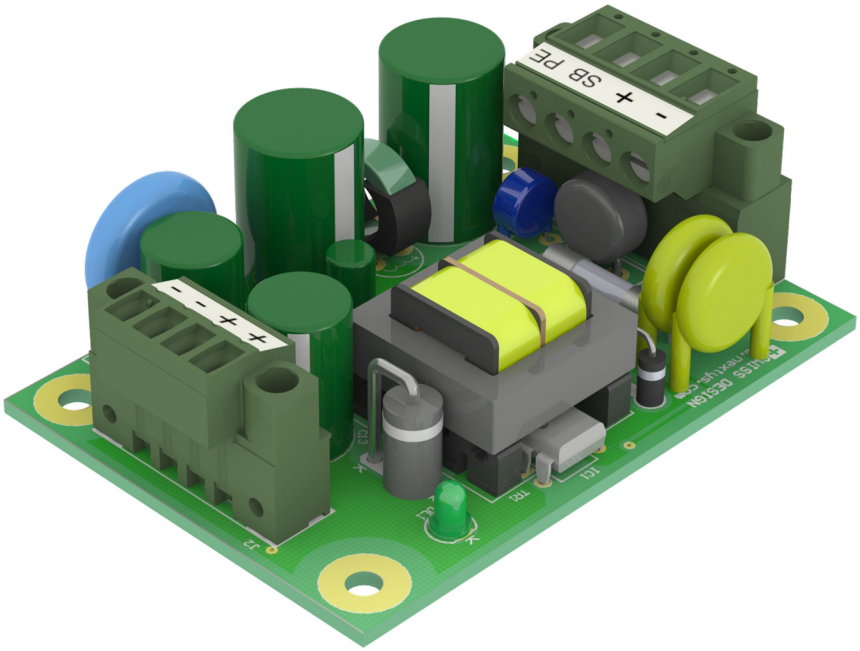


Main Features

- High efficiency and compact size
- Wide input voltage range
- High operating temperature (up to 70°C)
- Designed according to EN50121 for railway application

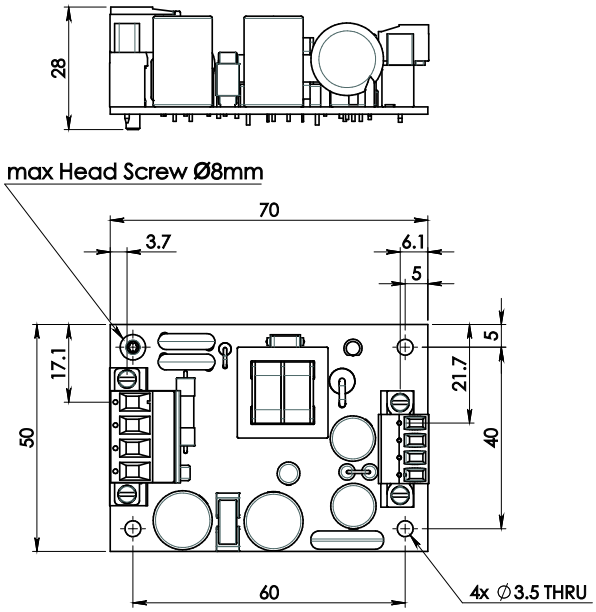
TECHNICAL DATA

Model type	NPSR10-5	
OUTPUT DATA		
Rated voltage	5.1Vdc	
Adj. output voltage range	5.1Vdc Fixed	
Continuous current	2.0A	
Overload limit	2.5A	
Short circuit peak current	7A for 60ms	
Load regulation	≤ 0.5%	
Ripple & Noise[1]	≤ 100mVpp	
Hold up time	≥ 50ms	
Protections	▪ Overload/short circuit: Hiccup mode ▪ Thermal protection ▪ Input undervoltage lockout (64Vdc ±2V) ▪ Output overvoltage	
Output overvoltage protection	≥ 6.2Vdc	
Status Signals	**DC OK** - green LED	
Parallel connection	Possible for redundancy (with external ORing module)	
INPUT DATA		
Input DC rated voltage	Nominal: 110Vac Range: 66…154Vac	
Input DC rated current	0.3A	
Inrush peak current	≤ 5A	
Internal protection fuse	Fuse 0.8AT (not user replaceable)	
GENERAL DATA		
Efficiency	> 78%	
Dissipated power	< 3W	
Operating temperature[2][3]	- 40°C…+ 85°C	
Derating	- 0.13W/°C over 70°C	
Storage temperature	- 40°C...+ 80°C	
Humidity	5…95% r.H. non condensing	
Overvoltage category Pollution degree	▪ EN50178 ▪ IEC60664-1	I 2
Input / output isolation	2.2kVdc	
Input / ground isolation	1.5kVdc	
Output / ground isolation	0.71kVdc	
Safety Standards	▪ EN50121	(reference)
EMC Emission	▪ EN50121-3-2	Class A
EMC Immunity	▪ EN61000-4-2 ▪ EN61000-4-3 ▪ EN61000-4-4 ▪ EN61000-4-5 ▪ EN61000-4-11	Level 3 Level 2 Level 2 Level 2 Level 2
Protection degree	▪ EN60529	IP00
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 Input terminals	2.5mm², screw type pluggable (24...12AWG)	
Connection Output terminals	1.5mm², screw type pluggable (24...16AWG)	
Case material	Aluminum	
Weight	65g	
Size (W x H x D)	70.0 x 28.0 x 50.0mm	

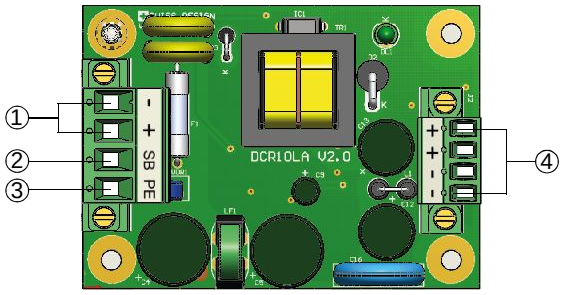
1) Ripple and Noise are measured with 20MHz bandwidth, probe terminated with a 0.1µF MKP parallel capacitor.
2) Start-up type tested: - 40°C, possible at nominal voltage with load deration.
3) At + 85°C the unit can work at full load for 10min Max.

Notes:
- Technical parameters are typical, measured in laboratory environment at 25°C and 110Vdc, 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



① DC Input

② Not connected

③ PE

④ DC Output (load)

Input Connection:

- + = Positive DC
- - = Negative DC
- SB = not connected
- PE = Earth ground

Output Connection:

- + = Positive DC
- - = Negative DC