



## 12 Watt, Regulated AC/DC Open Frame Series DVC12



### Features

- Universal Input Range 90 – 264Vac
- Size Pin 38,10 x 25,40 x 19,20 (mm)
- Size Terminal 54,61 x 25,40 x 17,50 (mm)
- Class II
- Approved UL/IEC/EN62368-1
- Meets EN60335-1
- High Efficiency up to 87%
- Continuous Short Circuit Protection
- Over Voltage Protection
- No Load Input Power < 0,75W
- Operating Altitude 5000m
- Meets EN55032 Class B / CIRSS/FCC Class B

MODEL NUMBER		OUTPUT VOLTAGE [ VDC ]	OUTPUT CURRENT [ mA ] MAX.	RIPPLE & NOISE [ mV ] ( Note 2 )	VOLTAGE ACCURACY [ % ] ( Note 1 )	EFF. [ % ] ( Note 5 )	LOAD CAPACITANCE [ $\mu$ F ] ( Note 4 )
PIN	TERMINAL ( Note 3 )						
DVC12S05-P	DVC12S05	5	2000	100	$\pm 2$	80	2000
DVC12S09-P	DVC12S09	9	1340	100	$\pm 2$	85	1340
DVC12S12-P	DVC12S12	12	1000	120	$\pm 2$	85	1000
DVC12S15-P	DVC12S15	15	800	150	$\pm 2$	85	800
DVC12S24-P	DVC12S24	24	500	240	$\pm 2$	87	500

#### NOTE:

1. Voltage Accuracy is set of 100% rated load.
2. Add a 0,1 $\mu$ F ceramic capacitor and a 10  $\mu$ F E.L. capacitor to output for Ripple & Noise Measuring @ 20MHz BW.
3. Terminal Version with JST B3B-XH / B4B-XH and mate with JST housing XH series or equivalent..
4. Vin=115Vac and 230Vac, Output is max. load
5. Typical efficiency at 230 Vac and 100% full load at 25°C.

Typical at 25°C, nominal line and 75% load, unless otherwise specified.

### INPUT CHARACTERISTICS:

Input Voltage Range ( Safety approvals only to the AC input ) .....	90-264Vac / 120-370Vdc
Input Frequency.....	50 to 60Hz
Input Current ( 100% Load, Vin=100Vac ) .....	0,4A max.
Leakage Current.....	0,25 mA max.
Inrush Current ( Vin=240Vac, Cold start at 25°C ).....	50A max.

### OUTPUT CHARACTERISTICS:

Efficiency ( Output is rated load, Input voltage is 230Vac ) .....	see table
Line Regulation ( Vin=High Line to low line ) .....	±1,0% max.
Load Regulation ( 10% Load to full load ) .....	±1,0% max.
Hold-up Time ( Vin=115Vac ) .....	10mS typ.
Over Voltage Protection ( Hiccup Mode, Auto Recovery ) .....	Vo 5V ..... 6,3 Vdc max.
	Vo 9V ..... 12,6 Vdc max.
	Vo 12V ..... 15,8 Vdc max.
	Vo 15V ..... 18,9 Vdc max.
	Vo 24V ..... 31,5 Vdc max.
Short Circuit Protection .....	Continuous, Auto Recovery

