

63W U-bracket Switching Power Supplies For Medical Equipment.



Safety Approvals :



Description:

The MUU60 series of compact, open frame constructed, AC/DC switching mode power supplies provide 63 Watts of continuous output power . They are suited for use in hospital instrument and many other applications. All models meet FCC Part-18 class B and CISPR-11 EN55011 class B emission Limits and are designed to comply with UL/c-UL(UL 60601-1:2nd Edition), TUV/T-mark(EN 60601-1:2nd Edition) and new CE requirements. All units are 100% burned-in and tested.

Features:

- Wide Operating Voltage 90 to 260 VAC,47 to 63 Hz
- Internal EMI filter
- Single to Quad Output
- Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-50-3081 and Molex 2478 series crimp terminal
- Power Fail Detect (Optional)
- Class I
- 3 year warranty

Electrical Characteristics:

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit	
Vin	Safety Approvals Input Voltage Range		100		240	VAC	
	Operate Voltage Range		90		264	VAC	
fin	Input Frequency		47		63	Hz	
PF	Output Power Range	Vin=90 to 264 VAC	0		63	W	
Po	Output Voltage Range		See rating Chart			V	
Vo	Output Current Range		See rating Chart			A	
Io	Input Current (Low Line)	Io=Full load, Vin=115VAC			1.6	A	
Iil	Input Current (High Line)	Io=Full load, Vin=230VAC			0.8	A	
Iih	Low Line Inrush Current	Io=Full load, 25 °C,Cool start,Vin=115VAC		15	18	A	
Irl	High Line Inrush Current	Io=Full load, 25 °C,Cool start,Vin=230VAC		21	25	A	
Irh	Efficiency	Io=Full load, Vin=230VAC	70	80	85	%	
Eff	Line Regulation	Io=Full load		0.5	1	%	
REG-i	Load Regulation	Vin=230VAC		3	7	%	
REG-o	Over Voltage Protection		112		132	%	
OVP	Over Current Protection		110		150	%	
OCP	Time of Transient Response	Io=Full load to Half Load, Vin=100VAC			4	mS	
Ttr	Hold-Up Time	Io=Full load, Vin=110VAC	16			mS	
Thold	Start Up Time	Io=Full load, Vin=100VAC	0.3	1	2	S	
Ts	Ripple & Noise (Peak to Peak)	Full load, Vin=90VAC		0.5	1	%	
* Vp-p	Safety Ground Leakage Current	Io=Full load, Vin=240VAC		0.1	0.3	mA	
Ilk	Temperature Coefficient	All output	-0.04		0.04	%/ °C	
TC	Temperature Coefficient	All output	-0.04		0.04	%/°c	

* Note: The Ripple & Noise which is under 3.3VDC at 2% max
The range of OCP is set between 110 - 150% of total output power

Environmental

Sym.	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Toper	Operating Temperature		0	50	70	°C
Tstg	Storage Temperature		-40		85	°C
Ho	Operating Humidity		0		95	%
Hr	Storage Humidity		0		75	%
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	5656			VDC
Vpg	Dielectric Withstanding Voltage for Primary to Ground	Primary to ground	2828			VDC
Ris	Isolation Resistance	Test Voltage=500VDC	50			M Ω
CISPR	EMI requirements for CISPR-11	Vin=220VAC	B			CLASS
FCC	EMI requirements for FCC PART-18	Vin=110VAC	B			CLASS

Output Voltage And Current Rating Chart (Single Output) :

	Output Voltage	Output Current	Total Regulation (1)	Maximum Output Power
MUU60-101	3 ~ 5 VDC	16.66 ~ 10.0 A	7%	50W
MUU60-102	5 ~ 6 VDC	11.0 ~ 9.16 A	7%	55W
MUU60-103	6 ~ 8 VDC	10.0 ~ 7.50 A	5%	60W
MUU60-104	8 ~ 11 VDC	7.87 ~ 5.72 A	5%	63W
MUU60-105	11 ~ 13 VDC	5.72 ~ 4.84 A	5%	63W
MU60-105-1	11 ~ 13 VDC	4.09 ~ 3.46 A	5%	45W
MUU60-106	13 ~ 16 VDC	4.84 ~ 3.93 A	5%	63W
MUU60-107	16 ~ 21 VDC	3.93 ~ 3.00 A	5%	63W
MUU60-108	21 ~ 27 VDC	3.00 ~ 2.33 A	5%	63W
MUU60-109	27 ~ 33 VDC	2.33 ~ 1.90 A	5%	63W
MUU60-110	33 ~ 40 VDC	1.90 ~ 1.57 A	2%	63W

Output Voltage And Current Rating Chart (Multi Output) :

