

20 - 65 Watts

- Energy Efficiency Level VI
- Medical and ITAV Approvals
- C6, C8, C14 Input type option
- Output Voltage from 12 V to 58 V
- EN 60601-1-2 4th edition
- LPS Limited Power Source
- DC LED Signal options



Dimension

eZVC :

- 4.25 x 1.81 x 1.16

eZVC series of desktop adaptors comply with the latest energy efficiency level VI standards with high active mode efficiency and extremely low no-load power consumption. Available with a standard jack plug connector is with customized DC connection options. These adaptors suit a wide variety of cost-sensitive industrial and medical applications while maintaining industry-leading performance.

20 Watt

Model Number	Voltage	Max. Load	Min. Load	Ripple ¹
eZVC20FS12E	12V	1.66A	0.0A	< 2%
eZVC20FS15E	15V	1.33A	0.0A	< 2%
eZVC20FS19E	19V	1.05A	0.0A	< 2%
eZVC20FS24E	24V	0.83A	0.0A	< 2%
eZVC20FS48E	48V	0.41A	0.0A	< 2%
eZVC20FS58E	58V	0.34A	0.0A	< 2%

30 Watt

Model Number	Voltage	Max. Load	Min. Load	Ripple ¹
eZVC30FS12E	12V	2.5A	0.0A	< 2%
eZVC30FS15E	15V	2A	0.0A	< 2%
eZVC30FS19E	19V	1.58A	0.0A	< 2%
eZVC30FS24E	24V	1.25A	0.0A	< 2%
eZVC30FS48E	48V	0.63A	0.0A	< 2%
eZVC30FS58E	58V	0.52A	0.0A	< 2%

36 Watt

Model Number	Voltage	Max. Load	Min. Load	Ripple ¹
eZVC36FS12E	12V	3A	0.0A	< 2%
eZVC36FS15E	15V	2.4A	0.0A	< 2%
eZVC36FS19E	19V	1.89A	0.0A	< 2%
eZVC36FS24E	24V	1.5A	0.0A	< 2%
eZVC36FS48E	48V	0.75A	0.0A	< 2%
eZVC36FS58E	58V	0.62A	0.0A	< 2%

45 Watt

Model Number	Voltage	Max. Load	Min. Load	Ripple ¹
eZVC45FS12E	12V	3.75A	0.0A	< 2%
eZVC45FS15E	15V	3A	0.0A	< 2%
eZVC45FS19E	19V	2.37A	0.0A	< 2%
eZVC45FS24E	24V	1.88A	0.0A	< 2%
eZVC45FS48E	48V	0.93A	0.0A	< 2%
eZVC45FS58E	58V	0.77A	0.0A	< 2%

55 Watt

Model Number	Voltage	Max. Load	Min. Load	Ripple ¹
eZVC55SG12E	12V	4.58A	0.0A	< 2%
eZVC55SG15E	15V	3.66A	0.0A	< 2%

65 Watt

Model Number	Voltage	Max. Load	Min. Load	Ripple ¹
eZVC65SG19E	19V	3.42A	0.0A	< 2%
eZVC65SG24E	24V	2.7A	0.0A	< 2%
eZVC65SG48E	48V	1.35A	0.0A	< 2%
eZVC65SG58E	58V	1.12A	0.0A	< 2%

Ordering definition

Example : eZVCXXYYZZWWVM

eZVC	XX	YY	ZZ	WW	V (I/P Option)	M
Series Name	Wattage (eg. 20/30/45/55/65)	Sub Code (eg. 2 alpha characters i.e. FS/SG or Blank)	Output Voltage (eg. 12,15,19, 24,48, 58 etc.)	Cord Type (ref. Page 6)	6 - C6 (Class I), 8 - C8 (Class II), 4 - C14 (Class I)	Medical Option

Notes

1. Total regulation includes initial set accuracy, line and load regulation.
2. Typical average value measured at 25%, 50%, 75% and 100% at 230 VAC.
3. M suffix to be added for Medical version.
4. LED indication optional on request to your sales representative.
5. Please enquire with EOS Sales Rep before ordering correct required adaptor model number.

Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage	90		264	VAC	Universal
Input Frequency	47		63	Hz	
Input Current			1.7	A	90 VAC
Inrush Current			75	A	230 VAC, cold start at 25 °C
No Load Input Power			150	mW	
Input Protection	Internal fuse in both line and neutral				

Output

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage	12		58	V	See Models and Ratings table
Minimum Load	0			A	No minimum load required
Start Up Delay			4	s	
Start Up Rise Time		30	55	ms	
Hold Up Time	10			ms	Full load and 115 VAC
Total Regulation			5	%	See Models and Ratings table
Transient Response			5	% deviation	50-75% step load change, at 0.1A/uS slew rate, 50% duty cycle, 100Hz=5%, recovery time < 5 ms
Ripple & Noise			2%	mV pk-pk	Measured with 20 MHz bandwidth and 10 µF electrolytic in parallel with 0.1 µF ceramic capacitor
Overload Protection	110		160	%	
Short Circuit Protection					Continuous, trip and restart (hiccup mode) with auto recovery
Temperature Coefficient			0.05	% / °C	

