

■ *Main Features*

- Single or 2 phase AC (90…550Vac) or DC (150…725Vdc) input
- High efficiency and extremely compact size
- Plastic enclosure
- Class II (simplified wiring)
- Overload 130%
- Up to 70°C operating temperature with derating curve
- Ideal for applications with harsh mains conditions
- Compliant to renewable energy systems and high DC Bus

RoHS 2011/65/EU Pb lead-free CE

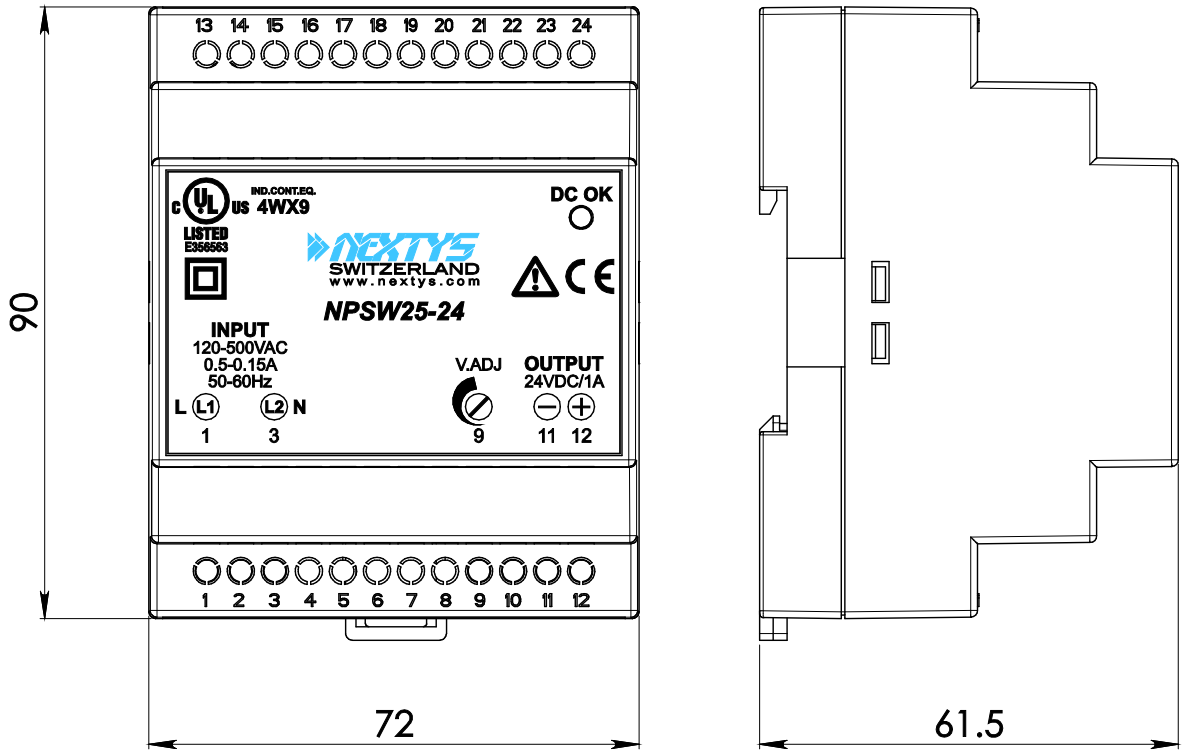
TECHNICAL DATA

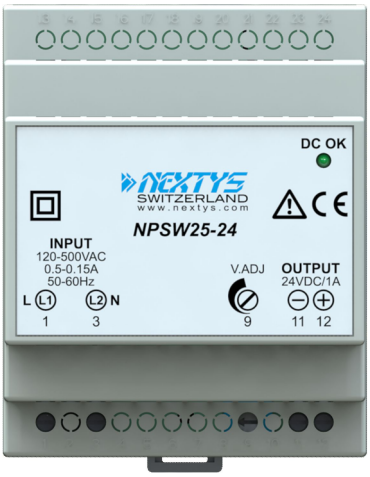
Model type	NPSW25-24
Rated voltage	24Vdc
Adj. output voltage range	23…28Vdc
Continuous current	1A
Overload limit Uin = 120Vac 1Ph Uin = 240Vac 1Ph Uin = 400Vac 2Ph Uin = 500Vac 2Ph	 1.35A 1.50A 1.35A 1.30A
Short circuit peak current	4.5A
Load regulation	≤ 0.5%
Ripple & Noise	≤ 50mVpp
Hold up time Uin = 240Vac 1Ph Uin = 500Vac 2Ph	 > 35ms > 180ms
Status Signals	▪ DC OK by green LED
Output protections	▪ Hiccup at the overload limit with auto reset ▪ Over temperature ▪ Overvoltage
Output overvoltage protection	> 33Vdc
Parallel connection	Possible with external ORing diode
INPUT DATA	
Input AC rated voltage Frequency	Nominal: 1-2 Phases, 120…500Vac Range: 90…550Vac 47...63Hz
Input DC rated voltage	150...725Vdc
Input AC current Uin = 120Vac 1Ph Uin = 500Vac 2Ph	 0.50A 0.15A
Input DC current Uin = 150Vdc Uin = 725Vdc	 0.3A < 0.1A
Inrush peak current	< 20A
Internal protection fuse	None, external fuse must be provided
External protection on AC line	MCB 2A C curve It is strongly recommended to provide external surge arresters (SPD) according to local regulations.
GENERAL DATA	
Efficiency	> 83%
Dissipated power	< 4.9W
Operating temperature	- 40°C…+ 70°C / overtemperature protection Start-up type tested: - 40°C[1]
Derating	See Fig.1
Storage temperature	- 40°C...+ 80°C
Humidity	5…95% r.H. non condensing
Life time expectation	179477h (20.4 years) at 25°C ambient full Load
Overvoltage category Pollution degree	III 2 (IEC 664-1)
Input / output isolation	4.2kVdc
Safety Standards	▪ UL508 (reference) ▪ EN60950 (reference)
EMC Emission	▪ EN55022:2010 (CISPR22) Class B ▪ EN55011:2009 /A1:2010 Class B
EMC Immunity	▪ 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 4 ▪ EN61000-4-11:2004 /A1:2010 Level 2
Protection degree	▪ EN60529:1989 /A:2013 IP20
Vibration sinuosoidal	▪ IEC 60068-2-6:2007 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2Hours / axis (X,Y,Z)
Shock	▪ IEC 60068-2-27:2008 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total)
Connection terminals	2.5mm², screw type Header (24...12AWG)
Case material	Flame retardant UL94V-0 plastic
Approx. weight	0.170Kg
Size (W x H x D)	72.0 x 90.0 x 61.5 mm
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 240Vac / 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.

Dimensions





Input Connection:

Single phase:
- L = Line (1)
- N = Neutral (3)

2 phases:
- L1 = Line 1 (1)
- L2 = Line 2 (3)

DC:
- L1(L) = + Positive DC (1)
- L2(N) = - Negative DC (3)

Output Connection:

- + = Positive DC (12)
- - = Negative DC (11)

Fig.1 Output Derating

