

# Specification for approval

<b>Description(产品类型):</b>	Encapsulated transformer
<b>Customer(客户)p/n:</b>	
<b>ZETTLER(赛特勒) p/n:</b>	BV30XXXX020
<b>Revision(版本号):</b>	A4
<b>页 数/Page:</b>	7

**Drafted(制作):** Li xiaoxu

**Checked(审核):** Chen chaolu

**Approved(确认):** He zongnian



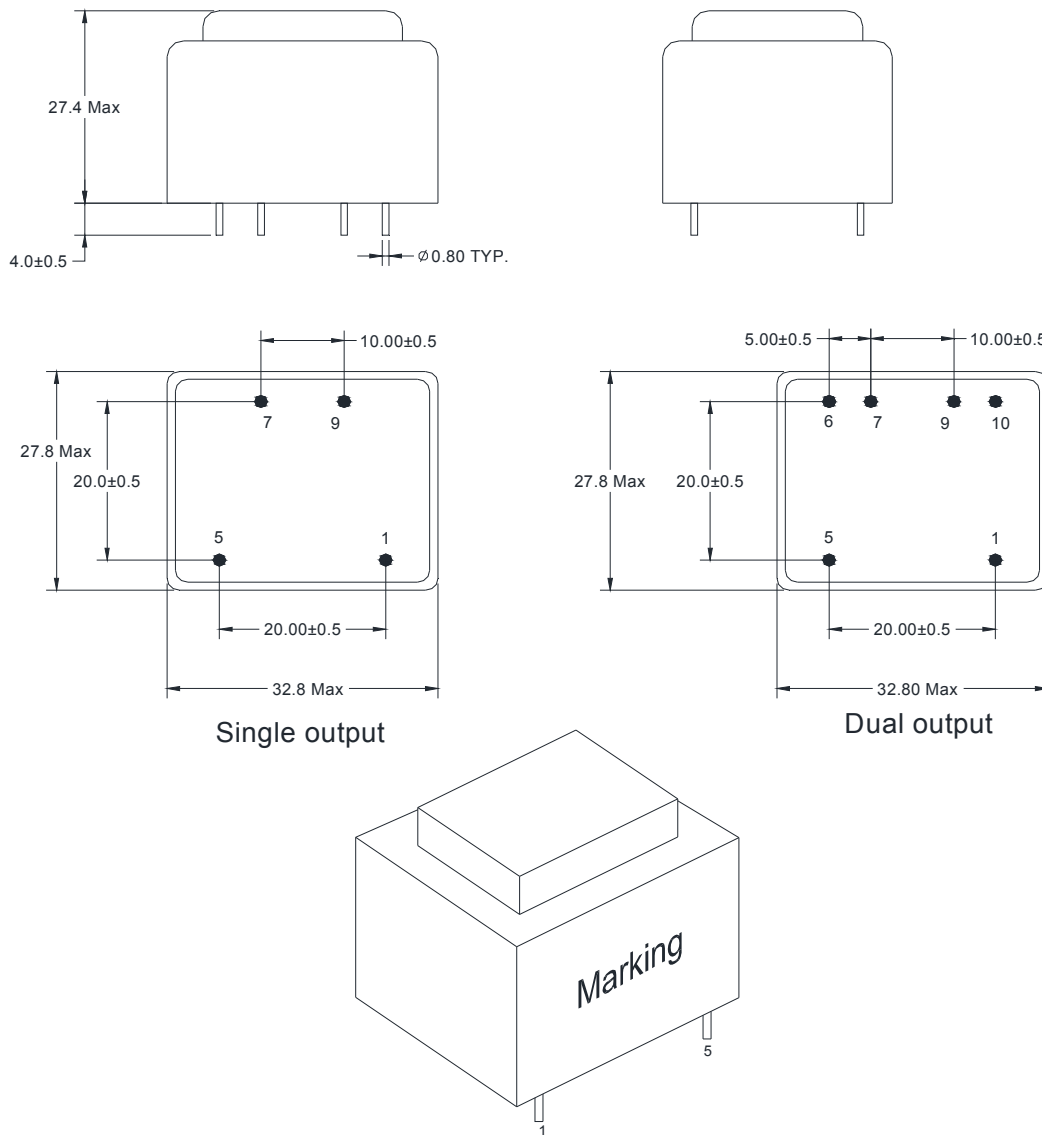
A4	2022/7/20	Add BOM. Add VDE UL ambient TEMP. in the precautions for use Add UL,VDE and CQC file numbers	Li xiaoxu
A3	2022/4/25	Add VDE ambient TEMP. in the marking	Li xiaoxu
A2	2022/3/4	Remove not CE conform parts for EU market	Stöckel
A1	2021/1/7	Merge the data code into the marking	Li xiaoxu
Rev.	Date	Description	Approved

