



DTMF210-zzSX-F-W7



210 Watt AC/DC ITE/Medical Adapter

FEATURES

- Meet DOE Level VII and EU ErP Efficiency Compliant
- <0.15W No Load Input Power
- Medical safety approved (2x MOPP between primary and secondary)
- Suitable for BF application with appropriate system consideration.
- Altitude during operation : ITE up to 5000m , Medical below 3000m
- Touch current less than 100 uA
- Protection Class IP 42
- 3-prong IEC320-C14, Class I AC inlet
- 3-Year Warranty

Safety Pending, Q4 2024



		UNIT		
INPUT	Voltage/Freq	V	AC90V - 264V	47 / 63Hz
	Current (rms).	A	2.5A @115VAC; 1.3A @230VAC max	
	Power Factor	-	> .95 @ 115vac; > .90@230vac @ full load	
	Inrush Current	A	<25A peak @115VAC; <50A peak @230VAC cold start @25 C	
	Leakage Current	uA	< 100uA @264VA	

		UNIT	DTMF210-12SX-F-W7	DTMF210-15SX-F-W7	DTMF210-19SX-F-W7	DTMF210-24SX-F-W7
OUTPUT	Nom. Voltage	VDC	12	15	19	24
	Efficiency typ	%	90	90	90	90
	Current	A	17.5	14.00	11.05	8.75
	Regulation		+/-5%	+/-5%	+/-5%	+/-5%
	Ripple Noise (v1)	mV	100 max	100 max	100 max	150 max

		UNIT	DTMF210-28SX-F-W7	DTMF210-36SX-F-W7	DTMF210-48SX-F-W7
OUTPUT	Nom. Voltage	VDC	28	36	48
	Efficiency typ	%	90	90	90
	Current	A	7.50	5.83	4.37
	Regulation		+/-5%	+/-5%	+/-5%
	Ripple Noise (v1)	mV	150 max	150 max	150 max
	Holdup-Time	mS	> 10ms typical @full load, 115VA		





Protection	Over-voltage protection	Latching type, AC Recycle
	Over-current protection	Auto-recovery
	Short-circuit protection	Auto-recovery
Emission	EMI/EMC	EN 60601-1-2, EN 55011 Class B, EN 55032 Class B, EN 55035 Class B, FCC Part 15 Class B, FCC Part 18 Class B, CE
Safety PENDING		UL60601-1 3.1rd , Edition, UL UL60950-1, UL62368-1, EN60601-1 3.1Rd Edition, TUV EN60950-1, TUV EN62368-1, IEC EN60601-1 3.1rd Edition, CB IEC 60950-1, CB IEC 62368-1
Environment	Operating temp/humid	-20 ~ +60°C, 0 ~ 90% RH(Non condensing) De-rates 2.5% per degree C linearly at 41-60°C)
	Storage temp/humid	-20°C ~ +85°C, Non-condensing
Size	MM/G	L 170×W 85×H 44 mm (6.69"x3.35"x1.73") / 0.78Kg (1.72 lbs)
MTBF		> 350,000 hours @full load and 25°C ambient temperature based on Telcordia SR-332(Bellcore)

- Ripple and noise are measured on an oscilloscope 20MHz bandwidth using a 47uF electrolytic capacitor and a 0.1uF ceramic capacitor connected in parallel at the output connector.
- (-1 to -20°C ambient temperature and EMS Immunity worse case O/P Regulation ≤ +/-10%)
- The switching frequency of this series is set within 56 to 85KHz at full load.

Safety and EMC Performance

Description	Safety	EMC
Medical Equipment	IEC 60601-1:2005+AMD1:2012+AMD2:2020 EN 60601-1:2006/A1:2013/A12:2014/A2:2021 ANSI/AAMI ES60601-1:2005/A2:2021 CAN/CSA C22.2 NO. 60601-1:14/A2:22	EN 60601-1-2:2015+A1:2021 EN 55011:2016+A1:2019+A2:2021 FCC 47 CFR Part 18
Audio / Video, ITE equipment	IEC 62368-1:2018 EN IEC 62368-1:2020+A11:2020 UL 62368-1, 3rd Ed CAN/CSA C22.2 No. 62368-1:19, 3rd Ed	EN 55032:2015+A11:2020 EN 55035:2017+A11:2020 FCC 47 CFR Part 15B(*) ICES-003 Issue 7

Tests for conformance to this requirement will be performed with the final system.
 (*) FCC PART 15 compliance information and warnings:
 This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
 - This device may not cause harmful interference, and
 - This device must accept any interference received, including interference that may cause undesired operation.





