



**600 Watt  
AC/DC Enclosed Power Supply  
Single Output  
Series DVM600S-C**



**Features**

- Input: 80 – 277VAC & 110 – 390VDC
- Low Standby Power Consumption
- Built-in PFC Function
- Regulated Output, Low Ripple & Noise
- Isolation I/O 4000VAC
- Efficiency to 94%
- With 5V/1A Standby Power
- Meet Safety IEC/EN/UL62368
- Operating Temperature Range -40°C to +70°C
- Over Current / Over Voltage Protection
- Over Temperature Protection
- Short Circuit Protection
- Remote ON/OFF
- DC OK Function
- Meet CISPR32 / EN55032 Class
- Meet EN60335 & IEC/EN60601

MODEL NUMBER	OUTPUT VOLTAGE / OUTPUT CURRENT MAX. (Vo / Io) Note 2	OUTPUT VOLTAGE ADJUSTABLE RANGE [ V ]	EFF. TYP. [ % ] Note 1	OUTPUT POWER [ W ]	CAP. LOAD MAX. [ µF ]	STANDBY (Vo / Io) Note 3
DVM600S12-C	12V/50A	11,8-12,6	92	320	6000	5V/1A
DVM600S24-C	24V/25A	23,5-25,2	94	321	4000	5V/1A
DVM600S36-C	36V/16,7A	35,3-37,8	94	321	2400	5V/1A
DVM600S48-C	48V/12,5A	47-50,4	94	321	1600	5V/1A

Note:

1. Nominal Input Voltage at 230Vac.
2. Under any conditions, the total power of product should not exceed the 600W rated power, and the output current cannot exceed the rated output current.
3. Standby power: Provide 5V / 1A independent output, it is recommended to use with the main circuit.

## INPUT SPECIFICATIONS:

Input Voltage Range.....	80 to 277VAC / 110 to 390VDC
Input Frequency.....	47 to 63Hz
Input Current.....	115VAC 7,5A / 230VAC 3,5A max.
Inrush Current.....	230VAC, Cold start ..... 40A typ.
Leakage Current.....	240VAC ..... <0,1mA

## OUTPUT SPECIFICATIONS:

Min. Load .....	0% typ.
Voltage Accuracy (Full Load Range) .....	Vo 12V/15V/24V/48V ..... ±1,0% typ.
	Standby 5V ..... ±2,0% typ.
Line Regulation (Rated Load) .....	Vo 12V/15V/24V/48V ..... ±0,3% typ.
	Standby 5V ..... ±0,5% typ.
Load Regulation (0%-100% Load).....	Vo 12V/15V/24V/48V ..... ±0,5% typ.
	Standby 5V ..... ±2,0% typ.
Ripple & Noise (Note 1) (20MHz Bandwidth) .....	Vo 12V ..... 150mVp-p typ.
	Vo 24V ..... 200mVp-p typ.
	Vo 36V & 48V ..... 300mVp-p typ.
Standby Power Consumption .Room Temp., 230VAC, ON/OFF add +5V .....	0,5W typ.
Hold-up Time .....	230VAC ..... 15ms min.
Short Circuit Protection Recovery Time <3s. after short circuit disappear .....	Hiccup, Continuous, self-recovery
Over Current Protection .....	110%-160%Io, self-recovery
Over Voltage Protection .....	Vo 12V ..... ≤ 16V (Output Voltage turn-off, re-power on for recovery)
	Vo 24V ..... ≤ 32V (Output Voltage turn-off, re-power on for recovery)
	Vo 36V ..... ≤ 47V (Output Voltage turn-off, re-power on for recovery)
	Vo 48V ..... ≤ 60V (Output Voltage turn-off, re-power on for recovery)
Over Temperature Protection .....	Output Voltage Turn Off, Self-recovery after temperature drops

