

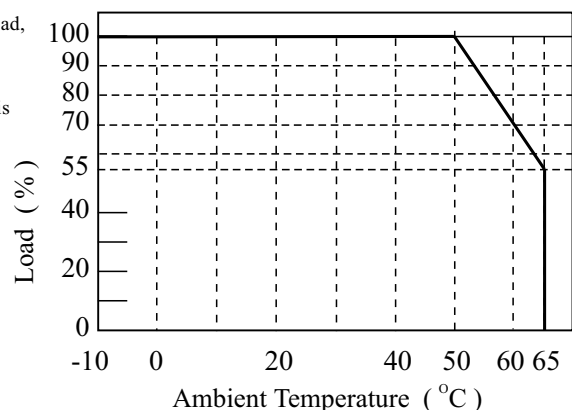
Items		Model	EWS 300P - 2	EWS 300P - 3	EWS 300P - 5	EWS 300P - 12	EWS 300P - 15	EWS 300P - 24	EWS 300P - 28	EWS 300P - 48	Rev
1	Nominal Output Voltage	V	2	3.3	5	12	15	24	28	48	A
2	Maximum Output Current	A	60	60	60	27	22	14	12	7	A
3	Maximum Output Power	W	120	198	300	324	330	336	336	336	A
4	Efficiency ( Typ )	(*1) %	58 / 61	66 / 70	71 / 75	77 / 81	77 / 81	78 / 82	78 / 82	79 / 83	E
5	Input Voltage Range	(*2) -	85 ~ 265VAC (47 ~ 63Hz) PFHC Range: 85 ~ 255VAC								
6	Input Current (Typ)	(*1) A	100VAC- 2.4A 200VAC- 1.2A	100VAC- 3.2A 200VAC- 1.6A	100VAC ... 4.6A 200VAC ... 2.3A						C
7	Power Factor (min)	(*1) -	0.95								
8	In-rush Current (Typ)	(*3) A	15A at 100VAC / 30A at 200VAC								
9	Output Voltage Range (Typ)	%	-10 ~ +20			$\pm 20$					A
10	Max. Ripple & Noise	0~+65°C	100			200				400	E
		-10~0°C	140			200				400	
11	Max. Line Regulation	(*4) mV	10	10	10	24	30	48	56	96	A
12	Max. Load Regulation	(*5) mV	20	20	20	48	60	96	112	192	A
13	Over Current Protection	(*6) A	63.0 ~ 78.0	63.0 ~ 78.0	63.0 ~ 78.0	28.4 ~ 35.1	23.1 ~ 28.6	14.7 ~ 18.2	12.6 ~ 15.6	7.3 ~ 9.1	A
14	Over Voltage Protection	(*7) V	2.8 ~ 3.6	4.6 ~ 5.6	6.3 ~ 7.3	15.0 ~ 17.4	18.8 ~ 21.8	30.0 ~ 34.8	35.0 ~ 40.6	60.0 ~ 69.6	C
15	Hold-up Time (Typ)	(*8) mS	20								
16	Remote Sensing	-	POSSIBLE ( Refer to Instruction Manual )								
17	Remote ON / OFF Control	-	POSSIBLE ( Refer to Instruction Manual )								
18	Parallel Operation	-	POSSIBLE ( Refer to Instruction Manual )								
19	Series Operation	-	POSSIBLE ( Refer to Instruction Manual )								
20	Operating Temperature	°C	-10 ~ + 65 ( Refer to derating curve )								C
21	Operating Humidity	%	30 ~ 90% RH ( No dewdrop )								
22	Storage Temperature	°C	-30 ~ + 85								
23	Storage Humidity	%	10 ~ 95% RH ( No dewdrop )								
24	Cooling	-	Forced air by blower fan ( Blower fan is mounted within unit )								
25	Temperature Coefficient (Typ)	%	Less than 1% at -10 ~ + 65 °C								C
26	Withstand Voltage	(*9) KV	Input - Chassis ... 2.0KVAC 1 min. Input - Output ... 3.0KVAC 1 min. Output - Chassis ... 500VAC 1 min.								
27	Isolation Resistance	Ω	More than 100M Ω at 25 °C and 70% RH Output - Chassis ...500 VDC								
28	Safety	-	Built to meet : EN60950, UL1950, CSA 950, DENTORI								C
29	Conducted EMI	-	EN55022-B, FCC-B, VCCI-2								C
30	Monitoring Signal	-	PF ( Open Collector Output )								
31	Vibration	G	At no operating, 10 ~ 55Hz Amplitude ( sweep for 1 min ) 2G constant X,Y,Z, 1 Hr. each								
32	Shock	G	Less than 20G								
33	Weight	kg	2.2								
34	Size ( W.H.D. )	mm	120 x 92 x 190 ( Refer to Outline Drawing )								

