

AC-DC CONVERTER

UNIVERSAL INPUT, 25 WATTS

SINGLE AND DUAL OUTPUT

UIL25 SERIES



FEATURES

- Universal Input 90-264Vac
- High Efficiency (up to 85%)
- Fully Encapsulated Plastic Case
- Dimensions: 3.0" × 2.0" × 1.0"
- Protection: Short Circuit/ Overload/ Over Voltage
- Internal Input Filter
- 2 Year Warranty
- RoHS Compliant

SELECTION GUIDE All specifications are typical at 230Vac input, full load and 25°C, unless otherwise noted.

Output Wattage W	Output Voltage Vdc	Output Current mA	Ripple & Noise ⁽¹⁾ mV (Max.)	Efficiency %	Model Number
16.5	3.3	5000	150	75	UIL25-33S
20	5	4000	150	75	UIL25-5S
24	6	4000	150	78	UIL25-6S
21	7	3000	150	78	UIL25-7S
24	8	3000	150	78	UIL25-8S
22.5	9	2500	150	78	UIL25-9S
25	10	2500	150	78	UIL25-10S
25	12	2100	150	80	UIL25-12S
26	13	2000	150	80	UIL25-13S
26	14	1850	150	80	UIL25-14S
26	15	1750	200	82	UIL25-15S
26	16	1625	200	82	UIL25-16S
26	18	1450	200	82	UIL25-18S
26.4	24	1100	240	85	UIL25-24S
27	27	1000	240	85	UIL25-27S
27	36	750	240	85	UIL25-36S
27	48	560	240	85	UIL25-48S
25	±5	±2500	150	75	UIL25-05D
24	±12	±1000	150	78	UIL25-12D
24	±15	±800	150	80	UIL25-15D
24	±24	±500	150	80	UIL25-24D
13.5	3.3/5	2500/1000	150/240	76	UIL25-33S5D
24	5/12	2500/1000	150/240	76	UIL25-5S12S
24	5/15	2500/1000	150/240	76	UIL25-5S15S
24	5/24	2500/1000	150/240	78	UIL25-5S24S

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Input Specifications			Output Specifications		
Voltage range	90Vac Min., 264Vac Max.	Vo, lo nom, AC input	Output voltage accuracy, %	±3 Max.	Vi nom, lo nom, Single output, 3.3V-9V models
	120Vdc Min., 370Vdc Max.	Vo, lo nom, DC input		±2 Max.	Vi nom, lo nom, Single output, 10V-48V models
Rated input voltage, Vac	100 - 240 Typ.	Vo, lo nom		±5 Max.	Dual output
			Minimum load, %	0 Min.	Vi nom, Single output models
Line frequency, Hz	47 Min., 50/60 Typ., 63 Max.	Vi nom, lo nom	Line regulation, %	20 Min.	Vi nom, Dual output models (each output)
			Load regulation, %	±1 Typ.	lo nom, Vi min...Vi max
Inrush current, A	12 Max.	lo nom, Vi: 115Vac	Load regulation, %	±2 Typ.	Lo min- lo nom, Single output models
	20 Max.	lo nom, Vi: 230Vac	Load regulation, %	±5 Typ.	Lo min- lo nom, Dual output models
Input fuse	VDE/UL/CCC, Fuse 2.5A/250V (Slow blow)		Transient recovery time, uS	1,000 Typ.	Vi nom, lo nom = $\longleftrightarrow$ 0.5 lo nom
			Overload protection	Above 110% rated output power Recovers automatically after fault condition is removed	
			Short circuit protection	Recovers automatically after fault condition is removed	
			Over voltage protection (Main output)	120%-150% rated output voltage Zener diode clamp	

General Specifications			
Isolation voltage		Input to Output	3KVac/ 5mA/ 5Secs
Isolation resistance, MΩ	500Vdc	Input to Output	100 Min.
Switching frequency, kHz	Vi nom, lo nom		65 Typ.

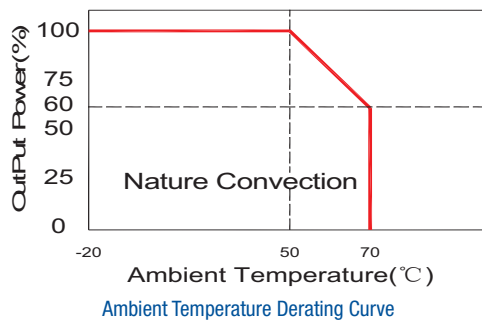
Environmental Specifications			
Operating temperature, °C	Operating at Vi nom, lo nom	-20 Min.	70 Max.
Derating, %/°C	Vi nom, lo nom 51 to 71°C		2 Max.
Storage temperature, °C	Non-operational	-40 Min.	85 Max.
Relatively humidity, % RH	Vi nom, lo nom		95 Max.
Cooling	Free air convection		

Physical Specifications		EMC Specifications	
Design meet safety standard	EN60950-1	EMI conduction and radiation	Compliance to EN55022
Dimensions, inches (mm)	3.0 × 2.0 × 1.0 (76.2 × 50.8 × 25.4)	EMS immunity	Compliance to EN55024

Note:

