

#### **Ambition Industry Electric chain hoist**



## NB! Read the User Guide carefully before use!



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## **1.0 Technical specifications -** dimensions, weight etc.

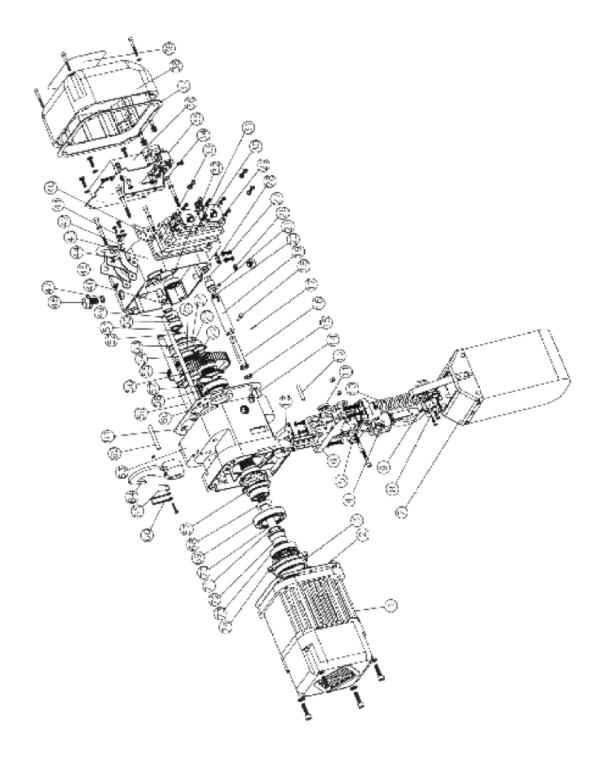
| Article<br>number | WLL at<br>F.O.S. 4:1<br>tonnes | Voltage /<br>frequency* | Speed<br>metres/min | Standard<br>lifting<br>height<br>metres | Minimum<br>distance<br>hooks etc. | Chain<br>dimensions<br>mm** | Number<br>of chain<br>falls | Class  | Approx.<br>weight kg |
|-------------------|--------------------------------|-------------------------|---------------------|---|-----------------------------------|-----------------------------|-----------------------------|--------|----------------------|
| 0271110           | 0.25                           | 3 x 230v /<br>50Hz      | 14 and 3.5          | 3                                       | 505                               | 6.3 x 19                    | 1                           | M5/2M  | 36                   |
| 0271120           | 0.5                            | 3 x 230v /<br>50Hz      | 7.6 and 1.9         | 3                                       | 505                               | 6.3 x 19                    | 1                           | M5/2M  | 37                   |
| 0271130           | 1.00                           | 3 x 230v /<br>50Hz      | 5 and 1.67          | 3                                       | 550                               | 8.0 x 24                    | 1                           | M4/1Am | 40                   |
| 0271140           | 2.00                           | 3 x 230v /<br>50Hz      | 2.5 and<br>0.83     | 3                                       | 660                               | 8.0 x 24                    | 2                           | M4/1Am | 50                   |
| 0271210           | 0.25                           | 3 x 380v/<br>50Hz       | 14 and 3.5          | 3                                       | 505                               | 6.3 x 19                    | 1                           | M5/2M  | 36                   |
| 0271220           | 0.5                            | 3 x 380v/<br>50Hz       | 7.6 and 1.9         | 3                                       | 505                               | 6.3 x 19                    | 1                           | M5/2M  | 37                   |
| 0271230           | 1.00                           | 3 x 380v/<br>50Hz       | 5 and 1.67          | 3                                       | 550                               | 8.0 x 24                    | 1                           | M4/1Am | 40                   |
| 0271240           | 2.00                           | 3 x 380v/<br>50Hz       | 2.5 and<br>0.83     | 3                                       | 660                               | 8.0 x 24                    | 2                           | M4/1Am | 50                   |

- \* When using the hoist with a 60Hz system the speed will be 20% higher than indicated in the table. Its theoretical lifespan will also be somewhat shorter.
- \*\* Only DAT chains complying with NS-EN 818-7 must be used.