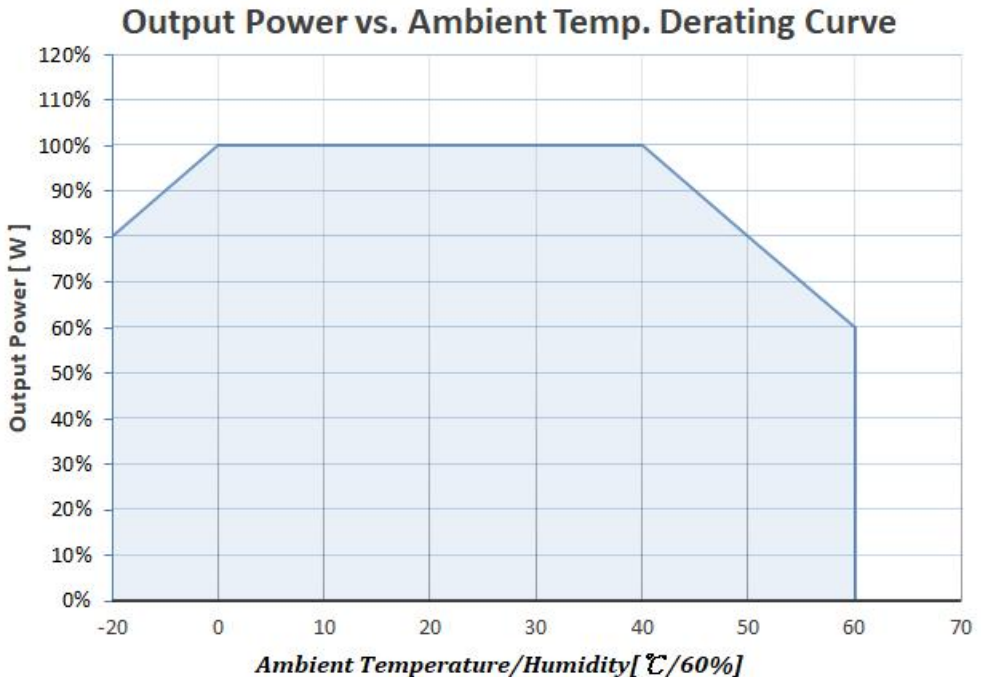
Insulation Level and Dielectric Withstand (HI-POT)

Audio/Video, ITE Equipment	Isolation Voltage	Grade Insulation
Primary circuits to secondary circuits	4242Vdc (3000Vac)	Reinforced
Primary circuits to earth ground	2121Vdc (1500Vac)	Basic
Secondary circuits to earth ground	2121Vdc (1500Vac)	Basic

Medical Equipment	Isolation Voltage	Means of Patient Protection
Primary circuits to secondary circuits	4242Vdc (3000Vac)	Reinforced
Primary circuits to earth ground	2121Vdc (1500Vac)	Basic
Secondary circuits to earth ground	2121Vdc (1500Vac)	Basic

