

Open Frame (基板单体電源)

Open Frame

製品用途

計測機器



工作機械



冷熱機



エネルギー
蓄電システム



製品特徴



長い製品寿命



ECOシステム準拠(効率)



長いMTBF
(平均故障間隔)



IEC 62368-1 安全規格



高高度5,000m

日本規格 – J Series

※COSEL様・TDKラムダ様の置き換えとしてご検討頂ける電源です。

出力	モデル名	サイズ D x W x H	5V	12V	15V	24V	36V	42V	48V
15W	FSP015-PxxJ-Axx		開発中	開発中					
30W	FSP030-P23J-Axx	87.5 x 50 x 27	○	○	-	○	-	-	-
50W	FSP050-P25J-Axx	112 x 50 x 27	○	○	○	○	-	-	-
75W	FSP075-P26J-Axx	150 x 50 x 27	2023 Q3	○	-	○	開発中	-	-
100W	FSP100-P36J-Axx	155 x 62 x 27	-	○	-	○	○	-	-
150W	FSP150-P37J-Axx	160 x 75 x 28.6	-	○	2023 Q1	○	○	-	○
200W	FSP200-P37J-Axx	177 x 76.2 x 35	-	-	-		-		
300W	FSP300-P37J-Axx	180 x 84 x 37	-	開発中	-	2023 Q3	-	-	開発中

全機種：リモートコントロール・ボリューム (オプション対応)

シャーシ・カバー対応 要相談

75W以上：力率改善回路

日本規格 – J Series

※COSEL様・TDKラムダ様の置き換えとしてご検討頂ける電源です。

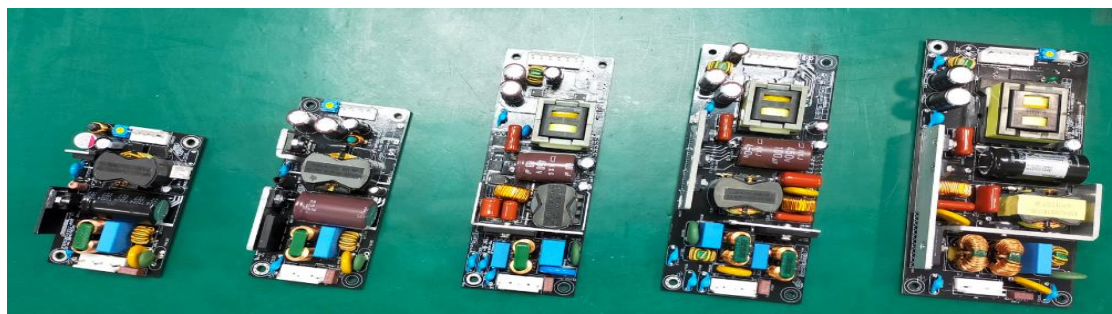
PEAK対応

出力	モデル名	サイズ D x W x H	12V	15V	24V	36V	42V	48V
150W	FSP150-P36P-Axx	160 x 75 x 28.6	-	-	TPA	TPA	開発中	-
200W	FSP200-P36P-Axx	177 x 76.2 x 35	2023 Q4	-	○	○	○	開発中
240W	FSP240-P37P-Axx	180 x 84 x 37	-	-	○	-	-	-
300W	FSP300-P378P-Axx	180 x 84 x 37	-	-	開発中	-	-	-

全機種：リモートコントロール・ボリュウム (オプション対応)

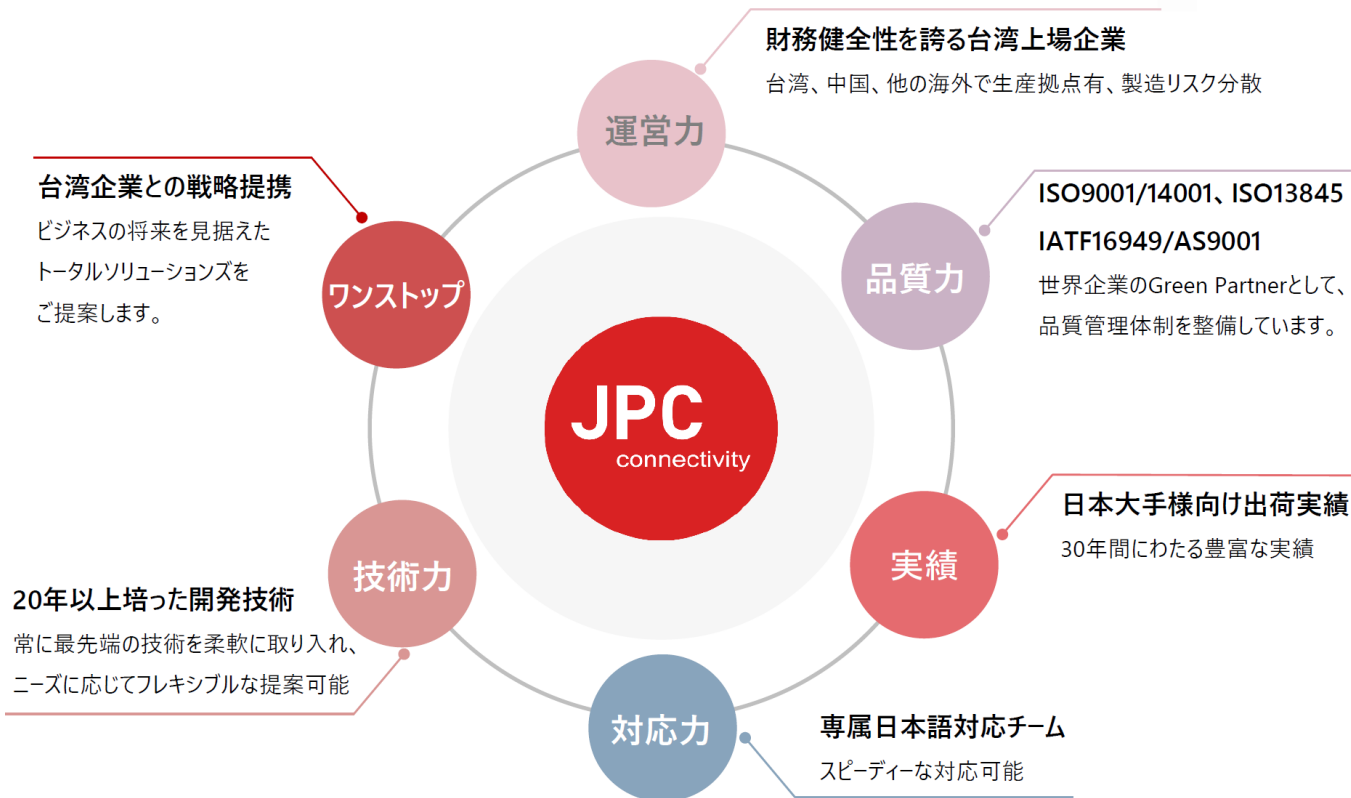
シャーシ・カバー対応 要相談

75W以上：力率改善回路



JPC X FSP 強み

- 電源業界 30 年以上の実績
- 400 名以上の電源専門エンジニア
- FSPが所有する独自の安全規格ラボ試験室
- 1,000 以上の標準電源と少量MOQ対応
- 20 拠点以上のグローバルサポート対応





These AC-DC switching power suppliers are compact Class-I PSU. They are capable of delivering full load continuous power at convection cooling and the rated operation temperature.

■ **Features**

- Universal Input (85~264Vac)
- High Efficiency
- Low Power consumption
- Small Size
- Built-in Voltage Adjustment
- Built-in Remote Control (option)

■ **Safety agency approvals(reference)**

- UL62368-1
- EN62368-1
- Complies with DEN-AN (Japan)

■ **MTBF**

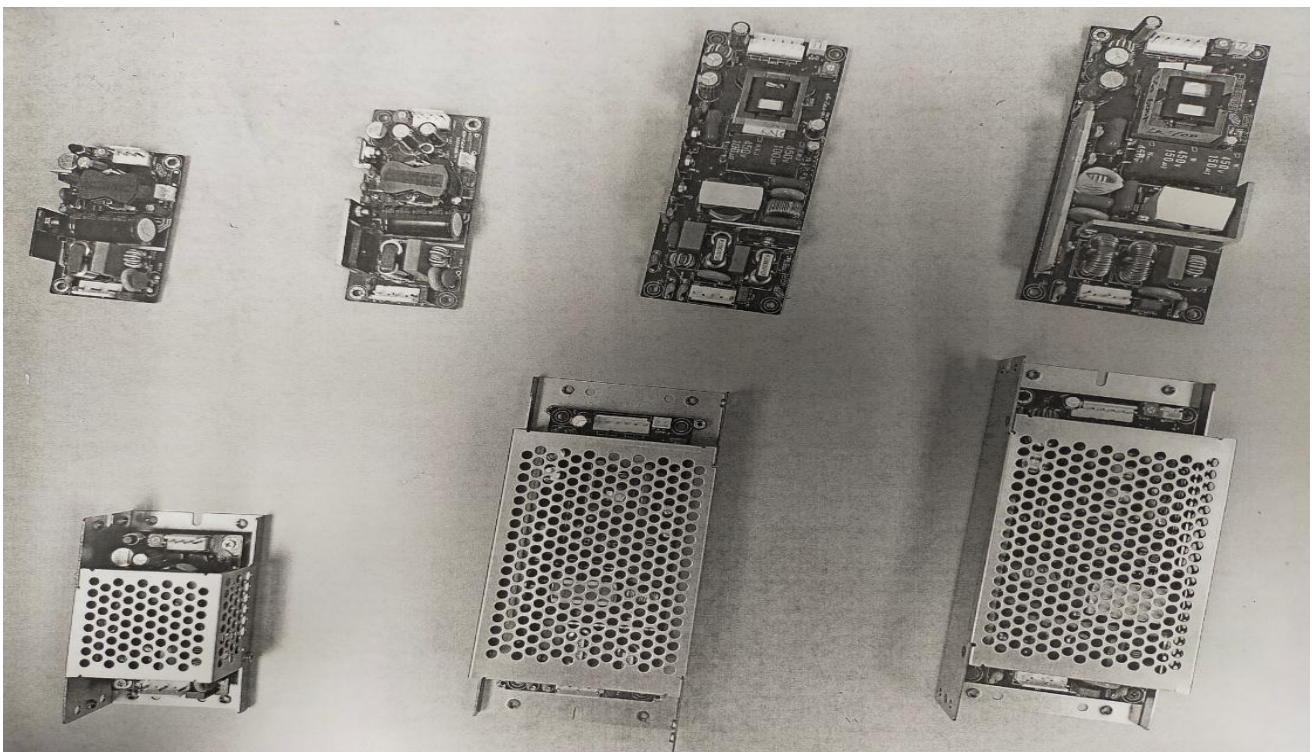
> 400,000 hrs at full load and 25°C ambient, calculated per BELL CORE SR-332.

