

# power DNR60US24

URL:<https://www.sxplc.com/power-dnr60us24>

## Product data sheet

### Input

Input Voltage • 90-264 VAC, 120-375 VDC (DNR05/10/18)

85-264 VAC, 90-375 VDC (DNR30/60)

Input Frequency • 47-63 Hz

Input Current • See tables

Inrush Current • 5-18 W: 15/30 A at 115/230 VAC

30 W: 20/40 A at 115/230 VAC

60 W: 30/60 A at 115/230 VAC

Power Factor • EN61000-3-2, class A

Earth Leakage Current • 0.8 mA max

Input Protection • Internal fuse T2A, 250 VAC fitted in line

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 • 30/130 ms at 115/230 VAC (DNR05)

25/100 ms at 115/230 VAC (DNR10)

20/75 ms at 115/230 VAC (DNR18)

20/30 ms at 115/230 VAC (DNR30)

20/30 ms at 115/230 VAC (DNR60)

Line Regulation • 5-18 W:  $\pm 1.0\%$  max

30-60 W:  $\pm 0.5\%$  max

Load Regulation • 5-18 W:  $\pm 2.0\%$  max

30-60 W:  $\pm 0.5\%$  max

Parallel Operation • Redundancy module DPM10 available

for load currents up to 10 A (not with

standby system), contact sales

Transient Response • 4% max deviation recovery to within

1% in 2 ms for a 50% load change

Ripple & Noise • 50 mV pk-pk, 20 MHz bandwidth (may

increase at low temperature extremes)

Overvoltage Protection • Output clamps at 120-145%  $V_{nom}$ ,

auto recovery

Overload Protection • 110-165% constant current (DNR05-18)

105-150% power limited (DNR30/60)

Short Circuit Protection • Power limited, auto recovery

Temperature •  $\pm 0.03\%/^{\circ}\text{C}$

Coefficient

xppower.com

General

Efficiency • See tables

Isolation • 3000VAC Input to Output, 1500VAC Input

to Ground, 500VAC Output to Ground

Switching Frequency • 132 KHz typical, 55-90 kHz (DNR60)

Signals • DC ON indicator LED Green: All models

DC LOW indicator LED Red: 5-18 W models

DC OK: 24 V 30-60 W models

DC OK: All standby models

MTBF • 800 kHrs typical Bellcore, Issue 6 at +40 °C,

GB (DNR05/10/18), 530 kHrs typical

Bellcore, Issue 6 at +40 °C, GB (DNR30/60)

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

Environmental

Operating Temperature • -20 °C to +70 °C (DNR05/10/18)

-40 °C to +70 °C, start up at -35 °C

(DNR30/60), all units derate linearly from

60 °C (see derating curves)

Cooling • Convection-cooled with 25mm free space

all sides

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

Storage Temperature • -25 °C to +85 °C (DNR05/10/18)

-40 °C to +85 °C (DNR30/60)

Shock • 15 g, 11 ms, X,Y & Z axis, 3 shocks/axis in

both directions

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

60 mins/axis, mounted on rail

## EMC & Safety

Emissions • EN55022, level 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, B, B

Safety Approvals • EN60950-1, UL508 Pollution Degree 2,

UL1310 class 2 power recognised,

See note 3 & ratings table,

UL60950-1 Overvoltage Category II,

UL508 Overvoltage Category III,

DNR30 & DNR60: SEMI F47

ANSI/ISA 12.12.01. Class 1, Division 2

Groups A,B,C and D

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