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**The Imperial Electric Company** is a manufacturer of **Permanent Magnet Motors, Gearmotors, AC and DC Elevator Motors, Generator Sets, AC Induction Motors, Vacuum Motors and Transaxle Drive Systems.**

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330.734.3600  
nidec-ise.com
With over one hundred years of experience in electrodynamic devices,

Imperial Electric can supply you with a complete line of high-performance motors and drive systems to keep your products in motion, and performing to specifications.
Compact design, high efficiency and extreme reliability have confirmed the Imperial Electric Gearless AC Machines to be a favorite in the industry. Models available: Frame 400 Series, 500 Series, LS Series and 800 Series.

Unlike traditional induction motors that lose efficiency at lower speeds, Imperial Electric gearless AC machines provide unusually capable low speed, high torque operation — and consume up to 40% less power than traditional asynchronous motors. Imperial Electric gearless AC machines are also noticeably quieter than the competition and are nearly maintenance-free.

Imperial Electric machines are known for durability and reliability. Imperial Electric gearless AC machines use rugged cast iron frames protecting a totally enclosed, self-cooling motor. Machine brake and sheave assemblies are removable and replaceable — features that will provide cost savings over long years of service.

Imperial Electric provides gearless AC machines in three frame sizes — serving car capacity ranges from 1,250 to 8,000 lbs. at speeds from 100 to 1,400 fpm (feet per minute). The 470 series has the capacity to lift 1,375 to 3,500 lbs. at speeds up to 500 fpm with 2:1 roping. The 520 series has the capacity to lift 2,000 to 4,500 lbs. up to 700 fpm with 1:1 roping or 2,200 to 6,500 lbs. up to 700 fpm with 2:1 roping. The 800 series has the capacity to lift 2,000 to 4,500 lbs. up to 1,400 fpm with 1:1 roping or 3,000 to 8,000 lbs. up to 700 fpm with 2:1 roping.

With the introduction of gearless AC machines to complement industry-leading, gearless DC machines, Imperial Electric boasts the most comprehensive gearless machine line in the elevator industry.

**BENEFITS**

- High efficiency
- Reduced power consumption
- Quieter operation
- Less cogging
- Smoother start up
- Compact design
- Reduced low speed vibration
- Improved electrical precision at very low speed
- Nearly maintenance-free

**FEATURES**

- AC synchronous permanent magnet design
- Machine, traction sheave, brake and encoder provided
- Totally enclosed, self-cooling motor — no fan needed
- Electronically activated double-action brake solenoid
- Brushless — no brushes to maintain
- Heavy duty components and construction
- Sub base with secondary sheave options
- CUS certified
- Re-greaseable bearings
- Press fit hardened drive sheave
Frame 400 Series: 472, 475, 478

ADDITIONAL FEATURES

MODEL 472
- 902 lbs.
- 682 ft.-lbs. brake torque per shoe
- 6,600 lbs. maximum sheave shaft load
- 5–10mm undercut U grooves for single wrap

MODEL 475
- 1,012 lbs.
- 734 ft.-lbs. brake torque per shoe
- 11,000 lbs. maximum sheave shaft load
- 6–10mm undercut U grooves single wrap

MODEL 478
- 1,367 lbs.
- 1,400 ft.-lbs. brake torque per shoe
- 11,000 lbs. maximum sheave shaft load
- 8–10mm undercut U grooves single wrap

Frame 400 Series 2:1 duty table

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Frame 400 Series dimensional diagrams: Page 20
Frame 500 Series: 522, 525

Additional Features

Model 522
- 2,596 lbs.
- 1,105 ft.-lbs. brake torque per shoe
- 17,600 lbs. maximum sheave shaft load
- 20 inch sheave
- 7-1/2 inch V grooves single wrap

Model 525
- 3,380 lbs.
- 2,215 ft.-lbs. brake torque per shoe
- 22,000 lbs. maximum sheave shaft load
- 20 inch or 25 inch sheave
- 7-1/2 inch or 6-5/8 inch V grooves single wrap

Frame 500 Series 1:1 Duty Table

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Model 525 All specifications at 50% counterweight and 25 inch sheave. Consult Imperial Electric for other ratings.