NOTES

- \*1 : At 100V / 200VAC & Maximum Output Power.
- \*2 : For cases where conformance to various safety specs. ( UL, IEC, etc.) are required, to be described as 100 - 240VAC ( 50 / 60Hz ) on name plate.
- \*3 : First in-rush current. When resuming operation in less than 10 sec. after power failure at no load, softstart circuit will not limit the in-rush current at turn-on.
- \*4 : From 85 ~ 132VAC or 170 ~ 265VAC, constant load.
- \*5 : From No load ~ full load, constant input voltage.
- \*6 : Current limiting with automatic recovery. Power supply will shut down if overload condition is maintained for more than 20sec.
- \*7 : Inverter shut down method, manual reset. ( OVP circuit will shut down output )
- \*8 : At 100V / 200VAC, nominal output voltage and maximum output current.
- \*9 : Leakage current range used : Input - Chassis greater than 20mA, Input - Output greater than 20mA Output - Chassis greater than 100mA.

C

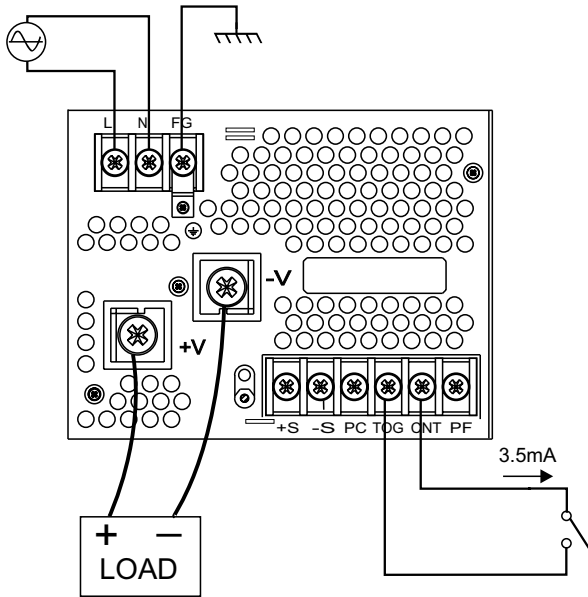
Derating Curve



DWG No: IA523 - 04-01F			
DWG.		CHK.	
ENGR.		APPR.	

