



Specifications

AC-DC Converter
ASQ03 Series, 1-3W

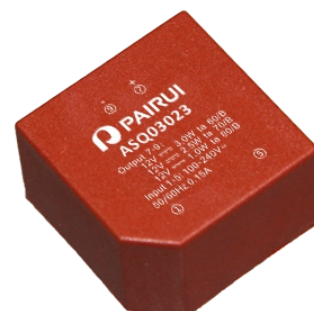
2020



AC-DC Converter, ASQ03 Series, 1-3W

Features

- Compact Size, High Power Density
- Universal Input Voltage Range: 85~264Vac/120~370Vdc
- Output Voltage Range: 3.3VDC~24VDC
- Low Standby Power Consumption<0.15W
- Better Energetic Efficiency: Meet Requirements of Energy Star and EC Code of Conduct
- Encapsulated Design and Same Footprint as EE20 Transformer
- Protections: Short Circuit, Over Temperature, Over Current



Electrical

Part Number	Nominal Input Voltage	Output Voltage	Output Power	Max. Output Current	Efficiency	Max. Ambient Temp.	Certificate
ASQ03020	85-265VAC	3.3V	1W 2.5W 3W	300mA 750mA 830mA	60% 63% 63%	80°C 60°C 50°C	UL, CUL, CE, CB, FCC
ASQ03021	85-265VAC	5V	1W 2.5W 3W	200mA 500mA 600mA	60% 65% 65%	80°C 60°C 50°C	UL, CUL, CE, CB, FCC
ASQ03022	85-265VAC	9V	1W 2.5W 3W	110mA 280mA 330mA	67% 70% 70%	80°C 70°C 60°C	UL, CUL, CE, CB, FCC
ASQ03023	85-265VAC	12V	1W 2.5W 3W	84mA 210mA 250mA	67% 72% 72%	80°C 70°C 60°C	UL, CUL, CE, CB, FCC
ASQ03024	85-265VAC	15V	1W 2.5W 3W	67mA 170mA 200mA	67% 72% 72%	80°C 70°C 60°C	UL, CUL, CE, CB, FCC
ASQ03025	85-265VAC	18V	1W 2.5W 3W	56mA 140mA 170mA	67% 72% 72%	80°C 70°C 60°C	UL, CUL, CE, CB, FCC
ASQ03026	85-265VAC	24V	1W 2.5W 3W	42mA 105mA 125mA	70% 74% 74%	80°C 70°C 60°C	UL, CUL, CE, CB, FCC



INPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Input voltage		85 120		265 370	Vac Vdc
Input frequency	Vin=85~265Vac	47		63	Hz
Input current	Full load, Vin=85~265Vac / 120~370Vdc		0.15		A
Inrush current	Cold start, Vin=230Vac			10	A
Standby power	No load, rated output voltage			0.15	W

OUTPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Output voltage accuracy	Rated input voltage, full load		±5		%
Line regulation	Vin from 85~265Vac or 120~370Vdc		±3		%
Load regulation	Vout from min. to max.		±5		%
Dynamic Response(Vout)	50%~100% load, 1A/us, 1Khz, 50% duty ratio			110	%
Turn-on delay time	Rated input voltage, full load, cold start			3	S
Turn-on rise time	Rated input voltage, full load			50	ms
Hold up time	Rated input voltage, full load	5			ms
Overshoot	Rated input voltage, full load			10	%
Undershoot	Rated input voltage, full load			10	%
Ripple	Refer to below note		200		mVp-p

NOTE: The values are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1uF & 47uF parallel capacitor under ambient temperature 25°C at rated input voltage and rated load.



Protection

Short circuit	In hiccup mode, it will recover automatically after fault condition is removed; No excessive heat, odor, or plastic deformation shall occur with no safety hazard
Over temperature	130-150°C, shut off output voltage, it will recover automatically after the temperature turn to normal
Over current	When output current exceeds the rated range, it will be protected automatically, and will recover automatically after fault condition is removed

Environment

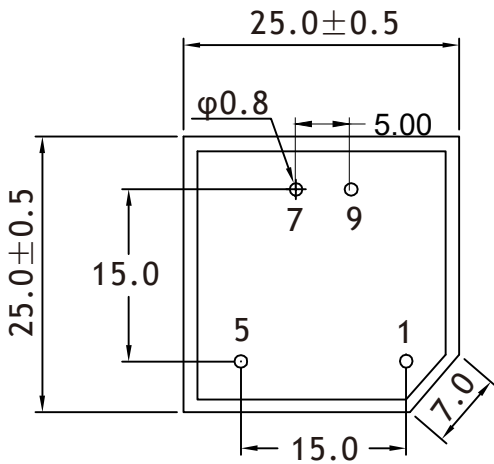
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Ambient operating temperature	Startup at rated voltage	-25		/	°C
Operating relative humidity	Non condensing	10		90	%
Storage temperature	Humidity 5 - 95% RH	-40		+85	°C
MTBF	Full load, 220Vac input, 25°C ambient temperature	550			Khrs
Dimension(LxWxH)	25.0 x 25.0 x 16.0mm, pin length 4mm				
Weight	18.5g				