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Model 522 Model 525 All specifications at 50% counterweight and 25 inch sheave. Consult Imperial Electric for other ratings.

Frame 500 Series Dimensional Diagrams: Page 21

Frame 520 has the capacity to lift 2,000 to 3,500 lbs. at speeds to 700 fpm with 1:1 roping or 2,200 to 6,500 lbs. at speeds to 700 fpm with 2:1 roping.

ADDITIONAL FEATURES

MODEL 478-LS
- 1,750 lbs.
- 1,111 ft.-lbs. brake torque per shoe
- 12,000 lbs. maximum sheave shaft load
- 20 inch sheave
- 5-1/2 inch V grooves single wrap

MODEL 522-LS
- 2,875 lbs.
- 1,868 ft lbs. brake torque per shoe
- 17,600 lbs. maximum sheave shaft load
- 20 inch sheave
- 7-1/2 inch V grooves single wrap

MODEL 525-LS
- 3,830 lbs. (525-LS)/3,995 lbs. (575-LS)
- 3,000 ft.-lbs. brake torque per shoe
- 22,000 lbs. maximum sheave shaft load
- 25 inch sheave
- 7-1/2 inch or 6-5/8 inch V grooves single wrap
- 527-LS requires rope brake

Frame LS Series 1:1 duty table

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Frame LS Series dimensional diagrams: Pages 22 - 23

LS package includes
- Motor
- Dual Coil Brake
- Drive Sheave
- Endat Encoder
- Single Tier Base
- Blocking
- Dynamic Isolation
- Hardware for bolting the machine to the blocking, sheave guard, rope retainer

Frame LS Series has the capacity to lift 1,000 to 4,500 lbs. at traditional geared speeds from 100 to 450 fpm with 1:1 roping.
### Frame 800 Series: 805, 808, 808-OB

#### ADDITIONAL FEATURES

**MODEL 805**
- 4,880 lbs.
- 2,400 ft.-lbs. brake torque per shoe
- 40,000 lbs maximum sheave shaft load
- 12-5/8 inch on 26 inch sheave or 14-9/16 inch on 22.5 inch U grooves double wrap. V groove available consult Imperial Electric.

**MODEL 808**
- 6,305 lbs.
- 3,470 ft.-lbs. brake torque per shoe
- 40,000 lbs. maximum sheave shaft load

**MODEL 808-OB**
- 5,900 lbs.
- 3,470 ft.-lbs. brake torque per shoe
- 60,000 lbs. maximum sheave shaft load
- 14-5/8 inch on 26 inch sheave, U grooves wrap. V groove available consult Imperial Electric
- Rope brake may be required.

### Frame 800 Series: 2:1 duty table

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Model 805 & Model 808 - 50% counterweight. Consult Imperial Electric for other ratings.

### Frame 800 Series: 1:1 duty table

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Model 805 & Model 808 - Imperial Electric Engineering to confirm OB requirements.
Gearless DC Machines
Frame 590 Series: 591, 593, 596, 598

FEATURES
- Self ventilated – blower not required
- Speeds 500 – 1,000 rpm
- Class F insulation
- 50˚C rise standard
- Capacity to 8,500 lbs. – 2:1 rope, 4,500 lbs. – 1:1 rope
- Single or double wrap
- CUS certified
- Re-greasable bearings
- Split-frame construction available
- Factory breakdown available

APPLICATIONS
- Gearless traction elevators
- Single or double wrap
- Split-frame construction available
- Factory breakdown available

BENEFITS
- Quiet operation
- Rugged construction
- Extreme reliability
- Easily disassembled for modernization

Quiet operation, heavy duty construction, and extreme reliability have confirmed the Imperial Electric Gearless DC Machines to be a favorite in the industry. Models available: 591, 593, 596, and 598.

