

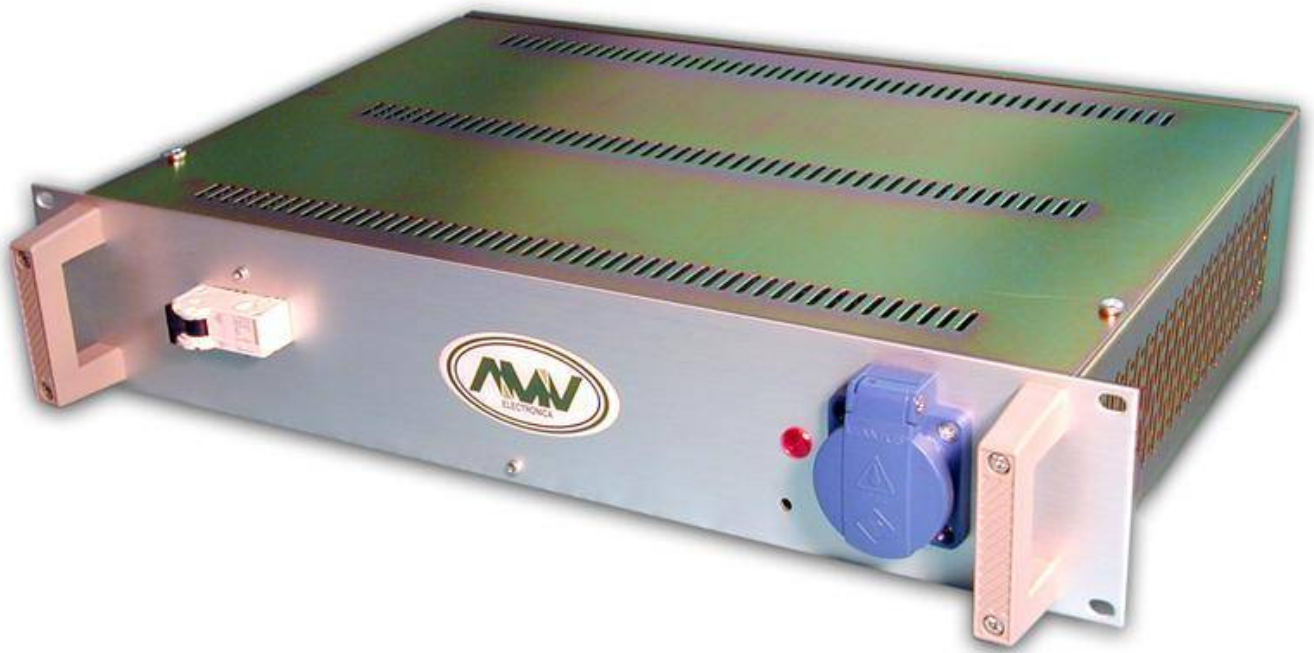


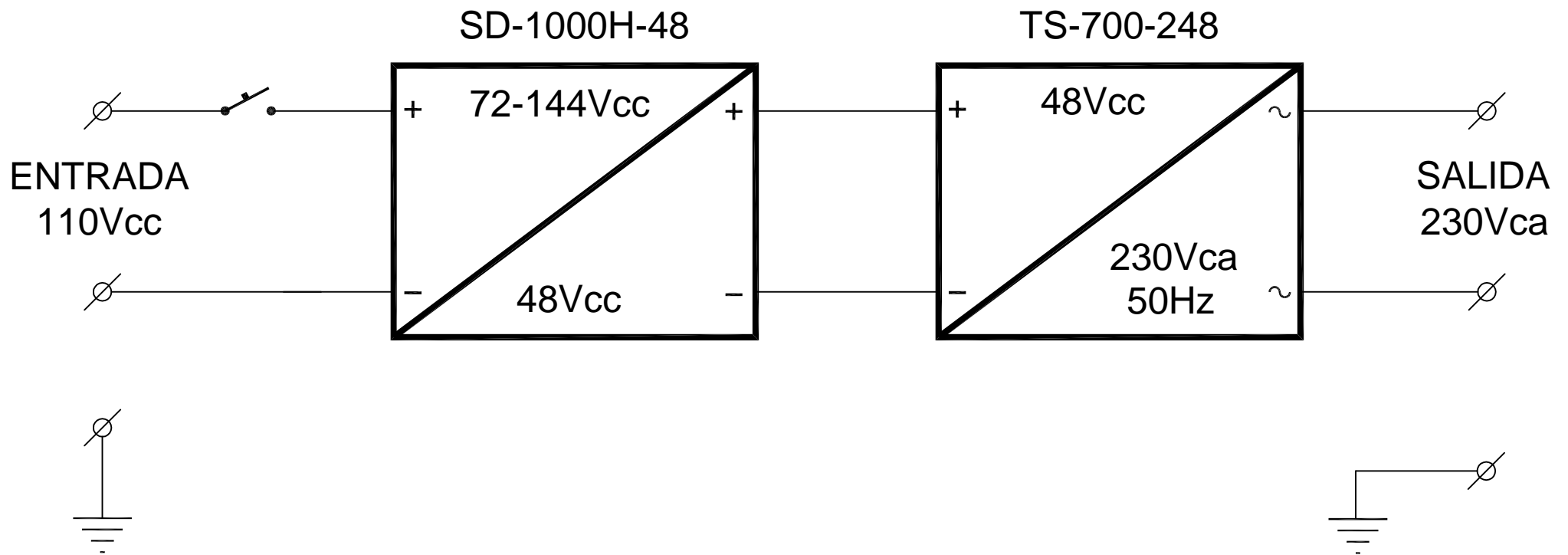
## INVERSOR SENOIDAL


MODELO AMV OND700-110-C2

Ve 110 Vcc (72 ~ 144 Vcc) / Vs 230 Vca 700W

Rack 19" 2U x 360

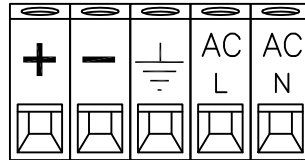




ESCALA:	MATERIAL:		ACABADO:	
APROBO	FECHA	FIRMA	 <b>DIAGRAMA EN BLOQUES DE OND700-110-C2</b>	
DIBUJO	22/7/2016	IVÁN		
AUTORIZO				
FECHA				
EDICION	1			
CODIGO: 30OND700110C2			NUMERO: 300200	

BORNES SITUADOS EN EL TRASERO DE LA CAJA

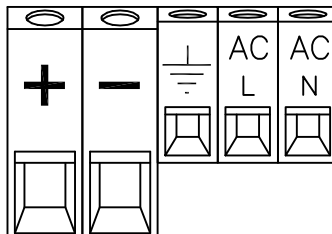
# AMV OND200/400-XX-CX



ENTRADA  
V<sub>CC</sub>


SALIDA  
230V<sub>ca</sub>  
50Hz

# AMV OND700-XX-CX



ENTRADA  
V<sub>CC</sub>

SALIDA  
230V<sub>ca</sub>  
50Hz

ESCALA:	MATERIAL:			ACABADO:		
APROBO	FECHA	FIRMA		CONEXION ENTRADA-SALIDA EQUIPO AMV OND200/400/700-XX-CX		
DIBUJO	2/2/16	IVÁN				
AUTORIZO						
FECHA	3/3/16	25/7/16				
EDICION	1	2	3			

# 1000W Single Output DC-DC Converter

# SD-1000 series



### ■ Features :

- Protections: Short circuit / Overload / Over voltage / Over temperature
- 2000VAC I/O Isolation
- Forced air cooling by built-in DC fan with fan speed control
- High power density 10.7w/inch<sup>3</sup>
- 1U low profile 41mm
- SD-1000L type input voltage design refer to LVD
- Output OK Signal
- Built-in remote ON-OFF control
- Built-in remote sense function



