



中国认可
国际互认
检测
TESTING
CNAS L1061



Type Test Certificate for Special Equipment (Lift)

Certificate Number: TSX F36002220220039

Applicant: SHENYANG BLUELIGHT NEW GENERATION TECHNOLOGY CO., LTD.
Registered address of applicant: No.37 Shiji Road, Hunnan New District, Shenyang, China
Manufacturer: SHENYANG BLUELIGHT NEW GENERATION TECHNOLOGY CO., LTD.
Registered address of manufacturer: No.37 Shiji Road, Hunnan New District, Shenyang, 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-STO-V2.1
Type test report No.: ETC22F360039

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 81-20:2014 (EN 81-20:2020)、EN 81-50:2014 (EN 81-50:2020)、GB/T20438-2017、GB28526-2012、GB/T35850.1-2018、IEC61508:2010、IEC62061:2015、ISO22201:2017.

Applicable product model(s) of the certificate: SJT-STO-V2.1

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

(Stamp of organ)

Issue date: 2022-08-04

Revalidation date: before 2026-08-04

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-STO-V2.1（24VDC Safety circuit） SJT-STO-V2.1（110VAC Safety circuit）	
	Software model and version	2070_0002	
	Programmable electronic device type	MCU	
	Programmable electronic device model	STM32F103C8 or GD32C103C8 or STM32F103CB or GD32C103CB	
	Working condition	-20℃~+65℃, humidity less than 95%, no water drop	
	Working voltage	DC5V	
	Pollution degree	3	
System composition	SJT-STO-V2.1*1		
Safety Function		Safety Integrity Level	
1	Safe torque off (STO) function for traction and positive drive lift		SIL3(hardware fault tolerance (HFT)=1)
Main component list: logic subsystem			
1	Microprocessor: STM32F103C8 or GD32C103C8 or STM32F103CB or GD32C103CB (*1)		
2	Power chip: AP2204K-3.3TRG1（*1）、B0505S-1WR3（*1），		
3	Optocoupler: TLP2362 (Toshiba) or HCPL-M601 or FODM611（*1）、EL814(A)-V（Yiguang）or HCPL-814-00AE(AVAGO) (*2)、LTV-356T-B or FODM121A or TLP185GR (*1)		
4	Triode: Leshan LBC817-25LT1G or MCC BC817-25-TP（*1）		
5	Logic chip: 74LVC2G17GW（*2），74LVC1G57GW（*2）		
6	PCB: Liaoning Orita electronic Co., Ltd. or Beijing Handwell technology Co., Ltd. or Cangzhou Huanyu Circuits Co., Ltd.		
Main component list: output subsystem			
1	Drive chip: UCC27517DBV(TI) or SGM48017XN5G/TR（SGMICRO）(*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.
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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.