■ **EMI**

- Complies with CISPR11 Class B, EN55011 Class B
- Complies with CISPR32 Class B, EN55032 Class B

■ **EMS Compliance**

- EN61000-3-2
- EN61000-4-2
- EN61000-4-3
- EN61000-4-4
- EN61000-4-5
- EN61000-4-6
- EN61000-4-8
- EN61000-4-11





30W

MODEL	FSP030- P23J-A05	FSP030- P23J-A12	FSP030- P23J-A15	FSP030- P23J-A24
MAX OUTPUT WATTAGE	30 W	30 W	30 W	31.2 W
DC OUTPUT	5V / 6A	12V / 2.5A	15V / 2A	24V / 1.3A

■ SPECIFICATIONS

	MODEL	FSP030- P23J-A05	FSP030- P23J-A12	FSP030- P23J-A15	FSP030- P23J-A24	
INPUT	VOLTAGE(VAC)	85~264 (Refer to Derating) *6				
	CURRENT(A)	@ 100V	0.62 typ			
		@ 230V	0.32 typ			
	FREQUENCY(Hz)	50/60 (47 - 63)				
	EFFICIENCY(%)	@ 100V	87.0 typ	90.0 typ	90.0 typ	90.0 typ
		@ 230V	87.5 typ	91.0 typ	91.0 typ	91.0 typ
	INRUSH CURRENT(A)	@ 100V	25 typ (Io=100%) Ta=25°C at cold start			
		@ 230V	50 typ (Io=100%) Ta=25°C at cold start			
	LEAKAGE CURRENT(mA)	0.2 / 0.45 max (ACIN 100V / 240V 60Hz, Io=100%)				
	POWER SAVING _NO LOAD	@ 100V	<50 mW at Ta=25°C			
@ 230V		<100 mW at Ta=25°C				
POWER SAVING _REOMTE OFF	@ 100V	<100 mW at Ta=25°C				
	@ 230V	<200 mW at Ta=25°C				
OUTPUT *2	RATED VOLTAGE	5V	12V	15V	24V	
	CURRENT	6.0A	2.5A	2.0A	1.3A	
	LINE REGULATION(mV)	20 max	48 max	60 max	96 max	
	LOAD REGULATION(mV)	40 max	100 max	120 max	150 max	
	RIPPLE(mVp-p)	0 to +50°C	70 max	60 max	120 max	120 max
		-10 to 0°C	140 max	150 max	160 max	160 max
		Io=0 to 15%	150 max	150 max	300 max	300 max
	RIPPLE NOISE(mVp-p)	0 to +50°C	60 max	60 max	150 max	150 max
		-10 to 0°C	150 max	150 max	180 max	180 max
		Io=0 to 15%	200 max	200 max	360 max	360 max
	TEMPERATURE REGULATION(mV)	0 to +50°C	50 max	120 max	150 max	240 max
		-10 to 50°C	60 max	150 max	180 max	290 max
	DRIFT(mV) *7	20 max	48 max	60 max	96 max	
	START-UP TIME(ms)	250 typ (AC IN 100V, Io=100%) / 200 typ (AC IN 230V, Io=100%)				
	HOLD-UP TIME(ms)	20 typ (ACIN 100V,Io=100%) / 60 typ (ACIN 230V,Io=100%)				
OUTPUT VOLTAGE (V)	4.90 to 5.30	11.50 to 12.50	14.40 to 15.60	23.00 to 25.00		
OUTPUT VOLTAGE ADJUSTMENT RANGE(V)	Option is available for adjusting rated output voltage between ±10%.					
PROTECTION CIRCUIT AND OTHERS	OVER CURRENT PROTECTION	Work over 105% min of rating and recovers automatically				
	OVER VOLTAGE PROTECTION	No damage & Latch output				
	REMOTE ON/OFF	Option				
ISOLATION	INPUT-OUTPUT	AC3000V 1minute, Cutoff current = 10mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
	INPUT-FG	AC2000V 1minute, Cutoff current = 10mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
	OUTPUT-FG	AC500V 1minute, Cutoff current = 25mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
ENVIRONMENT	OPERATING TEMP,HUMID,AND ALTITUDE*6	-10 to +70°C, 20 – 90%RH (Non condensing), 5,000m (16,500feet) max				
	STORAGE TEMP,HUMID,AND ALTITUDE	-20 to +75°C, 20 – 90%RH (Non condensing), 9,000m (30,000feet) max				
	VIBRATION	10 – 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis				
SAFETY AND NOISE REGULATION	AGENCY APPROVALS(reference)	UL62368-1,EN62368-1, Complies with DEN-AN (Japan)				
	CONDUCTED NOISE	CISPR 11 & 32				
	HARMONIC ATTENUATOR	Complies with IEC61000-3-2 (Class A)				
OTHERS	SIZE/WEIGHT	50*27*87.5mm [1.97*1.074*3.44 inches] (W*H*D)/100g max				

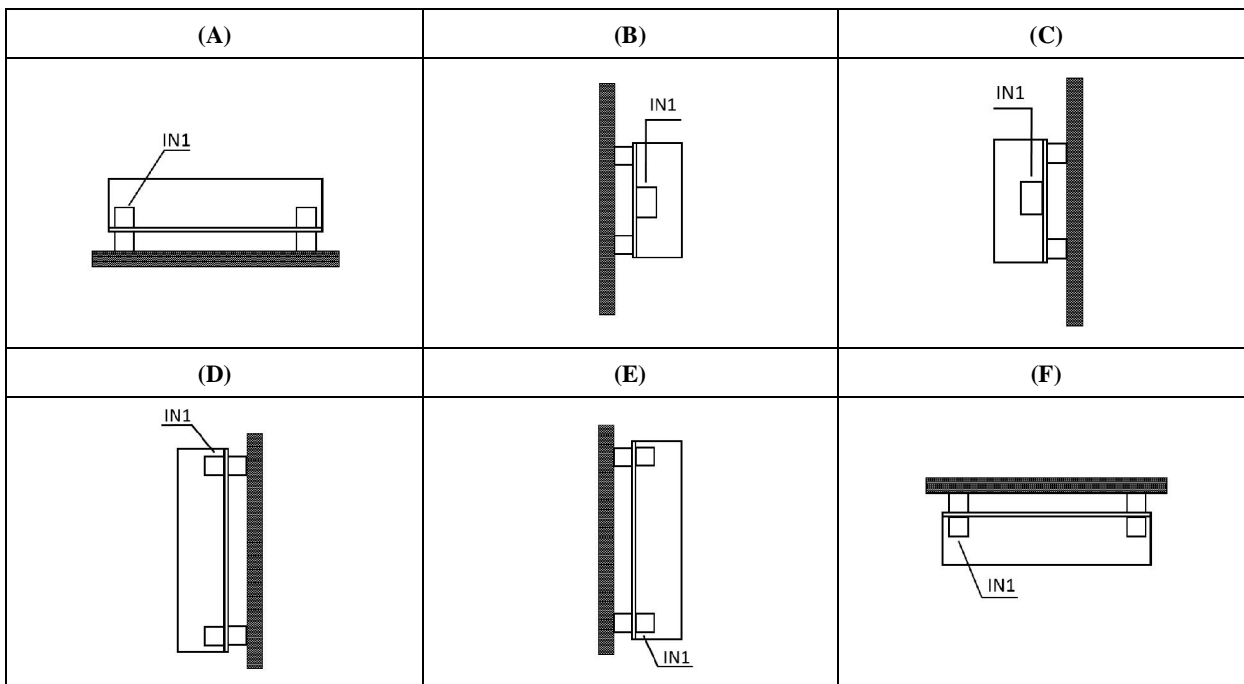
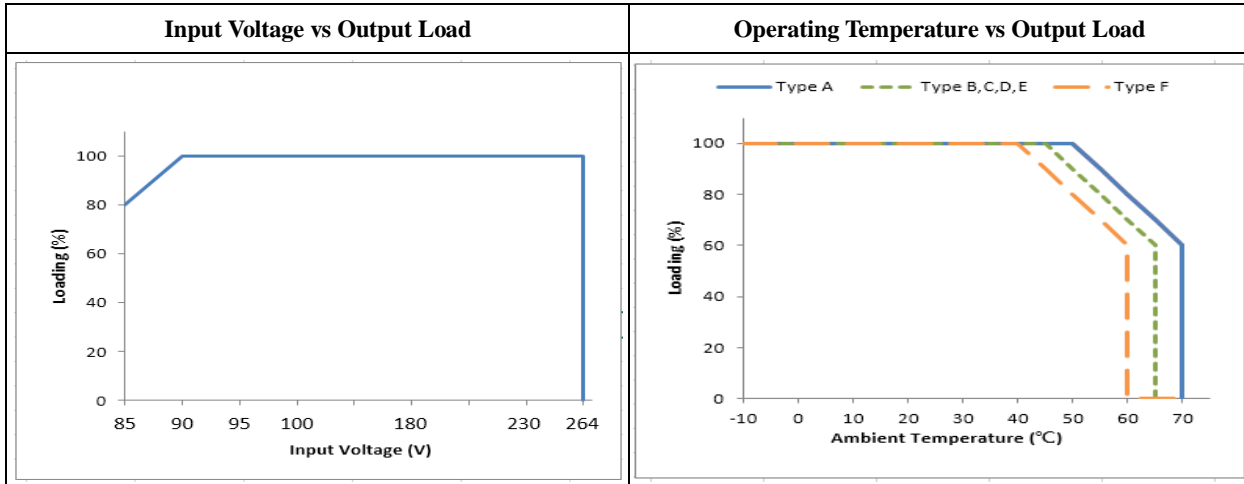
Notices:

- *1 Data that didn't mention is tested under 230Vac/ 50Hz/ full load condition & after 30 min warm-up at 25°C.
- *2 The ripple data must be measured under the condition of AC coupling & 20MHz bandwidth and with capacitor of 22uF+0.1uF. (Rated input and rated output)
- *3 EMC must be checked again with user's system & case.
- *4 For detail mechanical size, please check the outline drawing.
- *5 Read instruction manual carefully before using the power supply.
- *6 De-rating is required., Refer to de-rating curve
- *7 Drift the change in DC output for an eight hour after a half-hour warm-up at 25°C ,with the input voltage held constant at the rated input/output.

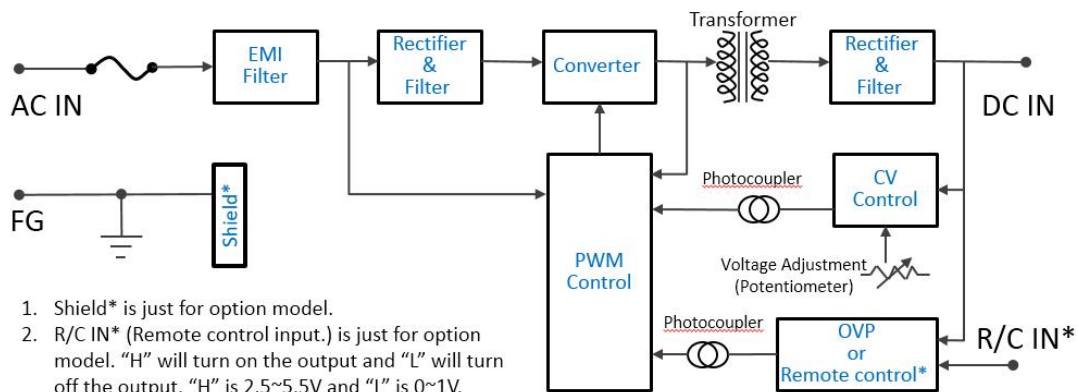
30W

MODEL	FSP030-P23J-A05	FSP030-P23J-A12	FSP030-P23J-A15	FSP030-P23J-A24
MAX OUTPUT WATTAGE	30 W	30 W	30 W	31.2 W
DC OUTPUT	5V / 6A	12V / 2.5A	15V / 2A	24V / 1.3A

SOA Curve (FSP030-P23J-A05) (de-rating curve)



Block Diagram

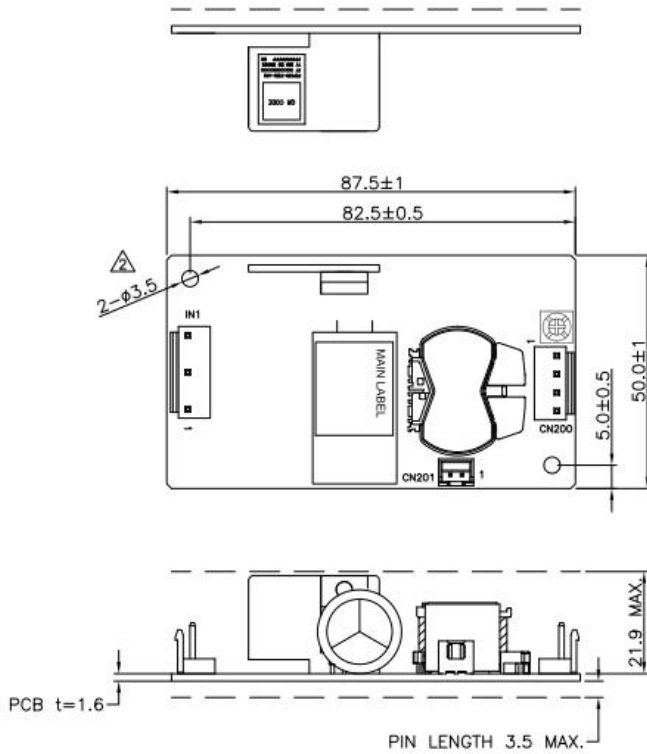


30W

MODEL	FSP030-P23J-A05	FSP030-P23J-A12	FSP030-P23J-A15	FSP030-P23J-A24
MAX OUTPUT WATTAGE	30 W	30 W	30 W	31.2 W
DC OUTPUT	5V / 6A	12V / 2.5A	15V / 2A	24V / 1.3A

