

Power supply · regulated, 120 W

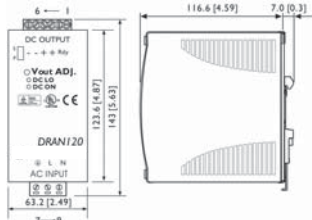
Switchmode power supply, PFC, Single-phase

Input: wide-range input AC 90–132 V, AC 186–264 V, DC 210–370 V

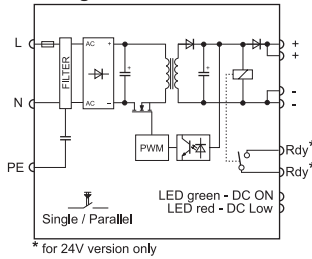
Output: 12 V / 24 V / 48 V, adjustable



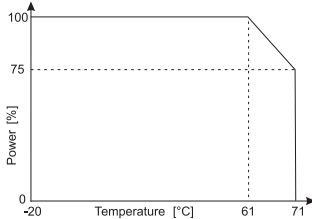
Dimensions



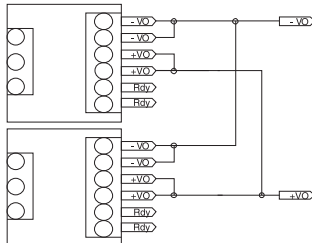
PIN assignment



Derating



Parallel/redundant mode



Description	Part-No.	Type	PU	
Screw terminal, pluggable				
Output voltage/current	DC 12 V/ 10 A	722770	DRAN120-12B	1
	DC 24 V/ 5 A	722758	DRAN120-24B	1
	DC 48 V/ 2.5 A	722777	DRAN120-48B	1
Screw terminal				
Output voltage/current	DC 24 V/ 5 A	728758	DRAN120-24A	1
Input				
	DRAN120-12B	DRAN120-24B	DRAN120-48B	DRAN120-24A
Nominal voltage	AC 115 / 230 V (auto select)			
Operation voltage range	AC 90–132 V; AC 186–264 V / DC 210–370 V			
Line frequency	47 – 63 Hz			
Rated current	U _i = AC 115 V: 1.25 A / U _i = AC 230 V: 0.63 A			
Inrush current	U _i = AC 115 V: 24 A / U _i = AC 230 V: 48 A			
Internal fuse	T3, 15 A / AC 250 V			
External fuse	Mini-circuit breaker: B 6 A			
Power Factor Correction P.F.C.	0.7			
Output				
Rated voltage output	DC 12 V	DC 24 V	DC 48 V	DC 24 V
Rated current output	10 A	5 A	2.5 A	5 A
Max. output current	–			
Short-circuit current	–			
Voltage trim range	11.4–14.5 V	22.5–28.5 V	45/55 V	22.5–28.5 V
Accuracy	±1 %			
Line regulation	±0.5 %			
Load regulation	Single ±1 %, Parallel ±5 %			
Rise time	1 s			
Temperature coefficient	±0.03 % / °C			
Ripple & Noise	50 mV			
Hold up time	V _{in} = 115 V: 25 ms / V _{in} = 230 V: 30 ms			
Status indication DC ON LED green	≥10–11.2 V	≥17.6–19.4 V	≥37–43 V	≥17.6–19.4 V
Status indication DC LOW LED red	≤10–11.2 V	≤17.6–19.4 V	≤37–43 V	≤17.6–19.4 V
Parallel/redundant operation	max. 3 units at 90% load current, manual switch			
Efficiency	84 %	86 %	87 %	86 %
Low power loss	24 W (AC 230 V)	20 W (AC 230 V)	19 W (AC 230 V)	20 W (AC 230 V)
Rated over load protection	105–125 %			
Over voltage protection	125–145 %			
Short circuit characteristics	Current limit			
General				
Switching frequency	approx. 80 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 – 70 °C (derating)			
Derating	-2.5% / °C starting at 60 °C			
Storage temperature range	-25 °C – 85 °C			
M.T.B.F.	440000 h	450000 h	482000 h	450000 h
Relative humidity	20–90% RH, non-condensing			
Dimensions (w × h × d) in mm	63.5 × 142.0 × 116.0			
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	2000 m			
Installation position	vertical			
Protection class	IP 20			
IP rating	I (SELV, PELV)			
Overvoltage category	II			
Pollution degree	2			
Weight (kg/piece)	0.920			
Termination	Screw terminal: 0.2–2.5 mm ² - pluggable,max. 0.56 Nm			Screw terminal: 0.2–4.0 mm ² , max. 0.62 Nm
Approvals	UL: UL 508 listed; cUL: UL 60950-1; TÜV: EN 60950, 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	–	Normally open
Switching voltage	–	DC 60 V	–	DC 60 V
Switching current	–	max. 300 mA	–	max. 300 mA
Switching capacity	–	–	–	–
Insulation voltage	–	DC 500 V	–	DC 500 V