Frame 590 Series basic ratings

<table>
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<th>Frame Size</th>
<th>Rated Torque (ft.-lbs.)</th>
<th>WK° Sheave (lbs.-ft.°)</th>
<th>Armature Voltage per RPM (V/RPM)</th>
<th>Armature Amps (A)</th>
<th>Armature Resistance Hot (Ω)</th>
<th>Field Voltage (V)</th>
<th>Field Amps (A)</th>
<th>Field Resistance (Ω)</th>
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Typical rating requirements for Gearless DC Machines

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Frame 590 Series dimensional diagram: Consult Imperial Electric

Efficiency in Motion
Rugged and dependable, Imperial Electric AC hoist motors enjoy a well deserved reputation for quality and durability.

**FEATURES**
- Cast iron construction
- 600–1,800 rpm
- 5 through 60 HP high slip
- 5 through 100 HP low slip
- Drip-proof construction standard, TENV and TEFC available
- Dual ball bearing construction
- Re-greasable bearings
- Class F insulation standard (Class H available)
- Class A temperature rise for elevator duty
- Mounted encoder optional
- CUS certified

**APPLICATIONS**
- Geared traction elevators
- VVVF with encoders, low slip 60 minute duty cycle
- Across the line high slip 30 minute duty cycle
- 2-speed, 60 minute duty cycle

**BENEFITS**
- Stock availability
- Quiet operation
- Available through 100 HP
- Highly reliable
- Long service life
- Rugged construction

**VVVF AC Hoist Motors** 1,200 RPM duty table full load amps

<table>
<thead>
<tr>
<th>HP</th>
<th>5</th>
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<th>12.5</th>
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<th>20</th>
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<th>40</th>
<th>50</th>
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<th>75</th>
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<td>65.8</td>
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<td>89.0%</td>
<td>89.7%</td>
<td>89.5%</td>
<td>90.8%</td>
<td>90.0%</td>
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<td>91.4%</td>
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<tr>
<td>P/F</td>
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<td>72.4%</td>
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<td>82.6%</td>
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<tr>
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<td>864</td>
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<td>3,395</td>
<td>4,056</td>
<td>4,312</td>
<td>5,596</td>
</tr>
</tbody>
</table>

Consult Imperial Electric for additional ratings.

Industry recognized performance and durability for all popular AC machine designs.

The Imperial Electric AC Hoist Motor is renowned for enduring dependability. Cast iron construction, hot rolled steel shaft, and re-greasable ball bearings contribute to a motor design that you can trust through long years of service.

A range of high and low slip single speed motor designs for VVVF drive applications are offered in rpm ranges from 600, 720, 900, 1,200 and 1,800. The motor is configured for foot mounting working with all popular machine designs.
Flange Motors  (including AC VVVF and DC)
Frames 256TYZ through 405TYZ

Heavy duty, replacement motors for your existing machines.
Imperial Electric’s line of AC and DC Flange Hoist Motors directly replace existing motors on virtually all popular machines. Imperial Electric motors are the definition of heavy duty construction, designed to provide reliable service year after year.

**Direct mounts for:**
- Titan 1
- KONE MR26, MR35
- Armor #2, #2 & 3, #3
- Otis 17CT, 22CT, 29CT
- Westinghouse 28, 38
- Northern TW151 through TW340
- Serge
- Renold
- Schindler

**Optional Flex Coupling mounts**
(see page 18):
- Gurney
- Dover GD105
- Westinghouse – all models

Consult Imperial Electric for additional ratings

**BENEFITS**
- Long life expectancy
- Heavy duty construction
- Drop in replacement availability
- Quiet operation
- Available through 100 HP
- Mounts for Flexible Couplings
  (see page 18)

**FEATURES**
- Drip-proof enclosure
- 600–1,800 rpm
- Single and two bearing designs
- Encoder and encoder mounting options
- Hot rolled steel shafts
- CUS certified

