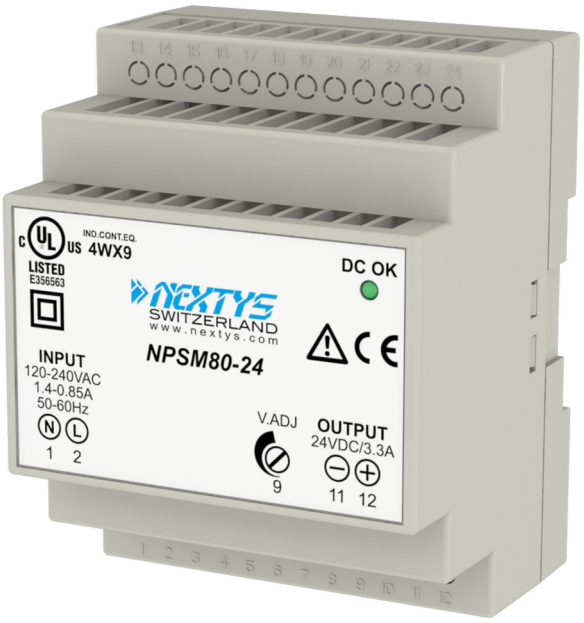


■ *Main Features*

- High efficiency and very compact size
- Plastic enclosure
- Class II (simplified wiring)
- Overload 150%
- Up to 50°C operating temperature with no derating