**Approved by Customer (客户确认) :** \_\_\_\_\_

Friendly Reminder: Please help to sign this Spec when approve , and fax to our company .Or else, we will consider you have accepted it and make future order based on this Spec.

友情提示:请在签字确认后,按封面的传真号码回传给赛特勒磁电有限公司.如无回传,则视为默认,后续的相关订单将以按本承认书的规定为技术要求.

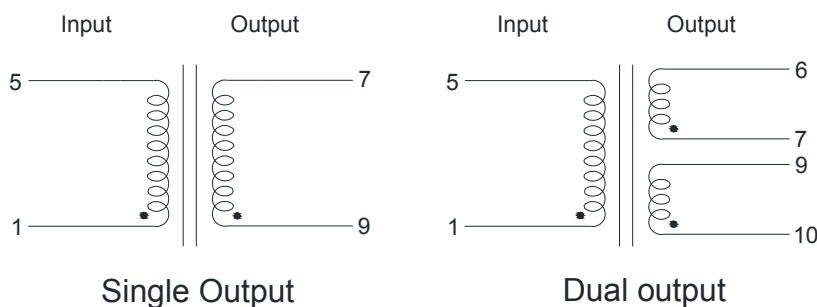
## 1、OUTLINE DRAWING(外形图):UNIT(单位): mm



### Notes :

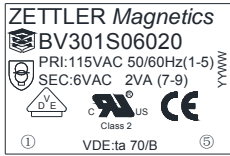
- ◆ PCB opening aperture is recommended to be 1.3mm; (建议 PCB 开孔孔径为 1.3mm)
- ◆ If PIN layout and footprint have slightly deviation, please refer to actual PCB assembly, the ones can be normally inserted into PCB is qualified . (PIN 距、排距尺寸测量有偏差时, 以 PCB 下板实装确认, 可正常下板为合格)
- ◆ The Pin length doesn't include the solder tip (PIN 脚长度不包括锡尖)

## 2、SCHEMATIC(原理图):

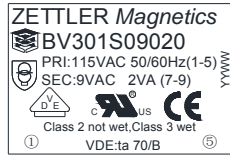


### 3、Marking (标签图)

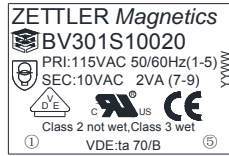
BV301S06020



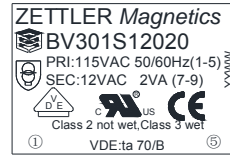
BV301S09020



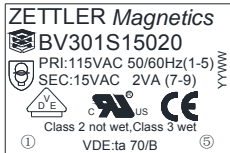
BV301S10020



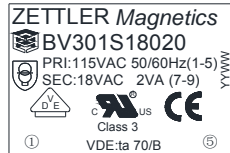
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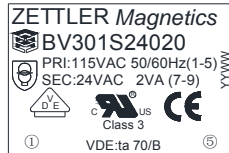
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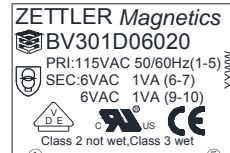
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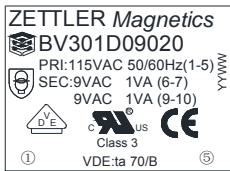
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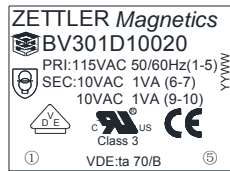
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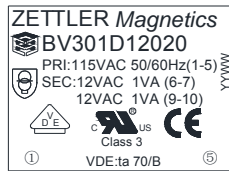
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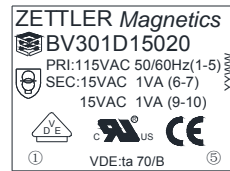
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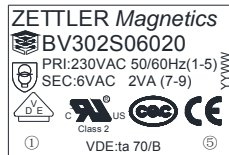
BV301D12020