Safety/EMC

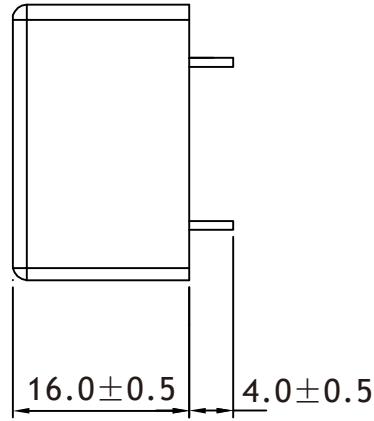
Safety	Design refer to UL/CUL60950, UL/CUL62368, IEC/EN60950, IEC/EN60335, IEC/EN61558-2-16, IEC/EN62368
Withstand voltage	I/P-O/P: 4KVAC, 5mA, 3s
EMI	Design refer to EN55032, EN55014, FCC part15, Class B under 3dB margin
EMS	Design refer to EN61000-3-2:2014 ClassA EN61000-3-3:2013 IEC61000-4-2:2008 Contact Discharge±4KV, Air Discharge±8KV IEC61000-4-3:2006+A1:2007+A2:2010 IEC61000-4-4:2012 ±1KV IEC61000-4-5:2014 ±1KV IEC61000-4-6:2013 IEC61000-4-11:2004



Dimension & Pinout



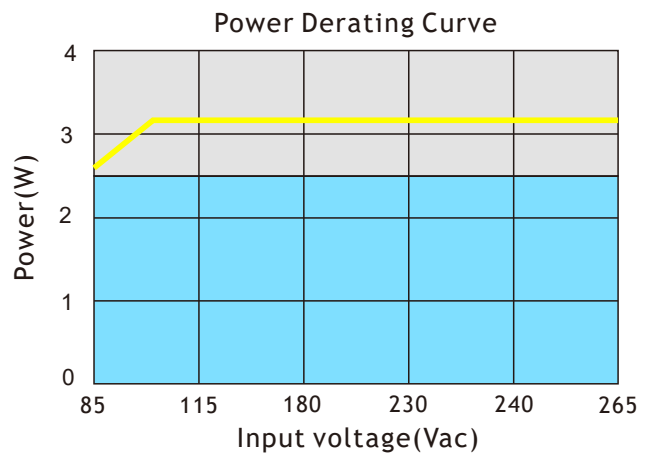
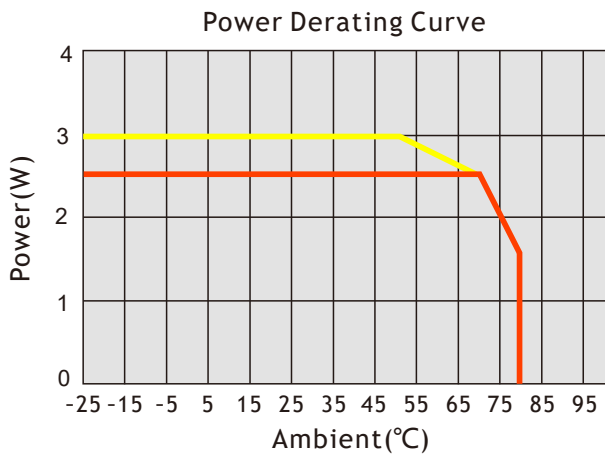
View from pins side



Unit: mm

PRI:
Pins 1-5: AC or DC Input
SEC:
Pin 7: DC Output +V
Pin 9: DC Output 0V

Electrical Curve



Package

SERIES	QTY/TUBE	QTY/CARTON	NET WEIGHT	GROSS WEIGHT	VOLUME
ASQ03	23 pieces	805 pieces	15kg/carton	17.6kg/carton	0.7cuft/carton



Specifications

**AC-DC Converter
ASQ05 Series, 2.5-5W**

2020



AC-DC Converter, ASQ05 Series, 2.5-5W

Features

- Compact Size, High Power Density
- Universal Input Voltage Range: 85~264Vac/120~370Vdc
- Output Voltage Range: 3.3VDC~24VDC
- Low Standby Power Consumption<0.2W
- Better Energetic Efficiency: Meet Requirements of Energy Star and EC Code of Conduct
- Encapsulated Design and Same Footprint as EI30 Transformer
- Protections: Short Circuit, Over Temperature, Over Current



Electrical

Part Number	Nominal Input Voltage	Output Voltage	Output Power	Max. Output Current	Efficiency	Max. Ambient Temp.	Certificate
ASQ05020	85-265VAC	3.3V	2.5W 4.5W	750mA 1350mA	65%	70°C 50°C	UL, CUL, CE, CB, FCC
ASQ05021	85-265VAC	5V	2.5W 2.75W 5W	500mA 550mA 900mA	68%	70°C 70°C 50°C	UL, CUL, CE, CB, FCC
ASQ05022	85-265VAC	9V	3.2W 5W	360mA 560mA	73%	70°C 50°C	UL, CUL, CE, CB, FCC
ASQ05023	85-265VAC	12V	3.2W 5W	270mA 420mA	75%	70°C 50°C	UL, CUL, CE, CB, FCC
ASQ05024	85-265VAC	15V	2.5W 5W	170mA 320mA	75%	70°C 50°C	UL, CUL, CE, CB, FCC
ASQ05025	85-265VAC	18V	3.2W 5W	180mA 280mA	78%	70°C 50°C	UL, CUL, CE, CB, FCC
ASQ05026	85-265VAC	24V	3.2W 5W 5W	130mA 210mA 220mA	80%	70°C 50°C 50°C	UL, CUL, CE, CB, FCC
ASQ05027	85-265VAC	3.8V	4.5W	1180mA	66%	50°C	UL, CUL, CE, CB, FCC



INPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Input voltage		85 120		265 370	Vac Vdc
Input frequency	Vin=85~265Vac	47		63	Hz
Input current	Full load, Vin=85~265Vac / 120~370Vdc		0.2		A
Inrush current	Cold start, Vin=230Vac			15	A
Standby power	No load, rated output voltage			0.2	W

OUTPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Output voltage accuracy	Rated input voltage, full load		±5		%
Line regulation	Vin from 85~265Vac or 120~370Vdc		±3		%
Load regulation	Vout from min. to max.		±5		%
Dynamic Response(Vout)	50%~100% load, 1A/us, 1Khz, 50% duty ratio			110	%
Turn-on delay time	Rated input voltage, full load, cold start			3	S
Turn-on rise time	Rated input voltage, full load			50	ms
Hold up time	Rated input voltage, full load	5			ms
Overshoot	Rated input voltage, full load			10	%
Undershoot	Rated input voltage, full load			10	%
Ripple	Refer to below note		200		mVp-p

NOTE: The values are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1uF & 47uF parallel capacitor under ambient temperature 25°C at rated input voltage and rated load.



