











■ Main Features

- High efficiency and compact size
- Only 40mm width aluminum enclosure
- Overload 150%
- Excellent field reliability record
- Up to 60°C operating temperature with no derating

NPSM120

AC/DC Din Rail Power Supply 120W



TECHNICAL DATA

TECHNICAL DATA				
Model type	NPSM120-12	NPSM120-24	NPSM120-24P	NPSM120-48P
DUTPUT DATA lated voltage	12Vdc	241	/dc	48Vdc
Adj. output voltage range	1215Vdc		8Vdc	4555Vdc
Continuous current	7.0A	5.0		2.5A
Overload limit	119.5A	7.	DA .	3.7A
Short circuit peak current		30)A	<u>, </u>
oad regulation	≤ 2%	≤ 1%	≤ 2.5%	≤ 1.5%
Ripple & Noise ¹	≤ 120mVpp		≤ 60mVpp	
lold up time				
/in = 120Vac	≥ 10ms	≥ 20ms		10ms
/in = 240Vac	≥ 60ms	≥ 50ms	≥	50ms
Protections	 Overload, short circuit: Thermal protection Output overvoltage 	Hiccup mode		
Output overvoltage protection	≥ 18Vdc	≥ 33	Vdc	≥ 68Vdc
	■ DC OK - green LED			
Status Signals	DC OK - dry contact (NO, 24Vdc / 1A)			
	Possible for redundancy (with external ORing module)			
Parallel connection	P (models) - include int			
NPUT DATA	, salay medacin			
		Nominal: 12024	OVac (UL certified)	
nput AC rated voltage)264Vac	
requency		47		
nput DC rated voltage		1103	45Vdc	
nput AC rated current		110	**	
/in = 120Vac	1.9A		2.1A	
/in = 240Vac	1.1A		1.2A	
nput DC rated current	1.2.		_,_,	
/in = 110Vdc	1.3A		1.4A	
/in = 345Vdc	0.5A		0.6A	
nrush peak current				
	≤ 40A			
ouch (leakage) current	≤ 0.45mA			
	Fuse 3.15AT (not user replaceable)			
nternal protection fuse		Fuse 3.15AT (not	user replaceable)	
Recommended external protection	It is strongly reco	Fuse 3.15AT (not Fuse 6AT or M ommended to provide external su	CB 6A C curve	local regulations.
Recommended external protection	- 1	Fuse 6AT or M ommended to provide external su	CB 6A C curve rge arresters (SPD) according to	_
Recommended external protection GENERAL DATA Efficiency	> 84%	Fuse 6AT or N ommended to provide external su > 87%	CB 6A C curve rge arresters (SPD) according to > 85%	> 86%
Recommended external protection GENERAL DATA Efficiency	- 1	Fuse 6AT or N ommended to provide external su > 87% < 18W	CB 6A C curve rge arresters (SPD) according to > 85% < 21W	_
Recommended external protection GENERAL DATA Efficiency Dissipated power	> 84%	Fuse 6AT or N commended to provide external su > 87% < 18W - 40°C.	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ²	> 84%	Fuse 6AT or N commended to provide external su > 87% < 18W - 40°C. UL certified	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating	> 84%	Fuse 6AT or N commended to provide external su > 87% < 18W - 40°C. UL certified - 2.4W/°C	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ²	> 84%	Fuse 6AT or N commended to provide external su > 87% < 18W - 40°C. UL certified	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature	> 84%	Fuse 6AT or N commended to provide external su > 87% < 18W - 40°C. UL certifier - 2.4W/°C. - 40°C.	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity	> 84%	Fuse 6AT or N commended to provide external su > 87% < 18W - 40°C. UL certifier - 2.4W/°C. - 40°C.	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing	> 86%
Recommended external protection GENERAL DATA Officiency Dissipated power Operating temperature ² Derating Storage temperature dumidity ife time expectation	> 84%	Fuse 6AT or Nommended to provide external substitution of the second sec	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation Overvoltage category	> 84% < 20W	Fuse 6AT or Nommended to provide external substitution > 87% < 18W - 40°C. UL certified - 2.4W/°C - 40°C. 595% r.H. n 106′880h (12.2 years) a	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation Dervoltage category Pollution degree	> 84% < 20W	Fuse 6AT or Mommended to provide external substitution of the second substi	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Ife time expectation Dervoltage category Follution degree Protection Class	> 84% < 20W	Fuse 6AT or Mommended to provide external substitution of the control of the cont	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load	> 86%
Derating temperature determined temperature d	> 84% < 20W	Fuse 6AT or Mommended to provide external substitution of the control of the cont	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Sife time expectation Devervoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation	> 84% < 20W	Fuse 6AT or Mommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation	> 84% < 20W • EN50178 • IEC60664-1 • CLASS	Fuse 6AT or Mommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation Divervoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Dutput / ground isolation	> 84% < 20W • EN50178 • IEC60664-1 • CLASS	Fuse 6AT or Mommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation Divervoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Dutput / ground isolation	> 84% < 20W - EN50178 - IEC60664-1 - CLASS - UL508 - EN60950	Fuse 6AT or Mommended to provide external surprise services and the provide external surprise services and the provide external surprise services and the provided external surprise services and the surprise services are surprised external services and the surprise services and the surprise services and the surprise services are services and the surprise serv	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation Dervoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Dutput / ground isolation	> 84% < 20W - EN50178 - IEC60664-1 - CLASS - UL508 - EN60950 - EN50178	Fuse 6AT or Mommended to provide external surprise services and the provide external surprise services and the provide external surprise services and the provided external surprise services and the surprise services are surprised external services and the surprise services and the surprise services and the surprise services are services and the surprise serv	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Officiency Dissipated power Operating temperature ² Derating Storage temperature dumidity iffe time expectation Overvoltage category collution degree Protection Class Input / output isolation Output / ground isolation Output / ground isolation Stafety Standards	> 84%	Fuse 6AT or Mommended to provide external surprise services and the provided external surprise services and the surprise services are surprised external services and the surprise services and the surprise services are surprised external services and the surprise services and	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Officiency Dissipated power Operating temperature ² Derating Storage temperature dumidity iffe time expectation Overvoltage category collution degree Protection Class Input / output isolation Output / ground isolation Output / ground isolation Stafety Standards	> 84%	Fuse 6AT or Mommended to provide external surprise services and the provided external surprise services and the surprise services are surprised external surprise services and the surprise services and the surprise services are surprised external services and the surprise ser	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation Dervoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Dutput / ground isolation Stafety Standards	> 84%	Fuse 6AT or Nommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature dumidity Life time expectation Dervoltage category Follution degree Protection Class Input / output isolation Input / ground isolation Dutput / ground isolation Stafety Standards EMC Emission	> 84%	Fuse 6AT or Nommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature dumidity Life time expectation Dervoltage category Follution degree Protection Class Input / output isolation Input / ground isolation Dutput / ground isolation Stafety Standards EMC Emission	> 84%	Fuse 6AT or Nommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Officiency Dissipated power Operating temperature ² Derating Storage temperature dumidity Iffe time expectation Overvoltage category Follution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Stafety Standards EMC Emission	> 84%	Fuse 6AT or Mommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity If e time expectation Devervoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Dutput / ground isolation Disafety Standards EMC Emission EMC Immunity	> 84%	Fuse 6AT or Mommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation Overvoltage category Pollution degree Protection Class Input / output isolation Dutput / ground isolation Dutput / ground isolation Dutput / Standards EMC Emission EMC Immunity Protection degree	> 84%	Fuse 6AT or Mommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc Vdc Vdc Vdc	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Sife time expectation Devervoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Dutput / ground isolation Disafety Standards EMC Emission EMC Immunity Protection degree	> 84%	Fuse 6AT or Mommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc Vdc Vdc Vdc	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity If time expectation Divervoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Dutput / ground isolation EMC Emission EMC Immunity Protection degree Vibration sinuosoidal	> 84%	Fuse 6AT or Mommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc Vdc Vdc kVdc Hz: 2g 2hours / axis (X,Y,Z)	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity If time expectation Overvoltage category Pollution degree Protection Class Input / output isolation Output / ground isolation Output / ground isolation EMC Emission EMC Immunity Protection degree //ibration sinuosoidal Shock	> 84%	Fuse 6AT or Mommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc Vdc Vdc kVdc kVdc Hz: 2g 2hours / axis (X,Y,Z) s / direction, 18 bumps total)	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature dumidity Iffe time expectation Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation EMC Emission EMC Immunity Protection degree //ibration sinuosoidal shock Connection terminals	> 84%	Fuse 6AT or Mommended to provide external surprise series with the provided external surprise series series with the provided external surprise series with the s	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc Vdc Vdc Avdc Hz: 2g 2hours / axis (X,Y,Z) s / direction, 18 bumps total) uggable (2412AWG)	> 86%
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation Divervoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Dutput / ground isolation EMC Emission EMC Immunity Protection degree Vibration sinuosoidal Shock Connection terminals Case material	> 84%	Fuse 6AT or Mommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc v	> 86%
Internal protection fuse Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Output / ground isolation EMC Emission EMC Immunity Protection degree Vibration sinuosoidal Shock Connection terminals Case material Weight Size (W x H x D)	> 84%	Fuse 6AT or Mommended to provide external surprise services and su	CB 6A C curve rge arresters (SPD) according to > 85% < 21W .+ 70°C I up to 60°C over 60°C .+ 80°C on condensing t 25°C ambient full load Vdc Vdc Vdc Vdc c Vdc vdc c vdc vdc vdc vdc vdc vdc vdc vdc	> 86%