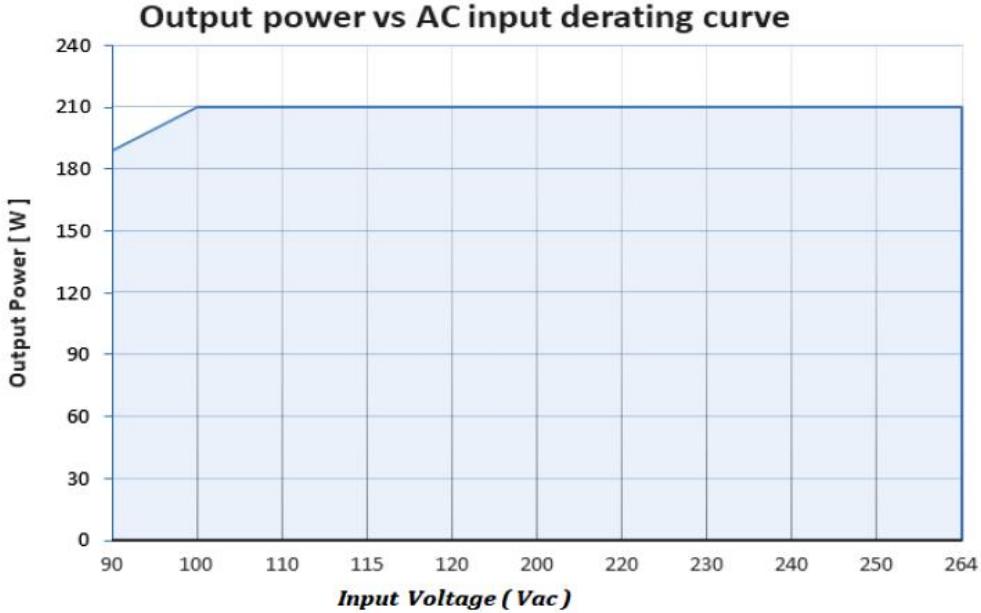
Note : Testing in Production uses a DC voltage test for 4 Sec.

OUTPUT DERATING CURVE



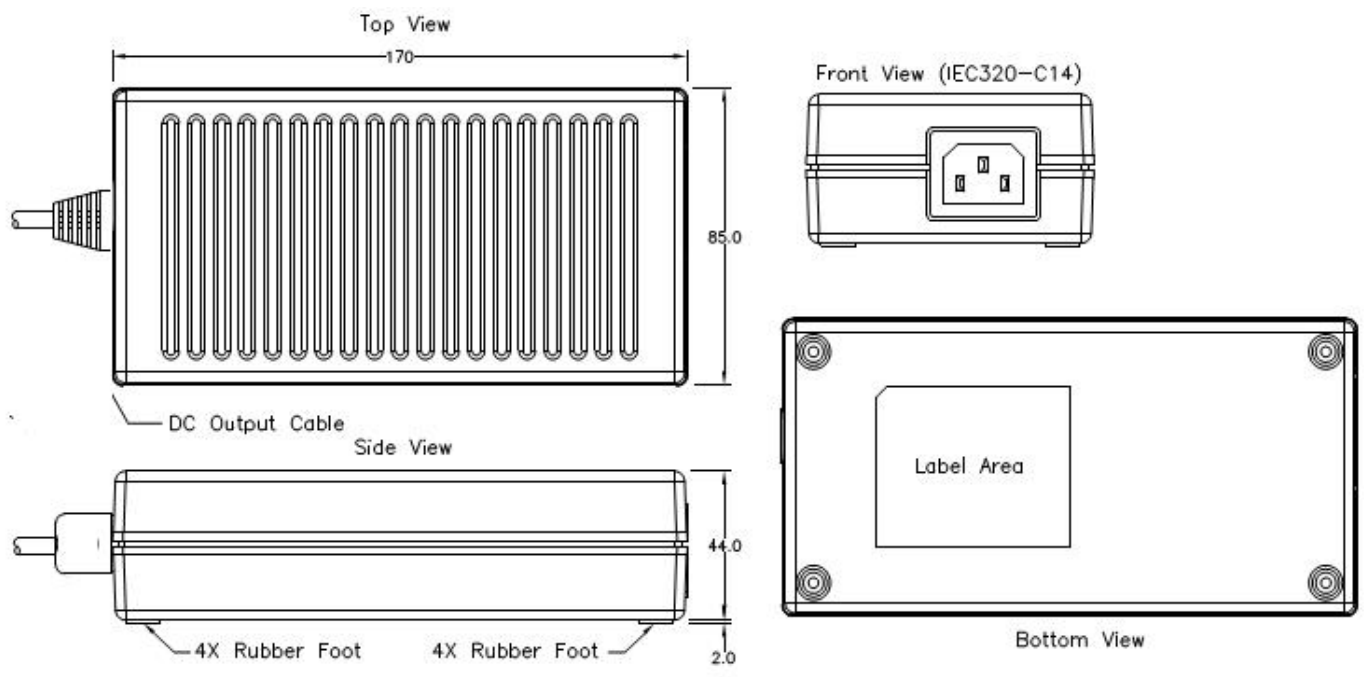
- Derate linearly 2% per°C from 41 to 60°C.
- Derate linearly 1% per°C from 0 to -20°C.





