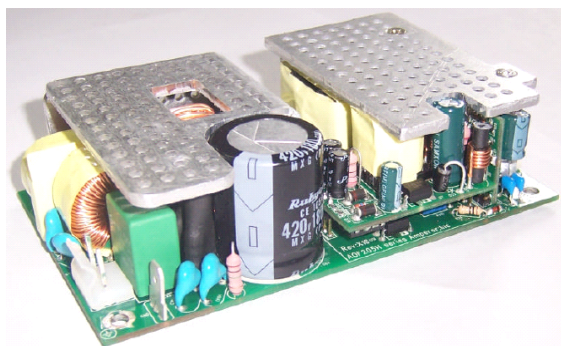


AOF205H Series

Single Output Power Supply

AmperorTM
power by design



Features and Applications:

- AC/DC Universal Input Switch Mode Power Supply
- High Power - 13W/Cubic Inch Max.
- Industry Standard 3.0×5.0×1.3 Inch Package (1U applications)
- 5V Standby & 12V Fan Outputs
- Remote On/Off, Power Good Signal
- Active Current Share
- Power Factor Correction (PFC) Meets EN61000-3-2
- OVP,OCP,OTP and Short Circuit Protection
- Safety Approved - cULus,TUV,CE,CB Report

All specifications are typical at nominal input, full load, at 25 °C unless otherwise stated.

Electrical Specs

INPUT

Input Range	90 ~ 264VAC, full range
Frequency Range	47 ~ 63 Hz
Efficiency	See table 1(230V)
Input Current	5A rms @ 100VAC, full load
Inrush Current	40A max. @ 115VAC, cold start 80A max. @ 230VAC, cold start
Leakage Current	1.75 mA max.
Input Fuse	5.0A, 250VAC

OUTPUT

Maximum Power	See the table 1
Min. Load Operation	0A
Load Regulation	±2%
Line Regulation	±1% max.
Ripple & Noise	120mV max. at 20M Hz
Power On Time	2s max. at turn on
Hold-up Time	> 10ms@ full load, 115AC
OCP Protection	140% Iout max.
OVP Protection	140% Vout max. and latch
OTP Protection	65±5°C ambient temperature
SCP Protection	Automatic Restart
Power Good Signal	5V ±10%
Remote On/Off	Yes
Active Current Share	Up to 3 supplies to share within 10% Maximum output current
12V Fan Output	12V ±10% 0.35A max.
5V Aux (standby)	5V ±5% 0.1A min and 0.5A max.

Safety


cUL	UL60950-1: 2003, First Edition
CE	EN55024,EN55022,EN61000
TUV	EN60950-1



General

Isolation Voltage	3000VAC or 4242VDC @ between input and output
Switching Freq.	70KHz, ±5KHz Fixed
Weight	500g(17.65z) max.
Warranty Info	1 year
MTBF	150,000 hours min. @25C, 80% load

Environmental

Operating Temp.	-20°C to 50°C
Storage Temp.	-20°C to 80°C
Relative Humidity	5% to 95% Non-condensing
Temperature Derating	+50 °C ~+70 °C decrease 2.5% / °C, See table 2
Altitude	Operating 10,000 ft max. Non-operating 50,000 ft max.
Vibration	2.4G rms peak, 5Hz ~ 500Hz
Shock	40G peak
RoHS	Compliant 

EMC

Conducted Emissions	EN55022, FCC part 15 level B
Radiated Emissions	EN55022, FCC part 15 level A
Harmonic Currents	EN61000-3-2, class D
Voltage Flicker	EN61000-3-3
Dips & Interruptions	EN61000-4-11, Criteria A, B, B
Conducted Immunity	EN61000-4-6, Perf Criteria A
EFT/Burst	EN61000-4-4, level 3, Criteria B

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Rev: 04

AOF205H Series

Single Output Power Supply



Order Information

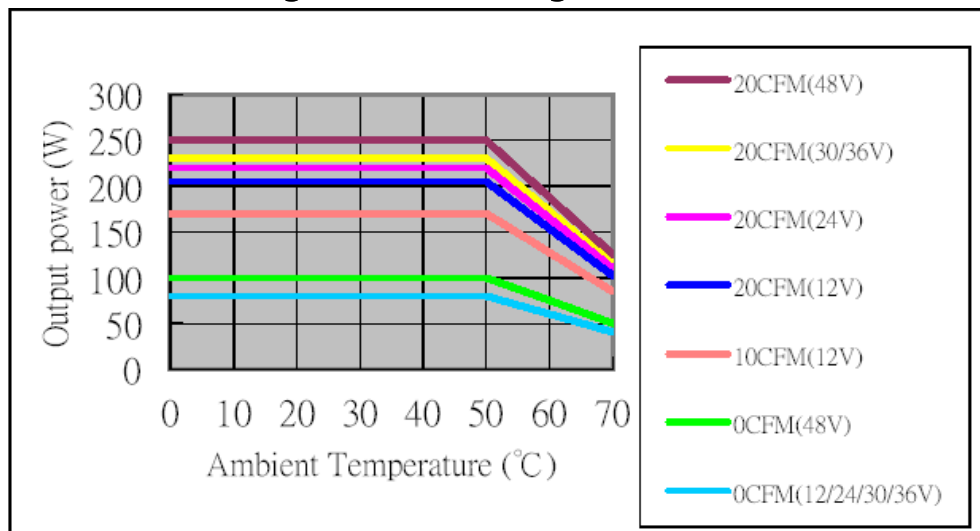
Table1: AOF205H Series Model Output Specifications(230V)