Protection

Short circuit	In hiccup mode, it will recover automatically after fault condition is removed; No excessive heat, odor, or plastic deformation shall occur with no safety hazard
Over temperature	130-150°C, shut off output voltage, it will recover automatically after the temperature turn to normal
Over current	When output current exceeds the rated range, it will be protected automatically, and will recover automatically after fault condition is removed

Environment

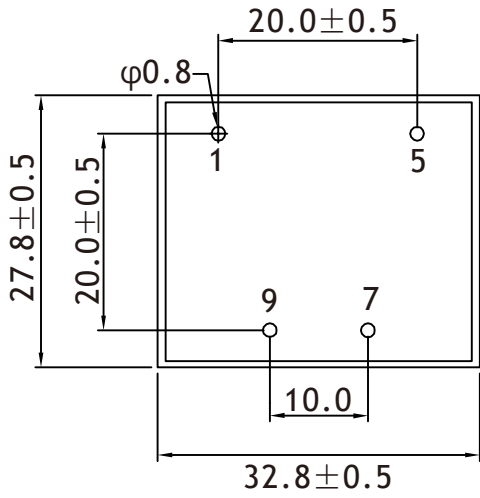
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Ambient operating temperature	Startup at rated voltage	-25		/	°C
Operating relative humidity	Non condensing	10		90	%
Storage temperature	Humidity 5 - 95% RH	-40		+85	°C
MTBF	Full load, 220Vac input, 25°C ambient temperature	500			Khrs
Dimension(LxWxH)	32.8 x 27.8 x 21.8mm, pin length 4mm				
Weight	30.5g				

Safety/EMC

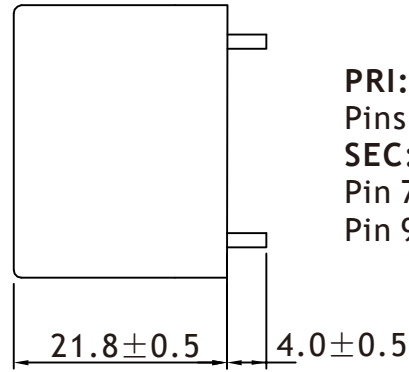
Safety	Design refer to UL/CUL60950, UL/CUL62368, IEC/EN60950, IEC/EN60335, IEC/EN61558-2-16, IEC/EN62368
Withstand voltage	I/P-O/P: 4KVAC, 5mA, 3s
EMI	Design refer to EN55032, EN55014, FCC part15, ClassB under 3dB margin
EMS	Design refer to EN61000-3-2:2014, ClassA EN61000-3-3:2013 IEC61000-4-2:2008 Contact Discharge ±4KV, Air Discharge ±8KV IEC61000-4-3:2006+A1:2007+A2:2010 IEC61000-4-4:2012, ±1KV IEC61000-4-5:2014, ±1KV IEC61000-4-6:2013 IEC61000-4-11:2004



Dimension & Pinout



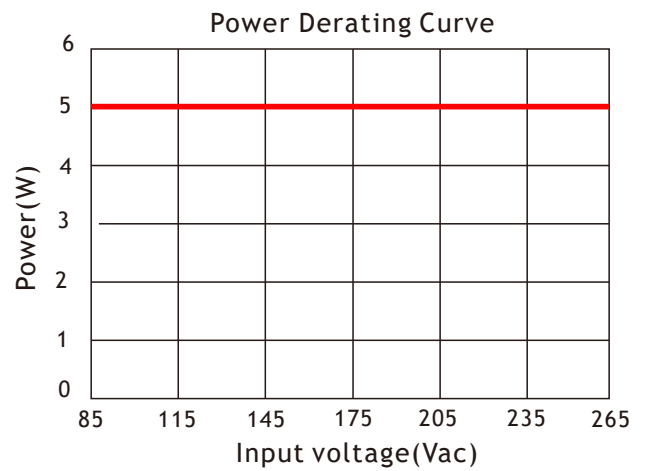
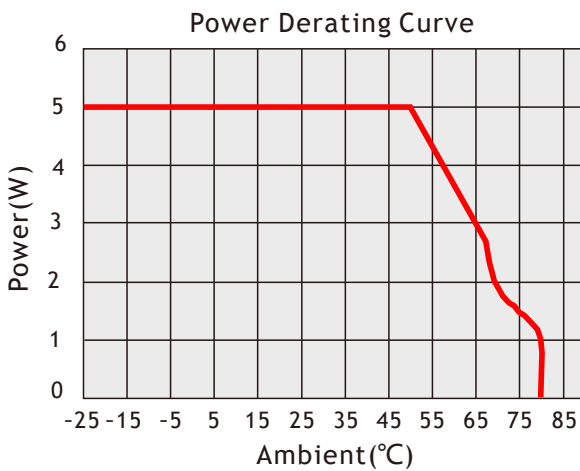
View from pins side