Outline Information

FSP030-P23J-AXX (Open Frame)



Pin assignment of IN1

Pin No.	Function	Wafer
1	L	JST B3P5-VH or EQUIVALENT
2		
3	N	
4		
5	FG	

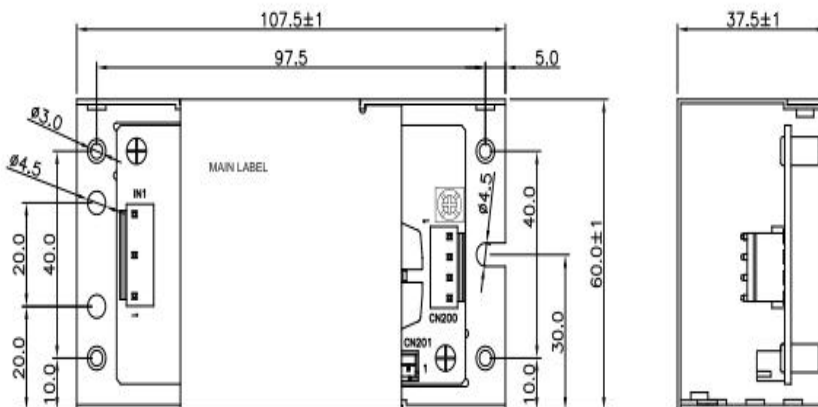
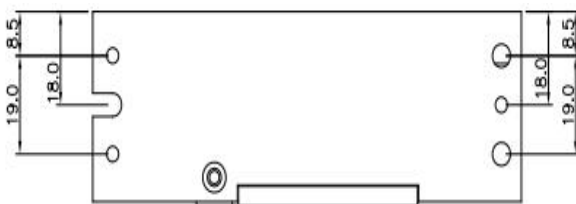
Pin assignment of CN200

Pin No.	Function	Wafer
1	-V	JST B4P-VH or EQUIVALENT
2	-V	
3	+V	
4	+V	

Pin assignment of CN201

Pin No.	Function	Wafer
1	R/C+	JST B2B-XH-A or EQUIVALENT
2	R/C-	

FSP030-P23J-AXXX (Shielding)





30W

MODEL	FSP030- P23J-A05	FSP030- P23J-A12	FSP030- P23J-A15	FSP030- P23J-A24
MAX OUTPUT WATTAGE	30 W	30 W	30 W	31.2 W
DC OUTPUT	5V / 6A	12V / 2.5A	15V / 2A	24V / 1.3A

■ Ordering Information

F S P 030 - P 23 J - A 12

① ② ③ ④ ⑤ ⑥ ⑦

Item	Description	Remark
①	Max Output Power (May drop due to application)	
②	Open Frame	
③	Approximate appearance (By Inch)	
④	Application Series	
⑤	Model Series	
⑥	Output Voltage (CV)	
⑦	Customer Option: Shielding: S , VR(Potentiometer): R , R/C: E Special Request: X1~n	



50W

MODEL	FSP050-P25J-A05	FSP050-P25J-A12	FSP050-P25J-A15	FSP050-P25J-A24	FSP050-P25J-A36	FSP050-P25J-A48
MAX OUTPUT WATTAGE	40 W	51.6 W	52.5 W	50.4 W	50.4 W	52.8 W
DC OUTPUT	5V / 8A	12V / 4.3A	15V / 3.5A	24V / 2.1A	36V / 1.4A	48V / 1.1A

■ SPECIFICATIONS

	MODEL	FSP050-P25J-A05	FSP050-P25J-A12	FSP050-P25J-A15	FSP050-P25J-A24	FSP050-P25J-A36	FSP050-P25J-A48	
INPUT	VOLTAGE(VAC)	85~264 (Refer to Derating) *6						
	CURRENT(A)	@ 100V	0.82 typ	1.05 typ				
		@ 230V	0.42 typ	0.57 typ				
	FREQUENCY(Hz)	50/60 (47 - 63)						
	EFFICIENCY(%)	@ 100V	85.5 typ	89.5 typ	89.5 typ	89.5 typ	89.5 typ	89.5 typ
		@ 230V	87.0 typ	92 typ	92.0 typ	92.0 typ	92.0 typ	92.0 typ
	INRUSH CURRENT(A)	@ 100V	25 typ (Io=100%) Ta=25°C at cold start					
		@ 230V	50 typ (Io=100%) Ta=25°C at cold start					
	LEAKAGE CURRENT(mA)	0.3 / 0.65 max (ACIN 100V / 240V 60Hz, Io=100%)						
	POWER SAVING _NO LOAD	@ 100V	<50 mW at Ta=25°C					
@ 230V		<150 mW at Ta=25°C						
POWER SAVING _REOMTE OFF	@ 100V	<100 mW at Ta=25°C						
	@ 230V	<200 mW at Ta=25°C						
OUTPUT *2	RATED VOLTAGE	5V	12V	15V	24V	36V	48V	
	CURRENT	8.0A	4.3A	3.5A	2.1A	1.4A	1.1A	
	LINE REGULATION(mV)	20 max	48 max	60 max	96 max	144 max	192 max	
	LOAD REGULATION(mV)	40 max	100 max	120 max	150 max	240 max	240 max	
	RIPPLE(mVp-p)	0 to +50°C	70 max	60 max	120 max	120 max	150 max	150 max
		-10 to 0°C	140 max	160 max	160 max	160 max	200 max	200 max
		Io=0 to 15%	200 max	300 max	300 max	300 max	300 max	300 max
	RIPPLE NOISE(mVp-p)	0 to +50°C	80 max	150 max	150 max	150 max	250 max	250 max
		-10 to 0°C	140 max	180 max	180 max	180 max	300 max	300 max
		Io=0 to 15%	200 max	360 max	360 max	360 max	360 max	360 max
	TEMPERATURE REGULATION(mV)	0 to +50°C	50 max	120 max	150 max	240 max	360 max	480 max
		-10 to 50°C	60 max	150 max	180 max	290 max	450 max	600 max
	DRIFT(mV) *7	20 max	48 max	60 max	96 max	144 max	192 max	
	START-UP TIME(ms)	250 typ (AC IN 100V, Io=100%) / 200 typ (AC IN 230V, Io=100%)						
	HOLD-UP TIME(ms)	15 typ (ACIN 100V, Io=100%) / 60 typ (ACIN 230V, Io=100%)						
OUTPUT VOLTAGE (V)	4.90 to 5.30	11.50 to 12.50	14.40 to 15.60	23.00 to 25.00	34.50 to 37.50	46.00 to 50.00		
	OUTPUT VOLTAGE ADJUSTMENT RANGE(V)	Option is available for adjusting rated output voltage between ±10%.						
PROTECTION CIRCUIT AND OTHERS	OVER CURRENT PROTECTION	Work over 105% min of rating and recovers automatically						
	OVER VOLTAGE PROTECTION	No damage & Latch output						
	REMOTE ON/OFF	Option						
ISOLATION	INPUT-OUTPUT	AC3000V 1minute, Cutoff current = 10mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)						
	INPUT-FG	AC2000V 1minute, Cutoff current = 10mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)						
	OUTPUT-FG	AC500V 1minute, Cutoff current = 25mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)						
ENVIRONMENT	OPERATING TEMP,HUMID,AND ALTITUDE *6	-10 to +70°C, 20 - 90%RH (Non condensing), 5,000m (16,500feet) max						
	STORAGE TEMP,HUMID,AND ALTITUDE	-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max						
	VIBRATION	10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis						
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis						
SAFETY AND NOISE REGULATION	AGENCY APPROVALS(reference)	UL62368-1, EN62368-1, Complies with DEN-AN (Japan)						
	CONDUCTED NOISE	CISPR 11 & 32						
	HARMONIC ATTENUATOR	Complies with IEC61000-3-2 (Class A)						
OTHERS	SIZE/WEIGHT	50*27*112mm [1.97*1.074*4.41 inches] (W*H*D)/140g max						

Notices:

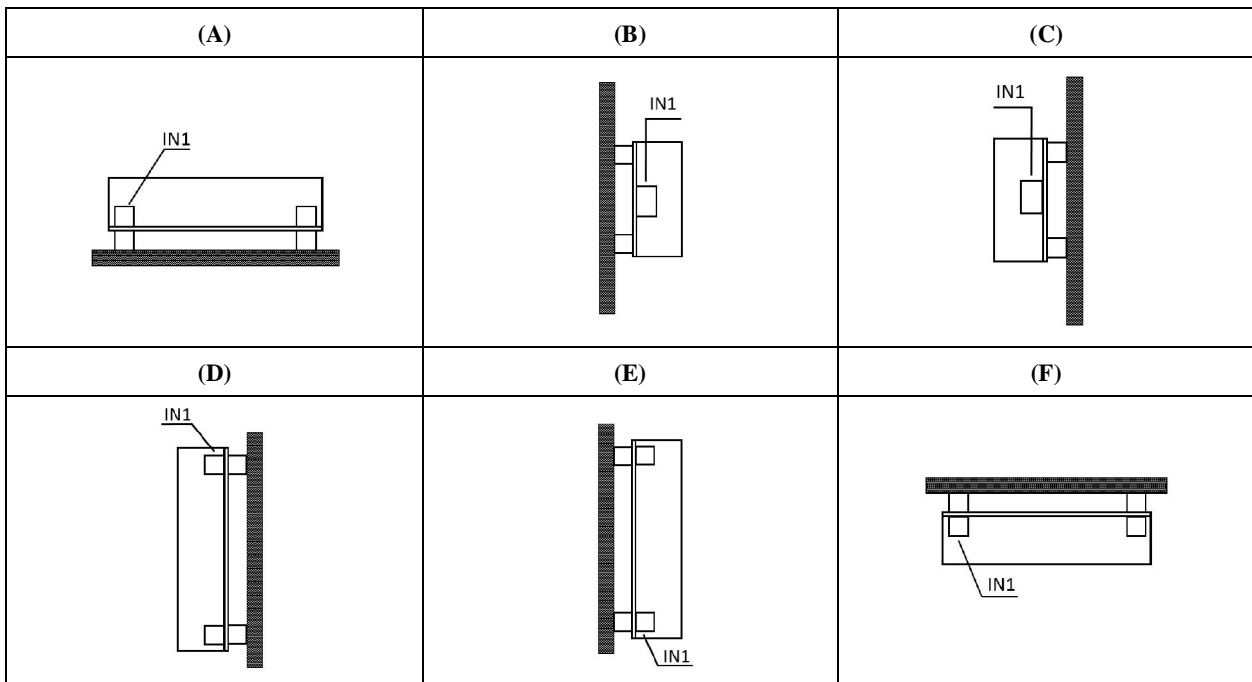
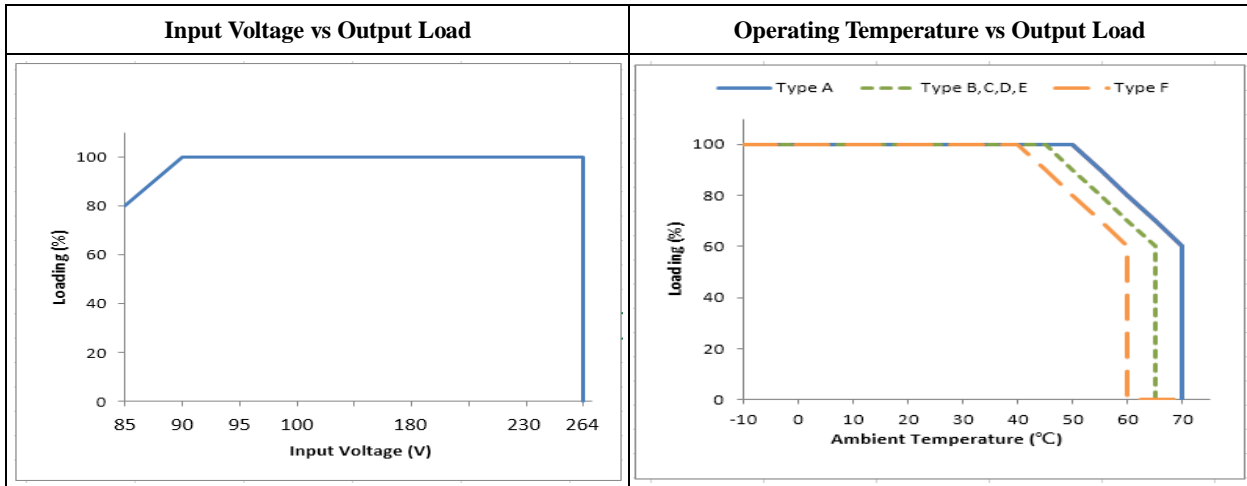
- *1 Data that didn't mention is tested under 230Vac/ 50Hz/ full load condition & after 30 min warm-up at 25°C.
- *2 The ripple data must be measured under the condition of AC coupling & 20MHz bandwidth and with capacitor of 22uF+0.1uF. (Rated input and rated output)
- *3 EMC must be checked again with user's system & case.
- *4 For detail mechanical size, please check the outline drawing.
- *5 Read instruction manual carefully before using the power supply.
- *6 De-rating is required., Refer to de-rating curve
- *7 Drift the change in DC output for an eight hour after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

