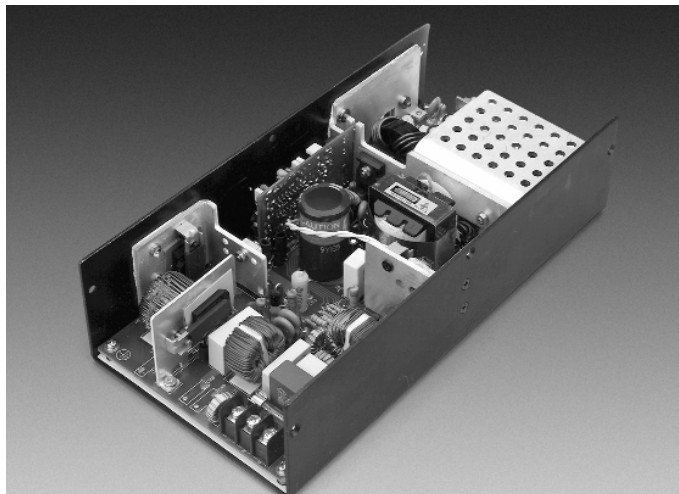


AC/DC U-Channel

350 Watts IFC350 Series

XPiQ inc.

Intelligent Design Quality Product



- CE Marked LVD
-
- Universal Input
-
- Power Factor Corrected
-
- Optional Fan & Cover
-
- Power Fail Signal
-
- Single & Multi Outputs
-
- Floating 4th Output
-
- EN61000-3-2 -3 Compliant

Specification

(All specifications are typical at +25 °C, nominal line at 75% load)

Input

- Input Voltage* • 90-264 VAC
- Input Frequency* • 47-63 Hz
- Inrush Current* • 40 A at 115 VAC or
80 A at 230 VAC
- Power Factor* • 0.98 typical

Output

- Output Voltage* • See Tables
(accuracy $\pm 2\%$ output 1, $\pm 4\%$ others)
- Hold-up Time* • 12 msec minimum
- Line Regulation* • $\pm 0.5\%$ max
- Ripple & Noise* • 2% pk-pk max
- Transient Response* • <5% deviation for 50% load change,
recovery in <500 μ s

General

- Overvoltage Protection* • Output 1 112-132% of nominal
- Overcurrent Protection* • Provided
- Switching Frequency* • 76 kHz ± 8 kHz

Environmental

- Operating Temperature* • 0 °C to +70 °C
derate linearly from 100% load
at +50 °C to 50% load at +70 °C
- Storage Temperature* • -40 °C to +85 °C
- Temperature Coefficient* • 0.04%/°C
- Efficiency* • 70% min
- MTBF* • 250,000 hrs MIL-HDBK-217D

Safety and EMC

- Safety* • UL1950, CSA C22.2 No.950,
IEC950 (EN60950)
- EMC* • CISPR 22 (EN55022) level B,
FCC 20780 Class B
EN61000-3-2, -3 compliant

