Jameco Part Number 391743

Features :

- 3 pole AC inlet IEC320-C14
- Class I power (with earth pin)
- Full output 3~48V safety approval
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Fix switching frequency and regulation
- Topology: Top switch circuit
- Pass LPS for 16~48V
- LED indicator for power on
- Approvals: UL / CUL / TUV / CB / CE
- 1 year warranty

SPECIFICATION

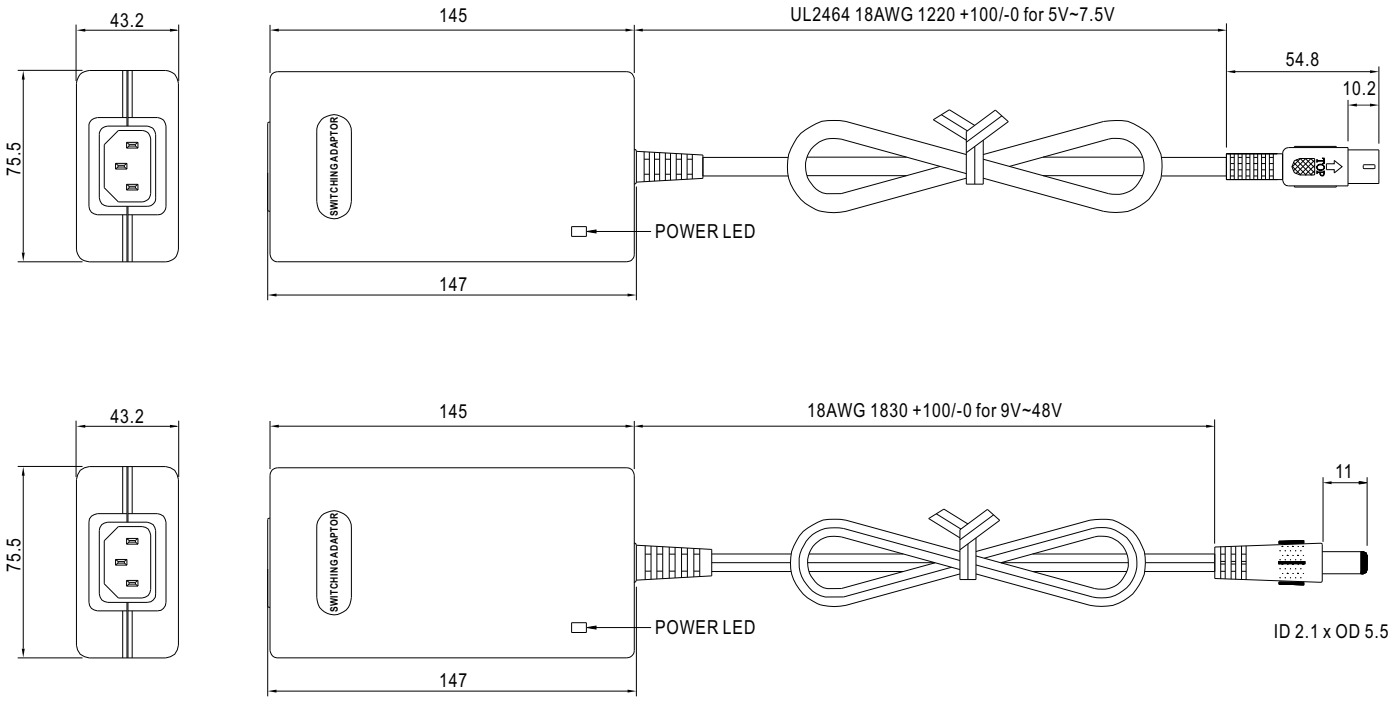
ORDER NO.			P66A-0R1B	P66A-1R1B	P66A-1-1R1B	P66A-2P2J	P66A-3P2J	P66A-4P2J	P66A-5P2J	P66A-6P2J	P66A-7P2J	P66A-8P2J
OUTPUT	SAFETY MODEL NO.		PSU66A-0	PSU66A-1	PSU66A-1-1	PSU66A-2	PSU66A-3	PSU66A-4	PSU66A-5	PSU66A-6	PSU66A-7	PSU66A-8
	DC VOLTAGE	Note.2	3.3V	5V	7.5V	9V	12V	15V	18V	24V	30V	48V
	RATED CURRENT		7.27A	8.50A	6.40A	5.55A	5.50A	4.40A	3.66A	2.75A	2.2A	1.37A
	CURRENT RANGE		0 ~ 7.27A	0 ~ 8.50A	0 ~ 6.40A	0 ~5.55A	0 ~ 5.50A	0 ~ 4.40A	0 ~ 3.66A	0 ~ 2.75A	0 ~ 2.2A	0 ~ 1.37A
	RATED POWER		24W	42.5W	48W	50W	66W	66W	66W	66W	66W	66W
	RIPPLE & NOISE (max.)	Note.3	50mVp-p	50mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE		3 ~ 5V	5 ~ 6V	6 ~ 8V	8 ~ 11V	11 ~ 13V	13 ~ 16V	16 ~ 21V	21 ~ 27V	27 ~ 33V	33 ~ 48V
			Fixed output by internal VR									
	VOLTAGE TOLERANCE	Note.4	±6.0%	±6.0%	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION	Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	Note.6	±5.0%	±5.0%	±4.0%	±4.0%	±4.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
	SETUP, RISE, HOLD UP TIME		1s, 50ms, 16ms at full load									
INPUT	VOLTAGE RANGE		90 ~ 264VAC 135 ~ 370VDC									
	FREQUENCY RANGE		47 ~ 63Hz									
	EFFICIENCY (Typ.)		65%	70%	75%	75%	78%	80%	82%	82%	82%	83%
	AC CURRENT		1.5A / 100VAC									
	INRUSH CURRENT (max.)		40A / 230VAC									
	LEAKAGE CURRENT (max.)		0.75mA / 240VAC									
PROTECTION	OVERLOAD		110 ~ 160% rated output power									
			Protection type : Hiccup mode, recovers automatically after fault condition is removed									
	OVER VOLTAGE		110 ~ 140% rated output voltage									
