-p 120m		PEAK POWER Note.6	180W (3 sec.)			
VOLTAGE TOLERANCE Note.3 ±1.0%	OUTPUT	RIPPLE & NOISE (max.) Note.2		100mVp-p	120mVp-p	
LINE REGULATION		VOLTAGE ADJ. RANGE	12 ~ 14V	24 ~ 28V	48 ~ 55V	
LOAD REGULATION ±1.0% ±1.0% ±1.0% ±1.0% ±1.0%		VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%	
SETUP, RISE TIME		LINE REGULATION	±0.5%	±0.5%	±0.5%	
HOLD UP TIME (Typ.) 20ms/230VAC 20ms/115VAC at full load 20ms/115VAC at full load 24 - 370VDC 20ms/115VAC at full load 24 - 370VDC 20ms/115VAC at full load 24 - 370VDC 25 - 270VBC 25 - 270VB		LOAD REGULATION	±1.0%	±1.0%	±1.0%	
VOLTAGE RANGE		SETUP, RISE TIME	1500ms, 60ms/230VAC 3000ms, 60m	ns/115VAC at full load		
FREQUENCY RANGE 47 ~ 63Hz POWER FACTOR (Typ.) 0.39/230VAC 0.96/115VAC at full load		HOLD UP TIME (Typ.)	20ms/230VAC 20ms/115VAC at full load			
NPUTE FOWER FACTOR (Typ.) 0.93/230VAC 0.96/115VAC at full load		VOLTAGE RANGE Note.7	88 ~ 264VAC 124 ~ 370VDC			
NPUT AC CURRENT (Typ.) 1.4A/115VAC 0.7A/230VAC		FREQUENCY RANGE				
AC CURRENT (Typ.) 1.4A/115VAC 0.7A/230VAC		POWER FACTOR (Typ.)	0.93/230VAC 0.96/115VAC at full loa	d		
AC CURRENT (Typ.) 1.4A/115VAC 0.7A/230VAC	INPUT	EFFICIENCY (Typ.)	89%	91%	90.5%	
INRUSH CURRENT (Typ.) 35A/115VAC		AC CURRENT (Typ.)				
PROTECTION PROTECTION OVER VOLTAGE 14 ~ 17V 29 ~ 33V 56 ~ 65V						
NOTE		LEAKAGE CURRENT	<1mA / 240VAC			
PROTECTION OVER VOLTAGE 14 ~ 17V 29 ~ 33V 56 ~ 65V		OVERLOAD	Normally works within 110 ~ 150% rated output power for more than 3 seconds and then shut down o/p voltage			
PROTECTION OVER VOLTAGE OVER TEMPERATURE 95°C±5°C (TSW: detect on heatsink of power switch) Protection type: Shut down o/p voltage, recovers automatically after temperature goes down FUNCTION DC 0K REALY CONTACT RATINGS (max.) 60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load WORKING TEMP25 ~ +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 ~ 50°C) VIBRATION Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6 WITHSTAND VOLTAGE I/P-0/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC SAFETY & EMC EMISSION Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3 Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, crit SEMI F47, GL approved WITHSTAND WITHSTAND VOLTAGE I/P-0/P, I/P-FG, O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC O/P-						
Protection type : Shift down of p voltage, re-power on to recover		OVER VOLTAGE	14 ~ 17V	29 ~ 33V	56 ~ 65V	
Protection type: Shut down o/p voltage, recovers automatically after temperature goes down FUNCTION DC OK REALY CONTACT RATINGS (max.) FUNCTION DC OK REALY CONTACT RATINGS (max.) FUNCTION DC OK REALY CONTACT RATINGS (max.) FUNCTION WORKING TEMP. -25 ~ +70°C (Refer to "Derating Curve") WORKING HUMIDITY 20 ~ 95% RH non-condensing STORAGE TEMP., HUMIDITY -40 ~ +85°C, 10 ~ 95% RH TEMP. COEFFICIENT -50.03%/°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 STANDARDS UL508, TUV EN60950-1 approved WITHSTAND VOLTAGE I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC ISOLATION RESISTANCE EMC EMISSION Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3 EMC IMMUNITY MTBF 289,9Khrs min. MIL-HDBK-217F (25°C)	PROTECTION					
Protection type : Shut down o/p voltage, recovers automatically after temperature goes down		OVER TEMPERATURE				
WORKING TEMP. -25 ~ +70°C (Refer to "Derating Curve")						
## WORKING HUMIDITY 20 ~ 95% RH non-condensing ## STORAGE TEMP., HUMIDITY -40 ~ +85°C, 10 ~ 95% RH ## TEMP. COEFFICIENT	FUNCTION	DC OK REALY CONTACT RATINGS (max.)	60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load			
ENVIRONMENT 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 STANDARDS UL508, TUV EN60950-1 approved WITHSTAND VOLTAGE I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC O/P-DC OK: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 EN55022 (CISPR22) Class B, EN61000-3-2,-3 EMC IMMUNITY Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, crits SEMI F47, GL approved MTBF 289.9Khrs min. MIL-HDBK-217F (25°C)		WORKING TEMP.	-25 ~ +70°C (Refer to "Derating Curve")			
TEMP. COEFFICIENT	ENVIRONMENT	WORKING HUMIDITY	20 ~ 95% RH non-condensing			
VIBRATION Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6 SAFETY STANDARDS UL508, TUV EN60950-1 approved WITHSTAND VOLTAGE I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC O/P-DC OK: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 EN55022 (CISPR22) Class B, EN61000-3-2,-3 EMC IMMUNITY Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, crit SEMI F47, GL approved MTBF 289.9Khrs min. MIL-HDBK-217F (25°C)		STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH			
SAFETY STANDARDS		TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)			
WITHSTAND VOLTAGE		VIBRATION	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6			
SAFETY & EMC (Note 4) ISOLATION RESISTANCE I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C / 70% RH EMC EMISSION Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3 EMC IMMUNITY Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, crits SEMI F47, GL approved MTBF 289.9Khrs min. MIL-HDBK-217F (25°C)	EMC	SAFETY STANDARDS	UL508, TUV EN60950-1 approved			
EMC EMC EMISSION Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3		WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC			
(Note 4) EMC IMMUNITY Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3 Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, crit SEMI F47, GL approved MTBF 289.9Khrs min. MIL-HDBK-217F (25°C)		ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C / 70% RH			
EMC IMMUNITY Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, crit SEMI F47, GL approved MTBF 289.9Khrs min. MIL-HDBK-217F (25°C)		EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3			
		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, SEMI F47, GL approved			
	OTHERS	MTBF	289.9Khrs min. MIL-HDBK-217F (25°C)			
עותבא טואבאסוטא 40 ועס.ע וווווו (אי ה ט)		DIMENSION	40*125.2*113.5mm (W*H*D)			
PACKING 0.67Kg; 20pcs/14.4Kg/1.16CUFT		PACKING	0.67Kg; 20pcs/14.4Kg/1.16CUFT			
NOTE 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.	NOTE	1. All parameters NOT specia	ially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. ured 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
- 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.