PRI:
Pins 1-5: AC or DC Input
SEC:
Pin 7: DC Output +V
Pin 9: DC Output 0V

Unit: mm

Electrical Curve



Package

SERIES	QTY/TUBE	QTY/CARTON	NET WEIGHT	GROSS WEIGHT	VOLUME
ASQ05	17 pieces	405 pieces	12.5kg/carton	15kg/carton	0.7cuft/carton



Specifications

**AC-DC Converter
ASP07 Series, 7.5W**

2020



AC-DC Converter, ASP07 Series, 7.5W

Features

- Compact Size, High Power Density
- Universal Input Voltage Range: 85~264Vac/120~370Vdc
- Output Voltage Range: 3.3VDC~24VDC
- Low Standby Power Consumption<0.15W
- Better Energetic Efficiency: Meet Requirements of Energy Star and EC Code of Conduct
- Encapsulated Design and Same Footprint as EI38 Transformer
- Protections: Short Circuit, Over Temperature, Over Current



Electrical

Part Number	Nominal Input Voltage	Output Voltage	Output Power	Max. Output Current	Efficiency	Max. Ambient Temp.	Certificate
ASP07200	85-265VAC	3.3V	7.5W	2270mA	74%	50°C	UL, CUL, CE, CB, FCC
ASP07201	85-265VAC	5V	7.5W	1500mA	77%	70°C	UL, CUL, CE, CB, FCC
ASP07202	85-265VAC	9V	7.5W	830mA	80%	70°C	UL, CUL, CE, CB, FCC
ASP07203	85-265VAC	12V	7.5W	625mA	82%	70°C	UL, CUL, CE, CB, FCC
ASP07204	85-265VAC	15V	7.5W	500mA	82%	70°C	UL, CUL, CE, CB, FCC
ASP07205	85-265VAC	18V	7.5W	420mA	82%	70°C	UL, CUL, CE, CB, FCC
ASP07206	85-265VAC	24V	7.5W	310mA	82%	70°C	UL, CUL, CE, CB, FCC



INPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Input voltage		85 120		265 370	Vac Vdc
Input frequency	Vin=85~265Vac	47		63	Hz
Input current	Full load, Vin=85~265Vac/120~370Vdc		0.3		A
Inrush current	Cold start, Vin=230Vac			20	A
Standby power	No load, rated output voltage			0.15	W

OUTPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Output voltage accuracy	Rated input voltage, full load		±3		%
Line regulation	Vin from 85~265Vac or 120~370Vdc		±1		%
Load regulation	Vout from min. to max.		±1		%
Dynamic Response(Vout)	50%~100% load, 1A/us, 1Khz, 50% duty ratio			110	%
Turn-on delay time	Rated input voltage, full load, cold start			3	S
Turn-on rise time	Rated input voltage, full load			50	ms
Hold up time	Rated input voltage, full load	5			ms
Overshoot	Rated input voltage, full load			10	%
Undershoot	Rated input voltage, full load			10	%
Ripple	Refer to below note		200		mVp-p

NOTE: The values are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1uF & 47uF parallel capacitor under ambient temperature 25°C at rated input voltage and rated load.



Protection

Short circuit	In hiccup mode, it will recover automatically after fault condition is removed; No excessive heat, odor, or plastic deformation shall occur with no safety hazard
Over temperature	130-150°C, shut off output voltage, it will recover automatically after the temperature turn to normal
Over current	When output current exceeds the rated range, it will be protected automatically, and will recover automatically after fault condition is removed

Environment

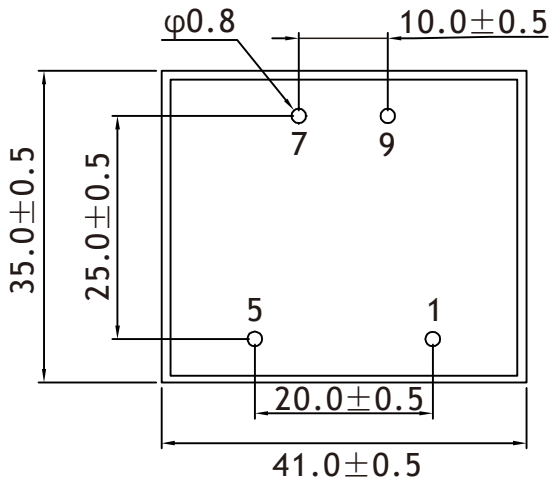
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Ambient operating temperature	Startup at rated voltage	-20		/	°C
Operating relative humidity	Non condensing	10		90	%
Storage temperature	Humidity 5 - 95% RH	-40		+85	°C
MTBF	Full load, 220Vac input, 25°C ambient temperature	550			Khrs
Dimension(LxWxH)	41.0 x 35.0 x 21.5mm, pin length 4mm				
Weight	58.2g				

Safety/EMC

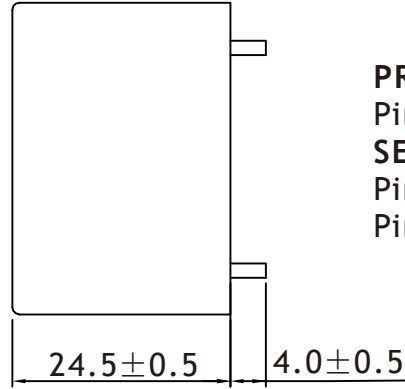
Safety	Design refer to UL/CUL60950, UL/CUL62368, IEC/EN60950, IEC/EN60335, IEC/EN61558-2-16, IEC/EN62368
Withstand voltage	I/P-O/P: 4KVAC, 5mA, 3s
EMI	Design refer to EN55032, EN55014, FCC part15, ClassB under 3dB margin
EMS	Design refer to EN61000-3-2:2014, ClassA EN61000-3-3:2013 IEC61000-4-2:2008 Contact Discharge ±4KV, Air Discharge ±8KV IEC61000-4-3:2006+A1:2007+A2:2010 IEC61000-4-4:2012, ±1KV IEC61000-4-5:2014, ±1KV IEC61000-4-6:2013 IEC61000-4-11:2004