### GENERAL CHARACTERISTICS:

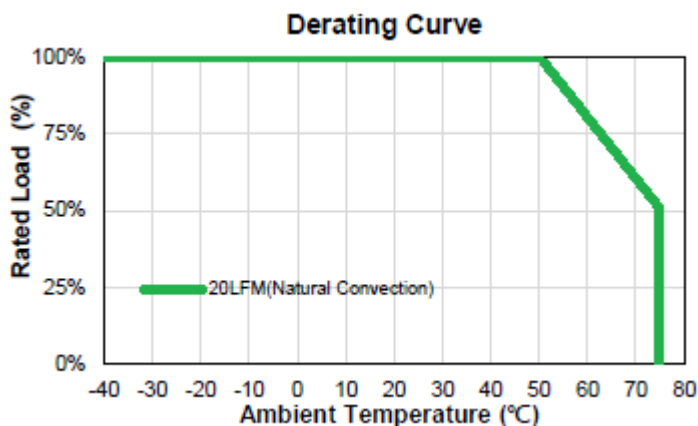
Isolation Input/Output ( 1 minute ) .....	3000VAC max.
Isolation Resisance ( Input/Output ) .....	100 MΩ min.
Switching Frequency .....	65KHz typ.
Operating Case Temperature Range .....	-40°C to +75°C
Derating above .....	see Curve
Storage Temperature Range .....	-40°C to +85°C
Cooling .....	Natural Convection
Humidity .....	93% RH max. non condensing
MTBF ( Io=100%; Ta=25°C per MIL-HDBK-217F ) .....	580K hrs min.
Altitude ( IEC/EN/UL 62368-1 ) .....	5000m max.
Shock ( Meet MIL-STD-810F ) .....	75g typ.
Vibration ( Meet MIL-STD-810F ) .....	4g typ.

### SAFETY & EMISSION:

Safety Approved .....	Class II, UL/IEC/EN62368-1
Safety Meets .....	IEC/EN 60335-1
EMC Emission .....	EN55032 Class B, EN 61000-3-2, EN 6100-3-3, EN 61000-6-3, Class B. EN 61000-6-4,
Conducted Disturbance....	EN 55032 2015, EN 6100-6-3 2007+A1: 2011+AC: 2012, Class B. EN 61000-6-4, 47 CFR FCC Part 15 Subpart B
Radiated Disturbance.....	EN 55032 2015, EN 6100-6-3 2007+A1: 2011+AC: 2012, Class B. EN 61000-6-4, 47 CFR FCC Part 15 Subpart B
Harmonic Current Emissions .....	EN 61000-3-2:2014
Voltage Fluctuations & Flicker .....	EN 61000-3-3:2013
EMC Immunity .....	EN 55024 2010+A1:2015, EN 61204-3:2000, EN 61000-6-1:2007, EN 61000-6-2:2005
Electrostatic Discharge (ESD) .....	IEC 61000-4-2:2008, Air Discharge: ±8kV, Contact Discharge: ±4kV
Radio-Frequency, Continuous , Radiated Disturbance .....	IEC 61000-4-3:2010
Electrical Fast Transient (EFT) .....	IEC61000-4-4:2012, ±1kV, ±2kV
Surge .....	IEC61000-4-5:2014, L-N: ±1kV
Conducted Disturbances, Induced by RF Fields.....	IEC 61000-4-6:2013
Power Frequency Magnetic Field .....	IEC 61000-4-8:2009
Voltage Dips .....	IEC 61000-4-11:2004, Dip: 30% Reduction, Dip >95% Reduction
Voltage Interruptions .....	IEC 61000-4-11:2004, >95% Reduction

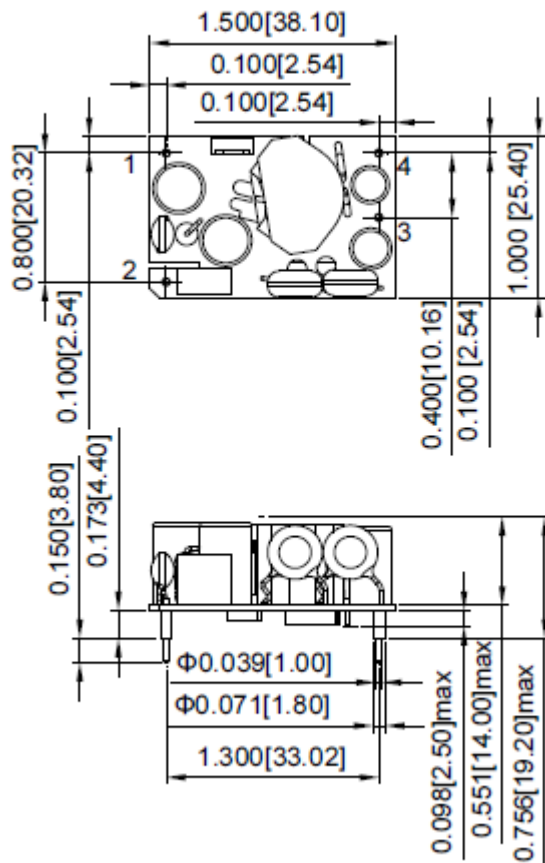
### MECHANICAL SPECIFICATIONS:

