ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Industrie Service

# CERTIFICATE

Examination of Conformity

| | |
|---|---|
| **Certificate no.:** | TM 027-2009-CHI |
| **Test laboratory:** | TÜV SÜD Industrie Service GmbH<br>Prüflaboratorium für Produkte der Fördertechnik<br>Westendstraße 199, 80686 München - Germany |
| **Applicant/<br>Certificate holder:** | Ningbo Shenling Lift Accessories Co., Ltd.<br>195 Nanping Road, Shipu Town,<br>Ningbo, P.R.China |
| **Date of application:** | 2009-03-23 |
| **Manufacturer:** | Ningbo Shenling Lift Accessories Co., Ltd.<br>195 Nanping Road, Shipu Town,<br>Ningbo, P.R.China |
| **Product:** | Traction Machine for lifts |
| **Type:** | WYJ103-04, sample-no. 8811044 |
| **Date and<br>number of test report:** | 2009-08-19<br>TM 027-2009-CHI |
| **Specifications:** | - Directive 98 / 37 / EC (new 2006 / 42 / EC)<br>- Directive 95 / 16 / EC<br>- Standard DIN EN 81-1:2000 |
| **Statement:** | The equipment fulfils the safety requirements of the specifications. This statement is valid as long as all products are in full compliance with the examined sample and there is no change of the requirements in the specifications referring to traction machines. |
| **Place and date of issue:** | Munich, 2009-08-19 |

TÜV SÜD Industrie Service GmbH
Notified Body: Identification no. 0036
Business Area Lifts and Cranes
Expert Engineer

Peter Tkalec

TÜV SÜD Industrie Service GmbH

CE

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# Test Report
## No. TM 027-2009-CHI

| | |
|---|---|
| **Applicant / Customer:** | Ningbo Shenling Lift Accessories Co., Ltd.<br>195 Nanping Road, Shipu Town,<br>Ningbo, P.R.China |
| **Manufacturer:** | Ningbo Shenling Lift Accessories Co., Ltd.<br>195 Nanping Road, Shipu Town,<br>Ningbo, P.R.China |
| **Test laboratory:** | TÜV SÜD Industrie Service GmbH<br>Prüflaboratorium für Produkte der Fördertechnik<br>Westendstraße 199, 80686 München - Germany |
| **Date of application:** | 2009-03-19 |
| **Product:** | Traction machine for lifts |
| **Type:** | WYJ103-04, sample-no. 8811044 |
| **Test order:** | Examination of conformity with specifications |
| **Specifications:** | - Directive 98 / 37 / EC (new 2006 / 42 / EC)<br>- Directive 95 / 16 / EC<br>- Standard DIN EN 81-1:2000 |
| **Kind of examinations:** | - Examination on correspondence with the specifications<br>- Practical tests<br>- Verification of documentation |
| **Place and date of examination:** | Ningbo, 2009-07-28 |

Date: 2009-08-19

Our reference:
TÜV SÜD China-
Shanghai Branch/Wang Peng

Document:
90819_TR_TM 027-2009-CHI.docx

This document consists of
4 Pages.
Page 1 of 4

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The test results refer exclusively to the units under test.

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## 1. Main Specifications and Configuration

Type: WYJ103-04
Rated number of revolutions: 85.3 Rpm
Rated output torque: 1850 Nm
Maximum radial load of traction sheave: 100 kN
Mode of wrapping: single
Rated voltage: AC 380 V
Working frequency: 0-27 Hz
Rated current: 32.8 A
Rated power: 16.5 kW
Insulation class: F

## 2. Generally

The comparison will be done in table form with the following legend:

**X:** fulfilled
**XX:** shall be fulfilled in installation at jobsite
**O:** not relevant in this case
**F:** not fulfilled

## 3. Considered items

Result is based on the documentation shown under point 4.

