

NPSW480

AC/DC Power Supplies 480W wide input range



■ Main Features:

- Single, 2 or 3 phases input AC 187...550Vac
- Wide DC input range 250...725Vdc
- Active PFC for optimal efficiency
- High efficiency 91% and compact size
- Usable for broad range of industrial, telecom and renewable energy applications



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TECHNICAL DATA

Model type	NPSW480-24	NPSW480-48	NPSW480-72
OUTPUT DATA			
Rated voltage	24Vdc	48Vdc	72Vdc
Adj. output voltage range	23...28Vdc	45...55Vdc	72...85Vdc
Continuous current	20A	10A	6A
Overload limit	28A	14A	9A
Short circuit peak current	50A	25A	12A
Load regulation	1%	1%	1%
Ripple & Noise	50mVpp		100mVpp
Hold up time	> 50ms		
Status Signals	<ul style="list-style-type: none"> ▪ DC OK by green LED ▪ Overload by red LED ▪ Dry contact (1A/30V) 		
Output protections	<ul style="list-style-type: none"> ▪ Hiccup at the overload limit with auto reset ▪ Over temperature ▪ Overvoltage 		
Output overvoltage protection	> 33Vdc	> 68Vdc	> 100Vdc
Parallel connection	Possible with external ORing diode		
INPUT DATA			
Input AC rated voltage	Nominal: 1-2-3 Phases, 200...500Vac (UL certified)		
Frequency	Range: 187...550Vac 47...63Hz		
Input DC rated voltage	250...725Vdc		
Input AC current			
1-2-Phase = 200Vac	2.9A		
1-2-Phase = 500Vac	1.3A		
3-Phase = 200Vac	1.8A		
3-Phase = 500Vac	0.8A		
Input DC current			
Uin = 250Vdc	2.1A		
Uin = 725Vdc	0.8A		
Inrush peak current	< 60A		
Continuous overvoltage protection	No damage up to 550Vac/725Vdc		
Internal protection fuse	None, external fuse must be provided		
External protection on AC line	Fuse AT 6.3A or MCB 6A C curve or 4A D curve It is strongly recommended to provide external surge arresters (SPD) according to local regulations.		
GENERAL DATA			
Efficiency	> 92%	> 92%	> 91%
Dissipated power	< 42W	< 42W	< 42.5W
Operating temperature	- 40°C...+ 70°C / overtemperature protection UL certified up to 45°C Start-up type tested: - 40°C ¹		
Derating	- 10W/°C over 45°C		
Storage temperature	- 40°C...+ 80°C		
Humidity	5...95% r.H. non condensing		
Life time expectation	65496h (7.4 years) at 25°C ambient full load		
Overvoltage category	III		
Pollution degree	2 (IEC 664-1)		
Input / output isolation	4.2kVdc		
Input / ground isolation	2.2kVdc		
Output / ground isolation	0.75kVdc		
Safety Standards	<ul style="list-style-type: none"> ▪ UL508 (certified) ▪ EN60950 (reference) 		
EMC Emission	<ul style="list-style-type: none"> ▪ EN55022:2010 (CISPR22) Class A ▪ EN55011:2009 /A1:2010 Class A ▪ EN61000-3-2:2014 Class A 		
EMC Immunity	<ul style="list-style-type: none"> ▪ EN61000-4-2:2008 Level 3 ▪ EN61000-4-3:2006 /A2:2010 Level 3 ▪ EN61000-4-4:2012 Level 3 ▪ EN61000-4-5:2014 Level 3 ▪ EN61000-4-11:2004 /A1:2010 Level 2 		
Protection degree	<ul style="list-style-type: none"> ▪ EN60529:1989 /A:2013 IP20 		
Vibration sinusoidal	<ul style="list-style-type: none"> ▪ IEC 60068-2-6:2007 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2Hours / axis (X,Y,Z) 		
Shock	<ul style="list-style-type: none"> ▪ IEC 60068-2-27:2008 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total) 		
Connection terminals	2.5mm ² , screw type pluggable (24...12AWG)		
Case material	Aluminum		
Approx. weight	1.000kg		
Size (W x H x D)	73.0 x 140.0 x 125.0mm		
Mounting Rail	IEC 60715/H15/TH35-7.5(-15)		

1) Possible at nominal voltage with load deration.

