

Model 4771

### Helical/Worm Gear Electric Hoists and Winches – Lightweight

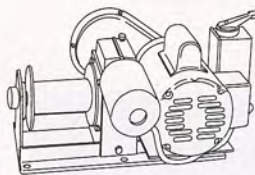
477 Series winches are constructed from cast aluminum for strength and minimal weight. Helical/worm gears operate in an enclosed oil bath. Reversible motors are operated with a pendant control on 6' of cable. Hoist models include an internal mechanical brake for load control. Winch units include a clutch but have no brake and must not be used to lift loads.

| model | description            | motor HP | load rating 1st layer | load rating full drum | wire rope diameter | full drum capacity | 1st layer line speed | approx. weight |
|-------|------------------------|----------|-----------------------|-----------------------|--------------------|--------------------|----------------------|----------------|
| 4771  | 120 VAC hoist w/brake  | 1.2      | 2000 lbs              | 1000 lbs              | 5/16 in            | 107 ft             | 12 fpm               | 64 lbs         |
| 4772  | 120 VAC winch w/clutch | 1.2      | 2000 lbs              | 1000 lbs              | 1/4 in             | 95 ft              | 12 fpm               | 65 lbs         |
| 4773  | 12 VDC hoist w/brake   | .6       | 1000 lbs              | 500 lbs               | 5/16 in            | 107 ft             | 12 fpm               | 67 lbs         |
| 4774  | 12 VDC winch w/clutch  | .6       | 1000 lbs              | 500 lbs               | 1/4 in             | 95 ft              | 12 fpm               | 67 lbs         |

Drum capacities may be 25-30% less, due to non-uniform winding. Tension in wire rope will also affect drum capacity. Drum capacity is lower for winch models due to smaller size drum.

### Worm Gear Electric Winches and Hoists

The 473 and 483 Series winches combine the load control of worm gearing with the speed and versatility of electric power. Winches are driven by either 120/230 volt single phase, or 230/460 volt three phase, TEFC, reversible, continuous duty motors. An electrically operated disc brake causes the winch to hold the load in place when power is off.



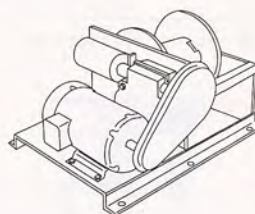
Model 473A1B

| model    | motor HP | load rating 2nd layer | load rating full drum | wire rope diameter | full drum capacity | 2nd layer line speed | approx. weight | options (see below)   |
|----------|----------|-----------------------|-----------------------|--------------------|--------------------|----------------------|----------------|-----------------------|
| 473A1/2B | .5       | 700 lbs               | 400 lbs               | 3/16 in            | 140 ft             | 14 fpm               | 60 lbs         | A C D E F G R S W X Z |
| 473A1B   | 1.0      | 1300 lbs              | 800 lbs               | 1/4 in             | 75 ft              | 14 fpm               | 71 lbs         | A C D E F G R S W X Z |
| 483A1B   | 1.0      | 1700 lbs              | 1000 lbs              | 5/16 in            | 200 ft             | 12 fpm               | 161 lbs        | A C D E F G R S W X Z |
| 483A2B   | 2.0      | 3200 lbs              | 1900 lbs              | 3/8 in             | 140 ft             | 12 fpm               | 204 lbs        | A C D E F G R S W X Z |

Drum capacities may be 25-30% less, due to non-uniform winding. Tension in wire rope will also affect drum capacity.

### Spur/Worm Gear Electric Winches and Hoists

489 Series winches feature a combination of spur and worm gearing which maximizes load moving power at an affordable price. All gears are machine cut and the worm gears are enclosed in an oil bath for smooth operation and long life. Winches are driven by 230/460 volt three phase, TEFC, reversible, continuous duty motors. An electrically operated disc brake causes the winch to hold the load in place when power is off.