| No. | No. of Sub-clause in standard EN 81-1: 2000 | Result | Conclusion |
|---|---|---|---|
| 1 | **9.2.1** The ratio between the pitch diameter (D) of sheaves, pulleys or drums and the nominal diameter (d) of the suspension ropes shall be at least 40, regardless of the number of strands. | x<br>D=560 mm<br>d=12 mm | xx |
| 2 | **9.7.1** For traction sheaves, pulleys and sprockets, provisions shall be made according to table 2 to avoid<br>a) bodily injury<br>b) the ropes leaving the pulleys (traction sheaves), if slack<br>c) the introduction of objects between ropes and traction sheaves. | x | xx |
| 3 | **12.2.2** Use may be made of belts for coupling the motor or motors to the component on which the electro-mechanical brake operates. In this case a minimum of two belts shall be used. | 0 | 0 |
| 4 | **12.4.1.1** The lift shall be provided with a braking system, which operates automatically :<br>a) in the event of loss of the mains power supply ;<br>b) in the event of the loss of the supply to control circuits | x | xx |

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| | | | |
|---|---|---|---|
| 5 | **12.4.2.1** This brake on its own shall be capable of stopping the machine when the car is travelling downward at rated speed and with the rated load plus 25 %. In these conditions the retardation of the car shall not exceed that resulting from operation of the safety gear or stopping on the buffer.<br><br>All the mechanical components of the brake which take part in the application of the braking action on the drum or disk shall be installed in two sets. If one of the components is not working a sufficient braking effort to slow down the car, travelling downwards at rated speed and with rated load shall continue to be exercised.<br><br>Any solenoid plunger is considered to be a mechanical part, any solenoid coil is not. | 0<br><br>x | xx<br><br>x |
| 6 | **12.4.2.2** The component on which the brake operates shall be coupled to the traction sheave or drum or sprocket by direct and positive mechanical means. | x | x |
| 7 | **12.4.2.3**To hold off the brake, in normal operation, shall require a continuous flow of current. | x | x |
| 8 | **12.4.2.4** Any machine fitted with a manual emergency operating device (**12.5.1**) shall be capable of having the brake released by hand and require a constant effort to keep the brake open. | x | x |
| 9 | **12.4.2.5** The brake shoe or pad pressure shall be exerted by guided compression springs or weights. | x | x |
| 10 | **12.4.2.6** Band brakes shall not be used. | x | x |
| 11 | **12.4.2.7** Brake linings shall be incombustible. | x | x |
| 12 | **12.5.1** If the manual effort required to move the car in the upward direction with its rated load does not exceed 400 N the machine shall be provided with a manual means of emergency operation allowing the car to be moved to a landing with the aid of a smooth, spoke less wheel. | x | x |
| 13 | **12.5.1.1** If the wheel is removable, it shall be located in an easily accessible place in the machine room. It shall be suitably marked if there is any risk of confusion as to the machine for which it is intended.<br><br>An electric safety device in conformity with **14.1.2** shall be actuated when the wheel is put on the machine at the latest. | x | xx |
| 14 | **12.6** The speed of the lift car, half loaded, in downward motion, in mid-travel, excluding all acceleration and retardation periods, shall not exceed the rated speed by more than 5 %, when the supply is at its rated frequency, and the motor voltage is equal to the rated voltage of the equipment.<br><br>This tolerance is also applicable for the speed in the case of :<br><br>a) levelling (**14.2.1.2 b)**) ;<br>b) re-levelling (**14.2.1.2 c)**) ;<br>c) inspection operation (**14.2.1.3 d)**) ;<br>d) emergency electrical operation (**14.2.1.4. e)**) ;<br>e) docking operation (**14.2.1.5 c)**). | 0 | xx |

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|---|---|---|---|
| 15 | **12.11** Effective protection shall be provided for accessible rotating parts, which may be dangerous, in particular :<br><br>a) keys and screws in the shafts ;<br>b) tapes, chains, belts ;<br>c) gears, sprockets ;<br>d) projecting motor shafts ;<br>e) fly-ball type over speed governors.<br><br>Exception is made for traction sheaves with protections according to **9.7**, hand winding wheels, brake drums and any similar smooth, round parts. Such parts shall be painted yellow, at least in part. | x | x |
| 16 | **15.4.3.1** The direction of movement of the car shall be clearly indicated on the machine, close to the hand winding wheel. | 0 | xx |