## GENERAL SPECIFICATIONS:

Efficiency .....	see table
Isolation Voltage (Test for 1min., leakage current<10mA) ... Input-Output .....	4000Vac min.
	Input-PE ..... 1500Vac min.
	Output-PE ..... 1500Vac min.
Insulation Resistance (500Vdc,25°C±5%) ... Input-Output/In.-PE/Out.-PE .....	50MΩ min.
Operating Temperature Range .....	-40°C to +70°C
Derating .....	see Derating Curve
Input Voltage Derating .....	see Derating Curve
Storage Temperature Range .....	-40°C to +85°C
Cooling .....	Free Air Convection
Operating Humidity .....	Non condensing ..... 95% RH max.
Storage Humidity .....	Non condensing) ..... 95% RH max.
MTBF (MIL-HDBK-217 @25°C).....	>300.000h

## SAFETY:

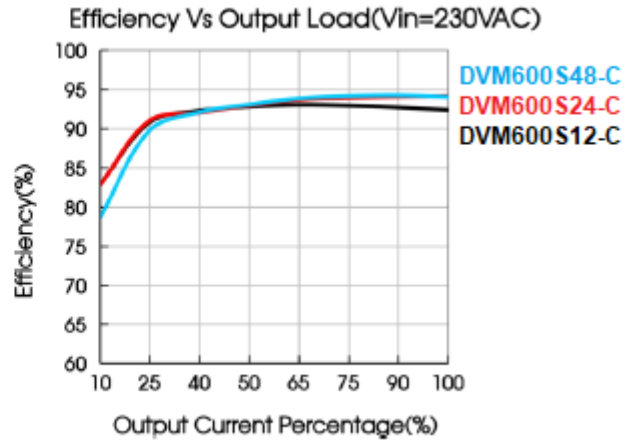
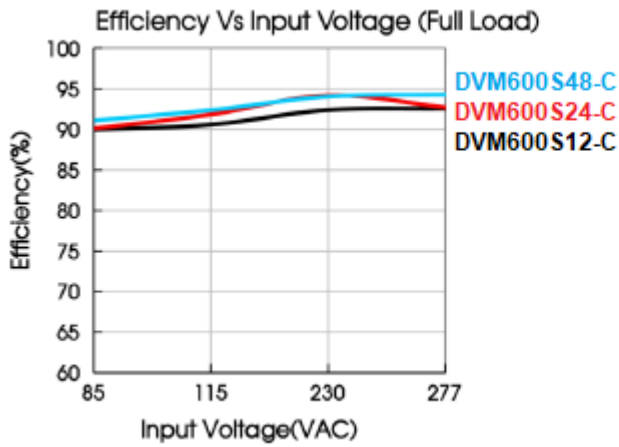
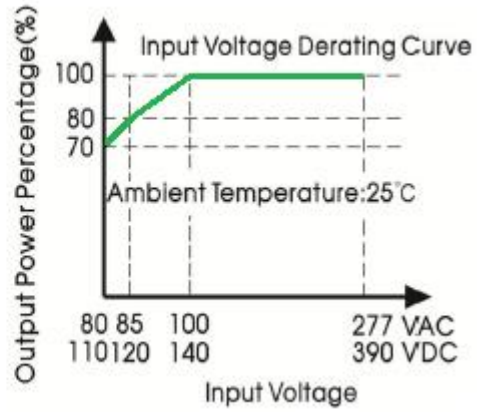
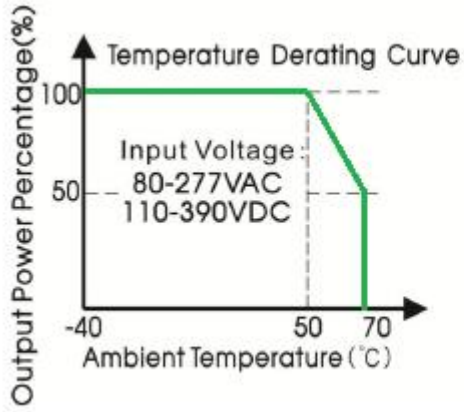
EMI.....	CE/RE Meet .....	CISPR32/EN55032 Class B
Harmonic Current Meet .....	IEC/EN61000-3-2 Class A and Class D	
Voltage Flicker Meet .....	IEC/EN61000-3-3	
Immunity Meet .....	IEC/EN61000-4-2, IEC/EN61000-4-3, IEC/EN61000-4-4, IEC/EN61000-4-5, IEC/EN61000-4-6, IEC/EN61000-4-11	
Safety Standards Meet.....	IEC/EN/UL62368-1 / EN60335 / EN61558 / IEC/EN60601	

