

AC/DC Switching Open Frame

ELECTRICAL SPECIFICATIONS

- Input range : 90 ~ 264 VAC / 127 ~ 380 VDC
- Input Frequency : 47 - 440Hz
- Inrush Current (25°C) 20A @ 110VAC; 40A @ 220VAC MAX




OUTPUT

- Short Protection: Autorecovery
- Overload Protection: Automatic Power Limited
- Over Voltage Protection: Autorecovery
- Hold-up time : 16ms
- Outputs Can Be Modified From 3V~200VDC



DIMENSIONS : 100(L) x 64(W) x 26.5(H)mm
 F148-12S : 100(L) x 64(W) x 34(H)mm

SAFETY STANDARDS

-  UL 1950 Meet
-  CSA C22.2 Meet
-  CE Marking

EMC STANDARDS

- EN 55022 CLASS B
- EN 61000-3-2 CLASS A
- EN 61000-3-3, EN 55024
- (IEC 61000-4-2, IEC 61000-4-3
- IEC 61000-4-4, IEC 61000-4-5
- IEC 61000-4-6, IEC 61000-4-8
- IEC 61000-4-11)

ENVIRONMENTAL

- Operating Temperature -15 ~ 50°C, Ambient
- Operating Humidity 5 ~ 95% RH, No Condensing
- Storage Temperature -20 ~ 85°C, Ambient
- Vibration 2G, 10~500Hz, 3 axes

DC OUTPUT & FEATURES

20 Watts

MODEL	O/P Volt Adj. ±%	Load (Current) ₁			Ripple & Noise ₄	Line REG. ₂	Load REG. ₃	Efficiency ₅	O.V.P. Trip point
		Min.	Rated	Max.					
F120-05S	V1: +5V ±10%	0A	4A	4A	50mVp-p	±1%	±1%	72% Min.	5.6 ~ 7.0V
F120201S	V1: +5V ±10% V2: +12V-----	0A 0A	1.5A 1A	1.5A 1A	50mVp-p 100mVp-p	±1% ±2%	±1% ±4%	70% Min.	5.6 ~ 7.0V -----



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DC OUTPUT & FEATURES

MODEL	O/P Volt Adj. \pm	Load(Current) ₁			Ripple & Noise ₄	Line REG. ₂	Load REG. ₃	Efficiency ₅	O.V.P. Trip point
		Min.	Rated	Max.					

30 Watts

● F120301S	V1: +24V \pm 10% V2: -12V-----	0A 0A	1A 0.5A	1A 0.5A	300mVp-p 100mVp-p	\pm 1% \pm 2%	\pm 1% \pm 4%	74% Min.	27.6 ~ 31V -----
● F120302S	V1: +8V \pm 10% V2: -8V-----	0A 0A	2.75A 1A	2.75A 1A	80mVp-p 80mVp-p	\pm 1% \pm 2%	\pm 1% \pm 4%	74% Min.	12.0 ~ 14V -----
● F120303S	V1: +8V \pm 10% V2: +24V-----	0A 0A	1A 0.9A	1A 0.9A	80mVp-p 300mVp-p	\pm 1% \pm 2%	\pm 1% \pm 4%	74% Min.	12.0 ~ 14V -----
● F120304S	V1: +5V \pm 10% V2: +24V-----	0A 0A	1.2A 1A	1.2A 1A	50mVp-p 300mVp-p	\pm 1% \pm 2%	\pm 1% \pm 4%	74% Min.	5.6 ~ 7.0V -----
● F120305S	V1: +15V \pm 10% V2: -15V-----	0A 0A	1A 1A	1A 1A	150mVp-p 150mVp-p	\pm 1% \pm 2%	\pm 1% \pm 4%	74% Min.	20.0 ~ 24V -----
● F120306S	V1: +24V \pm 10% V2: -24V-----	0A 0A	1A 0.25A	1A 0.25A	300mVp-p 300mVp-p	\pm 1% \pm 2%	\pm 1% \pm 4%	74% Min.	27.6 ~ 31V -----

36 Watts

F11036-12S	V1: +12V \pm 10%	0A	3A	3A	100mVp-p	\pm 1%	\pm 1%	73% Min.	15.0 ~ 18V
F11036-24S	V1: +24V \pm 10%	0A	1.5A	1.5A	150mVp-p	\pm 1%	\pm 1%	75% Min.	27.6 ~ 31V