## 4. Documents on which the test report is based

- Drawing no. NS103004C001 (1000 kg) stamped with "TÜV SÜD" dated "19. Aug. 2009"
- Drawing no. NS103004C052 (800 kg) stamped with "TÜV SÜD" dated "19. Aug. 2009"
- Drawing no. NS103004C062 (630 kg) stamped with "TÜV SÜD" dated "19. Aug. 2009"
- Type-examination report of SISE no. 2008AF0357 dated 2008-12-09
- Type-examination certificate of SISE no. TX F390-038-08 0283 dated 2008-12-09

Expert engineer

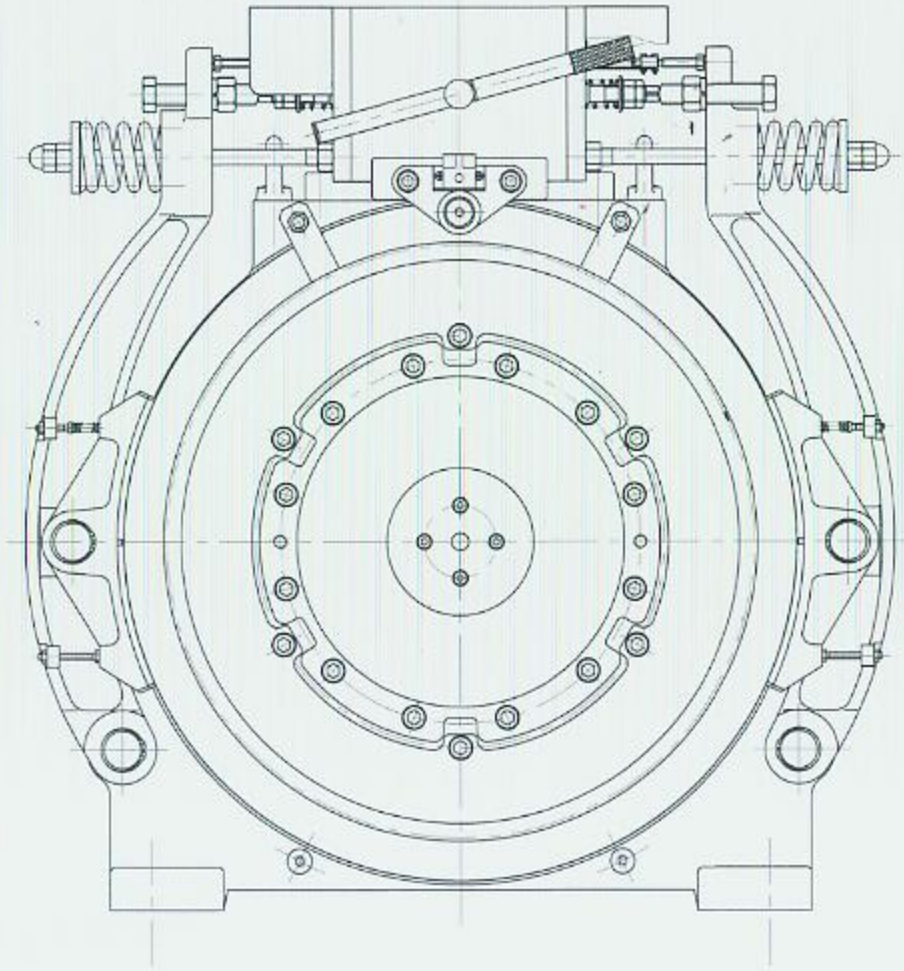
Wang Peng

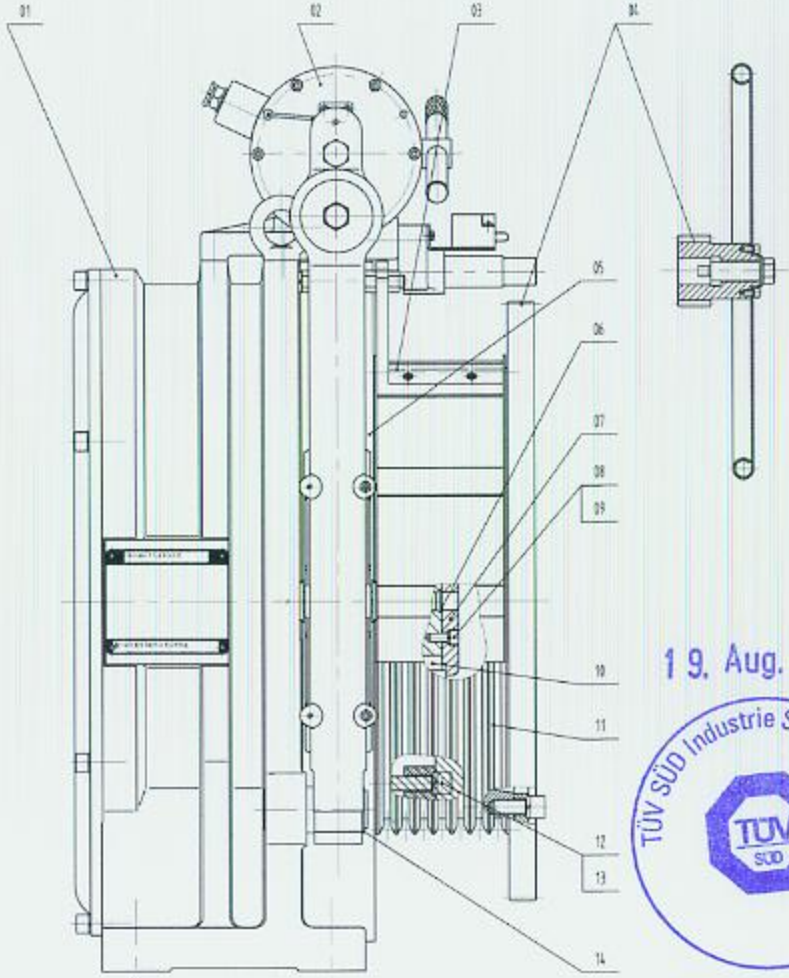
TÜV SÜD Industrie Service GmbH

NS103004C062

| POS. | 名 称 | DEF | 图 号 | 品/件 | L值 | 材 料 | 重量 | 涂/镀 | 备 注 |
|---|---|---|---|---|---|---|---|---|---|
| -01 | 电动机 | DWG | NS103004C063 | G01 | | | | | |
| -02 | 制动装置 | DWG | NS103005C018 | G01 | | | | | |
| -03 | 防跳离护环 | DWG | NS103005C027 | G01 | | | | | |