			Protection type : Shut down o/p voltage, re-power on to recover									
	OVER TEMPERATURE		IC1Tj135℃									
			Protection type : Shut down o/p voltage, recovers automatically after temperature goes down									
ENVIRONMENT	WORKING TEMP.		0 ~ +50℃ (Refer to output load derating curve)									
	WORKING HUMIDITY		20% ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY		-20 ~ +85℃, 10 ~ 95% RH									
	TEMP. COEFFICIENT		±0.03% / ℃ (0 ~ 50℃)									
	VIBRATION		10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes									
SAFETY & EMC (Note. 7)	SAFETY STANDARDS		UL1950, CSA22.2, EN60950-1 approved									
	WITHSTAND VOLTAGE		I/P-O/P:3KVAC, I/P-FG:1.5KVAC									
	ISOLATION RESISTANCE		I/P-O/P, IP/FG:100M Ohms / 500VDC / 25℃/ 70% RH									
	EMI CONDUCTION & RADIATION		Compliance to EN55022(CISPR22) class B									
	HARMONIC CURRENT		Compliance to EN61000-3-2,-3									
	EMS IMMUNITY		Compliance to EN61000-4-2,3,4,5,6,11, ENV50204, light industry level, criteria A									
OTHERS	MTBF		300khrs min. MIL-HDBK-217F(25℃)									
	DIMENSION		147*75.5*43.2mm (L*W*H)									
	PACKING		0.55kg ; 36pcs / 21kg / CARTON									
CONNECTOR	PLUG	STANDARD TYPE	3~8V R1B: DIN 5 Pin for stock; Other type available by customer requested									
			8~48V P2J: 2.1ϕ * 5.5ϕ * 11mm, center positive for stock ; Other type available by customer requested									
	CABLE	STANDARD TYPE	3~8V AWM2464 18Awg*4c with shiell 4ft for stock see page 2; Other type available by customer requested									
			8~48V18Awg*2c SPT-1 6ft for stock see page 2; Other type available by customer requested									

NOTE

1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient.
2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.
3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
4.Tolerence: includes set up tolerance, line regulation, load regulation.
5.Line regulation is measured from low line to high line at rated load.
6.Load regulation is measured from 0% to 100% rated load.
7.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.