**APPLICATIONS**
- Geared traction elevators
- AC VVVF with encoders, low slip
- AC across-the-line, high slip
- AC 2-speed, high slip
- DC shunt or compound wound

Capability Table and NEMA C Face Motors dimensional diagram: Page 26
DC Hoist Motors
Frames 284AT through 409AT

FEATURES
• Drip-proof enclosure
• 60 minute duty
• 10 through 100 HP
• 600–1,750 rpm
• Drip-proof construction standard, TENV available
• Dual ball bearing construction
• Re-greasable bearings
• Class A temperature rise for elevator duty
• CUS certified

BENEFITS
• Quiet operation
• Available through 100 HP
• Highly reliable
• Proven performance
• Broad compatibility 240V DC, at 1,150 rpm

APPLICATIONS
• Geared traction elevators
• Shunt wound standard
• Compound wound available
• Special wound available

Motor Generator Sets
Frames 284A/280T through S409A/360T

FEATURES
• Drip-proof enclosure
• 7.5 kW–75 kW ratings
• 240 volt DC loop standard
• Special DC loop voltages available
• 1,750 rpm
• AC input voltages – 200, 230/460, 575 3-phase
• 4 bearing DC to DC and TEFC units also available

BENEFITS
• Drop in replacement availability
• Quiet operation
• Available through 75 kW
• Extreme reliability

APPLICATIONS
• Geared traction elevators
• Gearless DC machines
• Compound winding standard
• Shunt wound available
• Special wound available

Rugged and dependable, Imperial Electric AC hoist motors enjoy a well deserved reputation for quality and durability.

Imperial Electric
Geared Elevator Machines
DC Hoist Motors | Motor Generator Sets | Door Operator Motors
Door Operator Motors

Frames 2.0 through 6.1 inch diameter gear drive with motor/gearbox and PM motors

**Light duty, self-contained worm gear drive with motor and gearbox.**

Imperial door operator motors are designed to replace existing motors on a wide range of door operators from various manufacturers. These motors offer heavy duty construction and superior quality, employing hardened steel and bronze gearing, lifetime lubrication bearings, and Viton output seals.

**Replacement motors for:**
- Courion
- Dover
- ECI
- GAL
- Haughton
- KONE
- Otis

**BENEFITS**
- Heavy duty construction
- Precision design
- Broad application range

**FEATURES**
- Low profile
- Hardened steel and bronze gearing
- Ball and tapered roller bearing construction
- Field replaceable motor
- Grease or oil lubrication for life
- 1/6 HP
- 1,140 rpm
- DC and AC available

**APPLICATIONS**
- Passenger elevator doors
- Freight elevator doors

Door Operator Motors dimensional diagrams: Page 27
Compact, open-frame construction delivers a light weight, high performance, submersible solution.

More than dependable, the Imperial Electric AC Submersible Hydraulic Motors are ruggedly built, highly efficient units. Open-construction, asynchronous motors are perfectly suited for wet operations. Hydraulic fluid cools the motors as they work. Motor leads are extra length, non-wicking for flexible unit positioning.

The Imperial Electric submersible motors are compatible with pump units from all major manufacturers. The motors offer the advantages of small size and light weight coupled with high starting torque and low starting current.

**FEATURES**

- Rolled steel construction
- Submersible enclosure
- Stock motors dual rated for 80 or 120 starts per hour
- 10 through 50 HP
- 3,600 rpm
- Voltages: 200, 230/460, 575 AC 3-phase, 60 Hz
- Single ball bearing
- High starting torque
- Low starting current
- Adapter kits available for alternate pumps
- CUS certified

**APPLICATIONS**

- Submersible hydraulic elevators

**BENEFITS**

- High performance
- Stock availability
- Drop-in replacement
- Available through 50 HP
## Efficiency in Motion

### Frames 217Z, L217Z

**AC Submersible Hydraulic Motors**

**duty table, 80 starts per hour**

<table>
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<tr>
<th>HP</th>
<th>Motor Loss BTU/HR</th>
<th>FL EFF (%)</th>
<th>FL PF (%)</th>
<th>FL RPM</th>
<th>Volts</th>
<th>HP</th>
<th>FL Amps (A)</th>
<th>Delta</th>
<th>No Load</th>
<th>Locked Rotor</th>
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<td>18.8</td>
<td>400</td>
<td>G</td>
<td>133</td>
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</tbody>
</table>

200 volt motors are designed for operation at 208 volts.