Notes:

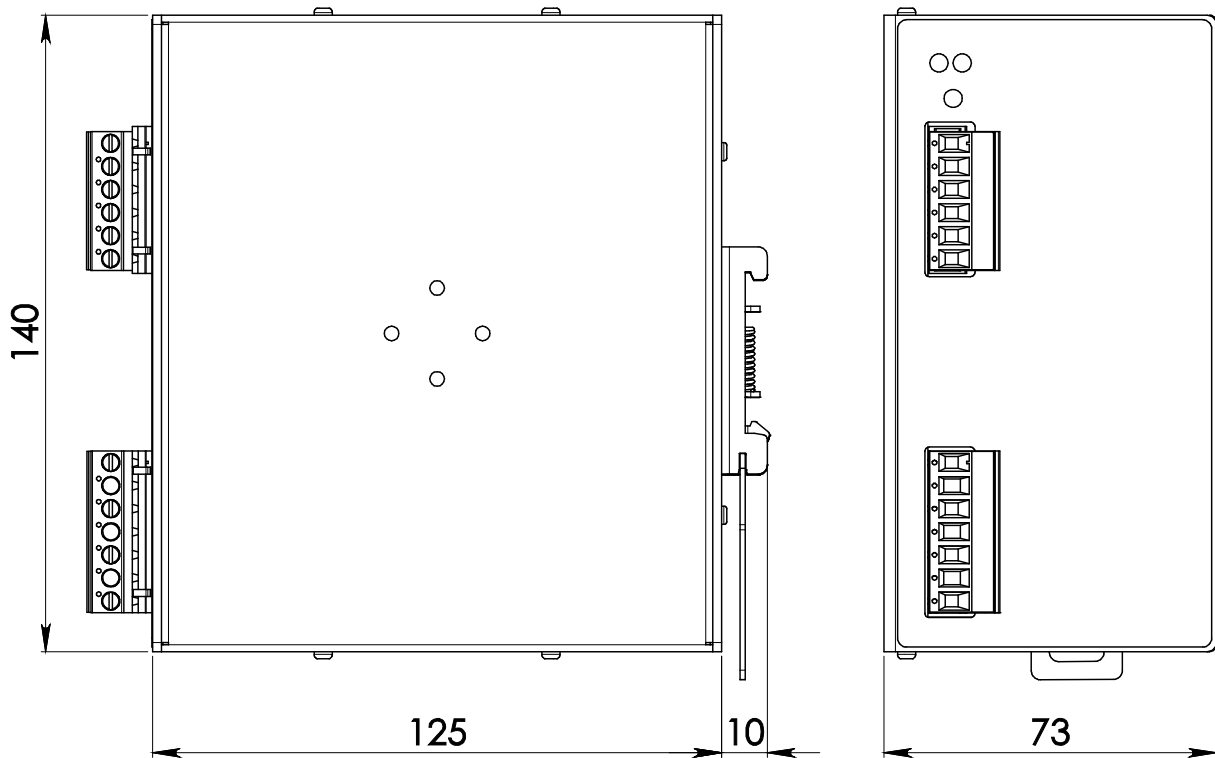
- Technical parameters are typical, measured in laboratory environment at 25°C and 400Vac / 50Hz.
- Power rating, losses, efficiency, ripple, thermal behaviour and start-up may change outside of the nominal rated input range. Contact factory for details.
- Data may change without prior notice in order to improve the product.

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Dimensions



(model just for reference)

Input Connection:

Single phase:

- L = Line
- N = Neutral
- I = earth ground

2 phases:

- L1 = Phase 1
- L2 = Phase 2
- I = earth ground

3 phases:

- L1 = Phase 1
- L2 = Phase 2
- L3 = Phase 3
- I = earth ground

DC:

- L1(L) = + Positive DC
- L2(N) = - Negative DC
- L3 = do not connect
- I = earth ground

Output Connection:

- + = Positive DC
- - = Negative DC
- Dry contact = NC