

regulated, 960 W, 3-phase



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<b>Identification</b>	Type	WRA960-24
	Part-No.	722806

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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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25.08.2017 – Subject to technical modification

Part-No. 722806

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## Technical data sheet - Power supply

### Input

Number of phases	3
Rated voltage $U_N$	3 × AC 400–500 V
Operation voltage range	3 × AC 340–575 V / 3 × DC 480–820 V
Line frequency	47 – 63 Hz
Rated current $I_N$	2.4 A @ AC 400 V / 1.6 A @ AC 480 V
Inrush current	30 A
Internal fuse	T6, 3 A/per Phase
External fuse	Mini-circuit breaker: 3 × B 16 A, C 10 A
Power Factor Correction P.F.C.	0.7

### Output

Rated voltage $U_N$	DC 24.00 V
Rated current $I_N$	40.00 A
Setting range $U_{out\ min.}/U_{out\ max.}$	22.5/28.5 V
Accuracy	1 %
Load regulation	Single ±1 %, Parallel ±5 %
Line regulation	±1 %
Rise time	1 s
Temperature coefficient	±0.03 % / °C
Ripple and Noise	80 mV
Hold up time	15 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. 2 units at 92% load current, terminal P and G for current share
Efficiency	92 %
Over voltage protection	125–137 %
Rated over load protection	Temperature: Deactivation at 100–110°C and automatic activation after cooling off
Short circuit	Hiccup Mode

### 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. 52 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

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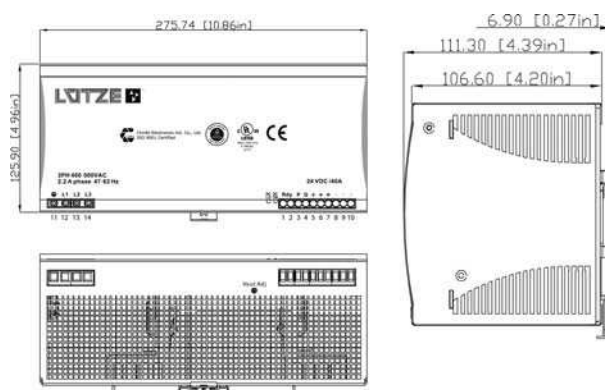


SYSTEMATIC TECHNOLOGY

## Technical data sheet · Power supply

Derating	Capacity: -3.5 %/°C starting at +61 °C
Operation temperature range	-25 °C ... +71 °C (Derating)
Storage temperature range	-25 °C ... +85 °C
MTBF	352000 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	3.200 kg/piece
Connection device	Screw terminal 0.50 mm <sup>2</sup> – 10.0 mm <sup>2</sup> max. 0.62 Nm
Dimensions (w × h × d)	276.0 × 125.0 × 118.0 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 Class I Division 2, Groups A, B, C, D
PU	1 piece

### Dimensions



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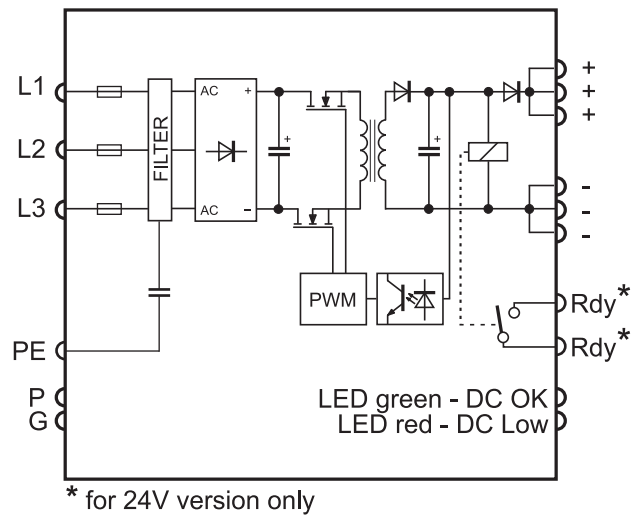
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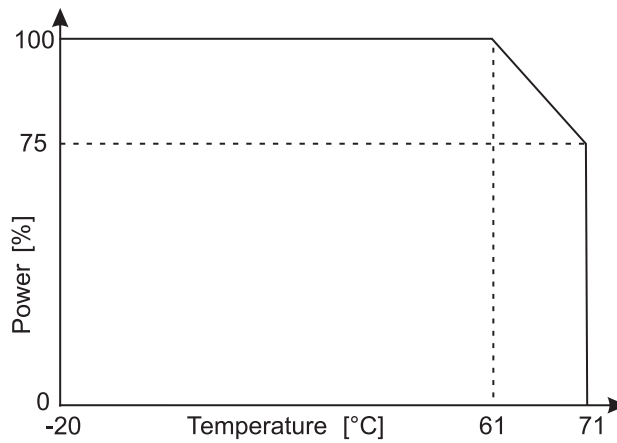