### SPECIFICATION

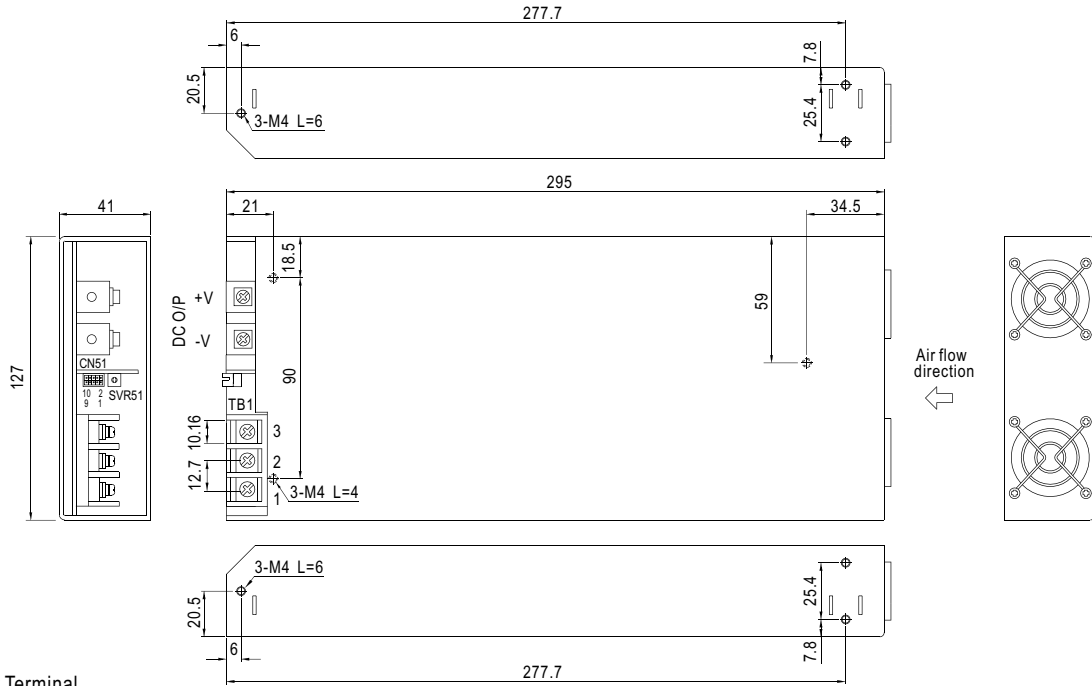
MODEL	SD-1000L-12	SD-1000L-24	SD-1000L-48	SD-1000H-12	SD-1000H-24	SD-1000H-48	
OUTPUT	DC VOLTAGE	12V	24V	48V	12V	24V	48V
	RATED CURRENT	60A	40A	21A	60A	40A	21A
	CURRENT RANGE	0 ~ 60A	0 ~ 40A	0 ~ 21A	0 ~ 60A	0 ~ 40A	0 ~ 21A
	RATED POWER	720W	960W	1008W	720W	960W	1008W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	11 ~ 15V	23 ~ 30V	46 ~ 60V	11 ~ 15V	23 ~ 30V	46 ~ 60V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
SETUP, RISE TIME	500ms, 50ms at full load						
INPUT	VOLTAGE RANGE Note.5	19 ~ 72VDC			72 ~ 144VDC		
	EFFICIENCY (Typ.)	84%	88%	90%	85%	89%	91%
	DC CURRENT (Typ.)	23.5A/48VDC			11.6A/96VDC		
	INRUSH CURRENT (Typ.)	-----			100A/96VDC		
PROTECTION	OVERLOAD	105 ~ 125% rated output power Protection type : Constant current limiting, unit will shut down o/p voltage about 5sec. Re-power on to recover					
	OVER VOLTAGE	16 ~ 19V	30.8 ~ 35.2V	62 ~ 68V	16 ~ 19V	30.8 ~ 35.2V	62 ~ 68V
	OVER TEMPERATURE	85°C ±5°C (TSW2) detect on heatsink of O/P diode; 75°C ±5°C (TSW1) detect on heatsink of power transistor Protection type : Shut down o/p voltage, recovers automatically after temperature goes down					
FUNCTION	REMOTE ON/OFF CONTROL	Please refer to function manual					
	OUTPUT OK SIGNAL	Open collector signal low when PSU turns on, Max. sink current : 10mA					
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.02%/°C (0 ~ 50°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 4)	SAFETY STANDARDS	IEC60950-1 CB approved by TUV					
	WITHSTAND VOLTAGE	I/P-O/P:2KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC 25°C 70%RH					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22)					
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,6,8; ENV50204, light industry level, criteria A					
OTHERS	MTBF	32K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	295*127*41mm (L*W*H)					
	PACKING	1.94Kg; 6pcs/12.6Kg/0.99CUFT					
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 48,96VDC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> <li>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</li> </ol>						

