

YS90-Class II SERIES

90W



Features

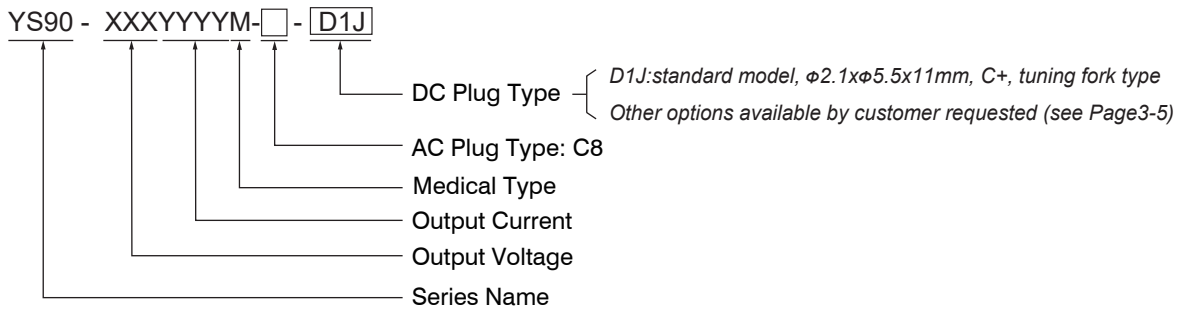
- Energy efficiency level VI
- Class II Power Supply
- 3 Years Warranty
- Universal AC input/Full range
- No load power consumption < 0.21W
- Protections: Short Circuit /Over Load / Over Voltage
- -30~+70°C wide range working temperature

Applications

- Blood pressure monitor
- Portable medical device
- Mobile clinical workstation
- Medical computer monitor

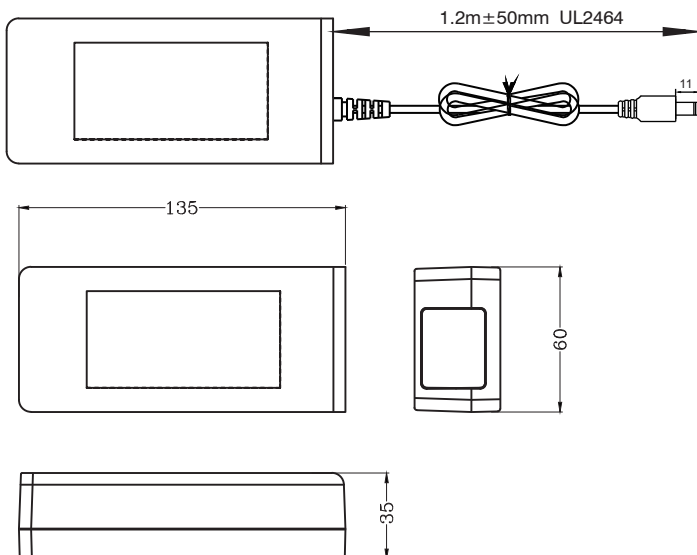


Model Description

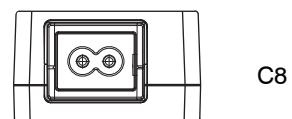


Dimensions and installation

(Unit: mm , tolerance: ± 1 mm)



Standard Cable	1.2m UL2464 (Option: UL2468, UL1185)
12 ~ 24V	18AWG
36V	20AWG
48V	22AWG



