



中国认可
国际互认
检测
TESTING
CNAS L1061



Type Test Certificate for Special Equipment (Lifts)

Certificate Number: TSX F36002220210039

Name of Applicant : SHENYANG BLUELIGHT NEW GENERATION TECHNOLOGY CO., LTD.
Address of Applicant : No.37 Shiji Road, Hunnan New District, Shenyang, China
Name of manufacturer : SHENYANG BLUELIGHT NEW GENERATION TECHNOLOGY CO., LTD.
Address of manufacture : No.37 Shiji Road, Hunnan New District, Shenyang, China
Classification : Safety Device
Varieties : Programmable electronic system in safety-related applications & Unintended car movement protection means (Detecting subsystem)
Product Name : Programmable electronic system in safety-related applications for lifts (PESSRAL)
Product Type : SJT-ZPC-P1A
Type Test Report Number : ETC21F360039

The product meets the requirements of Regulation for Type Test of Lifts(TSG T7007-2016)、GB7588-2003+XG1-2015、GB/T20438-2017、GB/T35850.1-2018、IEC61508:2010、IEC62061:2005、ISO22201:2017、EN81-20:2014 and EN81-50:2014。

Product types covered by the certificate: SJT-ZPC-P1A, SJT-ZPC-P1B, SJT-ZPC-P2A, SJT-ZPC-P2B

Product parameter and configuration covered by the certificate see the table attached.

(Stamp)
Date of issue: 2021-08-27

Expiry date: 2023-08-27

Shanghai Jiao Tong University Elevator Test Center

- Note:1. The applicant is responsible for confirming that the products comply with the regulation and correlative standard specifications and are in accordance with the sample for type test.
2. The certificate is valid before the deadline of next check.
3. Period of validity of the certificate is always calculated from the date of submission even if the certificate is modified.

Attached table:

Product Parameter and Configuration Table

Major parameters	Hardware model and version		SJT-ZPC-P1A(5953), SJT-ZPC-P1B(5954), SJT-ZPC-P2A(5955), SJT-ZPC-P2B(5956)	
	Software model and version		595_10 (for SJT-ZPC-P1A and SJT-ZPC-P2A) 595_11 (for SJT-ZPC-P1B and SJT-ZPC-P2B)	
	Programmable electronic device type		MCU	
	Programmable electronic device model		STM32F103C8 or GD32C103C8	
	Working condition		-20℃~-+65℃, humidity less than 95%, no water drop	
	Working voltage		DC24V	
System composition	2 Leveling switches, 1 PCB (SJT-ZPC-P1A or SJT-ZPC-P1B or SJT-ZPC-P2A or SJT-ZPC-P2B)			
Unintended car movement protection means (Detecting subsystem)	Installation position of detecting element	Car roof, control cabinet, well	Stopping distance from the landing where the unintended car movement has been detected	≤150mm
	Working environment	Normal indoor environment	Response time	PCB: ≤10ms
	Stopping subsystem can be fitted	The stopping element of the means can act on: 1.The car, or the counterweight 2.The rope system (suspension or compensating) 3.The traction sheave, or the same shaft as the traction sheave provided the shaft is only statically supported in two points		
Safety Function				Safety Integrity Level
1	Detection of unintended car movement with open doors			SIL2
2	Check on levelling, re-levelling and preliminary operations			SIL2
Unsafe function				
1	Checking door contact circuits (checking closed position of car door, the electric safety device checking locked position of landing door locking device)			
Main component list: input subsystem				