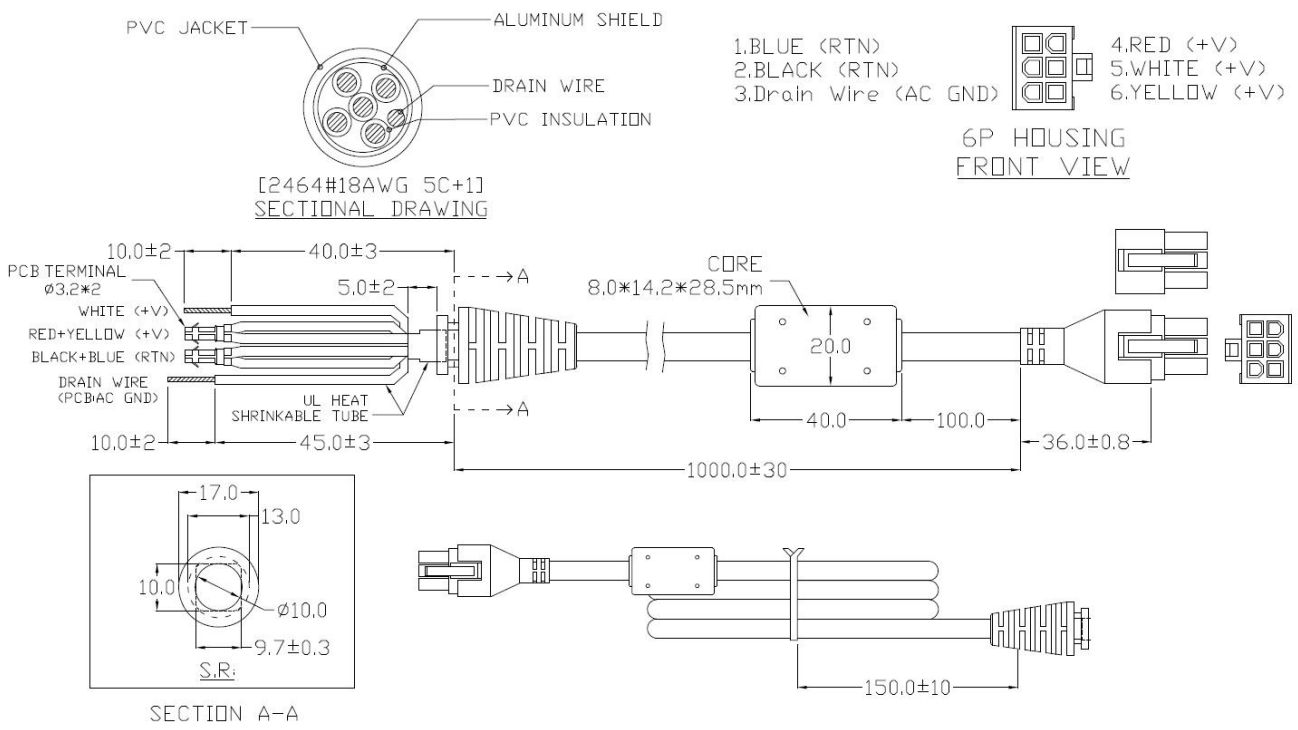
- Derate linearly 1% perVac from 90V to 100V

DIMENSIONAL DRAWING





STANDARD DC CONNECTOR DRAWING BELOW



1. Cable: Black UL 2464 300V 18AWG x5 conductor + Drain Wire
2. Connector Housing: 6 Position 4.2mm Pitch. Equivalent to Molex 39012060

****NOTE-** Customer specified DC connector and AC input inlet options available, inquire at sales@eta-usa.com for more information