Dimension & Pinout



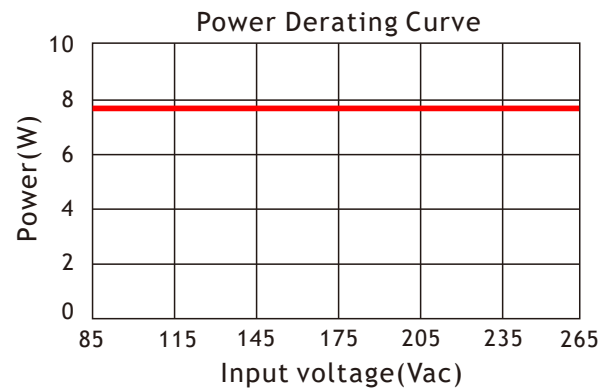
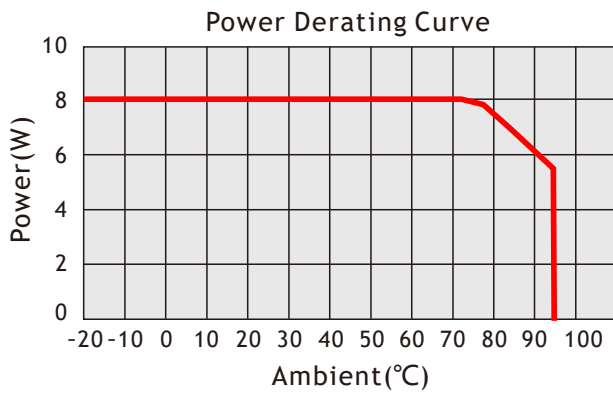
View From Pins Side



PRI:
Pins 1-5: AC or DC Input
SEC:
Pin 7: DC Output +V
Pin 9: DC Output 0V

Unit: mm

Electrical Curve



Package

SERIES	QTY/TUBE	QTY/CARTON	NET WEIGHT	GROSS WEIGHT	VOLUME
ASP07	14 pieces	210 pieces	10.5kg/carton	12.4kg/carton	0.7cuft/carton



2019-V1.0-0320

Specifications

AC-DC Converter
ASP10 Series, 10W

2019



AC-DC Converter, ASP10 Series, 10W

Features

- Compact Size, High Power Density
- Universal Input Voltage Range: 85~264Vac/120~370Vdc
- Output Voltage Range: 3.3VDC~24VDC
- Low Standby Power Consumption<0.1W
- Better Energetic Efficiency: Meet Requirements of Energy Star and EC Code of Conduct
- Encapsulated Design and Same Footprint as EI48 Transformer
- Protections: Short Circuit, Over Temperature, Over Current



Electrical

Part Number	Nominal Input Voltage	Output Voltage	Output Power	Max. Output Current	Efficiency	Max. Ambient Temp.	Certificate
ASP10210	85-265VAC	3.3V	10W	3000mA	72%	50°C	UL, CUL, CE, CB, FCC
ASP10211	85-265VAC	5V	10W	2000mA	74%	60°C	UL, CUL, CE, CB, FCC
ASP10212	85-265VAC	9V	10W	1100mA	80%	60°C	UL, CUL, CE, CB, FCC
ASP10213	85-265VAC	12V	10W	830mA	82%	60°C	UL, CUL, CE, CB, FCC
ASP10214	85-265VAC	15V	10W	670mA	82%	60°C	UL, CUL, CE, CB, FCC
ASP10215	85-265VAC	18V	10W	560mA	82%	60°C	UL, CUL, CE, CB, FCC
ASP10216	85-265VAC	24V	10W	420mA	82%	60°C	UL, CUL, CE, CB, FCC



INPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Input voltage		85 120		265 370	Vac Vdc
Input frequency	Vin=85~265Vac	47		63	Hz
Input current	Full load, Vin=85~265Vac/120~370Vdc		0.4		A
Inrush current	Cold start, Vin=230Vac			25	A
Standby power	No load, rated output voltage			0.1	W

OUTPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Output voltage accuracy	Rated input voltage, full load		±2	±4	%
Line regulation	Vin from 85~265Vac or 120~370Vdc		±1		%
Load regulation	Vout from min. to max.		±1		%
Dynamic Response(Vout)	50%~100% load, 1A/us, 1Khz, 50% duty ratio			110	%
Turn-on delay time	Rated input voltage, full load, cold start			3	S
Turn-on rise time	Rated input voltage			50	ms
Hold up time	Rated input voltage, full load	5			ms
Overshoot	Rated input voltage, full load			10	%
Undershoot	Rated input voltage, full load			10	%
Ripple	Refer to below note		150		mVp-p

NOTE: The values are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1uF & 47uF parallel capacitor under ambient temperature 25°C at rated input voltage and rated load.



