

Power supply · regulated, 240 W, 3-phase

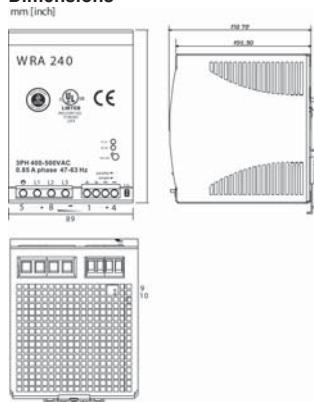
Switchmode power supply, PFC, 3-phase

Input: wide-range input AC 340–576 V, DC 480–820 V

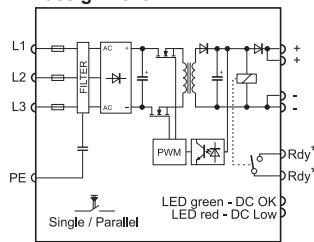
Output: 24 / 48 V, adjustable



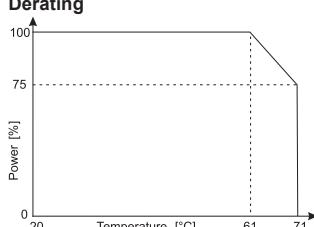
Dimensions



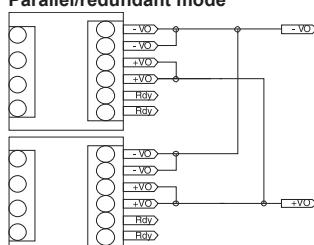
PIN assignment



Derating



Parallel/redundant mode



Description	Part-No.	Type	PU
Screw terminal			
Output voltage/current	DC 24 V/10 A	WRA240-24	1
	DC 48 V/5 A	WRA240-48	1
Input	WRA240-24	WRA240-48	
Nominal voltage	3x AC 340–500 V		
Operation voltage range	3x AC 340–576 V; 3x DC 480–820 V		
Line frequency	47 – 63 Hz		
Rated current	$U_i = \text{AC } 380 \text{ V}: 0.85 \text{ A} / U_i = \text{AC } 500 \text{ V}: 0.7 \text{ A}$		
Inrush current	20 A		
Internal fuse	3xT2, 0 A / AC 600 V		
External fuse	Automatic: 3 x B 6 A		
Power Factor Correction P.F.C.	0.6		
Output			
Rated voltage output	DC 24 V	DC 48 V	
Rated current output	10 A	5 A	
Max. output current	—		
Short-circuit current	—		
Voltage trim range	22.5/28.5 V	47/56 V	
Accuracy	1 %		
Line regulation	±1 %		
Load regulation	Single ±1 %, Parallel ±5 %		
Rise time	1 s		
Temperature coefficient	±0.03 % / °C		
Ripple & Noise	100 mV		
Hold up time	min. 20 ms		
Status indication DC ON LED green	≥17.6–19.4 V	≥37–43 V	
Status indication DC LOW LED red	≤17.6–19.4 V	≤37–43 V	
Parallel/redundant operation	max 2 devices with 90 % load current each, switching with switch S/P		
Efficiency	90 %	91 %	
Low power loss	30 W (AC 380 V)	24 W (AC 380 V)	
Rated over load protection	Temperature: Deactivation at 100–110 °C and automatic activation after cooling off		
Over voltage protection	125–137 %	125–142 %	
Short circuit characteristics	Hiccup-mode		
General			
Switching frequency	approx. 25 kHz		
Insulation voltage input/output	AC 3.0 kV _{eff}		
Insulation voltage input / ground	AC 1.5 kV _{eff}		
Insulation voltage output / ground	—		
Insulation resistance at DC 500 V	100 MΩ		
Operation temperature range	-25 °C – 71 °C (derating)		
Derating	Capacity: -2.5% / °C starting at +61 °C		
Storage temperature range	-25 °C – 85 °C		
M.T.B.F.	488000 h	519000 h	
Relative humidity	20–90% RH, non-condensing		
Dimensions (w × h × d) in mm	89.0 × 123.6 × 117.5		
Cooling	Natural air cooling, 25 mm distance on all sides		
Housing material	Metal		
Shock resistance	—		
Vibration resistance	—		
Field installation	rail TS 35 (EN 50022)		
Application height	3000 m		
Installation position	vertical		
Protection class	IP 20		
IP rating	I (SELV, PELV)		
Overvoltage category	II		
Pollution degree	2		
Weight (kg/piece)	1.100		
Termination	Screw terminal: 0.2–4.0 mm ² , max. 0.62 Nm		
Approvals	UL: UL 508 listed, cUL: UL 60950-1 accepted, TÜV: EN 60950-1; CE: 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 and D		
Monitoring			
DC ON Control (Rdy)	Normally open	—	
Switching voltage	DC 60 V	—	
Switching current	max. 300 mA	—	
Switching capacity	—		
Insulation voltage	DC 500 V	—	