Dimensions (Pin Version).....	-P Pin Version ..... 38,10 x 25,40 x 19,20 (mm)
	Terminal Version ..... 54,61 x 25,40 x 17,50 (mm)
Weight.....	-P Pin Version ..... 16g typ.
	Terminal Version ..... 17g typ.



All dimensions are in inches [mm]  
 Tolerance: Inches: x.xxx=±0.02  
 Millimeters:x.xx=±0.5

## DVC12xx-P



CONNECTION PIN Model	
Pin	Function
1	ACN
2	ACL
3	-Vout
4	+Vout

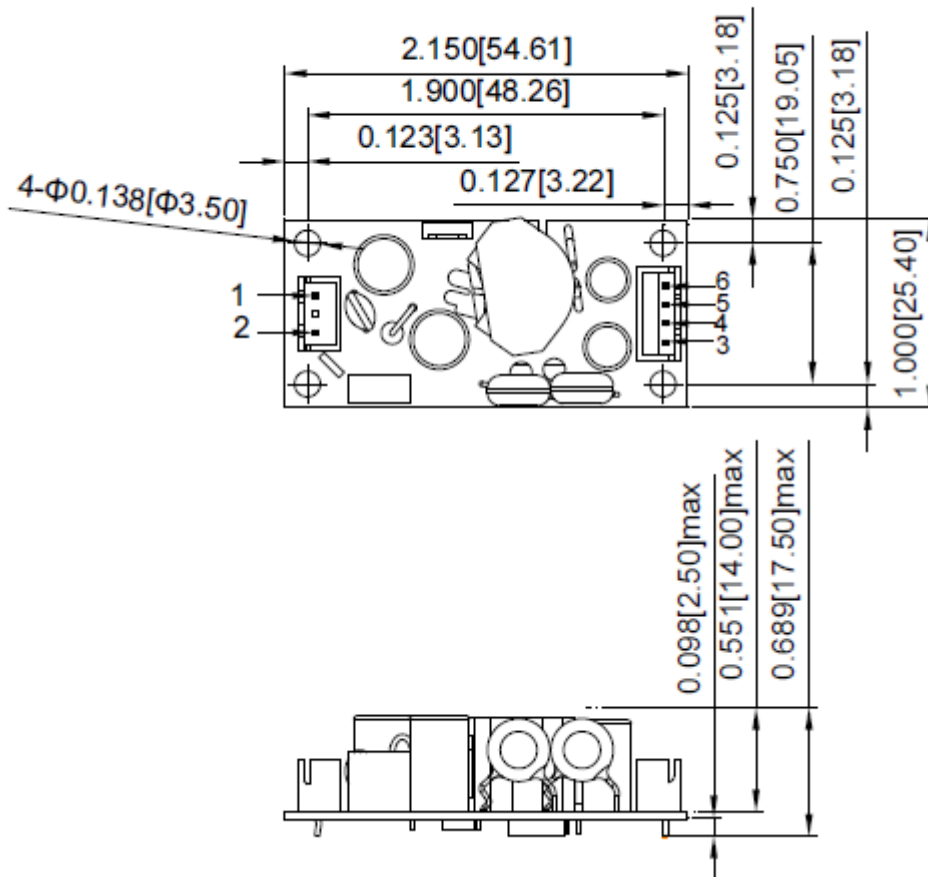
## Mechanical Specification (Terminal Version)

All dimensions are in inches [mm]

Tolerance: Inches: x.xxx=±0.02

Millimeters:x.xx=±0.5

### DVC12xx



Pin	Function	CONNECTION TERMINAL Model
1	ACN	
2	ACL	
3	-Vout	
4	-Vout	
5	+Vout	
6	+Vout	

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