50W

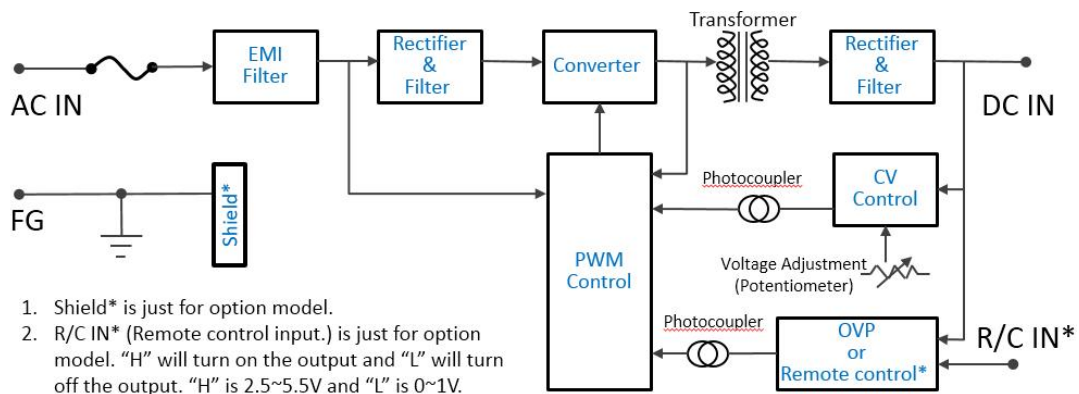
MODEL	FSP050-P25J-A05	FSP050-P25J-A12	FSP050-P25J-A15	FSP050-P25J-A24	FSP050-P25J-A36	FSP050-P25J-A48
MAX OUTPUT WATTAGE	40 W	51.6 W	52.5 W	50.4 W	50.4 W	52.8 W
DC OUTPUT	5V / 8A	12V / 4.3A	15V / 3.5A	24V / 2.1A	36V / 1.4A	48V / 1.1A

SOA

Curve (FSP050-P25J-A12) (de-rating curve)



Block Diagram

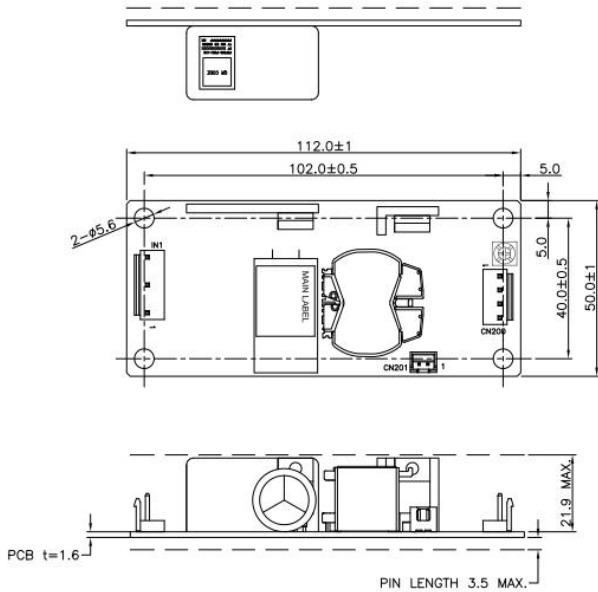


50W

MODEL	FSP050-P25J-A05	FSP050-P25J-A12	FSP050-P25J-A15	FSP050-P25J-A24	FSP050-P25J-A36	FSP050-P25J-A48
MAX OUTPUT WATTAGE	40 W	51.6 W	52.5 W	50.4 W	50.4 W	52.8 W
DC OUTPUT	5V / 8A	12V / 4.3A	15V / 3.5A	24V / 2.1A	36V / 1.4A	48V / 1.1A

Outline Information

FSP050-P25J-AXX (Open Frame)



Pin assignment of IN1

Pin No.	Function	Wafer
1	L	JST B3P5-VH or EQUIVALENT
2		
3	N	
4		
5	FG	

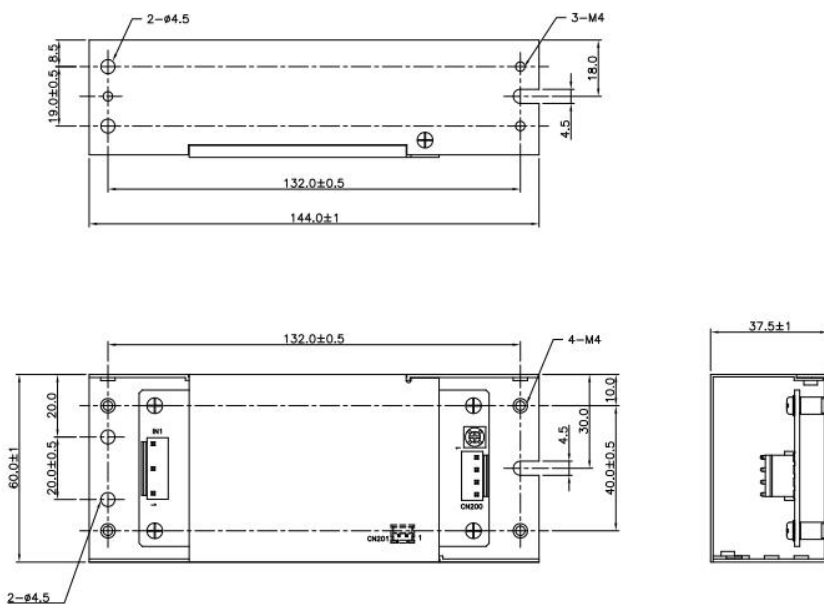
Pin assignment of CN200

Pin No.	Function	Wafer
1	-V	JST B4P-VH or EQUIVALENT
2	-V	
3	+V	
4	+V	

Pin assignment of CN201

Pin No.	Function	Wafer
1	R/C+	JST B2B-XH-A or EQUIVALENT
2	R/C-	

FSP050-P25J-AXXX(Shielding)





50W

MODEL	FSP050-P25J-A05	FSP050-P25J-A12	FSP050-P25J-A15	FSP050-P25J-A24	FSP050-P25J-A36	FSP050-P25J-A48
MAX OUTPUT WATTAGE	40 W	51.6 W	52.5 W	50.4 W	50.4 W	52.8 W
DC OUTPUT	5V / 8A	12V / 4.3A	15V / 3.5A	24V / 2.1A	36V / 1.4A	48V / 1.1A

■ Ordering Information

F S P 0 5 0 - P 2 5 J - A 1 2

① ② ③ ④ ⑤ ⑥ ⑦

Item	Description	Remark
①	Max Output Power (May drop due to application)	
②	Open Frame	
③	Approximate appearance (By Inch)	
④	Application Series	
⑤	Model Series	
⑥	Output Voltage (CV)	
⑦	Customer Option: Shielding: S , VR(Potentiometer): R , R/C: E Special Request: X1~n	



75W

MODEL	FSP075- P26J-A05	FSP075- P26J-A12	FSP075- P26J-A15	FSP075- P26J-A24
MAX OUTPUT WATTAGE	60 W	75.6 W	75 W	76.8 W
DC OUTPUT	5V / 12A	12V / 6.3A	15V / 5A	24V / 3.2A

■ SPECIFICATIONS

	MODEL	FSP075- P26J-A05	FSP075- P26J-A12	FSP075- P26J-A15	FSP075- P26J-A24	
INPUT	VOLTAGE(VAC)	85~264 (Refer to Derating) *6				
	CURRENT(A)	@ 100V	0.9 typ			
		@ 230V	0.5 typ			
	FREQUENCY(Hz)	50/60 (47 - 63)				
	EFFICIENCY(%)	@ 100V	87.0 typ	87.0 typ	88.0 typ	89.0 typ
		@ 230V	88 typ	90.0 typ	90.0 typ	91.0 typ
	INRUSH CURRENT(A)	@ 100V	15 typ (Io=100%) Ta=25°C at cold start			
		@ 230V	35 typ (Io=100%) Ta=25°C at cold start			
	LEAKAGE CURRENT(mA)	0.4 max (AC IN 264V 60Hz, Io=100%)				
	POWER SAVING _NO LOAD	@ 100V	<300 mW at Ta=25°C			
@ 230V		<500 mW at Ta=25°C				
POWER SAVING _REOMTE OFF	@ 100V	<300 mW at Ta=25°C				
	@ 230V	<800 mW at Ta=25°C				
OUTPUT*2	RATED VOLTAGE	5V	12V	15V	24V	
	CURRENT	12.0A	6.3A	5.0A	3.2A	
	LINE REGULATION(mV)	20 max	48 max	60 max	96 max	
	LOAD REGULATION(mV)	40 max	100 max	120 max	150 max	
	RIPPLE(mVp-p)	0 to +50°C	80 max	120 max	120 max	120 max
		-10 to 0°C	140 max	160 max	160 max	160 max
		Io=0 to 15%	300 max	360max	500 max	500 max
	RIPPLE NOISE(mVp-p)	0 to +50°C	120 max	150 max	150 max	150 max
		-10 to 0°C	160 max	180 max	180 max	180 max
		Io=0 to 15%	360 max	400 max	600 max	600 max
	TEMPERATURE REGULATION(mV)	0 to +50°C	50 max	120 max	150 max	240 max
		-10 to 50°C	60 max	150 max	180 max	290 max
	DRIFT(mV) *7	20 max	48 max	60 max	96 max	
	START-UP TIME(ms)	500 typ (AC IN 100V, Io=100%) / 500 typ (AC IN 230V, Io=100%)				
	HOLD-UP TIME(ms)	20 typ (ACIN 100V,Io=100%) / 20 typ (ACIN 230V,Io=100%)				
OUTPUT VOLTAGE (V)	4.90 to 5.30	11.50 to 12.50	14.40 to 15.60	23.00 to 25.00		
OUTPUT VOLTAGE ADJUSTMENT RANGE(V)	Option is available for adjusting rated output voltage between ±10%.					
PROTECTION CIRCUIT AND OTHERS	OVER CURRENT PROTECTION	Work over 105% min of rating and recovers automatically				
	OVER VOLTAGE PROTECTION	No damage & Latch output				
	REMOTE ON/OFF	Option				
ISOLATION	INPUT-OUTPUT	AC3000V 1minute, Cutoff current = 10mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
	INPUT-FG	AC2000V 1minute, Cutoff current = 10mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
	OUTPUT-FG	AC500V 1minute, Cutoff current = 25mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
ENVIRONMENT	OPERATING TEMP,HUMID,AND ALTITUDE*6	-10 to +70°C, 20 – 90%RH (Non condensing), 5,000m (16,500feet) max				
	STORAGE TEMP,HUMID,AND ALTITUDE	-20 to +75°C, 20 – 90%RH (Non condensing), 9,000m (30,000feet) max				
	VIBRATION	10 – 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis				
SAFETY AND NOISE REGULATION	AGENCY APPROVALS(reference)	UL62368-1,EN62368-1, Complies with DEN-AN (Japan)				
	CONDUCTED NOISE	CISPR 11 & 32				
	HARMONIC ATTENUATOR	Complies with IEC61000-3-2 (Class A)				
OTHERS	SIZE/WEIGHT	50*27*150mm [1.97*1.074*5.91 inches] (W*H*D)/190g max				

