



80 Watt, (160W Peak Load) AC/DC Modules, Open Frame Series DVC80-2



Features

- Universal Input Range 90 – 264Vac
- Size 76,20 x 50,80 (mm)
- No Load Input Power < 0,3W
- Safety Approved IEC/EN/UL62368-1
- Meets IEC/EN60335-1
- High Efficiency up to 91%
- Peak Load (2 Times of Rated Current Note 7)
- Continuous Short Circuit Protection
- Meets EN55032 Class B / CIRSS/FCC Class B
- Meets Class I and II

MODEL NUMBER CONNECTOR	MODEL NUMBER PIN -P	MODEL NUMBER COVER -C (Note 7)	OUTPUT VOLTAGE [VDC]	OUTPUT CURRENT [A] MAX.	RIPPLE & NOISE [mV p-p] (Note 2)	VOLTAGE ADJ. RANGE [V]	LOAD CAP. [μF] (Note 9)	EFF. [%] (Note 5)
DVC80-2S12	DVC80-2S12-P	DVC80-2S12-C	12	6,7	120	11,4-12,6	13400	89
DVC80-2S15	DVC80-2S15-P	DVC80-2S15-C	15	5,36	150	14,25-15,75	11000	89
DVC80-2S24	DVC80-2S24-P	DVC80-2S24-C	24	3,35	240	22,8-25,2	6700	90
DVC80-2S48	DVC80-2S48-P	DVC80-2S48-C	48	1,67	480	45,6-50,4	3340	91

NOTE:

1. Voltage accuracy is set at 100% full load.
2. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for ripple & noise measurement @20MHz BW.
3. Line regulation is measured from 90Vac to 264Vac with 100% full load.
4. Load regulation is measured from 10% to 100% full load.
5. Typical efficiency at 230 Vac and 100% full load at 25°C.
6. Standard input and output connectors (CN1 and CN2) wafer with TAIWAN KING PIN TERMINAL PVHI series and mate with JST housing VHR series and JST SVH-21/41T-P1.1 series crimp terminal.
7. PL (peak load function) lasting time < 10 seconds with a maximum 10% duty cycle.
When operating peak load function, it requires the average power do not exceed 75% rated power.
Vin=100Vac&115Vac&230Vac&264Vac: Peak load function by 200% load 10Sec. & 61% load 90Sec.
8. Safety IECEN/UL62368-1 Approvals do apply only for Connector Versions. Not for Pin -P & Cover -C Versions.
9. Vin=115Vac and 230Vac, Output is max. load

INPUT CHARACTERISTICS:

Input Voltage Range..... (Safety approvals only to the AC input).....	90-264Vac / 120-370VDC
Input Frequency	50 to 60Hz
Inrush Current	V _{in} =240Vac, Cold start at 25°C..... 100A max.
Leakage Current.....	0,25mA max.
Input Current	100% Load, V _{in} =100Vac..... 1,7A max.

OUTPUT CHARACTERISTICS:

Voltage Accuracy (Note 1)..... V _{in} =90Vac~264Vac, I _o =I _o max., T _c =25°C.....	±1,0% max.
Line Regulation (Note 3)..... V _{in} =High Line to Low Line.....	±0,5% max.
Load Regulation (Note 4)	10% Load to Full Load..... ±1,0% max.
Hold-up Time.....	V _{in} =115V _{ac} 12ms typ.
Over Voltage Protection	Built-in a TVS component to clamp output voltage
Short Circuit Protection.....	Continuous, Auto Recovery

GENERAL CHARACTERISTICS:

Efficiency.....	see table
Isolation Input/Output	1 minute..... 3000VAC max.
Isolation Resistance Input/Output.....	100MΩ min.
Switching Frequency	65KHz typ.
Operating Temperature Range.....	-30°C to +80°C
Derating	see curve
Storage Temperature Range	-30°C to +85°C
Cooling.....	Natural Convection
Humidity	Non-condensing..... 93% RH max.
MTBF	I _o =100%; T _a =25°C per MIL-HDBK-217F..... 300K hrs. min.
Altitude.....	IEC/EN/UL 62368-1 & Meet IEC/EN 60335-1..... 5000m max.
Shock.....	Meet MIL-STD-810F..... 75g typ.
Vibration.....	Meet MIL-STD-810F..... 4g typ.