General

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		88		%	Typical average of efficiencies measured at 25%, 50%, 75% and 100% load and 115 VAC input
Energy Efficiency					Level VI
Isolation: Input to Output	4000			VAC	Input to Output, 2 x MOPP
Input to Ground	1500				Class I version only
Output to Ground	1500				(Not Applicable For Class II option)
Leakage Current			300	µA	264 VAC, 60 Hz
Switching Frequency	24		160	kHz	Variable
Mean Time Between Failure	250			kHrs	MIL-HDBK-217F at 25 °C GB
Weight		0.66 (300)		lb (g)	

Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating Temperature	0		40	°C	-40 to 0°C startup is guaranteed with spec deviation ²
Storage Temperature	-20		+70	°C	
Operating Humidity	20		90	%	RH, non-condensing
Operating Altitude			5000	m	
Shock					1 m drop onto concrete on each of 6 axes, non operating
Vibration	10		300	Hz	2 g, 0.3 decades/min, 15 mins for each of 3 axes

EMC: Immunity

Phenomenon	Standard	Test Level	Criteria	Notes & Conditions
Medical Device EMC	IEC60601-1-2		as below	
ESD Immunity	EN61000-4-2	±8 kV contact, ±15 kV air	A	
Radiated Field Immunity	EN61000-4-3	10 V/m	A	
Electrical Fast Transient/ Burst	EN61000-4-4	Level 3	A	
Surge Immunity	EN61000-4-5	Level 3	A	
Conducted Immunity	EN61000-4-6	6 V	A	
Magnetic Fields Immunity	EN61000-4-8	30 A/m	A	
Dips and Interruptions	EN61000-4-11	Dip: 100% 10 ms	A	
		Dip: 70% 500 ms	B	
		Int: 100% 5000 ms	B	
		Dip: 30% 25 AC Cycles	A	
	EN60601-1-2	Int: 100% 0.5 AC Cycle	A	At 8 angles
		Int: 100% 1 AC Cycle	B	
		Int.: >95% 5000 ms	B	

Standard IEC60601-1-2 : 2014 (4th Edition)