BV301D15020



BV302S06020



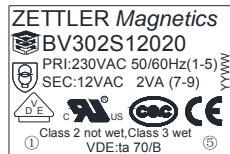
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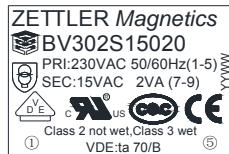
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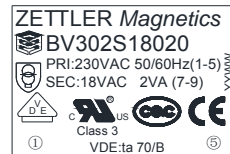
BV302S12020



BV302S15020



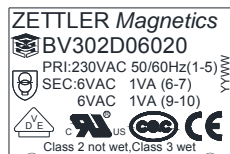
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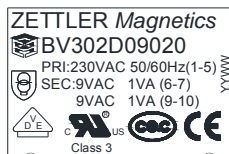
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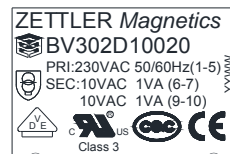
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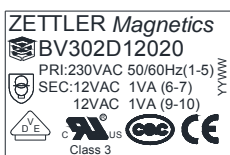
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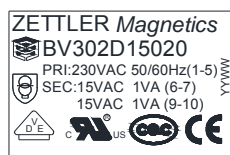
BV302D10020



BV302D12020



BV302D15020



YY:Year WW:Week

## 4-1、ELECTRICAL SPECIFICATION(电气特性测试)(Single Output 单输出):

ITEM (项目)	EXCITATION CURRENT 空载电流(mA) Max	LOSS POWER 空载损耗 (W) Max	RATED LOAD VOLTAGE 负载电压 (V)	NO LOAD VOLTAGE 空载电压(V) max	HI-POT VOLTAGE 耐压	INSULATION RESISTANCE 绝缘阻抗	RESISTANCE 直流电阻(Ω)	
测试条件 TEST CONDITION	Input 输入:115V 50Hz		Input 输入:115V 50Hz		1mA/1S/ 50Hz	DC 500V 100MΩ	Ta=25°C	
端子 TERMINAL	1--5		7--9	7--9	P--S	P--S	1--5	7--9
BV301S06020	22.5	0.8	6.3±10% @ 333mA	10.4	2800V	DC 500V 100MΩ MIN	610±30%	6.7 ± 30%
BV301S09020	22.5	0.8	9±10% @ 222mA	15.5			610±30%	15.5 ± 30%
BV301S10020	22.5	0.8	10±10% @ 200mA	16			610±30%	15.5 ± 30%
BV301S12020	22.5	0.8	12.5±10% @ @ 167mA	20.7			610±30%	24.5 ± 30%
BV301S15020	22.5	0.8	15±10% @ 133mA	25.8			610±30%	43.1 ± 30%
BV301S18020	22.5	0.8	18.5±10% @ @ 111mA	30.8			610±30%	58.5 ± 30%
BV301S24020	22.5	0.8	24.5±10% @ @ 83mA	41.4			610±30%	109.2 ± 30%
测试条件 TEST CONDITION	Input 输入:230V 50Hz		Input 输入:230V 50Hz				1mA/1S/ 50Hz	DC 500V 100MΩ
端子 TERMINAL	1--5		7--9	7--9	P--S	P--S	1--5	7--9
BV302S06020	11	0.8	6.3±10% @ 333mA	10.4	4200V	DC 500V 100MΩ MIN	2420±30%	6.7 ± 30%
BV302S09020	11	0.8	9±10% @ 222mA	15.5			2420±30%	15.5 ± 30%
BV302S10020	11	0.8	10±10% @ 200mA	16			2420±30%	15.5 ± 30%

BV302S12020	11	0.8	12.5±10% @ 167mA	20.7			2420±30%	24.5 ± 30%
BV302S15020	11	0.8	15.5±10% @ 133mA	25.8			2420±30%	43.1 ± 30%
BV302S18020	11	0.8	18.5±10% @ 111mA	30.8			2420±30%	58.5 ± 30%
BV302S24020	11	0.8	24.5±10% @ 83mA	41.4			2420±30%	109.2 ± 30%

