

#### Cooling Fan Working Code:

Cooling fan of inverter is through detecting output power and heat sink's temperature to work.

Cooling fan is 3-speed fan. When start to turn on the inverter and output power under about 250W, the cooling fan does not start running. It complies with saving energy sources requirement. Until, output power is up to about 250W, the cooling fan will start to work at low speed, in order to drop the inner temperature. If the output power is up to about 1000W, the cooling fan will speed up, in order to dispel the more heat. If the power is more than about 2000W, the fan will work at the fastest speed. Meanwhile, the inverter is detecting the temperature of heat sink, if the temperature is up to 40°C, the colling fan will start to work at low speed at once, if the temperature is up to 50°C, the fan will speed up, in order to dispel the more heat. If the temperature is more than 60°C, the fan will work at the fastest speed. In other words, inverter is detecting the load and temperature at the same time, regardless of load or temperature, as long as there is any value reaches the set value, the cooling fan will operate according to the design.

If the ventilation opening is obstructed, the inverter will enter Over Temperature Protection mode (OTP). The cooling fan will continue working to drop the inner temperature. When the temperature comes down to normal situation, the inverter will turn on automatically.

Note: The specifications are subject to change without notice.

Specification	Model					
Item	YK-PSQ 12300	YK-PSQ 24300	YK-PSQ 48300	YK-PSQ 12300E	YK-PSQ 24300E	YK-PSQ 48300E
Continuous Output Power	3000W					
Maximum Output Power	3150W (3 mins)					
Surge Rating	6000W					
Input Voltage	12V	24V	48V	12V	24V	48V
Input Voltage Range	10-16 VDC	20-32 VDC	42-62 VDC	10-16 VDC	20-32 VDC	42-62 VDC
DC Input over voltage alarm	15.5VDC	31.0VDC	61.0VDC	15.5VDC	31VDC	61.0VDC
DC Input over voltage shut-down	16.0VDC	32.0VDC	62.0VDC	16.0VDC	32.0VDC	62.0VDC
DC Input under voltage alarm	10.5VDC	21.0VDC	43.0VDC	10.5VDC	21.0VDC	43.0VDC
DC Input under voltage shut-down	10.0VDC	20.0VDC	42.0VDC	10.0VDC	20.0VDC	42.0VDC
Output Voltage	100/110/115/120V(Switch Selectable) RMS±3%			200/220/230/240V(Switch Selectable) RMS±3%		
<b>Frequency</b>	<b>50/60Hz ± 0.05% ( Switch Selectable)</b>					
Peak Output Current	55A			27A		
<b>Efficiency (full load)</b>	<b>86%</b>	<b>88%</b>	<b>89%</b>	<b>87%</b>	<b>90%</b>	<b>92%</b>
No load Current Draw	1.60A	0.80A	0.40A	1.65A	0.83A	0.42A
<b>Output Waveform</b>	<b>R Load Pure Sine Wave &lt; 3% THD</b>					
Protection	Overload, Short Circuit, Reverse Polarity (fuse), Input Undervoltage, Input Overvoltage, Over Temperature.					
LED light	Power, OLP, OVP/UVP, OTP					
RS232 interface	Optional					
Power Saving	Optional					
Safety	Comply with EN60950-1					
Operating Temperature Range	-20°C to 50°C					
Storage Temperature Range	-30°C to 70°C					
Dimensions	436(L) × 188.6(W) × 94.2 (H) mm					
<b>Cooling fans</b>	<b>Temperature and loading controlled 3-speed fan Temperature controlled:40°C---low speed cooling fan, 50°C---middle speed cooling fan, 60°C---fast speed cooling fan; Loading controlled: 250W---low speed cooling fan, 1000W---middle speed cooling fan, 2000W---fast speed cooling fan</b>					
Weight	7.3kgs					