

regulated, 480 W, 3-phase



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<b>Identification</b>	Type	WRA480-24
	Part-No.	722805

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<b>Description</b>	Primary switchmode power supply, PFC, 3-phase Input: wide-range input AC 340–576 V, DC 480–820 V Output: 24 V
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Part-No. 722805

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### Input

Number of phases	3
Rated voltage $U_N$	3 × AC 380–480 V
Operation voltage range	3 × AC 340–575 V / 3 × DC 480–820 V
Line frequency	47 – 63 Hz
Rated current $I_N$	1.5 A @ AC 400 V / 1.2 A @ AC 480 V
Inrush current	20 A
Internal fuse	T3, 15 A/per Phase
External fuse	Mini-circuit breaker: 3 × B 10 A, C 6 A
Power Factor Correction P.F.C.	0.7

### Output

Rated voltage $U_N$	DC 24.00 V
Rated current $I_N$	20.00 A
Heat dissipation	58 A @ AC 380 V
Setting range $U_{out\ min.}/U_{out\ max.}$	22.5/28.5 V
Accuracy	1 %
Load regulation	Single ±1 %, Parallel ±5 %
Line regulation	±1 %
Temperature coefficient	±0.03 % / °C
Ripple and Noise	100 mV
Hold up time	min. 20 ms
Status indication DC ON LED green	≥17.6–19.4 V
Status indication DC LOW LED red	≤17.6–19.4 V
Parallel / redundant mode	max. 3 units at 90% load current, manual switch S/P
Efficiency	90 %
Over voltage protection	125–137 %
Rated over load protection	115–135 %
Short circuit	Current limit (C) / Hiccup Mode (D), switching with switch C/D Hiccup Mode: deactivation within 3 s and restart after 30 s

### 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

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Insulation resistance at DC 500 V	100 M $\Omega$
Derating	Capacity: -2.5 %/°C starting at +61 °C
Operation temperature range	-25 °C ... +71 °C (Derating)
Storage temperature range	-25 °C ... +85 °C
MTBF	411000 h
Relative air humidity	20 – 90 % RH, not condensing
Cooling	Air convection, 25 mm clearance all-round
Housing material	Metal
Mounting	DIN rail mountable TS35 (EN 60715)
Application height	3000 m
Installation position	vertical
Protection class	IP20
Protection class	I
Over voltage category	II
Degree of pollution	2
Weight	1.750 kg/piece
Connection device	Screw terminal 0.20 mm <sup>2</sup> – 4.0 mm <sup>2</sup> max. 0.62 Nm
Dimensions (w × h × d)	150.0 × 125.0 × 116.0 mm
Approvals	UL 508 listed UL 60950-1 EN 60950-1 EN 61000-6-3 EN 55022 Class B EN 61000-3-2 EN 61000-3-3 EN 61000-6-2 EN 55024
PU	1 piece

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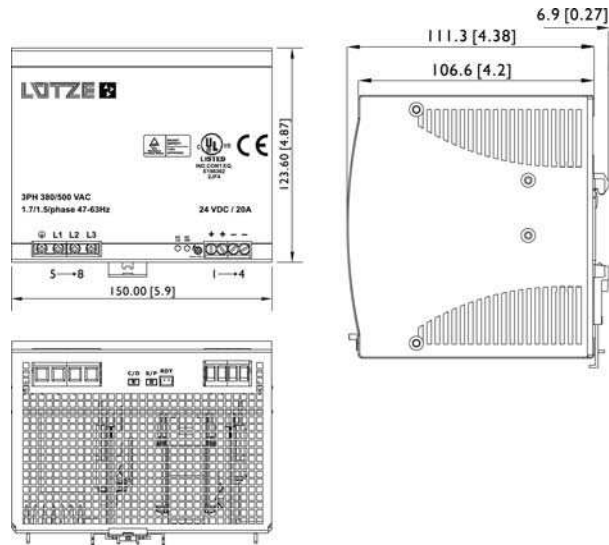
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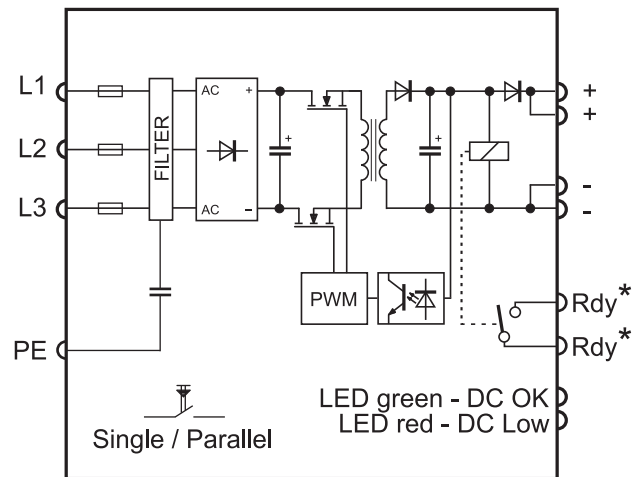
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## Dimensions



