

FEATURES

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

ELECTRICAL SPECIFICATIONS

- Input range : 90 - 264VAC
- Frequency : 47 - 63Hz
- Power Factor : >0.95 @115VAC; > 0.90 @230VAC @full load
- Inrush current : < 25A peak @115VAC;< 50A peak @230VAC cold start @25°C
- Input current (rms) : 2.5A @115VAC; 1.3A @230VAC max.
- Efficiency : >92% @80% Full load, 230VAC
 >89% @Average efficiency, 115/230VAC
- Maximum output power (Po) : 210 Watts convection cooling
- Hold-up time : >10ms typical @full load, 115VAC
- Short circuit protection : Auto-recovery
- Over load protection : Auto-recovery
- Over voltage protection : Latch off
- Over temperature protection : Latch off

ENVIRONMENTAL

- Operating temperature : -20 to +60°C (Refer to derating curve)
- Operating Humidity : 10% to 95%, Non-condensing.
- Storage temperature : -20°C to +85°C, Non-condensing.
- Storage Humidity : 0% to 95%, Non-condensing.
- MTBF : > 350,000 hours @full load and 25°C ambient temperature based on Telcordia SR-332(Bellcore)

DC OUTPUT & FEATURES

Model No.	Output Rating		Po	Output Regulation	Ripple & Noise (Vp-p)	Efficiency Level
A08210-12	+12V	17.50A	210W	±5%	100mV	VII
A08210-15	+15V	14.00A	210W	±5%	100mV	VII
A08210-19	+19V	11.05A	210W	±5%	100mV	VII
A08210-24	+24V	8.75A	210W	±5%	150mV	VII
A08210-28	+28V	7.50A	210W	±5%	150mV	VII
A08210-36	+36V	5.83A	210W	±5%	150mV	VII
A08210-48	+48V	4.37A	210W	±5%	150mV	VII

- Note: 1. Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 47uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.
 2. (-1 to -20°C ambient temperature and EMS Immunity worse case O/P Regulation ≤ ±10%)
 3. The switching frequency of this series is set within 56 to 85KHz at full load.
 4. The ripple and noise of this series is tested under full load condition.



RoHS compliant

Dimension : L 170xW 85xH 44 mm (6.69"x3.35"x1.73")
 Weight : 0.78 kgs. (1.72 lbs.)

SAFETY STANDARDS

- UL/cUL 60601-1
- TUV EN 60601-1
- CB IEC 60601-1
- UL/cUL UL 62368-1
- TUV EN 62368-1
- CB IEC 62368-1

EMC STANDARDS

- 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



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REV.1.3

SAFETY AGENCY CERTIFICATIONS

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 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 :

- (1) This device may not cause harmful interference, and
- (2) 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	5656Vdc (4000Vac)	2 MOPP
Primary circuits to earth ground	2121Vdc (1500Vac)	1 MOPP
Secondary circuits to earth ground	2121Vdc (1500Vac)	1 MOPP

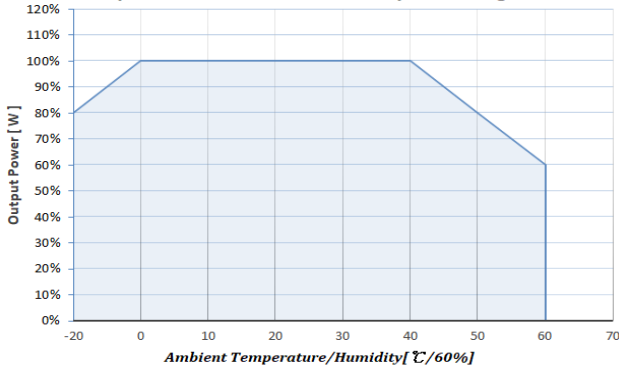
Note : testing in Production use a dc voltage test 4 Sec.



ENVIRONMENTAL

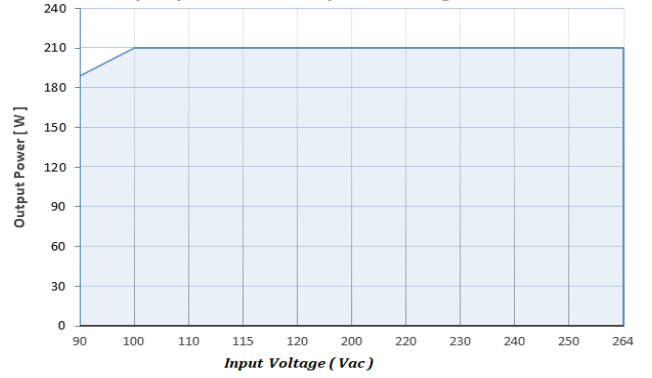
DERATING CURVE:

