IBU63 SERIES

63W Open frame switching power supplies for Industrial Equipment

Description:

The IBU63 series of compact, open frame constructed, AC/DC or DC/DC switching mode power supplies provide 63 Watts of continuous output power. They are suited for use in industrial instrument and many other applications, all models are designed to meet the safety requirements of UL/c-UL(UL 60950-1),TUV-Bauart(EN60950-1) and new CE requirements. All units are 100% burned in and tested.

Features:

- Wide Input Voltage 81 to 275 VAC, 47 to 400 Hz or 90 to 300VDC
- Internal EMI filter
- Single to Quad Output
- Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-50-3081 and Molex 2478 series crimp terminal
- Input Surge Current and Over Load protection
- Over Voltage Protection (Crowbar Design)
- Size: 3"x5"x1.1"
- Class I
- Operating temperature -20~70℃
- Power Fail Detect (Optional)
- 3 year warranty

Safety Approvals :

c UL us TÜV Rheinland Product Safety BAUART GEPRÜFT TYPE APPROVED CE CB

Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vin	Input Voltage	Universal Input Voltage	90		250	VAC
			106		250	VDC
		Operating Voltage	81		275	VAC
			90		300	VDC
fin	Input Frequency		47		400	Hz
Po	Output Power Range	Vin= Operating Voltage	0		63	W
Vo	Output Voltage Range		See rating chart			V
Io	Output Current Range		See rating chart			A
Iil	Input Current (Low Line)	Io=Full load, Vin=115VAC or 160VDC			1.6	A
Iih	Input Current (High Line)	Io=Full load, Vin=230VAC or 325VDC			0.8	A
Irl	Low Line Inrush Current	Io=Full load, 25°c, Cool start, Vin=115VAC or 160VDC		12	15	A
Irh	High Line Inrush Current	Io=Full load, 25°c, Cool start, Vin=230VAC or 325VDC		26	30	A
Eff	Efficiency	Io=Full Load, Vin=230VAC or 325VDC	70	80	88	%
REG-i	Line Regulation	Io=Full Load		0.5	1	%
REG-o	Load Regulation	Vin=230VAC or 325VDC		3	7	%
OVP	Over Voltage Protection		112		132	%
OCP	Over Current Protection		110		150	%
Ttr	Time of Transient Response	Io=Full Load to Half Load, Vin=100VAC or 140VDC			5	mS
Thold	Hold-Up Time	Io=Full Load, Vin=110VAC or 160VDC	16			mS
Ts	Start Up Time	Io=Full Load, Vin=100VAC or 140VDC	0.3	1	2	S
* Vrn	Ripple & Noise (Peak to Peak)	Full Load, Vin=85VAC or 100VDC		0.5	1	%
Ilk	Safety Ground Leakage Current	Io=Full Load, Vin=240VAC		0.4	0.45	mA
TC	Temperature Coefficient	All output	-0.05		0.05	%/°c

* **Note:** The Ripple & Noise which is under 3.3VDC at 2% max

Environmental :

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		-20		70	°C
Tstg	Storage Temperature		-40		85	°C
Hr	Relative Humidity		5		95	%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F		0.1M			Hrs
Pd	Derate linearly from 100% load at 50°C to 50% load at 70°C					

Safety Specifications:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Vps	Dielectric Withstanding Voltage for Primary to secondary	Primary to secondary	4242			VDC
Vpg	Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2121			VDC
Ris	Isolation Resistance	Test Voltage=500VDC	50			MΩ
CISPR	EMI requirements for CISPR-22	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-15	Vin=110VAC	B			CLASS

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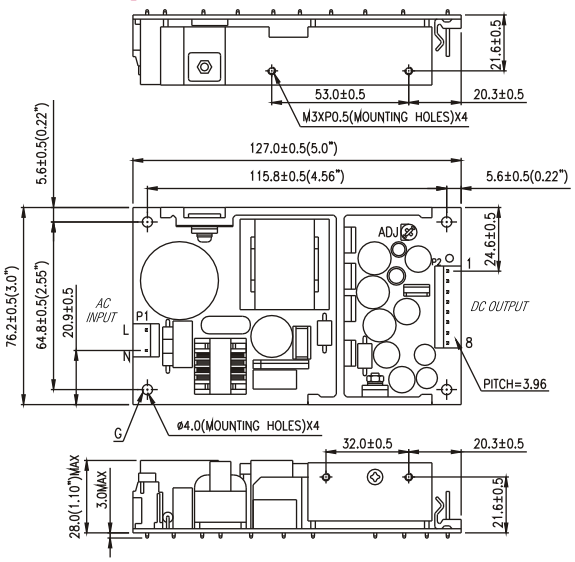
Output Voltage And Current Rating Chart (Single Output) :

Model Number	Output Voltage	Output Current	Total Regulation	Maximum Output Power
IBU63-101	3 - 5 VDC	16.66 - 10.0 A	5%	50W
IBU63-102	5 - 6 VDC	11.0 - 9.16 A	5%	55W
IBU63-103	6 - 8 VDC	10.0 - 7.50 A	4%	60W
IBU63-104	8 - 11 VDC	7.87 - 5.72 A	3%	63W
IBU63-105	11 - 13 VDC	5.72 - 4.84 A	3%	63W
IBU63-105-1	11 - 13 VDC	4.09 - 3.46 A	3%	45W
IBU63-106	13 - 16 VDC	4.84 - 3.93 A	3%	63W
IBU63-107	16 - 21 VDC	3.93 - 3.00 A	3%	63W
IBU63-108	21 - 27 VDC	3.00 - 2.33 A	2%	63W
IBU63-109	27 - 33 VDC	2.33 - 1.90 A	2%	63W
IBU63-110	33 - 40 VDC	1.90 - 1.57 A	2%	63W
IBU63-111	40 - 48 VDC	1.57 - 1.31 A	2%	63W