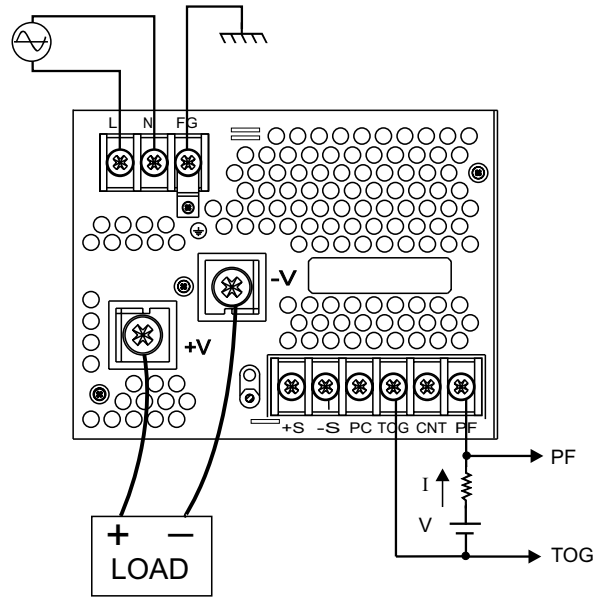
# CONNECTIONS FOR OPERATION

## 1. Remote ON / OFF



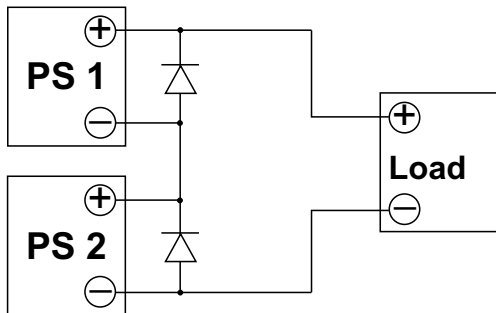
CNT: Short to TOG or TTL 'L'  
 ( 0.8V max ) : P.S ON  
 Open or TTL 'H' ( 2V min ): P.S OFF  
 ( max. voltage to CNT: 30V )

## 2. PF SIGNAL

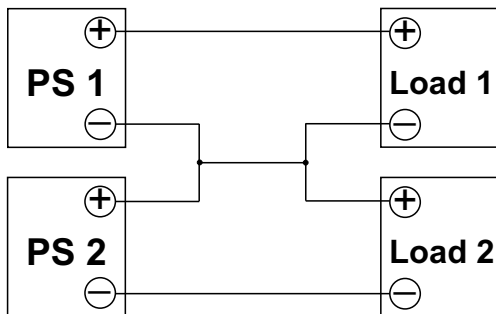


Output voltage within spec: PF=0~0.8V  
 Output voltage below 65% of nominal  
 output: PF= V  
 ( MAX I = 2mA, MAX V = 15V )  
 ( TOG can be connected to +V, -V potential )

## 3. SERIES OPERATION

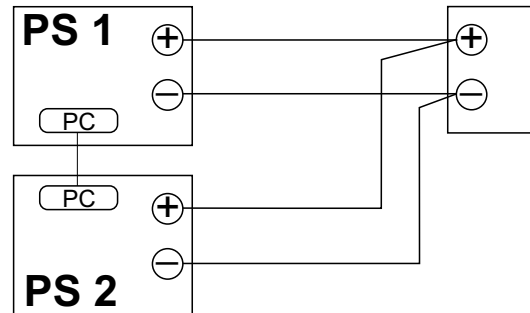


A) Connection for high output voltage



B) Connection for + / - polarity

## 4. PARALLEL OPERATION

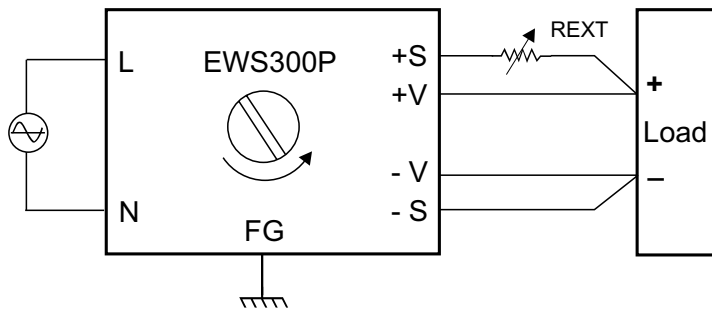


Notes:

1. PS1 and PS2 should be adjusted within 1% or 100mv difference (whichever is smaller) between outputs prior to connection.
2. Minimum load of 10% of the rated output power should be maintained at Parallel Operation.
3. Voltage drop on load wires should be balanced.
4. Total load current should be less than  $N \times (0.9 \times I_o \text{ max})$  of each PS. (N = number of parallel power supplies).
5. Output power of each PS should not exceed the maximum stated in the specifications.
6. Maximum 5 units of the same output voltage can be paralleled.

