CNAS L0454 2011000708Z (2011)国认监认字(134)号

Special Equipment Type Test Report

Report No. TGE 00720002

Category of Equipment: Safety Protection Component

Type of Equipment: Traction Machine

Name of Product: Permanent Magnet Synchronous Gearless Traction Machine

Model of Product: WYT-S

Applicant: Shenyang Bluelight Drive Technology Co., Ltd.

Manufacturer: Shenyang Bluelight Drive Technology Co., Ltd.

NETEC

National Elevator Inspection and Testing Center

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Type Test Report

Name of product	Permanent magnet synchronous gearless traction machine			
Model of product	WYT-S			
Serial No. of sample	20118903	Production date	2011.11	
Main technical parameter	Rated speed	2.50m/s	Rated output torque	765N·m
	Motor rated power	19.2kW	Allowed radial load of traction sheave	5500kg
	Suspension ratio	2:1	Mode of wrapping	Single
Applicant	Name: Shenyang Bluelight Drive Technology Co., Ltd.			
	Address: No.37 Shili Road, Hunnan New District, Shenyang, China			
Manufacturer	Name	Shenyang Bluelight Drive Technology Co., Ltd.		
	Address	No.37 Shili Road, Hunnan New District, Shenyang, China		
Receiving date	/	Sample No.	/	
Test date	2012.01.15 to	Sample state	Normal	
Test category	Type test	Test item	All application items	
Test place	Shenyang Bluelight Drive Technology Co., Ltd.			
Test condition	Ambient temperature: 10.0 °C-12.5 °C, relative humidity: 72.0%, Voltage: 390V			
Test basis	*Rules for Type Test of Elevators (tryout)*, *Rule for Type Test of Lift Traction Machine (tryout)* EN 81-1:1998 Safety Rules for the Construction and Installation of Electric Lifts			
Test conclusion	The type test is certificated.			

Issue date: 2012.02.15

Note: The validity of this report is 3 years.

Reported by: Verified by: Issued by:

SAMPLE'S MAIN TECHNICAL PARAMETERS AND CONFIGURATION

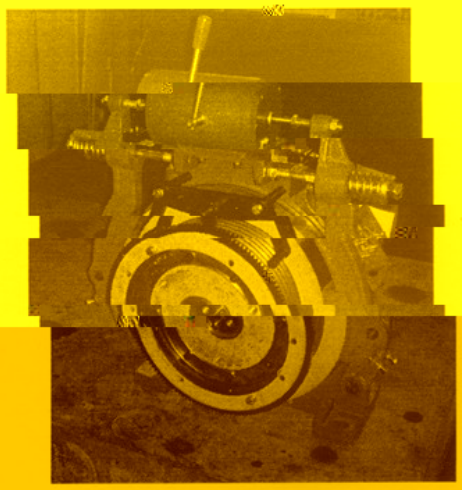
Model and name	WYT-S	Permanent magnet synchronous gearless traction machine			
Applicable environment	Indoor	Structure type of traction machine	Permanent magnet synchronous gearless		
Rated speed	2.5m/s	Rated output torque	735N·m		
Rated load	1150kg	Allowed radial load of traction sheave	5500kg		
Mode of wrapping	Single	Suspension ratio	2:1		
Manual emergency operating device	Releasing brake handle, handwinding wheel				
Motor	Model	WYT-S2.5F	Rated rotating speed	240r/min	
	Rated power	19.2kW	Rated current	40A	
	Rated voltage	380V	Insulation grade	F	
	Rated frequency	40Hz	Protection degree	IP41	
	Duty	S_5	Allowed start times	240F/h	
	Structure type	Permanent magnet synchronous outer rotor			
	Mode of overload protection	Over-heat protection			
	Manufacturer	Shenyang Bluelight Drive Technology Co., L			
Gear reducer	Structure type	/	Reduction gear ratio	/	
	Reduction stages	/	Center distance	/	
	Lubricating oil	/			
Traction sheave	Number of grooves	5	Type of grooves	Semi-c under	
	Diameter of ropes	10mm	Heat treatment	Annea	
	Pitch diameter of traction sheave	400mm	Mode of wrapping	Single	
Model	DZF				

