



■ Main Features

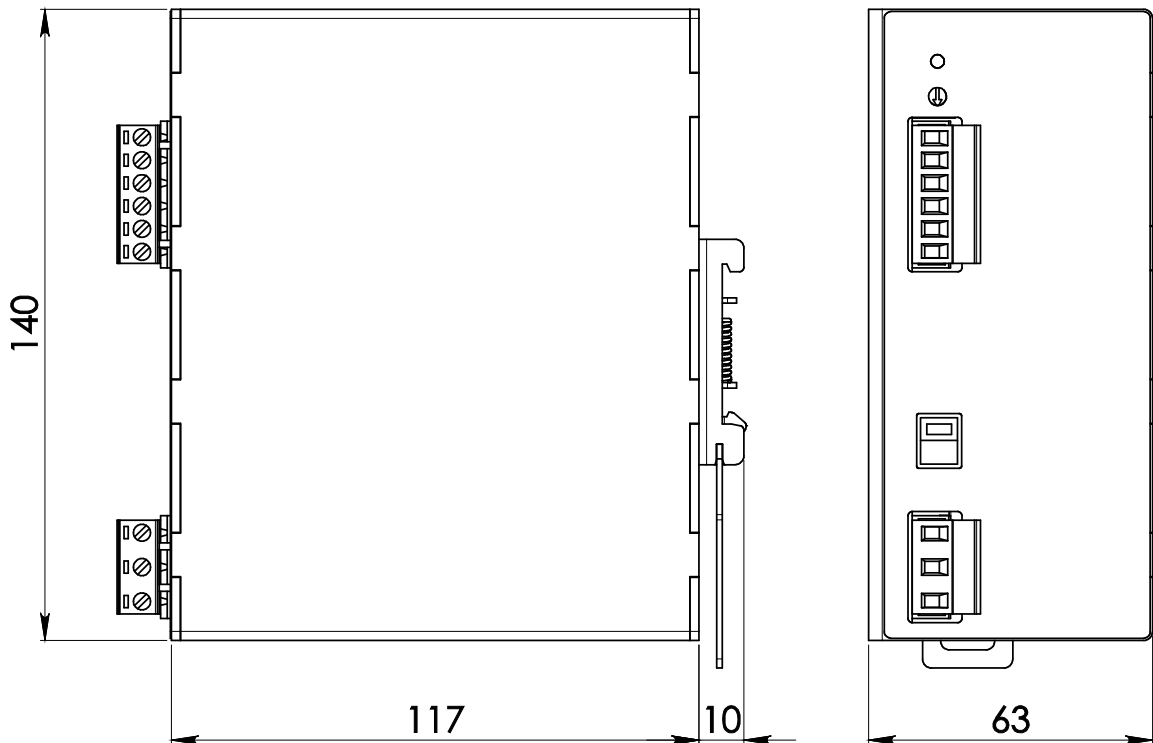
- ⌋ High efficiency and compact size
- ⌋ Only 63mm width aluminum enclosure
- ⌋ Overload 130%
- ⌋ Excellent field reliability record
- ⌋ High operating temperature with no derating