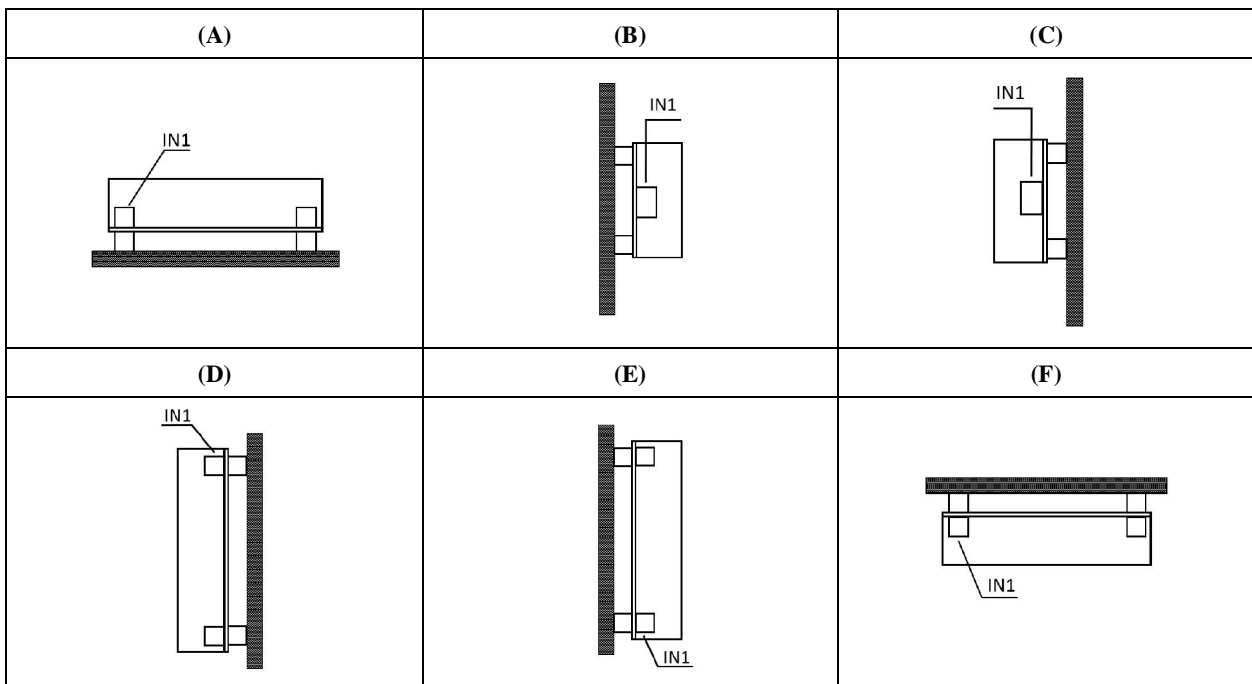
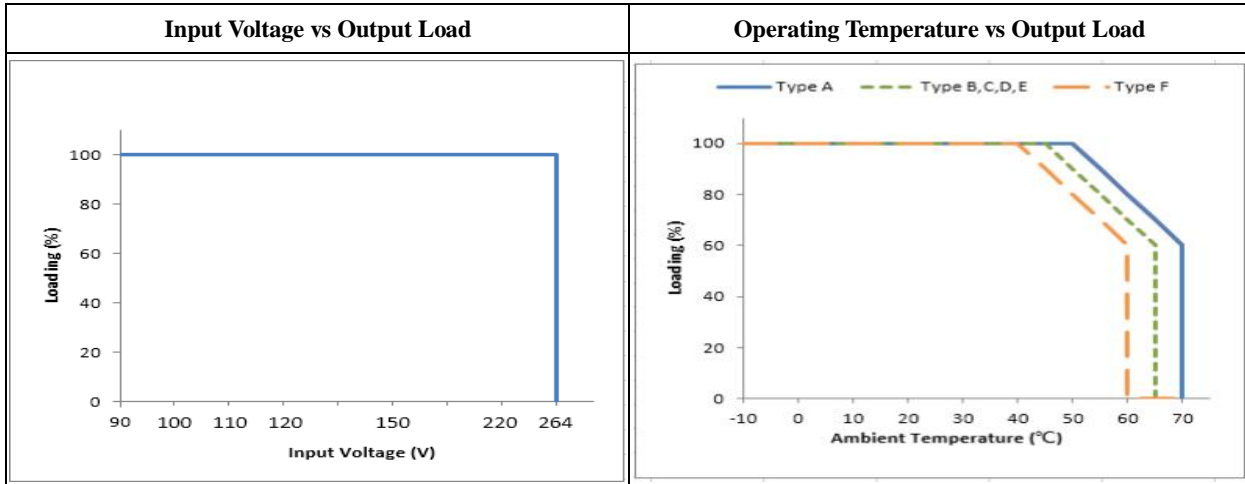
Notices:

- *1 Data that didn't mention is tested under 230Vac/ 50Hz/ full load condition & after 30 min warm-up at 25°C.
- *2 The ripple data must be measured under the condition of AC coupling & 20MHz bandwidth and with capacitor of 22uF+0.1uF. (Rated input and rated output)
- *3 EMC must be checked again with user's system & case.
- *4 For detail mechanical size, please check the outline drawing.
- *5 Read instruction manual carefully before using the power supply.
- *6 De-rating is required., Refer to de-rating curve
- *7 Drift the change in DC output for an eight hour after a half-hour warm-up at 25°C ,with the input voltage held constant at the rated input/output.

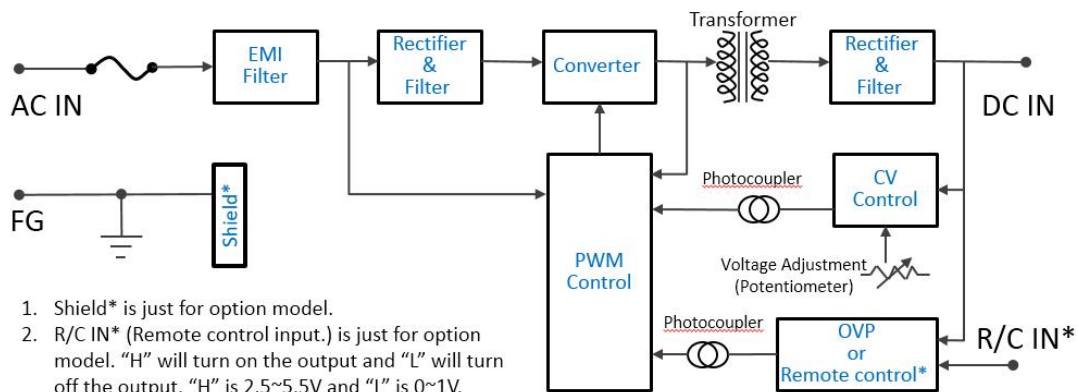
75W

MODEL	FSP075-P26J-A05	FSP075-P26J-A12	FSP075-P26J-A15	FSP075-P26J-A24
MAX OUTPUT WATTAGE	60 W	75.6 W	75 W	76.8 W
DC OUTPUT	5V / 12A	12V / 6.3A	15V / 5A	24V / 3.2A

SOA Curve (FSP075-P26-A24) (de-rating curve)



Block Diagram



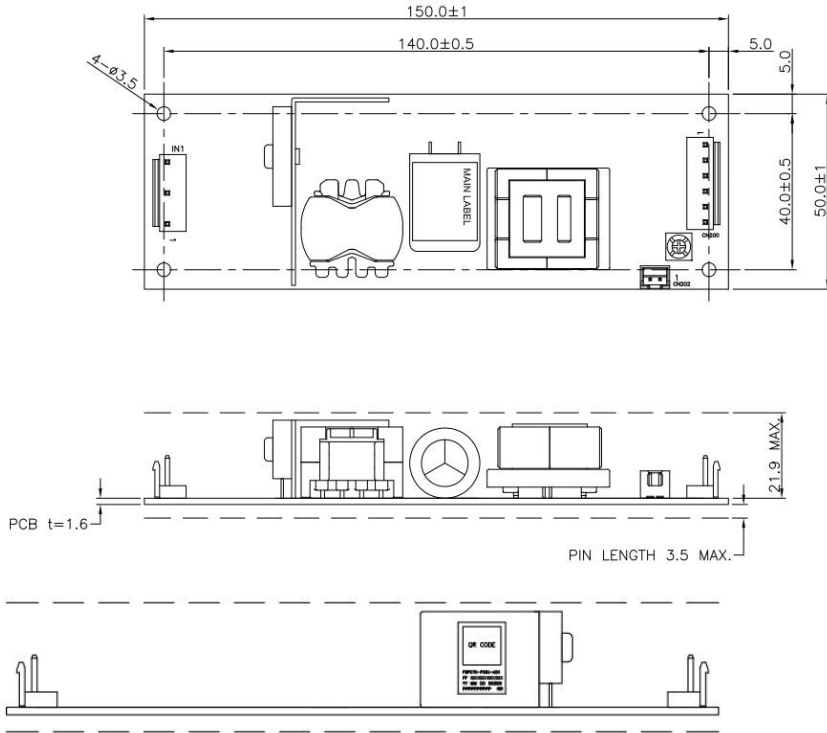
1. Shield* is just for option model.
2. R/C IN* (Remote control input.) is just for option model. "H" will turn on the output and "L" will turn off the output. "H" is 2.5~5.5V and "L" is 0~1V.

75W

MODEL	FSP075-P26J-A05	FSP075-P26J-A12	FSP075-P26J-A15	FSP075-P26J-A24
MAX OUTPUT WATTAGE	60 W	75.6 W	75 W	76.8 W
DC OUTPUT	5V / 12A	12V / 6.3A	15V / 5A	24V / 3.2A

Outline Information

FSPFSP075-P26-AXXX (Open Frame)



Pin assignment of IN1

Pin No.	Function	Wafer
1	L	JST B3P5-VH or EQUIVALENT
2		
3	N	
4		
5	FG	

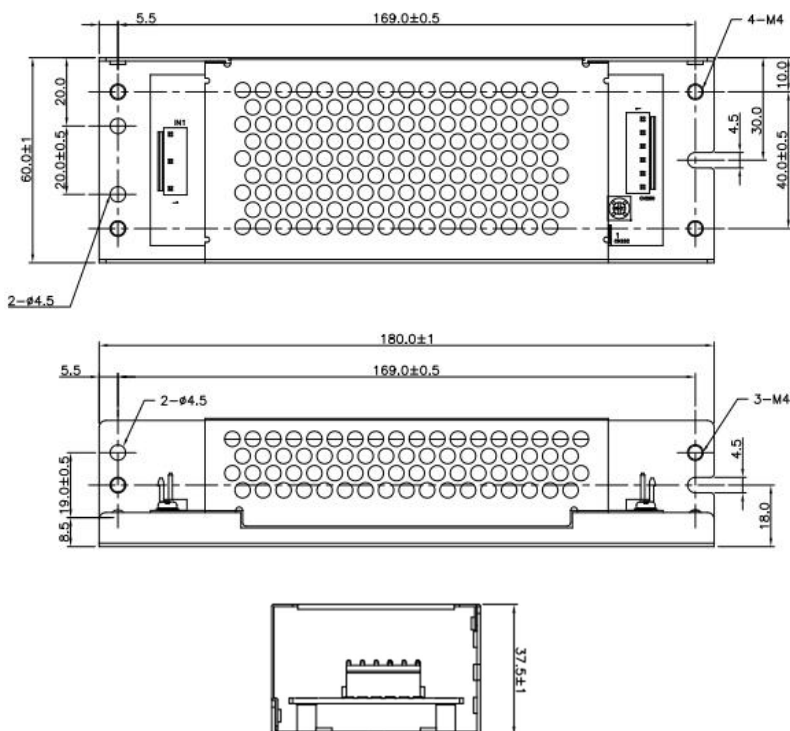
Pin assignment of CN200

Pin No.	Function	Wafer
1	-V	JST B6P-VH or EQUIVALENT
2	-V	
3	-V	
4	+V	
5	+V	
6	+V	