■ Mechanical Specification

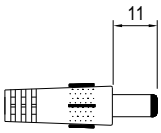
Unit:mm



■ Plug Assignment

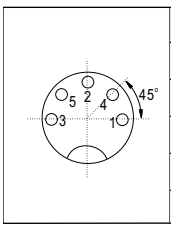
Standard plug: 8~48V P2J (option)

P2J	
P/N	OUTPUT
CENTER	+



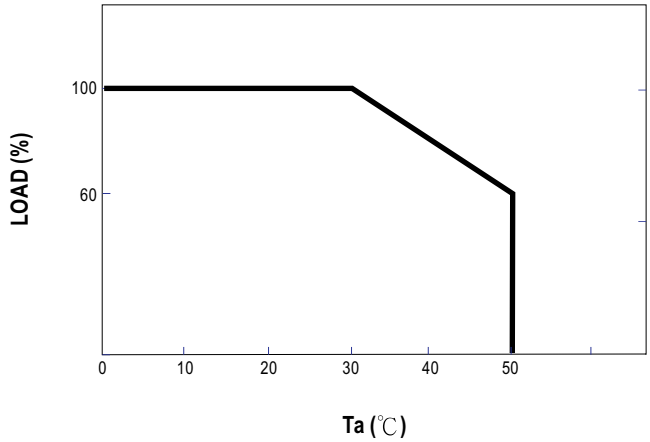
ID 2.1 x OD 5.5

Standard plug: 3~8V R1B (option)

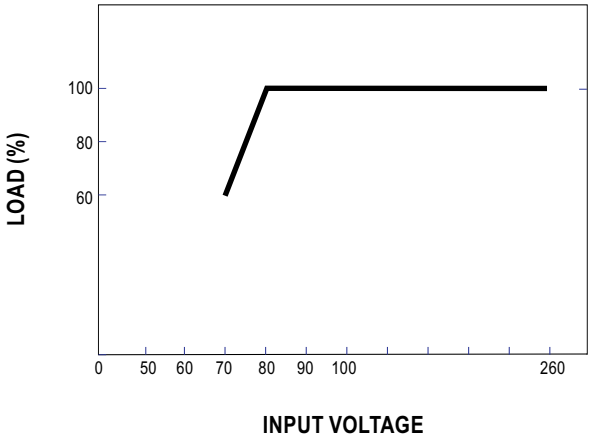


PIN NO	OUTPUT
1	COM
2	COM
3	+Vout
4	COM
5	+Vout

■ Derating Curve



■ Static Characteristics



Quality Engineering Test Report

SERIES: P66 42.5~66W AC-DC SINGLE OUTPUT DESKTOP

SAMPLE:	**A. P66-1**	**+5V / 8.50A**	**E. P66-4**	**+15V / 4.40A**
	B. P66-1-1	**+7.5V / 6.40A**	**F. P66-5**	**+18V / 3.66A**
	C. P66-2	**+9V / 5.55A**	**G. P66-6**	**+24V / 2.75A**
	D. P66-3	**+12V / 5.50A**	**H. P66-8**	**+48V / 1.37A**