TECHNICAL DATA



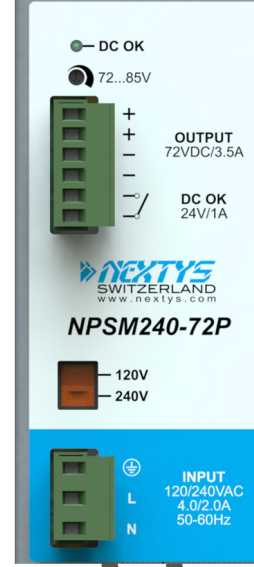
Model type	NPSM240-12	NPSM240-24	NPSM240-24P	NPSM240-48P	NPSM240-72P
OUTPUT DATA					
Rated voltage	12Vdc	24Vdc	48Vdc	72Vdc	
Adj. output voltage range	12...15Vdc	23...28Vdc	45...55Vdc	72...85Vdc	
Continuous current	16...14A	10A	5.0A	3.5A	
Overload limit	19...16A	13.5A	6.8A	4.6A	
Short circuit peak current	42A	35A	20A	14A	
Load regulation	≤ 1.5%	≤ 1%	≤ 2.5%	≤ 1.5%	
Ripple & Noise ¹	≤ 150mVpp	≤ 100mVpp			
Hold up time Vin = 120Vac Vin = 240Vac	≥ 60ms ≥ 70ms				
Protections	<ul style="list-style-type: none"> ▪ Overload, short circuit: Hiccup mode ▪ Thermal protection ▪ Output overvoltage 				
Output overvoltage protection	≥ 18Vdc	≥ 33Vdc	≥ 68Vdc	≥ 100Vdc	
Status Signals	<ul style="list-style-type: none"> ▪ DC OK - green LED ▪ DC OK - dry contact (NO, 24Vdc / 1A) 				
Parallel connection	<ul style="list-style-type: none"> ▪ Possible for redundancy (with external ORing module) ▪ P (models) - include internal ORing circuit 				
INPUT DATA					
Input AC rated voltage Frequency	Nominal: 120 / 240Vac (UL certified) Range: 90...132 / 187...264Vac Settable with voltage input selector 47...63Hz				
Input DC rated voltage	270...345Vdc (only with 240V selected)				
Input AC rated current Vin = 120Vac Vin = 240Vac	4.0A 2.0A				
Input DC rated current Vin = 270Vdc Vin = 345Vdc	1.3A 1.0A				
Inrush peak current	≤ 40A				
Touch (leakage) current	≤ 0.8mA				
Internal protection fuse	Fuse 6.3AT (not user replaceable)				
Recommended external protection	Fuse 10AT or MCB 10A C curve It is strongly recommended to provide external surge arresters (SPD) according to local regulations.				
GENERAL DATA					
Efficiency	> 84% ... > 86%	> 88%	> 86%	> 88%	
Dissipated power	< 36.5W ... < 34.5W	< 33W	< 39W	< 33W	< 34.5W
Operating temperature ²	- 40°C...+ 70°C UL certified up to 50°C				
Derating	- 5.0W/°C over 60°C				
Storage temperature	- 40°C...+ 80°C				
Humidity	5...95% r.H. non condensing				
Life time expectation	77'894h (8.8 years) at 25°C ambient full load				
MTBF	<ul style="list-style-type: none"> ▪ MIL-HDBK-217F ▪ > 500'000h at 25°C ambient full load 				
Overvoltage category	<ul style="list-style-type: none"> ▪ EN50178 ▪ III 				
Pollution degree	<ul style="list-style-type: none"> ▪ IEC60664-1 ▪ 2 				
Protection Class	<ul style="list-style-type: none"> ▪ CLASS ▪ I 				
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 E356563) ▪ EN60950 (reference) ▪ EN50178 (reference) 				
EMC Emission	<ul style="list-style-type: none"> ▪ EN55011 (CISPR11) Class A ▪ EN55022 (CISPR22) Class A 				
EMC Immunity	<ul style="list-style-type: none"> ▪ EN61000-4-2 Level 3 ▪ EN61000-4-3 Level 3 ▪ EN61000-4-4 Level 3 ▪ EN61000-4-5 Level 3 ▪ EN61000-4-11 Level 2 				
Protection degree	<ul style="list-style-type: none"> ▪ EN60529 IP20 				
Vibration sinusoidal	<ul style="list-style-type: none"> ▪ IEC 60068-2-6 (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 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total) 				

Connection terminals	2.5mm ² , screw type pluggable (24...12AWG)
Case material	Aluminum
Weight	0.75kg
Size (W x H x D)	63.0 x 140.0 x 117.0mm
1) Ripple and Noise are measured with 20MHz bandwidth, probe terminated with a 0.1µF MKP parallel capacitor. 2) Start-up type tested: - 40°C, possible at nominal voltage with load deration.	
Notes: - Technical parameters are typical, measured in laboratory environment at 25°C and 240Vac / 50Hz, at nominal values, 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



CONNECTION

 <p>DC OK 12...15V</p> <p>OUTPUT 12VDC/16A 15VDC/14A</p> <p>DC OK 24V/1A</p> <p>NPSM240-12</p> <p>120V 240V</p> <p>INPUT 120/240VAC 4.0/2.0A 50-60Hz</p>	 <p>DC OK 45...55V</p> <p>OUTPUT 48VDC/5A</p> <p>DC OK 24V/1A</p> <p>NPSM240-48P</p> <p>120V 240V</p> <p>INPUT 120/240VAC 4.0/2.0A 50-60Hz</p>	 <p>DC OK 72...85V</p> <p>OUTPUT 72VDC/3.5A</p> <p>DC OK 24V/1A</p> <p>NPSM240-72P</p> <p>120V 240V</p> <p>INPUT 120/240VAC 4.0/2.0A 50-60Hz</p>
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- Input Connection:**
- Single phase:
- L = Line
 - N = Neutral
 - | = Earth ground
- DC:
- L = + Positive DC
 - N = - Negative DC
 - | = Earth ground

- Output Connection:**
- + = Positive DC
 - - = Negative DC
- Signalling:
- DC OK:** dry contact
- NO
 - COM