Specification

Model	Order P/N	YS90-1207000M -C8-D1J	YS90-1506000M -C8-D1J	YS90-2403750M -C8-D1J	YS90-3602500M -C8-D1J	YS90-4801875M -C8-D1J	
	Safety Model No.	YS90-1207000M	YS90-1506000M	YS90-2403750M	YS90-3602500M	YS90-4801875M	
Output	DC Voltage	12V	15V	24V	36V	48V	
	Rated Current	7A	6A	3.75A	2.5A	1.875A	
	Rated Power	84W	90W	90W	90W	90W	
	Ripple & Noise(max.)	100mVp-p	150mVp-p	200mVp-p	300mVp-p	360mVp-p	
	Voltage Tolerance	±5%	±5%	±5%	±5%	±5%	
	Line Regulation	±3%	±3%	±3%	±3%	±3%	
	Load Regulation	±5%	±5%	±5%	±5%	±5%	
	Setup,Rise,Hold up Time	1.0s,50ms,30ms/230VAC(at full load)			1.5s,50ms,20ms/115VAC(at full load)		
Input	Rated Voltage Range	100-240VAC					
	Voltage Range	90-264VAC					
	Frequency Range	50/60Hz					
	AC Current	2.2A/115VAC	1.4A/230VAC				
	Inrush Current	Cold Start 130A/200us at 230VAC 50Hz			Cold Start 60A/200us at 115VAC 50Hz		
	Leakage Current	<0.1mA/230VAC					
	Efficiency	88.5%	89.5%	89%	91.5%	90.5%	
	No Load Power Consumption	<0.21W					
Protection	Over Load	105~150% Hiccup mode, recovers automatically after fault condition is removed.					
	Short Circuit	Shut down o/p voltage, re-power on to recover.					
	Over Voltage	120~180% Shut down o/p voltage, re-power on to recover.					
Ambient	Working TEMP.	-30 ~ +70 C (Please refer to "Derating Curve" section)					
	Working Humidity	20 ~ 95%RH Non-condensing					
	Storage TEMP. Humidity	-40 ~ +85 C, 10 ~ 95%RH Non-condensing					
	TEMP. Coefficient	±0.03%/ (0 ~ 40 C)					
	Vibration	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes					
Safety	Safety Standards	IEC60601-1, EN60601-1					
	Withstand Voltage	I/P-O/P: 4KVAC/1min					
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25 C / 70% RH					
EMC	EMC Emission	Parameter	Standard		Test Level		
		Conducted	EN55032(CISPR32)		CLASS B		
		Radiated	EN55032(CISPR32)		CLASS B		
		Harmonic Current	EN61000-3-2		CLASS B		
		Voltage flicker	EN61000-3-3		CLASS B		
	EMC Immunity	Parameter	Standard		Test Level		
		ESD	EN61000-4-2		Level 3, 8KV air, criteria A		
		Radiated Susceptibility	EN61000-4-3		Level 3, criteria A		
		EFT/Burest	EN61000-4-4		Level 3, criteria A		
		Surge	EN61000-4-5		Level 4, 2KV/L-N, criteria A		
		Conducted	EN61000-4-6		Level 3, criteria A		
		Magnetic Field	EN61000-4-8		Level 4, criteria A		
		Voltage Dips and interruptions	EN61000-4-11		> 95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods		
Others	Packing	420g/pcs; 40 x 21 x 30 cm; 20pcs/carton					
	Dimension (LxWxH)	135 x 60 x 35 mm					
	Plug and Cable	See page 3~5; Other type available by customer requested					
	MTBF	397.1Khrs min. MIL-HDBK-217F(25 C)					
Note	<ol style="list-style-type: none"> 1. Tolerance: includes set up tolerance, line regulation and load regulation. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Line regulation is measured from low line to high line at rated load. 4. Load regulation is measured from 0% to 100% rated load. 5. All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 C of ambient temperature. 6. De-rating may be needed under low input voltages. Please refer to "Static Characteristic" sections for details. 7. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. 						

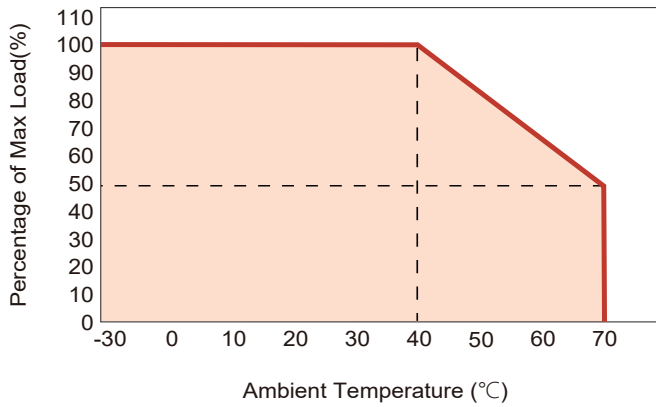
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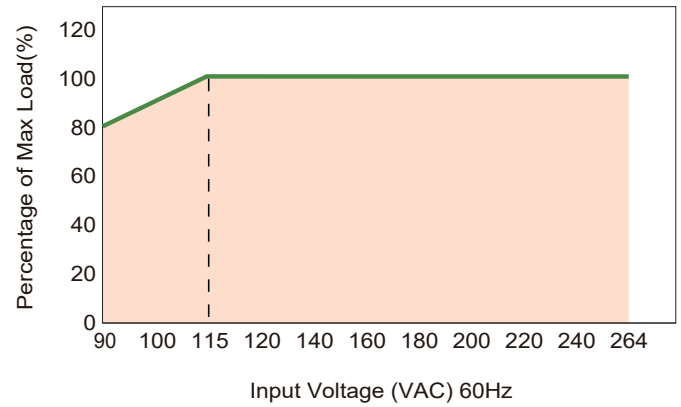
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Feature Curves