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DRAWN	ENGR.	CHECKED	APPROVED

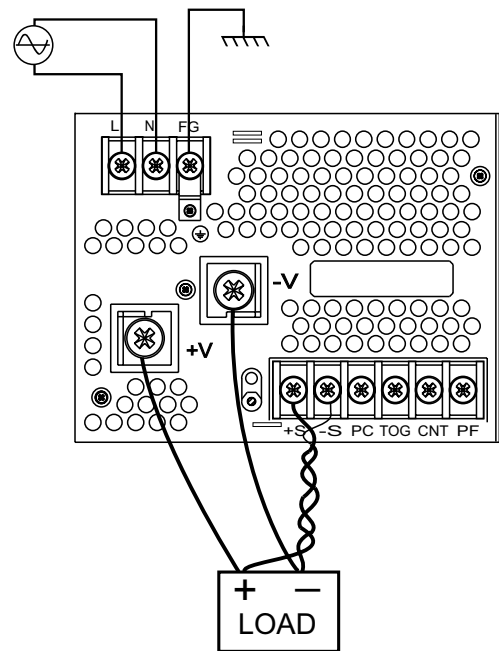
## 5. REMOTE PROGRAMMING



### NOTE

Adjust REXT to its minimum, adjust Vout to its minimum according to the specification using Vout adjust trimmer. Now Vout can be adjusted using REXT with typical 1V / KΩ .

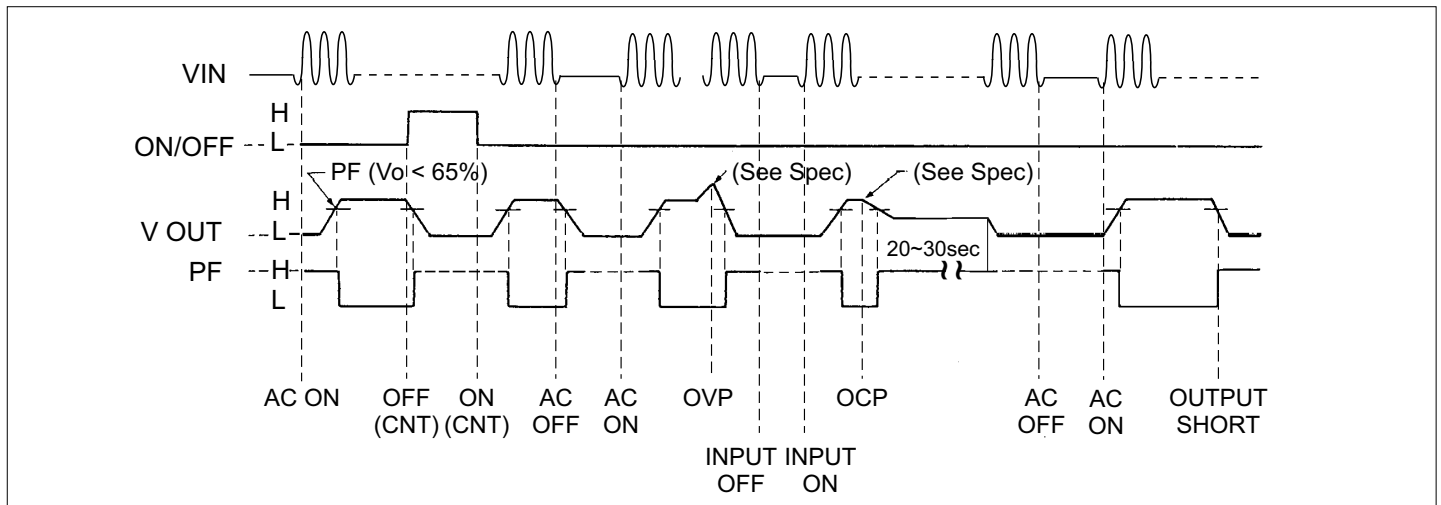
## 6. REMOTE SENSING



### NOTES

1. Twist the sensing wires or use shielded wires to minimize noise interference.
2. The output voltage at + / -V terminals of the P. Supply should be kept within the specifications.

## SEQUENCING CHART



### SAFETY INSTRUCTIONS

1. Fuse rating: T10A 250V
2. Power supply must be secured to the chassis of the end use equipment by 4 screws, inserted into threaded holes in the mounting surface of the power supply enclosure. ( Refer to outline drwg. )
3. Max. leakage current of the end use equipment should not exceed 3.5mA.
4. The following modules are capable of providing hazardous energy (>240VA) according to output voltage setting. Manufacturers final equipment must provide protection to service personnel against inadvertent contact with these module output terminals. If set such that hazardous energy can occur then the module terminals or connections therefore must not be user accessible.