Model Number	Output #1				Output #2				Output #3								Maximum Output Power
	Vonom	Iomin	Iomax	Reg-max	Vonom	Iomin	Iomax	Reg-max	Vonom	Iomin	Iomax	Reg-max	Vonom	Iomin	Iomax	Reg-max	
MPU100-200	+3.3V	1.4A	7A	6%	+12V	0.6A	3A	5%									59.1W
MPU100-201	+5V	0.7A	7A	5%	+12V	0.3A	3A	5%									63W
MPU100-202	+5V	0.7A	7A	5%	+15V	0.3A	3A	5%									63W
MPU100-203	+5V	0.7A	7A	5%	+24V	0.4A	2A	5%									63W
MPU100-204	+3.3V	1.4A	7A	6%	+5V	0.5A	5A	5%									48.1W
MPU100-215	+5V	0.7A	7A	5%					-24V	0.2A	2A	5%					63W
MPU100-300	+3.3V	1.2A	6A	6%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%					63W
MPU100-300-1	+3.3V	1.2A	6A	6%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%					63W
MPU100-301	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	-5V	0A	0.8A	5%					63W
MPU100-301-1	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	+5V	0A	0.8A	5%					63W
MPU100-302	+5V	0.6A	6A	5%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%					63W
MPU100-302-1	+5V	0.6A	6A	5%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%					63W
MPU100-303	+5V	0.6A	6A	5%	+15V	0.3A	3A	5%	-15V	0A	0.8A	5%					63W
MPU100-303-1	+5V	0.6A	6A	5%	+15V	0.3A	3A	5%	+15V	0A	0.8A	5%					63W
MPU100-305	+5V	1.2A	6A	5%	+24V	0.4A	2A	5%	-12V	0A	0.8A	5%					63W
MPU100-305-1	+5V	1.2A	6A	5%	+24V	0.4A	2A	5%	+12	0A	0.8A	5%					63W
MPU100-306	+3.3V	1.2A	6A	6%	+12V	0.6A	3A	5%	-5V	0A	0.8A	5%					59.8W
MPU100-306-1	+3.3V	1.2A	6A	6%	+12V	0.6A	3A	5%	+5V	0A	0.8A	5%					59.8W
MPU100-308	+3.3V	0.5A	5A	6%	+5V	0.5A	5A	5%	-12V	0A	1A	5%					53.5W
MPU100-308-1	+3.3V	0.5A	5A	6%	+5V	0.5A	5A	5%	+12V	0A	1A	5%					53.5W
MPU100-400	+3.3V	1.2A	6A	6%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
MPU100-400-1	+3.3V	1.2A	6A	6%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W
MPU100-400-2	+3.3V	1.2A	6A	6%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
MPU100-400-3	+3.3V	1.2A	6A	6%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W
MPU100-401	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	-12V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
MPU100-401-1	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	-12V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W
MPU100-401-2	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	+12V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
MPU100-401-3	+5V	0.6A	6A	5%	+12V	0.3A	3A	5%	+12V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W
MPU100-402	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	-12V	0A	0.8A	5%	63W
MPU100-402-1	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	+12V	0A	0.8A	5%	63W
MPU100-402-2	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	-12V	0A	0.8A	5%	63W
MPU100-402-3	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	+12V	0A	0.8A	5%	63W
MPU100-403	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	-24V	0A	0.8A	5%	63W
MPU100-403-1	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	-12V	0A	0.8A	5%	+24V	0A	0.8A	5%	63W
MPU100-403-2	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	-24V	0A	0.8A	5%	63W
MPU100-403-3	+5V	1.2A	6A	5%	+12V	0.6A	3A	5%	+12V	0A	0.8A	5%	+24V	0A	0.8A	5%	63W
MPU100-404	+5V	0.6A	6A	5%	15V	0.3A	3A	5%	-15V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
MPU100-404-1	+5V	0.6A	6A	5%	15V	0.3A	3A	5%	-15V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W
MPU100-404-2	+5V	0.6A	6A	5%	15V	0.3A	3A	5%	+15V	0A	0.8A	5%	-5V	0A	0.8A	5%	63W
MPU100-404-3	+5V	0.6A	6A	5%	15V	0.3A	3A	5%	+15V	0A	0.8A	5%	+5V	0A	0.8A	5%	63W

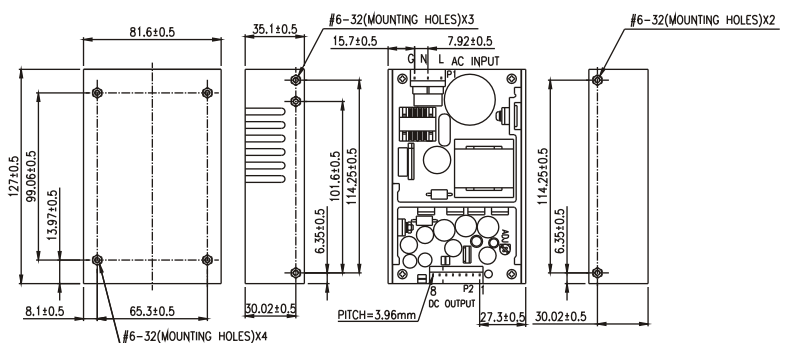
Mechanical Specifications:

Note:

1. Dimensions are shown in mm.
2. Weight: 425gs approx.
3. Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3081 and Molex 2478 series crimp terminal.

Pin	1	2	3	4	5	6	7	8
Model								
MUU60-1XX	Out	Out	Out	RTN	RTN	RTN	RTN	PF
MUU60-2XX	Vo2	Vo1	Vo1	COM	COM	N/C	N/C	PF
MUU60-215	N.C	Vo1	Vo1	COM	COM	Vo3	N/C	PF
MUU60-3XX	Vo2	Vo1	Vo1	COM	COM	Vo3	N/C	PF
MUU60-4XX	Vo2	Vo1	Vo1	COM	COM	Vo3	Vo4	PF

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



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