| -04 | 齿轮润滑装置 | DWG | NS103005C029 | G01 | | | | | |
| -05 | 电引支架 | DWG | NS103005C032 | -01 | | | | | |
| -06 | 密封圈 | DWG | NS103004D066 | -01 | | | | | |
| -07 | 轴端盖 | DWG | NS103004D065 | -01 | | | | | |

| POS. | G01 | POS. | 名 称 | DEF | 图 号 | 品/件 | L值 | 材 料 | 重量 | 涂/镀 | 备 注 | POS. | G01 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -01 | 1 | -08 | 外六角螺栓 GB70-85 | | XL10F0008-20 | | | 钢 | | | | -08 | 4 |
| -02 | 1 | -09 | 弹簧垫圈 GB93-87 | | X213A0008 | | | 弹钢 | | | | -09 | 4 |
| -03 | 1 | -10 | 普通平键 GB1096-79 | | XL18A0022-50 | | | 45钢 | | | | -10 | 2 |
| -04 | 1 | -11 | 电引轮 | DWG | NS103005C064 | -01 | | | | | | -11 | 1 |
| -05 | 1 | -12 | 外六角螺栓 GB70-85 | | XL10F0014-60 | | | | | | 性能等级12.9级 | -12 | 12 |
| -06 | 2 | -13 | 弹簧垫圈 GB93-87 | | X213A0014 | | | 弹钢 | | | | -13 | 12 |
| -07 | 1 | -14 | 圆柱销 GB894.1-86 | | X216B1036 | | | 钢 | | | | -14 | 4 |