**CAUTION: FUSE MUST BE REPLACED BY AUTHORIZED SERVICE PERSONNEL ONLY!**

### CE MARK

1. EWS300P Series is intended for professional installation within host equipment and must not be used as a stand alone product.
2. CE marking, when applied to a product covered by this manual indicates compliance with the Low Voltage Directive only.

### SICHERHEITSHINWEISE

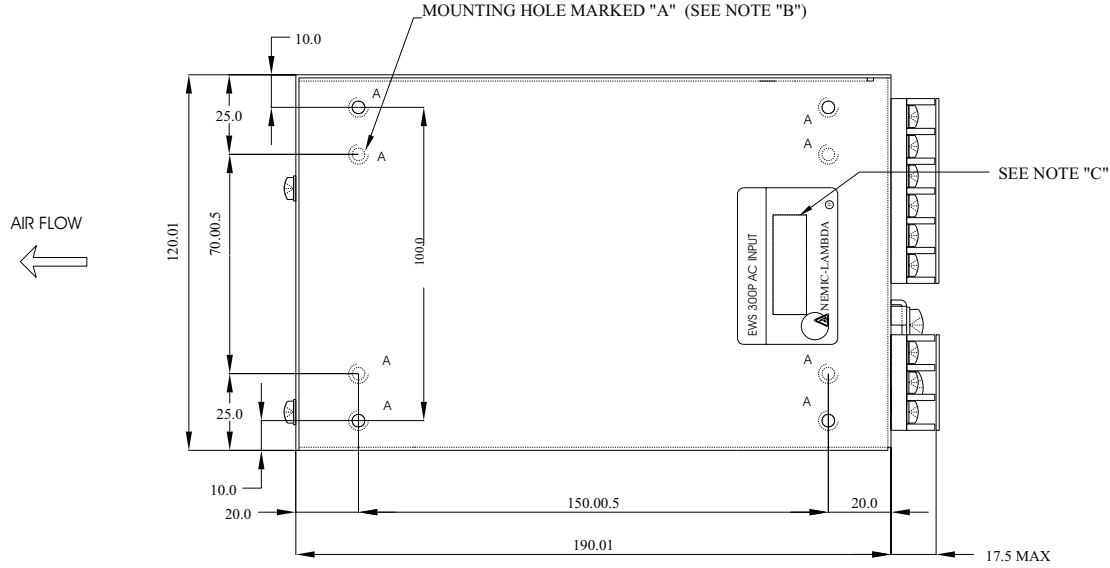
Vor Anschluss an das Netz Aufstellanleitung beachten!

1. Absicherung: T10A / 250VAC
2. Die Befestigung des Netzgeraetes in der End-Anlage erfolgt durch 4 Schrauben. Im Netzteil eingesetzte Einpressmuttern auf der Befestigungsseite muessen verwendet werden. (siehe Masszeichnung)
3. Der maximale Ableitstrom der End-Anlage darf 3.5mA nicht ueberschreiten.

