

25 WATT AC-DC CONVERTER

VTA-SZ Series



Features

1. High reliability
2. High efficiency
3. Inrush-current protection built in

Options

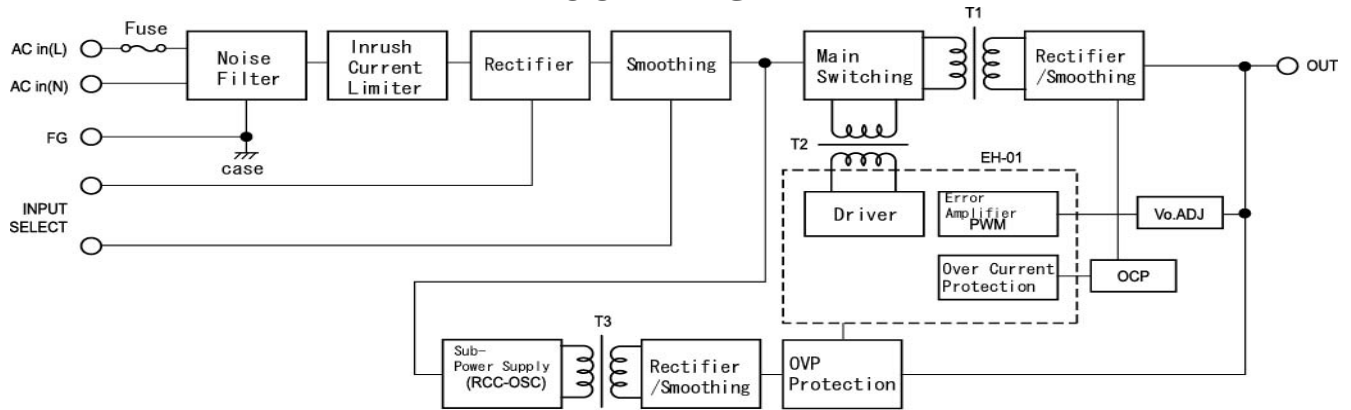
Terminal cover (ordered separately)

General Description

VT is the basic series of switching power supplies manufactured by ETA Electric Industry. 188 different models are available. Output power ranges from 10W to 600W. 50 models have dual outputs; 33 models are designed with triple outputs. Input selectable ("SZ") models conform to local power conditions.

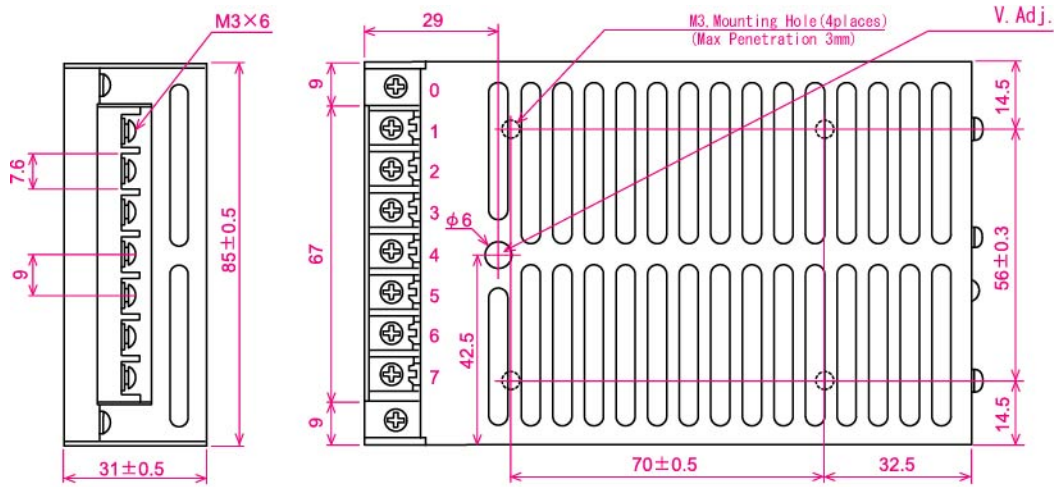
Specifications<AC/DC>	Model				
VTA**SZ 25WATTS/SINGLE OUTPUT	VTA05SZ	VTA12SZ	VTA15SZ	VTA24SZ	VTA48SZ
Input Characteristic					
Input Voltage	AC100V/200V				
Input Range	AC90-132V/180-264V				
Input Frequency	50/60Hz				
Input Frequency Range	47 -440Hz				
Phase	Single				
Inrush Current *1	30A(maximum) at rated input/output				
Efficiency [%] (typical) *2	76	79	80	80	80