**AC Submersible Hydraulic Motors**

**dimensional diagram: Page 28**
AC Dry Hydraulic Motors
Frames 215T through 365T

Quiet, efficient AC dry hydraulic motors.

Designed for use with belted hydraulic pump systems, Imperial Electric AC Dry Hydraulic Motors are exceptionally quiet, highly efficient and built for rugged duty. Totally Enclosed Fan Cooled (TEFC) designs are available for most ratings.

Rated for 80 or 120 starts per hour, the AC Dry Hydraulic Motor is a drop-in replacement for existing motors, making any elevator modernization project more efficient.

The AC Dry Hydraulic Motor is just one of many highly engineered products developed for the elevator industry by Imperial Electric. Imperial Electric has more than 100 years experience in electrodynamic devices. Learn how Imperial Electric can benefit your next project. Call your representative today for more information.

FEATURES
• Cast iron construction
• Stock motors dual rated for 80 or 120 starts per hour
• 15 through 100 HP
• 1,800 rpm
• Voltages: 200, 230/460, 575 AC 3-phase, 60 Hz
• Dual ball bearing
• Drip-proof or TEFC enclosure
• Class F insulation standard
• 40° C ambient
• WYE Start, Delta Run

APPLICATIONS
• Dry hydraulic elevators

BENEFITS
• Stock availability
• Drop-in replacement
• Available through 100 HP
Frames 215T, 254T, 256T, 284T, 286T, 324T, 326T, 364T, 365T

AC Dry Hydraulic Motors duty table, 80 starts per hour

<table>
<thead>
<tr>
<th>HP</th>
<th>Full Load RPM</th>
<th>Frame</th>
<th>Voltage</th>
<th>Currents</th>
<th>Elevator Duty BTU Per Hour</th>
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<td>Delta</td>
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<td>Full Load</td>
<td>No Load</td>
<td>Locked Rotor</td>
</tr>
<tr>
<td>15</td>
<td>1740</td>
<td>215T</td>
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<td>46</td>
<td>23</td>
</tr>
<tr>
<td></td>
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<td>215T</td>
<td>230/460</td>
<td>39.2/19.8</td>
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<td>1735</td>
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<tr>
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<td>230/460</td>
<td>62/31</td>
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<td>365T</td>
<td>575</td>
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AC Dry Hydraulic Motors dimensional diagram: Page 29
Imperial Electric offers flexible couplings and adapters with its heavy-duty line of AC & DC Elevator Duty Motors for geared traction machines. The couplings and adapters are also available for both flange or foot-mount machines manufactured by companies such as Armor, Dover, Gurney, Montgomery, Otis, Schindler-Haughton, Serge and Westinghouse. Other couplings are available upon request.

The three-part coupling consists of a drum-mount flange, polyurethane disc and a motor adapter plate for flange motors. When assembled and properly installed, the poly disc reduces vibration and noise carry-through to the car due to any misalignment. End thrusting of motor shafts and overloading of bearings are also reduced.