Unit:mm





Terminal Pin No. Assignment (TB1)

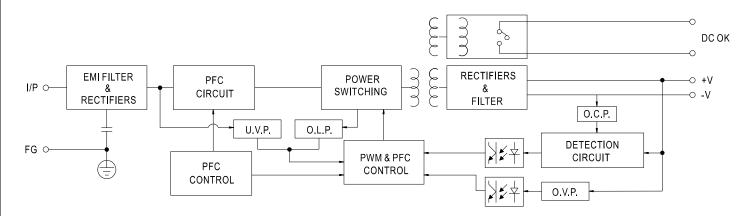
Pin No.	Assignment
1	FG 🖶
2	AC/N
3	AC/L

Terminal Pin No. Assignment (TB2)

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

■ Block Diagram

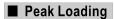
ADMISSIBLE DIN-RAIL:TS35/7.5 OR TS35/15

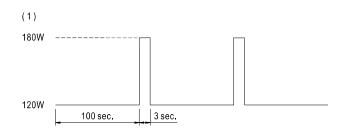


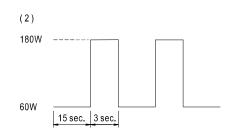
■ DC OK Relay Contact

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

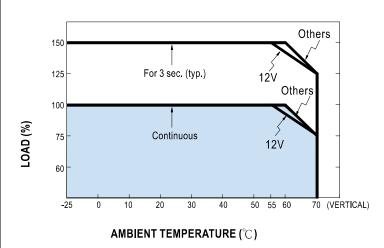








■ Derating Curve



■ Output derating VS input voltage