BLOCK DIAGRAM



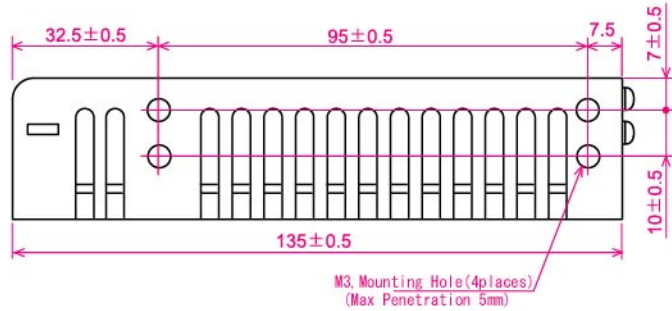
Specifications<AC/DC>	Model				
	VTA**SZ 25WATTS/SINGLE OUTPUT	VTA05SZ	VTA12SZ	VTA15SZ	VTA24SZ
Output Characteristic					
Output Voltage [V]	5	12	15	24	48
Output Current [A]	5.0	2.1	1.7	1.1	0.5
Voltage Adjust Range	+/-10% of Rated Output Voltage(at no load within input range)				
Ripple and Noise [mVp-p](maximum) *3	100	170	200	290	530
Regulation					
a.Statistic Line Regulation [mV](maximum)	40	96	120	192	384
b.Statistic Load Regulation [mV](maximum)	45	108	135	216	432
c.Temperature Coefficient *4	0.03%/°C				
d.Drift[mV](maximum) *5	40	75	90	135	255
e.Dynamic Load Regulation [mV](typical) *6	150	360	450	720	1440
f.Recovery Time *6	0.5mS(typical)				
Rise up time	100mS(maximum) at 25°C and rated input/output				
Hold up time	20mS(minimum) at 25°C and rated input/output				
Functions					
Overcurrent Protection	Current Limiting with automatic recovery				
Overvoltage Protection	output shutdown				
Remote Sense	not available				
Remote On/Off	not available				
Environmental					
Operating Temperature	0 to +50°C				
Operating Humidity	85%RH(non-condensing)				
Storage Temperature	-20 to +85°C				
Storage Humidity	30 to 85%RH(non-condensing)				
Withstanding Voltage	Primary-Secondary AC2,500Vfor 1minute				
	Primary-Frame Ground AC2,500V for 1minute				
	Secondary-Frame Ground AC500V for 1minute				
Isolation Resistance	Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation tester				
Vibration	5-10Hz:10mm double amplitude,10-55Hz:19.6m/s ² ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)				
Shock	294m/s ²				
Cooling	Convection				
Leakage Current	1.0mA(maximum)				
Line Conduction Noise	Not specified				
Safety	-				
Weight (typical)	350g				
MTBF [H]	650,000				
Switching Frequency[kHz](typical)	65				

DIMENSION DIAGRAM



Pin Assignments

SA · SB	SZ
0 FG	0 FG
1 AC in	1 Input select
2 AC in	2 Input select
3 LFG	3 AC in
4 NC	4 AC in
5 NC	5 FG
6 -V out	6 -V out
7 +V out	7 +V out



VTA_SA/SB