

Certificate No. R 50566276 0001 **Our Reference** 05-DUVI-CN223U3N 001 **Appendix No.** 1

Constructional Data Form (CDF) for Temperature Control

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License holder	: Shenzhen Sonoff Technologies Co.,Ltd 3F & 6F, Bldg A, No. 663, Bulong Rd, Shenzhen, 518000 Guangdong P.R. China
Factory 1	: Dongguan SI Electronic Co.,LTD No.4, Fuzhu 1st Street Zhangyang, Zhangmutou Town, Dongguan City, Guangdong, P.R. China
Factory 2	: Shenzhen Yindao Micro-electronics Co.,Ltd Floor 3&4, Building B2, Beihuan Hengkeng Industrial Park, Guantian Community, Shiyuan Street, Bao 'an District, Shenzhen, Guangdong, P.R. China
Kind of device	: Smart temperature and humidity monitoring switch
Type designation	: THR316, THR316D, THR320, THR320D

Product information		
<input checked="" type="checkbox"/> Operating temperature	-10°C~40°C	
<input type="checkbox"/> Reset temperature	-	
Feature of automatic action	Type 1.B	
Manufacturing deviation	-	
Drift	-	
Rated voltage	AC100-240V	
Nature of supply	~	
Frequency	50Hz/60Hz	
Rated current	<input type="checkbox"/> Substantially resistive load:	
	<input checked="" type="checkbox"/> Resistive or/and inductive load:	THR316 , THR316D: Max 16A; THR320 , THR320D: Max 20A
	<input type="checkbox"/> Specific Load:	
	<input type="checkbox"/> Other:	
Ambient temperature limits of the switch head	-10°C to 40°C	
Temperature limits of the mounting surface	-	
Number of cycles of actuation (M) for each manual action	10000 cycles	
Number of automatic cycles (A) for each automatic action	10000 cycles	
Disconnection (Micro, Full) or Micro interruption	Micro-disconnection	
Glow wire temperature	850 °C	
Resistance to tracking	PTI 175V	
Degree of protection against electrical shock	class II appliances	
Type of terminal	Screw terminal block, type Y attachment	
Pollution degree	Pollution degree 2	
IP Code (degree of protection)	IP20	
Overvoltage category	II	
Rated Impulse Voltage	2500V	

Critical component

Material: e.g. external enclosure, PCB, closed-end connector, sleeves, cord anchorage etc

Components with winding: e.g. motor, transformer, magnetic coil etc.

Other components: e.g. switch, thermostat, heater, plug, internal wire, capacitor, relay, varistor etc.

Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity
PCB	SHENZHEN BESTMAN ELECTRONIC CO LTD	YX-11	V-0, Min. 130°C, UL E302201	EN 60730-1	Tested with appliance
(Alt.)	Shenzhen Qunhui Precision Technology Co Ltd	QH-D	V-0, Min. 130°C, UL E506706	EN 60730-1	Tested with appliance
Material of enclosure	SABIC INNOVATIVE PLASTICS US LLC	940(f1)	V-0, UL E121562	EN 60730-1	Tested with appliance
Fuse(F1)	Dongguan Reomax Electronics Technology Co., Ltd	MTS1100A	1A 250V	IEC 60127- 1+A1+A2; IEC 60127- 3+A1.	VDE 40039420
Varistor(RV1)	SHANTOU HIGH-NEW ZONE SONGTIAN ENTERPRISE CO., LTD.	STE- 10D471KBS	Min.300V, 85°C	EN 61051-1 EN 61051-2 EN 61051-2- 2	VDE 40023049
(Alt.)	HONGZHI ENTERPRISES LTD	HEL10D471K	Min.300V, 85°C	EN 61051-1 EN 61051-2 EN 61051-2- 2	VDE 40037512
Y-Capacitor (CY1)	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	Y1-400VAC- Y5P-221K	400V 220pF 125°C	EN 60384-14	VDE 40025754
(Alt.)	Guangdong Hongzhi Electronic Technology Co., Ltd.	Y1-B-221K	400V 220pF 125°C	EN 60384-14	VDE 40038760
X-Capacitor X2 (CX1)	SURETOP TECHNOLOGY Co. Ltd.	MPX	AC275V 0.047 μ F, 105° C	EN60384-14	VDE 40034508
Relay (K1) for THR320 and THR320D	Zhejiang Fanhar Electronics Co Ltd	W15L-1A2T- L2-DC5V	5V 20A 250VAC UL/C-UL E475405	EN 60730-1	Tested with appliance
Relay (K2) for THR316 and THR316D	SHENZHEN Golden Electrical Appliance Co Ltd.	GN-1A-5L / GN-1A-5LT	5V 16A 250VAC	IEC 61810-1: 2015 EN 61810- 1:2015	TUV R50210280

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electronic transformer(T1)	Shenzhen xinchuanglong Electronics Co., Ltd.	EE10	2.8mH 5V/500mA LP3669A	EN 60730-1	Tested with appliance
-Bobbin	CHANGSHU SOUTH-EAST PLASTIC CO LTD	PF2A5-151J	V-0 155°C, UL E136137	EN 60730-1	Tested with appliance
-Winding	SHANTOU SHENGANG ELECTRICAL INDUSTRIAL CO LTD	xUEW/155, QA-x/155	155 °C, UL E239508	EN 60730-1	Tested with appliance
-Tape	SUZHOU MAILADUONA ELECTRIC MATERIAL CO LTD	JY313#	130°C, UL E188295	EN 60730-1	Tested with appliance
-Secondary wire(Triple insulated wire)	SHENZHEN DARUN SCIENCE AND TECHNOLOGY CO LTD	DRTIW-B	155°C	EN 62368-1	VDE 40032470
-Varnish	ZHUHAI CHANGXIN NEW MATERIALS TECHNOLOGY CO LTD	E962	MW 28-C, 130°C, UL E335405	EN 60730-1	Tested with appliance
-Tube	Fluotech Industrial (Huizhou) Co Ltd	TFL	200°C, 300V, VW-1, UL E175982	EN 60730-1	Tested with appliance
(Alt.) Transformer (T1)	Dongguan Aeromagnetic Electronics Co., Ltd.	EE10	2.8mH 5V/500mA SN-5V/0.5A,	EN 60730-1	Tested with appliance
-Bobbin	ZHEJIANG JIAMIN PLASTIC CO LTD	PF2E6-985J(GF30+G G20)	V-0, 150°C Thickness: Min.0.8mm, UL E231508	EN 60730-1	Tested with appliance
-Winding	SHANTOU SHENGANG ELECTRICAL INDUSTRIAL CO LTD	2UEW	155 °C, UL E239508	EN 60730-1	Tested with appliance
-Tape	SUZHOU MAILADUONA ELECTRIC MATERIAL CO LTD	JY313#	130°C, UL E188295	EN 60730-1	Tested with appliance
-Secondary wire(Triple insulated wire)	TEAMWORK INTERNATIONAL CORPORATION	TIWW-B	36-18AWG, 130°C	EN 62368-1: 2014+A11:2017 IEC 62368-1: 2014 UL 2353	VDE 40024497 UL E321186
-Varnish	SUZHOU TAIHU ELECTRIC ADVANCED MATERIAL CO LTD	T-4260(a)	MW 28-C, 130°C, UL E335405	EN 60730-1	Tested with appliance
-Tube	Fluotech Industrial (Huizhou) Co Ltd	TFL	200°C, 300V, VW-1, UL E175982	EN 60730-1	Tested with appliance