Output Power vs. Ambient Temp. Derating Curve



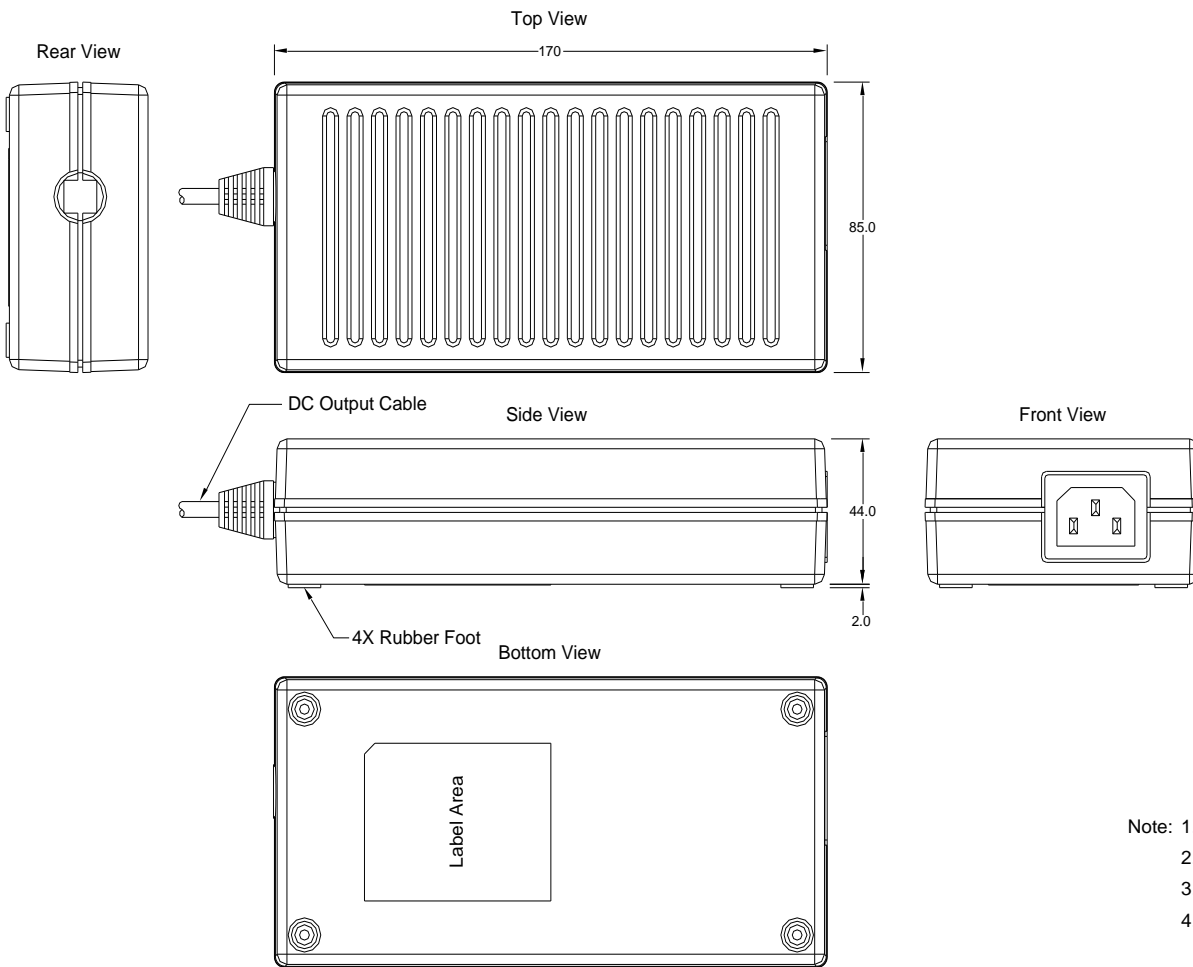
Derate linearly 2% per°C from 41 to 60°C.
 Derate linearly 1% per°C from 0 to -20°C.

