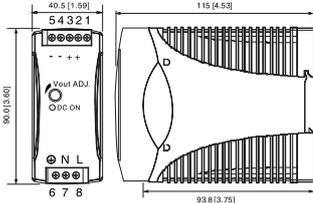


Power supply · regulated, 50 W

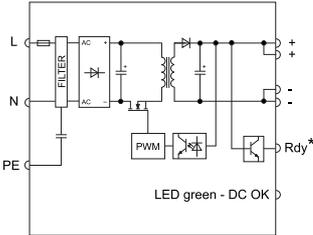
Primary switchmode power supply, Single-phase, Class 2
Input: wide-range input AC 85–264 V, DC 90–375 V
Output: 5 V, adjustable



Dimensions

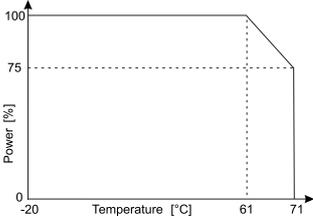


PIN assignment

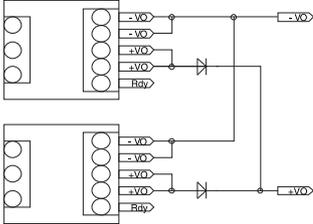


* for 24V version only

Derating



Redundant operation



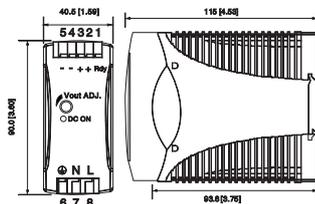
Description	Part-No.	Type	PU	
Screw terminal				
Output voltage/current	DC 5 V / 10 A	722764	DRA 60-05A	1
Spring terminal				
Output voltage/current	DC 5 V / 10 A	728764	DRA 60-05	1
Input				
	DRA 60-05A	DRA 60-05		
Nominal voltage	AC 100–240 V			
Operation voltage range	AC 85–264 V / DC 90–375 V			
Line frequency	47 – 63 Hz			
Rated current	U _i = AC 115 V, AC: 550 mA / U _i = 230 V; U _i = AC 115 V, AC: 550 mA / U _i = 230 V, AC: 280 mA			
Inrush current	U _i = AC 115 V: 20 A / U _i = AC 230 V: 40 A			
Internal fuse	T2 A / AC 250 V			
External fuse	Mini-circuit breaker: B 4 A, C 2 A			
Power Factor Correction P.F.C.	–			
Output				
Rated voltage output	DC 5 V			
Rated current output	10 A			
Max. output current	–			
Short-circuit current	–			
Voltage trim range	5.0/5.5 V			
Accuracy	±1 %			
Line regulation	±0.5 %			
Load regulation	±0.5 %			
Rise time	1 s			
Temperature coefficient	±0.03 % / °C			
Ripple & Noise	50 mV			
Hold up time	V _{in} = 115 V: 20 ms / V _{in} = 230 V: 30 ms			
Status indication DC ON LED green	≥4 V			
Status indication DC LOW LED red	–			
Parallel/redundant operation	max. 2 devices / via external diodes			
Efficiency	79 %			
Low power loss	12.5 W (AC 230 V)			
Rated over load protection	110–150 %			
Over voltage protection	120–136 %			
Short circuit characteristics	Hiccup-mode			
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	–40 °C – 85 °C			
M.T.B.F.	498000 h			
Relative humidity	20–90% RH, non-condensing			
Dimensions (w × h × d) in mm	40.5 × 90.0 × 115.0			
Cooling	Natural air cooling, 25 mm distance on all sides			
Housing material	Plastic			
Field installation	rail TS 35 (EN 50022)			
Application height	2000 m			
Installation position	vertical			
Protection class	IP 20			
IP rating	II (SELV, PELV)			
Overvoltage category	II			
Pollution degree	2			
Weight (kg/piece)	0.340			
Termination	Screw terminal: 0.2–2.5 mm ² , max. 0.56 Nm Spring terminal 0.2–2.0 mm ²			
Approvals	UL: UL 508 listed; cUL: UL 60950-1; TÜV: EN 60950-1, CE: EN 61000-6-3 / EN 55022 Class B; EN 61000-3-2, EN 61000-3-4; EN 55024; EN 61000-6-2; EN 61000-4-2; EN 61000-4-3, EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-8; EN 61000-4-11			
Monitoring				
DC ON Control (Rdy)	–			
Switching voltage	–			
Switching current	–			
Switching capacity	–			
Insulation voltage	–			

