

# 30 WATT AC-DC CONVERTER ERT-FWB SERIES

Specifications <AC/DC>	Model							
ERT**FWB 30WATTS/2OUTPUTS	ERT21FW B-B		ERT22FW B-B		ERT23FW B		ERT24FW B-B	
<b>Input Characteristic</b>								
Input Voltage	AC200V(DC 260V)							
Input Range	AC 170-264V(DC 220-350V)							
Input Frequency	50/60Hz							
Input Frequency Range	47-440Hz							
Phase	Single							
Inrush Current *1	30A(maximum) at AC200V							
Efficiency [%] (typical) *2	76		73		76		69	
<b>Output Characteristic</b>								
Output Voltage [V]	24	5	12	12	15	15	12	5
Output Current [A]	0.2-1.0(Peak1.5)	1.5	0.4-2.0(Peak2.7)	0.8	0.2-1.0(Peak1.5)	1.0	0.2-2.0(Peak2.7)	1.5
Voltage Adjust Range	V1:+3%/-0% of Rated Output Voltage(at no load within the input range) V2:fixed with tolerance of +/-3.5% (at no load within the input range)							
Ripple and Noise [mVp-p](maximum) *3	290	100	170	170	200	200	170	100
<b>Regulation</b>								
a.Statistic Line Regulation [mV](maximum)	120	25	60	60	75	75	60	25
b.Statistic Load Regulation [mV](maximum)	240	50	120	120	150	150	120	50
c.Temperature Coefficient *4	0.03%/°C							
d.Drift[mV](maximum) *5	135	40	75	75	90	90	75	40
e.Dynamic Load Regulation [mV](typical) *6	not specified							
f.Recovery Time *6	not specified							
Rise up time	200mS(maximum) at 25°C and rated input/output							
Hold up time	20mS(minimum) at 25°C and rated input/output							
<b>Functions</b>								
Overcurrent Protection Current[A]	≥ 105% of Rated Output	V1:Current Limiting with automatic recovery V2:by the regulator I.C's characteristics						
Overvoltage Protection Voltage[V]	≥ 115% of Rated Output	V1:Zener diode clamping V2:not available						
Remote Sense	not available							
Remote On/Off	not available							
<b>Environmental</b>								
Operating Temperature	-5 to +50°C [enclosed type:-5 to 50°C at vertical mount/-5 to 40°C at horizontal mount]							
Operating Humidity	85% RH(non-condensing)							
Storage Temperature	-20 to +85°C							
Storage Humidity	85% RH(non-condensing)							
Withstanding Voltage	Primary-Secondary AC1,500V for 1minute Primary-Frame Ground AC1,500V 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 <sup>2</sup> ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)							
Shock	294m/s <sup>2</sup>							
Cooling	Convection							
? Leakage Current	1mA(maximum) at 25°C ,rated input/output and rated input frequency							
? EMI(Electromagnetic Interference)	Built to meet FCC Part15-B Class B							
? Safety								
? Weight (typical)	400g/enclosed type:490g							
? MTBF [H]	670,000							
? Switching Frequency[kHz](typical) *7	35							

Conditions:

\*1 at cold start

\*2 at DC 260V input and rated output

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

\*4 at -5 to +50°C /enclosed type: at -5 to +40°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 AC200V input

\*7 variable on input voltage and load conditions