## PIN assignment



\* for 24V version only

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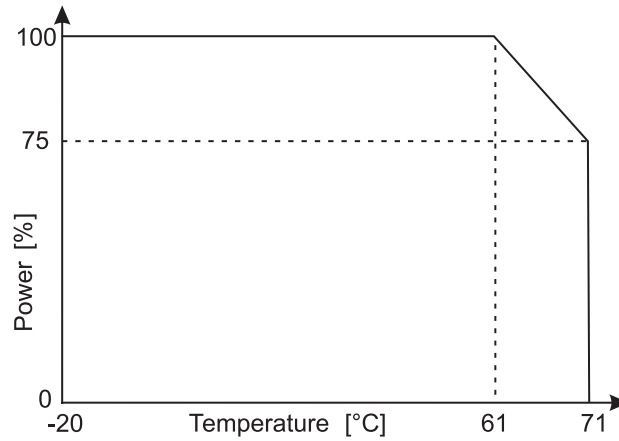
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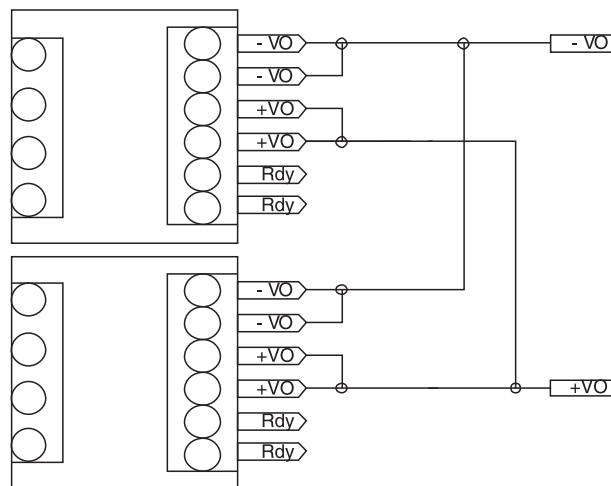
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## Derating



## Parallel/redundant mode



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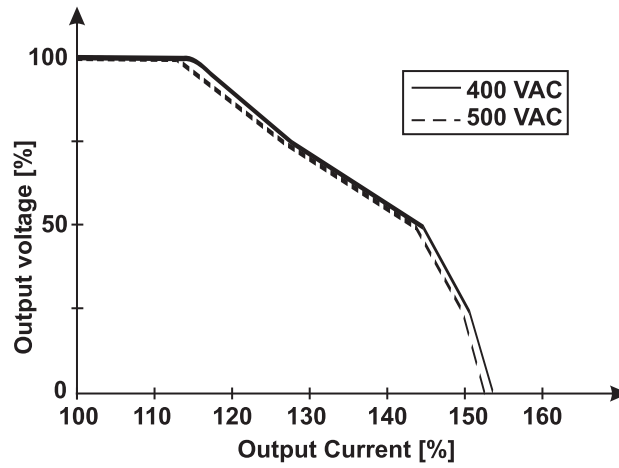
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Short circuit characteristics



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