



**700 Watt  
AC/DC Modules, PCB mounting  
Series DVC700-F**



**Features**

- Wide Input Range 90 – 264 VAC
- Power Factor 0,97
- Full Brick Size
- Operating Case Temperature -40°C to +105°C
- Meets EN55032 Class A
- Meets IEC/EN/UL62638-1
- Efficiency up to 91%
- Over Temperature Protection
- Over Voltage Protection
- Continuous Short Circuit Protection
- Remote ON/OFF
- Meets Class I

MODEL NUMBER	OUTPUT VOLTAGE [ VDC ]	OUTPUT VOLTAGE [ VDC ]	VOLTAGE ACCURACY [ % ] ( Note 1 )	RIPPLE & NOISE [ mV ] ( Note 2 )	EFFICIENCY [ % ] TYP. ( Note 3 )	LOAD CAPACITANCE [ $\mu$ F ] ( Note 4 )	
						MIN.	MAX.
DVC700-F-S12	12	58,4	$\pm 1,0$	120	87	11700	58340
DVC700-F-S24	24	29,2	$\pm 1,0$	240	90	8000	29170
DVC700-F-S28	28	25,0	$\pm 1,0$	280	90	8000	25000
DVC700-F-S48	48	14,6	$\pm 1,0$	480	91	2820	14590
DVC700-F-S56	56	12,5	$\pm 1,0$	560	91	2820	12500

**Note:**

1. Voltage Accuracy is Set at 60% 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.  
The output capacitor is necessary, such as load capacitance in the table.  
External components are required. please refer to the application note.
3. Typical efficiency at 230Vac and full load at 25°C.
4. Input Voltage is 115VAC and 230VAC, Output is max. Load
5. Line regulation is measured from 100Vac to 264Vac with full load.
6. Load regulation is measured from 60% $\pm$ 40% rated load.

**INPUT SPECIFICATIONS:**

Input Voltage Range.....	90 – 264 VAC
Input Frequency.....	47-63Hz
Power Factor.....	230Vac/50Hz @ Full load..... 0,97 typ.
Input Current.....	100% Load, Vin=100Vac..... 9A max.
Leakage Current.....	0,01mA max.
Inrush CurrentVin.....	Vin=240Vac,Cold Start at 25°C, (External inrush resistor 10Ω)..... 35A max.
Under Voltage Protection.....	70Vac typ.

**OUTPUT SPECIFICATIONS:**

Hold-up Time.....	Vin=115Vac..... 16msec. typ.
Line Regulation ( Note 5 ).....	Vin=High Line to low line..... ±0,5% max.
Load Regulation ( Note 6 ).....	20% Load to 100% Load..... ±0,5% max.
Output Voltage Trim Range.....	Po≤max rated power, Io≤Io_max, Vout 56V..... -5% / +1,8%
	Po≤max rated power, Io≤Io_max, Vout Others..... -5% / +5%
Over Current Protection.....	Hiccup Mode, Auto Recovery..... 105% min. / 195% max.
Over Voltage Protection.....	Latch off (Recycle AC Input to Restart)
Short Circuit Protection.....	Continuous

**GENERAL SPECIFICATIONS:**

Efficiency.....	see table
Isolation Voltage Input/Output.....	1 minute, (without dielectric breakdown)..... 3000 VAC max.
Isolation Voltage Input/Earth.....	1 minute, (without dielectric breakdown)..... 2000 VAC max.
Isolation Voltage Output/Earth.....	1 minute, (without dielectric breakdown)..... 500 VAC max.
Isolation Resistance.....	Input to Output..... 100MΩ min.
Switching Frequency.....	220 KHz typ.
Operating Case Temperature.....	At the center of base plate..... -40°C to +100°C
Storage Temperature.....	-55°C to +105°C
Over Temperature Shutdown... Temp. at the center part of base plate, auto recovery.....	+110°C typ.
Over Temperature Recovery ... Temp. at the center part of base plate, auto recovery.....	+105°C typ.
Humidity.....	Non condensing..... 93% RH max.
MTBF.....	Io=100%; Ta=25°C per MIL-HDBK-217F..... 250K hrs typ.
Operating Altitude.....	5000m max.
Shock.....	Meet MIL-STD-810F..... 75g typ.
Vibration.....	Meet MIL-STD-810F..... 4g typ.

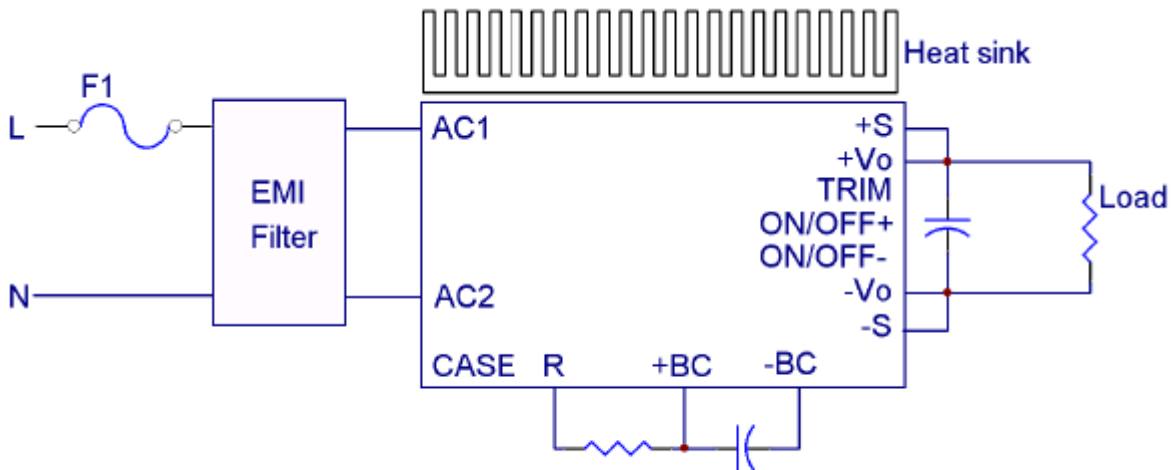
**SAFETY & EMISSION:**

Safety.....	Class I, IEC/EN/UL62368-1
EMC Emission.....	EN55032 Class A
Conducted Disturbance.....	EN55032 Class A
Radiated Disturbance.....	EN55032 Class A
Harmonic Current Emissions.....	EN 61000-3-2
Voltage Fluctuations & Flicker.....	EN 61000-3-3
EMC Immunity.....	EN55035
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).....	IEC 61000-4-4, ±1kV, ±2KV
Surge.....	IEC 61000-4-5, L-N: ±0.5kV, ±1kV, ±2kV, L-E(ground): ±0.5kV, ±1kV, ±2kV, ±4kV
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:**

Dimension ( L x W x H ).....	116,8x61,0x12,7 (mm) / 4,60x2,40x0,50 (Inches)
Case Material.....	Aluminum Baseplate with Plastic Case ( UL94V-0 )
Potting Material.....	UL94V-0
Weight.....	210g typ.

Typical at 25°C, 230Vac and 75% rated load, unless otherwise Specified



Simplified Application Circuit

Power Derating Curve

Series DVC700-F

