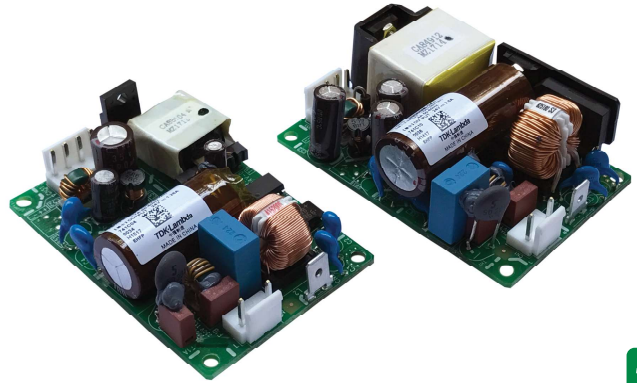


# TDK-Lambda CUS30M & CUS60M Series

## Single Output 30 to 60W Medical & ITE Power Supplies

### Features

- ◆ High Efficiency, up to 90%
- ◆ Industry Standard 2" x 3" Footprint
- ◆ Convection Cooled
- ◆ Class I and II Operation
- ◆ Suitable for B and BF rated equipment



### Key Market Segments & Applications



### Specifications

Model		CUS30M	CUS60M
AC Input Voltage	VAC	85 - 265VAC(1)	
Input Frequency	Hz	47 - 63Hz	
Inrush Current (cold start)	A	30A at 115VAC, 60A at 230VAC	
Power Factor	-	Meets EN61000-3-2	
Input Current (115/230VAC)	A	0.6 / 0.4	5V: 0.7 / 0.5, 12-48V: 1.2 / 0.8
Off-load Power Draw	W	<0.3W at 265VAC	<0.5W at 265VAC
Temperature Coefficient	%/°C	<0.02%/°C	
Output Voltage Adjustment	-	Fixed as standard. Use /ADJ suffix for potentiometer ±10% adjustment	
Overcurrent Protection	-	>105% of rated current. Designed to meet Class 2 Limited Power Source (2)	
Overvoltage Protection (3)	V	> 115% of nominal output	> 120% of nominal output
Hold Up Time (Typical) (115/230VAC)	ms	20 / 100	
Leakage Current	mA	<0.25mA at 265VAC, 60Hz	<0.2mA at 265VAC, 60Hz
Touch Current (Maximum)	µA	100µA at 265VAC, 60Hz	60µA at 265VAC, 60Hz
Remote Sense	-	No	
Operating Temperature	°C	-20 to +70°C. (-30°C start up) Derate linearly to 50% load from +50 to +70°C (4)	
Storage Temperature	°C	-40 to +85°C	
Humidity (non condensing)	%RH	10 - 95%RH (Operating & Storage)	
Cooling	-	Convection Cooled	
Withstand Voltage		Input to Ground 2kVAC (1xMOPP), Input to Output 4kVAC (2xMOPPs), Output to Ground 1.5kVAC (1xMOPP) suitable for B & BF rated equipment	
Isolation Resistance	MΩ	>100MΩ at 25°C & 70%RH, Output to Ground 500VDC	
Vibration (non operating)	-	10 - 55Hz: 19.6m/s <sup>2</sup> constant sweep 1 min X, Y, Z for 1 hour	
Shock	-	< 196.1 m/s <sup>2</sup> , MIL-STD-810F	
Immunity	-	IEC61000-4-2 (lv 4), -3 (lv3), -4 (lv 3), -5 (lv3, 4), -6 (lv 3), -8 (lv 4), -11, Criteria A. IEC60601-1-2 Ed4 SEMIF47 (200-240VAC), IEC61000-4-11 (Class 3)	
Line Voltage Dips	-	Criteria A: Vin >120VAC or <70% load, Criteria B: Vin <120VAC and >70% load	
Safety Agency Certifications	-	EN/IEC/UL/ES/CSA60601-1, EN/IEC/UL/CSA60950-1, IEC60335-1, CE Mark	
Altitude	m	5,000m, derate operating ambient by 5°C/1000m above 3,000m	
Conducted & Radiated EMI	-	EN55011-B, EN55032-B, FCC Class B	
Weight (Typ)	g	62	120
Size (LxWxH)	mm(in)	76.2 x 50.8 x 24.2mm (3 x 2 x 0.95")	76.2 x 50.8 x 26.7mm (3 x 2 x 1.05")
Warranty	yrs	Three Years	

#### Notes:

- (1) CUS30M: Derate linearly to 80% load from 115VAC to 85VAC. CUS60M: Derate linearly to 80% load from 100VAC to 85VAC
- (2) All models except CUS60M-5
- (3) Cycle AC to reset
- (4) CUS30-18 and -48: Derate linearly to 50% load from +45 to +70°C

