



PORTABLE ELECTRIC WINCH

# DURA-HOIST 477 SERIES



thern.com  
(507) 454-2996

# DURA-HOIST SERIES

## PORTABLE ELECTRIC WINCHES



### QUIET PORTABILITY with Quick Cable Disconnect

The 477 Series features a compact, vertical design when robust power is needed in tight spaces. Lift/pull up to 2,000 pounds in any direction or orientation: floor, ceiling, or wall. Machine-cut helical and worm gears offer quiet and precise power transfers and continuous lubrication ensures long life. Ideal for wastewater, construction, and manufacturing applications.

### Portable Design

- Optional Integrated pressure plate prevents unspooling during transport
- Mounts on wall, ceiling, or floor for maximum flexibility
- Lightweight cast aluminum drum and gearbox

### Premium Motor & Configurations

- Brushless-design, totally enclosed AC induction motor provides superior life
- Quiet operation in both directions
- 115-volt single phase standard, with other voltages available (single- and three-phase configurations)

### Durable Winch Frame & Component Construction

- Cast aluminum drum, frame, and gearbox (with enamel or optional epoxy coating) resist corrosion for extreme conditions and applications



Product Shown:  
4777

### Premium Gearbox Design

- Helical and worm gears provide increased load control and quiet operation
- Fully enclosed oil bath reducer dissipates heat and provides continuous lubrication for long service life

### Enhanced Load Handling

- Quickly disconnect loads when needed to speed labor/time

### Ready-to-Work Controls

- Standard push-button pendant and power cord standard on 4771 and 4777
- NEMA 4 rating for outdoor use

### Internal Mechanical Load Brake

- Internal mechanical brake helps control loads and facilitates controlled operation
- Wet-brake design increases durability by dissipating heat and reducing wear

## PERFORMANCE

IMPERIAL					
Series	Load Rating	Power Supply	Line Speed	Drum Capacity	Drum (Wide or Narrow)
4771	2,000 lbs 1st layer	115 / 1 / 60 VAC	13-22 fpm	90-120 ft	Wide
4771PN	1,500 lbs 1st layer	Pneumatic	13-22 fpm	90-120 ft	Wide
4771HY	2,000 lbs 1st layer	Hydraulic	13-22 fpm	90-120 ft	Wide
4771DC	2,000 lbs 1st layer	12 VDC	13-22 fpm	90-120 ft	Wide
4777	2,000 lbs 1st layer	115 / 1 / 60 VAC	13-22 fpm	60-89 ft	Narrow

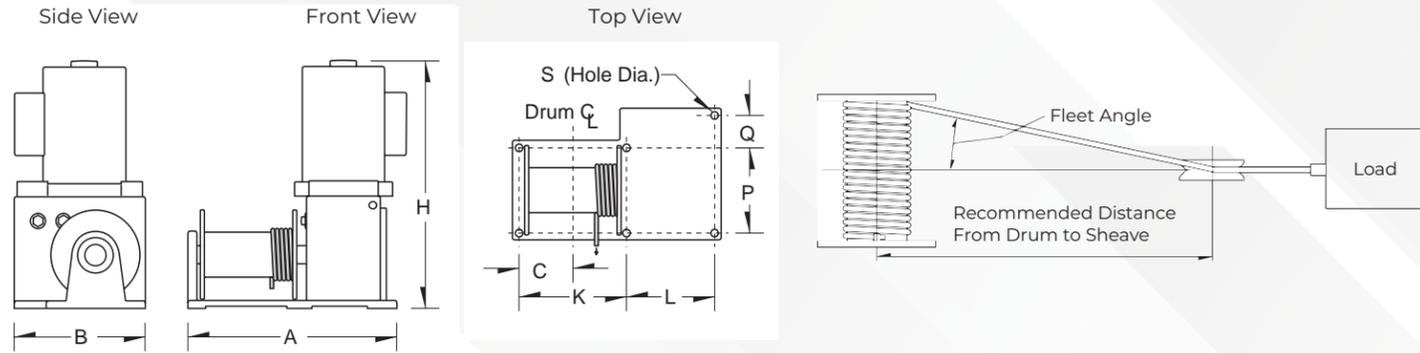
METRIC					
Series	Load Rating	Power Supply	Line Speed	Drum Capacity	Drum (Wide or Narrow)
4771	907 kg 1st layer	115 / 1 / 60 VAC	3-6 mpm	27-36 m	Wide
4771PN	680 kg 1st layer	Pneumatic	3-6 mpm	27-36 m	Wide
4771HY	907 kg 1st layer	Hydraulic	3-6 mpm	27-36 m	Wide
4771DC	907 kg 1st layer	12 VDC	3-6 mpm	27-36 m	Wide
4777	907 kg 1st layer	115 / 1 / 60 VAC	3-6 mpm	18-27 m	Narrow

NOTICE: These products are not for lifting people or things over people.

Refer to technical pages for detailed performance information.

# 477 SERIES PORTABLE ELECTRIC WINCHES

## Model 4771



Install wire rope correctly as shown, or brake will not operate properly.

