## Safelift ${ }^{\circ}$

## Electric Wire Rope Hoist

## 1. HIGH RELIABLE BRAKING SYSTEM UNQUE TO SAFELIFT

- The hoist detects the amount of lining abrasion. The brake is equipped with as automatic adjusting device to apply brake torque in proportion to the amount of lining abrasion.
- The double braking system consists of the main brake and the auxiliary brake unit

2. HOISTING MOTOR WITH A THERMAL PROTECTOR

- The hoist motor automatically stops when sensing the heat of the motor coil in order to protect the motor from burning damage caused by heat due to overwork.


## 3. EFFICIENT MAINTENANCE IS POSSIBLE

- The starting time counter in the control box facilitates checking of the lifetime of consumable parts.
- The gear inspection window in the control box allows visual checks of the condition of the gear teeth surface and lubrication to some degree.
- The punch mark on the hook indicates the reference point fot the hook inspection of deformation.
- The inspection of the rope end is easy.


## Motor unit

Each hoist is equipped with a motor, which provides optimal starting torque for the hoist. Employing cooling fans and large-capacity ball bearings, the class B insulating motor (class F for 7.5 and 10 tons) can withstand severe operating conditions. The hoisting motor is provide with a thermal protector, which sense the heat of the motor coil and functions to protect the motor from burning damage caused by over-frequent starting times.

## - Control box Starting time counter

The cumulative number of starting times is indicated on this counter because the total number of times the parts have been operated is know on this counter it is useful for planning the maintenance and procurement of consumable part such as brake, electromagnetic switches and wire ropes.

## Reduction gear unit

With a grease lubricating system, grease is filled in the gear unit on shipment, eliminating the replenishment prior to use and prolonging the operation time. The building blocks of the spur gears (helical $1^{\text {st }}$ stage) facilitate the maintenance inspection

## Auxiliary brake unit

If the braking force of the main brake is reduced, the auxiliary brake unit, a new system with minimum impact, prevents the drop of the load. Together with the automatic brakes, it composes a double braking mechanism.

## 4. Safelift



This is an orthodox type of hoist widely utilized for general purposes.
It boasts high performance for use in rugged jobs such as general production in factories, mining, railroads and warehouses.

## Technical Parameters

| Capacity |  |  |  | 1 | 2 | 3 | 5 | 5 | 7.5 | 10 | 15 | 20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lifting height (m) |  |  |  | 6/12 | 6/12 | 6/12 | 6/12 | 9/12 | 9/12 | 9/12 | 9/12 | 12 |
| Hoisting | $\begin{aligned} & \text { Speed } \\ & (\mathrm{m} / \mathrm{min}) \end{aligned}$ |  | 50 Hz | 11 | 8.4 | 7.5 | 7.5 | 6.7 | 6.0 | 5.0 | 5.0 | 4.2 |
|  |  |  | 50 Hz | 13 | 10 | 9 | 9 | 8 | 7.2 | 6.0 | 6.0 | 5.0 |
|  | Motor | (Kw) | 60 Hz | 1.9 | 2.9 | 4.2 | 4.2 | 5.9 | 7.9 | 8.8 | 6.7X2 | 7.5x2 |
|  |  |  | 60 Hz | 2.3 | 3.5 | 5 | 5 | 7 | 9.5 | 10.5 | 8X2 | $9 \times 2$ |
|  |  | No. of Poles |  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Traversing | $\begin{aligned} & \text { Speed } \\ & (\mathrm{m} / \mathrm{min}) \end{aligned}$ |  | 50 Hz | 21 | 21 | 21 | 21 | 21 | 14 | 14 | 14 | 14 |
|  |  |  | 50 Hz | 25 | 25 | 25 | 25 | 25 | 17 | 17 | 17 | 17 |
|  | Motor | (Kw) | 60 Hz | 0.30 | 0.30 | 0.45 | 0.45 | 0.63 | $0.47 \times 2$ | 0.47 X 2 | $0.7 \times 2$ | 0.7x2 |
|  |  |  | 60 Hz | 0.36 | 0.36 | 0.55 | 0.55 | 0.75 | $0.56 \times 2$ | $0.56 \times 2$ | 0.84 X 2 | 0.84x2 |
|  |  | No. of Poles |  | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 4 | 4 |
| Wire Rope | No. of falls |  |  | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
|  | Composition |  |  | 6xFi(29)-B |  |  |  |  |  |  |  | 6xFi(29)WRC-B |
|  | Dia. (mm) |  |  | $\varnothing 8$ | $\varnothing 11.2$ | $\varnothing 14$ | $\varnothing 14$ | $\varnothing 12.5$ | $\varnothing 14$ | ø16 | ø20 | $ø 22.4$ |
| Operating method |  |  |  | PUSH-BUTTON OPERATION |  |  |  |  |  |  |  |  |
| Electric source (3 phase) |  |  |  | $200-600 \mathrm{~V} 50 \mathrm{~Hz} / 60 \mathrm{~Hz}$ |  |  |  |  |  |  |  |  |