Flexible couplings are also available in kit form for field modifications. The couplings with Taper-Lock™ fittings have flange bolt patterns that are identical to the rigid couplings they replace which allows for motor replacement within a few hours.
Elevator Machine Accessories

**Encoders**

- Incremental hollow shaft encoder for hoist motors
- Absolute taper shaft encoder for frame 400 and 500 series gearless AC machines
- Absolute hollow shaft encoder for Frame 800 series gearless AC machines
- Encoder Cables

**Submersibles**

- 80 Series Flange Kit
- 440 Series Flange Kit

**Gearless**

- Sub-Base/Sub-Structure/Up-Stand
- Deflector/Secondary Sheave
- Sheave Guard
- Dead-End Hitch Plate
- Rope Guard/Rope Retainer
- Threaded Mounting Plate
- Isolation Pads

Efficiency in Motion
Gearless AC Machines
Frame 400 series dimensional diagrams

Model 472

Model 475

Model 478

Model 478

Note: Contact Imperial Electric for actual dimensions.
Gearless AC Machines
Frame 500 series dimensional diagrams

Model 522

Model 525

Model 525 available in 20 inch and 25 inch sheaves.

Note: Contact Imperial Electric for actual dimensions.
Gearless AC Machines
Frame LS series dimensional diagrams

Model 478-LS

Model 522-LS
Gearless AC Machines
Frame LS series dimensional diagrams

Model 525-LS or 527-LS with table top base and with deflector sheave

Model 525-LS or 527-LS
Model 805
Model 805 available in 22.5 inch and 26 inch sheaves.

Model 808
Model 808 available in 22.5 inch and 26 inch sheaves.

Note: Contact Imperial Electric for actual dimensions.
Gearless AC Machines
Frame 800 series dimensional diagram

Model 808 with upstand and secondary sheave

Model 808-OB with upstand and secondary sheave
Flange Motors (including AC VVVF and DC)
Frame 256TYZ through 405TYZ dimensional diagram
(256TC through 405TC shown)

Flange Motor dimensions

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Compatibility Table 1,200 RPM, low slip, 200V–575V, 3-phase, 60 Hz

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Motors are 2 ball bearing designs unless otherwise noted (*single ball bearing design). Consult Imperial Electric for other ratings. All flange mounted requirements need customer review of dimension sheets.
Door Operator Motors
Frame 2.0 through 6.1 inch diameter dimensional diagrams

3.25 inch diameter PM Motor

6.1 inch diameter PM Motor - 56 Frame

2.0 inch diameter PM Gearmotor
AC Submersible Hydraulic Motors
Frame 217Z dimensional diagram

AC Submersible Hydraulic Motor dimensions

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<th>D</th>
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AC Hoist or AC Dry Hydraulic Motors
Frames 215T through 405T dimensional diagram

