

NEW • UNIVERSAL INPUT • POWER FACTOR CORRECTION

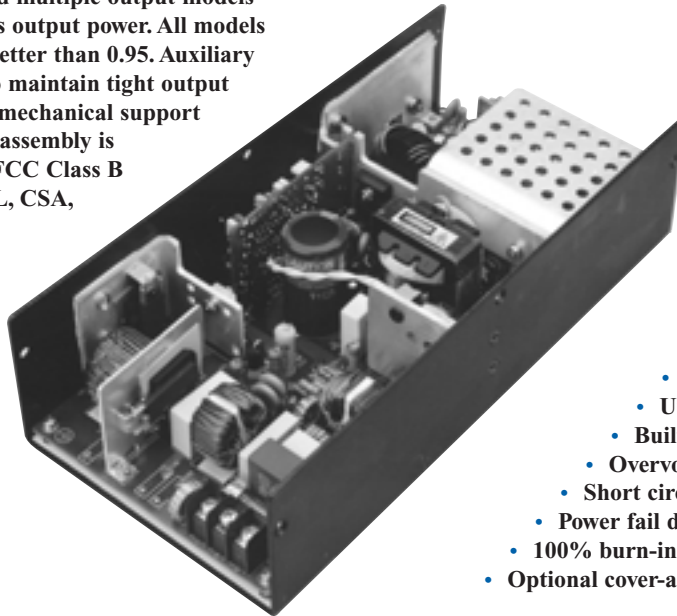
350 WATT

SWITCHING POWER SUPPLY



DESCRIPTION

The IFC350 Series is comprised of single and multiple output models capable of delivering 350 watts of continuous output power. All models have universal input and a power factor of better than 0.95. Auxiliary outputs use magnetic amplifier regulators to maintain tight output tolerances. U-bracket construction provides mechanical support and heat sinking. An optional cover-and-fan assembly is available. All models to meet CISPR22 and FCC Class B emission limits, and comply are approved UL, CSA, and TUV safety standards and carry the CE mark.



FEATURES

- EN61000-3-2, 3 compliant
- Universal Input
- Built-in EMI filter
- Overvoltage and thermal protection
- Short circuit protection with auto-recovery
- Power fail detection (PFD) signal
- 100% burn-in at full rated load
- Optional cover-and-fan assembly

OUTPUT VOLTAGE/CURRENT RATINGS CHART

Model	Output #1				Output #2 ³				Output #3				Output #4 ⁴				Maximum Output Power ¹
	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	
IFC350-10	5.1V	1.0A	54.0A	2%	N/A				N/A				N/A				275W
IFC350-12	12V	0.5A	29.2A	2%	N/A				N/A				N/A				350W
IFC350-13	15V	0.4A	23.4A	2%	N/A				N/A				N/A				350W
IFC350-14	24V	0.3A	14.6A	2%	N/A				N/A				N/A				350W
IFC350-16	30V	0.2A	11.7A	2%	N/A				N/A				N/A				350W
IFC350-18	48V	0.1A	7.3A	2%	N/A				N/A				N/A				350W
IFC350-23	5.1V	5.0A	40A	2%	+12V	0A	9A	4%	N/A				N/A				300W
IFC350-24	5.1V	5.0A	40A	2%	+15V	0A	8A	4%	N/A				N/A				300W
IFC350-25	5.1V	5.0A	40A	2%	+24V	0A	4.5A	4%	N/A				N/A				300W
IFC350-30	5.1V	5.0A	40A	2%	+12V	0A	9A	4%	-5V	0A	6A	4%	N/A				300W
IFC350-31	5.1V	5.0A	40A	2%	+12V	0A	9A	4%	-12V	0A	4A	4%	N/A				350W
IFC350-32	5.1V	5.0A	40A	2%	+15V	0A	8A	4%	-15V	0A	4A	4%	N/A				350W
IFC350-33	5.1V	5.0A	40A	2%	+15V	0A	8A	4%	-12V	0A	4A	4%	N/A				350W
IFC350-40	5.1V	5.0A	40A	2%	+12V	0A	9A	4%	-12V	0A	4A	4%	F 5V	0A	6A	4%	350W
IFC350-41	5.1V	5.0A	40A	2%	+15V	0A	8A	4%	-15V	0A	4A	4%	F 24V	0A	4A	4%	350W
IFC350-42	5.1V	5.0A	40A	2%	+12V	0A	9A	4%	-12V	0A	4A	4%	F 12V	0A	4A	4%	350W
IFC350-44	5.1V	5.0A	40A	2%	+12V	0A	9A	4%	-15V	0A	4A	4%	F 15V	0A	4A	4%	350W
IFC350-45	5.1V	5.0A	40A	2%	+12V	0A	9A	4%	-12V	0A	4A	4%	F 24V	0A	4A	4%	350W

- NOTE:** (1) 350 Watts for "C" version with cover and fan. User required to supply 38 CFM forced air for "B" version.
 (2) Add suffix "B" for U-bracket or "C" for enclosed i.e. PFC350-45C.
 (3) On output #2 peak current is 12A on +12V, 9.6A on +15V and 6A on +24V.
 (4) Output #4 is floating. It can be connected externally for positive or negative output.
 (5) Peak output current with 10% maximum duty cycle for less than 60 seconds. Total power must not exceed Maximum Output Power

GENERAL SPECIFICATIONS

All specifications are typical at nominal line, full load, and 25°C.