19. Aug. 2009

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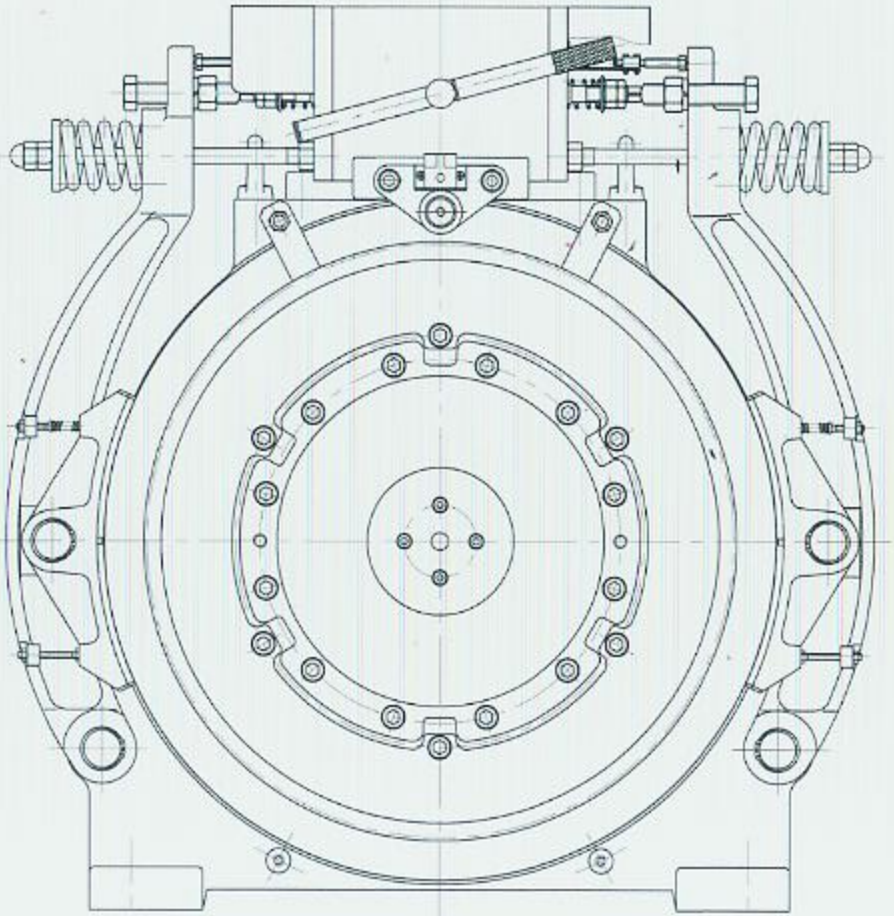
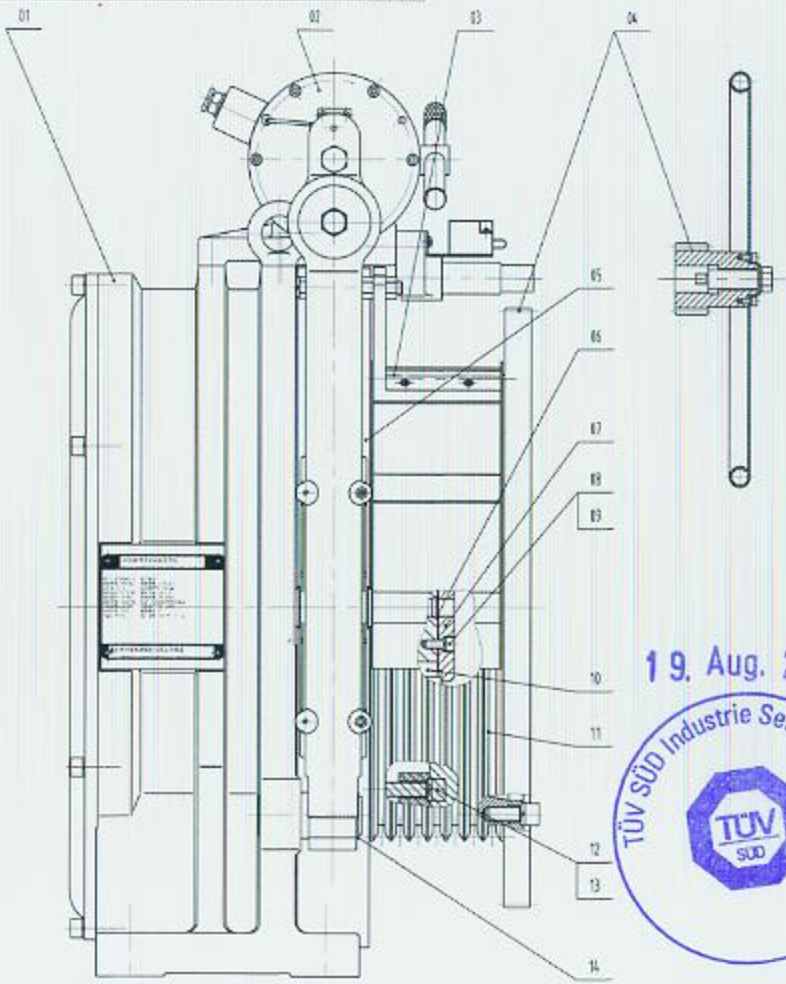
| | | | | |
|---|---|---|---|---|
| 比例 1:5 | 重量 | 总装图 | NS103004C062 | 103 |
| | | | 电引机(630kg) | |
| 设计 | 标准化 | | WYJ103-04.1 | |
| 校对 | 批准 | | 宁波申菱电梯配件有限公司 | |
| 审核 | 日期 | 共 1 页 第 1 页 | | |
| 工艺 | | | | |