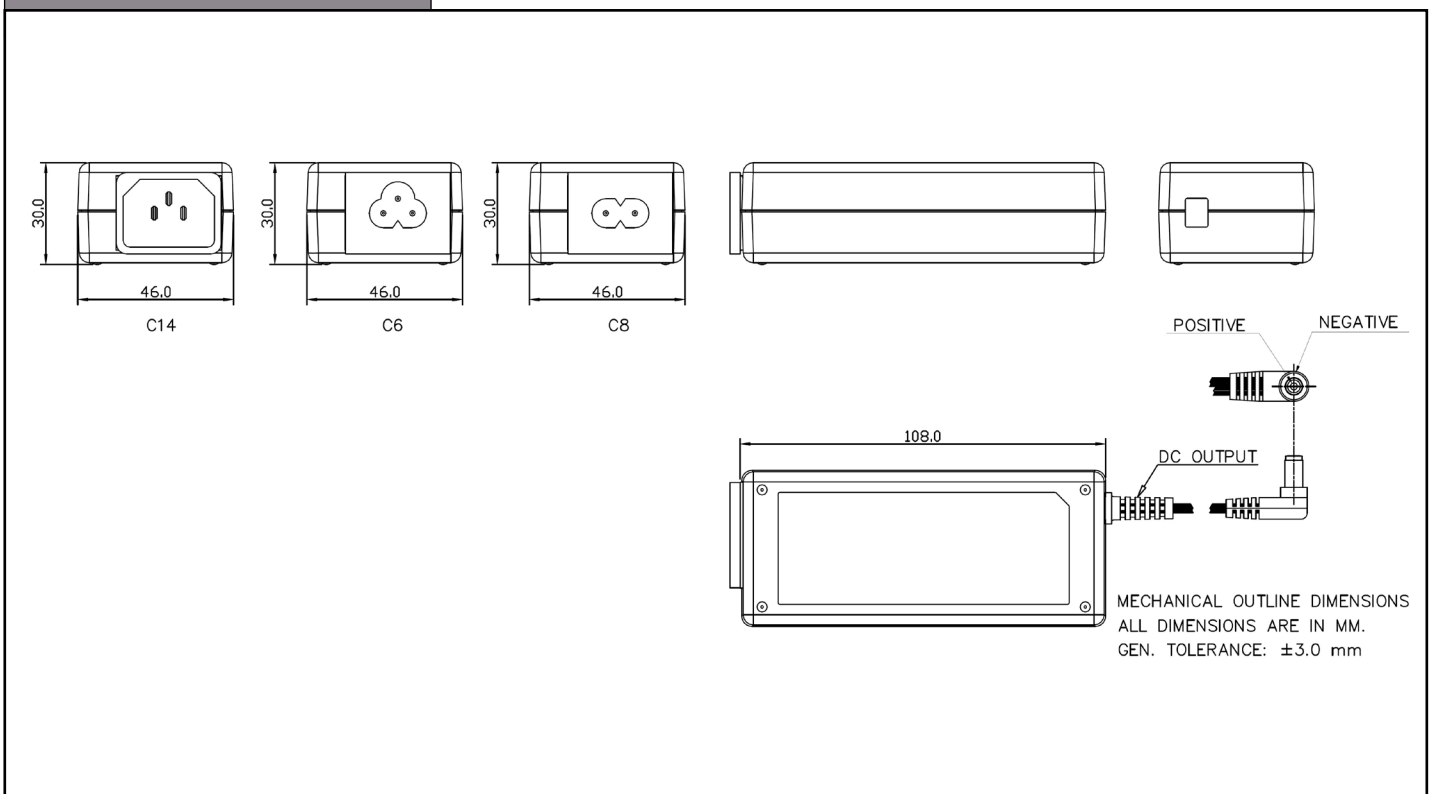
EMC: Emissions

Phenomenon	Standard	Test Level	Notes & Conditions
Conducted Emissions	EN55032	Level B	
Radiated Emissions	EN55032	Level B	
Input Current Harmonics	EN61000-3-2	Class A	
Voltage Fluctuation and Flicker	EN61000-3-3		

Safety Approvals

Safety Agency	Safety Standard	Notes & Conditions
UL	UL 62368-1 & CAN/CSA C22.2 No. 62368-1-14	ITAV
Nemko	EN62368-1:2020, A11	
CB	IEC62368-1:2018	
CE	LVD	
UL	ANSI /AAMI 60601-1 -1 AMD1	Medical, 2 x MOPP
CSA	CSA C22.2 No. 60601-1 -1 AMD1	
Nemko	EN60601-1	
CB	IEC60601-1	

Mechanical Details



Notes

1. Output plug: $\varnothing 5.5 \times \varnothing 2.5 \times 11.0$ mm, centre positive.

STANDARD DC CABLE / CONNECTOR, AC CORD

AC CORD

EOS P/N	Description
CEL-22-LF00000005981	CORD, AC, US PLUG, C7, 2PIN, 2METER
CEL-22-LF00000007286	CORD, AC, US PLUG, C13, 3PIN, 2METER
CEL-22-LF00000007287	CORD, AC, EURO PLUG, C13, 3PIN, 2METER
CEL-22-LF00000007288	CORD, AC, EURO PLUG, C7, 2PIN, 2METER
CEL-22-LF00000007289	CORD, AC, UK PLUG, C7, 2PIN, 2METER
CEL-22-LF00000007290	CORD, AC, UK PLUG, C13, 3PIN, 2METER

Note: For minimum order & ship quantity consult your sales representative.

STANDARD DC CORD (CABLE / CONNECTOR)

EOS P/N :	Suffix	Description	ID (mm)	OD (mm)	LB (mm)	L2 (mm)	Cord Length (Inch)
CEL-22-LF00000003311	A	2.54mm Straight Barrel	2.54	5.54	9.6	N/A	24*
CEL-22-LF00000003411	AR	2.54mm Right Angle with ferrite filter	2.54	5.54	9.6	25.4	40*
CEL-22-LF00000006739	AD	2.54mm Straight Barrel	2.54	5.54	10.16	N/A	52*
CEL-22-LF00000005949	BD	2.54mm Straight Barrel with ferrite filter	2.54	5.54	10.16	25.4	40*
CEL-22-LF00000003405	D	2.1mm Straight Barrel	2.1	5.54	9.6	N/A	40*
CEL-22-LF00000003249	GN	2.1mm Right Angle	2.1	5.54	9.6	N/A	6*
CEL-22-LF00000007565	BE	2.1mm Straight Barrel with ferrite filter	2.1	5.54	10.16	25.4	40*
CEL-22-LF00000007412	Z2	2.54mm Straight Barrel with ferrite filter	2.54	5.54	10.16	40	76*
CEL-22-LF00000007424	E1	2.1mm Right Angle	2.1	5.54	12.3	N/A	40*
CEL-22-LF00000007570	Z3	2.1mm Straight Barrel	2.1	5.54	10.16	N/A	40*
CEL-22-LF00000003406	E	2.5mm Right Angle	2.54	5.54	9.6	N/A	40*

1. To order a DC cable and connector , substitute the appropriate Suffix below.
2. *Example* : The eZVC65SG15D has DC connector ID of 2.1mm with straight barrel and 40 Inch long cord.
To receive ID of 2.54mm connector, order eZVC65SG15E.
3. All cables are 18GA & black color. for customized color request your sales representative

