

# Power supply · regulated, 10 W

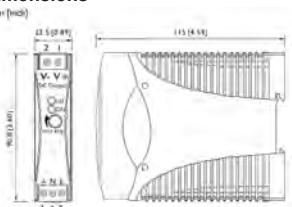
## Primary switchmode power supply, Single-phase, Class 2

**Input:** wide-range input AC 90–265 V, DC 120–370 V

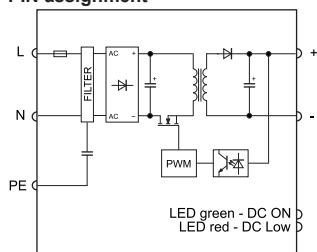
**Output:** 5 V / 12 V, adjustable



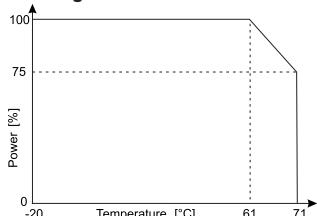
### Dimensions



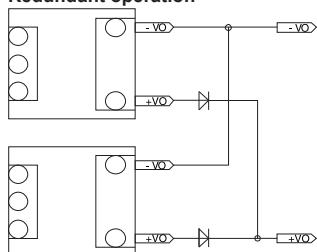
### PIN assignment



### Derating



### Redundant operation



Description	Part-No.	Type	PU
<b>Screw terminal</b>			
Output voltage/current	DC 5 V / 2 A	DRA 10-05A	1
	DC 12 V / 0.84 A	DRA 10-12A	1
<b>Input</b>	<b>DRA 10-05A</b>	<b>DRA 10-12A</b>	
Nominal voltage		AC 100–240 V	
Operation voltage range		AC 90–265 V / DC 120–370 V	
Line frequency		47 – 63 Hz	
Rated current	$U_i = \text{AC } 115 \text{ V: } 120 \text{ mA} / U_i = \text{AC } 230 \text{ V: } 70 \text{ mA}$		
Inrush current	$U_i = \text{AC } 115 \text{ V: } 10 \text{ A} / U_i = \text{AC } 230 \text{ V: } 18 \text{ A}$		
Internal fuse		T2 A / AC 250 V	
External fuse		Mini-circuit breaker: B 4 A	
Power Factor Correction P.F.C.		–	
<b>Output</b>			
Rated voltage output	DC 5 V	DC 12 V	
Rated current output	2 A	0.84 A	
Max. output current		–	
Short-circuit current		–	
Voltage trim range	4.5–5.75 V	10.8–13.8 V	
Accuracy		±1 %	
Line regulation		±1 %	
Load regulation		±2 %	
Rise time		1 s	
Temperature coefficient		±0.03 % / °C	
Ripple & Noise		<50 mV	
Hold up time	$V_{in} = 115 \text{ V: } 25 \text{ ms} / V_{in} = 230 \text{ V: } 100 \text{ ms}$		
Status indication DC ON LED green	≥4.5 V	≥10.8 V	
Status indication DC LOW LED red	<3.75–4.50 V	<9–10.8 V	
Parallel/redundant operation		max. 2 devices / via external diodes	
Efficiency	73 %	75 %	
Low power loss	4 A (AC 230 V)	3.4 A (AC 230 V)	
Rated over load protection		110–135 %	
Over voltage protection		125–145 %	
Short circuit characteristics		Hiccup-mode	
<b>General</b>			
Switching frequency		approx. 100 kHz	
Insulation voltage input/output		AC 3.0 kV <sub>eff</sub>	
Insulation voltage input / ground		AC 1.5 kV <sub>eff</sub>	
Insulation voltage output / ground		–	
Insulation resistance at DC 500 V		100 MΩ	
Operation temperature range		-20 °C – 70 °C (derating)	
Derating		-3% / °C starting at 61 °C	
Storage temperature range		-40 °C – 85 °C	
M.T.B.F.	801000 h	803000 h	
Relative humidity		20–95% RH, non-condensing	
Dimensions (w × h × d) in mm		22.5 × 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)	
Oversupply category		II	
Pollution degree		2	
Weight (kg/piece)		0.120	
Termination		Screw terminal: 0.2–2.5 mm <sup>2</sup> , max. 0.56 Nm	
Approvals		UL: UL 508 listed; cUL: UL 60950-1, UL 1310 Class 2; TÜV: EN 60950-1, CE: EN 50081-1 / EN 55022 Class B, EN 61000-3-2, EN 61000-3-3, EN 50082-1 / EN 55024	
<b>Monitoring</b>			
DC ON Control (Rdy)		LED green/red	
Switching voltage		–	
Switching current		–	
Switching capacity		–	
Insulation voltage		–	