1 T


2 T/3T


## Size Specification

| Capacity (t) |  | 1 |  |  |  |  |  | 2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approx. dimensions (mm) | L | 6000 |  |  | 12000 |  |  | 6000 |  |  | 12000 |  |  |
|  | H | 790 |  |  | 790 |  |  | 985 |  |  | 985 |  |  |
|  | A | 545 |  |  | 715 |  |  | 595 |  |  | 630 |  |  |
|  | B | 350 |  |  | 385 |  |  | 435 |  |  | 615 |  |  |
|  | M | 345 |  |  | 345 |  |  | 415 |  |  | 415 |  |  |
|  | W | 200/290 |  |  | 200/290 |  |  | 200/290 |  |  | 200/290 |  |  |
|  | K | 20 |  |  | 90 |  |  | 30 |  |  | 110 |  |  |
|  | J | 85 |  |  | 115 |  |  | 75 |  |  | 100 |  |  |
|  | $\emptyset \mathrm{d}$ | 45 |  |  | 45 |  |  | 56 |  |  | 56 |  |  |
|  | ${ }_{\square} \mathrm{P}$ | 96 |  |  | 96 |  |  | 96 |  |  | 96 |  |  |
|  | a | 23 |  |  | 23 |  |  | 36 |  |  | 36 |  |  |
| Min. Curve rad |  | 1.5 |  |  | 1.5 |  |  | 1.8 |  |  | 1.8 |  |  |
| Dimensions with respect to I-beam |  | E | F | S | T | U | C | E | F | S | T | U | C |
| 200x100x7 |  | 255 | 374 | 42 | 148 | 47/42 | 135 | 220 | 378 | 42 | 148 | 42 | 135 |
| $250 \times 125 \times 7.5$ |  | 255 | 387 | 67 | 151 | 44/39 | 185 | 220 | 391 | 67 | 151 | 39 | 185 |
| $300 \times 150 \times 11.5$ |  | 255 | 400 | 92 | 160 | 35/30 | 225 | 220 | 404 | 92 | 160 | 30 | 225 |
| $450 \times 175 \times 11$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Approx. weight (Kg) |  | 165 |  |  | 175 |  |  | 250 |  |  | 270 |  |  |


| Capacity (t) |  | 3 |  |  |  |  |  | 5 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approx. dimensions (mm) | L | 6000 |  |  | 12000 |  |  | 8000 |  |  | 12000 |  |  |
|  | H | 1115 |  |  | 1115 |  |  | 1190 |  |  | 1190 |  |  |
|  | A | 645 |  |  | 690 |  |  | 845 |  |  | 955 |  |  |
|  | B | 475 |  |  | 660 |  |  | 690 |  |  | 800 |  |  |
|  | M | 460 |  |  | 460 |  |  | 230/310 |  |  | 455 |  |  |
|  | W | 230/310 |  |  | 230/310 |  |  | / |  |  | 230/310 |  |  |
|  | K | 35 |  |  | 120 |  |  |  |  |  | 1 |  |  |
|  | J | 80 |  |  | 110 |  |  | 90 |  |  | 1 |  |  |
|  | ød | 71 |  |  | 71 |  |  |  |  |  | 90 |  |  |
|  | $ø \mathrm{P}$ | 128 |  |  | 128 |  |  | 58 |  |  |  |  |  |
|  | a | 42 |  |  | 42 |  |  | 3.0 |  |  | 58 |  |  |
| Min. curve radius (m) |  | 2.0 |  |  | 2.0 |  |  |  |  |  | 3.0 |  |  |
| Dimensions with respect to I-beam |  | E | F | S | T | U | C | E | F | S | T | U | C |
| 200x100x7 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $250 \times 125 \times 7.5$ |  | 245 | 417 | 52 | 177 | 38 | 180 |  |  |  |  |  |  |
| $300 \times 150 \times 11.5$ |  | 245 | 430 | 77 | 187 | 28 | 220 | 305 | 450 | 77 | 225 | 30 | 215 |
| 450x175×11 |  | 245 | 443 | 102 | 185 | 30 | 370 | 305 | 463 | 102 | 223 | 32 | 365 |
| Approx. weight (Kg) |  | 315 |  |  | 340 |  |  | 685 |  |  | 745 |  |  |

