

■ **Main Features:**

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



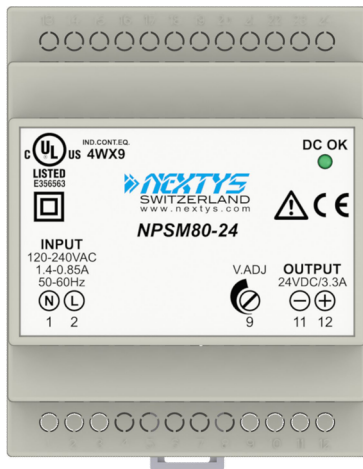
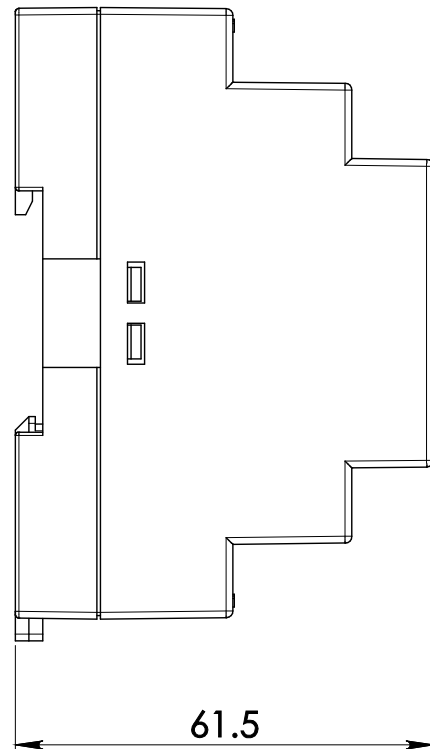
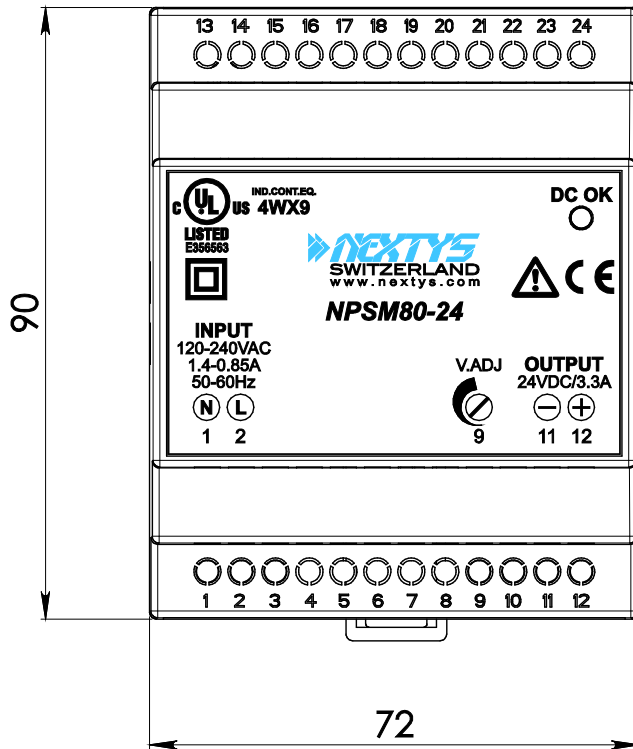
TECHNICAL DATA

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	< 1%	
Ripple & Noise	< 100mVpp	< 50mVpp
Hold up time U _{in} = 120Vac U _{in} = 230Vac	> 10ms > 30ms	
Output protections	<ul style="list-style-type: none"> ▪ Overload, short circuit with hiccup mode ▪ Thermal protection ▪ Overvoltage 	
Status Signals	<ul style="list-style-type: none"> ▪ DC OK green LED 	
Output overvoltage protection	> 18Vdc	> 33Vdc
Parallel connection	Possible with external ORing diode	
INPUT DATA		
Input rated voltage / frequency	AC: 120...240Vac / 47...63Hz (range 90...264Vac) DC: 110...345Vdc (UL508 Certified for 300Vdc)	
Input AC current U _{in} = 120Vac U _{in} = 230Vac	1.50A 0.85A	1.40A 0.85A
Input DC current U _{in} = 110Vdc U _{in} = 345Vdc	1.0A 0.4A	
Inrush peak current	< 30A	
Power factor	> 0.6	
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%	> 88%
Dissipated power	< 13W	< 11W
Operating temperature	- 40°C...+ 70°C / overtemperature protection UL certified up to 50°C for NPSM80-12 and up to 55°C for NPSM80-24 (Start-up type tested: - 40°C)	
Derating	- 1.2W/°C over 50°C	- 0.9W/°C over 55°C
Humidity	5...95% r.H. non condensing	
Life time expectation	51136h (5.8 years) at 25°C ambient full load	
Overvoltage category	II	
Pollution degree	2 (IEC 664-1)	
Input / output isolation	4.2 kVdc	
Safety Standards	<ul style="list-style-type: none"> ▪ UL508 (certified) ▪ EN60950 	
EMC Emission	EN55022:2010 (CISPR22)	Class A
EMC Immunity	<ul style="list-style-type: none"> ▪ EN61000-4-2:2008 ▪ EN61000-4-3:2006 /A2:2010 ▪ EN61000-4-4:2012 ▪ EN61000-4-5:2014 ▪ EN61000-4-11:2004 /A1:2010 	Level 3 Level 3 Level 3 Level 3
Protection degree	EN60529:1989 /A:2013	IP20
Vibration sinusoidal	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	2.5 mm ² , screw type Header (24...12 AWG)	
Approx. weight	0.230Kg	
Case material	Flame retardant UL 94 V-0 plastics	
Size (W x H x D)	72.0 x 90.0 x 61.5 mm	
Mounting Rail	IEC 60715/H15/TH35-7.5(-15)	

Notes:

- Technical parameters are typical, measured in laboratory environment at 25°C and 230Vac / 50Hz.
- Power rating, losses, efficiency, ripple, thermal behaviour 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 = +/- (2)
- N = -/+ (1)

Output Connection:

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