Output power vs AC input derating curve



Derate linearly 1% perVac from 90V to 100V

MECHANICAL SPECIFICATION

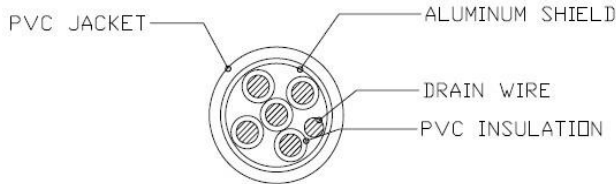


- Note: 1. AC Inlet : IEC320-C14
 2. Plastic Case Color : Black
 3. Tolerance : ± 0.5mm
 4. Unit : mm



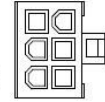
STANDARD OUTPUT CABLE

12V

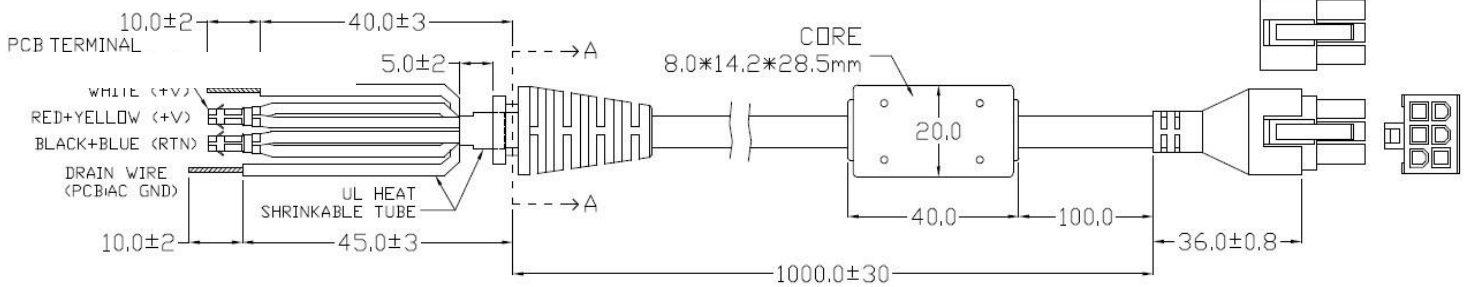


[2464#18AWG 5C+1]
 SECTIONAL DRAWING

- 1.BLUE (RTN)
- 2.BLACK (RTN)
- 3.Drain Wire (AC GND)
- 4.RED (+V)
- 5.WHITE (+V)
- 6.YELLOW (+V)



6P HOUSING
 FRONT VIEW



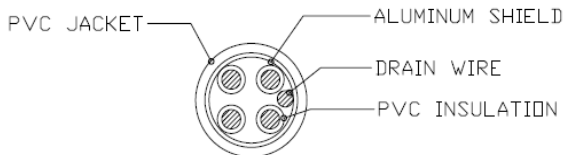
DC Output Connector

Standard male plug(power supply side): 6P=P4.2 UL/CSA/TUV 94V-2 [7A/250V/85°C]

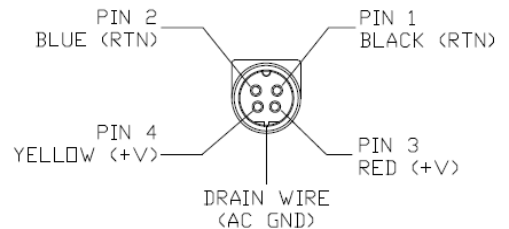
Mating Connector : WST P4.20 6PIN WAFER M-I42002

DC output cable: 5C+1, UL2464, 18AWG, VW-1, 80°C, 300V

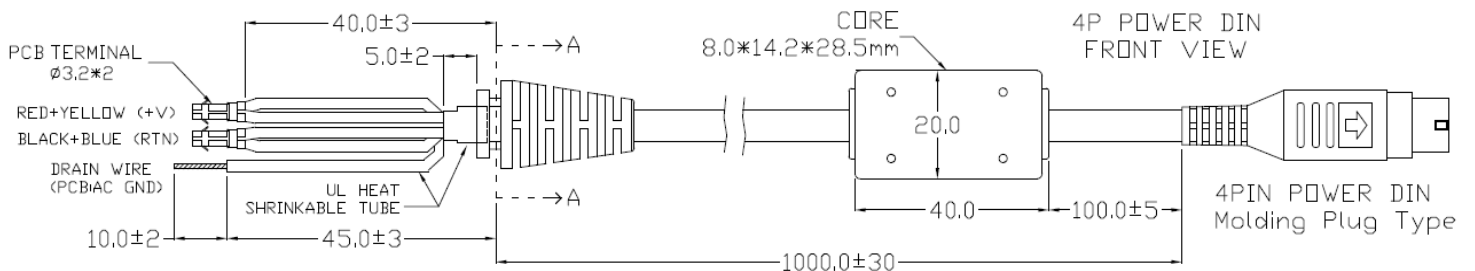
15,19V,24V,28V,36V,48V



[2464#16AWG 4C+1]
 SECTIONAL DRAWING



4P POWER DIN
 FRONT VIEW



Standard male plug(power supply side): 4PIN POWER DIN

Mating Connector : 4PIN POWER DIN(FEMALE)MDP-002-4PIN

DC output cable: 4C+1, UL2464, 16AWG, VW-1, 80°C, 300V