NS103004C052

| POS | 名 称 | DEF | 图 号 | 品/件 | L备 | 材 料 | 重量 | 单/管 | 备 注 |
|---|---|---|---|---|---|---|---|---|---|
| -01 | 电动机 | DWG | NS103004C053 | G01 | | | | | |
| -02 | 制动装置 | DWG | NS103005C018 | G01 | | | | | |
| -03 | 自调间隙护环 | DWG | NS103005C027 | G01 | | | | | |
| -04 | 自动回动装置 | DWG | NS103005C029 | G01 | | | | | |
| -05 | 电引支座 | DWG | NS103005C032 | -01 | | | | | |
| -06 | 密封圈 | DWG | NS103004D066 | -01 | | | | | |
| -07 | 轴螺栓 | DWG | NS103004D065 | -01 | | | | | |

| POS | G01 | POS | 名 称 | DEF | 图 号 | 品/件 | L备 | 材 料 | 重量 | 单/管 | 备 注 | POS | G01 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -01 | 1 | -08 | 外六角螺栓头部型 GB70-85 | | XL10F0008-20 | | | 钢 | | | | -08 | 4 |
| -02 | 1 | -09 | 弹簧垫圈 GB93-87 | | X213A0008 | | | 弹钢 | | | | -09 | 4 |
| -03 | 1 | -10 | 普通平键 GB1096-79 | | XL18A0022-50 | | | 45钢 | | | | -10 | 2 |
| -04 | 1 | -11 | 电引轮 | DWG | NS103005C061 | -01 | | | | | | -11 | 1 |
| -05 | 1 | -12 | 外六角螺栓头部型 GB70-85 | | XL10F0014-60 | | | | | | 性能等级12.9级 | -12 | 12 |
| -06 | 2 | -13 | 弹簧垫圈 GB93-87 | | X213A0014 | | | 弹钢 | | | | -13 | 12 |
| -07 | 1 | -14 | 轴用弹性挡圈 GB894.1-86 | | X216B1036 | | | 钢 | | | | -14 | 4 |