Power supply · regulated, 60 W

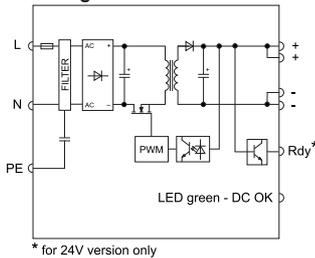
Primary switchmode power supply, Single-phase, Class 2
Input: wide-range input AC 85–264 V, DC 90–375 V
Output: 12 V / 24 V / 48 V, adjustable



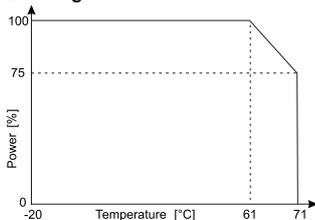
Dimensions



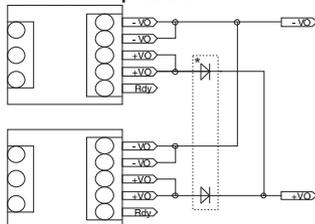
PIN assignment



Derating



Redundant operation



* Redundant Module 722987
 Only use together with 24 V version!

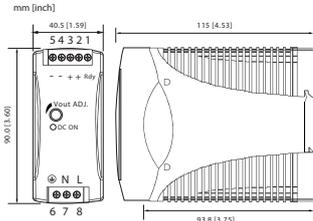
Description	Part-No.	Type	PU	
Spring terminal				
Output voltage/current	DC 12 V / 5 A	728769	DRA 60-12	1
	DC 24 V / 2.5 A	728754	DRA 60-24	1
	DC 48 V / 1,25 A	728776	DRA 60-48	1
Input				
	DRA 60-12	DRA 60-24	DRA 60-48	
Nominal voltage	AC 100–240 V			
Operation voltage range	AC 85–264 V / DC 90–375 V			
Line frequency	47 – 63 Hz			
Rated current	U _i = AC 115 V: 690 mA / U _i = AC 230 V: 360 mA			
Inrush current	U _i = AC 115 V: 20 A / U _i = AC 230 V: 40 A			
Internal fuse	T2 A / AC 250 V			
External fuse	Mini-circuit breaker: B 6 A			
Power Factor Correction P.F.C.	–			
Output				
Rated voltage output	DC 12 V	DC 24 V	DC 48 V	
Rated current output	5 A	2.5 A	1.25 A	
Max. output current	–			
Short-circuit current	–			
Voltage trim range	12/14 V	24/28 V	48/55 V	
Accuracy	±1 %			
Line regulation	±0.5 %			
Load regulation	±0.5 %			
Rise time	1 s			
Temperature coefficient	±0.03 % / °C			
Ripple & Noise	50 mV			
Hold up time	V _{in} = 115 V: 20 ms / V _{in} = 230 V: 30 ms			
Status indication DC ON LED green	≥9.6 V	≥19.2 V	≥37 V	
Status indication DC LOW LED red	–			
Parallel/redundant operation	max. 2 devices / via external diodes			
Efficiency	86 %	89 %	89 %	
Low power loss	9.0 W (AC 230 V)	8.8 W (AC 230 V)	7.8 W (AC 230 V)	
Rated over load protection	110–150 %			
Over voltage protection	125–138 %			
Short circuit characteristics	Hiccup-mode			
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.	504000 h	520000 h	531000 h	
Relative humidity	20–90% RH, non-condensing			
Dimensions (w × h × d) in mm	40.5 × 90.0 × 115.0			
Cooling	Natural air cooling, 25 mm distance on all sides			
Housing material	Plastic			
Field installation	rail TS 35 (EN 50022)			
Application height	2000 m			
Installation position	vertical			
Protection class	IP 20			
IP rating	II (SELV, PELV)			
Overvoltage category	II			
Pollution degree	2			
Weight (kg/piece)	0.340			
Termination	Spring terminal 0.2–2.0 mm ²			
Approvals	UL: UL 508 listed; cUL: UL 60950-1, UL 1310 Class 2 (not 12 V) recognised; TÜV: EN 60950-1, EN 61558-1, EN 61558-2-17 CE: EN 61000-6-3 / EN 55022 Class B; EN 61000-3-2 EN 601000-3-3; EN 55024; EN 61000-6-2; EN 61000-4-2; EN 61000-4-3 EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-8; EN 61000-4-11			
Monitoring				
DC ON Control (Rdy)	–	Open Collector	–	
Switching voltage	–	DC 24 V	–	
Switching current	–	≤ 35 mA	–	
Switching capacity	–	–	–	
Insulation voltage	–	none	–	

