





Main Features

-) High efficiency and compact size
- / Only 54mm width aluminum enclosure
- J 1, 2 or 3 phases input AC 187...550Vac
- J Wide DC input range 250...725Vdc
-) Overload 150%
- *J* Excellent field reliability record
-) Usable for broad range of industrial, telecom and renewable energy applications

NPSW240 Series 240W Wide Input Range, Compact DIN Rail Power Supply



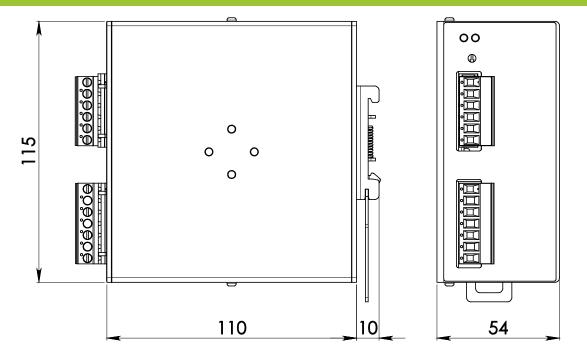
TECHNICAL DATA		NDCW240-24		NDCW248-788			
Model type OUTPUT DATA	NPSW240-12	NPSW240-24	NPSW240-48P	NPSW240-72P			
	12 15)/1-	24)/4-	40)//-	70)/4-			
Rated voltage	1215Vdc	24Vdc	48Vdc	72Vdc			
Adj. output voltage range	1215Vdc	2328Vdc	4555Vdc	7285Vdc			
Continuous current	1512A	10A	5.0A	3.5A			
Overload limit (max. 6s)	20A	15A	7.5A	5.0A			
Short circuit peak current	34A	38A	18A	13A			
Load regulation	≤1		≤1.	5%			
Ripple & Noise ¹		≤ 100	ЭтVpp				
Hold up time							
Vin = 240Vac	≥ 15ms						
Vin = 500Vac	≥ 100ms						
Protections	Overload, short circuit: Hiccup mode Thermal protection Output overvoltage						
Output overvoltage protection	≥ 18Vdc	≥ 33Vdc	≥ 68Vdc	≥ 100Vdc			
Status Signals	 DC OK - green LED OVERLOAD - red LED DC OK - dry contact (N 	O, 24Vdc / 1A)					
Parallel connection	Possible for redundancy (with external ORing module)						
INPUT DATA	P (models) - include int						
INFOT DATA		Norte-L 1/2/2					
Input AC rated voltage			200500Vac (UL certified)				
Frequency			87550Vac				
· ·			.63Hz				
Input DC rated voltage			725Vdc lc UL certified)				
		(5005000					
Input AC rated current		-	24				
Vin = 200Vac 1/2 Ph			.2A				
Vin = 500Vac 1/2 Ph			.1A				
Vin = 200Vac 3Ph			.5A				
Vin = 500Vac 3Ph		0	.8A				
Input DC rated current							
Vin = 250Vdc	0.9A		1.4A				
Vin = 725Vdc	0.4A		0.5A				
Inrush peak current		≤	60A				
Touch (leakage) current		≤1	.3mA				
internal protection fuse	None, external fuse must be provided						
Internal protection fuse		Fuse 6.3AT or MCB 6A C or MCB 4A D curve					
•							
Recommended external protection	It is strongly rec		urge arresters (SPD) according to lo	cal regulations.			
Recommended external protection		ommended to provide external s	urge arresters (SPD) according to lo				
Recommended external protection GENERAL DATA Efficiency	> 89%	ommended to provide external s > 93%	urge arresters (SPD) according to lo > 91%	> 92%			
Recommended external protection GENERAL DATA Efficiency		ommended to provide external s > 93% < 18W	urge arresters (SPD) according to lo > 91% < 23.5W				
Recommended external protection GENERAL DATA Efficiency Dissipated power	> 89%	ommended to provide external s > 93% < 18W - 40°C	urge arresters (SPD) according to lo > 91%	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ²	> 89%	ommended to provide external s > 93% < 18W - 40°C UL certifie	urge arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating	> 89%	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/°(urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature	> 89%	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/°(- 40°C	urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C + 80°C	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity	> 89%	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r	urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C + 80°C non condensing	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity	> 89%	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r	urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C + 80°C	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation	> 89% < 22.5W	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81′648h (9.3 years) at	urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C + 80°C ton condensing t 25°C ambient full load	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF	> 89% < 22.5W	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81′648h (9.3 years) at > 500'000h at 2	urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C + 80°C non condensing	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category	> 89% < 22.5W MIL-HDBK-217F • EN50178	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81'648h (9.3 years) at > 500'000h at 2 III	urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C + 80°C ton condensing t 25°C ambient full load	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree	> 89% < 22.5W MIL-HDBK-217F = EN50178 = IEC60664-1	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81'648h (9.3 years) at > 500'000h at 2 III 2	urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C + 80°C ton condensing t 25°C ambient full load	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class	> 89% < 22.5W MIL-HDBK-217F • EN50178	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81'648h (9.3 years) at > 500'000h at 2 III 2 I	urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C + 80°C non condensing t 25°C ambient full load 5°C ambient full load	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class	> 89% < 22.5W MIL-HDBK-217F = EN50178 = IEC60664-1	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81'648h (9.3 years) at > 500'000h at 2 III 2 I	urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C + 80°C ton condensing t 25°C ambient full load	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation	> 89% < 22.5W MIL-HDBK-217F = EN50178 = IEC60664-1	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81′648h (9.3 years) ar > 500'000h at 2 III 2 I 4.2 I 4.	urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C + 80°C non condensing t 25°C ambient full load 5°C ambient full load	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation	> 89% < 22.5W MIL-HDBK-217F = EN50178 = IEC60664-1	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/* - 40°C 595% r.H. r 81'648h (9.3 years) at > 500'000h at 2 III 2 I 4.2 2.2	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation	> 89% < 22.5W • MIL-HDBK-217F • EN50178 • IEC60664-1 • CLASS	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/* - 40°C 595% r.H. r 81'648h (9.3 years) ar > 500'000h at 2 III 2 I 4.2 0.75	urge arresters (SPD) according to lo > 91% < 23.5W + 70°C d up to 50°C C over 50°C + 80°C non condensing t 25°C ambient full load 5°C ambient full load	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Dutput / ground isolation	> 89% < 22.5W MIL-HDBK-217F • EN50178 • IEC60664-1 • CLASS • UL508	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81′648h (9.3 years) ar > 500'000h at 2 III 2 I 4.2 (certified E356563)	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation	> 89% < 22.5W MIL-HDBK-217F • EN50178 • IEC60664-1 • CLASS • UL508 • EN60950	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81'648h (9.3 years) at > 500'000h at 2 III 2 I 4.2 0.75 (certified E356563) (reference)	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation	> 89% < 22.5W MIL-HDBK-217F = EN50178 = IEC60664-1 CLASS UL508 = EN60950 = EN50178	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81′648h (9.3 years) at > 500'000h at 2 III 2 I 4.2 (certified E356563) (reference) (reference) (reference)	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Safety Standards	> 89% < 22.5W MIL-HDBK-217F • EN50178 • IEC60664-1 • CLASS UL508 • EN60950 • EN50178 • EN5011 (CISPR11)	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81′648h (9.3 years) at > 500'000h at 2 III 2 I 4.2 (certified E356563) (reference) (reference) (reference) Class A	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Safety Standards	> 89% < 22.5W MIL-HDBK-217F = EN50178 = IEC60664-1 CLASS UL508 = EN60950 = EN50178	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81′648h (9.3 years) at > 500'000h at 2 III 2 I 4.2 (certified E356563) (reference) (reference) (reference)	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Safety Standards	> 89% < 22.5W MIL-HDBK-217F • EN50178 • IEC60664-1 • CLASS UL508 • EN60950 • EN50178 • EN5011 (CISPR11)	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81′648h (9.3 years) at > 500'000h at 2 III 2 I 4.2 (certified E356563) (reference) (reference) (reference) Class A	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Safety Standards	> 89% < 22.5W MIL-HDBK-217F • EN50178 • IEC60664-1 • CLASS UL508 • EN60950 • EN50178 • EN50178 • EN5011 (CISPR11) • EN55022 (CISPR22)	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/° - 40°C 595% r.H. r 81′648h (9.3 years) at > 500'000h at 2 III 2 II 2 (certified E356563) (reference) (reference) (reference) Class A Class A Class A	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Safety Standards EMC Emission	> 89% < 22.5W MIL-HDBK-217F • EN50178 • IEC60664-1 • CLASS • UL508 • EN60950 • EN50178 • EN5012(CISPR11) • EN55022(CISPR22) • EN51000-4-2 • EN61000-4-3	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/% - 40°C 595% r.H. r 81'648h (9.3 years) ai > 500'000h at 2 III 2 III 2 I I 4.2 2.2 III 2 (certified E356563) (reference) (reference) (reference) Class A Class A Level 3 Level 3 Level 3	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Safety Standards EMC Emission	 > 89% < 22.5W MIL-HDBK-217F EN50178 IEC60664-1 CLASS UL508 EN60950 EN50178 EN50178 EN50178 EN50178 EN50178 EN50178 EN50178 EN50178 EN5012 (CISPR11) EN55022 (CISPR22) EN61000-4-2 EN61000-4-3 	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/% - 40°C 595% r.H. r 81'648h (9.3 years) al > 500'000h at 2 III 2 I 4.2 2.2 (certified E356563) (reference) (reference) (class A Class A Level 3	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Safety Standards EMC Emission	> 89% < 22.5W MIL-HDBK-217F EN50178 IEC60664-1 CLASS UL508 EN60950 EN50178 EN5011 (CISPR11) EN55022 (CISPR22) EN61000-4-2 EN61000-4-3 EN61000-4-3 EN61000-4-5	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/* - 40°C 595% r.H. r 81′648h (9.3 years) at > 500'000h at 2 III 2 I I 4.2 2.2 III 2 (certified E356563) (reference) (ceference) (reference) (class A Class A Class A Level 3 Level 3 Level 3 Level 3 Level 4	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Safety Standards EMC Emission EMC Immunity	> 89% < 22.5W MIL-HDBK-217F EN50178 IEC60664-1 CLASS UL508 EN60950 EN50178 EN5011 (CISPR11) EN55022 (CISPR22) EN61000-4-2 EN61000-4-3 EN61000-4-3 EN61000-4-5 EN61000-4-11	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/* - 40°C 595% r.H. r 81′648h (9.3 years) af > 500'000h at 2 III 2 I I 4.2 2.2 III 2 (certified E356563) (reference) (reference) (reference) (class A Class A Level 3 Level 3 Level 3 Level 3 Level 3 Level 4 Level 2	vige arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Safety Standards EMC Emission EMC Immunity Protection degree	> 89% < 22.5W MIL-HDBK-217F EN50178 IEC60664-1 CLASS UL508 EN60950 EN50178 EN55011 (CISPR11) EN55022 (CISPR22) EN61000-4-2 EN61000-4-3 EN61000-4-3 EN61000-4-5 EN61000-4-11 EN60529	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/* - 40°C 595% r.H. r 81'648h (9.3 years) ar > 500'000h at 2 III 2 I I 4.2 2.2 III 2 (certified E356563) (reference) (reference) (reference) (reference) Class A Class A Level 3 Level 3 Level 3 Level 3 Level 3 Level 2 IP20	urge arresters (SPD) according to lo > 91% < 23.5W	> 92%			
Internal protection fuse Recommended external protection GENERAL DATA Efficiency Dissipated power Operating temperature ² Derating Storage temperature Humidity Life time expectation MTBF Overvoltage category Pollution degree Protection Class Input / output isolation Input / ground isolation Output / ground isolation Safety Standards EMC Emission EMC Immunity Protection degree Vibration sinuosoidal	> 89% < 22.5W MIL-HDBK-217F EN50178 IEC60664-1 CLASS UL508 EN60950 EN50178 EN5011 (CISPR11) EN55022 (CISPR22) EN61000-4-2 EN61000-4-3 EN61000-4-3 EN61000-4-5 EN61000-4-11	ommended to provide external s > 93% < 18W - 40°C UL certifie - 4.2W/* - 40°C 595% r.H. r 81'648h (9.3 years) af > 500'000h at 2 III 2 I I 4.2 2.2 III 2 (certified E356563) (reference) (reference) (reference) (class A Class A Level 3 Level 2 IP20 (5-17.8Hz: ±1.6mm; 17.8-500)	urge arresters (SPD) according to lo > 91% < 23.5W	> 92%			