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT Max.	%EFF. TYPICAL	RIPPLE & NOISE	LOAD REGULATION	OUTPUT VOLTAGE RANGE
AOF205H-12	+12V	17.0A	82	120mV	±2%	±5%
AOF205H-24	+24V	9.16A	84	120mV	±2%	±5%
AOF205H-30	+30V	7.67A	85	120mV	±2%	±5%
AOF205H-36	+36V	6.39A	86	120mV	±2%	±5%
AOF205H-48	+48V	5.20A	87	120mV	±2%	±5%

Note:

1. 230W max. for AOF205H-12/24/30/36 With 20CFM airflow cooling
2. 170W max. for AOF205H-12 With 10CFM airflow cooling
3. 250W max. for AOF205H-48 With 20CFM airflow cooling(see figure 1)

Figure 1: De-Rating Curve



Other Description

1. The Power Off when the remote On/Off connect to ground .
2. The Power On when the remote On/Off connect to High signal or open .
3. Isolation between chassis & DC output ground is optional.

Suffix notation of "/G" will designate this ground isolation option.

AOF205H Series

Single Output Power Supply



Order Information

Figure 2: Current share connection

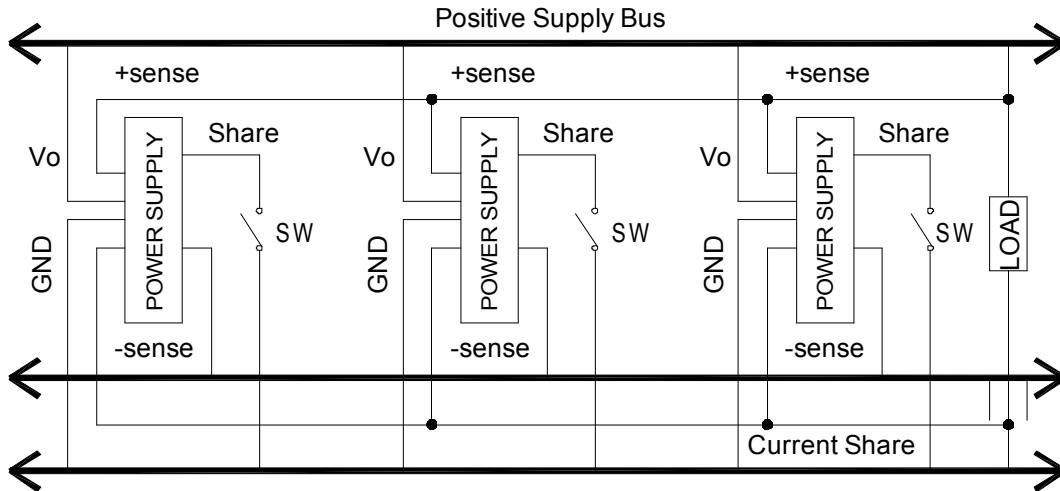
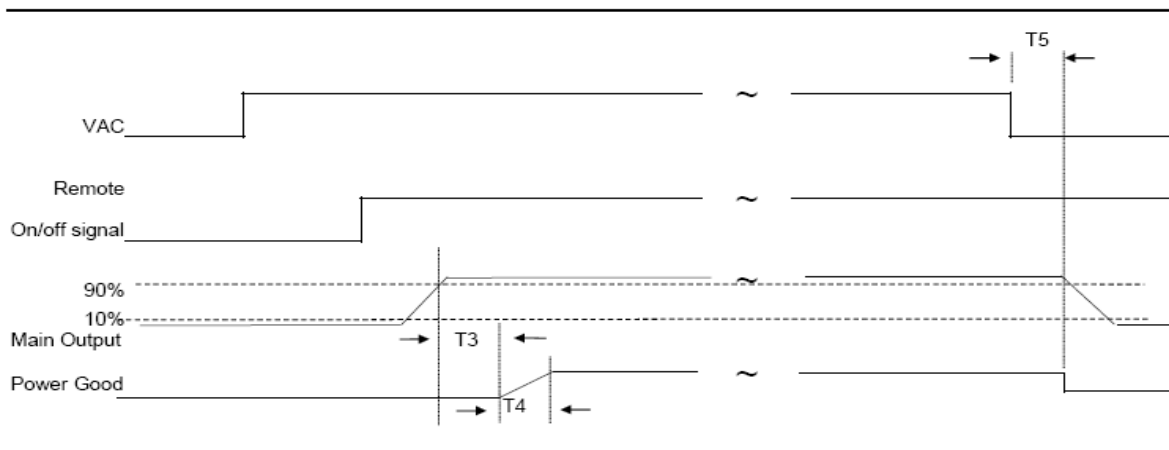


