

# WH Series

## Features

- Screw-mount terminal type, Long life
- Endurance with ripple current: 105°C 5000 hours
- High ripple current capability
- Safety vent designed on aluminum case
- RoHS2.0 Compliant

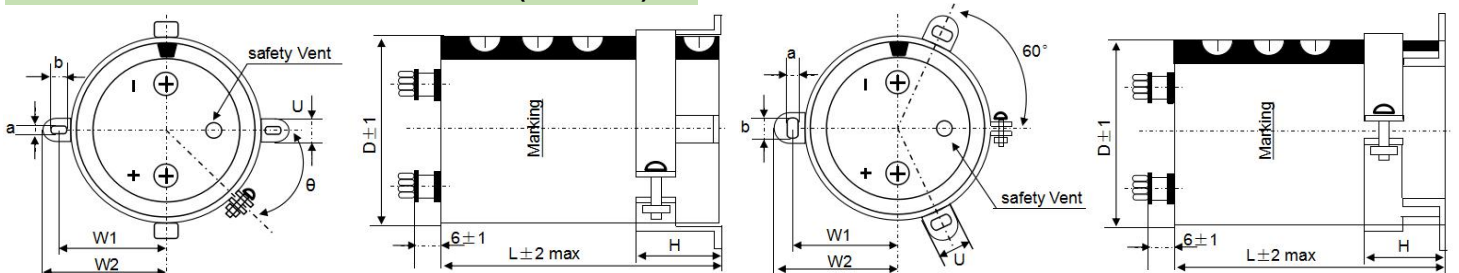
## Applications

- Professional power supply
- Inverter
- UPS
- Air conditioner, general purpose inverter
- Professional arena power amplifier
- Frequency converters
- Medical power supply
- New energy
- And others

## 规格表 Specifications

项目 Items	特性参数 Characteristics						
使用温度范围 Category Temperature Range	-25 ~ +105°C						
额定工作电压范围 Rated Voltage Range	350 ~ 450V.DC						
电容量允许偏差 Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)						
漏电流 Leakage Current	$I \leq 0.02CV$ or 5mA, 二者取最小值 (施加额定工作电压5分钟后) Whichever is smaller (After 5 minutes application of rated Voltage ) Note: I=Max.leakage current (µA), C=Nominal capacitance(µF), V=Rated voltage(V) (at 20°C)						
损耗角正切值 tanδ Dissipation Factor	0.15 Max (at 20°C, 120Hz)						
低温特性 Low Temperature Characteristics (Max.Capacitance Ratio)	容量比值不得超过下表中所列出的值 The Capacitance ratio shall not exceed the values listed in the below table.(at 120Hz)  Capacitance change : $C(-25^\circ C)/C(+20^\circ C) \geq 0.7$						
绝缘阻抗 Insulation Resistance	在螺丝端子与固定架之间施加直流电压 500V, 测量其绝缘阻抗值不低于 100MΩ。 The insulation resistance shall be more than 100MΩ at DC 500V application between terminal and bracket.						
绝缘耐电压 Voltage proof	在螺丝端子与固定架之间施加交流电压 2000V, 1分钟, 无电气性能异常。 There shall not be electrical damage during application of AC 2000V voltage between terminal and bracket 1 minute.						
耐久性 Endurance	在105°C环境中, 不超过额定电压的范围内叠加最大允许纹波电流, 连续5000小时, 经恢复到20°C后, 电容器满足以下各项要求。 The following specifications shall be satisfied when the capacitors are restored to 20°C after applied within maximum allowable ripple current and not over rated voltage range for 5000 hours at 105°C. <table border="1"> <tr> <td>Capacitance change</td> <td>≅ ±20% of the initial value</td> </tr> <tr> <td>D F (tanδ)</td> <td>≅ 200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ The initial specified value</td> </tr> </table>	Capacitance change	≅ ±20% of the initial value	D F (tanδ)	≅ 200% of the initial specified value	Leakage current	≅ The initial specified value
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Leakage current	≅ The initial specified value						
高温储存特性 Shelf Life	在105°C环境中, 不施加电压条件下储存500小时, 经恢复到20°C后, 电容器满足以下各项要求。 The following specifications shall be satisfied when the capacitors are restored at 20°C after exposing them for 500 hours at 105°C without voltage applied. <table border="1"> <tr> <td>Capacitance change</td> <td>≅ ±20% of the initial value</td> </tr> <tr> <td>D F (tanδ)</td> <td>≅ 200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>≅ 200% of the initial specified value</td> </tr> </table>	Capacitance change	≅ ±20% of the initial value	D F (tanδ)	≅ 200% of the initial specified value	Leakage current	≅ 200% of the initial specified value
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## 尺寸图 (单位: mm) DIMENSIONS (Unit:mm)



ΦD	W1	W2	U	a	b	H
36.0	24.0	29.0	10.0	3.8	7.0	15.0
51.0	34.0	40.0	14.0	5.0	7.0	30.0
64.0	40.5	46.5	14.0	5.0	7.0	30.0
77.0	46.8	53.0	14.0	5.0	7.0	30.0
90.0	54.0	60.3	14.0	5.0	7.0	30.0

ΦD	W1	W2	U	a	b	H
51.0	31.8	36.5	14.0	5.0	7.0	30.0
64.0	38.1	42.6	14.0	5.0	7.0	30.0
77.0	44.5	49.2	14.0	5.0	7.0	30.0
90.0	50.8	55.6	14.0	5.0	7.0	30.0
101.0	57.5	63.5	20.0	5.5	8.0	35.0



**WH Series****◆ 纹波电流修正系数 Rated Ripple Current Coefficient**

## ● 频率系数 Frequency Coefficient

Frequency (Hz)	50(60)	120	500	1k	10k
350~450V	0.7	1	1.1	1.3	1.4

## ● 温度系数 Temperature Coefficient

Ambient Temperature(°C)	40	60	85	105
Coefficient	2.4	2.1	2	1

**◆ 标准品一览表 Standard Ratings**

WV (V) Items ΦD×L (mm)	350(2V)		400(2G)		450(2W)	
	Cap. (μF) 20°C/120Hz	Maximum allowable ripple current at 105°C /120Hz(A.r.m.s)	Cap. (μF) 20°C/120Hz	Maximum allowable ripple current at 105°C /120Hz(A.r.m.s)	Cap. (μF) 20°C/120Hz	Maximum allowable ripple current at 105°C /120Hz(A.r.m.s)
64×100	2700	8.5	2200	7.7	1800	6.8
64×120	3300	10.1	2700	9.1		
64×130	3900	11.7	3300	10.7	2200	8.2
64×155	4700	13.4	3900	12	2700	9.4
76×120	4700	13	3900	11.9	2700	10.3
76×140	5600	16.1	4700	14.7	3300	12.7
76×160	6800	18.7	5600	18.3	3900	13.7
					4700	18.2
90×120	5600	15.5	4700	15.4	3900	13.4
90×140	6800	18.5	5600	18.8	4700	18.8
90×160	8200	21.9	6800	27.9	5600	20.2
90×160	10000	24.8				

※铝电解电容器由于在纹波电流叠加时自我发热、温度上升而老化，中心温度每升温5°C寿命减少一半。要想保持长寿命请在使用过程中降低纹波电流。

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