Power supply · regulated, 60 W

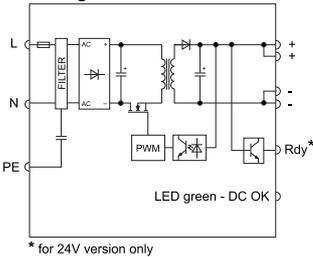
Primary switchmode power supply, Single-phase, Class 2
Input: wide-range input AC 85–264 V, DC 90–375 V
Output: 12 V / 24 V / 48 V, adjustable



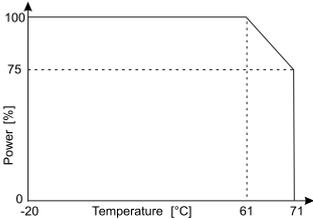
Dimensions



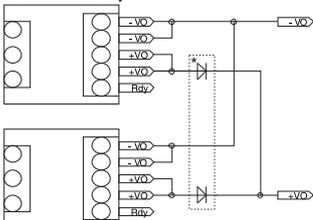
PIN assignment



Derating



Redundant operation



* Redundant Module 722987
 Only use together with 24 V version!

Description	Part-No.	Type	PU	
Screw terminal				
Output voltage/current	DC 12 V / 5 A	722769	DRA 60-12A	1
	DC 24 V / 2.5 A	722754	DRA 60-24A	1
	DC 48 V / 1,25 A	722776	DRA 60-48A	1
Input				
	DRA 60-12A	DRA 60-24A	DRA 60-48A	
Nominal voltage	AC 100–240 V			
Operation voltage range	AC 85–264 V / DC 90–375 V			
Line frequency	47 – 63 Hz			
Rated current	U _i = AC 115 V: 690 mA / U _i = AC 230 V: 360 mA			
Inrush current	U _i = AC 115 V: 20 A / U _i = AC 230 V: 40 A			
Internal fuse	T2 A / AC 250 V			
External fuse	Mini-circuit breaker: B 6 A			
Power Factor Correction P.F.C.	–			
Output				
Rated voltage output	DC 12 V	DC 24 V	DC 48 V	
Rated current output	5 A	2.5 A	1.25 A	
Max. output current	–			
Short-circuit current	–			
Voltage trim range	12/14 V	24/28 V	48/55 V	
Accuracy	±1 %			
Line regulation	±0.5 %			
Load regulation	±0.5 %			
Rise time	1 s			
Temperature coefficient	±0.03 % / °C			
Ripple & Noise	50 mV			
Hold up time	V _{in} = 115 V: 20 ms / V _{in} = 230 V: 30 ms			
Status indication DC ON LED green	≥9.6 V	≥19.2 V	≥37 V	
Status indication DC LOW LED red	–			
Parallel/redundant operation	max. 2 devices / via external diodes			
Efficiency	86 %	89 %	89 %	
Low power loss	9.0 W (AC 230 V)	8.8 W (AC 230 V)	7.8 W (AC 230 V)	
Rated over load protection	110–150 %			
Over voltage protection	125–138 %			
Short circuit characteristics	Hiccup-mode			
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.	504000 h	520000 h	531000 h	
Relative humidity	20–90% RH, non-condensing			
Dimensions (w × h × d) in mm	40.5 × 90.0 × 115.0			
Cooling	Natural air cooling, 25 mm distance on all sides			
Housing material	Plastic			
Field installation	rail TS 35 (EN 50022)			
Application height	2000 m			
Installation position	vertical			
Protection class	IP 20			
IP rating	II (SELV, PELV)			
Overvoltage category	II			
Pollution degree	2			
Weight (kg/piece)	0.340			
Termination	Screw terminal: 0.2–2.5 mm ² , max. 0.56 Nm			
Approvals	UL: UL 508 listed; cUL: UL 60950-1, UL 1310 Class 2 (not 12 V) recognised; TÜV: EN 60950-1, EN 61558-1, EN 61558-2-17 CE: EN 61000-6-3 / EN 55022 Class B; EN 61000-3-2 EN 61000-3-3; EN 55024; EN 61000-6-2; EN 61000-4-2; EN 61000-4-3 EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-8; EN 61000-4-11			
Monitoring				
DC ON Control (Rdy)	–	Open Collector	–	
Switching voltage	–	DC 24 V	–	
Switching current	–	≤ 35 mA	–	
Switching capacity	–	–	–	
Insulation voltage	–	none	–	