Connection terminals	2.5mm ² , screw type pluggable (2412AWG)				
Case material	Aluminum				
Weight	0.65kg				
Size (W x H x D)	54.0 x 115.0 x 110.0mm				
1) Ripple and Noise are measured with 20MHz bandwidth, probe 2) Start-up type tested: - 40°C, possible at nominal voltage with lo					
Notes: - Technical parameters are typical, measured in laboratory enviro	nment at 25°C and 400Vac / 50Hz, at nominal values, after minimum 5 minutes of operation.				

Technical parameters are typical, measured in laboratory environment at 25°C and 400Vac / 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

DC OK OVERLOAD 1215V + + OUTPUT 12VDC/15A 12VDC/15A 12VDC/15A 12VDC/15A 12VDC/15A 12VDC/15A 12VDC/15A 0 12VDC/15A 12VDC/15A 0 12VDC/15A 12VDC/15A 0 12VDC/15A 12VDC/15	DC OK OVERLOAD	DC OK OVERLOAD T285V T285V + 4 OUTPUT T2VDC/3.5A - DC OK 24V/1A C2VDC/3.5A - DC OK 24V/1A C2VDC/3.5A - DC OK 24V/1A C2VDC/3.5A - DC OK 24V/1A C2VDC/3.5A - DC OK 24V/1A C2VDC/3.5A - DC OK 24V/1A - - - - - - - - - - - - -	Input Connection: Single phase: L = Line N = Neutral I = Earth ground 2 phases: L1 = phase 1 L2 = phase 2 I = Earth ground 3 phases: L1 = phase 1 L2 = phase 2 L3 = phase 3 I = Earth ground DC: L1(L) = + Positive DC L2(N) = - Negative DC L3 = do not connect I = Earth ground	Output Connection: • + = Positive DC • - = Negative DC Signalling: DC OK: dry contact • NO • COM
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