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	AC INPUT VOLTAGE RANGE	I/P:TESTING SPEC: 90~260VAC O/P:FULL LOAD	D:50~260VAC	P
2	LINE REGULATION	I/P: 90~260VAC SPEC: 1% O/P:FULL LOAD	A: -0.2% ~ +0% B: -0.1% ~ +0% C: -0.1% ~ +0% D: -0.1% ~ +0% E: -0% ~ +0% F: -0.1% ~ +0.1% G: -0.1% ~ +0% H: -0.1% ~ +0.1%	P
3	LOAD REGULATION	I/P:230VAC SPEC: A~C 5% D~G 3% O/P:MIN.TO FULL LOAD H 2%	A: -4.7% ~ +4.7% B: -2.6% ~ +1.1% C: -3.2% ~ +3.1% D: -2.6% ~ +2.6% E: -1.7% ~ +1.7% F: -1.3% ~ +1.3% G: -0.7% ~ +0.7% H: -0.1% ~ +0.1%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P: 90~260VAC SPEC: A~C 5% D~G 3% O/P:MIN.TO FULL LOAD H 2%	A: -5.0% ~ +4.8% B: -2.3% ~ +2.3% C: -3.2% ~ +3.2% D: -3.3% ~ +2.7% E: -1.7% ~ +1.8% F: -1.3% ~ +1.3% G: -0.8% ~ +0.8% H: -0.3% ~ +0.1%	P
5	RIPPLE & NOISE	I/P:230VAC SPEC: A :50mV B~D :80mV E,F :100mV O/P:FULL LOAD G,H :150mV	A: 10mV B: 13mV C: 28mV D: 6mV E: 20mV F: 7mV G: 5mV H: 26mV	P
6	AC INPUT CURRENT	I/P:90VAC SPEC: 1.5A O/P:FULL LOAD	D:1.39A	P
7	MAX. INRUSH CURRENT	I/P:230VAC SPEC: 40A O/P:FULL LOAD	D:37.6A	P
8	O/P RATED VOLTAGE	I/P:230VAC SPEC: FIXED O/P:50% LOAD	A: 5.02Vdc B: 7.64Vdc C: 9.03Vdc D: 12.1Vdc E: 14.97Vdc F: 17.99Vdc G: 24.0Vdc H: 47.9Vdc	P
9	SET UP TIME	I/P:230VAC SPEC: 1S O/P:FULL LOAD	D:803mS	P

