

25 WATT AC-DC CONVERTER

VTA-00B SERIES



General Description

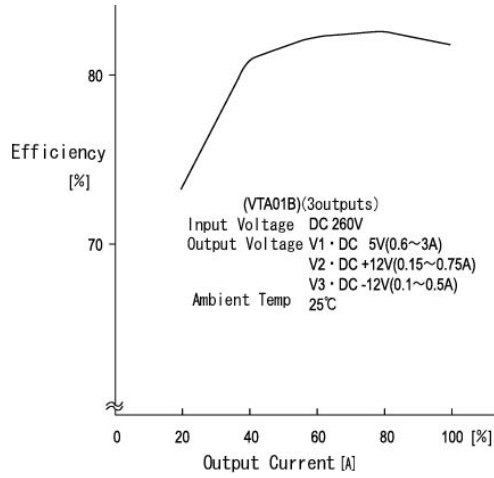
VT is the basic series of switching power supplies manufactured by ETA Electric Industry. 188 different models are available. Output power ranges from 10W to 600W. 50 models have dual outputs; 33 models are designed with triple outputs. Input selectable ("SZ") models conform to local power conditions.

Features

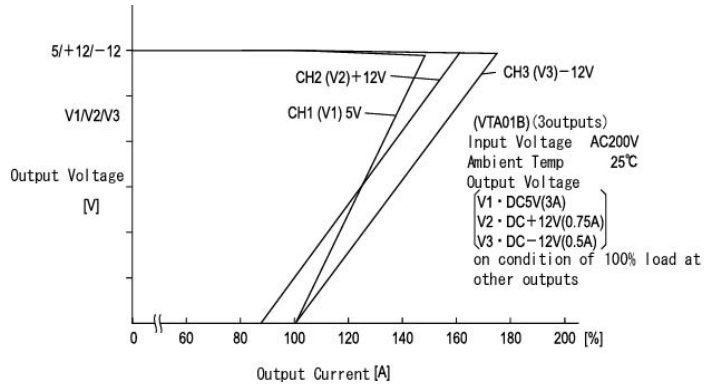
- Compact
- Isolated outputs
- High Performance and Reliability
- Excellent for equipment/din rail applications

Specifications<AC/DC>	Model			
VTA**B 25,30WATTS /3 OUTPUTS	VTA01B	VTA01B-B	VTA03B	VTA04B
Input Characteristic				
Input Voltage	AC200V(DC260V)			
Input Range	AC180-264V(DC220-350V)			
Input Frequency	50/60Hz			
Input Frequency Range	47 -440Hz			
Phase	Single			
Inrush Current *1	25A(maximum) at rated input/output			
Efficiency [%] (typical) *2	75			76

Efficiency Curve



OCP Curve



VTA**B Specification

Specifications<AC/DC>	Model											
VTA**B 25,30WATTS /3 OUTPUTS	VTA01B			VTA01B-B			VTA03B			VTA04B		
Output Characteristic												
Output Voltage [V]	5	+12	-12	+12	+5	-12	5	+12	-5	5	+15	-15
Output Current [A]												
at horizontal mount 25W	2.8	0.5	0.4	1.5	0.7	0.25	2.8	0.5	0.5	2.8	0.36	0.36
at vertical mount 30W	3.0	0.75	0.5	1.7	0.8	0.3	3.0	0.75	0.75	3.0	0.5	0.5
Voltage Adjust Range	V1:+5% of Rated Output Voltage(at no load within input range)											
	V2,V3:fixed with tolerance of +/-3.5% Rate Output Voltage(at no load within input range)											
Ripple and Noise [mVp-p](maximum) *3	100	170	170	170	100	170	100	170	100	100	200	200
Regulation												
a.Statistic Line Regulation [mV](maximum)	35	84	84	84	35	84	35	84	35	35	105	105
b.Statistic Load Regulation [mV](maximum)	50	120	120	120	50	120	50	120	50	50	150	150
c.Temperature Coefficient *4	0.03%/°C											
d.Drift[mV](maximum) *5	40	75	75	75	40	75	40	75	40	40	90	90
e.Dynamic Load Regulation [mV](typical) *6	150	360	360	360	150	360	150	360	150	150	450	450
f.Recovery Time *6	0.5mS(typical)											
Rise up time	200mS(maximum) at 25°C and rated input/output											
Hold up time	10mS(minimum) at 25W/8mS(minimum) at 30W both at 25°C and rated input/output											
Functions												
Overcurrent Protection	Current Limiting with automatic recovery											
Overvoltage Protection	Zener diode clamping											
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)	380g											
? MTBF [H]	500,000											
? Switching Frequency[kHz](typical)	43											

Conditions:

*1 at cold start

*2 at DC260V and rated output

*3 measured by a bayonet probe at the output connector at a 0 to 100MHz bandwidth

*4 at 0 to +50°C

*5 for 7hour period after 1hour warm-up at 25°C and rated input/output

*6 when output current changed from 25% to 75% of rated output current rapidly at AC100V input