

Dimension

W	*	L	*	H
127	*	230	*	40.5(1U)
mm				



■ Features

- DC input
- Protections: Short circuit / Overload / Over voltage / Over temperature
- LED indicator for power on
- Built-in remote ON-OFF control / remote sense / DC OK signal
- High efficiency up to 90.5%
- Forced air cooling by built-in DC fan
- Built-in active PFC function

■ Applications

- Industrial automation machinery
- Industrial control system machinery
- Factory control or automation apparatus
- Test and measurement instrument
- RF application

■ Description

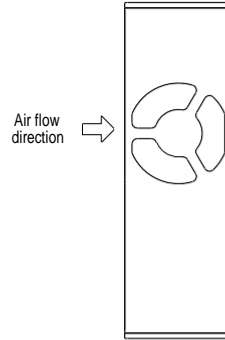
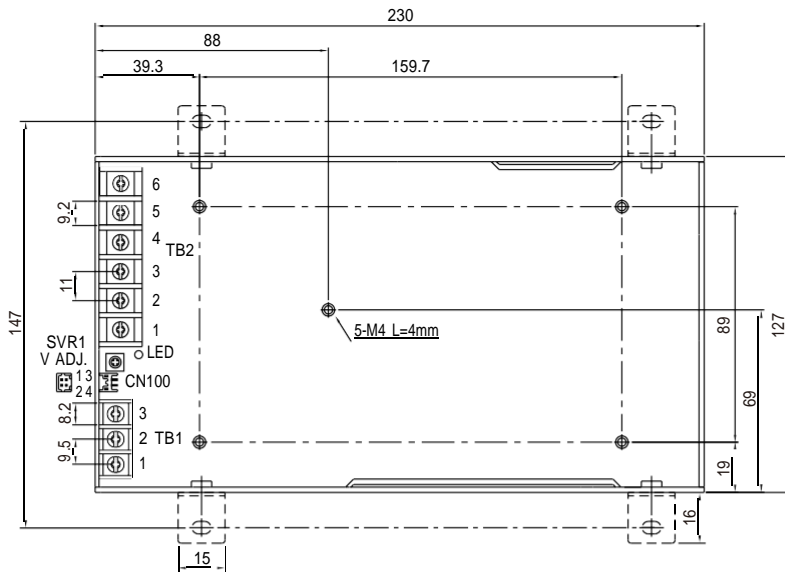
DC127-DC48 is a 500W single output enclosed type DC/DC power supply. This series operates for 115~350VDC input voltage and offers -48 VDC output. DC127-DC48 is cooled by the built-in fan with fan speed control, working for the temperature up to 70°C.

SPECIFICATION

MODEL		DC127-DC48
INPUT	VOLTAGE RANGE	115 ~ 350VDC
	EFFICIENCY (Typ.)	90.5%
OUTPUT	DC VOLTAGE	-48V
	RATED CURRENT	10.5A
	CURRENT RANGE	0 ~ 10.5A
	RATED POWER	504W
	RIPPLE & NOISE (max.)	150mVp-p
	VOLTAGE ADJ. RANGE	41 ~ 56V
	VOLTAGE TOLERANCE	±1.0%
	LINE REGULATION	±0.2%
PROTECTION	OVERLOAD	105 ~ 130% rated output power Protection type: Constant current limiting, recovers automatically after fault condition is removed
	OVER VOLTAGE	58.4 ~ 68V Protection type: Shut down o/p voltage, re-power on to recover
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down
FUNCTION	REMOTE CONTROL	POWER ON: open or 0~0.8VDC between RC+(Pin 4)&RC-(Pin3) on CN100 POWER OFF: 4~10VDC between RC+(Pin 4)&RC-(Pin3) on CN100
	REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.3V
	FAN CONTROL (Typ.)	RTH2≥50°C±10°C Fan on; RTH2≤40°C±10°C Fan off (Fan ON/OFF control)
ENVIRONMENT	WORKING TEMP.	-30 ~ +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)
SAFETY & EMC	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes
	SAFETY STANDARDS	UL62368-1, TUV BS EN/EN62368-1, AS/NZS 62368.1, EAC TP TC 004 , CCC GB4943.1 , BSMI CNS14336-1approved
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020,GB/T 9254, CNS13438 Class B
OTHERS	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55024, BS EN/EN61000-6-2, criteria A, EAC TP TC 020
	MTBF	187.7K hrs min. MIL-HDBK-217F (25°C)
NOTE	DIMENSION 230*127*40.5mm (L*W*H)	
1. 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.		