<table>
<tr><th>NO</th><th>TEST ITEM</th><th>TEST CONDITION / SPECIFICATION</th><th>RESULT</th><th>VERDICT</th></tr>
<tr><td>10</td><td>HOLD UP TIME</td><td>I/P:115VAC SPEC: 16mS
O/P:FULL LOAD</td><td>D:26mS</td><td>P</td></tr>
<tr><td>11</td><td>EFFICIENCY</td><td>I/P:230VAC SPEC: A:70%
B:72%
C:74%
D:75%
E:78%
F:78%
G:80%
O/P:FULL LOAD H:80%</td><td>A:71.4%
B:77.2%
C:76.4%
D:79.8%
E:81.3%
F:83.0%
G:84.8%
H:83.9%</td><td>P</td></tr>
<tr><td>12</td><td>OVER LOAD
PROTECTION</td><td>I/P:230VAC SPEC: NONE
O/P:TESTING</td><td>A:107%
B:150%
C:165%
D:128%
E:148%
F:150%
G:162%
H:188%
HICCUP MODE
AUTO RECOVERY</td><td>P</td></tr>
<tr><td>13</td><td>OVER VOLTAGE
PROTECTION</td><td>I/P:230VAC SPEC: 110%~140%
O/P:TESTING</td><td>A:138%
B:136%
C:138%
D:128%
E:122%
F:138%
H:113%</td><td>P</td></tr>
<tr><td>14</td><td>GROUND LEAKAGE
CURRENT</td><td>I/P:240VAC SPEC:
O/P:FULL LOAD L--FG-- < 3.5mA
N--FG-- < 3.5mA</td><td>D: L--FG:0.85mA
N--FG:0.82mA</td><td>P</td></tr>
<tr><td>15</td><td>INSULATION
RESISTANCE</td><td>SPEC:
I/P--O/P 500VDC/10M Ohms MIN.
I/P--FG 500VDC/10M Ohms MIN.</td><td>D: I/P--O/P: > 100M Ohms
I/P--FG: > 100M Ohms</td><td>P</td></tr>
<tr><td>16</td><td>DIELECTRIC /
WITHSTAND
VOLTAGE</td><td>SPEC: I/P-- O/P: 3000VAC/ 1 min.
(10mA CUT-OFF)
I/P-- FG: 1500VAC/ 1 min.
(10mA CUT-OFF)</td><td>D: I/P--O/P: 8.91mA
I/P--FG : 6.44mA</td><td>P</td></tr>
<tr><td>17</td><td>BURN IN TEST</td><td>I/P : 230VAC O/P : FULL LOAD
TA : 25ºC BURN-IN DURATION : 4 hrs</td><td>A:NO BREAK
B:NO BREAK
C:NO BREAK
D:NO BREAK
E:NO BREAK
F:NO BREAK
G:NO BREAK
H:NO BREAK</td><td>P</td></tr>
<tr><td>18</td><td>TEMPERATURE RISE T
rise OF PARTS</td><td colspan="2">D: I/P :230VAC AFTER 13 hrs BURN-IN
O/P :FULL LOAD TA:25 ºC
<table>
<tr><th>POSITION</th><th>P/N</th><th>TEMP</th><th>T rise</th></tr>
<tr><td>Q1</td><td>MAIN TRANSISTOR</td><td>99.3ºC</td><td>74.3ºC</td></tr>
<tr><td>T1</td><td>MAIN TRANSFORMER</td><td>109.2ºC</td><td>84.2ºC</td></tr>
<tr><td>D4</td><td>O/P DIODE</td><td>99.2ºC</td><td>74.2ºC</td></tr>
<tr><td>C13</td><td>O/P FILTER CAPACITOR</td><td>96.3ºC</td><td>71.3ºC</td></tr>
<tr><td>C5</td><td>I/P FILTER CAPACITOR</td><td>94.9ºC</td><td>69.9ºC</td></tr>
<tr><td>DB</td><td>BRIDGE DIODE</td><td>97.7ºC</td><td>72.7ºC</td></tr>
</table></td><td>P</td></tr>
<tr><td>19</td><td>LIFE CYCLE</td><td colspan="2">D: SUPPOSE C13 IS THE MOST CRITICAL COMPONENT
(LTEC 2700uf/16V 13*26 LZG 105ºC 5000hrs)
I/P:230VAC O/P:FULL LOAD Ta:25ºC C13:96.3ºC Life: 9138hrs
I/P:230VAC O/P:FULL LOAD Ta:40ºC C13:106.6ºC Life: 4475hrs
I/P:230VAC O/P:80% LOAD Ta:40ºC C13:101.1ºC Life: 6551hrs</td><td>P</td></tr>
<tr><td>20</td><td>CONSTRUCTION
INSPECTION
(FOR QC INSPECTION
REFERENCE ONLY)</td><td colspan="3">D: 1. PACKING : WHITE BOX
2. MARKING : MODEL LABEL
CE,CUL,TUV, MARK
3. TOPOLOGY : PWM 3843 CIRCUIT
4. MECHANICAL : FULLY ENCLOSED PLASTIC CASE,O/P CABLE UL 18AWG*2C DC
PLUG :2.1X5.5X11mm 1800mm LENGTH CENTER="+"</td></tr>
</table>

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
21	CRITICAL COMPONENT RECORD (FOR QC INSPECTION REFERENCE ONLY)	D: FUSE : T2.5A / 250V BRIDGE DIODE : GBU 4J PEC LINE FILTER : EV-20 4槽 TRANSFOMER : EER-28 POWER SWITCHER : FS10KM 14A1801 TO-220F OUTPUT DIODE : IR 30CPQ100 TO-3P INPUT CAPACITOR : JENPO 150uF/400V VENT 105ºC OUTPUT CAPACITOR : LTEC 2700uf/16V 13*26 LZG 5000hrs 105ºC*3 P.C.B : CEM-1 1 OZ		

DATE	SAMPLE	TEST RESULT	TEST	APPROVAL
2002.12.3	P66-1 P66-1-1 P66-2 P66-3 P66-4 P66-5 P66-6 P66-8	PASS	T.K.CHENG	MAX LIN