Figure 3: Timing/Housekeeping/Control



Following Power good signal characteristics:

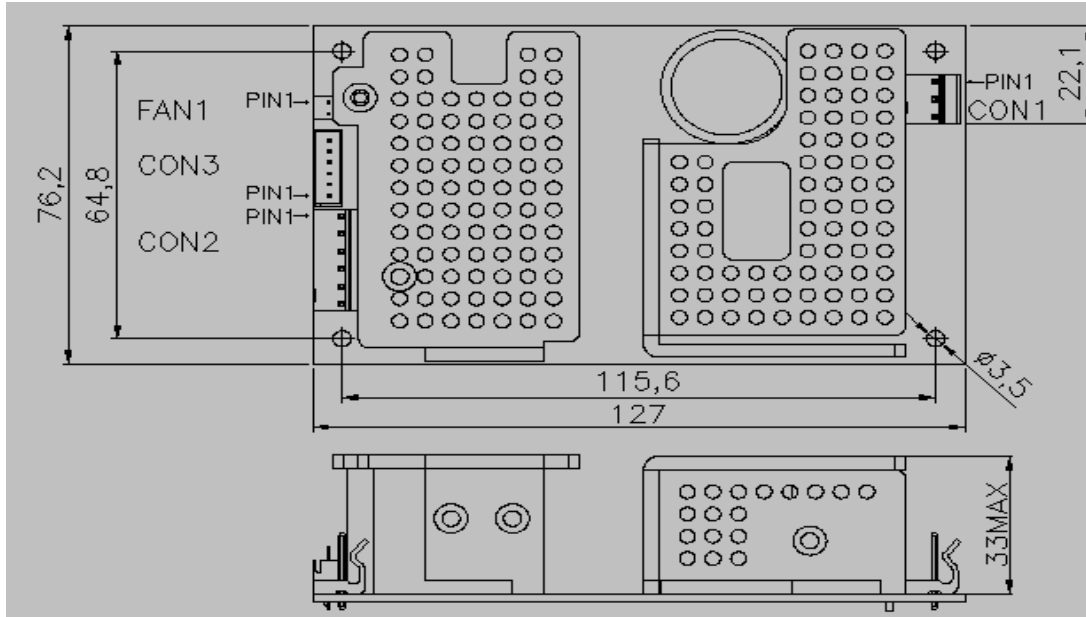
Signal Type	+5V TTL compatible
Logic level low	<0.4V while sinking 4mA
Logic level high	Between 2.4V and 5V output while sourcing 200uA
Power good delay	100Ms<T3<500ms
Power good rise time	T4≤10ms
AC loss to power good hold-up time	T5≥10ms

AOF205H Series

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Mechanical Information



MOLEX:09-65-2068	
CON2	DC OUTPUT CONNECTOR
PIN 1	+V
PIN 2	+V
PIN 3	+V
PIN 4	RTN
PIN 5	RTN
PIN 6	RTN
FEMALE	Molex 09-50-1061
	Molex 09-52-4064

JST:S 6B-XH-A	
CON3	SIGNAL CONNECTOR
PIN 1	REMOTE ON/OFF
PIN 2	-SENSE
PIN 3	+SENSE
PIN 4	CURRENT SHARE
PIN 5	POWER GOOD
PIN 6	5Vaux
FEMALE	JST XHP-6

MOLEX:09-65-2038	
CON1	AC INPUT CONNECTOR
PIN 1	LINE
PIN 2	NO PIN
PIN 3	NEUTRAL
FEMALE	Molex 09-52-4034
	Molex 09-50-1031

MOLEX:22-04-1021	
FAN1	Fan Power CONNECTOR
PIN 1	+12V
PIN 2	+12V RTN
FEMALE	Molex 22-01-1022
	Molex 51191-0200

KANGYANG:PCRS250-1	
GND	GND TERMINAL
PIN 1	GND
FEMALE	Panduit:DMNF1-63F1B-C
	Panduit:DNFR14-250B-C

- Note: 1. All dimensions in mm(inches)
 2. Other tolerance: $\pm 0.02(\pm 0.5)$
 3. Detailed mechanical drawing upon request