



2019-V1.0-0328

Specifications

Constant Current LED Power Supplies

PIAH Series, IP20 3~9W

PAIRUI ELECTRONICS

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2019

LED Power Supplies for Indoor Use

PIAH SERIES, 3~9WATT, IP20 RATING

Features

- 3 Year Warranty
- High Input Voltage Range: 220~240Vac
- Constant Current Output Mode
- Waterproof Rating IP20
- Built-in Active Power Factor Correction
- Short Circuit, Over Voltage, and Over Current Protections



Applications

- ✓ Panel Light
- ✓ Cabinet Light
- ✓ Down Light
- ✓ Other Indoor used Lights
- ✓ Recessed Light

Electrical

Part Number	Rated Power	Input voltage	Output current	Output voltage	PF	Efficiency	Certificate
PIAH003C0120NSLPP1	3W	220-240V	120mA	15-26V	0.5	72%	CCC CE TUV SAA
PIAH003C0150NSLPP1	3W	220-240V	150mA	15-26V	0.5	72%	CCC CE TUV SAA
PIAH003C0200NSLPP1	3W	220-240V	200mA	9-16V	0.5	72%	CCC CE TUV SAA
PIAH003C0300NSLPP1	3W	220-240V	300mA	3-13V	0.5	72%	CCC CE TUV SAA
PIAH003C0350NSLPP1	3W	220-240V	350mA	3-10V	0.5	72%	CCC CE TUV SAA
PIAH003C0500NSLPP1	3W	220-240V	500mA	2-6V	0.5	72%	CCC CE TUV SAA
PIAH003C0550NSLPP1	3W	220-240V	550mA	2-6V	0.5	72%	CCC CE TUV SAA
PIAH003C0600NSLPP1	3W	220-240V	600mA	2-6V	0.5	70%	CCC CE TUV SAA
PIAH003C0700NSLPP1	3W	220-240V	700mA	2-6V	0.5	70%	CCC CE TUV SAA
PIAH006C0120NSLPP1	6W	220-240V	120mA	30-50V	0.5	75%	CCC CE TUV SAA
PIAH006C0150NSLPP1	6W	220-240V	150mA	24-45V	0.5	75%	CCC CE TUV SAA
PIAH006C0180NSLPP1	6W	220-240V	180mA	22-35V	0.5	75%	CCC CE TUV SAA
PIAH006C0200NSLPP1	6W	220-240V	200mA	18-35V	0.5	75%	CCC CE TUV SAA
PIAH006C0300NSLPP1	6W	220-240V	300mA	12-22V	0.5	75%	CCC CE TUV SAA
PIAH006C0350NSLPP1	6W	220-240V	350mA	9-18V	0.5	75%	CCC CE TUV SAA
PIAH006C0400NSLPP1	6W	220-240V	400mA	8-15V	0.5	75%	CCC CE TUV SAA
PIAH006C0500NSLPP1	6W	220-240V	500mA	6-13V	0.5	72%	CCC CE TUV SAA
PIAH006C0550NSLPP1	6W	220-240V	550mA	6-13V	0.5	72%	CCC CE TUV SAA
PIAH006C0600NSLPP1	6W	220-240V	600mA	4-10V	0.5	72%	CCC CE TUV SAA
PIAH006C0700NSLPP1	6W	220-240V	700mA	4-10V	0.5	72%	CCC CE TUV SAA
PIAH009C0150NSLPP1	9W	220-240V	150mA	43-60V	0.5	80%	CCC CE TUV SAA
PIAH009C0180NSLPP1	9W	220-240V	180mA	30-45V	0.5	80%	CCC CE TUV SAA
PIAH009C0200NSLPP1	9W	220-240V	200mA	30-45V	0.5	80%	CCC CE TUV SAA
PIAH009C0250NSLPP1	9W	220-240V	250mA	20-36V	0.5	80%	CCC CE TUV SAA
PIAH009C0300NSLPP1	9W	220-240V	300mA	20-32V	0.5	80%	CCC CE TUV SAA
PIAH009C0350NSLPP1	9W	220-240V	350mA	15-27V	0.5	80%	CCC CE TUV SAA
PIAH009C0400NSLPP1	9W	220-240V	400mA	12-24V	0.5	80%	CCC CE TUV SAA
PIAH009C0500NSLPP1	9W	220-240V	500mA	12-19V	0.5	80%	CCC CE TUV SAA
PIAH009C0600NSLPP1	9W	220-240V	600mA	8-15V	0.5	80%	CCC CE TUV SAA
PIAH009C0700NSLPP1	9W	220-240V	700mA	8-13V	0.5	80%	CCC CE TUV SAA

NOTE: Other output models are may available on request.

INPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Input frequency		50		60	Hz
Input current	Full load, Vin=220Vac, 3W Full load, Vin=220Vac, 6W Full load, Vin=220Vac, 9W		0.04 0.08 0.1		A A A
Inrush current	Cold start, Vin=220Vac		60		A
Leakage current	Cold start, Vin=220Vac		0.5		mA
Power factor(PF)	Full load, Vin=220Vac		0.5		
Surge voltage	L-N		0.5		KV

OUTPUT

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Output current accuracy			±5		%
Line regulation	Vin from 220Vac to 240Vac		±5		%
Load regulation	Vout from min. to max.		±5		%
Turn-on delay time	Cold start, power on		0.5		S
Ripple	Please refer to below measuring method		±5%		mAp-p
THD	Full load, Vin=220Vac		20		%

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
Over voltage	>95% no load output voltage, it will recover automatically after fault condition is removed
Over current	In hiccup mode, it will recover automatically after fault condition is removed

Environment

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Ambient operating temperature	Startup at rated voltage	-20		+45	°C
Operating relative humidity	Non condensing	20		85	%
Storage temperature	Humidity 10 ~ 95% RH	-25		+85	°C
Maximum case temperature	Hot-spot on case			+75	°C
Lifetime	Full load, 25°C ambient temperature	30			Khrs
Waterproof rating	Ip20				
Dimension(LxWxH)	38.0 x 30.0 x 20.0mm				

Safety/EMC

Safety standards	Design refer to EN61347-1, EN61347-2-13, EN60598-1, EN60598-2-6
EMC	Design refer to EN55015, EN61000-4-3, EN61000-3-3

NOTE: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and Vin=220Vac to 240Vac.

Mechanical



Unit: mm

Electrical Curve