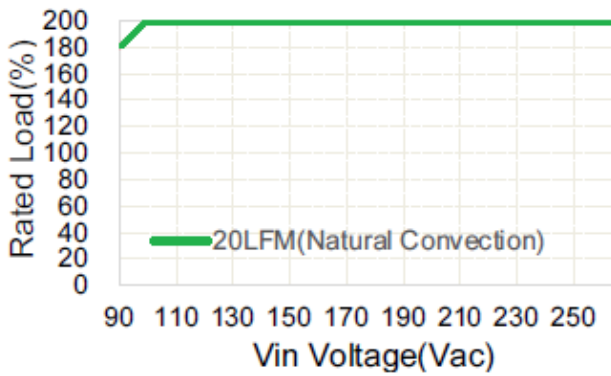
SAFETY & EMISSION:

Safety Approved.....	only Connector Versions DVC80-2Sxx..... Class I, Class II, IEC/EN/UL62368-1
Safety Meets ... Covered DVC80-2Sxx-C & Pin DVC80-2Sxx-P Versions.....	IEC/EN/UL62368-1
Safety Meets	IEC/EN 60335-1
EMC Emission.....	EN55032 Class B, 47 CFR FCC Part 15 Subpart B, N 61000-3-2, EN 61000-3-3, EN61000-6-3, EN61000-6-4, EN61204-3
Conducted Disturbance	EN 55032 Class B, EN61204-3, EN61000-6-3, EN61000-6-4,47 CFR FCC Part 15 Subpart B
Radiated Disturbance.....	EN 55032 Class B, EN61204-3, EN61000-6-3, EN61000-6-4,47 CFR FCC Part 15 Subpart B
Harmonic Current Emissions	EN 61000-3-2
Voltage Fluctuations & Flicker	EN 61000-3-3
EMC Immunity.....	EN 55035, EN61204-3, EN61000-6-1, EN61000-6-2
Electrostatic Discharge (ESD)	IEC 61000-4-2, Air Discharge: ±8kV, Contact Discharge: ±4kV
Radio-Frequency, Continuous, Radiated Disturbance	IEC 61000-4-3
Electrical Fast Transient (EFT)	IEC61000-4-4, ±1kV, ±2kV
Surge	IEC61000-4-5, L-N: ±0.5kV, ±1kV, L-E(Ground): ±0.5kV, ±1kV, ±2kV
Conducted Disturbances, Induced by RF Fields	IEC 61000-4-6
Power Frequency Magnetic Field	IEC 61000-4-8
Voltage Dips.....	IEC 61000-4-11, Dip: 30% Reduction, Dip >95% Reduction
Voltage Interruptions	IEC 61000-4-11, >95% Reduction

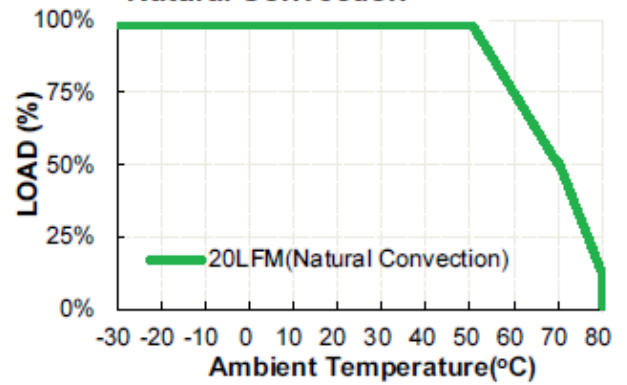
MECHANICAL SPECIFICATIONS:

Dimensions:	
Connector Version:.....	76,20 x 50,80 x 34,00 (mm)
Pin Version -P:	76,20 x 50,80 x 35,90 (mm)
Cover Version -C:.....	81,28 x 62,00 x 40,00 (mm)
Weight:	
Connector Version:.....	135g typ.
Pin Version -P:	133g typ.
Cover Version -C:.....	174g typ.