SYSTEMATIC TECHNOLOGY

**PIN assignment**



**Derating**



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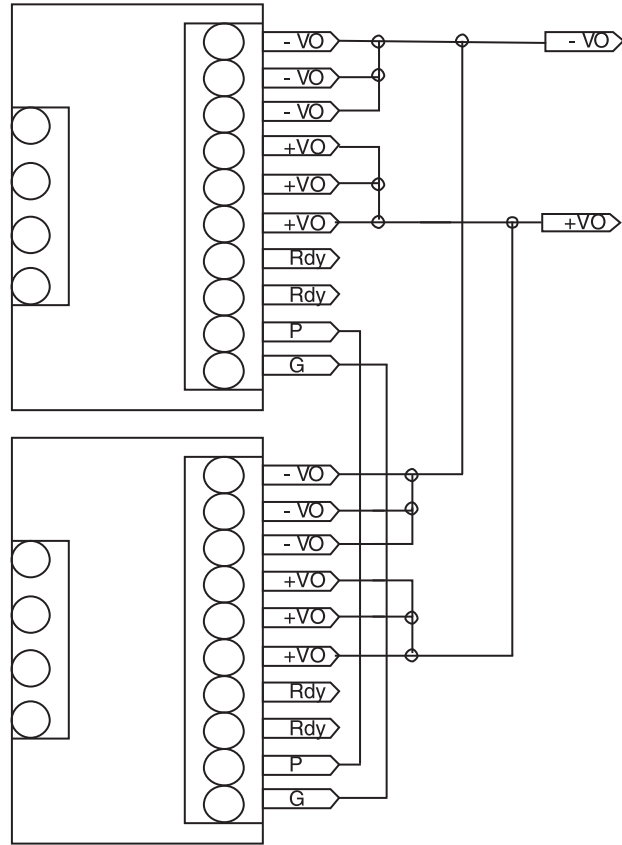
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Parallel/redundant mode



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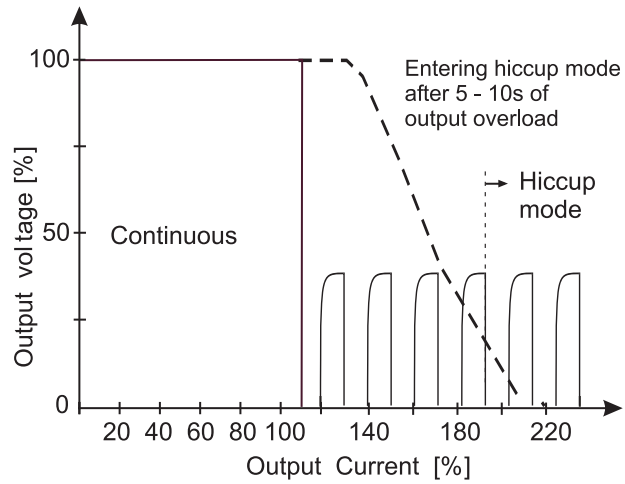
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Short circuit characteristics



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