# 1000W Single Output DC-DC Converter

# SD-1000 series

## Mechanical Specification

Case No. 952B Unit:mm



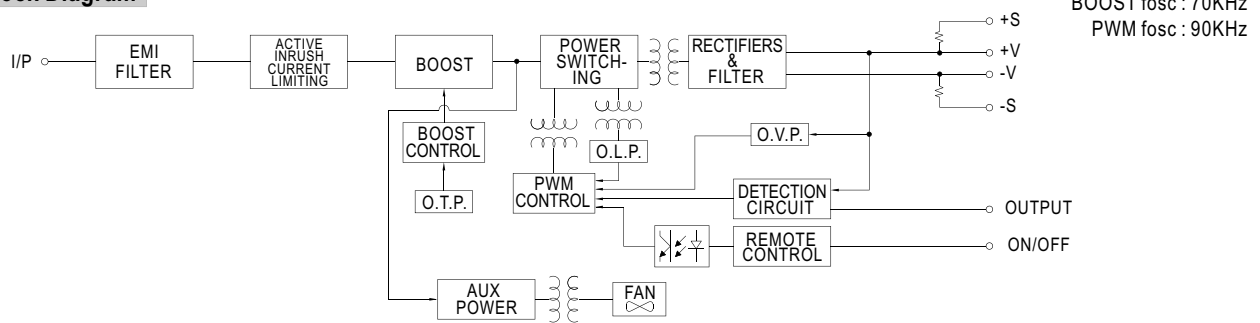
DC Input Terminal  
Pin No. Assignment

Pin No.	Assignment
1	DC INPUT V+
2	DC INPUT V-
3	FG $\equiv$

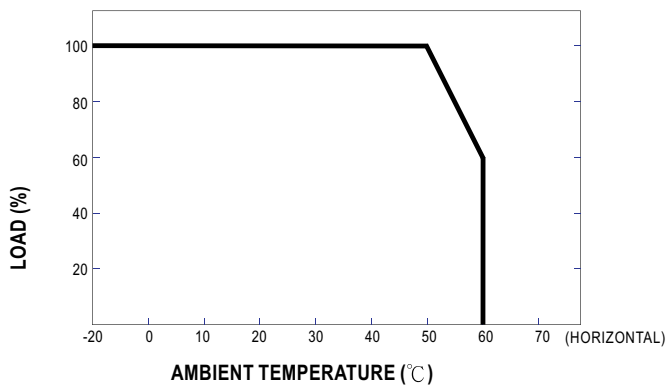
Control pin number assignment (CN51) : JST B10B-PHDSS or equivalent

Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
1	+S	5	AUX	9	RCG	JST PHDR-10VS or equivalent	JST SPHD-002T-P0.5 or equivalent
2	-S	6	AUXG	10	NC		
3	OUTPUT OK	7	RC1				
4	GND	8	RC2				

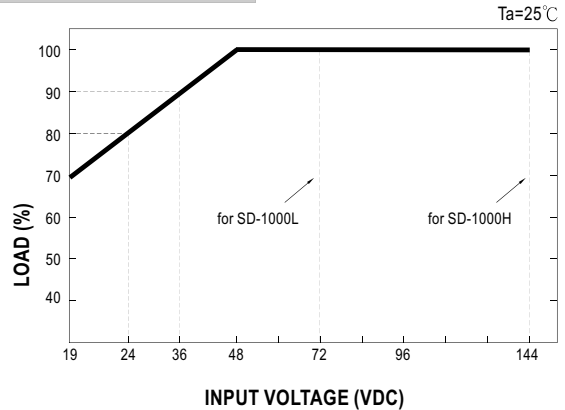
## Block Diagram



## Derating Curve



## Static Characteristics



■ **Function Description of CN51**

Pin No.	Function	Description
1	+S	Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
2	-S	Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
3	O/P OK	Open collector signal, referenced to pin4(GND). Low when PSU turns on. The maximum sink current is 10mA and the maximum external voltage is 13V.
4	GND	These pins connect to the negative terminal (-V).
5	AUX	Auxiliary voltage output, 10.8~13.2V referenced to pin6(AUXG).The maximum load current is 0.25A.
6	AUXG	Auxiliary voltage output ground. The signal return is isolated from the output terminals(+V & -V).
7	RC1	Remote ON/OFF
8	RC2	Remote ON/OFF
9	RCG	Remote ON/OFF ground
10	NC	No connection

■ **Function Manual**

**1.Remote ON/OFF**

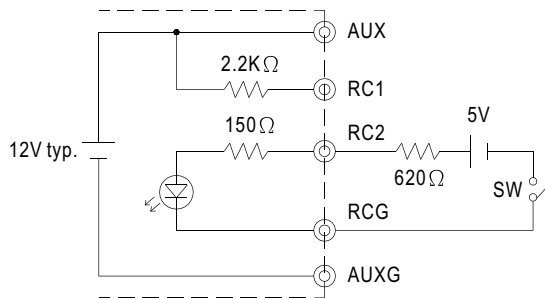
- (1) Remote ON/OFF control becomes available by applying voltage in CN51
- (2) Table 1.1 shows the specification of Remote ON/OFF function
- (3) Fig.1.2 shows the example to connect Remote ON/OFF control function