Protection

Short circuit	In hiccup mode, it will recover automatically after fault condition is removed; No excessive heat, odor, or plastic deformation shall occur with no safety hazard
Over temperature	130-150°C, shut off output voltage, it will recover automatically after the temperature turn to normal
Over current	When output current exceeds the rated range, it will be protected automatically, and will recover automatically after fault condition is removed

Environment

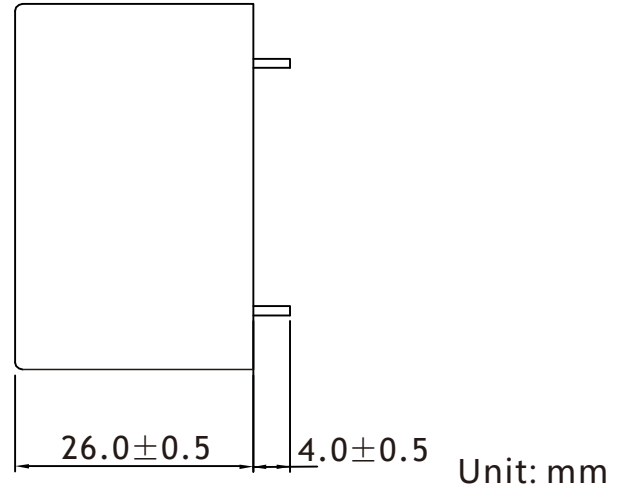
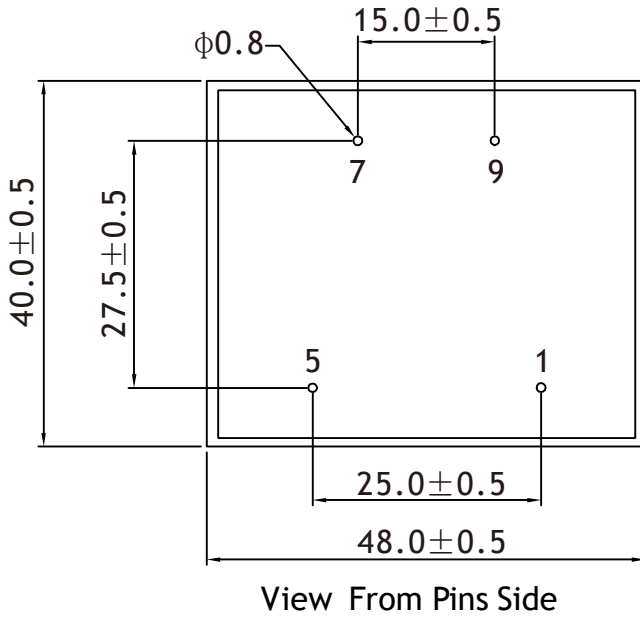
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Ambient operating temperature	Startup at rated voltage	-25		/	°C
Operating relative humidity	Non condensing	10		90	%
Storage temperature	Humidity 5 - 95% RH	-40		+85	°C
MTBF	Full load, 220Vac input, 25°C ambient temperature	550			Khrs
Dimension(LxWxH)	48 x 40 x 26mm, pin length 4mm				
Weight	76.5g				

Safety/EMC

Safety	Design refer to UL/CUL60950, UL/CUL62368, IEC/EN60950, IEC/EN60335, IEC/EN61558-2-16, IEC/EN62368
Withstand voltage	I/P-O/P: 4KVAC, 5mA, 3s
EMI	Design refer to EN55032, EN55014, FCC part15, ClassB under 3dB margin
EMS	Design refer to EN61000-3-2:2014, ClassA EN61000-3-3:2013 IEC61000-4-2:2008 Contact Discharge ±4KV, Air Discharge ±8KV IEC61000-4-3:2006+A1:2007+A2:2010 IEC61000-4-4:2012, ±1KV IEC61000-4-5:2014, ±1KV IEC61000-4-6:2013 IEC61000-4-11:2004

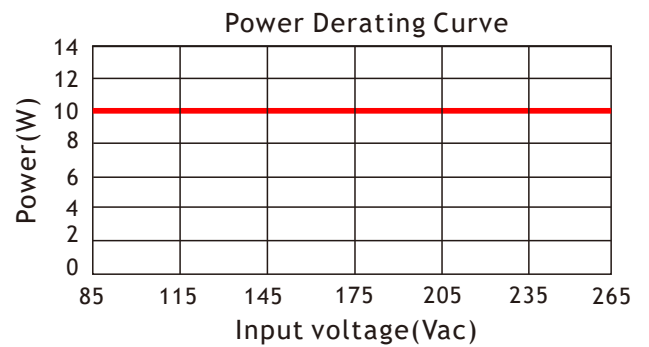
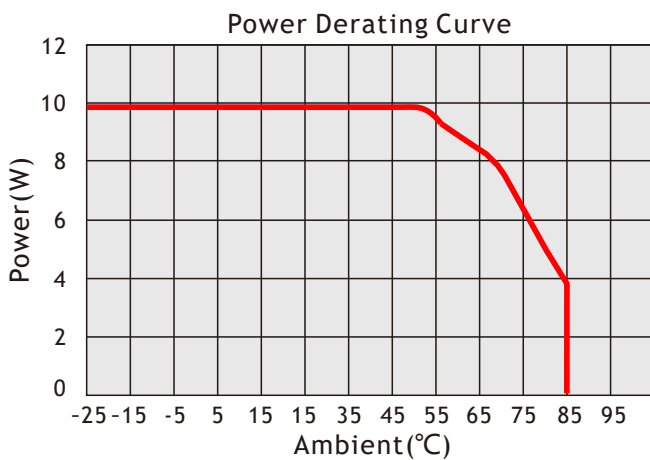


Dimension & Pinout



PRI:
 Pins 1-5: AC or DC Input
SEC:
 Pin 7: DC Output +V
 Pin 9: DC Output 0V

Electrical Curve





Update Record

Date	Version	Updated Content	Updated By	Approved By
2019-01-15	2019-V1.0-0115	File created		
2019-03-20	2019-V1.0-0320	File updated		



2019-V1.0-0423-C
product specifications

Industrial module power
supply ASP20 series, 20W

2019

Industrial module power supply, ASP20 series, 20W

- Small size, high power density
- Wide input voltage range: 85~264Vac or 120~370Vdc Wide
- output voltage range: 3.3~24VDC
- Ultra-low standby power consumption is about 0.1W
- Higher energy efficiency to meet Energy Star requirements
- Potting design, suitable for PCB installation
- Short circuit protection, overcurrent protection