OUTPUT VOLTAGE & CURRENT RATINGS

IFC350

Max Output Power	Output #1				Output #2				Output #3				Output #4				Model Number
	Vnom	Imin	I _{max}	Tol.	Vnom	Imin	I _{max}	Tol.	Vnom	Imin	I _{max}	Tol.	Vnom	Imin	I _{max}	Tol.	
275 W	5.1 V	1.0 A	54.0 A	2%													IFC350-10
350 W	12.0 V	0.5 A	29.2 A	2%													IFC350-12
350 W	15.0 V	0.4 A	23.4 A	2%													IFC350-13
350 W	24.0 V	0.3 A	14.6 A	2%													IFC350-14
350 W	30.0 V	0.2 A	11.7 A	2%													IFC350-16
350 W	48.0 V	0.1 A	7.3 A	2%													IFC350-18
300 W	5.1 V	5.0 A	40.0 A	2%	+12 V	0 A	9.0 A	4%									IFC350-23
300 W	5.1 V	5.0 A	40.0 A	2%	+15 V	0 A	8.0 A	4%									IFC350-24
300 W	5.1 V	5.0 A	40.0 A	2%	+24 V	0 A	4.5 A	4%									IFC350-25
300 W	5.1 V	5.0 A	40.0 A	2%	+12 V	0 A	9.0 A	4%	-5 V	0 A	6 A	4%					IFC350-30
350 W	5.1 V	5.0 A	40.0 A	2%	+12 V	0 A	9.0 A	4%	-12 V	0 A	4 A	4%					IFC350-31
350 W	5.1 V	5.0 A	40.0 A	2%	+15 V	0 A	8.0 A	4%	-15 V	0 A	4 A	4%					IFC350-32
350 W	5.1 V	5.0 A	40.0 A	2%	+15 V	0 A	8.0 A	4%	-12 V	0 A	4 A	4%					IFC350-33
350 W	5.1 V	5.0 A	40.0 A	2%	+12 V	0 A	9.0 A	4%	-12 V	0 A	4 A	4%	F5 V	0 A	6 A	4%	IFC350-40
350 W	5.1 V	5.0 A	40.0 A	2%	+15 V	0 A	8.0 A	4%	-15 V	0 A	4 A	4%	F24 V	0 A	4 A	4%	IFC350-41
350 W	5.1 V	5.0 A	40.0 A	2%	+12 V	0 A	9.0 A	4%	-12 V	0 A	4 A	4%	F12 V	0 A	4 A	4%	IFC350-42
350 W	5.1 V	5.0 A	40.0 A	2%	+12 V	0 A	9.0 A	4%	-15 V	0 A	4 A	4%	F15 V	0 A	4 A	4%	IFC350-44
350 W	5.1 V	5.0 A	40.0 A	2%	+12 V	0 A	9.0 A	4%	-12 V	0 A	4 A	4%	F24 V	0 A	4 A	4%	IFC350-45

Notes

1. Add suffix "B" for U-bracket or "C" for enclosed i.e. IFC350-45C.
2. On Output #2 peak current is 12A on +12V, 9.6A on +15 V and 6A on +24V.
3. Output #4 is floating. It can be connected externally for positive or negative output.
4. 350 watts for "C" version with a cover-and-fan assembly. 150 watts for "B" version without moving air (maximum current of output #1 & #2 derated to 70%), or 200 watts with 38 CFM forced air provided by user.

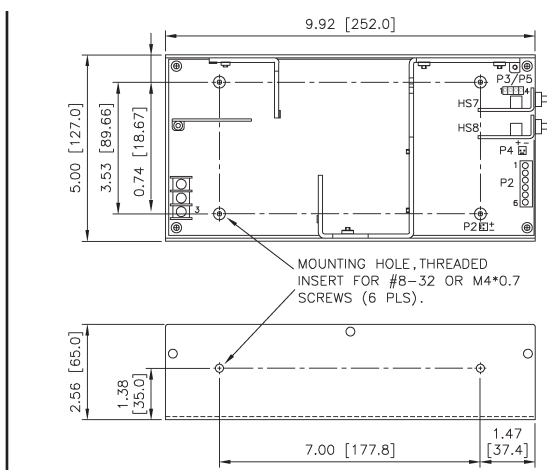
Pin Charts

Single and Multiple Outputs

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

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		

Mechanical Details



NOTES:

1. Dimensions in inches (mm).
2. Tolerance 0.02 (0.5) max.
3. Input connector P1 is Beau Inc. part no. 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 40455 series crimp terminals.
6. Single output models: P2 (2 pin) is for DC fan rated 24 V/0.12 A (models IFC350-14B & 16B) or 12 V/0.22 A for other models. P2 (6 pin) and P4 are not present on PCB.
7. Multiple output models: P2 (6 pin) is Dinkle part no. 166-06P. P4 is for DC fan rated 24 V/0.12 A (model IFC350-25B) or 12 V/0.22 A for other models. P2 (2 pins) is not present on PCB.
8. Weight: 1.4 Kgs approx. for B version, 1.75 Kgs approx. for C version.