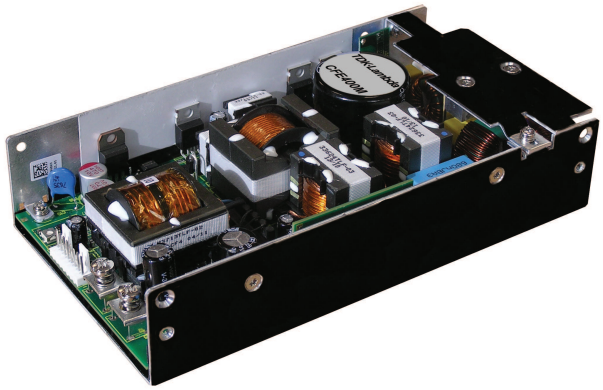
300W Convection / 400W Fan Cooled Medical Power Supplies

Features

- Medical & ITE Safety Certifications (BF Rated)
- 94% Efficient
- 0.5W Standby Power
- Meets ERP/Eco-Design (2009/125/EC)
- Meets Climate Savers Gold Level
- 450W Peak Loading (10s)
- High Power Density (7" x 4" x 1.6")
- Suitable for 1U applications
- Five Year Warranty



Key Market Segments & Applications

RoHS

Specifications

Model		CFE400M
Input Voltage range	VAC	85 - 264VAC
Input Frequency	Hz	47 - 63Hz, 440Hz with reduced PFC
Inrush Current	A	<20A at 25°C and 230VAC input, Cold Start
Power Factor Harmonics	-	EN61000-3-2 Compliant. Class A (Class C >100W output power)
Voltage Setting Accuracy	%	±1% at 50% Load
Regulation	%	Line: 0.25%; Load: 1%; Thermal Coefficient: 0.02%/°C
Ripple & Noise	mV	1% peak-peak
Efficiency (230VAC, 80% load)	%	94% typical (48V & 24V), 91% (12V), 0.5W power draw in standby mode
Overcurrent Protection	-	Automatic recovery upon overload removal
Overvoltage Protection	V	Cycle AC line to reset
Overtemperature Protection	-	Yes
Hold Up Time (Typ)	ms	15ms at full load
Leakage Current (max)	µA	140µA 120VAC 60Hz, 280µA 240VAC 60hz, <300µA 240VAC 63Hz (Type Test results)
Fan Supply	-	12V 0.25A (Not available if the top fan option is selected)
Standby Voltage	-	5V 80mA or 5V 2A (chosen at time of ordering)
Remote Sense	-	None
Signals & Features	-	Remote on/off - Inhibit or Enable operation (chosen at time of ordering) Power Good - High indicates DC output & AC input is good. ORing FET - (Option)
Operating Temperature (1)	°C	Convection cooled: 0 to +60°C. Derate linearly to 50% load from 40°C to 60°C Forced air cooled: 0 to +70°C. Derate linearly to 50% load from 50°C to 70°C
Storage Temperature	°C	-40 to +70°C
Humidity (non condensing)	%RH	5 - 95%RH
Cooling	-	Convection, internal fan or external 1.5m/s forced air , approx. 12 CFM (see oper. temp.)
Isolation	-	Input to Output 4kVAC (Reinforced) (3) (2 x MOPPs (3rd edition 60601)), Input to Ground 1500VAC, Output to Ground 1500VAC
Vibration (non operating)	-	2G, 10-500Hz in all 3 planes. MIL-STD-810E, Method 514.4, Pro I, Cat 1, 9
Shock	-	30G per IEC68-2-27, MIL-STD-810E/F, Method 516.5, Pro I, IV, VI
Safety Agency Certifications (2)	-	IEC/UL/EN/CSA22.2 60601-1, IEC/UL/EN 61010-1, IEC/UL/EN/CSA22.2 No 60950-1, CE for LVD
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11, -12, -14
Conducted Emissions and Flicker	-	EN55011, EN55022 Class B (per CISPR.11/22), EN61000-3-3
Radiated Emissions	-	EN55011, EN55022 Class B (per CISPR.11/22)
Weight (open frame)	kg	U Channel: 0.71kg, Top fan: 0.86kg
Size	in	U channel: 7 x 3.94 x 1.6, With cover: 7 x 3.94 x 2, Top Fan: 7 x 3.94 x 2.8
Warranty	yrs	Five Years

(1) -20°C cold start
(2) Designed to meet IEC/EN/UL/CSA 61010-1 Edition 2
(3) Type tested to 4kVAC (equivalent to 5.7kVDC). Production tested to 4.3 kVDC.