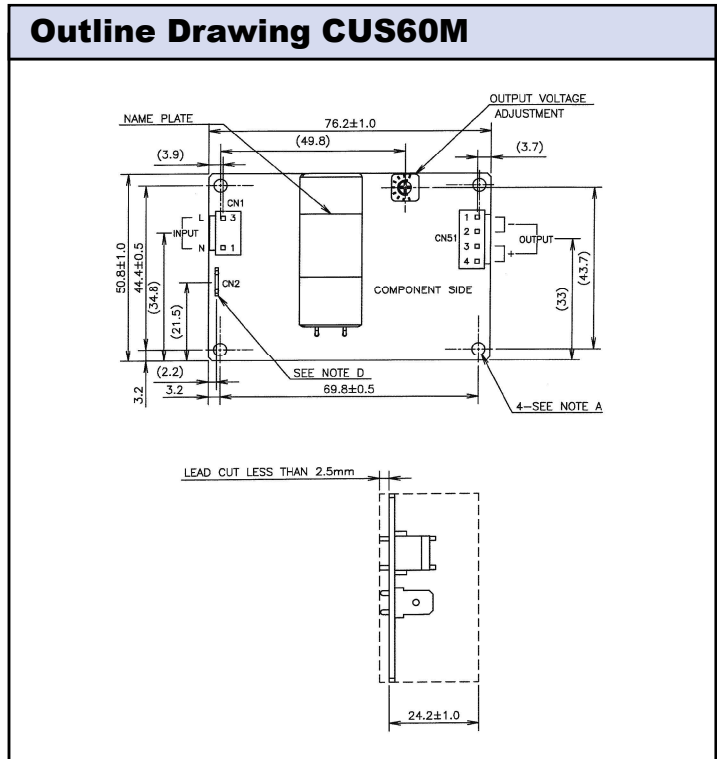
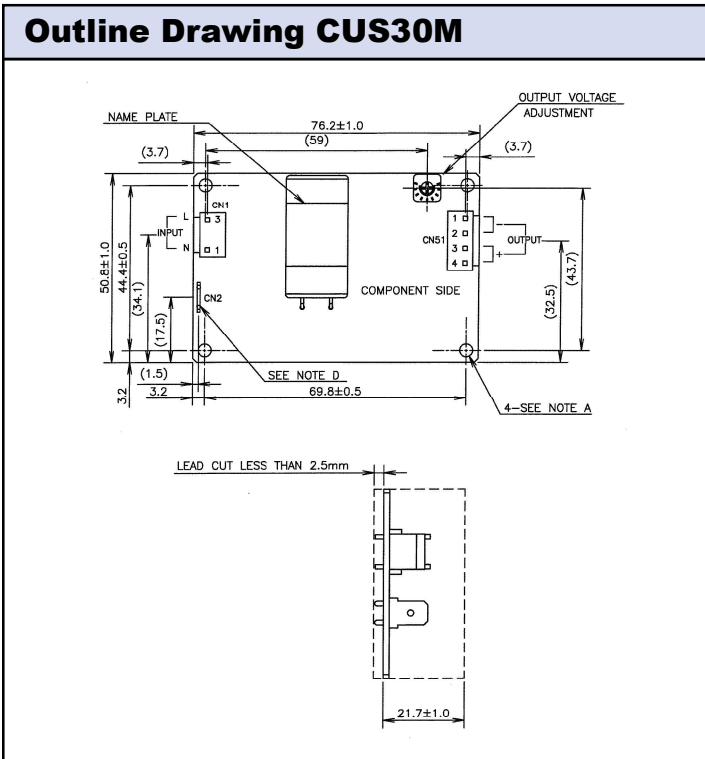
# TDK-Lambda CUS30M & CUS60M Series

Model Selector								
Model	Voltage	Max Current (A)	Max Power (W)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV) <sup>(5)</sup>	Efficiency (typ) % <sup>(6)</sup>	Average Active Efficiency (typ) % <sup>(6)</sup>
CUS60M-5	5V	6.0	30.0	100	20	120	81 / 81	81 / 80
CUS30M-12	12V	2.5	30.0	120	48	120	87 / 88	87 / 87
CUS60M-12	12V	5.0	60.0	120	48	120	87 / 88	87 / 86
CUS30M-15	15V	2.0	30	120	60	150	87 / 88	87 / 87
CUS60M-15	15V	4.0	60	120	60	150	88 / 89	87 / 87
CUS30M-18	18V	1.7	30.6	144	72	150	87 / 88	87 / 87
CUS60M-18	18V	3.25	60.3	144	72	150	88 / 89	87 / 87
CUS30M-24	24V	1.25	30.0	192	96	150	88 / 90	87 / 87
CUS60M-24	24V	2.5	60.0	192	96	150	89 / 90	88 / 87
CUS30M-36	36V	0.84	30.24	288	144	200	88 / 90	87 / 87
CUS60M-36	36V	1.68	60.48	288	144	200	89 / 90	87 / 87
CUS30M-48	48V	0.63	30.24	384	192	200	88 / 90	87 / 87
CUS60M-48	48V	1.25	60.0	384	192	200	89 / 90	89 / 88

Notes:

(5) Ripple level increases at light loading to meet new efficiency standards

(6) 115/230VAC



Options	
Suffix	Description
Blank	Open frame construction
/ADJ	Potentiometer with ±10% adjustment

For Additional Information, please visit [us.tdk-lambda.com/lp/products/cus-m-series](http://us.tdk-lambda.com/lp/products/cus-m-series)

