SPECIFICATION FOR APPROVAL

技术规格确认书

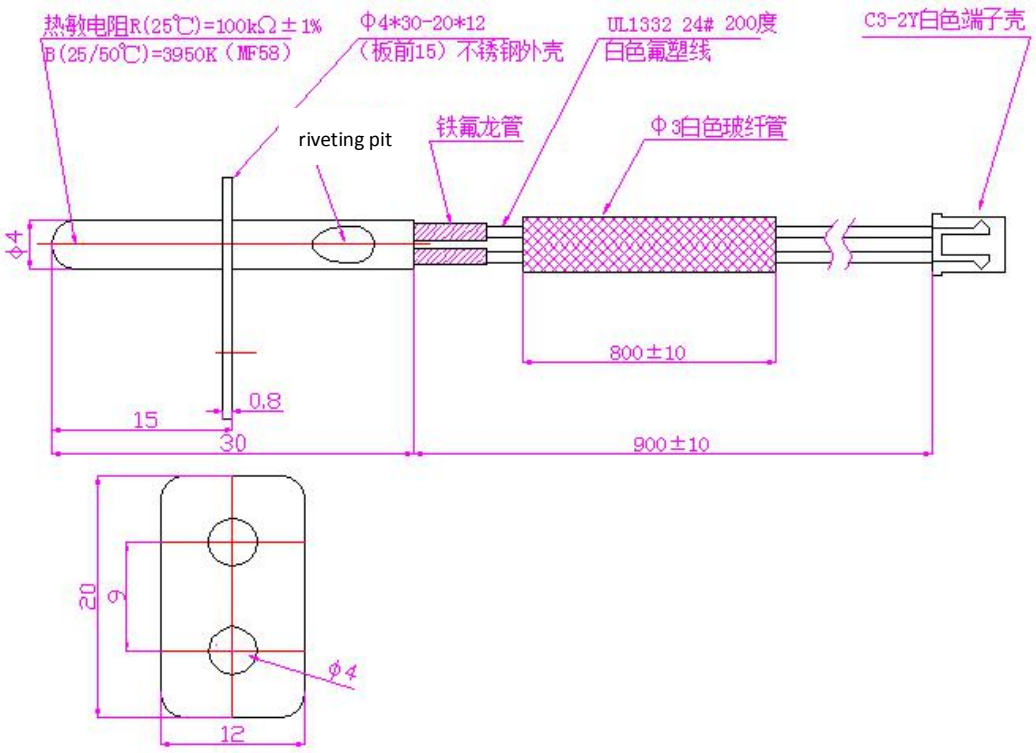
客户名称 Customer	
客户料号 Customer PN	
产品类型 Product Model	NTC Thermistor Temperature Sensor
型号规格 Part Number	CWF104F3950D4L30W901
文控编号 Specification file No.	
版本号 Version	V1

	DES.	CHK.	APP.
Manu.	RH LIANG	HO ZHANG	DZ LIN
User			

This Specification indicates the parameters, electrical properties, test condition, structure and dimension of the NTC Thermistors and Temperature Sensors manufactured by Ampfort . it is sincerely for your confirmation got the spec. and accept as our company ’ s standard.Any doubt, please contact us in due course, or if you change the usage of the products, or if the operational environment changed evidently, please inform us.

Date 日期	Version 版本号	Revise Content 修订内容	Make 制作	Approval 批准
2018.01.24	V1		RH Liang	DZ Lin

1、 Dimension （Unit：mm）



2、 Material explanation

NO	Material Name	Material and Specifications
2-1.	Housing	φ4*30-20*12 (15 in front of plate) stainless steel shell
2-2.	Thermistor	R(25℃)=100KΩ±1%　　B(25/50) =3950K±1%
2-3.	Cable	UL1332 24# 200℃ white fluoroplastic wire L=900±10mm (exposed)
2-4.	Tube	φ3 white glass fiber tube L=800±10mm
2-5.	Terminal	C3 Terminal
2-6.	Terminal shell	C3-2Y white terminal shell
2-7.	Other	Teflon tube L=70mm

3、Part Number ：

CWF -×× ××× × × ×××× ×

1　2 3　4　5 6　7　8

(1) NTC Thermistor Mark；

(2) Head shape sign (B:Housing Type,　D:Dip-Coating,　M:Molding)；

(3) Series Type (0:Epoxy coating structure,　1:Epoxy coating structure(high temp))　；

(4) Nominal Resistance at 25℃ (previous two digits are significant figures, The last digit specifies the number of zeros to follow.);

(5) Resistance tolerance（%）;

(6) B Value (1:25/50; 2:25/85; 3:25/100; 4:25/125; 5:0/25; 6:0/50; 7:0/100; 8:50/85; 9:100/200; 0:Other);

(7) Length Sign (unit is mm) ;

(8) Special code ;

4、Performance Specs:

NO	Item	Sign	Test Conditions	Min.	Nor.	Max.	Unit
4-1.	Resistance at 25℃	R25	Ta=25±0.05℃ P_T≦0.1mw	99	100	101	kΩ
4-2.	B Value	B25/50	$B=LN\frac{R_{T1}}{R_{T2}}/(\frac{1}{T1}-\frac{1}{T2})$	3910.5	3950	3989.5	k
4-3.	Dissipation factor	σ	In still air	About 2			mW/℃
4-4.	Time response	τ	In flowing water	About 15			sec
4-5.	Withstanding Voltage	/	1500VAC 2Sec	No breakdown			Sec
4-6.	Insulation Resistance		500VDC	≧100			MΩ
4-7.	Operating temp. range	/	/	-20	/	+200	℃

5、Reliability Test

NO	Item	Technical requirements	Test conditions and method
5-1.	Dry heat storage	△R25: R25≤±3% △B25/85: B25/85≤±2%	80±2℃，Room temperature storage 1000H.
5-2.	Warm storage		55±2℃，95% RH, Room temperature storage 1000H.
5-3.	Low temperature storage		-30±2℃， Room temperature storage 1000H.
5-4.	Temp. cycle test		-20℃×30min → 25℃×10min →100℃ Water×30min → 25℃×10min, total 10 cycles
5-5	Lead wire pulling test	No visible damage, and are within specification	Fix the product and apply 9.8Nor 1.0kg force on axial direction of each lead wire, for 10 secs.
5-6	Lead wire bending test		Fix the product and apply 100g force on axial direction of each lead wire, then bend both lead wires to same direction slowly, before bending them back to original location, for 10 times
5-7	Welding ability	Tin covered area should be larger than 90%	Soak lead wires with flux, immerse into flux at 230-260, for 3 to 5 secs.

6、Storage Method

6.1 In the process of storage and transportation, per stack height is not more than 4 CTN products.

6.2 Available with all transport method, but avoid the rain, snow of direct or indirect leaching and mechanical damage.

6.3 Products should be stored in the temperature of environment - 10 ℃ / + 40 ℃, relative humidity is not more than 80%, environment should not have acid, alkali and corrosion gas or radioactive source.