Pin assignment of CN202

Pin No.	Function	Wafer
1	R/C+	JST B2B-XH-A or EQUIVALENT
2	R/C-	

FSPFSP075-P26-AXXX (Shielding)





75W

MODEL	FSP075- P26J-A05	FSP075- P26J-A12	FSP075- P26J-A15	FSP075- P26J-A24
MAX OUTPUT WATTAGE	60 W	75.6 W	75 W	76.8 W
DC OUTPUT	5V / 12A	12V / 6.3A	15V / 5A	24V / 3.2A

■ **Ordering Information**

F S P 0 7 5 - P 2 6 J - A 1 2

① ② ③ ④ ⑤ ⑥ ⑦

Item	Description	Remark
①	Max Output Power (May drop due to application)	
②	Open Frame	
③	Approximate appearance (By Inch)	
④	Application Series	
⑤	Model Series	
⑥	Output Voltage (CV)	
⑦	Customer Option: Shielding: S , VR(Potentiometer): R , R/C: E Special Request: X1~n	



100W

MODEL	FSP100-P36J-A05	FSP100-P36J-A12	FSP100-P36J-A15	FSP100-P36J-A24
MAX OUTPUT WATTAGE	75 W	102 W	100.5 W	103.2 W
DC OUTPUT	5V / 15A	12V / 8.5A	15V / 6.7A	24V / 4.3A

■ SPECIFICATIONS

	MODEL	FSP100-P37J-A05	FSP100-P37J-A12	FSP100-P37J-A15	FSP100-P37J-A24	
INPUT	VOLTAGE(VAC)	85~264 (Refer to Derating) *6				
	CURRENT(A)	@ 100V	1.0 typ	1.2 typ		
		@ 230V	0.5 typ	0.6 typ		
	FREQUENCY(Hz)	50 / 60 (47 - 63)				
	EFFICIENCY(%)	@ 100V	86.0 typ	87.0 typ	88.0 typ	89.0 typ
		@ 230V	89.0 typ	90 typ	91.0 typ	92.0 typ
	INRUSH CURRENT(A)	@ 100V	15 typ (Io=100%) Ta=25°C at cold start			
		@ 230V	35 typ (Io=100%) Ta=25°C at cold start			
	LEAKAGE CURRENT(mA)	0.25 max (AC IN 264V 60Hz, Io=100%)				
	POWER SAVING _NO LOAD	@ 100V	<200 mW at Ta=25°C			
@ 230V		<300 mW at Ta=25°C				
POWER SAVING _REOMTE OFF	@ 100V	<150 mW at Ta=25°C				
	@ 230V	<300 mW at Ta=25°C				
OUTPUT*2	RATED VOLTAGE	5V	12V	15V	24V	
	CURRENT	15A	8.5A	6.7A	4.3A	
	LINE REGULATION(mV)	20 max	48 max	60 max	96 max	
	LOAD REGULATION(mV)	40 max	100 max	120 max	150 max	
	RIPPLE(mVp-p)	0 to +50°C	80 max	120 max	120 max	120 max
		-10 to 0°C	140 max	160 max	160 max	160 max
		Io=0 to 15%	300 max	300 max	300 max	300 max
	RIPPLE NOISE(mVp-p)	0 to +50°C	120 max	150 max	150 max	150 max
		-10 to 0°C	160 max	180 max	180 max	180 max
		Io=0 to 15%	360 max	360 max	360 max	360 max
	TEMPERATURE REGULATION(mV)	0 to +50°C	50 max	120 max	150 max	240 max
		-10 to 50°C	60 max	150 max	180 max	290 max
	DRIFT(mV) *7	20 max	48 max	60 max	96 max	
	START-UP TIME(ms)	500 typ (AC IN 100V, Io=100%) / 500 typ (AC IN 230V, Io=100%)				
HOLD-UP TIME(ms)	20 typ (ACIN 100V,Io=100%) / 20 typ (ACIN 230V,Io=100%)					
OUTPUT VOLTAGE (V) (*Default)	4.90 to 5.30	11.50 to 12.50	14.40 to 15.60	23.00 to 25.00		
OUTPUT VOLTAGE ADJUSTMENT RANGE(V)	Option is available for adjusting rated output voltage between ±10%.					
PROTECTION CIRCUIT AND OTHERS	OVER CURRENT PROTECTION	Work over 105% min of rating and recovers automatically				
	OVER VOLTAGE PROTECTION	No damage & Latch output				
	REMOTE ON/OFF	Option				
ISOLATION	INPUT-OUTPUT	AC3000V 1minute, Cutoff current = 10mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
	INPUT-FG	AC2000V 1minute, Cutoff current = 10mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
	OUTPUT-FG	AC500V 1minute, Cutoff current = 25mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
ENVIRONMENT	OPERATING TEMP,HUMID,AND ALTITUDE*6	-10 to +70°C, 20 - 90%RH (Non condensing), 5,000m (16,500feet) max				
	STORAGE TEMP,HUMID,AND ALTITUDE	-20 to +75°C, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max				
	VIBRATION	10 - 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis				
SAFETY AND NOISE REGULATION	AGENCY APPROVALS(reference)	UL62368-1,EN62368-1, Complies with DEN-AN (Japan)				
	CONDUCTED NOISE	CISPR 11 & 32				
	HARMONIC ATTENUATOR	Complies with IEC61000-3-2 (Class A)				
OTHERS	SIZE/WEIGHT	62*27*155mm [2.44*1.074*6.10 inches] (W*H*D)/250g max				

Notices:

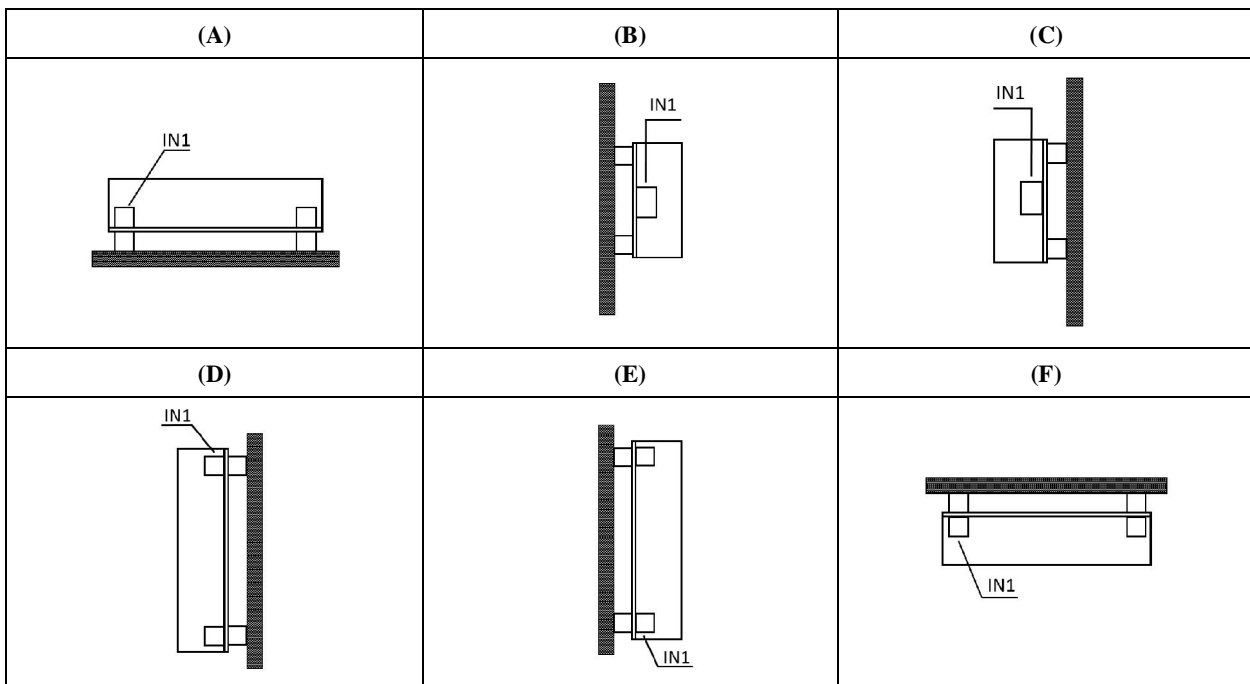
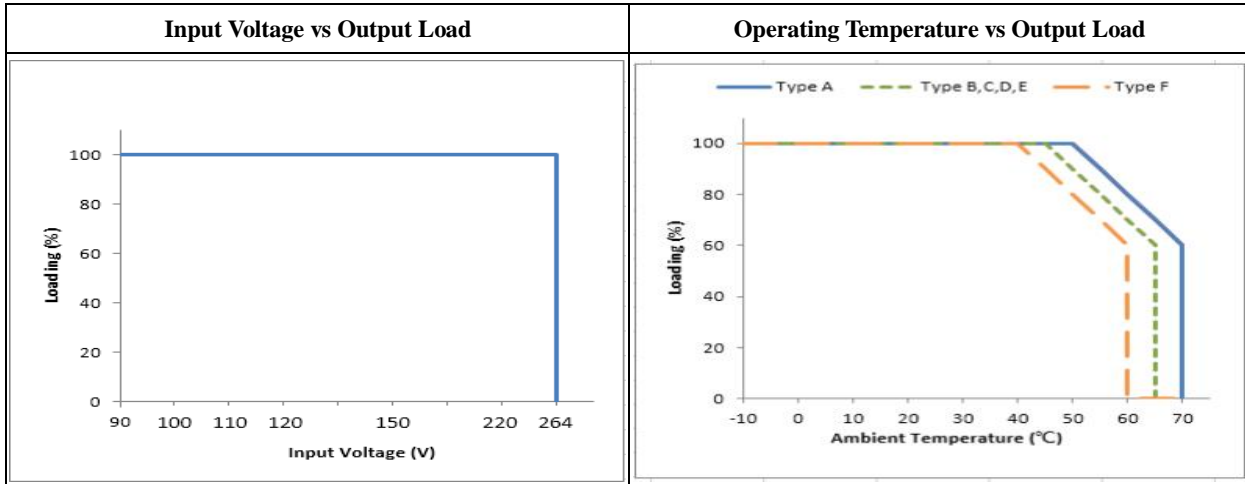
- *1 Data that didn't mention is tested under 230Vac/ 50Hz/ full load condition & after 30 min warm-up at 25°C.
- *2 The ripple data must be measured under the condition of AC coupling & 20MHz bandwidth and with capacitor of 22uF+0.1uF. (Rated input and rated output)
- *3 EMC must be checked again with user's system & case.
- *4 For detail mechanical size, please check the outline drawing.
- *5 Read instruction manual carefully before using the power supply.
- *6 De-rating is required., Refer to de-rating curve
- *7 Drift the change in DC output for an eight hour after a half-hour warm-up at 25°C ,with the input voltage held constant at the rated input/output..



