



power DNR120AS24-I

URL:<https://www.sxplc.com/power-dnr120as24-i>

Product data sheet

Input

Input Voltage • 90-132/180-264 VAC, auto select,

210-375 VDC (DNR120AS, DNR240PS)

90-264 VAC, 120-375 VDC (DNR480PS)

Input Frequency • 47-63 Hz

Input Current • See tables

Inrush Current • 24/48 A at 115/230 VAC (DNR120)

30/60 A at 115/230 VAC (DNR240)

25/50 A at 115/230 VAC (DNR480)

Power Factor • 0.7 typical (DNR120, DNR240)

0.9 typical (DNR480)

Earth Leakage Current • 0.8 mA max

Input Protection • T3.15A, 250 VAC (DNR120)

T6.3A, 250 VAC (DNR240)

T10A, 250 VAC (DNR480)

Output

Output Voltage • See tables

Output Voltage Trim • See tables

Initial Set Accuracy • $\pm 1\%$

Minimum Load • No minimum load required

Start Up Delay • < 1 s (may increase at low

temperature extremes)

Start Up Rise Time • < 150 ms

Hold Up Time • 25/30 ms at 115/230 VAC

Line Regulation • $\pm 0.5\%$ max

Load Regulation • $\pm 1\%$ ($\pm 5\%$ for units in parallel)

Parallel Operation • A maximum of 3 units can be paralleled

(not with standby system). Total power

available is 90% of the rated current of

each unit. Minimum load per unit 10%

Transient Response • 4% max deviation recovering to within

1% in 2 ms for a 50% load change

Ripple & Noise • 50 mV pk-pk (DNR120)

100 mV pk-pk (DNR240, DNR480)

20 MHz bandwidth (may increase at low

temperature extremes)

Overvoltage Protection • Output clamps at 125-140% V_{nom} ,

auto recovery

Overload Protection • 105-145% constant current, auto recovery

120-165% constant current (DNR240)

Temp. Coefficient • $\pm 0.03\%/^{\circ}\text{C}$

General

Efficiency • See table

Isolation • 3000 VAC Input to Output

1500 VAC Input to Ground

500 VAC Output to Ground

Switching Frequency • See table

Signals • DC ON indicator Green LED,

DC LOW indicator Red LED

DC OK: 24 V and standby models

MTBF • 430 kHrs typical Bellcore,

Issue 6 at +40 °C, GB

DIN Rail • Compatible with TS35/7.5 or TS35/15

Environmental

Operating Temperature • DNR120: -35 °C to +70 °C, derate linearly

from +60 °C at 2.5%/°C, start up at -30 °C

DNR240: -40 °C to +70 °C, derate linearly

from +60 °C at 2.5%/°C, start up at -35 °C

DNR480: -40 °C to +70 °C, derate linearly

from +55 °C at 2.5%/°C, start up at -35 °C

(see derating curves)

Cooling • Convection-cooled with 25mm free space

all sides

Operating Altitude • 5000m

Operating Humidity • 20-95% RH, non-condensing

Storage Temperature • -40 °C to +85 °C

Shock • 15 g, 11 ms, 3 axes, 6 faces, 3 shocks

per face

Vibration • 2 g, 10 Hz to 500 Hz, along X, Y & Z axis,

60 min/axis, mounted on rail

EMC & Safety

Emissions • EN55022, class B conducted & radiated

Harmonic Currents • EN61000-3-2, class A

Voltage Flicker • EN61000-3-3

ESD Immunity • EN61000-4-2, level 4 Perf Criteria A

Radiated Immunity • EN61000-4-3, level 3 Perf Criteria A

EFT/Burst • EN61000-4-4, level 4 Perf Criteria A

Surge • EN61000-4-5, installation class 3,

Perf Criteria A

Conducted Immunity • EN61000-4-6, level 3 Perf Criteria A

Magnetic Field • EN61000-4-8, level 4 Perf Criteria A

Dips & Interruptions • EN61000-4-11, 30% 10 ms,

60% 100 ms, 100% 5000 ms

Perf Criteria A, A, B

Safety Approvals • EN62368-1, UL508, UL62368-1,

cUL60950-1, Pollution Degree 2, CE Mark,

UL60950-1, Overvoltage Category II,

UL508 Overvoltage Category III, ANSI/ISA

12.12.01. (Class 1, Division 2 Groups A, B,

C and D), CE & UKCA meets all applicable

directives & legislation