Electrical

Part Number	Nominal Input Voltage	Output Voltage	Output Power	Max. Output Current	Efficiency	Max. Ambient Temp.	Certificate
ASP20210	85-265VAC	3.3V	15W	4500mA	82%	50°C	UL, CUL, CE, CB, FCC
ASP20211	85-265VAC	5V	20W	4000mA	82%	50°C	UL, CUL, CE, CB, FCC
ASP20212	85-265VAC	9V	20W	2200mA	85%	60°C	UL, CUL, CE, CB, FCC
ASP20213	85-265VAC	12V	20W	1700mA	85%	60°C	UL, CUL, CE, CB, FCC
ASP20214	85-265VAC	15V	20W	1400mA	85%	60°C	UL, CUL, CE, CB, FCC
ASP20215	85-265VAC	18V	20W	1100mA	85%	60°C	UL, CUL, CE, CB, FCC
ASP20216	85-265VAC	24V	20W	840mA	85%	60°C	UL, CUL, CE, CB, FCC



INPUT

PARAMETER	Condition	MIN	TYP	MAX	UNITS
Input voltage		85 120		265 370	Vac Vdc
Input frequency	Input voltage 85~265Vac	47		63	Hz
Input current	Full load, input voltage 85~265Vac/120~370Vdc			0.6	A
Standby power	No load, rated output voltage			0.15	W

OUTPUT

parameter	condition	MIN	TYP	MAX	UNITS
Output voltage accuracy	Output voltage: 3.3V/5V		±4		%
	Output voltage: 9V/12V/15V/18V/24V		±3		%
Linear adjustment rate	Output voltage: 3.3V/5V		±3		%
	Output voltage: 9V/12V/15V/18V/24V		±2		%
Undershoot	Output voltage: 3.3V/5V		±4		%
	Output voltage: 9V/12V/15V/18V/24V		±3		%
ripple	See notes for measurement method			180	mVp-p

Note: When the rated load, rated input and ambient temperature are 25°C, use a 12" twisted pair and connect 0.1uF and 47uF capacitors in parallel, and measure with an oscilloscope bandwidth of 20MHz.



Protection

Short circuit protection	The power supply should be able to withstand a continuous short circuit without being damaged within 24 hours; the short circuit can occur before or after powering on; the power supply should resume normal operation after the short circuit is removed, and should not produce overheating, odor or plastic deformation, and have no safety hazards
Overcurrent protection	The power supply should automatically protect; when the overcurrent is removed, the power supply should automatically resume normal operation. There must be no overheating, odor or plastic deformation, and no safety hazards

Environment

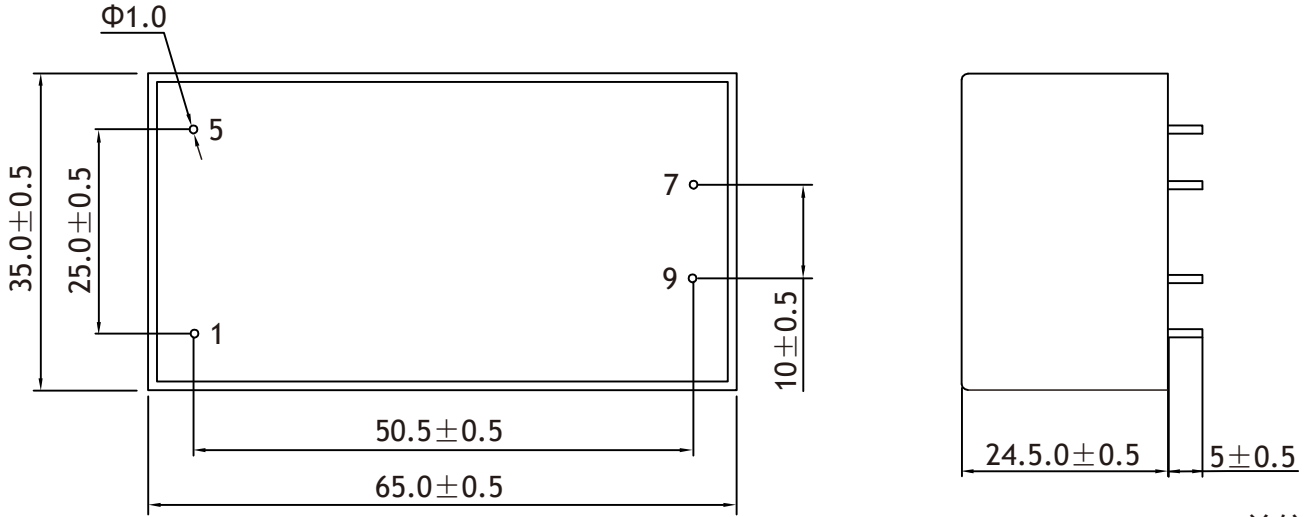
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Working temperature	Start at rated voltage	-20		/	°C
Operating relative humidity	No condensation	10		90	%
Storage temperature	Humidity 5 ~ 95% RH	-40		+85	°C
MTBF	Full load, 230Vac input, operating temperature 50°C	200			Khrs
Dimension(LxWxH)	65.0 x 35.0 x 24.0mm, 针长5mm				
Weight	92g				

Safety/EMC

Safety	设计参照：UL/CUL60950, UL/CUL62368, IEC/EN60950, IEC/EN60335, IEC/EN61558-2-16, IEC/EN62368
Withstand voltage	I/P-O/P: 4KVAC, 5mA, 3s
EMC	设计参照：EN55032, EN55014, FCC part15 Class B(余量小于3dB)