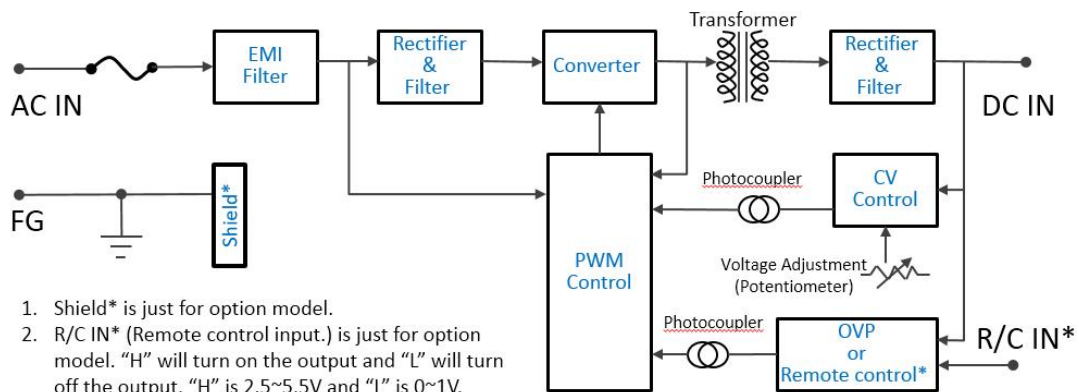
100W

MODEL	FSP100-P36J-A05	FSP100-P36J-A12	FSP100-P36J-A15	FSP100-P36J-A24
MAX OUTPUT WATTAGE	75 W	102 W	100.5 W	103.2 W
DC OUTPUT	5V / 15A	12V / 8.5A	15V / 6.7A	24V / 4.3A

SOA Curve (FSP100-P36J-A24) (de-rating curve)



Block Diagram



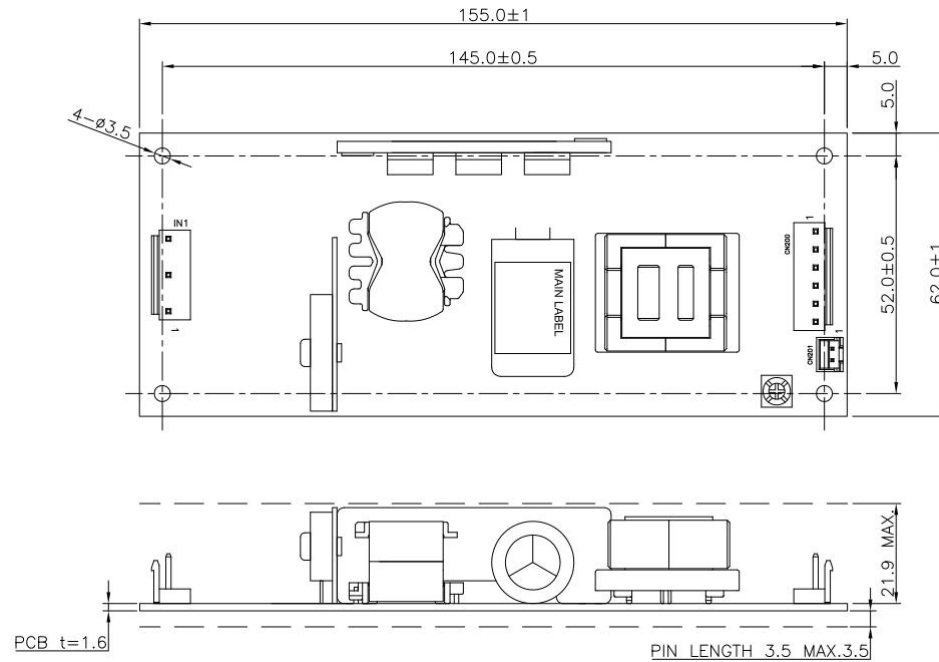
1. Shield* is just for option model.
2. R/C IN* (Remote control input.) is just for option model. "H" will turn on the output and "L" will turn off the output. "H" is 2.5~5.5V and "L" is 0~1V.

100W

MODEL	FSP100-P36J-A05	FSP100-P36J-A12	FSP100-P36J-A15	FSP100-P36J-A24
MAX OUTPUT WATTAGE	75 W	102 W	100.5 W	103.2 W
DC OUTPUT	5V / 15A	12V / 8.5A	15V / 6.7A	24V / 4.3A

Outline Information

FSP100-P36J-AXXX (Open Frame)



Pin assignment of IN1

Pin No.	Function	Wafer
1	L	JST B3P5-VH or EQUIVALENT
2		
3	N	
4		
5	FG	

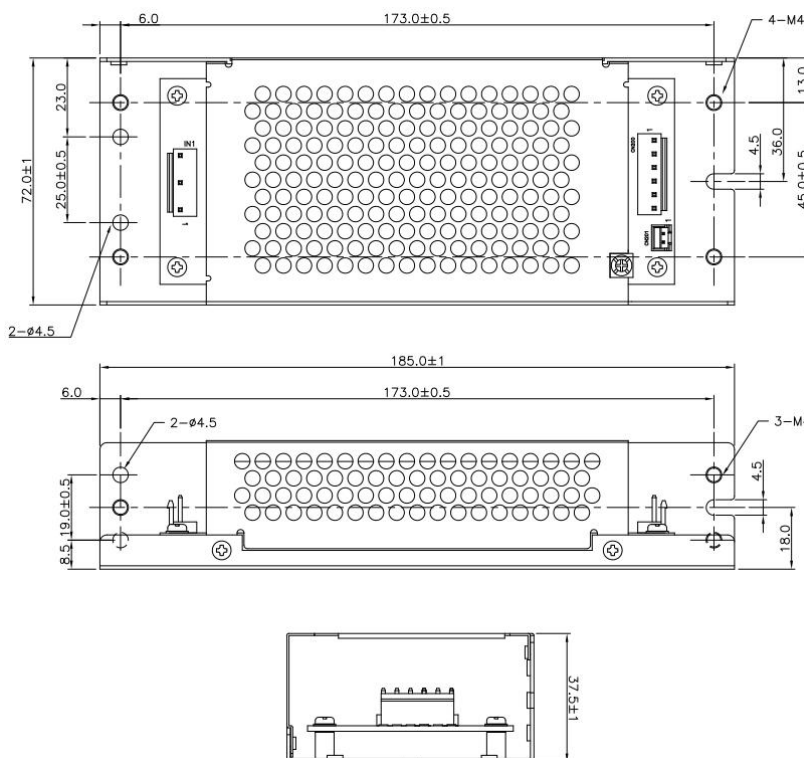
Pin assignment of CN200

Pin No.	Function	Wafer
1	-V	JST B6P-VH or EQUIVALENT
2	-V	
3	-V	
4	+V	
5	+V	
6	+V	

Pin assignment of CN201

Pin No.	Function	Wafer
1	R/C+	JST B2B-XH-A or EQUIVALENT
2	R/C-	

FSP100-P36J-AXXX (Shielding)





100W

MODEL	FSP100- P36J-A05	FSP100- P36J-A12	FSP100- P36J-A15	FSP100- P36J-A24
MAX OUTPUT WATTAGE	75 W	102 W	100.5 W	103.2 W
DC OUTPUT	5V / 15A	12V / 8.5A	15V / 6.7A	24V / 4.3A

■ Ordering Information

F S P 1 0 0 - P 3 6 J - A 1 2

① ② ③ ④ ⑤ ⑥ ⑦

Item	Description	Remark
①	Max Output Power (May drop due to application)	
②	Open Frame	
③	Approximate appearance (By Inch)	
④	Application Series	
⑤	Model Series	
⑥	Output Voltage (CV)	
⑦	Customer Option: Shielding: S , VR(Potentiometer): R , R/C: E Special Request: X1~n	



150W

MODEL	FSP150- P37J-A12	FSP150- P37J-A24	FSP150- P37J-A36	FSP150- P37J-A48
MAX OUTPUT WATTAGE	150 W	151.2 W	151.2 W	153.6 W
DC OUTPUT	12V / 12.5A	24V / 6.3A	36V / 4.2A	48V / 3.2A

■ SPECIFICATIONS

	MODEL	FSP150- P37J-A12	FSP150- P37J-A24	FSP150- P37J-A36	FSP150- P37J-A48	
INPUT	VOLTAGE(VAC)	85~264 (Refer to de-rating) *6				
	CURRENT(A)	@ 100V	1.8 typ			
		@ 230V	0.8 typ			
	FREQUENCY(Hz)	50/60 (47 - 63)				
	EFFICIENCY(%)	@ 100V	87.0 typ	90.0 typ	90.0 typ	90.0 typ
		@ 230V	90.0 typ	92.0 typ	93.0 typ	93.0 typ
	INRUSH CURRENT(A)	@ 100V	15 typ (Io=100%) Ta=25°C at cold start			
		@ 230V	35 typ (Io=100%) Ta=25°C at cold start			
	LEAKAGE CURRENT(mA)	0.4 max (AC IN 264V 60Hz, Io=100%)				
	POWER SAVING _NO LOAD	@ 100V	<300 mW at Ta=25°C			
@ 230V		<300 mW at Ta=25°C				
POWER SAVING _REOMTE OFF	@ 100V	<500 mW at Ta=25°C				
	@ 230V	<500 mW at Ta=25°C				
OUTPUT*2	RATED VOLTAGE	12V	24V	36V	48V	
	CURRENT	12.5A	6.3A	4.2A	3.2A	
	LINE REGULATION(mV)	48 max	96 max	144 max	192 max	
	LOAD REGULATION(mV)	100 max	150 max	240 max	240 max	
	RIPPLE(mVp-p)	0 to +50°C	120 max	120 max	150 max	150 max
		-10 to 0°C	160 max	160 max	200 max	200 max
		Io=0 to 15%	160 max	160 max	200 max	200 max
	RIPPLE NOISE(mVp-p)	0 to +50°C	150 max	150 max	250 max	250 max
		-10 to 0°C	240 max	240 max	300 max	300 max
		Io=0 to 15%	240 max	240 max	300 max	300 max
	TEMPERATURE REGULATION(mV)	0 to +50°C	120 max	240 max	360 max	480 max
		-10 to 50°C	150 max	290 max	450 max	600 max
	DRIFT(mV) *7	48 max	96 max	144 max	192 max	
	START-UP TIME(ms)	500 typ (AC IN 100V, Io=100%) / 500 typ (AC IN 230V, Io=100%)				
HOLD-UP TIME(ms)	20 typ (ACIN 100V,Io=100%) / 20 typ (ACIN 230V,Io=100%)					
OUTPUT VOLTAGE (V)	11.50 to 12.50	23.00 to 25.00	34.50 to 37.50	46.00 to 50.00		
OUTPUT VOLTAGE ADJUSTMENT RANGE(V)	Option is available for adjusting rated output voltage between ±10%.					
PROTECTION CIRCUIT AND OTHERS	OVER CURRENT PROTECTION	Work over 105% min of rating and recovers automatically				
	OVER VOLTAGE PROTECTION	No damage & Latch output				
	REMOTE ON/OFF	Option				
ISOLATION	INPUT-OUTPUT	AC3000V 1minute, Cutoff current = 10mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
	INPUT-FG	AC2000V 1minute, Cutoff current = 10mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
	OUTPUT-FG	AC500V 1minute, Cutoff current = 25mA (At Ta=25°C) DC500V 100MΩ min (At Ta=25°C)				
ENVIRONMENT	OPERATING TEMP,HUMID,AND ALTITUDE*6	-10 to +70°C, 20 – 90%RH (Non condensing), 3,000m (10,000feet) max				
	STORAGE TEMP,HUMID,AND ALTITUDE	-20 to +75°C, 20 – 90%RH (Non condensing), 9,000m (30,000feet) max				
	VIBRATION	10 – 55Hz, 19.6m/s ² (2G), 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT	196.1m/s ² (20G), 11ms, once each X, Y and Z axis				
SAFETY AND NOISE REGULATION	AGENCY APPROVALS(reference)	UL62368-1,EN62368-1, Complies with DEN-AN (Japan)				
	CONDUCTED NOISE	CISPR 11 & 32				
	HARMONIC ATTENUATOR	Complies with IEC61000-3-2 (Class A)				
OTHERS	SIZE/WEIGHT	75*27*160mm [2.95*1.074*6.30 inches] (W*H*D)/320g max				