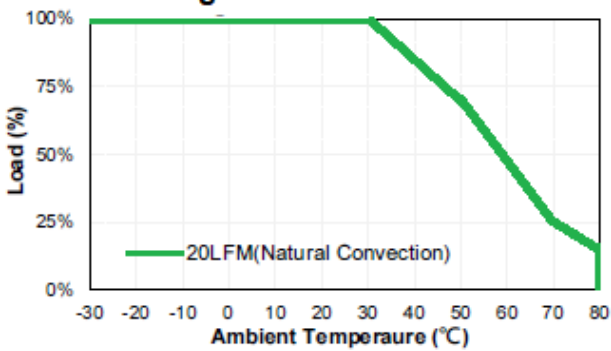
Peak Load Vin Derating Curve



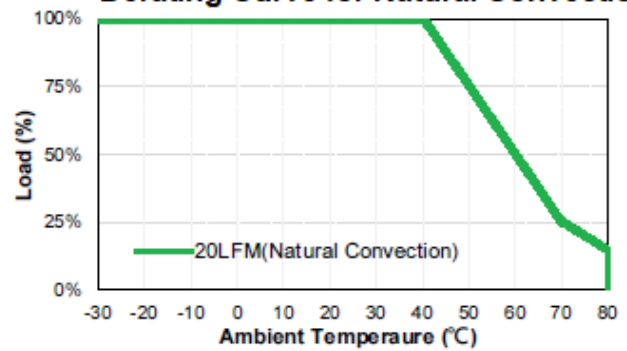
Power Derating Curve for Natural Convection



DVC80-2S12-C Derating Curve for Natural Convection



DVC80-2S15/24/48-C Derating Curve for Natural Convection



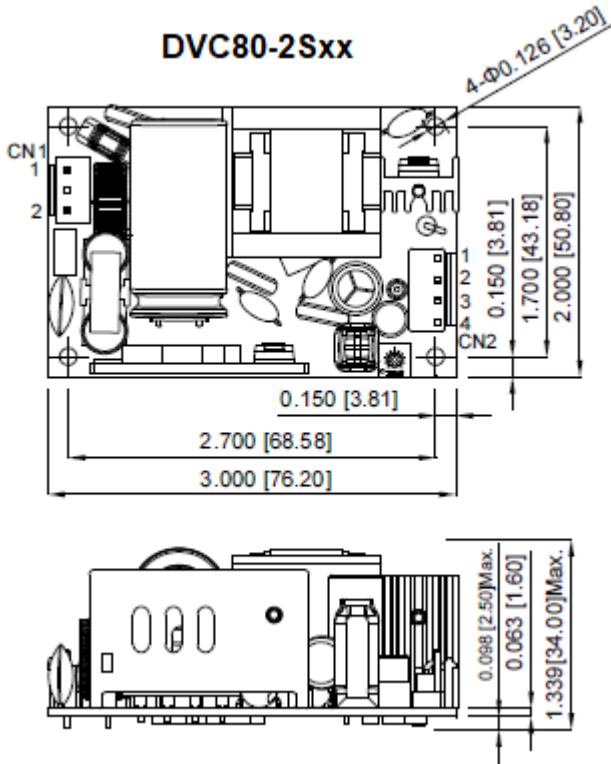
Mechanical Specification

Series DVC80-2

All Dimensions In Inches[mm]