Test items and test results

No.	Items No.	Test items	Test results	Conclusions
1	1.1	Fastening and welding	Comply with requirements	Pass
2	1.2	Assembly of all parts	Comply with requirements	Pass
3	1.3	Paint marking	Comply with requirements	Pass
4	2.1	Ratio of pitch diameter of traction sheave (D) to diameter of traction ropes (d)	D = 400mm d = 10mm D/d = 40	Pass
5	2.2	Material of traction sheave and hardness deviation of groove	Material: QT600-3 δ: HB10	Pass
6		Working surface roughness	Ra6.3μm	
7	2.3	Precision of traction sheave	Working surface run-out in normal direction of the surface	0.06mm
8			Working surface run-out in radial direction of the pitch-circle	0.02mm
9			Average gaps between the brakes and the brake sheave	0.20mm
10	2.4		Working surface roughness of brake sheave	Ra3.2μm
11			Axial run-out of brake sheave working surface	0.02mm
12	3.1		Manual brake release device when emergency	Comply with requirements
13	3.2		Requirements for the power transmission	
14	3.3		Connection mode of braked components	Comply with requirements
15	3.4		Pressure mode of the brake shoe or pad	Comply with requirements
16	3.5		The brake shall realize a continuous power current	Comply with requirements
17			Minimum activating voltage of the brake	Rated voltage: AC 220V Activating voltage: AC 145V 65.9%U-rated
18	3.6		Maximum release voltage of the brake	Rated voltage: AC 220V Release voltage: AC 105V 47.7%U-rated
19			Delay-time of activating	0.50s

No.	Items No.	Test items	Test results	Conclusions
20	3.7	Withstand voltage test of brake coil	Comply with requirements	Pass
21	3.8.6	All the mechanical components shall be installed in two sets	Comply with requirements	Pass
22	4	Manual means of emergency operation	Comply with requirements	Pass
23	5	Protection for traction sheave	Comply with requirements	Pass
24	6	Torque vibration	/	/
25	7	Speed	Rated speed: 2.50m/s Test speed: 239.0r/min Speed: 2.503m/s 100.1%v_{rated}	Pass
26	8	No-load running noise	Noise dB(A): Front: 56.8 Back: 57.0 Left: 57.3 Right: 57.8 Upside: 57.5 Background: 41.0	Pass
27		Oil temperature	/	/
28	9	Fault-free running and temperature rise	Stator winding temperature rise: 50.4K Before test-running Air temperature: 12.5℃ Stator winding temperature rise Stator winding coil resistance: 0.662Ω After test-running Air temperature: 10.6℃ Stator winding coil resistance: 0.835Ω Brake coil temperature rise: 64.1K Brake coil highest temperature: 74.7℃ Brake coil temperature rise and highest temperature Before test-running Air temperature: 12.5℃ Brake coil resistance: 59.6Ω After test-running Air temperature: 10.6℃ Brake coil resistance: 74.6Ω	Pass
29				
30	10	Machine efficiency	No doubt about files, without testing	/
31	11.1	Special precaution for the lift in the outdoor environment	/	/
32	11.2	Special precaution for the explosion protection lift	/	/

Appendix Sample photo



Certificate of Type Test for Speed Equipment

No. TX F390-003-12 0002

Applicant's name and address:	Shenyang Blueright Drive Technology Co., Ltd. No.37 Shiji Road, Hunnan New District, Shenyang, Liaoning
Manufacturer's name and address:	Shenyang Blueright Drive Technology Co., Ltd. No.37 Shiji Road, Hunnan New District, Shenyang, Liaoning
Name of product (Type of equipment):	Permanent magnet synchronous gearless traction machine (traction machine)
Model and specifications:	WYTS Rated speed: 2.5m/s (suspension ratio: 2:1 Rated pow

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Annex

Configuration of Traction Machine

No.TYX2330-00343-20002

Structure type of machine	Permanent magnet synchronous gearless	Structure type of motor	Permanent magnet synchronous outer rotor
Center distance of gear reducer	/	Structure type of gear reducer	/
Structure type of brake	Two sets, block type	Applicable environment	Indoor

Issue date: 2015.04.16

Issued date of the Chinese version: Jan. 31, 2012