Power factor:	0.98 typical
Efficiency:	70% minimum
Hold-up time:	12 msec minimum, at 115VAC
Line regulation:	±0.5% maximum at full load
Inrush current:	40A at 115VAC or 80A at 230VAC at 25°C cold start
Withstand voltage:	3000VAC from input to output 1500VAC from input to ground 500VAC from output to ground
Operating temperature:	0°C to +70°C*
Storage temperature:	-40°C to +85°C
Relative humidity:	5% to 95% non-condensing
MTBF:	250,000 hours (MIL-HBK-217D)
EMI requirements:	Meets conduction limits of: (a) CISPR22 (EN 55022) Class B (b) FCC Class B
Safety requirements:	Approved to: (a) UL1950 (b) CSA C22.2 No. 950 (c) IEC 950 (EN60950)
Switching frequency:	76KHz ±8KHz

INPUT SPECIFICATIONS

Input voltage:	90 to 264 VAC
Input frequency:	47 to 63 Hz
Input current:	5.6A (rms) at 115 VAC 2.8A (rms) at 230 VAC

OUTPUT SPECIFICATIONS

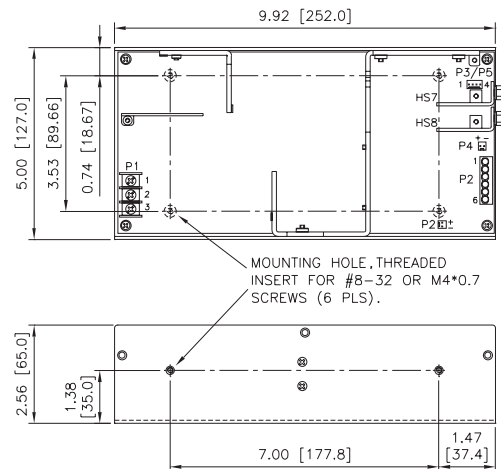
Output voltage:	See Rating Chart
Output current:	See Rating Chart
Ripple and noise:	2% peak-peak maximum
Overvoltage protection:	Provided on output #1 only; set at 112-132% of its nominal output voltage
Overcurrent protection:	All outputs protected to short circuit conditions
Power Fail Detect:	TTL logic low upon loss of input power
Temperature coefficient:	All outputs +0.04%/°C maximum
Transient response:	Maximum excursion of 5% , recovering to 1% of final value in less than 500us after a 50% load change

* Derate linearly from 100% load at 50°C to 50% load at 70°C

MECHANICAL SPECIFICATIONS

NOTES:

1. Dimensions shown in inches [mm].
2. Tolerance 0.02 (0.5) maximum.
3. Input connector P1 is Beau Inc. P/N 72-5-03C with #6-32 screws.
4. Main output studs HS7 and HS8 use M5 x 0.8 screws.
5. P3 (single output) / P5 (multi output) mates with Molex housing 22-01-1043 and Molex 40445 series crimp terminals.
6. Single Output Models: P2 (2 pin) is for DC fan rated 24V/0.12A (models IFC350-14 & -16) or 12V/0.22A for other models. P2 (6 pin) and P4 are not present on PCB.
7. Multiple Output Models: P2 (6 pin) is Dinkle P/N 166-06P. P4 is for DC fan rated 24V/0.12A (model IFC350-25) or 12V/0.22A for other models. P2 (2 pin) is not present on PCB.
8. Weight: 3.1 Lbs (1.4 Kgs) approx. for "B" version 3.9 Lbs (1.75 Kgs) approx. for "C" version



PIN CHART Single Output Models

Connector	P1			P3				HS7	HS8
Pin	1	2	3	1	2	3	4		
IFC350-10	AC Line	AC Neutral	AC Ground	Return	PFD	-Sense	+Sense	Output #1 Return	Output #1
IFC350-12, IFC350-13 IFC350-14, IFC350-16 IFC350-18	AC Line	AC Neutral	AC Ground	Return	NC	-Sense	+Sense	Output #1 Return	Output #1

PIN CHART Multiple Output Models – Includes P1 from above chart

Connector	P2					P5				HS7	HS8
Pin	1	2,3	4	5	6	1	2	3	4		
IFC350-23, IFC350-24 IFC350-25	Output #2	COM. RET.	N/C	N/C	N/C	COM. RET.	PFD	-Sense	+Sense	Output #1	Output #1 Return
IFC350-30, IFC350-31 IFC350-32, IFC350-33	Output #2	COM. RET.	Output #3	N/C	N/C	COM. RET.	PFD	-Sense	+Sense		
IFC350-40, IFC350-41 IFC350-42, IFC350-44 IFC350-45	Output #2	COM. RET.	Output #3	Output #4	Output #4 Return	COM. RET.	PFD	-Sense	+Sense		



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