Tolerance Inches:x.xxx=+0.039/-0.02, Millimeters:x.xx= +1.0/-0.5

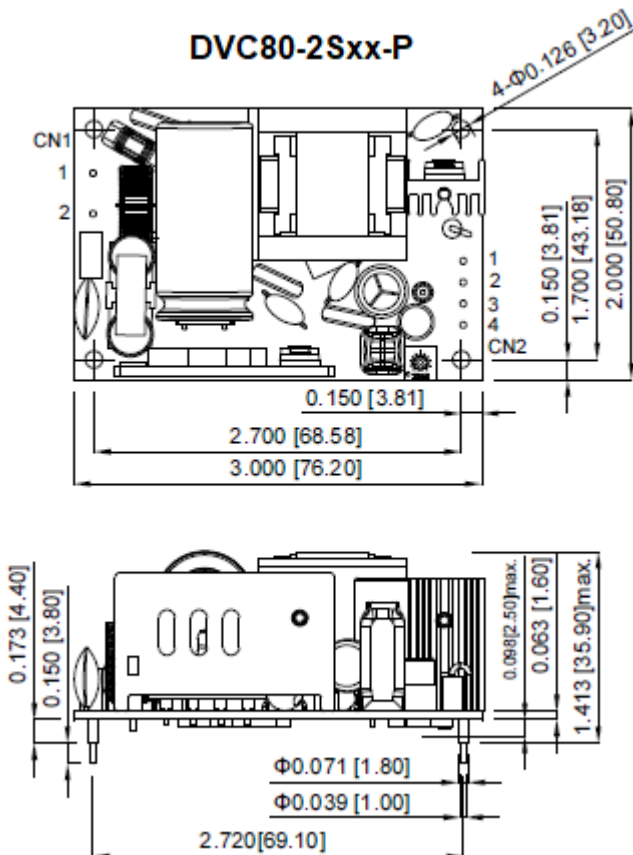
DVC80-2Sxx



CN1 CONNECTION	
Pin	Function
1	AC-N
2	AC-L

CN2 CONNECTION	
Pin	Function
1	-Vout
2	-Vout
3	+Vout
4	+Vout

DVC80-2Sxx-P



CN1 CONNECTION	
Pin	Function
1	AC-N
2	AC-L

CN2 CONNECTION	
Pin	Function
1	-Vout
2	-Vout
3	+Vout
4	+Vout

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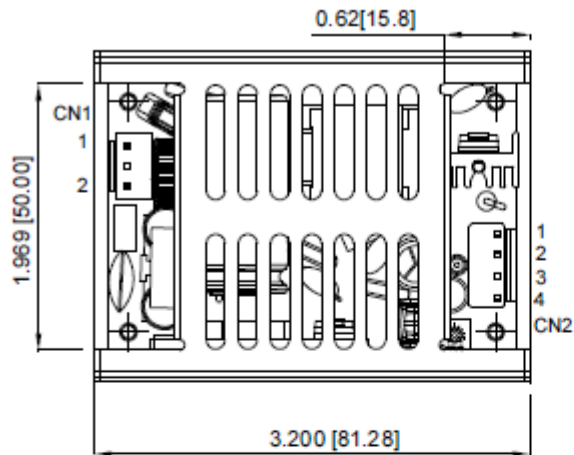
Mechanical Specification

Series DVC80-2

All Dimensions In Inches[mm]

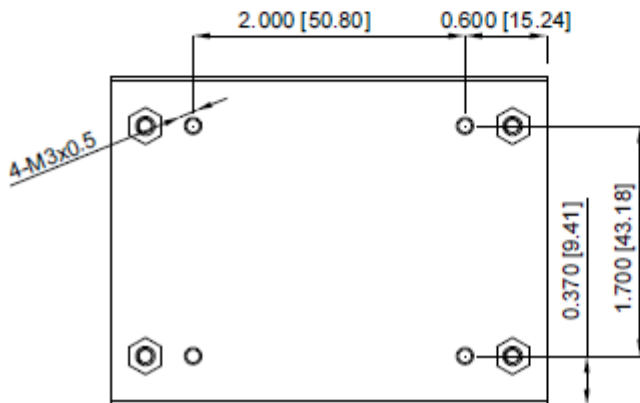
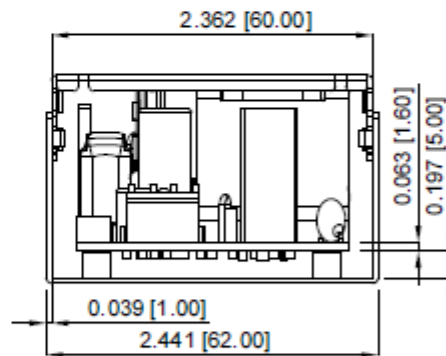
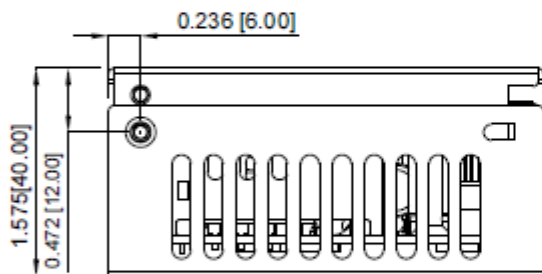
Tolerance Inches:x.xxx=+0.039/-0.02, Millimeters:x.xx= +1.0/-0.5

DVC80-2Sxx-C



CN1		CONNECTION
Pin		Function
1		AC-N
2		AC-L

CN2		CONNECTION
Pin		Function
1		-Vout
2		-Vout
3		+Vout
4		+Vout



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