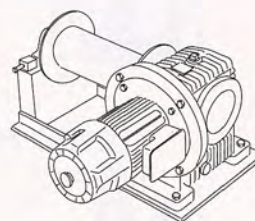
Model 489A2B

| model  | motor HP | load rating 2nd layer | load rating full drum | wire rope diameter | full drum capacity | 2nd layer line speed | approx. weight | options (see below)     |
|--------|----------|-----------------------|-----------------------|--------------------|--------------------|----------------------|----------------|-------------------------|
| 489A2B | 2.0      | 2500 lbs              | 1200 lbs              | 5/16 in            | 720 ft             | 15 fpm               | 300 lbs        | A C D E F G P R S W X Z |
| 489A3B | 3.0      | 3600 lbs              | 1800 lbs              | 3/8 in             | 510 ft             | 15 fpm               | 322 lbs        | A C D E F G P R S W X Z |
| 489A5B | 5.0      | 6000 lbs              | 3000 lbs              | 1/2 in             | 300 ft             | 15 fpm               | 328 lbs        | A C D E F G P R S W X Z |

Drum capacities may be 25-30% less, due to non-uniform winding. Tension in wire rope will also affect drum capacity.

### Helical/Worm Gear Electric Winches and Hoists – Heavy-Duty

4HW Series winches are built with a limited number of heavy-duty components to reduce chances of breakdown and increase durability. Winches are driven by 200/230/460 volt three phase, TEFC, reversible, continuous duty brakemotors. The Helical/Worm design is compact, and with modification it can be mounted in vertical or upside-down positions.



Model 4HW35

| model | motor HP | load rating 1st layer | load rating full drum | wire rope diameter | full drum capacity | 1st layer line speed | approx. weight | options (see below)     |
|-------|----------|-----------------------|-----------------------|--------------------|--------------------|----------------------|----------------|-------------------------|
| 4HW25 | 1.0      | 1033 lbs              | 790 lbs               | 7/32 in            | 210 ft             | 24.0 fpm             | 200 lbs        | A D E F G P R S U W X Z |
| 4HW35 | 2.0      | 2100 lbs              | 1600 lbs              | 5/16 in            | 345 ft             | 22.1 fpm             | 375 lbs        | A D E F G P R S U W X Z |
| 4HW40 | 3.0      | 2700 lbs              | 2050 lbs              | 3/8 in             | 340 ft             | 26.4 fpm             | 550 lbs        | A D E F G P R S U W X Z |
| 4HW60 | 5.0      | 5100 lbs              | 3850 lbs              | 1/2 in             | 335 ft             | 20.7 fpm             | 1000 lbs       | A D E F G P R S U W X Z |
| 4HW80 | 7.5      | 7100 lbs              | 5350 lbs              | 5/8 in             | 335 ft             | 21.6 fpm             | 1800 lbs       | A D E F G P R S U W X Z |

Drum capacities may be 25-30% less, due to non-uniform winding. Tension in wire rope will also affect drum capacity.

### Options and Modifications Available for Thern Power Winches and Hoists

- A Additional Cable Anchors** - for attaching more than one wire rope to the drum.
- C Clutches** - allow wire rope to be rapidly unwound for hook-up to load. Units with clutches must not be used to lift loads.
- D Drum Length Modifications** - to alter the capacity of the drum.
- E Electrical Control Packages** - magnetic reversing controls available for operating the motor in different environments.
- F Additional Drum Flanges** - create separate drum compartments to accommodate multiple wire ropes.
- G Grooved Drums** - help wire rope to wind uniformly onto the drum.
- P Pressure Bars** - help prevent wire rope from becoming slack on drum.
- R Rotary Limit Switches** - limit the distance load can travel in one or two directions.
- S Drum Diameter Modifications** - to alter wire rope line speed.
- U Special Mounting Arrangements** - for mounting to ceiling or wall.
- W Weatherproof Brake** - for use in outdoor environments.
- X Special Motors** - Explosion Proof, Corrosion Resistant, or Dirty Duty.
- Z Emergency Handle** - for manual operation when electric power fails.