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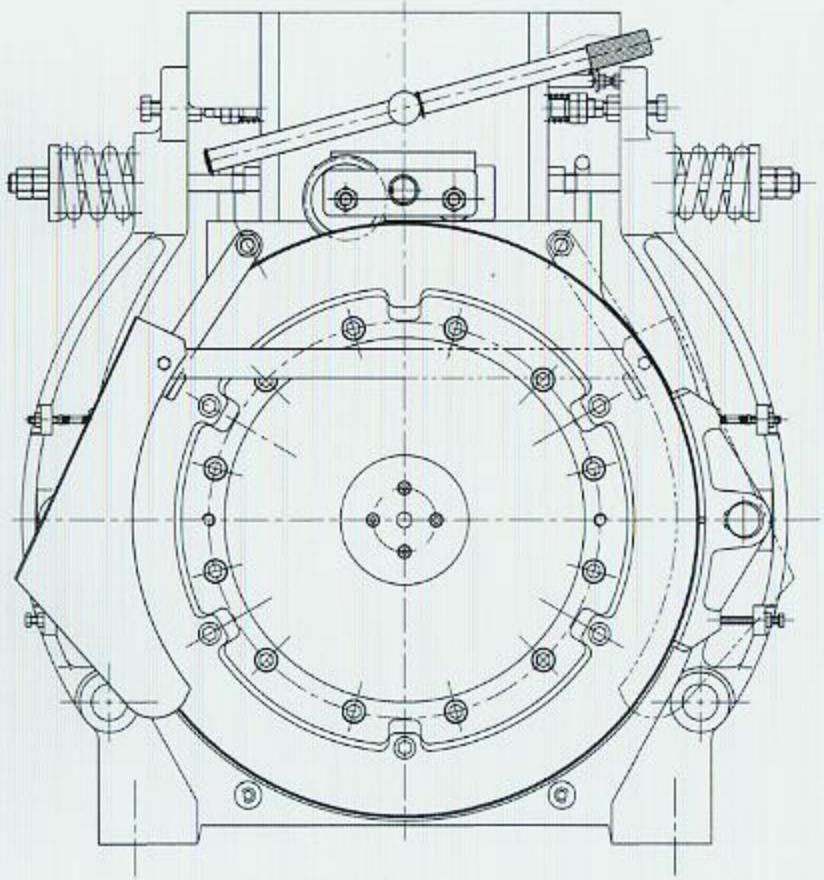
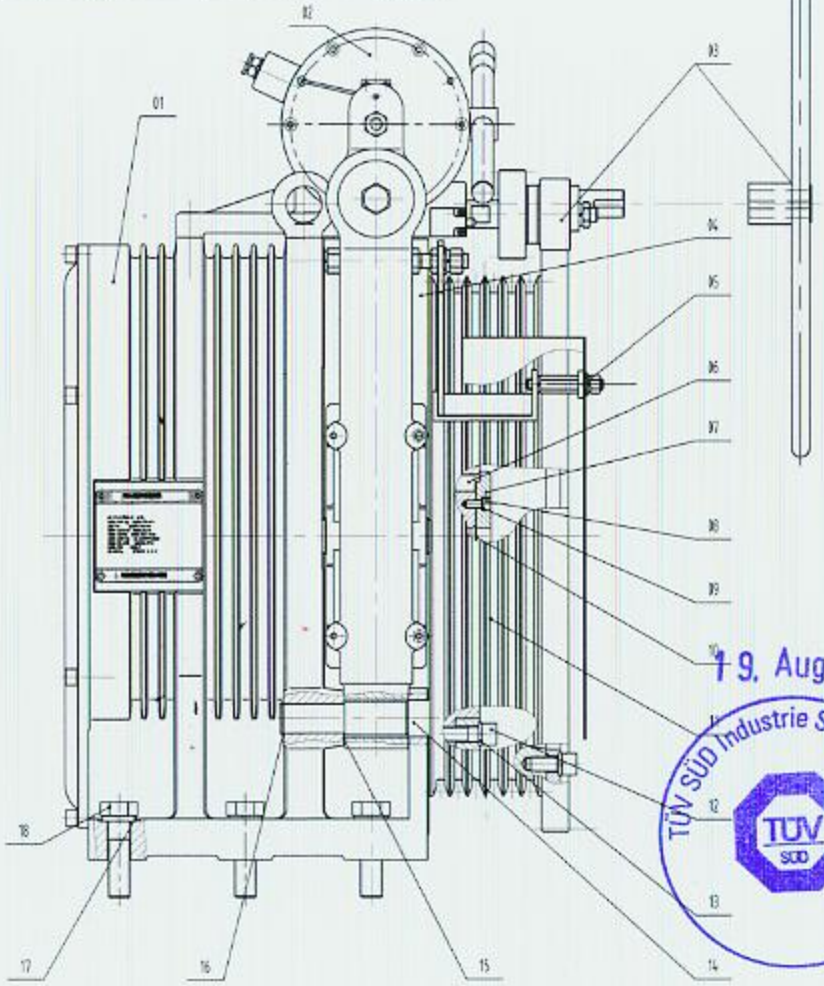
| | | | | | |
|---|---|---|---|---|---|
| 比 例 | 1:3.5 | 质 量 | | NS103004C052 | 103 |
| | | | 总装图 | 电引机(800kg) | |
| 设 计 | | 标准化 | | WYJ103-04.2 | |
| 校 对 | | 批 准 | | 宁波申菱电梯配件有限公司 | |
| 审 核 | | | | | |
| 工 艺 | | 日 期 | 共 1 张 | 第 1 张 | |