Output Voltage And Current Rating Chart (Multi Output) :

Model Number	Output #1				Output #2				Output #3				Output #4				Maximum Output Power
	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	Vonom	Iomin	Iomax	Regmax	
IBU63-200	+3.3V	1.4A	7A	7%	+12V	0.6A	3A	5%									59.1W
IBU63-201	+5V	0.7A	7A	5%	+12V	0.3A	3A	5%									63W
IBU63-202	+5V	0.7A	7A	5%	+15V	0.3A	3A	5%									63W
IBU63-203	+5V	0.7A	7A	5%	+24V	0.4A	2A	5%									63W
IBU63-204	+3.3V	1.4A	7A	7%	+5V	0.5A	5A	5%									48.1W
IBU63-215	+5V	0.7A	7A	5%					-24V	0.2A	2A	5%					63W
IBU63-300	+3.3V	1.2A	6A	7%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%					63W
IBU63-300-1	+3.3V	1.2A	6A	7%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%					63W
IBU63-301	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	-5V	0A	0.8A	5%					63W
IBU63-301-1	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	+5V	0A	0.8A	5%					63W
IBU63-302	+5V	0.6A	6A	5%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%					63W
IBU63-302-1	+5V	0.6A	6A	5%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%					63W
IBU63-303	+5V	0.6A	6A	5%	+15V	0.3A	3A	5%	-15V	0A	0.8A	5%					63W
IBU63-303-1	+5V	0.6A	6A	5%	+15V	0.3A	3A	5%	+15V	0A	0.8A	5%					63W
IBU63-305	+5V	1.2A	6A	5%	+24V	0.4A	2A	5%	-12V	0A	0.8A	5%					63W
IBU63-305-1	+5V	1.2A	6A	5%	+24V	0.4A	2A	5%	+12V	0A	0.8A	5%					63W
IBU63-306	+3.3V	1.2A	6A	7%	+12V	0.6A	3A	5%	-5V	0A	0.8A	5%					59.8W
IBU63-306-1	+3.3V	1.2A	6A	6%	+12V	0.6A	3A	5%	+5V	0A	0.8A	5%					59.8W
IBU63-308	+3.3V	0.5A	5A	7%	+5V	0.5A	5A	5%	-12V	0A	1A	5%					53.5W
IBU63-308-1	+3.3V	0.5A	5A	7%	+5V	0.5A	5A	5%	+12V	0A	1A	5%					53.5W
IBU63-400	+3.3V	1.2A	6A	7%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
IBU63-400-1	+3.3V	1.2A	6A	7%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W
IBU63-400-2	+3.3V	1.2A	6A	7%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
IBU63-400-3	+3.3V	1.2A	6A	7%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W
IBU63-401	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	-12V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
IBU63-401-1	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	-12V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W
IBU63-401-2	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	+12V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
IBU63-401-3	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	+12V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W
IBU63-402	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	-12V	0A	0.8A	5%	63W
IBU63-402-1	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	+12V	0A	0.8A	5%	63W
IBU63-402-2	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	-12V	0A	0.8A	5%	63W
IBU63-402-3	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	+12V	0A	0.8A	5%	63W
IBU63-403	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	-24V	0A	0.8A	5%	63W
IBU63-403-1	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	+24V	0A	0.8A	5%	63W
IBU63-403-2	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	-24V	0A	0.8A	5%	63W
IBU63-403-3	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	+24V	0A	0.8A	5%	63W
IBU63-404	+5V	0.6A	6A	5%	+15V	0.3A	3A	5%	-15V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
IBU63-404-1	+5V	0.6A	6A	5%	+15V	0.3A	3A	5%	-15V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W
IBU63-404-2	+5V	0.6A	6A	5%	+15V	0.3A	3A	5%	+15V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
IBU63-404-3	+5V	0.6A	6A	5%	+15V	0.3A	3A	5%	+15V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W

Mechanical Specifications :



PIN CHART

MODEL \ PIN	1	2	3	4	5	6	7	8 (Optional)
IBU63-1XX	OUT	OUT	OUT	RTN	RTN	RTN	RTN	PFD
IBU63-2XX	Vo2	Vo1	Vo1	COM	COM	N/C	N/C	PFD
IBU63-215	N/C	Vo1	Vo1	COM	COM	Vo3	N/C	PFD
IBU63-3XX	Vo2	Vo1	Vo1	COM	COM	Vo3	N/C	PFD
IBU63-4XX	Vo2	Vo1	Vo1	COM	COM	Vo3	Vo4	PFD

Note: Vo1:Output#1 Vo2:Output#2 Vo3:Output#3 Vo4:Output#4

Note:
1. Dimensions are shown in inches or mm.
2. Weight: 300gs approx.
3. Input connector mates Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3081 and Molex 2478 series crimp terminal.