

Technical data sheet

Power supply · 120 W

Switchmode power supply, PFC, Single-phase
Input: AC 90–132 V, AC 180–264 V / DC 210–375 V
Output: DC 24 V, 5 A



Identification

Type DRAN120-24B
Part No. [722758](#)

Product version

Datasheet version 01

Input

Number of phases 1
Rated voltage U_N AC 115 / 230 V (auto select)
Operation voltage range AC 90–132 V / AC 180–264 V / DC 210–375 V
Frequency range 47 Hz – 63 Hz
Rated current I_N 2.2 A @ AC 115 V / 0.83 A @ AC 230 V
Inrush current 24 A @ AC 115 V / 48 A @ AC 230 V
Internal fuse T3, 15 A/AC 250 V
External protection Mini-circuit breaker: B 6 A
Power factor correction P.F.C. 0.7

Output

Output voltage/current DC 24 V/5 A
Rated voltage U_N DC 24 V
Rated current I_N 5 A
Power Dissipation 20 W @ AC 230 V
Setting range $U_{out\ min.}/U_{out\ max.}$ 22.5–28.5 V
Accuracy $\pm 1\%$
Load regulation Single $\pm 1\%$, Parallel $\pm 5\%$
Line regulation $\pm 0.5\%$
Rise time 1 s
Temperature coefficient $\pm 0.03\% / ^\circ C$
Ripple and noise 50 mV

USA: LUTZE INC.

13330 South Ridge Drive • Charlotte, NC 28273, USA
Tel. +1 (704) 504-0222 • Fax +1 (704) 504-0223
www.lutze.com • info@lutze.com

10.11.2022 • Subject to technical modification

Part No. [722758](#) • Datasheet version: 01

page 1 of 5



SYSTEMATIC TECHNOLOGY

Technical data sheet

Power supply · 120 W

Hold up time	25 ms @ 115 V / 30 ms @ 230 V
Parallel / redundant mode	Max. 3 units at 90% load current, manual switch S/P
Efficiency	87 %
Over voltage protection	125–145 %
Rated over load protection	105–125 %
Short circuit	Current limit

Status indication

Status indication DC ON LED green	≥17.6–19.4 V
Status indication DC LOW LED red	≤17.6–19.4 V

Monitoring

DC ON Control (Rdy)	N/O contact
Switching voltage	DC 60 V
Switching current	Max. 300 mA
Isolation voltage	DC 500 V

General

Switching frequency	Approx. 80 kHz
Insulation voltage input / output	DC 4.2 kV
Insulation voltage input / ground	DC 2.1 kV
Insulation voltage output / ground	DC 700 V
Insulation resistance at DC 500 V	100 MΩ
Derating	Capacity: -2.5 %/°C starting at +61 °C
Cooling	Air convection, 25 mm clearance all-round
Housing material	Metal
Mounting	DIN rail mountable TS35 (EN 60715)
Max. altitude operation	5000 m (EN 62368-1)
Installation position	Vertical
MTBF	530000 h
Degree of protection	IP20
Protection class	I
Weight/unit	0.92 kg
Connection type	Pluggable screw terminal 0.20 mm ² – 2.5 mm ² AWG 24 – AWG 12
Dimensions (w × h × d)	64.0 mm × 143.5 mm × 116.6 mm
PU (units)	1

General ambient conditions

Operation temperature range	-35 °C ... +71 °C (Derating)
Storage temperature range	-40 °C ... +85 °C
Over voltage category	II
Degree of pollution	2