48 Watts

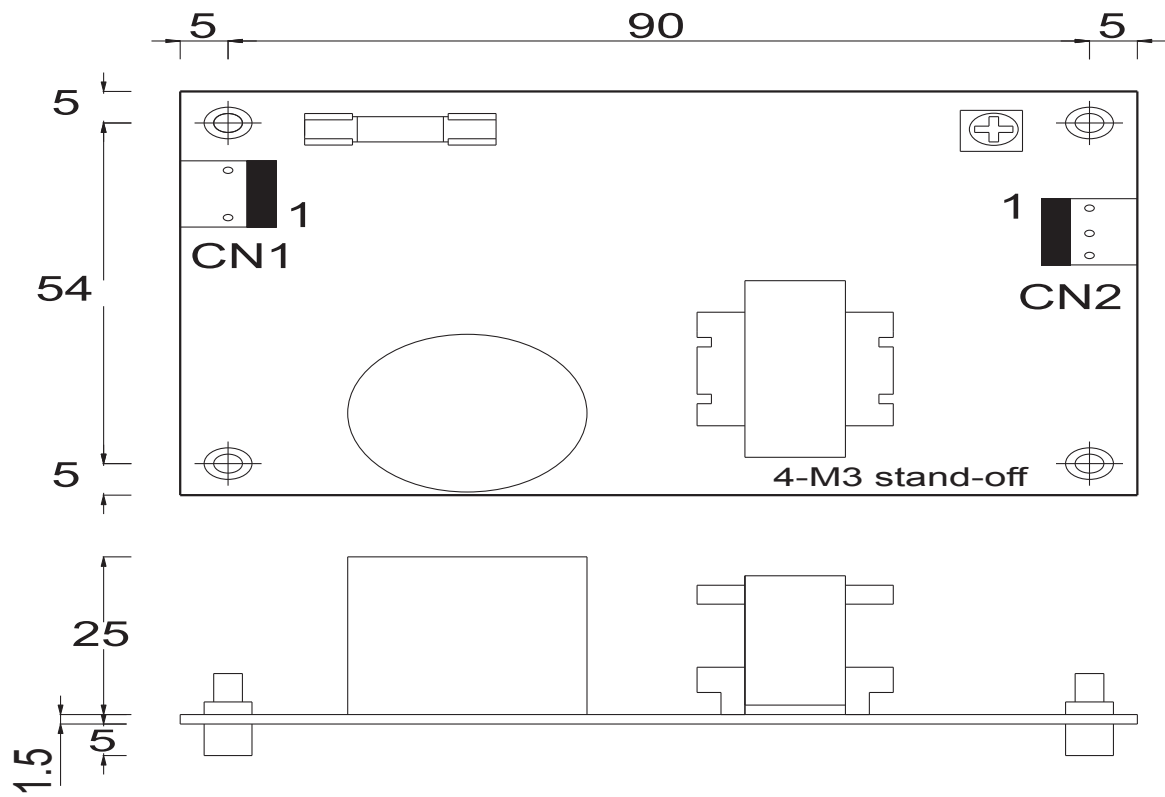
● F11030-05S	V1: +5V \pm 10%	0A	6A	6A	60mVp-p	\pm 1%	\pm 1%	73% Min.	6.25~7.5V
● F11048-12S	V1: +12V \pm 10%	0A	4A	4A	100mVp-p	\pm 1%	\pm 1%	73% Min.	15.0~18V
● F11048-24S	V1: +24V \pm 10%	0A	2A	2A	200mVp-p	\pm 1%	\pm 1%	73% Min.	27.6~31V
● F11048-48S	V1: +48V \pm 10%	0A	1A	1A	300mVp-p	\pm 1%	\pm 1%	73% Min.	54.0~60V

- NOTE:
1. Each output can provide up to maximum load, but total load can not exceed rated output power.
 2. Line regulation is measured from low line to high line at rated load.
 3. Load regulation is measured from 20% to 100% of rated load at 110VAC input.
 4. Ripple & Noise is measured by using a 0.1uF/630V metalized capacitor & a 47uF electrolytic capacitor parallel on the test point, at rated load and 110VAC input.
 5. Efficiency is measured at rated load and 110VAC input.
 6. Hold-up time is measured at rated load and 110VAC input.
 7. With ● are non-safety approval.



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MECHANICAL SPECIFICATION



Input connector (CN1):
 3.96mm crimp style connector
 3Pin (Pin 2 no pole) · 3.96mm

Pin	Input	Description
1	N	Neutral Terminal of AC Input
3	L	Line Terminal of AC Input

No Polarity At DC Input

CASE NO: F120-48
UNIT: mm
DIMENSIONS:
 100(L) x 64(W) x 31.5(H)mm

DC Output Connector (CN2):
 3.96mm crimp style connector
 Single output: 2Pin · 3.96mm
 Dual output: 3Pin · 3.96mm

Pin	Single	Dual	Description
1	G	V2	G: DC Output Ground Terminal Vx: DC Output Terminal (Specify a t spec.)
2	V1	G	
3	/	V1	



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