**ACHTUNG:  
AUSTAUSCH DES SICHERUNGSEINSATZES NUR  
DURCH GESCHULTES FACHPERSONAL!**

DWG. No.	IA523 - 04 - 03D		
DRAWN	ENGR.	CHECKED	APPROVED
Marie Orian			

# OUTLINE DRAWING EWS300P

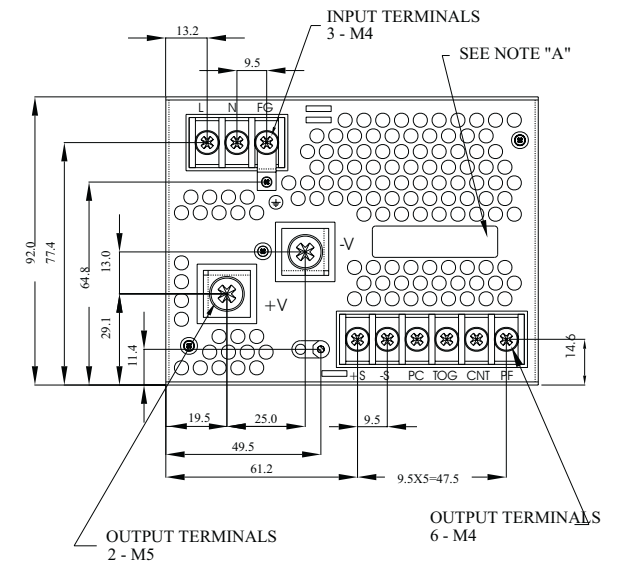
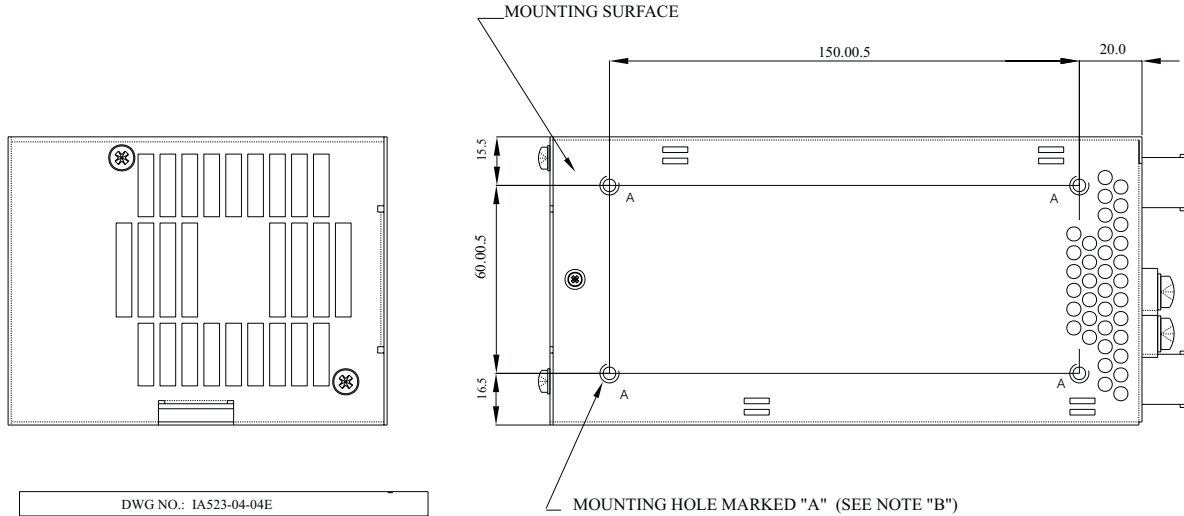


## ACCESSORIES

1. COVER FOR BARRIER TERMINAL STRIP ----2 (MOUNTED ON TERMINALS AT TIME OF SHIPMENT)
2. METAL BAR FOR SHORTING ACG AND FG---1 (MOUNTED AT TERMINAL STRIP AT TIME OF SHIPMENT)
3. METAL BAR FOR SHORTING TOG AND CNT---1 (MOUNTED AT TERMINAL STRIP AT TIME OF SHIPMENT)
4. SENSING WIRES -----2 (RED: +, BLAK: -)

## NOTES

- A. MODEL NAME, NOMINAL OUTPUT VOLTAGE AND MAXIMUM OUTPUT CURRENT ARE SHOWN HERE ACCORDING TO THE SPECIFICATIONS.
- B. M4 TAPPED HOLE FOR CHASSIS MOUNTING.(16 HOLES) (SCREWS MUST NOT PROTRUDE INTO P.S MORE THAN 6 mm)
- C. AC INPUT INFORMATION WILL BE SHOWN HERE ACCORDING TO SPECIFICATIONS.
- D. UL MARK : FOR ALL VOLTAGES  
 UL-C MARK : FOR ALL VOLTAGES  
 CE MARK : FOR ALL VOLTAGES  
 TUV MARK : FOR ALL VOLTAGES



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