| 215T  | 10.5 | 9 | 3.5 | 17.312 | 5.25 | 4.25 | 3.5 | 6.875 | 3.5 | 10.312 | 10.125 | — | 5.25 2.625 | 5.25 | 4.25 | 2.5 | 8.375 | 8.25 | 4.125 | 12.312 | 12.125 | 2.375 | 1.625 | 1.375 | 3.125 | 125 | 312 | 156 | 1 | 8.962 | 8.837 | 2.75 | 125 |
| 254T  | 12.5 | 10.75 | 4.25 | 20.75 | 6.25 | 5 | 4.125 | 3.5 | 17.312 | 5.25 | 4.25 | 2.5 | 8.375 | 8.25 | 4.125 | 12.312 | 12.125 | 2.375 | 1.625 | 1.375 | 3.125 | 125 | 375 | 187 | 1.5 | 11 | 8.75 | 4 | 200 |
| 261T  | 12.5 | 12.5 | 4.25 | 22.5 | 6 | 5 | 7.5 | 2.625 | 2.25 | 2.5 | 9.25 | 9.125 | 4.125 | 12.312 | 12.125 | 2.375 | 1.625 | 1.375 | 3.125 | 125 | 375 | 187 | 1.5 | 11 | 8.75 | 4 | 225 |
| 284T  | 14 | 12.5 | 4.75 | 23.625 | 7 | 5.25 | 4.75 | 8.75 | 5.375 | 2.75 | 3 | 6.5 | 6.375 | 3.75 | 13.812 | 13.75 | 2.375 | 1.675 | 1.375 | 3.75 | 13.125 | 12.5 | 375 | 187 | 1.5 | 11 | 8.75 | 4 | 300 |
| 286T  | 14 | 14 | 4.75 | 25.125 | 7 | 5.25 | 5.5 | 8.75 | 5.375 | 2.75 | 3 | 10.25 | 10.125 | 4.125 | 13.812 | 13.75 | 2.375 | 1.675 | 1.375 | 3.75 | 13.125 | 12.5 | 375 | 187 | 1.5 | 11 | 8.75 | 4 | 325 |
| 324T  | 16 | 14 | 5.25 | 26.25 | 8 | 6.25 | 5.25 | 1 | 8.75 | 4.375 | 3 | 10.5 | 10.375 | 5.375 | 15.812 | 15.625 | 2.375 | 1.675 | 1.375 | 3.75 | 15.125 | 15.5 | 375 | 187 | 1.5 | 11 | 8.75 | 4 | 400 |
| 326T  | 16 | 16 | 5.25 | 27.75 | 8 | 6.25 | 6 | 1 | 8.75 | 4.375 | 3.5 | 11.25 | 11.125 | 5.375 | 15.812 | 15.625 | 2.375 | 1.675 | 1.375 | 3.75 | 15.125 | 15.5 | 375 | 187 | 1.5 | 11 | 8.75 | 4 | 450 |
| 364T  | 18 | 16.25 | 5.875 | 29.75 | 9 | 6.25 | 5.875 | 1 | 8.75 | 4.375 | 3.5 | 11.75 | 11.625 | 5.875 | 18.812 | 18.625 | 2.75 | 2.125 | 1.675 | 1.375 | 4.375 | 18.125 | 18.5 | 375 | 187 | 1.5 | 11 | 8.75 | 4 | 550 |
| 365T  | 18 | 16.25 | 5.875 | 29.75 | 9 | 6.25 | 5.875 | 1 | 8.75 | 4.375 | 3.5 | 11.75 | 11.625 | 5.875 | 18.812 | 18.625 | 2.75 | 2.125 | 1.675 | 1.375 | 4.375 | 18.125 | 18.5 | 375 | 187 | 1.5 | 11 | 8.75 | 4 | 610 |
| 405T  | 20 | 17.75 | 6.625 | 34.25 | 10 | 8 | 6.875 | 1 | 8 | 4.375 | 3.5 | 13 | 12.375 | 7.875 | 19.812 | 19.5 | 2.75 | 2.125 | 1.675 | 1.375 | 4.375 | 19.125 | 19.5 | 375 | 375 | 1.5 | 11 | 8.75 | 4.5 | 885 |
Kinetek

Kinetek is a global manufacturing enterprise that provides custom engineered control, motor and drive system solutions for world class customers in the elevator/escalator, commercial floor care, material handling/aerial lift, commercial food equipment, golf car/utility vehicle, renewable energy and medical markets.

Imperial Electric

Imperial Electric is a custom manufacturer of special application AC and DC motor systems. Imperial manufactures a complete line of products for the elevator/escalator market including AC and DC gearless machines, AC and DC hoist motors and submersible motors. Imperial Electric is also an established leader in commercial floor care and hose reel markets.

Motion Control Engineering (MCE)

Motion Control Engineering (MCE) is a leader in non-proprietary elevator controls, complete elevator packages, technical services and repair solutions for modernization and new construction. MCE has an installed base of more than 160,000 elevator controls worldwide.

Advanced Motors & Drives

Advanced Motors & Drives designs and manufactures special purpose AC, DC and brushless DC motors for traction, pump and steering applications for battery operated vehicles. AMD is a leader in material handling, golf car, utility vehicle, scissor lift and wind markets.

Euclid Universal

Euclid Universal designs and builds gear drives for special applications to meet custom specification and performance requirements. Euclid develops custom engineered gearmotors, transmissions, and gearing for the floor care, medical/mobility and loose gearing markets.

Scott DC Power Products

Scott DC Power Products designs and manufactures high output DC motors for the floor care market, hydraulic pump drive motors for industrial lift applications, and traction drive motors.