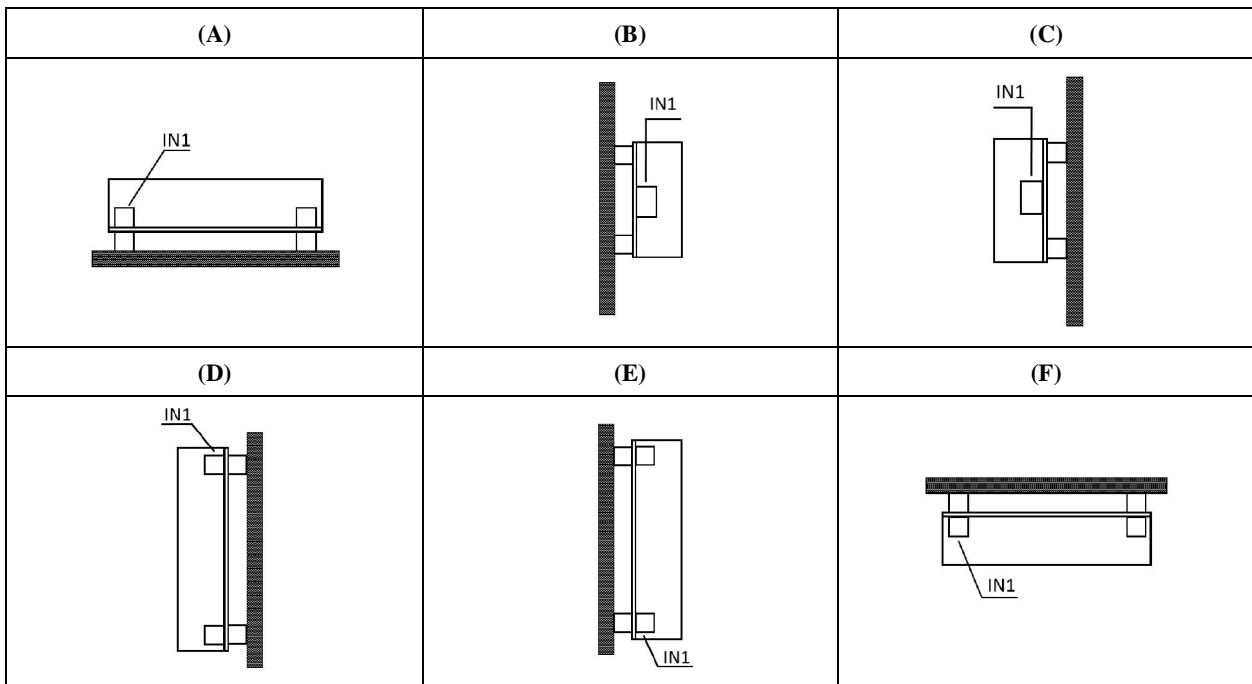
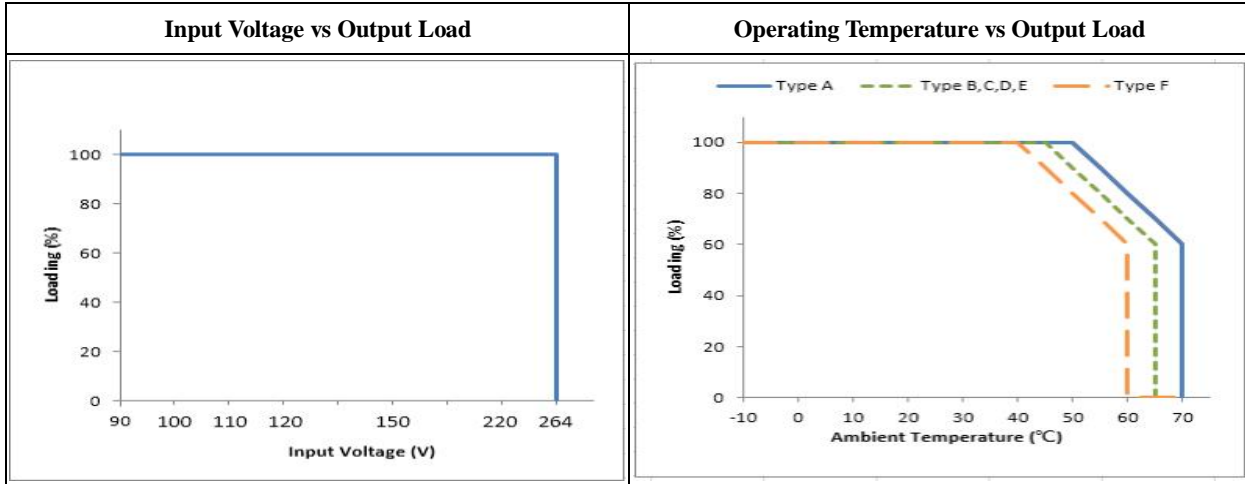
Notices:

- *1 Data that didn't mention is tested under 230Vac/ 50Hz/ full load condition & after 30 min warm-up at 25°C.
- *2 The ripple data must be measured under the condition of AC coupling & 20MHz bandwidth and with capacitor of 22uF+0.1uF. (Rated input and rated output)
- *3 EMC must be checked again with user's system & case.
- *4 For detail mechanical size, please check the outline drawing.
- *5 Read instruction manual carefully before using the power supply.
- *6 De-rating is required., Refer to de-rating curve
- *7 Drift the change in DC output for an eight hour after a half-hour warm-up at 25°C ,with the input voltage held constant at the rated input/output.

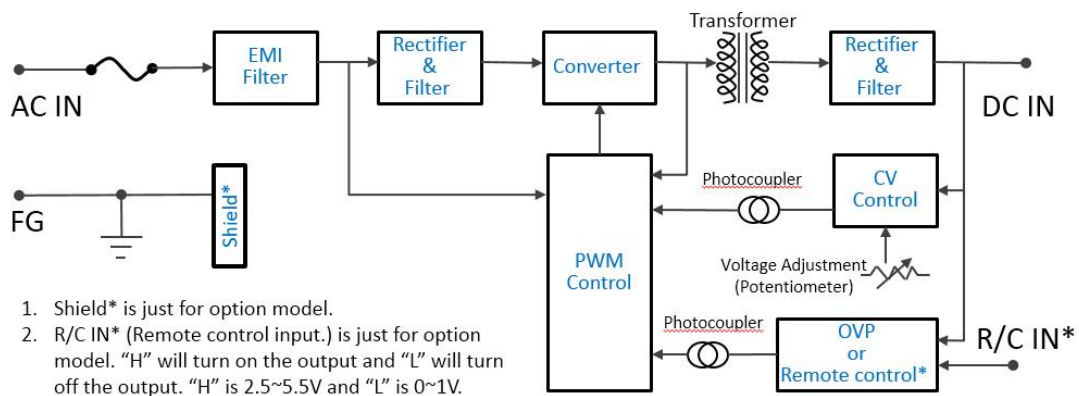
150W

MODEL	FSP150-P37J-A12	FSP150-P37J-A24	FSP150-P37J-A36	FSP150-P37J-A48
MAX OUTPUT WATTAGE	150 W	151.2 W	151.2 W	153.6 W
DC OUTPUT	12V / 12.5A	24V / 6.3A	36V / 4.2A	48V / 3.2A

SOA Curve (FSP150-P37J-A24) (de-rating curve)



Block Diagram

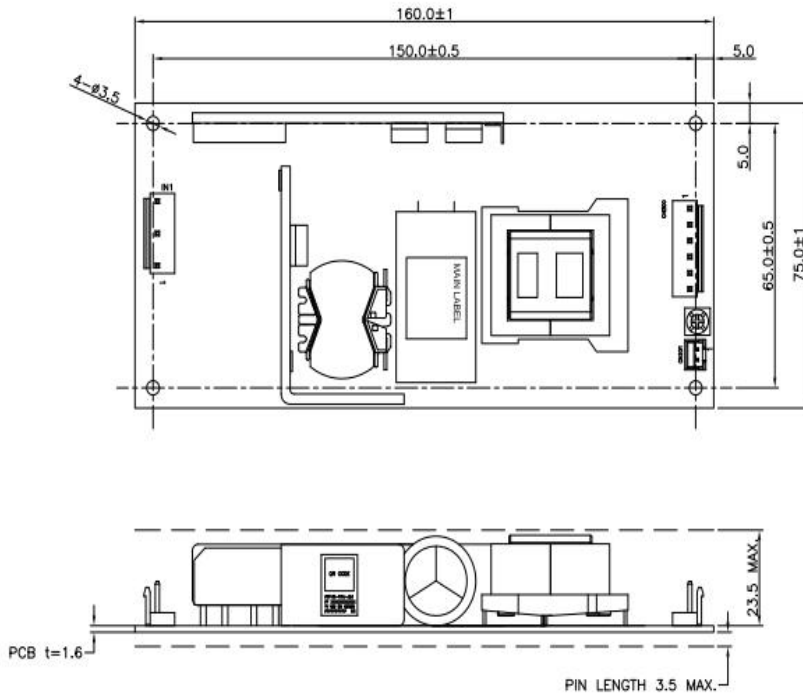


150W

MODEL	FSP150-P37J-A12	FSP150-P37J-A24	FSP150-P37J-A36	FSP150-P37J-A48
MAX OUTPUT WATTAGE	150 W	151.2 W	151.2 W	153.6 W
DC OUTPUT	12V / 12.5A	24V / 6.3A	36V / 4.2A	48V / 3.2A

Outline Information

FSP150-P37J-AXX (Open Frame)



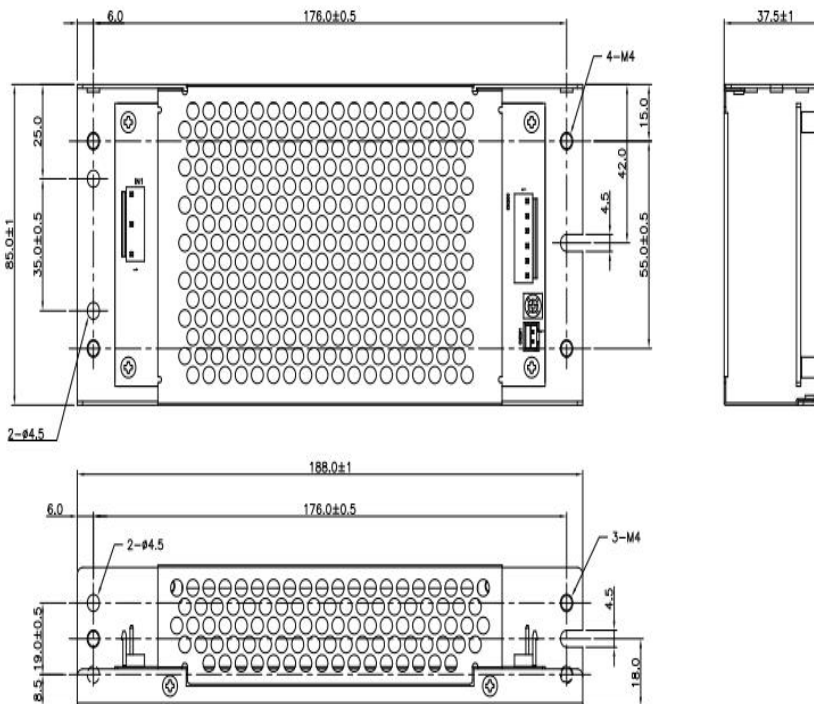
Pin assignment of IN1

Pin No.	Function	Wafer
1	L	JST B3P5-VH or EQUIVALENT
2		
3	N	
4		
5	FG	

Pin assignment of CN200

Pin No.	Function	Wafer
1	-V	JST B6P-VH or EQUIVALENT
2	-V	
3	-V	
4	+V	
5	+V	
6	+V	

FSP150-P37J-AXXX (Shielding)



Pin assignment of CN201

Pin No.	Function	Wafer
1	R/C+	JST B2B-XH-A or EQUIVALENT
2	R/C-	



150W

MODEL	FSP150- P37J-A12	FSP150- P37J-A24	FSP150- P37J-A36	FSP150- P37J-A48
MAX OUTPUT WATTAGE	150 W	151.2 W	151.2 W	153.6 W
DC OUTPUT	12V / 12.5A	24V / 6.3A	36V / 4.2A	48V / 3.2A

■ **Ordering Information**

F S P 1 5 0 - P 3 7 J - A 2 4

① ② ③ ④ ⑤ ⑥ ⑦

Item	Description	Remark
①	Max Output Power (May drop due to application)	
②	Open Frame	
③	Approximate appearance (By Inch)	
④	Application Series	
⑤	Model Series	
⑥	Output Voltage (CV)	
⑦	Customer Option: Shielding: S , VR(Potentiometer): R , R/C: E Special Request: X1~n	

JPC connectivity

佳必琪國際股份有限公司
JESS-LINK PRODUCTS CO., LTD.



Thank You!