Table 1.1 Specification of Remote ON/OFF

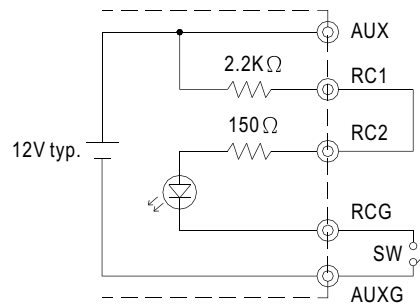
Connection Method	Fig. 1.2(A)	Fig. 1.2(B)	Fig. 1.2(C)
SW Logic	Output on	SW Open	SW Close
	Output off	SW Close	SW Open

Fig.1.2 Examples of connecting remote ON/OFF

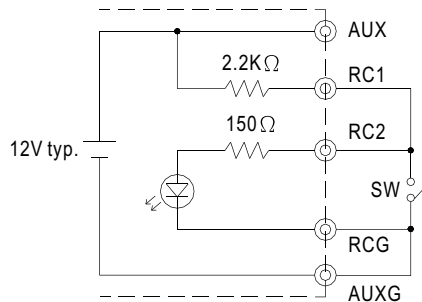
(A) Using external voltage source



(B) Using internal 12V auxiliary output



(C) Using internal 12V auxiliary output



## 2. Output OK signal

"Output OK" is an open collector signal. It indicates the output status of the PSU. It can operate in two ways : One is sinking current from external signal ; the other is sending out a voltage signal.

### 2-1 Sink current :

The maximum sink current is 10mA and the maximum external voltage is 13V.

### 2-2 Voltage signal :

Between O/P OK(pin3) and GND(pin4)	Output Status
0 ~ 0.5V	ON
12 ~ 13V	OFF

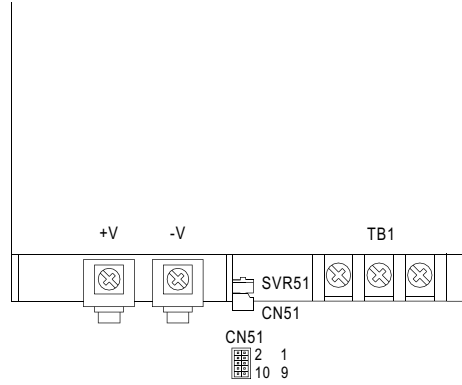
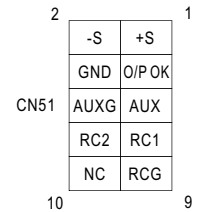


Fig 2.1



## 3. Remote Sense

The remote sensing compensates voltage drop on the load wiring up to 0.5V.

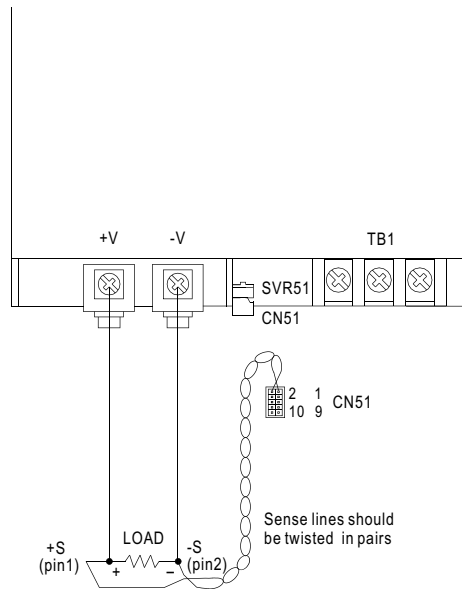
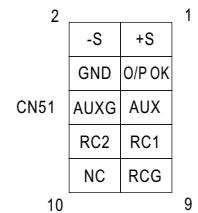


