www.us.tdk-lambda.com/lp/products/cus-m-series
www.emea.tdk-lambda.com/cus30_60

Single Output 30 to 60W Medical & ITE Power Supplies

Medical Industrial Test COMM Broadcast

The CUS30M and CUS60M are 2" x 3" footprint AC/DC power supplies with outputs ranging from 5V to 48V. They are certified to IEC60601-1 3rd edition (medical), IEC60950-1 and IEC60335-1 with compliance to EN60601-1-2:2015 Edition 4 immunity requirements. Rated at 30W and 60W, these compact products meet class B conducted and radiated EMI in either a Class I or Class II (double insulated) construction, without the need for external filtering.

Features	Benefits
• 30 to 60W Convection Cooled	• Quite Operation
• Medical Certification (2 x MoPP)	• Suitable for B and BF Rated Equipment
• Class B Conducted and Radiated EMI	• Easier System Compliance
• Suitable for Class I and II Installations	• Flexible Utilisation
• Compact 2" x 3" Footprint	• Space Saving in End Equipment
• Enclosure, Mounting and Connection Options	• Versatile Application

Model Selector

Model	Output Voltage (V)	Maximum Current (A)	Maximum Power (A)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV) (1)	Efficiency (typ) % (2)	Average Active Efficiency (typ) % (2)
CUS60M-5	5	6	30	100	20	120	81 / 81	81 / 79.5
CUS30M-12	12	2.5	30	120	48	120	87 / 88	87 / 87
CUS60M-12	12	5	60	120	48	120	87 / 88	87 / 86
CUS30M-15	15	2	30	120	60	150	87 / 88	87 / 87
CUS60M-15	15	4	60	120	60	150	87.5 / 87	87 / 86.5
CUS30M-18	18	1.7	30.6	144	72	150	87 / 88	87 / 87
CUS60M-18	18	3.25	60.3	144	72	150	88 / 88	87 / 87
CUS30M-24	24	1.25	30	192	96	150	88 / 90	87 / 87
CUS60M-24	24	2.5	60	192	96	150	89 / 90	88 / 87
CUS30M-36	36	0.84	30.24	288	144	200	88 / 90	88 / 89
CUS30M-48	48	0.63	30.24	384	192	200	88 / 90	88 / 89
CUS60M-48	48	1.25	60	384	192	200	89 / 91	90 / 89

Options

Suffix	Description
Blank	Open frame, JST connectors
/A	Cover, JST connectors. See website for derating
/CO2	Open frame, JST connectors, pcb coating
/M	Open frame, Molex 5195-03 & -04 mating connectors
/P	Open frame, JST connectors, Pcb mount
/S	Open frame, JST connectors, single fuse, (Line only)

Specifications

Model		CUS30M	CUS60M
Input			
Input Voltage range	V	85 - 264VAC (3)	
Input Frequency	Hz	47- 63Hz	
Input Current (110/230VAC)	A	0.6 / 0.4	5V: 0.7 / 0.5, 12-48V: 1.2 / 0.8
Inrush Current at 230VAC (typ) (Cold Start)	A	30A at 115VAC, 60A at 230VAC	
Leakage Current	uA	<0.25mA at 265VAC, 60Hz	<0.2mA at 265VAC, 60Hz
Touch Current	uA	100µA at 265VAC, 60Hz	60µA at 265VAC, 60Hz
Harmonic Compliance	-	Meets EN61000-3-2	
No Load Power Consumption	W	<0.3W at 265VAC	<0.5W at 265VAC
Hold Up Time (typ) at 115VAC Input	ms	20 / 100	
Efficiency	-	See model selector	
Average Efficiency	-	See model selector. Measured at 25%, 50%, 75% and 100% load conditions	
Conducted & Radiated EMI	-	EN55011-B, EN55032-B, FCC Class B	
Immunity	-	IEC61000-4-2, IEC60601-1-2 Ed4. See immunity table	
Insulation Class	-	Construction suitable for Class I or Class II installation	
Safety Agency Certifications	-	EN/IEC/UL/ES/CSA60601-1, EN/IEC/UL/CSA60950-1, IEC60335-1, CE Mark	

Immunity

Test	Standard	Test Level	Criteria	Notes
ESD	EN61000-4-2	3 & 4	A	Level 4 contact discharge only
Radiated Susceptibility	EN61000-4-3	3	A	-
Electrical Fast Transient Burst	EN61000-4-4	3	A	-
Surge	EN61000-4-5	3 & 4	A	Level 4 common mode only
Conducted Susceptibility	EN61000-4-6	3	A	-
Magnetic fields	EN61000-4-8	4	A	-
Voltage Dips	EN61000-4-11	Class 3	B	100 - 120VAC
			A	200 - 240VAC
Short Interruptions	EN61000-4-11	Class 3	B	-
Voltage Dips	EN60601-1-2:2015	Class 2	B	100 - 120VAC
			A	200 - 240VAC
Short Interruptions	EN60601-1-2:2015	Class 2	B	-
SEMI F47 Line Dip	SEMI F47	-	-	At input voltages > 200VAC