



中国认可
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检测
TESTING
CNAS L1061



Type Test Certificate for Special Equipment (Lift)

Certificate Number: TSX F36002220210039

Applicant: SHENYANG BLUELIGHT NEW GENERATION TECHNOLOGY CO., LTD.

Registered address of applicant: No. 99A-31 (Gate 1, Gate 2) and No. 33 (Gate 1, Gate 2), Chuangxin 1st Road, Hunnan District, Shenyang City, Liaoning Province, P.R. China

Manufacturer: SHENYANG BLUELIGHT NEW GENERATION TECHNOLOGY CO., LTD.

Registered address of manufacturer: No. 99A-31 (Gate 1, Gate 2) and No. 33 (Gate 1, Gate 2), Chuangxin 1st Road, Hunnan District, Shenyang City, Liaoning Province, P.R. China

Category of equipment: Lift safety protection component

Type of equipment: Programmable electronic system in safety-related applications

Name of product: Programmable electronic system in safety-related applications for lifts (PESSRAL)

Model of product: SJT-ZPC-P1A

Type test report No.: ETC21F360039、ETC23F360YZ042(1)

After type test, it is confirmed that the product complies with the requirements of TSG T7007-2022 *Regulation for Type Test of Lifts*、GB/T 7588.1-2020、GB/T 7588.2-2020、ISO 8100-1:2019、ISO 8100-2:2019、EN 81-20:2020、EN 81-50:2020、GB/T 20438-2017、GB 28526-2012、GB/T 35850.1-2018、IEC 61508:2010、IEC 62061:2021、ISO 22201-1:2017.

Applicable product model(s) of the certificate: SJT-ZPC-P1A, SJT-ZPC-P1B, SJT-ZPC-P2A, SJT-ZPC-P2B

See appendix for applicable product parameters and configuration of the certificate.

(Stamp of organ)

Issue date: 2021-08-27
Recertification date: 2023-08-14
Revision date: 2026-06-16
Revalidation date: before 2027-08-27

Shanghai Jiao Tong University Elevator Test Center

Note:

1. The applicant has responsibilities to ensure that the products conform to the requirements of the safety technical specifications and relative standards, and to ensure that the quality and safety performance of products are consistent with the tested sample mentioned above.
2. This certificate is not applicable to product manufactured after the revalidation date.
3. If this certificate is revised, the validity period of the certificate remains unchanged.

Appendix

Applicable Product Parameters and Configuration

Major parameters	Hardware model and version		SJT-ZPC-P1A（3150200001）、SJT-ZPC-P1B（3150200002）、SJT-ZPC-P2A（3150200003）、SJT-ZPC-P2B（3150200004）	
	Software model and version		21010000_010 (for SJT-ZPC-P1A and SJT-ZPC-P2A) 21010001_011 (for SJT-ZPC-P1B and SJT-ZPC-P2B)	
	Programmable electronic device type		MCU	
	Programmable electronic device model		STM32F103C8 or GD32C103C8 or GD32C103CB or GD32FCESCB or APM32F103C8 or APM32F103CB or APM32E103CC or APM32E103CE	
	Working condition		-20℃~+65℃, humidity less than 95%, no water drop	
	Working voltage		DC24V	
	Pollution degree		3	
	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
Non-safe 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 Qiutong control electronic	TNC-121	≤3ms
	6	Shanghai Qiutong 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
	22	Fuqi Technology (Suzhou) Co., Ltd.	FX-I642-U09A	≤1ms
Main component list: logic subsystem				
1	Microprocessor: STM32F103C8 or GD32C103C8 or GD32C103CB or GD32FCESCB or APM32F103C8 or APM32F103CB or APM32E103CC or APM32E103CE (*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 or SCT2400TVBR or 3PEAK TPP361063 (*1)			
3	Optocoupler: SJT-ZPC-P1A&P2A: Yiguang EL357N(B)(TA)-G or LITEON LTV-356T-B or Orient OR-357B or QXMicro QX357B (*4) SJT-ZPC-P1B&P2B: Yiguang EL357N(B)(TA)-G or LITEON LTV-356T-B or Orient OR-357B or QXMicro QX357B (*7)			

