■ *Main Features*

- High efficiency and compact size
- Overload 150%
- Constant current or hiccup mode limitation, user settable
- Easy parallelable for power increase
- Low noise thermally regulated “long life” fan
- Up to 60°C operating temperature with no derating

TECHNICAL DATA

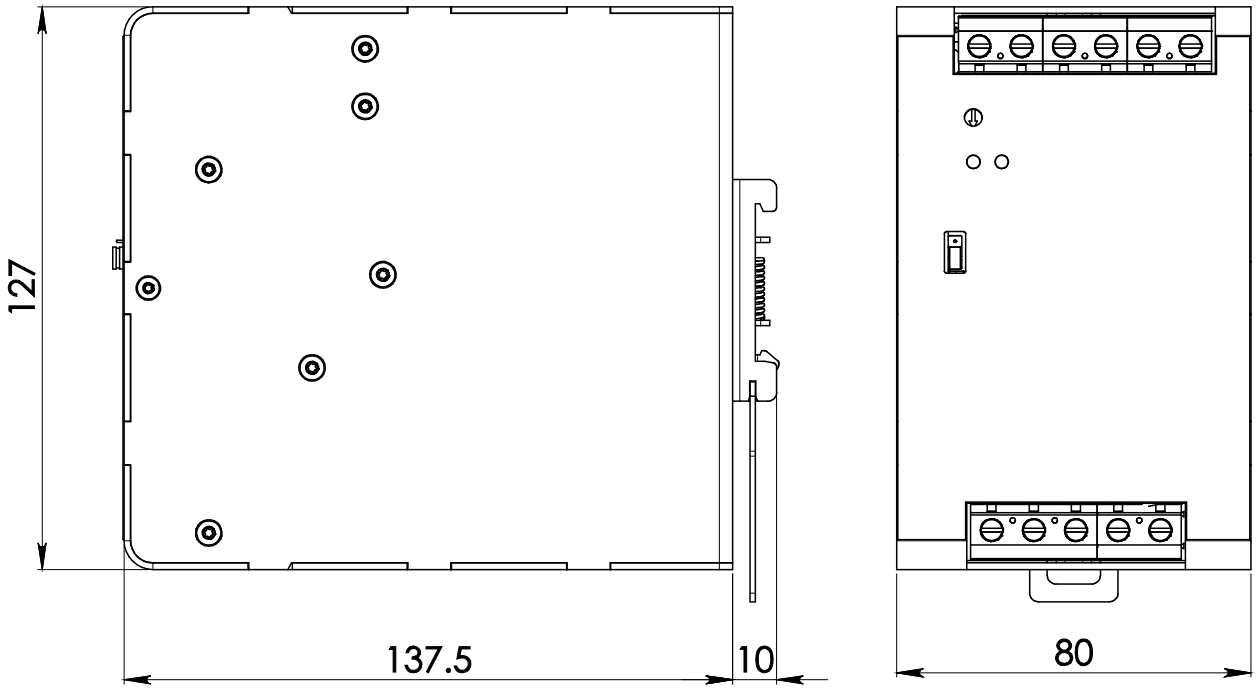
Model type	NPST721-24	NPST721-48
OUTPUT DATA		
Rated voltage	24Vdc	48Vdc
Adj. output voltage range	23…28Vdc	45…55Vdc
Continuous current	30A	15A
Overload limit in constant current mode	33A	16.5A
Overload limit in hiccup mode (max. 5s)	45A	22.5A
Load regulation	≤ 1%	≤ 0.5%
Ripple & Noise[1]	≤ 150mVpp	≤ 100mVpp
Hold up time	≥ 20ms	
Protections	▪ Overload, short circuit: Constant current or Hiccup mode (user settable) ▪ Thermal protection ▪ Output overvoltage	
Output overvoltage protection	≥ 33Vdc	≥ 68Vdc
Status Signals	▪ **DC OK** - green LED ▪ **OVERLOAD** - red LED ▪ **DC OK** - dry contact (NO, 24Vdc / 1A)	
Parallel connection[2]	Possible for power or redundancy (with external ORing module)	
INPUT DATA		
Input AC rated voltage[3] Frequency	Nominal: 3 phases, 400…500Vac (UL certified) Range: 340…550Vac 47...63Hz	
Input DC rated voltage	520...725Vdc	
Input AC rated current Vin = 400Vac Vin = 500Vac	 1.9A 1.7A	
Input DC rated current Vin = 520Vdc Vin = 725Vdc	 1.7A 1.3A	
Inrush peak current	≤ 50A	
Touch (leakage) current	≤ 0.1mA	
Internal protection fuse	None, external fuse must be provided	
Recommended external protection	Fuse 3x 10AT or 3x MCB 10A C curve It is strongly recommended to provide external surge arresters (SPD) according to local regulations.	
GENERAL DATA		
Efficiency	> 91.5%	> 93%
Dissipated power	< 62W	< 55W
Operating temperature[4]	- 40°C…+ 70°C UL certified up to 60°C	
Derating	- 16W/°C over 60°C	
Storage temperature	- 40°C...+ 80°C	
Humidity	5…95% r.H. non condensing	
Life time expectation	63'200h (7.2 years) at 25°C ambient full load	
MTBF	▪ MIL-HDBK-217F > 500'000h at 25°C ambient full load	
Overvoltage category Pollution degree	▪ EN50178 III ▪ IEC60664-1 2	
Protection Class	▪ CLASS I	
Input / output isolation	4.2kVdc	
Input / ground isolation	2.2kVdc	
Output / ground isolation	0.75kVdc	
Safety Standards	▪ UL508 (certified E356563) ▪ EN60950 (reference) ▪ EN50178 (reference)	
EMC Emission	▪ EN55011 (CISPR11) Class A ▪ EN55022 (CISPR22) Class A	
EMC Immunity	▪ EN61000-4-2 Level 3 ▪ EN61000-4-3 Level 3 ▪ EN61000-4-4 Level 3 ▪ EN61000-4-5 Level 4 ▪ EN61000-4-11 Level 2	
Protection degree	▪ EN60529 IP20	
Vibration sinuosoidal	▪ IEC 60068-2-6 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2hours / axis (X,Y,Z)	
Shock	▪ IEC 60068-2-27 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total)	
Connection terminals	1.5…6mm², screw type header (16...10AWG)	

Case material	Aluminum
Weight	1.3kg
Size (W x H x D)	80.0 x 127.0 x 137.5mm

1) Ripple and Noise are measured with 20MHz bandwidth, probe terminated with a 0.1µF MKP parallel capacitor.
2) Pay attention, set the current limitation mode jumper on C.C. mode when connecting more units in parallel.
3) In case of 2 phases operation, reduce the output load to 50% of the nominal value.
4) 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 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

Input Connection:

3 phases:
- L1 = phase 1
- L2 = phase 2
- L3 = phase 3
- ⏚ = Earth ground

DC:
- L1 = + Positive DC
- L2 = - Negative DC
- L3 = do not connect
- ⏚ = Earth ground

Output Connection:

- + = Positive DC
- - = Negative DC

Signalling:
DC OK: dry contact
- NO
- COM