Fig 3.1



## 700W True Sine Wave DC-AC Power Inverter

# TS-700 series



### ■ Features :

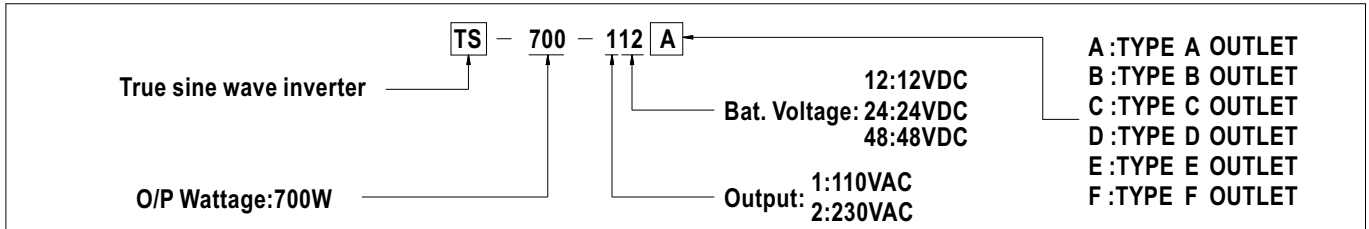
- True sine wave output (THD<3%)
- High surge power up to 1400W
- High efficiency up to 91%
- Power ON-OFF switch
- Standby saving mode can be selectable
- Front panel indicator for operation status
- Built-in fan ON-OFF control function
- Protections: Bat. low alarm / Bat. low shutdown / Over voltage / Over temp. / Output short / Reverse polarity / Overload
- Application : Home appliance, power tools, office and portable equipment, vehicle and yacht ...etc.



### SPECIFICATION

MODEL	TS-700-112□	TS-700-124□	TS-700-148□	TS-700-212□	TS-700-224□	TS-700-248□		
OUTPUT	RATED POWER (Typ.) 700W							
	MAXIMUM OUTPUT POWER (Typ.) 800W for 180 sec. / 1050W for 10 sec. / surge power 1400W for 30 cycles							
	AC VOLTAGE			AC VOLTAGE				
	Factory setting set at 110VAC			Factory setting set at 230VAC				
	100 / 110 / 115 / 120VAC selectable by setting button S.W			200 / 220 / 230 / 240VAC selectable by setting button S.W				
	FREQUENCY 60±0.1Hz 50/60Hz selectable by setting button S.W							
	50±0.1Hz 50/60Hz selectable by setting button S.W							
	WAVEFORM True sine wave (THD<3%) at rated input voltage							
AC REGULATION (Typ.) ±3.0%								
SAVING MODE (Typ.) Load ≤ 5W will be changed to standby mode								
FRONT PANEL INDICATOR Battery voltage level, output load level, saving mode, fault and operation status								
INPUT	BAT. VOLTAGE		12V	24V	48V	12V	24V	48V
	VOLTAGE RANGE (Typ.) <sup>Note.3</sup>		10.5 ~ 15VDC	21 ~ 30VDC	42 ~ 60VDC	10.5 ~ 15VDC	21 ~ 30VDC	42 ~ 60VDC
	DC CURRENT (Typ.)		75A	38A	19A	75A	38A	19A
	NO LOAD DISSIPATION ≤ 6W @ standby saving mode							
	OFF MODE CURRENT DRAW ≤ 1mA							
	EFFICIENCY (Typ.) <sup>Note.1</sup>		86%	88%	89%	89%	90%	91%
	BATTERY TYPES Open & sealed Lead Acid							
BATTERY INPUT PROTECTION	FUSE		40A*3	30A*2	20A*2	40A*3	30A*2	20A*2
	BAT. LOW ALARM		11.3±4%	22.5±4%	45±4%	11.3±4%	22.5±4%	45±4%
	BAT. LOW SHUTDOWN		10.5±4%	21±4%	42±4%	10.5±4%	21±4%	42±4%
	BAT. POLARITY By internal fuse open							
OUTPUT PROTECTION	OVER TEMPERATURE			OVER TEMPERATURE				
	80°C ± 5°C			75°C ± 5°C				
	Protection type : Shut down o/p voltage, re-power on to recover; by internal RTH3 detect on heatsink of power diode							
	OUTPUT SHORT Protection type : Shut down o/p voltage, re-power on to recover							
OVER LOAD (Typ.) 105 ~ 115% load for 180 sec., 115% ~ 150% load for 10 sec.								
Protection type : Shut down o/p voltage, re-power on to recover								
GFCI PROTECTION Optional (Only type F) None								
ENVIRONMENT	WORKING TEMP. <sup>Note.4</sup>		0 ~ +40°C @ 100% load ; +60°C @ 50% load					
	WORKING HUMIDITY 20% ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY -30 ~ +70°C / -22 ~ +158°F, 10 ~ 95% RH							
	VIBRATION 10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes							
SAFETY & EMC	SAFETY STANDARDS			SAFETY STANDARDS				
	Design refer to UL458			None				
	LVD			LVD				
	None			EN60950-1				
	WITHSTAND VOLTAGE Bat I/P - AC O/P:3.0KVAC AC O/P - FG:1.5KVAC							
	ISOLATION RESISTANCE AC O/P-FG , Bat I/P-FG:100M Ohms / 500VDC / 25°C / 70% RH							
EMI CONDUCTION&RADIATION				EMI CONDUCTION&RADIATION				
Compliance to FCC class A				Compliance to EN55022 class A, 72/ 245/ CEE, 95/ 54/ CE, E-Mark				
EMS IMMUNITY								
None								
Compliance to EN61000-4-2,3,8 ENV50204								
OTHERS	MTBF 74.4K hrs min. MIL-HDBK-217F (25°C)							
	DIMENSION 295*184*70mm (L*W*H)							
	PACKING 3.8Kg; 2pcs/8.6Kg/1.02CUFT							
NOTE	1.Efficiency is tested by 530W, linear load at 13V, 26V, 52V input voltage. 2.All parameters not specified above are measured at rated load, 25°C of ambient temperature. 3.Output derating capacity referenced by curve 1. 4.Output derating capacity referenced by curve 2.							