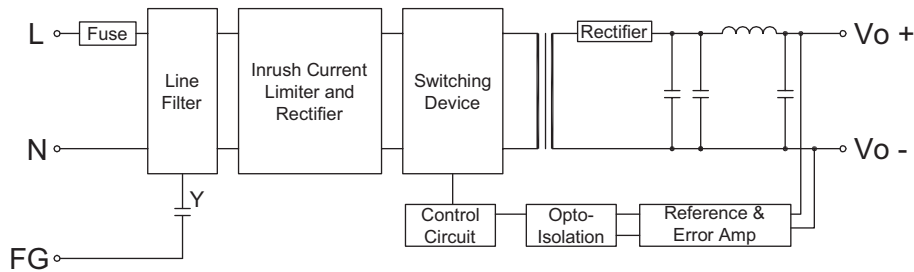
1. Ripple & noise is measured by using 20 MHz bandwidth, measured with a 47μF paralleled with a high-frequency 0.47μF capacitor across each output by full load.

Characteristic Curve

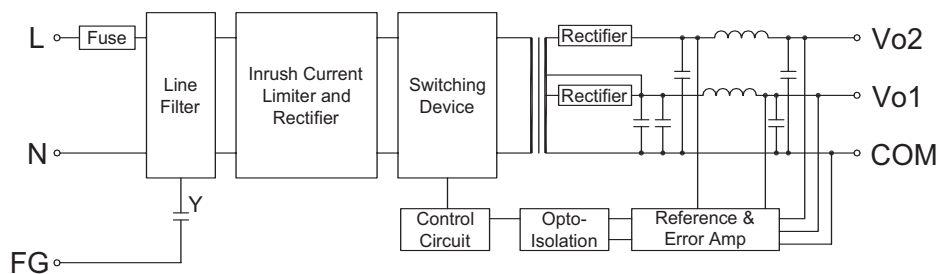
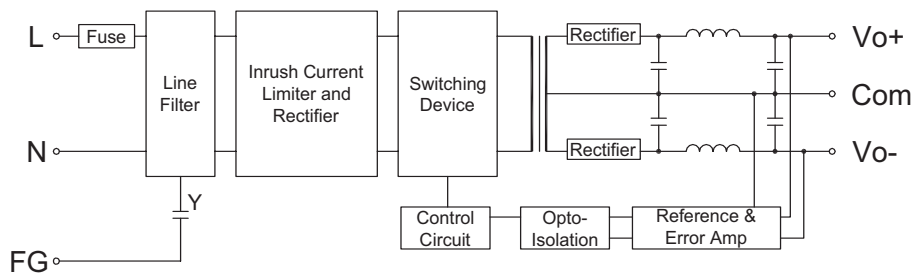


Circuit Schematic

Single Output

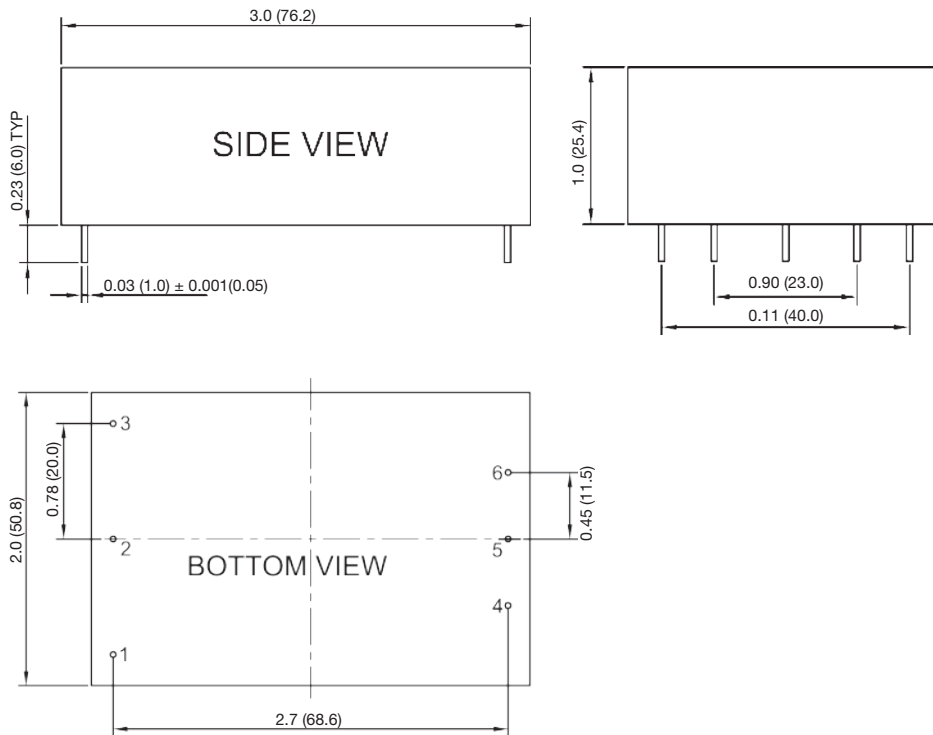


Dual Output



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Mechanical Drawing



PIN CONNECTION

PIN	SINGLE	DUAL	DUAL
1	FG	FG	FG
2	ACN	ACN	ACN
3	ACL	ACL	ACL
4	-Vo	-Vo	+Vo2
5	NO PIN	Com	Com
6	+Vo	+Vo	+Vo1

1. All dimensions in inches (mm)
2. All tolerances are ±0.50