POWER CONTROL SYSTEMS
POWER SUPPLY UNITS

SD83-I-R-X-N3

Railway Application
Single output DC-DC converter with I/O isolation

FEATURES

Input voltage
24 - 48 V
(18 ÷ 72 Vdc)

Efficiency
> 85% (from 70% to full load)

Input protections
• Input Transient Level (The P.S. shall not be damage when a 24Vac and 48Vac/50Hz full rectified voltage is applied)
• Short circuit on input line
• Reverse Polarity at the Input
• Input Voltage Lower
• The product shall admit a ripple of 15%/50Hz on the 24 Vdc and 48 Vdc input voltage without disturbance.

Output protections
• Overload protection (active clamp)
• Short-circuit protection

Hold up time
50 ms (at 40Vdc and nominal power)

Rise Time
100 ms (from 10% to 90% of out voltage)

Start up time
500 ms

Operating indicators
• Green Led = Input voltage is OK (IN OK)
• Green led = Output voltage is OK (OUT OK)

Operating temperature
-40° ÷ +85° C

Dielectric withstand voltage
• Input - Output = 2,5 KVrms
• Input - Mechanical Ground = 2,5 KVrms
• Output - Mechanical Ground = 0,5 KVrms

Isolation
• Comply with EN 50124-1
• Mechanical Ground - Output > 200 MOhm
• Mechanical ground - Input > 200 Mohm
• Input - Output > 200 Mohm

Comply with
• EN 50155
• EN 50121-3-2
• EN 50121-4
• IEC 62380
• CECC 0020
• CECC 63000
• DIRCTIVE 2002/95/EC
• EN 60529
• EN 61373
• EN 50125-1
• EN 50125-3
• EN 60068-2-1
• EN 60068-2-2
• EN 60068-2-30
• EN 61000-4-2
• EN 61000-4-3
• EN 61000-4-4
• EN 61000-4-5
• EN 61000-4-6
• EN 55011
• NFF 16-101
• NFF 16-102
• CEI 664
• NFC 42-801
• EMN 60950-1
• EN 50129
• EN 50160
• EMCSS-VILB-TH-00157
• MIL.03.TIS.STD.004

Weight
< 1,4 Kg

Connections
• Input = DIN 41612 Type H15 Male Argented with Mechanical Coding
• Output = DIN 41612 Type C96

MTBF
• 1000000 h (comply with IEC 62380)

Audio Noise
• < 40dB (A) at 1 meter

Power Supply Comply with:
• NF F 16-101
• NF F 16-102

Manufacture comply with:
• IPC A 610 REV. D Class 3
• RoHS

FEATURES TABLE

Vout Volts	Iout Ampere	Imin Ampere	Staic Line and load Variation temperature and Dynamical Variation %	Ripple & NOise (0÷20MHz) mV
12.35	7	0	5	< 50 (0 ÷ 50KHz) < 100 (50KHz ÷ 20MHz)

POWER SUPPLY VIEW

DIMENSIONS AND CONNECTIONS