POWER CONTROL SYSTEMS
POWER SUPPLY UNITS

SA83-I-R-X-N1

Railway Application
Single output AC-DC power supply unit

FEATURES

Input voltage
115 - 125 - 220 - 230 Vac (90÷264Vac)
Input frequency
46÷450 Hz
Efficiency
> 80% (from 70% to full load)
Power factor
> 0,8
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
Harmonic Distortion
• up to 10%, according EN 50160
Output protections
• Overvoltage protection
• Overload protection
• Short-circuit protection
Hold up time
500 ms at 99V/48Hz and nominal power
Rise Time
100ms (from 10% to 90% to output voltage)

Start up time
500ms
Operating indicators
• Green led = Input voltage is OK (IN OK)
• Green led = Output voltage is OK (OUT OK)
Operating temperature
-40°C ÷ +85°C
Storage temperature
-40°C ÷ +85°C
Cooling
Natural convection
Dielectric withstand voltage
• Input - Output = 3,5KVrms
• Input - Mechanical Ground = 3,5KVrms
• Output - Mechanical Ground = 0,5KVrms
Isolation
• Comply with EN 50124-1
• Mechanical Ground - Output < 100 MOhm
• Mechanical ground - input < 100 Mohm
• input - Output > 200 Mohm
Comply with
• EN 50155
• EN 50121-3-2
• EN 50121-4
• EN 50124-1
• IEC 62380
• CECC 0020
• CECC 63000
• DIRECTIVE 2002/95/EC
• EN 60529
• EN 61373
• EN 50125-1
• EN 50125-3
• EN 60 068-2-1
• EN 60 068-2-2
• EN 60 068-2-30
• EN 61000-4-2
• EN 61000-4-3
• EN 61000-4-4
• EN 61000-4-5
• EN 61000-4-6
• EN 55011
• CEI 664
• NFC 42-801
• EN 60950-1
• EN 50129
• EN 50160
• EMCSS-VILB-TH-00157
Weight
< 2,0 Kg
Connections
• Input = DIN 41612 Type H15 male Argented with Mechanical Coding
• Output = DIN 41612 Type C96
MTBF
• 750000 h (comply with IEC
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