Technical data sheet

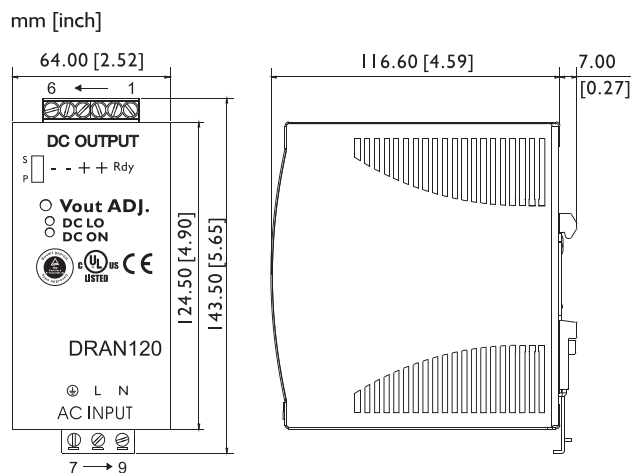
Power supply · 120 W

Relative air humidity 20 – 90 % RH, not condensing

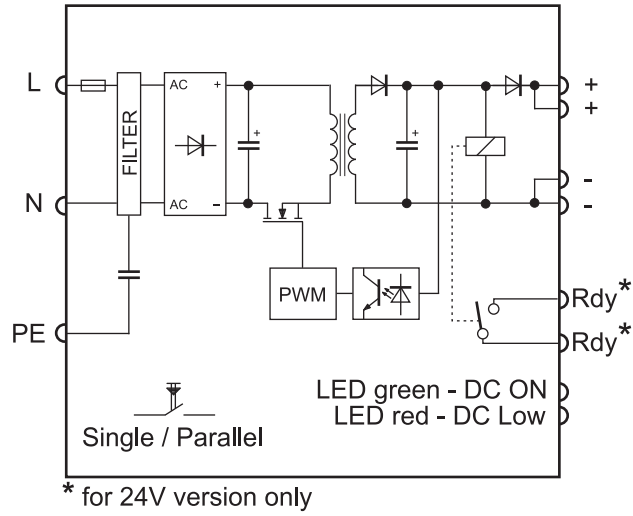
Approvals/Standards

Approvals	UL 508 Listed (E249179) UL 60950-1, (Class 1, Division 2, Groups A, B, C and D) (E350538) CE UKCA
Standards	IEC/EN 62368-1 EN 61558-1 EN 61558-2-16 EN 61000-6-3 EN 55032 Class B EN 61000-3-2 Class D EN 61000-3-3 EN 61000-6-2 EN 55024 EN 61000-4-2 Level 4 EN 61000-4-3 Level 3 EN 61000-4-4 Level 4 EN 61000-4-5 L-N Level 3 L/N-FG Level 4 EN 61000-4-6 Level 3 EN 61000-4-8 Level 4 EN 61000-4-11 ENV 50204 Level 2 EN 61204-3

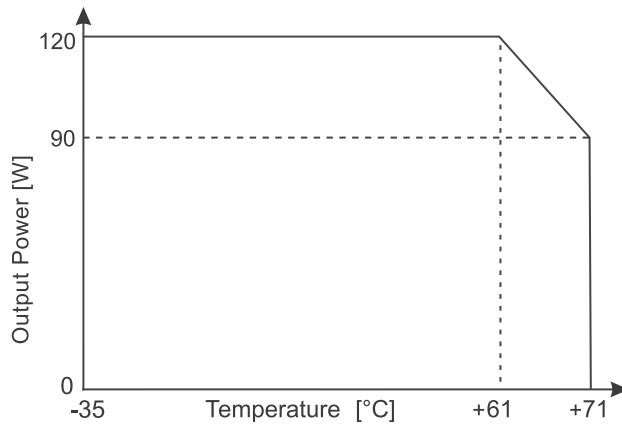
Dimensions



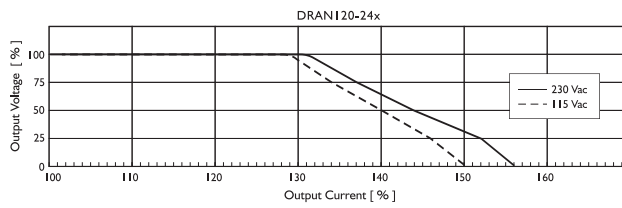
PIN assignment



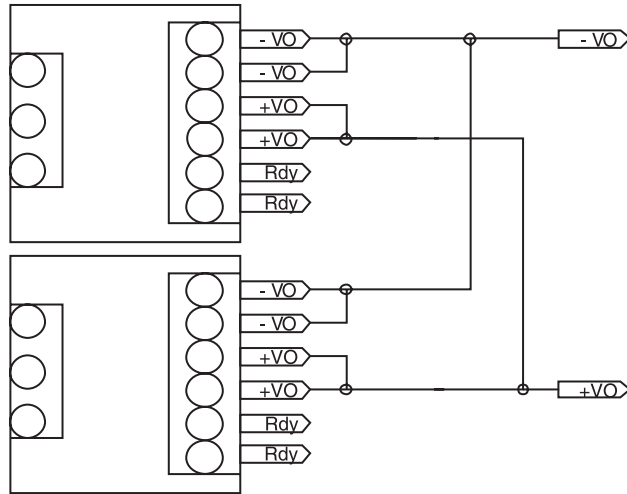
Derating



Short circuit characteristics



Parallel/redundant mode



Efficiency