4	Triode: SJT-ZPC-P1A&P2A: Leshan LBC817-25LT1G or MCC BC817-25-TP or Changjing BC807-25 (*2), Leshan LBC807-25LT1G or MCC BC807-25-TP or Changjing BC817-25 (*5), Changjing BCX53-16 or MCC BCX53-16 or Shikues BCX53-16 or UTC UBCX53-16 (*1) SJT-ZPC-P1B&P2B: Leshan LBC817-25LT1G or MCC BC817-25-TP or Changjing BC807-25 (*3), Leshan LBC807-25LT1G or MCC BC807-25-TP or Changjing BC817-25 (*8), Changjing BCX53-16 or MCC BCX53-16 or Shikues BCX53-16 or UTC UBCX53-16 (*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 or TYCO V23047-A1024-A511 or Fanhar FH55T-AB1STF-G DC24V or Churod CHSR2-S-AB24D2F (*2) SJT-ZPC-P1B&P2B : HFA2/24-HD1ST or TYCO V23047-A1024-A511 or Fanhar FH55T-AB1STF-G DC24V or Churod CHSR2-S-AB24D2F (*5), HF46F/24-HS1 or TYCO PCJ-124D3M or Fanhar W18-1AST DC24V or Churod CHM-S-124DA3 (*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.

Type test change table

No.	Description	Before change	After change	Date of change
1	Hardware model and version	SJT-ZPC-P1A (5953)、 SJT-ZPC-P1B (5954) SJT-ZPC-P2A (5955)、 SJT-ZPC-P2B (5956)	SJT-ZPC-P1A (3050300001)、 SJT-ZPC-P1B (3050300002)、 SJT-ZPC-P2A (3050300008)、 SJT-ZPC-P2B (3050300009)	2023-08-14
2	Software model and version	595_10(for SJT-ZPC-P1A and SJT-ZPC-P2A) 595_11(for SJT-ZPC-P1A and SJT-ZPC-P2A)	21010000_010(for SJT-ZPC-P1A and SJT-ZPC-P2A) 21010001_011(for SJT-ZPC-P1A and SJT-ZPC-P2A)	2023-08-14

No.	Description	Before change	After change	Date of change
3	Programmable electronic device model, Microprocessor	Skip	Add: GD32C103CB or GD32FCESCB	2023-08-14
4	Leveling switches	Skip	Add: 22 Fuqi Technology (Suzhou) Co., Ltd. FX-I642-U09A	2023-08-14
5	Power chip	Skip	Add: SCT2400TVBR	2023-08-14
6	Registered address of applicant & manufacturer	No.37 Shiji Road, Hunnan New District, Shenyang, China	No. 99A-31 (Gate 1, Gate 2) and No. 33 (Gate 1, Gate 2), Chuangxin 1st Road, Hunnan District, Shenyang City, Liaoning Province, P.R. China	2026-06-16
7	Hardware model and version	SJT-ZPC-P1A (3050300001)、SJT-ZPC-P1B (3050300002)、SJT-ZPC-P2A (3050300008)、SJT-ZPC-P2B (3050300009)	SJT-ZPC-P1A (3150200001)、SJT-ZPC-P1B (3150200002)、SJT-ZPC-P2A (3150200003)、SJT-ZPC-P2B (3150200004)	2026-06-16
8	Programmable electronic device model, Microprocessor	Skip	Add: APM32F103C8 or APM32F103CB or APM32E103CC or APM32E103CE	2026-06-16
9	Power chip	Skip	Add: 3PEAK TPP361063	2026-06-16
10	Optocoupler	Skip	Add: Orient OR-357B or QXMicro QX357B	2026-06-16
11	Triode	Leshan LBC817-25LT1G or MCC BC817-25-TP, Leshan LBC807-25LT1G or MCC BC807-25-TP, Changjing BCX35-16 or MCC BCX35-16	Leshan LBC817-25LT1G or MCC BC817-25-TP or Changjing BC807-25, Leshan LBC807-25LT1G or MCC BC807-25-TP or Changjing BC817-25, Changjing BCX53-16 or MCC BCX53-16 or Shikues BCX53-16 or UTC UBCX53-16	2026-06-16
12	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)	SJT-ZPC-P1A&P2A : HFA2/24-HD1ST or TYCO V23047-A1024-A511 or Fanhar FH55T-AB1STF-G DC24V or Churod CHSR2-S-AB24D2F (*2) SJT-ZPC-P1B&P2B: HFA2/24-HD1ST or TYCO V23047-A1024-A511 or Fanhar FH55T-AB1STF-G DC24V or Churod CHSR2-S-AB24D2F (*5), HF46F/24-HS1 or TYCO PCJ-124D3M or Fanhar W18-1AST DC24V or Churod CHM-S-124DA3 (*1)	2026-06-16