





Features

- 180 ~ 550Vac ultra wide input for 1-phase or 2-phase
- 32mm slim width
- 4.7KVac I/O high isolation(Reinforced isolation)
- · Protections: Short circuit / Overload / Over voltage / Over temperature
- · Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- -30~+85°C ultra-wide operating temperature (>+60°C derating)
- Over voltage category III
- DC OK relay contact
- DC output voltage adjustable(+20%)
- 3 years warranty

Description

WDR-60 series is a 60W DIN rail power supply with ultra-wide AC input range. It is suitable to be mounted on TS-35/7.5 or TS-35/15 rails. Main features are as following: it can accept 180~550Vac ultra-wide input voltage range for single phase or 2-phase system, easy to install DIN rail type, narrow width (32mm) in slim design, -30~+85°C wide range operating temp, 4.7KVAC high isolation voltage, operation at 2000m altitude, adjustable output voltage (+20% max.), high efficiency, low ripple & noise, complete protections and so on. WDR-60 is compliant with EN-61000-6-2 standard regarding immunity for industrial environments. It suitable for industrial automation, surveillance, telecommunication and more applications.





Applications

- Industrial control system
- Semiconductor fabrication equipment
- Factory automation
- Electro-mechanical apparatus



SPECIFICATION

MODEL		WDR-60-5	WDR-60-12	WDR-60-24	WDR-60-48
	DC VOLTAGE	5V	12V	24V	48V
OUTPUT	RATED CURRENT	10A	5A	2.5A	1.25A
	CURRENT RANGE	0 ~ 10A	0~5A	0~2.5A	0 ~ 1.25A
	RATED POWER	50W	60W	60W	60W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	5~6V	12 ~ 15V	24~29V	48 ~ 57V
	VOLTAGE TOLERANCE Note.3		±1.5%	±1.0%	±1.0%
		±0.5%	±0.5%	±0.5%	± 1.0%
		,.			±0.5%
	LOAD REGULATION	±1.5%	±0.5%	±0.5%	10.3%
	SETUP, RISE, HOLD UP TIME				
INPUT		180 ~ 550Vac or 254 ~ 780Vdc			
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	83.5% / 400Vac 86.5% / 400Vac 89% / 400Vac 90.5% / 400Vac			
	AC CURRENT	0.4A/400Vac 0.7A/230Vac			
	INRUSH CURRENT (max.)	COLD START 50A /400Vac 30A/230Vac			
	LEAKAGE CURRENT	<2mA / 530Vac			
PROTECTION		105 ~ 135% rated output power			
	OVERLOAD	Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed			
		Constant current limiting within 50% ~100% rated output voltage, recovers automatically after fault condition is removed			
		6.2 ~ 7.2V	16 ~ 18V	31 ~ 37V	58 ~ 60.5V
	OVER VOLTAGE				30 00.34
		Protection type : Shut down o/p voltage, re-power on to recover			
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover Relay contact rating(max.) : 30V / 1A resistive			
UNCTION	DC OK SIGNAL				
ENVIRONMENT	WORKING TEMP.	-30 ~ +85 $^\circ C$ (Refer to "Derating Curve")			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP.	-40 ~ +85°C			
	TEMP. COEFFICIENT	±0.03%/°C (0~60°C)			
	VIBRATION	Component: 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting clip: Compliance to IEC60068-2-6			
	OPERATING ALTITUDE Note.5				
	OVER VOLTAGE CATEGORY	III; According to EN61558, EN50178, EN60664-1, EN62477-1, EN60204-1; altitude up to 2000 meters			
	SAFETY STANDARDS	UL61010, EN61558-2-16, EAC TP TC 004 approved; design refer to GL and EN60204-1(By request)			
	WITHSTAND VOLTAGE	I/P-O/P:4.7KVAC I/P-FG:2.5KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH			
	IOULATION NEOIOTANUE	Parameter	st Level / Note		
	EMC EMISSION	Conducted	Standard		
			EN55032(CISPR32)		lass B
		Radiated	EN55032(CISPR32)	C	lass B
		Harmonic Current	EN61000-3-2	C	lass A
		Voltage Flicker	EN61000-3-3		
EMC (Note 7)	EMC IMMUNITY	EN55024, EN55035, EN61000-	6-2, EN61204-3		
		Parameter	Standard	T	est Level /Note
		ESD	EN61000-4-2	L	evel 3, 8KV air; Level 2, 4KV contact, criteria A
		Radiated Susceptibility	EN61000-4-3		evel 3, 10V/m, criteria A
		EFT Bursts	EN61000-4-4		evel 3, 2KV/5KHz, criteria A
		-			evel 4, 2KV/Line-Line, 4KV/Line-Earth, criteria
		Surge	EN61000-4-5		, , , ,
		Conducted	EN61000-4-6		evel 3, 10V, criteria A
		Magnetic Field	EN61000-4-8	L	.evel 4, 30A/m, criteria A
		Voltage Dips and interruptions	EN61000-4-11		>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods
	MTBF	313.68K hrs min. MIL-HDBK-217F (25°C)			
OTHERS	DIMENSION	32*125.2*102mm (W*H*D)			
	PACKING	0.45Kg; 28pcs/13.6Kg/1.24CUF	T		
NOTE	 Ripple & noise are measu Tolerance : includes set u Derating may be needed The ambient temperature 2000m(6500ft). Installation clearances : 4 full power. In case the action of the ambient temperature and the action of the action of	cially mentioned are measured at 400VAC input, rated load and 25°C of ambient temperature. sured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor. up tolerance, line regulation and load regulation. d under low input voltage. Please check the derating curve for more details. e derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with tdjacent device is a heat source, 15mm clearance is recommended. dered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets nce on how to perform these EMC tests, please refer to "EMI testing of component power supplies."			



WDR-60 series





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