The hoist may be fitted with an overload switch if desired. Contact your dealer for further information.



# **1.1 Technical specifications -** parts





- 1, motor set
- 2. motor cover pressurize ring
- 3, bearing set
- 4. bottom hook assy
- 5. chain guide assy
- 6, chain guide (DN)
- 7. Chain bucket set
- 8. chain stop stripper
- 9, chain
- 10, limited spring
- 11. guide roller
- 12, guide roller shaft
- 13, chain stopper set
- 14. oil stuff bolt
- 15, limit switch ferrule
- 16, limit switch pin
- 17, cotter pin
- 18. connect pin
- 19, limit switch pin
- 20, O TYPE RUBBER CUSHION CIRCLE 57, gear shaft S
- 21, COLUMN PIN
- 22. SPRING SNAPRING
- 23, friction disk
- 24. brake lining
- 25. SHAFT COVER
- 26, OTYPE RING
- 27. limit switch pin
- 28, CABLE HANGER
- 29. Rubber cushion for connection
- 30, cable root
- 31, connection set
- 32, deep channel bearing
- 33, rubber cushion for connect set
- 34, electric plate frame
- 35, limit switch set
- 36, electric parts
- 37, rubber cushion for electric cover

- 38, motor cover
- Label
- 40, cable plate hanger
- 41, shaft snap ring
- 42, small discharge piece
- 43, box cover
- 44. cable plate
- 45, cable plate
- 46, space cover
- 47. Otypering
- 48, outer six corner snail
- 49, spring snap ring for bore
- 50, deep channel bearing
- 51, rubber cushion pressurize for O type
- 52, space cover
- 53, dish spring
- 54, ring shaft
- 55, gearwheel
- 56, spindle gear
- 58, deep channel bearing
- 59, hook shaft
- 60. lip type pressurize ring
- 61, pressurize ring for gear case
- 62、COLUMN PIN
- 63, body
- 64. top hook assy
- 65, twin spring
- 66, chain stopper set
- 67, liad sheave
- 68. lip type pressurize ring
- 69, deep channel bearing
- 70, gear shaft S
- 71. SPRING SNAP RING
- 72, cover for electric connect
- 73, deep channel bearing
- 74. spring snap ring for bore

#### **1.2 Technical specifications** parts list / article numbers

| Article numbers | Description | WLL tonnes |
|-----------------|-------------|------------|
| 0271400         | Top hook    | 0.25       |
| 0271403         | Top hook    | 0.5        |
| 0271406         | Top hook    | 1.00       |
| 0271409         | Top hook    | 2.00       |
| 0271420         | Load hook   | 0.25       |
| 0271423         | Load hook   | 0.5        |
| 0271426         | Load hook   | 1.00       |
| 0271429         | Load hook   | 2.00       |



#### 1.3 How to order parts

Article numbers for individual parts or for sets of parts are listed in the above table. The article numbers cover parts for specific hoist sizes. To place an order, contact your dealer and state the relevant article number and the number of units required.

#### 2.0 Usage

\*The hoist is designed to lift and lower loads.

\*The hoist must not be used in areas where there is a risk of explosion.

\*The hoist is not suitable for use in areas that are particularly prone to corrosion.

\*The hoist is not suitable for use in areas where humidity is higher than 85%.

#### **3.0 Important information**

\*Read this User Guide carefully before using the hoist for the first time.

- \*It is important that the user has the appropriate skills and experience in order to understand this User Guide and to use the hoist correctly.
- \*Before using the hoist for the first time, run it for 15 minutes, without a load attached, to ensure that it works correctly. This should also be done with hoists that have not been used for some time.
- \*Always check that all electrical connections are working properly, that the cables are not damaged and that the equipment can be switched off using a mains switch.
- \*Safety regulations stipulate that a test of the lifting arrangement must be carried out before it is used for the first time.