Size and foot position



单位: mm

底部视图

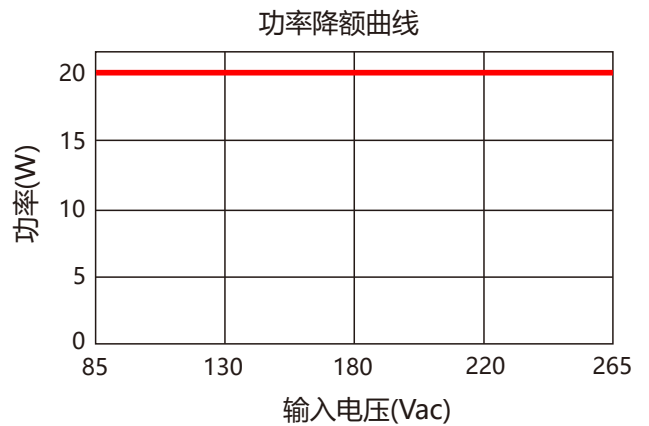
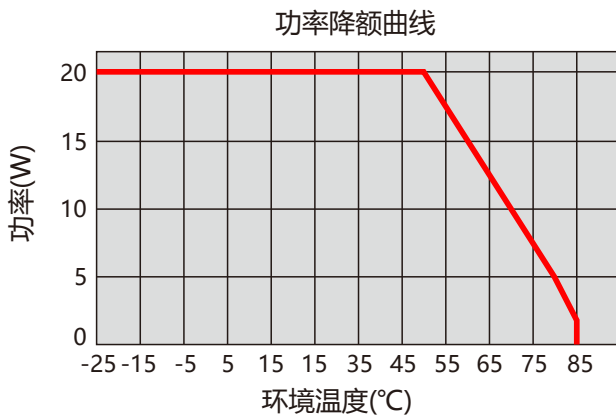
初级:

Pins 1-5: AC or DC
input secondary:

Pin 7: DC output +V

Pin 9: DC output 0V

Electrical curve



Product packaging

规格	数量/管	数量/箱	净重	毛重	体积
ASP20	待定	待定	待定	待定	待定



ASQ和ASP系列应用

1. Storage Guidelines

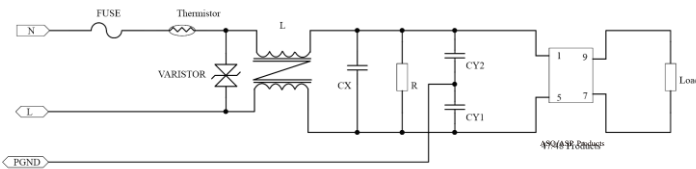
Storage temperature: -40°C to +85°C, storage humidity: 5% to 95%

2. Warranty Guidelines

In order to best ensure the reliability and life of the power supply, we recommend that customers use it within 6 months. If the power supply is not used for more than 12 months, Then we recommend that the product needs to be aged for 2 hours before use.

3. Suitable for applications with high EMC performance requirements

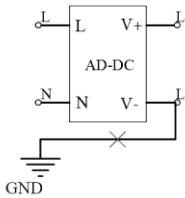
The ASQ/ASP series has passed EN55022 and EN55014 CLASS B EMC certification without adding any additional internal components. The following circuit can meet more stringent EMC performance requirements.



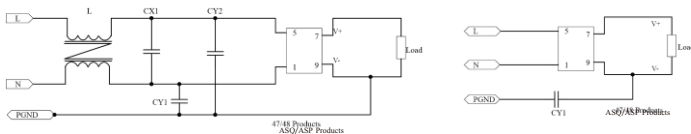
Fuse: Recommended parameters: 5A to 10A/250Vac, slow-acting fuse type
 Thermistor: Recommended parameters: 2A, 5Ω, 1.8W to 5A D10, 2.5Ω, 2.4W.
 Varistor: Recommended parameters: 14D471, 300Vac, maximum energy 118 Joules.
 L is common mode inductor: Recommended parameters: 10mH to 30mH
 CX is a X2 capacitor: Recommended parameters: 0.1uF to 0.22uF/275Vac
 R is a resistor: Recommended parameters: 1.0MQ to 3.0 MQ2.

4 Suitable for grounding:

该应用不支持ASQ/ASP产品



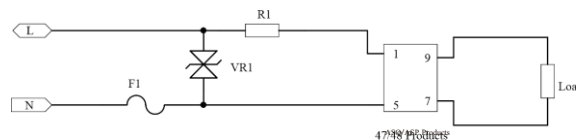
The following suggested circuit may be helpful



L: It is a common mode inductor, recommended parameters: 10 mh~30 mh
 CX1: It is the X2 capacitor, recommended parameters: 0.1uF to 0.22uF/275 Vac
 CY1 and CY2 are Y-type capacitors, recommended parameters: 1000 pF to 2200 pF/400 V

5. high surge circuit

The ASQ/ASP series is tested and certified for surge levels in compliance with IEC61000-4-5 standards and does not require any additional external components. In order to increase the surge level to 6KV, the following external circuit can be recommended.



VR1 is a varistor, recommended parameters: 14D471, 300 Vac, maximum energy 118 Joules. R1 is a wire-wound resistor, recommended parameters: 10R/1W~10R/3W, resistance wire diameter 0.1 to 0.23mm. F1 is a fuse with recommended parameters: 6.3A to 10A/250 VAC, slow-acting fuse.

The information contained in this document is subject to change without prior notice.



更新记录

日期	版本	更新内容	更新人	核准人
2019/04/23	2019-V1.0-0423-C	创建文件		