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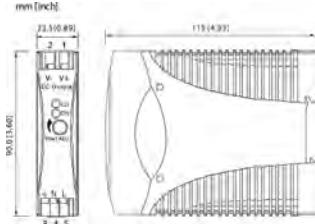
**Primary switchmode power supply, Single-phase, Class 2**

**Input: wide-range input AC 90–265 V, DC 120–370 V**

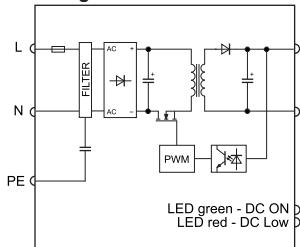
**Output: 5 V / 12 V / 15 V / 24 V, adjustable**



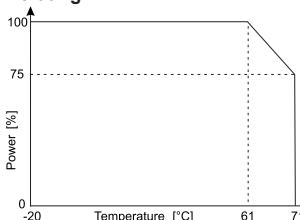
## Dimensions



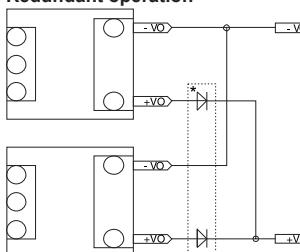
## PIN assignment



## Derating



## Redundant operation



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

Description	Part-No.	Type	PU
<b>Spring terminal</b>			
Output voltage/current	DC 5 V/ 2 A	DRA 10-05	1
	DC 12 V/ 0.84 A	DRA 10-12	1
	DC 15 V/ 0.67 A	DRA 10-15	1
	DC 24 V/ 0.42 A	DRA 10-24	1
<b>Input</b>			
Nominal voltage	DRA 10-05	DRA 10-12	DRA 10-15
		AC 100–240 V	
Operation voltage range		AC 90–265 V / DC 120–370 V	
Line frequency		47 – 63 Hz	
Rated current	$I_{\text{in}} = \text{AC } 115 \text{ V: } 120 \text{ mA} / I_{\text{in}} = \text{AC } 230 \text{ V: } 70 \text{ mA}$		
Inrush current	$I_{\text{in}} = \text{AC } 115 \text{ V: } 10 \text{ A} / I_{\text{in}} = \text{AC } 230 \text{ V: } 18 \text{ A}$		
Internal fuse		T 2 A / AC 250 V	
External fuse		Mini-circuit breaker: B 4 A	
Power Factor Correction P.F.C.		–	
<b>Output</b>			
Rated voltage output	DC 5 V	DC 12 V	DC 15 V
Rated current output	2 A	0.84 A	0.67 A
Max. output current		–	–
Short-circuit current		–	–
Voltage trim range	4.5–5.75 V	10.8–13.8 V	13.5–17.25 V
Accuracy		±1 %	
Line regulation		±1 %	
Load regulation		±2 %	
Rise time		1 s	
Temperature coefficient		±0.03 % / °C	
Ripple & Noise		<50 mV	
Hold up time		$V_{\text{in}} = 115 \text{ V: } 25 \text{ ms} / V_{\text{in}} = 230 \text{ V: } 100 \text{ ms}$	
Status indication DC ON LED green	≥4.5 V	≥10.8 V	≥13.5 V
Status indication DC LOW LED red	<3.75–4.50 V	<9–10.8 V	<11.25–13.5 V
Parallel/redundant operation		max. 2 devices / via external diodes	
Efficiency	73 %	75 %	76 %
Low power loss	4 W (AC 230 V)	3.4 W (AC 230 V)	3.3 W (AC 230 V)
Rated over load protection		110–135 %	
Over voltage protection		125–145 %	
Short circuit characteristics		Hiccup-mode	
<b>General</b>			
Switching frequency		approx. 100 kHz	
Insulation voltage input/output		AC 3.0 kV <sub>eff</sub>	
Insulation voltage input / ground		AC 1.5 kV <sub>eff</sub>	
Insulation voltage output / ground		–	
Insulation resistance at DC 500 V		100 MΩ	
Operation temperature range		-20 °C – 70 °C (derating)	
Derating		-3% / °C starting at 61 °C	
Storage temperature range		-25 °C – 85 °C	
M.T.B.F.	801000 h	803000 h	805000 h
Relative humidity		20–95% RH, non-condensing	
Dimensions (w × h × d) in mm		22.5 × 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)	
Oversupply category		II	
Pollution degree		2	
Weight (kg/piece)		0.120	
Termination		Spring terminal: 0.2–2.0 mm <sup>2</sup>	
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<b>Monitoring</b>			
DC ON Control (Rdy)		LED green/red	
Switching voltage		–	
Switching current		–	
Switching capacity		–	
Insulation voltage		–	