- \*When replacing the chain, ensure that only DAT chains compliant with NS-EN 818-7 are used. The chain must have the correct dimensions. It is also important that the chain is correctly fitted. Chains must only be replaced by qualified personnel.
- \*Maximum lifting height is, in principle, 12 metres. Contact your dealer for further information.

### 4.0 Safety

- \*Only persons with the appropriate skills and experience should use the hoist. The user should have good knowledge of the use and construction of lifting gear in general and must have knowledge of the relevant directives and regulations on the use and design of lifting gear.
- \*Always ensure that your co-workers and any other people in the vicinity are aware that you are starting a lifting operation!
- \*Never overload a hoist! Maximum lifting capacity is printed on the hoist's label as WLL (Working Load Limit).
- \*Never stand or move underneath a suspended load!
- \*The hoist must never be used to transport or lift people!
- \*Always inspect the hoist before use.
- \*Check that the hook latch is working properly.
- \*Always check that the WLL of the hoist complies with the lift you are performing.
- \*The hoist must not be used if its labelling is inadequate.
- \*The hoist must not be used if the hook is damaged.



\*Always check that the hoist has not been taken out of use after the previous operation due to a fault. If this is the case, the hoist must not be used but should be repaired!

\*Never leave a suspended load unattended.

\*Be aware that pendular motion may increase the strain on the hoist. This should be avoided!

\*The load must always be properly placed on the hook!

- \*The hoist should be inspected by a trained person at least twice a year!
- \*Only use <u>original</u> parts and accessories. This is important in order to fully maintain the hoist's functions!

\*Repairs on the hoist must only be carried out by trained personnel!

















#### **5.0 Checklist before use**

\*Before each use, the hoist must be inspected by a person with the appropriate training.

\*Always check the following before use:

| Part:         | Inspection:                   | Requirement:   | If requirement is not met:  |
|---------------|-------------------------------|--|---|
| Label         | Visual                        | All information must be clear and legible.   | Replace label.  |
| Hook latch    | Visual                        | The latch on the hook must be working properly.  | Replace hook or latch.  |
| Hook          | Visual                        | The opening of the hook must not be too wide.  | Replace hook.   |
|               | Visual                        | The hook must not be worn, damaged or deformed.  | Replace hook.   |
| Chain         | Visual                        | The links in the chain must not be twisted.  | Replace chain.  |
|               | Visual                        | The chain must be free from rust or other types of corrosion.  | Replace chain.  |
|               | Visual                        | The chain should be lubricated with thin oil.  | Lubricate chain.  |
| Noise         | Operate hoist<br>without load | There should be no unusual noise<br>coming from the hoist or the<br>transmission.                                    | Replace part(s) that cause(s) the noise.                                |
| Miscellaneous | Visual                        | Check that no nuts, bolts, split pins,<br>cables or other visible parts are<br>missing, loose or incorrectly fitted. | Replace missing parts or tighten/fit loose or incorrectly fitted parts. |



#### 6.0 During use

\*Ensure that the load/strap is correctly attached to the hook.

\*Never rest a load on the tip of the hook.

- \*Never use the hoist to stabilise or suspend a load while you or others weld or carry out other work on the load.
- \*No parts other than the hook should be used to carry a load.
- \*If any unusual noise occurs during operation, halt work immediately and ensure that the hoist is inspected by a trained person.

#### 7.0 After use

\*Do not leave the load hanging longer than necessary. It should be set down immediately or as soon as possible!

\*Never leave a suspended load unattended!

\*Never throw the hoist on the floor! Put it down carefully!

#### 8.0 How to use the hoist

Press the green button on the control panel to start or stop the hoist.

Press " $\uparrow$ " to raise the load.

Press " $\downarrow$ " to lower the load.

In the event of an emergency, press the red emergency stop switch. This breaks the power supply to the hoist, which will stop immediately. Turn the emergency stop to the right to resume operation.



The hoist is fitted with end switches to determine the highest and lowest permitted hook position. The end switches must not, under any circumstances, be used for any other purpose!

