

Power supply - regulated, 240 W

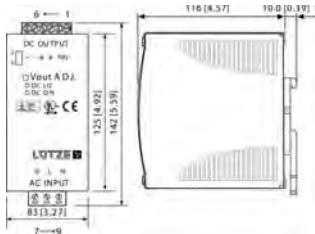
Primary switchmode power supply, PFC, Single-phase

Input: Wide range input AC 93 - 132 V; AC 186 - 264 V, DC 210 - 370 V

Output: 24 V / 48 V - adjustable

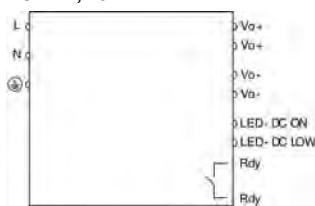


Dimensions

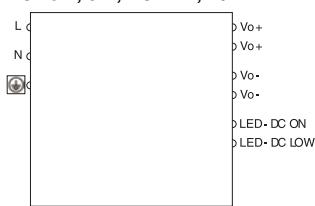


PIN assignment

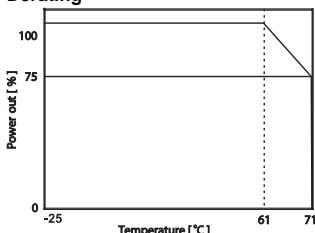
DC 24 V; 10 A



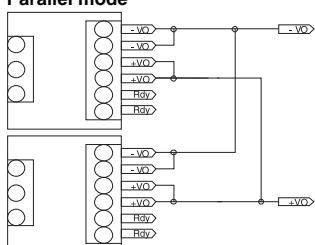
DC 48 V; 5 A, DC 24 V; 10 A



Derating



Parallel mode



Description	Part-No.	Type	PU
Screw terminal, pluggable			
Output voltage/current	DC 24 V; 10 A	DRA 240-24B	1
	DC 48 V; 5 A	DRA 240-48B	1
Screw terminal			
Output voltage/current	DC 24 V; 10 A	DRA 240-24A	1
Input	DRA 240-24B	DRA 240-48B	DRA 240-24A
Nominal voltage	AC 115 / 230 V (auto select)	AC 115 / 230 V (auto select)	AC 115 / 230 V (auto select)
Operation voltage range	AC 93–132 V; AC 186–264 V / DC 210–370 V	AC 93–132 V; AC 186–264 V / DC 210–370 V	AC 93–132 V; AC 186–264 V / DC 210–370 V
Line frequency	47 – 63 Hz	47 – 63 Hz	47 – 63 Hz
Rated current	$U_i = \text{AC } 115 \text{ V}: 2.4 \text{ A} / U_i = \text{AC } 230 \text{ V}: 1.2 \text{ A}$	$U_i = \text{AC } 115 \text{ V}: 2.4 \text{ A} / U_i = \text{AC } 230 \text{ V}: 1.2 \text{ A}$	$U_i = \text{AC } 115 \text{ V}: 2.4 \text{ A} / U_i = \text{AC } 230 \text{ V}: 1.2 \text{ A}$
Inrush current	$U_i = \text{AC } 115 \text{ V}: 30 \text{ A} / U_i = \text{AC } 230 \text{ V}: 60 \text{ A}$	$U_i = \text{AC } 115 \text{ V}: 30 \text{ A} / U_i = \text{AC } 230 \text{ V}: 60 \text{ A}$	$U_i = \text{AC } 115 \text{ V}: 30 \text{ A} / U_i = \text{AC } 230 \text{ V}: 60 \text{ A}$
Internal fuse	T6, 3 A / AC 250 V	T6, 3 A / AC 250 V	T6, 3 A / AC 250 V
External fuse	Mini-circuit breaker: B 10 A, C 6 A	Mini-circuit breaker: B 10 A, C 6 A	Mini-circuit breaker: B 10 A, C 6 A
Power Factor Correction P.F.C.	0.7	0.7	0.7
Output			
Rated voltage output	DC 24 V	DC 48 V	DC 24 V
Rated current output	10 A	5 A	10 A
Max. output current	–	–	–
Peak output current	–	–	–
Voltage trim range	22.5–28.5	47/56 V	22.5–28.5 V
Accuracy	±1 %	±1 %	±0.5 %
Line regulation	±0.5 %	±0.5 %	±0.5 %
Load regulation	Single ±1 %, Parallel ±5 %	Single ±1 %, Parallel ±5 %	Single ±1 %, Parallel ±5 %
Rise time	1 s	1 s	1 s
Temperature coefficient	±0.03 % / °C	±0.03 % / °C	±0.03 % / °C
Ripple & Noise	100 mV	100 mV	100 mV
Hold up time	$V_{in} = 115 \text{ V}: 25 \text{ ms} / V_{in} = 230 \text{ V}: 30 \text{ ms}$	$V_{in} = 115 \text{ V}: 25 \text{ ms} / V_{in} = 230 \text{ V}: 30 \text{ ms}$	$V_{in} = 115 \text{ V}: 25 \text{ ms} / V_{in} = 230 \text{ V}: 30 \text{ ms}$
Status indication DC ON LED green	≥17.6–19.4 V	≥37–43 V	≥17.6–19.4 V
Status indication DC LOW LED red	≤17.6–19.4 V	≤37–43 V	≤17.6–19.4 V
Parallel mode	max. 3 units at 90% load current, manual switch	max. 3 units at 90% load current, manual switch	max. 3 units at 90% load current, manual switch
Efficiency	89 %	90 %	89 %
Low power loss	–	–	–
Rated over load protection	105–145 %	105–145 %	105–145 %
Over voltage protection	120–145 %	120–145 %	120–145 %
Short circuit characteristics	Current limit	Current limit	Current limit
General			
Switching frequency	approx. 40 kHz	approx. 40 kHz	approx. 40 kHz
Insulation voltage input/output	AC 3.0 kV _{eff}	AC 3.0 kV _{eff}	AC 3.0 kV _{eff}
Insulation voltage input / ground	AC 1.5 kV _{eff}	AC 1.5 kV _{eff}	AC 1.5 kV _{eff}
Insulation voltage output / ground	–	–	–
Insulation resistance at DC 500 V	100 MΩ	100 MΩ	100 MΩ
Operation temperature range	-25 °C – 70 °C (derating)	-25 °C – 70 °C (derating)	-25 °C – 70 °C (derating)
Derating	-2.5% / °C starting at 60 °C	-2.5% / °C starting at 60 °C	-2.5% / °C starting at 60 °C
Storage temperature range	-25 °C – 85 °C	-25 °C – 85 °C	-25 °C – 85 °C
M.T.B.F.	423000 h	437000 h	423000 h
Relative humidity	20–95% RH	20–95% RH	20–95% RH
Dimensions (w × h × d) in mm	83.0 × 142.0 × 116.0	83.0 × 142.0 × 116.0	83.0 × 142.0 × 116.0
Cooling	Air convection	Air convection	Air convection
Housing material	metal	metal	metal
Field installation	rail TS 35 (EN 50022)	rail TS 35 (EN 50022)	rail TS 35 (EN 50022)
Application height	2000 m	2000 m	2000 m
Installation position	vertical	vertical	vertical
Protection class	IP 20	IP 20	IP 20
Oversupply category	II	II	II
Pollution degree	2	2	2
Protection class	–	–	–
Weight (kg/piece)	1.000	1.000	1.000
Termination	Screw terminal: 0.5–4.0 mm ² , pluggable	Screw terminal: 0.2–2.0 mm ²	Screw terminal: 0.2–2.0 mm ²
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	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	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
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