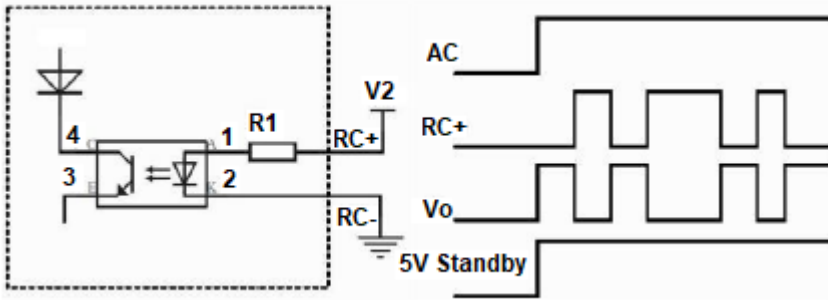
## MECHANICAL SPECIFICATIONS:

Case Material .....	Metal
Dimension.....	203,1 x 101,6 x 40,6 (mm)
Weight.....	1000g typ.

## NOTE:

1. The "Tip and barrel method" is used for ripple and noise test, (47µF electrolytic capacitor and 0,1µF ceramic capacitor) please refer to enclosure and guide rail Converter Application Notes for specific information.
2. The room temperature derating of 5°C/1000m is needed for operating altitude greater than 2000m.
3. The out case needs to be connected to PE of system when the terminal equipment in operating.
4. Unless otherwise specified, parameters in this datasheet were measured under the conditions of Ta=25°C, Humidity <75% RH with nominal input voltage and rated output load;



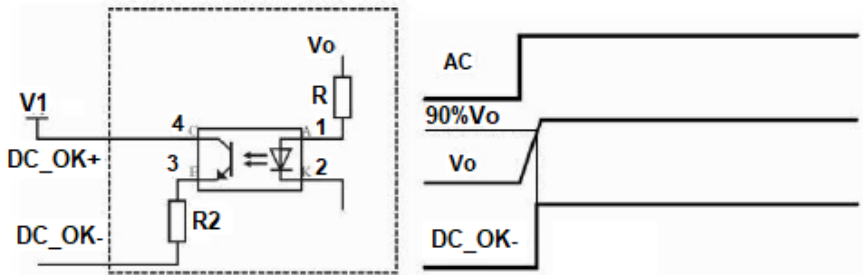


<b>R1</b> (Product Inside)	2K $\Omega$ , $\frac{1}{12}$ W
<b>V2</b> (User side)	5V-15V

**Note:**

1. When the product is working normally, apply voltage (5-15V) to RC+ and RC- to trigger the remote ON/OFF function, and the Output voltage will be of. With draw the voltage, the output voltage will be re-established;
2. 5V standby power supply is not controlled by remote ON/OFF function.

# DC OK

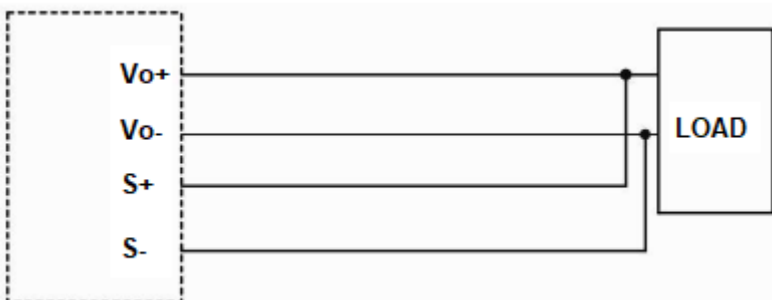


<b>R2</b> (Product Inside)	1K $\Omega$ , $\frac{1}{12}$ W
<b>V1</b> (User side)	5V-15V

**NOTE:**

1. When the output voltage of the product reaches 90% of the rated value, DC\_OK+ will be connected to DC\_OK- ;
2. It is recommended that users apply a certain voltage between DC\_OK+ and DC\_OK- to detect the signal.