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.

- Technical parameters are typical, measured in laboratory environment at 25°C and 240Vac / 50Hz, at nominal values, after minimum 5 minutes of operation.

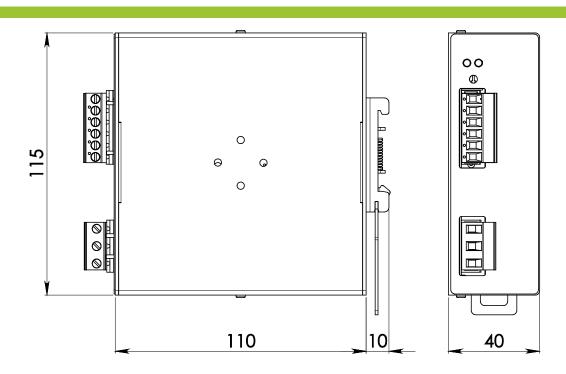
 Power rating, losses, efficiency, ripple, thermal behaviour and start-up may change outside of the nominal rated input range. Contact factory for details.
- Data may change without prior notice in order to improve the product.

NPSM120

AC/DC Din Rail Power Supply 120W



DIMENSIONS



CONNECTION







Input Connection:

Single phase:

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

- L = + Positive DC
- N = Negative DC
- I = Earth ground

Output Connection:

- + = Positive DC
- -= Negative DC

Signalling: **DC OK:** dry contact

- NO COM