Kinetek Controls

Kinetek Controls specializes in application specific, custom motor control design and production. Kinetek Controls’ markets include material handling, floor care, recreational vehicles, lift trucks, golf and other electric vehicles.
Kinetek product lines include AC, DC and brushless DC electric motors, pumps, gearing, gearboxes, fans, transaxles, human machine interface products (membrane switches, touch screens, turnkey HMI assemblies), electronic controls/systems and end products.

FIR Group designs and manufactures custom made AC and brushless DC motors and pump motor packages for highly specialized industrial and commercial markets. TEA International, a member of the FIR group, serves the global building construction market with cable hoist and platform lift products.

Valmark Interface Solutions
Valmark Interface Solutions is an ISO 9001:2000 certified leader in the design and manufacture of custom human machine interface (HMI) products, incorporating sophisticated membrane switch assemblies, touch screens, graphic panel overlays, and a variety of custom industrial and commercial labeling and shielding products.

Merkle-Korff Industries
Merkle-Korff, founded in 1911, is a pioneer in the development of small motors and gear motors. Merkle-Korff’s product line includes advanced brushless DC motors and gearmotors, PMDC planetary and PMDC right angle gearmotors, high efficiency PSC motors, and PMDC and AC parallel shaft gearmotors.

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KJH (KineteK Jinghe) is a leading shaft and gearing manufacturer. KJH’s world class customers include Bosch, Panasonic and Kinetek. KJH markets include floor care & material handling, golf car/utility vehicle, power tools, appliance and automotive.

NKET (Nidec Kinetek Elevator Technology (Wuxi) Corporation) designs and manufactures elevator controls and complete elevator packages for China and International markets. NKET is a member of Nidec Kinetek’s elevator group.

KDS (KineteK De Sheng) maintains a strong position in China in several industries. KDS is an ISO-certified manufacturer of AC and DC motors, brushless DC motors, general purpose motors, gearboxes and end products.

Efficiency in Motion

FIR Group
Casalmaggiore, Italy

KDS
Shunde, China

NKET
Wuxi, China

KJH
Guangzhou City, China

KMM
Changzhou, China

KDS (KineteK De Sheng) maintains a strong position in China in several industries. KDS is an ISO-certified manufacturer of AC and DC motors, brushless DC motors, general purpose motors, gearboxes and end products.

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**WARRANTY POLICY**

New equipment is warranted to be free from defects in material and workmanship for one year from date of shipment from Imperial Electric Co.

Imperial Electric Co. will repair or replace defective equipment at its option and expense provided that prior to repair or replacement, defects are reported to and approved for disposition by the Akron office at the address listed above:

**Attn: Elevator Warranty Claims**

Notice of failure or defect must include job name, location, date of start-up, unit serial number, model number as listed on unit nameplate, kW/HP rating, and description of problem.

Imperial shall have the right to require the buyer to deliver the equipment to a designated service center and the buyer shall pay all inbound and outbound transportation and for services of any kind, diagnostic or otherwise, except the direct and actual cost of repair or replacement.

Equipment sold but not manufactured by the Imperial Electric Co. will be warranted as to defects in material and workmanship consistent with the warranty policy of the original manufacturer of the equipment.

The Imperial Electric Co.’s liability under this warranty or any other warranty whether expressed or implied in law or fact shall be limited to the repair or replacement of defective material and workmanship and in no event shall it be liable for consequential or indirect damages.

Failure to comply with the above policy places responsibility and cost of repair or replacement with others.

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**NOTE:** The technical information in this product catalog has been reviewed and approved by Imperial Electric technical and engineering staff. Performance data and dimensions are for reference only and are subject to change. It is the responsibility of the purchaser to ensure that the specific data for the product they are purchasing is properly confirmed for their specific application. This analysis should be performed only by individuals with appropriate technical expertise related to elevator machines and motors. Contact Imperial Electric directly for certified data. Imperial Electric is not responsible for providing financial remedy for products that were incorrectly specified by the purchaser.