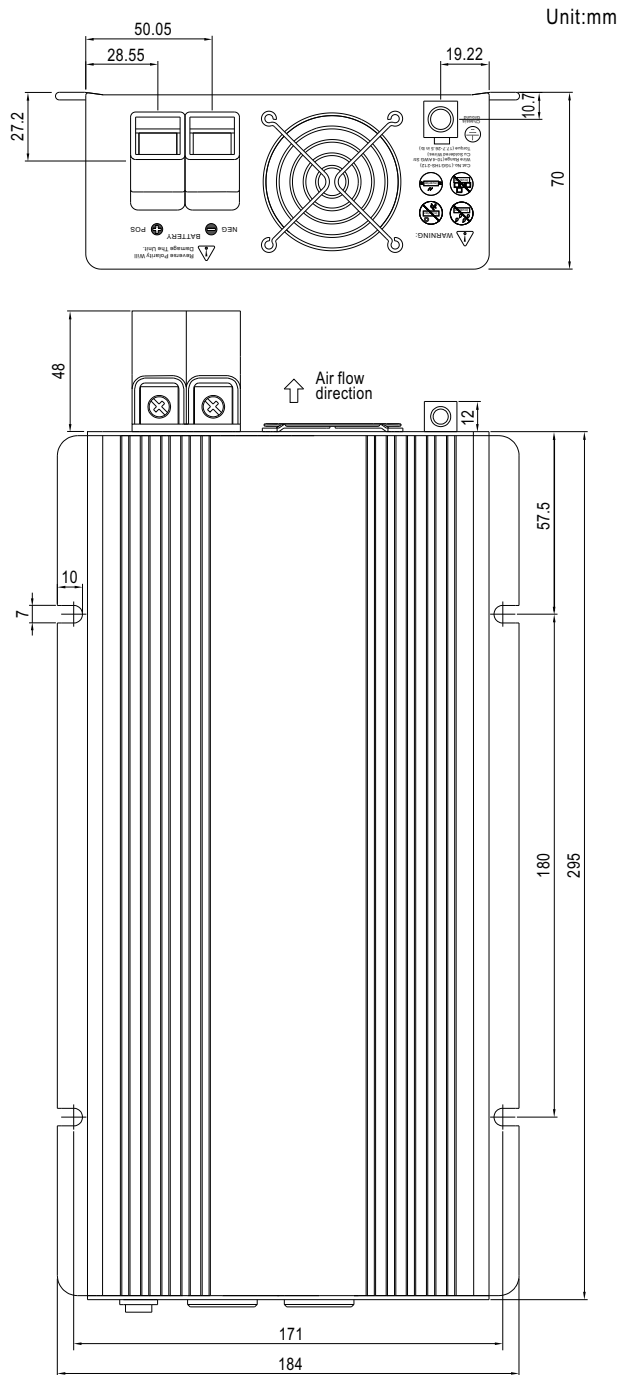




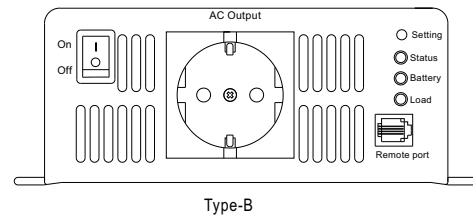
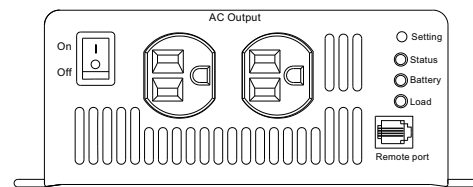
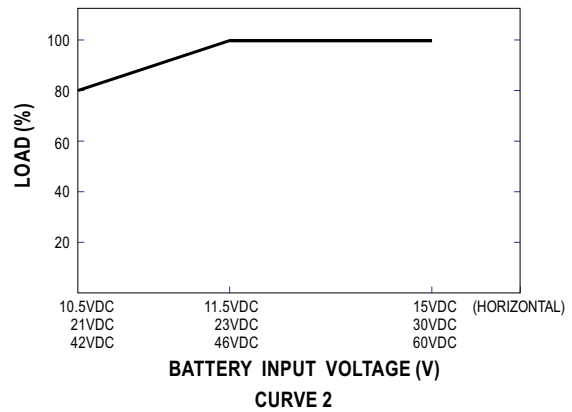
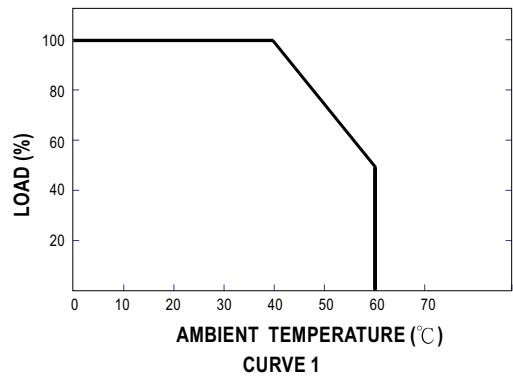
**AC Output Receptacles (optional)**

Receptacle type						
Country	USA	EUROPE	AUSTRALIA	U.K	JAPAN	GFCI
Certificate	<b>FC</b>	<b>E13 CE</b>	<b>E13 CE</b>	<b>E13 CE</b>	<b>FC</b>	<b>FC</b>

**Mechanical Specification**



**Derating Curve**





C/ NAVA Nº 7 BAJO  
33207 GIJON (ASTURIAS)  
TFNO 985 319171 FAX 985 346795  
Email: [amv@amvelectronica.com](mailto:amv@amvelectronica.com)

[www.amvelectronica.com](http://www.amvelectronica.com)

# GARANTIA

TODOS LOS EQUIPOS FABRICADOS POR **AMV ELECTRÓNICA** SALEN DE NUESTROS TALLERES AJUSTADOS, NUMERADOS Y CON DOCUMENTACIÓN TÉCNICA, **SIENDO LA GARANTIA TOTAL DE 2 AÑOS.**