## 4-2、ELECTRICAL SPECIFICATION(电气特性测试)(Dual output 双输出):

ITEM (项目)	EXCITATION CURRENT 空载电流(mA) Max	LOSS POWER 空载损耗 (W) Max	RATED LOAD VOLTAGE 负载电压 (V)	NO LOAD VOLTAGE 空载电压(V) max	HI-POT VOLTAGE E 耐压	INSULATION RESISTANCE 绝缘阻抗	RESISTANCE 直流电阻(Ω)		
测试条件 TEST CONDITION	Input 输入:115V 50Hz		Input 输入:115V 50Hz		1mA/1S/ 50Hz	DC 500V 100MΩ	Ta=25℃		
端子 TERMINAL	1--5		6--7 9--10	6--7 9--10	P--S	P--S	1--5	6--7	9--10
BV301D06020	22.5	0.8	2×6.3±10% @ 2×167mA	2×10.4	2800V	DC 500V 100MΩ MIN	610±30%	13.9±30%	12.4±30%
BV301D09020	22.5	0.8	2×9±10% @ 2×111mA	2×15.4			610±30%	31.5±30%	27.5±30%
BV301D10020	22.5	0.8	2×10±10% @ 2×100mA	2×16.0			610±30%	31.5±30%	27.5±30%
BV301D12020	22.5	0.8	2×12.5±10% @ 2×83mA	2×20.7			610±30%	57.1±30%	50.5±30%
BV301D15020	22.5	0.8	2×15±10% @ 2×67mA	2×25.0			610±30%	84.8±30%	75.2±30%

测试条件 TEST CONDITION	Input 输入:230V 50Hz		Input 输入:230V 50Hz		1mA/1S/ 50Hz	DC 500V 100MΩ	Ta=25℃		
端子 TERMINAL	1--5		6--7 9--10	6--7 9--10	P--S	P--S	1--5	6--7	9--10
BV302D06020	11	0.8	2×6.3±10% @ 2×167mA	2×10.4	4200V	DC 500V 100MΩ MIN	2420±30%	13.9±30%	12.4±30%
BV302D09020	11	0.8	2×9±10% @ 2×111mA	2×15.4			2420±30%	31.5±30%	27.5±30%
BV302D10020	11	0.8	2×10±10% @ 2×100mA	2×16.0			2420±30%	31.5±30%	27.5±30%
BV302D12020	11	0.8	2×12.5±10% @ 2×83mA	2×20.7			2420±30%	57.1±30%	50.5±30%
BV302D15020	11	0.8	2×15.5±10% @ 2×67mA	2×25.0			2420±30%	84.8±30%	75.2±30%

### 5、PRECAUTIONS FOR USE (产品使用注意事项):

Ambient temperature range(使用环境温度范围): -25~+70℃

Storage temperature range(保存温度范围): -25~+85℃

Ambient TEMP.(VDE): ta 70/B

Ambient TEMP.(UL): ta 40/B

UL 认证号/ UL file No.: E177998

VDE 认证号/VDE file No.: 40022230

CQC 认证号/CQC file No.: CQC09001030821

### 6. BOM (材料表):

NO. 序号	MATERIAL TYPE 材料名称	DESCRIPTION 规格描述	SUPPLIERS 供应商	UL NO. 认证号
1	BOBBIN	PBT 4130 94V-0	CHANG CHUN PLASICS CO LTD	E59481
		PA66 A3X2G5, (94-V0)	BASF SE	E41871
2	CASE	PBT 4130 94V-0	CHANG CHUN PLASICS CO LTD	E59481
		PA66 A3X2G5, (94-V0)	BASF SE	E41871
3	WIRE	UEW	ELEKTRISOLA HANGZHOU CO LTD TA YA ELECTRIC LTD YICHI NingBo XINJIAN ELECTRONICS INDUSTRY CO., LTD	E258243 E197768 E363385 E197317
4	GLUE	PU552FL	WEVO-CHEMIE GMBH	E108835
		7800AR(*)/7800BR(#)	WUXI EAST-GRACE ELECTRONIC MATERIAL TECHNOLOGY CO LTD	E309982