

TECHNICAL DATA SHEET

Duco Power supply 230VAC-24VDC/20W

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

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



Specifications

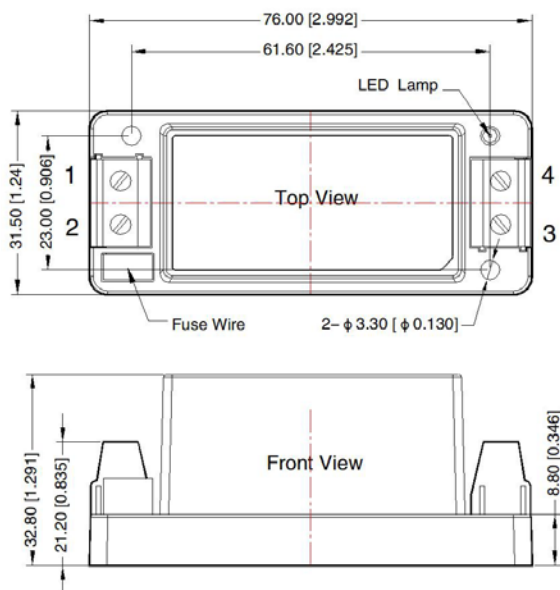
Article number:	0000-4763 (including Duco Power Supply casing)
Input:	230V
Output (nominal):	24V
Electric current:	830 mA
Power:	20W
Efficiency:	87%

Max. capacitive load:	1000 uF
No-load power:	0.1W
Housing material:	Black PVC, flame retardant and heat resistant (UL94V-0)
Dimensions:	76,00 x 31,50 x 32,80 mm
Weight:	75g
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	4000	-	-	VAC		
Insulation resistance	Input-output	At 500VDC	100	-	-	MΩ		
Operating temperature			-40	-	+85	°C		
Storage temperature			-40	-	+85			
Storage humidity			-	-	95	%RH		
Soldering temperature		Wave soldering	260 +/--5°C; time: 5-10s					
		Manual welding	360 +/--10°C; time: 3-5s					
Switching frequency			-	65	-	kHz		
Power derating		-40°C to -25°C	85VAC-165VAC	2,0	-	-	% / °C	
		+55°C to +70°C	24V	3,33	-	-		
		-70°C to +85°C		1,33	-	-		
		85VAC - 100VAC			2,0	-	-	% / VAC
		277VAC - 305VAC			0,71	-	-	
		2000m - 5000m			6,7	-	-	
Safety standards			IEC/UL62368-1, EN61558-1, EN60335-1 safety approval & AN62368-1, BS EN 62368-1 (report); design refers to IEC/EN60601/ANSI/AAMI EN606-1					
Safety class			Class II					
Mean time between failures (MTBF)			MIL-HDBK-217F@25°C>1500000h					
Designed life		230VAC	Ambient temperature 25°C - 100% load	>130x10³ h				
			Ambient temperature 55°C - 100% load	>16x10³ h				
			Ambient temperature 55°C - 80% load	>27x10³ h				

OUTPUT SPECIFICATIONS						
Item	Operating conditions		Min.	Typical	Max.	Unit
Output voltage accuracy			-	+/-1,5	-	%
Line regulation	Full load		-	+/-0,5	-	
Load regulation	0-100% load		-	+/-1	-	
Ripple and noise	20 MHz bandwidth (peak-to-peak)		-	100	150	mV
Standby power consumption	230VAC	24V	-	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	≤30VDC (output voltage clamp or hiccup mode)					
Minimum load			0	-	-	%
Hold-up time			-	50	-	ms

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	-	440	Hz
Input current	230VAC		-	-	0,3	A
Inrush current	230VAC		-	45	-	
Leakage current	277VAC/50Hz		Max. 0,1 mA RMS			
Built-in fuse	3.15A/300V, slow-blow					



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

LEGEND	
Units:	mm [inches]
Wire thickness:	0,5-2 mm [24-12 AWG]
Tightening torque:	max. 0,4Nm
General tolerances:	+/- 1,00 [+/- 0.039]