1. Derating Curve

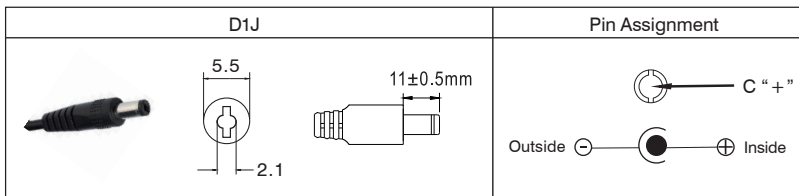


2. Static Characteristics



DC Output Plug (Option)

Standard Model : D1J



Optional DC plug:

(Unit: mm , tolerance: ±0.5mm)

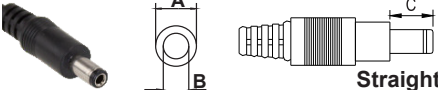
Tuning Fork Style	Straight		
	A	B	C
Type No.	OD	ID	L
	D1I	5.5	2.1
D1L	5.5	2.5	9.5
D1M	5.5	2.5	11.0

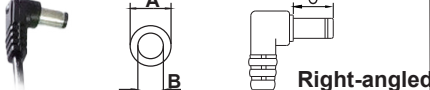
Tuning Fork Style	Right-angled		
	A	B	C
Type No.	OD	ID	L
	D1IR	5.5	2.1
D1JR	5.5	2.1	11.0
D1LR	5.5	2.5	9.5
D1MR	5.5	2.5	11.0

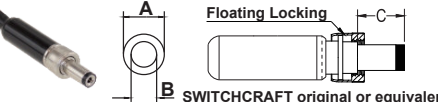
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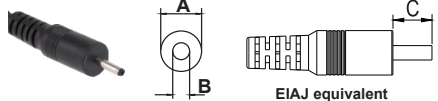
DC Output Plug (Option)

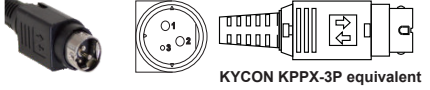
Barrel Style	 Straight			
	Type No.	A OD	B ID	C L
D2I		5.5	2.1	9.5
D2J		5.5	2.1	11.0
D2L		5.5	2.5	9.5
D2M		5.5	2.5	11.0

Barrel Style	 Right-angled			
	Type No.	A OD	B ID	C L
D2IR		5.5	2.1	9.5
D2JR		5.5	2.1	11.0
D2LR		5.5	2.5	9.5
D2MR		5.5	2.5	11.0

Lock Style	 SWITCHCRAFT original or equivalent			
	Type No.	A OD	B ID	C L
D2S(S761K)		5.53	2.03	12.06
D2K(761K)		5.53	2.54	12.06
D2C(S760K)		5.53	2.03	9.52
D2D(760K)		5.53	2.54	9.52

Center Pin Style	 EIAJ equivalent				
	Type No.	A OD	B ID	C L	D Center Pin
D4A		5.5	3.4	11.0	1.0
D4B		6.5	4.4	11.0	1.4
D4C		7.4	5.1	11.0	0.6

Tuning Fork Style	 EIAJ equivalent			
	Type No.	A OD	B ID	C L
D3A		2.35	0.7	11.0
D3B		4.0	1.7	11.0
D3C		4.75	1.7	11.0

MIN.Din 3Pin with Lock(male)	 KYCON KPPX-3P equivalent	
	Pin Assignment	
	Type No.	PIN No.
M6B	1	+Vo
	2	-Vo
	3	+Vo

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DC Output Plug (Option)

MIN.Din 4Pin with Lock(male)		
	KYCON KPPX-4P equivalent	
Type No.	Pin Assignment	
	PIN No.	Output
M7B	1	+Vo
	2	-Vo
	3	-Vo
	4	+Vo

MIN.Din 4Pin with Lock(female)		
	KYCON KPJX-CM-4S equivalent	
Type No.	Pin Assignment	
	PIN No.	Output
M7BF	1	+Vo
	2	-Vo
	3	-Vo
	4	+Vo

Barrel Style		
	KYCON KPPX-4P equivalent	
Type No.	Pin Assignment	
	PIN No.	Output
M1B	1	-Vo
	2	-Vo
	3	+Vo
	4	-Vo
	5	+Vo

Stripped and tinned leads	<p>Length of Land L1 by request YJ's standard length, L: 30 mm, L1: 5 mm NOTE: The wire color is for reference only, please refer to the actual product</p>		
	Pin Assignment		
Type No.	PIN No.	Output	
	by customer	1	+Vo
		2	-Vo

Type-C			
	KYCON KPPX-4P equivalent		
Type No.	A	B	C
	OD	ID	L
C1	2.4	1.3	8.25