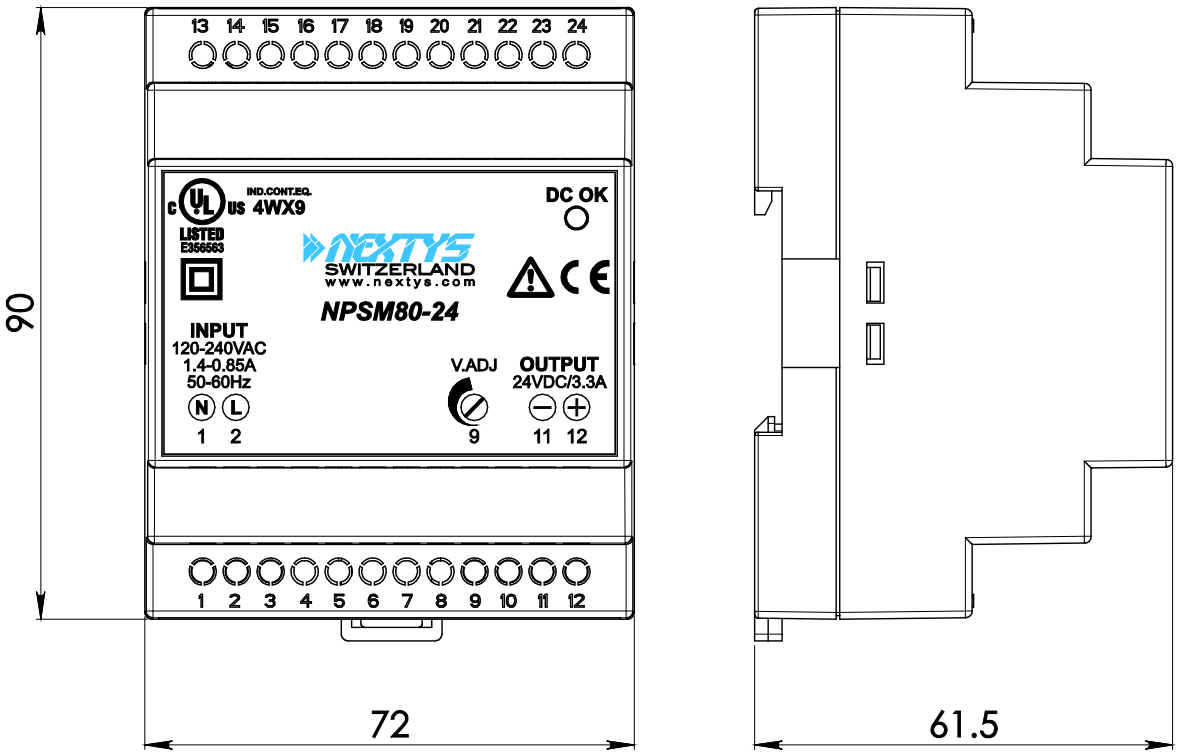
TECHNICAL DATA

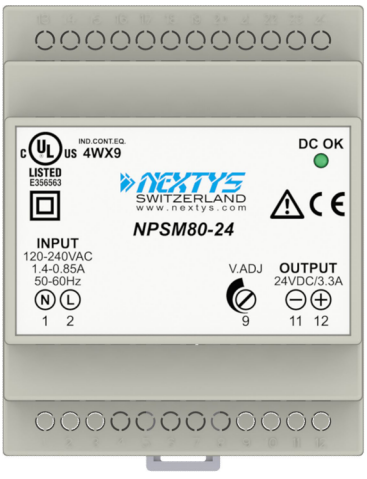
Model type	NPSM80-12	NPSM80-24
OUTPUT DATA		
Rated voltage	12…15Vdc	24Vdc
Adj. output voltage range	12…15Vdc	23…28Vdc
Continuous current	6.0…5.0A	3.3A
Overload limit	7.5A @ 12Vdc 6.5A @ 15Vdc	4.0A
Short circuit peak current	20A	25A
Load regulation	≤ 0.5%	≤ 1%
Ripple & Noise	≤ 100mVpp	≤ 50mVpp
Hold up time	> 30ms	
Output protections	▪ Overload, short circuit with hiccup mode ▪ Thermal protection ▪ Overvoltage	
Status Signals	▪ DC OK green LED	
Output overvoltage protection	> 18Vdc	> 33Vdc
Parallel connection	Possible with external ORing diode	
INPUT DATA		
Input AC rated voltage Frequency	Nominal: 120…240Vac (UL certified) Range: 90…264Vac 47...63Hz	
Input DC rated voltage	110...345Vdc	
Input AC current Uin = 120Vac Uin = 240Vac	 1.50A 0.85A	 1.40A 0.85A
Input DC current Uin = 110Vdc Uin = 345Vdc	 1.0A 0.4A	
Inrush peak current	< 85A	
Internal protection fuse	Fuse 2AT/250Vac (not user replaceable)	
External protection on AC line	MCB 6A C curve It is strongly recommended to provide external surge arresters (SPD) according to local regulations.	
GENERAL DATA		
Efficiency	> 86%	> 87%
Dissipated power	< 12.5W	< 12W
Operating temperature	- 40°C…+ 70°C / overtemperature protection UL certified up to 50°C for NPSM80-12 and up 55°C for NPSM80-24 Start-up type tested: - 40°C[1]	
Derating	- 1.2W/°C over 50°C	- 0.9W/°C over 55°C
Storage temperature	- 40°C...+ 80°C	
Humidity	5…95% r.H. non condensing	
Life time expectation	51136h (5.8 years) at 25°C ambient full load	
OVC Pollution degree	III 2 (IEC 664-1)	
Input / output isolation	4.2kVdc	
Safety Standards	▪ UL508 (certified) ▪ EN60950 (reference) ▪ EN50178:1999	
EMC Emission	▪ EN55022:2010 (CISPR22) Class A ▪ EN55011:2009 /A1:2010 Class A	
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 3 ▪ 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)	
Approx. weight	0.230Kg	
Case material	Flame retardant UL94V-0 plastics	
Size (W x H x D)	72.0 x 90.0 x 61.5mm	
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, after minimum 5 minutes of operation.
- 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





(model just for reference)

Input Connection:

Single phase:
- L = Line (2)
- N = Neutral (1)

DC:
- L = + Positive DC (2)
- N = - Negative DC (1)

Output Connection:

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