

TECHNICAL DATA SHEET

Duco Power Supply 230 VAC - 24 VDC / 20 W



The external power supply 230 VAC - 24 VDC is the best solution to power DUCO Wired components from a central 230 V connection. The component comes with a surface-mounted box as standard.

The sum of the peak power of all connected DUCO components can be 20 W at most when using one Power Supply.

Properties

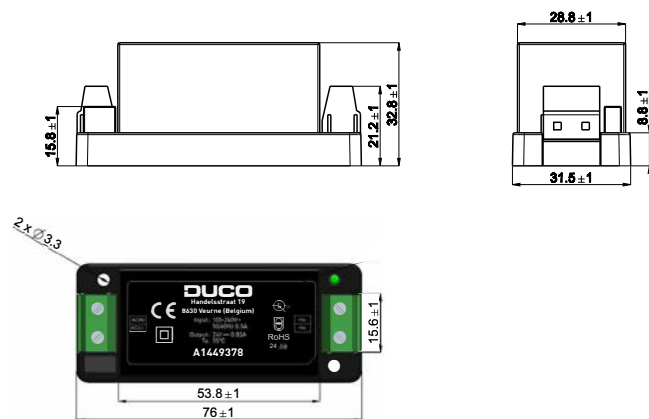
Article number:	0000-4763 (including Duco Power Supply casing)
Input:	230 VAC
Output (nominal):	24 VDC
Electric current:	830 mA
Power:	20 W
Efficiency:	87 %

Max. capacitive load:	1000 uF
No-load power:	0,12 W
Housing material:	Black PVC, flame retardant and heat resistant (UL94V-0)
Dimensions:	76,00 x 31,50 x 32,80 mm
Weight:	75 g
Cooling method:	Free air convection

GENERAL SPECIFICATIONS								
Item		Operating conditions		Min.	Typical	Max.	Unit	
Insulation	Input-output	Electrical strength test (1 min), leakage current < 5 mA		3000	-	-	VAC	
Insulation resistance	Input-output	At 500 VDC		100	-	-	MΩ	
Storage temperature				-40	-	+85	°C	
Storage humidity		Non-condensing		-	-	95	% RH	
Operating temperature				-40	-	+85	°C	
Operating humidity		Non-condensing		20	-	95	% RH	
Switching frequency				-	65	-	kHz	
Power derating		-40 °C to -25 °C	85 VAC to 165 VAC	2,0	-	-	% / °C	
		+55 °C to +70 °C	24 VDC	3,33	-	-		
		-70 °C to +85 °C		1,33	-	-		
		85 VAC to 100 VAC			2,0	-	-	% / VAC
		277 VAC to 305 VAC			0,71	-	-	
		2000 m to 5000 m		6,7	-	-	% / km	
Safety standards				IEC/UL 62368-1, EN 61558-1, EN 60335-1 safety approval & AN 62368-1, BS EN 62368-1 (report); design refers to IEC/EN 60601 / ANSI/AAMI ES 60601-1				
Safety class				Class II				
Mean time between failures (MTBF)				MIL-HDBK-217F @ 25 °C > 1500000 h				
Designed life		220 VAC	Ambient temperature 25 °C - 100 % load	> 130x10 ³ h				
			Ambient temperature 55 °C - 100 % load	> 20x10 ³ h				
			Ambient temperature 55 °C - 80 % load	> 27x10 ³ h				

INPUT SPECIFICATIONS					
Item	Operating conditions	Min.	Typical	Max.	Unit
Input voltage range	AC Input	85	-	305	VAC
	DC Input	100	-	430	VDC
Input frequency		47	-	63	Hz
Input current	230 VAC	-	-	0,3	A
Inrush current	230 VAC	-	45	-	
Leakage current	277 VAC / 50 Hz	Max. 0,1 mA RMS			
Built-in fuse		3.15 A / 300 V, slow-blow			

OUTPUT SPECIFICATIONS						
Item	Operating conditions	Min.	Typical	Max.	Unit	
Output voltage accuracy		-	± 1.5	-	%	
Line regulation	Full load	-	± 0.5	-		
Load regulation	0 to 100 % load	-	± 1	-		
Ripple and noise	20 MHz bandwidth (peak-to-peak)		-	100	150	mV
Standby power consumption	230 VAC	24 VDC	-	0,12	-	W
Temperature coefficient		-	± 0.02	-	%/°C	
Short-circuit protection		Hiccup mode, continuous, self-recovery				
Overcurrent protection		≥ 110 %Io, self-recovery				
Over-voltage protection		≤ 30 VDC (output voltage clamp or hiccup mode)				
Minimum load		0	-	-	%	
Hold-up time	230 VAC at full load	-	50	-	ms	



CONNECTIONS	
Clamp	Function
1	AC (N)
2	AC (L)
3	-V out
4	+V out

LEGEND	
Units:	mm [inches]
Wire thickness:	0.5 to 2 mm (24 to 12 AWG)
Tightening torque:	max. 0.4 Nm
General tolerances:	± 1.00 (± 0.039)