The hoist can be operated at two different speeds. Lightly press the "up" or "down" buttons for low speeds and press the buttons fully for higher speeds.

When using a trolley: Never pull the steering cable to move the hoist!

#### 9.0 Troubleshooting

| Problem   | Possible cause   | Solution   |
|---|--|--|
| Hoist does not work.  | Loose cables.  | Check all cables.  |
|   | Electrical components are damaged.   | Replace components.                                      |
| Hoist does not work and<br>brakes are emitting abnormal<br>noise. | Insufficient power supply.   | Rectify power supply.                                    |
| Load sags when hoist stops.                                       | Dust or oil on brake disks.  | Clean brake disks.                                       |
|   | Brake disks are worn.  | Replace brake disks.                                     |
| Load continues moving up or down after button is released.        | Contactor is damaged.  | Replace contactor.                                       |
| Chain emits abnormal noise.                                       | Chain is not lubricated.   | Lubricate chain with thin oil.                           |
|   | Pulley wheel is worn.  | Replace pulley wheel.                                    |
| Power leak.   | Earth connection is not<br>working properly, humidity<br>levels are high, or there is dust<br>in the electrical parts of the<br>hoist. | Check earth connection and remove any dust in the hoist. |



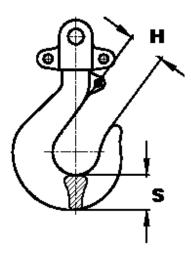
#### **10.0 Periodic inspection**

Inspection of the hoist must be carried out once a year by a workshop / qualified personnel with the appropriate training. More frequent inspections should be carried out if the hoist has been subject to heavy use. The following should be inspected:

| Part:                               | Inspection:                  | Requirement:  | If requirement is not met:  |  |
|-------------------------------------|------------------------------|---|---|--|
| Chain                               | Measure using callipers.     | Chain thickness must be<br>reduced by 10%. The extension<br>of the chain must be a<br>maximum 3% measured on the<br>outside over 11 links (11 x t). | Replace load chain.   |  |
|                                     | Visual                       | There must be no visible rust on the chain.   | Replace load chain.   |  |
|                                     | Visual                       | The chain must not be twisted or have cracks.   | Replace load chain.   |  |
| Hook                                | Measure using callipers.     | Largest acceptable enlargement of hook opening (H) is 10%.  | Replace hook.   |  |
|                                     | Visual inspection.           | There must be no visible twists in the hook.  | Replace hook.   |  |
|                                     | Visual inspection.           | There must be no significant visible damage.  | Replace hook.   |  |
|                                     | Physical inspection.         | The hook latch must slide easily into position.   | Replace latch or hook.  |  |
| Lifting<br>function                 | Lift and lower a light load. | There should be no abnormal performance or noise.   | Overhaul internal mechanisms.   |  |
| Brakes Lift and lower a light load. |                              | All functions such as lifting<br>and lowering should work<br>normally.  | Overhaul brake mechanism.<br>(Ensure there is no grease or<br>other residue on the brake<br>disks.) |  |



| All other parts       | Check all parts. | All parts must be in good<br>condition with no obvious<br>visible wear. | Replace worn parts.              |
|-----------------------|------------------|---|----------------------------------|
| Internal<br>mechanism | Visual           | Ensure there is sufficient grease (not on the brake disks!).            | Lubricate mechanism with grease. |
| Label                 | Visual           | All information must be clear and legible.                              | Replace label.                   |
| Electronics           | Visual           | All cables, couplings etc., must be undamaged.                          | Replace damaged parts.           |



| Standardized values |     |     |      |      |  |
|---------------------|-----|-----|------|------|--|
| Lifting capacity    | Kgs | Kgs | Kgs  | Kgs  |  |
| / WLL               | 250 | 500 | 1000 | 2000 |  |
| H - mm              | 27  | 27  | 33   | 40   |  |
| S - mm              | 21  | 21  | 24   | 30   |  |



#### **11.0 Importer**

#### The hoist is imported by:

John Dahle Skipshandel AS Plattformveien 6 4056 Tananger Norway

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