1	2 Leveling switches:			
	No.	Manufacturer	Type	Response time
	1	Shanghai Fuxiang electromechanical	FX-T121/FX-T121E	≤1.8ms
	2	Changchun Huitong photoelectric	SGD31-GG-TZ2B2	≤1ms
	3	Changchun Huitong photoelectric	E3S-GS3E4	≤1ms
	4	Changchun Huitong photoelectric	E3S-GS3B4	≤1ms
	5	Shanghai Qitong control electronic	TNC-121	≤3ms
	6	Shanghai Qitong control electronic	TN.DS-25	≤1ms
	7	Ningbo electronic 1 st factory	YG-10	≤1ms
	8	Ningbo electronic	NDS-83-PO	≤1ms
	9	Ningbo electronic	NDS-83-NO	≤2ms
	10	Suzhou Yilaide electrical technology Co., Ltd.	HDPN-1	≤1ms
	11	Changchun Shenghao electronic Co., Ltd.	SH-GS3A4	≤2ms
	12	Fuqi technology (Suzhou) Co., Ltd.	FX-PS1030M	≤1ms
	13	BEERKE	BRK-DS3E4	≤1ms
	14	Yongri Elevator	GX-GD-003	≤1ms
	15	Foshan Shihe electromechanical technology Co., Ltd.	E3S-GS30-A	≤1ms
	16	Carlo gavazzi	PF74CNT30B03376	≤1ms
	17	Changchun Huitong photoelectric	SGD31-GG-TZ2B2P	≤1ms
	18	Changchun Huitong photoelectric	SGD31-GG-TZ2B2F	≤1ms
	19	Changchun Huitong photoelectric	SGD31-GG-TZ2B2G	≤1ms
20	Ruidianshi sensor Co., Ltd.	GLS126NC	≤1ms	
21	Ruidianshi sensor Co., Ltd.	GLS126NT .NC	≤1ms	
Main component list: logic subsystem				
1	Microprocessor: STM32F103C8 or GD32C103C8 (*1)			
2	Power chip: ON MAX708TESA-TG or SGMICRO SGM708-SYS8G/TR or EXAR SP708TEN-L/TR (*1), TI LV3842 or TI LV2842 or Will WD1603E-6/TR or RICHTEK RT6200 (*1)			
3	Optocoupler: SJT-ZPC-P1A&P2A: Yiguang EL357N(B)(TA)-G or LITEON LTV-356T-B (*4) SJT-ZPC-P1B&P2B: Yiguang EL357N(B)(TA)-G or LITEON LTV-356T-B (*7)			
4	Triode: SJT-ZPC-P1A&P2A: Leshan LBC817-25LT1G or MCC BC817-25-TP (*2), Leshan LBC807-25LT1G or MCC BC807-25-TP (*5), Changjing BCX35-16 or MCC BCX35-16 (*1) SJT-ZPC-P1B&P2B: Leshan LBC817-25LT1G or MCC BC817-25-TP (*3), Leshan LBC807-25LT1G or MCC BC807-25-TP (*8), Changjing BCX35-16 or MCC BCX35-16 (*1)			
5	PCB: Liaoning Orita electronic Co., Ltd. or Beijing Handwell technology Co., Ltd. or Cangzhou Huanyu Circuits Co., Ltd.			

Main component list: output subsystem	
1	Relay: SJT-ZPC-P1A&P2A: HFA2/24-HD1ST(*2) or TYCO V23047-A1024-A511 (*2) SJT-ZPC-P1B&P2B: HFA2/24-HD1ST(*5) or TYCO V23047-A1024-A511 (*5) HF46F/24-HS1 (*1) or TYCO PCJ-124D3M (*1)
Main manufacturing process	
1	PCB manufacturing: Liaoning Orita electronic Co., Ltd. or Beijing Handwell technology Co., Ltd. or Cangzhou Huanyu Circuits Co., Ltd.
2	PCBA production: Dalian Shengdong electronic Co., Ltd. or Shenyang Kehairongsheng technology Co., Ltd.

Note to attached table:

1. When the parameter or configuration listed in the attached table has been changed, The type test must be done again.
2. When a safety function is not used, the corresponding sensor or detector may not be configured. Apart from this, the major parameters, system composition, main components (brand, model and quantity) and main manufacturing process must all be completely consistent with the content of the above tables. If a component allows multiple brands and models, the brands and models can be used alternatively.