Model Selector (Standard Models*)

Product Code	Part Description	Style	Output Voltage	Current (Convection)	Current (Forced Air or Fan)	Peak Output Current (2)
U7Y0010	CFE400M-12-5H-N1-UML-NT	U Chassis	12V	25A	33.3A	37.5A
U7Y0043	CFE400M-12-5H-TF-CML-NT	Cover & Top Fan	12V	-	33.3A	37.5A
U7Y0269	CFE400M-24-5H-N1-UML-NT	U Chassis	24V	12.5A	16.67A	18.75A
U7Y028C	CFE400M-24-5H-TF-CML-NT	Cover & Top Fan	24V	-	16.67A	18.75A
U7Y027B	CFE400M-48-5H-N1-UML-NT	U Chassis	48V	6.25A	8.33A	9.375A
U7Y029D	CFE400M-48-5H-TF-CML-NT	Cover & Top Fan	48V	-	8.33A	9.375A

Notes:
(*) Additional variants available, see Option Selection below.
(2) For up to 10s without exceeding Average Output Power rating (300W convection, 400W with forced air or fan)

Option Selection

Output	Adjustment Range
12	10.8 - 14.4V
24	21.6 - 28.8V
48	43.2 - 50V

*Adjustable by potentiometer

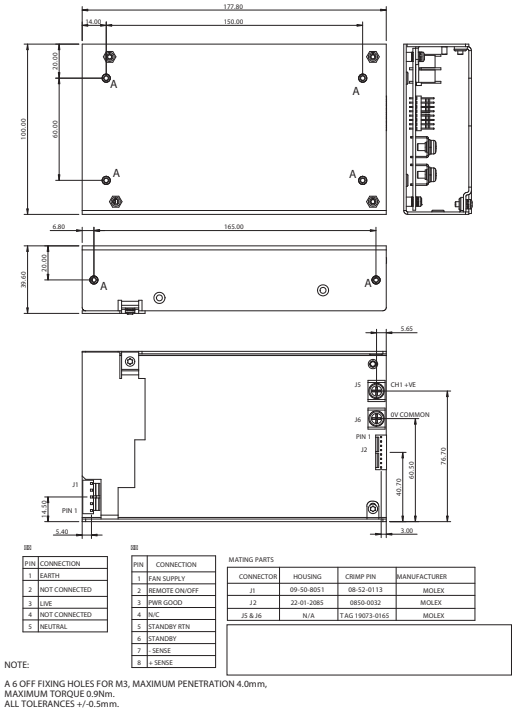
NN = None
5C = 5V 80mA
5H = 5V 2A

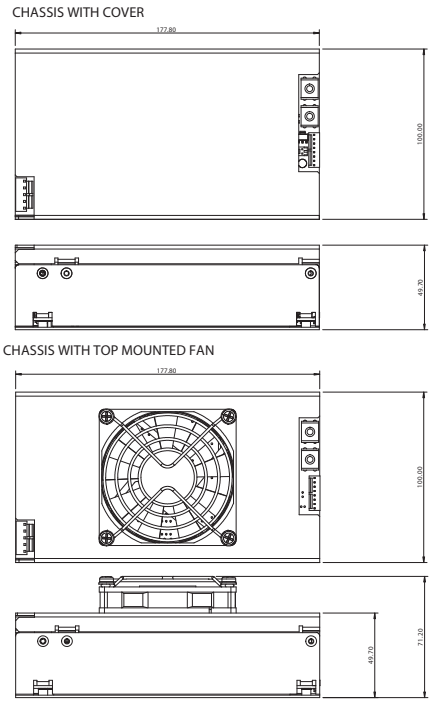
N = None
E = Enable
T = Inhibit

CFE400M	Output V	-	Standby Voltage	-	Fan & Cover Option	ORing FET	Remote On/Off

NN-U = No fan, no fan supply, no cover
NN-C = No fan, no fan supply, cover
N1-U = 12V fan supply, no cover
N1-C = 12V fan supply, cover
TF-C = Top fan & cover
ML-Y = FET fitted
ML-N = No FET fitted

Outline Drawing





Other TDK-Lambda Products

EFE Series	300 to 400W 1U single output power supply
CSS Series	65 to 500W 1U single output power supply
NV Series	175 to 900W 1U power supply 1-8 outputs

For Additional Information, please visit
us.tdk-lambda.com/lp/products/cfe-series.htm

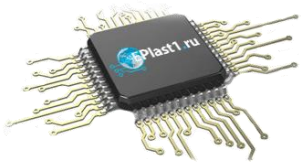
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.