# Remote SENSE Compensation



**NOTE:**

1. The left side represents the Internal schematic diagram of the product, the right side represents the customer system;
2. Twisted pair wires are needed for S+/S-

# Dimension

# Series DVM600S-C

Note:

Unit: mm [inch]

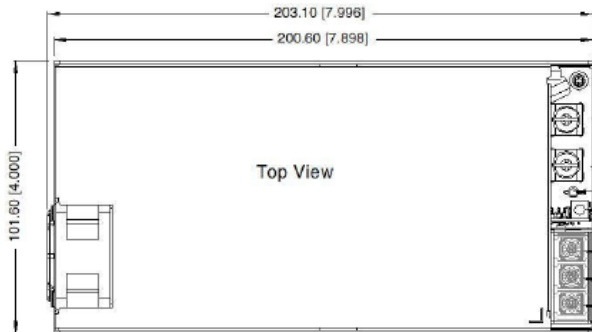
Wire range: 22-14 AWG

Input Connector tightening torque: M4, 1,2Nm ( max. )

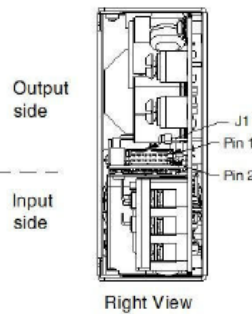
Output Connector (-Vo/+Vo) tightening torque: M5, 2,4Nm ( max. )

General tolerances: ±1.00mm [±0.039]

1-8 any position must be connected to the earth ( PE )



THIRD ANGLE PROJECTION



Pin	Pin-Out Function
A1	PE
A2	AC(L)
A3	AC(N)
A4	+Vo
A5	-Vo

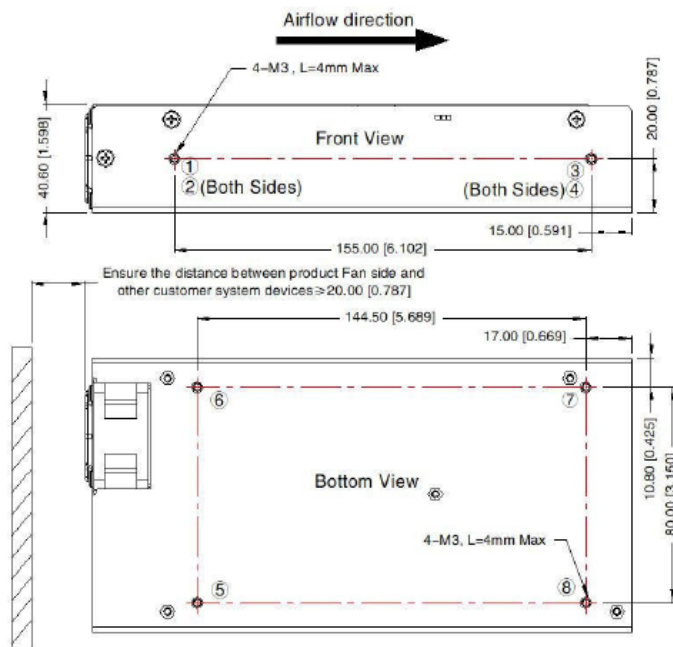


Fig.	Output Connector J1				Customer Connector
	Pin	Function	Pin	Function	
	1	-S	2	+S	MOLEX P/N 51110-1450 (without locking ramp) or 5110-1451 (with locking ramp) or equivalent
	3	NC	4	NC	
	5	DC_OK-	6	DC_OK+	
	7	+5VSB	8	5VSB_RTN	
	9	RC+	10	RC-	
	11	+5VSB	12	+5VSB	
	13	5VSB_RTN	14	5VSB_RTN	

①-⑧ any position must be connected to the earth ( PE )

Position	Screw Spec.	L(max)	Torque(max)
①-⑧	M3	4mm	0.4N · m