Mechanical Specification

Unit:mm

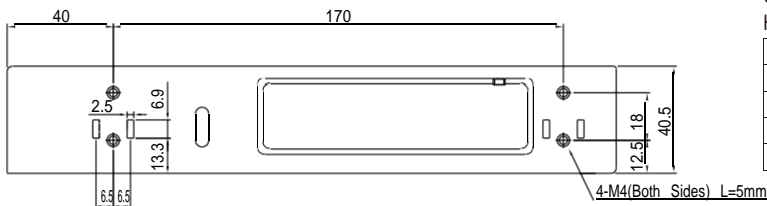


Input Terminal
Pin No. Assignment (TB1)

Pin No.	Assignment
1	127 VDC
2	0 VDC
3	FG ±

DC Output Terminal
Pin No. Assignment (TB2)

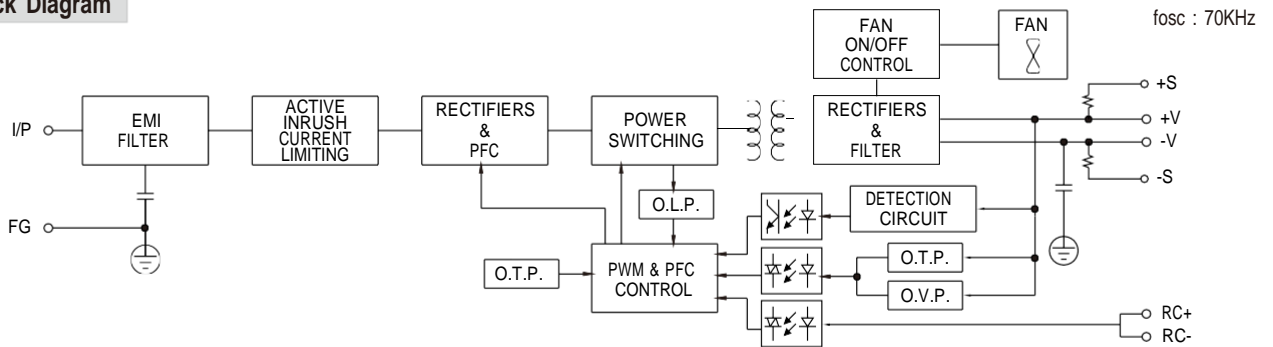
Pin No.	Assignment
1-3	0 VDC
4-6	-48 VDC



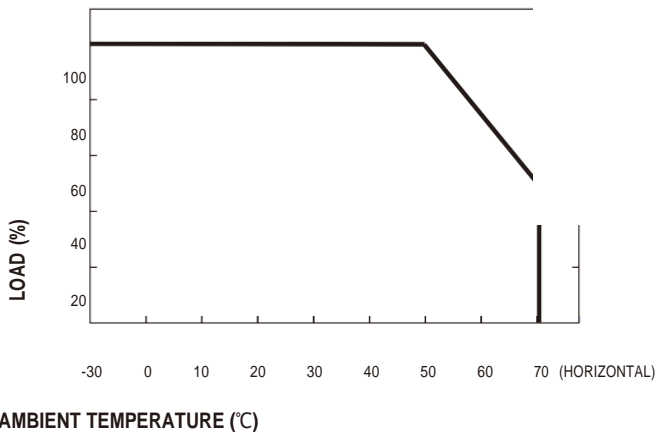
Connector Pin No. Assignment (CN100) :
HRS DF11-04DP-2DS or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	-S	HRS DF11-4DS or equivalent	HRS DF11-**SC or equivalent
2	+S		
3	RC-		
4	RC+		

Block Diagram



Derating Curve



■ Function Description of CN100

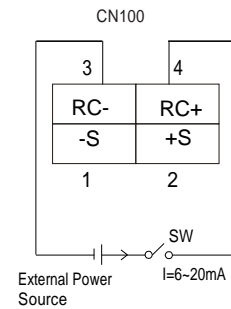
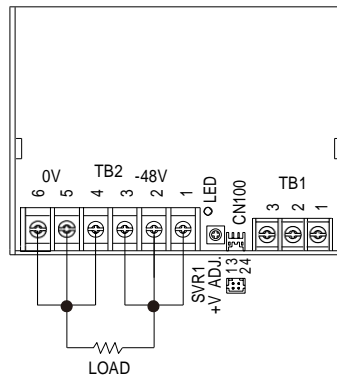
Pin No.	Function	Description
1	-S	Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.3V.
2	S	Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.3V.
3	RC-	Return for RC+ signal input.
4	RC+	Turns the output on and off by electrical or dry contact between pin 4 (RC+) and pin 3 (RC-). 0~0.8VDC or open: Power ON, 4~10VDC: Power OFF.

■ Function Manual

1. Remote Control

The PSU can be turned ON/OFF by using the "Remote Control" function.

Between RC-(pin3) and RC+(pin4) on CN100	PSU Status
SW OFF (0 ~ 0.8VDC) or open	ON
SW ON (4 ~ 10V)	OFF



2. Remote Sense

The remote sensing compensates voltage drop on the load wiring up to 0.3V