LA GARANTÍA CUBRE LAS SITUACIONES DE DAÑO INTRÍNSECO, Y NO LAS PROVOCADAS POR CAUSAS EXTERNAS O LA MANIPULACIÓN POR PARTE DEL USUARIO.

LA GARANTÍA SE ENTIENDE EN NUESTROS TALLERES, SIENDO POR CUENTA DEL USUARIO LOS COSTES DEL TRANSPORTE.

**AMV ELECTRONICA**

## TELEFONOS & E-MAIL DE CONTACTO

DEPARTAMENTO	RESPONSABLE	Teléfono	e-MAIL
Comercial y Ventas	Gracia Nomparte	985319171 Ext. 10	<a href="mailto:gracia@amvelectronica.com">gracia@amvelectronica.com</a>
Ingeniería	Víctor Viña	985319171 Ext. 18	
Producción	Jenaro Blanco		<a href="mailto:compras@amvelectronica.com">compras@amvelectronica.com</a>
Servicio de Asistencia Técnica	Alejandro Arce	985319171 Ext. 17	<a href="mailto:sat@amvelectronica.com">sat@amvelectronica.com</a>
Administración	Laura Granda	985319171 Ext. 12	<a href="mailto:administracion@amvelectronica.com">administracion@amvelectronica.com</a>