NS103004C001

| POS. | 名 称 | DEF | 图 号 | 品/群 | L备 | 材 料 | 重量 | 定/额 | 备 注 | POS. | G01 | POS. | 名 称 | DEF | 图 号 | 品/群 | L备 | 材 料 | 重量 | 定/额 | 备 注 | POS. | G01 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -01 | 电动机 | DWG | NS103004C002 | G03 | | | | | | -01 | 1 | -10 | 固定架 | DWG | NS103004D066 | -01 | | | | | | -10 | 2 |
| -02 | 制动器 | DWG | NS103004C030 | G01 | | | | | | -02 | 1 | -11 | 曳引轮 | DWG | NS103004C044 | -01 | | | | | | -11 | 1 |
| -03 | 曳引装置 | DWG | NS103004C041 | G01 | | | | | | -03 | 1 | -12 | 六角螺栓 GB70-85 | | X211C0016-60 | | | | | N41 | | -12 | 12 |
| -04 | 曳引支架 | DWG | NS103004C042 | -01 | | | | | | -04 | 1 | -13 | 弹簧垫圈 GB93-87 | | X213A0016 | | | 钢制 | | | | -13 | 12 |
| -05 | 防跳装置 | DWG | NS103004C043 | G01 | | | | | | -05 | 1 | -14 | 销轴 | DWG | NS103004D067 | -01 | | | | | | -14 | 2 |
| -06 | 普通平键 32×63 | | GB1096-79 32×63 | | | 45钢 | | | 外购 | -06 | 2 | -15 | 调整垫片 | DWG | NS103004D068 | -01 | | | | | | -15 | 3 |
| -07 | 轴端盖 | DWG | NS103004D065 | -01 | | | | | | -07 | 1 | -16 | 标准弹性圆柱销 GB894.1-86 | | X216B1036 | | | 钢 | | | | -16 | 2 |
| -08 | 六角螺栓 GB70-85 | | X211C0008-20 | | | | | N41 | | -08 | 4 | -17 | 六角螺栓 GB5782-86 | | X211A0024-90 | | | 钢制 | | N41 | | -17 | 6 |
| -09 | 弹簧垫圈 GB93-87 | | X213A0008 | | | 钢制 | | | | -09 | 4 | -18 | 弹簧垫圈 GB93-87 | | X213A0024 | | | 钢制 | | | | -18 | 6 |



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| | | | |
|---|---|---|---|
| 比例 1:4 | 重量 | 总装图 | NS103004C001 103 |
| | 分类重 | | 曳引机(1000kg) |
| 设计 | 标准化 | 图样标记 | WYJ103-04 |
| 校对 | 批准 | | 宁波中菱电梯配件有限公司 |
| 审核 | | | |
| 工艺 | 日期 | 共 1 页 | 第 1 页 |