## Series 477 Configurations and Performance Characteristics

Model Number	Motor Description	Motor HP	Load Rating			Wire Rope Dia.	Line Speed		Drum Capacity <sup>1</sup>			Approx. Ship Weight
			1st Layer	Mid Drum	Full Drum		1st Layer	Full Drum	1st Layer	Mid Drum	Full Drum	
			(lb)	(lb)	(lb)	(in)	(fpm)	(fpm)	(ft)	(ft)	(ft)	(lb)
4771 <sup>2</sup>	115/1/60 VAC—6 ft pendant	1.3	2,000	1,500	1,200	5/16	13	22	13	40	90	88
4771AC-1PH	115/1/60 VAC—less controls	1.3	2,000	1,500	1,200	5/16	13	22	13	40	90	87
4771AC-1PH2 <sup>3</sup>	115/230/1/60 VAC—less controls	1.5	2,000	1,500	1,200	5/16	13	22	13	40	90	115
4771AC-3PH <sup>3</sup>	230/460/3/60 VAC—less controls	1.5	2,000	1,500	1,200	5/16	13	22	13	40	90	111
4771DC <sup>4</sup>	12 VDC—10 ft pendant	1.0	2,000	1,500	1,200	5/16	13	22	13	40	90	105
4771PN <sup>4,5</sup>	Pneumatic—less controls	1.2	2,000	1,500	1,200	5/16	13	22	13	40	90	70
4771HY <sup>4,5</sup>	Hydraulic—less controls	2.3	2,000	1,500	1,200	5/16	13	22	13	40	90	72
4777 <sup>2</sup>	115/1/60 VAC—6 ft pendant	1.3	2,000	1,500	1,200	5/16	13	22	7	27	60	93
4777DC <sup>4,6</sup>	12 VDC—10 ft pendant	1.0	2,000	1,500	1,200	5/16	13	22	7	27	60	105

Please contact Thern or nearest Thern Distributor for firm, fixed price and delivery.

<sup>1</sup> Actual drum capacities may be 25-30% less due to nonuniform winding. Tension in wire rope will also affect drum capacity.

<sup>2</sup> Motor includes an 8-ft power cord with grounded plug and a push button pendant control on 6-ft cord.

<sup>3</sup> For models 4771AC-1PH2 and 4771AC-3PH, please specify voltage when ordering.

<sup>4</sup> For pneumatic, hydraulic, and DC models, line speed is based on rated load. Actual line speed varies with load weight and power supply.

<sup>5</sup> For Model 4771PN, ratings are for 80 cfm at 100 psi. For Model 4771HY, ratings are for 4 gpm at 1000, psi.

<sup>6</sup> Controls are separate.

## Series 477 Controls

Model	Description	Approx. Ship Wt.	
		(lb)	(kg)
10L2A1 <sup>6</sup>	NEMA 1 control switch—mounted and wired	3	2
10L2A4 <sup>6</sup>	NEMA 4 watertight control switch—mounted and wired	7	4
A22787 <sup>7</sup>	Control assembly 477 PN pneumatic pendant	15	7
A23076 <sup>7</sup>	Control assembly 477 PN pneumatic pendant with E-Stop and F/R-L	43	20
477PN-CNTRL	Pneumatic control valve—not mounted or plumbed, no hoses	6	3
477PN-HS6	6-ft hoses for pneumatic controls—not plumbed	4	2
477HY-CNTRL	Hydraulic control valve—not mounted or plumbed, no hoses	5	3
477HY-HS6	6-ft hoses for hydraulic controls—not plumbed	4	2

Please contact Thern or nearest Thern Distributor for firm, fixed price and delivery.

<sup>6</sup> Controls for 115 volt, single phase, 60 cycle include an 8-ft power cord with grounded plug (drum control switches are not available for this model).

<sup>7</sup> Length of pendant to be specified at time of order. 30 ft maximum length.

## Series 477 Winch Dimensions

Model	A		B		C		H		K		L		P		Q		S (Hole Dia.)	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
4771	14.38	365.25	8.86	225.04	3.55	90.17	17.45	443.23	6.75	171.45	6.31	160.27	5.70	144.78	2.16	54.86	.34	8.63
4771AC-1PH	14.38	365.25	8.86	225.04	3.55	90.17	22.00	558.8	6.75	171.45	6.31	160.27	5.70	144.78	2.16	54.86	.34	8.63
4771AC-1PH2	14.38	365.25	8.86	225.04	3.55	90.17	21.00	533.4	6.75	171.45	6.31	160.27	5.70	144.78	2.16	54.86	.34	8.63
4771AC-3PH	14.38	365.25	8.86	225.04	3.55	90.17	19.00	482.6	6.75	171.45	6.31	160.27	5.70	144.78	2.16	54.86	.34	8.63
4771DC	14.38	365.25	8.86	225.04	3.55	90.17	18.69	474.72	6.75	171.45	6.31	160.27	5.70	144.78	2.16	54.86	.34	8.63
4771PN	14.38	365.25	8.86	225.04	3.55	90.17	14.94	379.47	6.75	171.45	6.31	160.27	5.70	144.78	2.16	54.86	.34	8.63
4771HY	14.38	365.25	8.86	225.04	3.55	90.17	11.84	300.73	6.75	171.45	6.31	160.27	5.70	144.78	2.16	54.86	.34	8.63
4777	14.38	365.25	8.86	225.04	3.49	90.17	17.45	443.23	6.75	171.45	6.31	160.27	5.70	144.78	2.16	54.86	.34	8.63
4777DC	14.38	365.25	8.86	225.04	3.49	90.17	18.69	474.72	6.75	171.45	6.31	160.27	5.70	144.78	2.16	54.86	.34	8.63

Dimensions are for reference only and subject to change without notice.

## Series 477 Drum Dimensions

Model	Drum Diameter		Flange Diameter		Drum Width		Fleet Angle <sup>1</sup> Distance	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(ft)	(m)
4771	3.00	76.2	6.00	152.4	6.00	152.4	10	3.04
4771AC-1PH	3.00	76.2	6.00	152.4	6.00	152.4	10	3.04
4771AC-1PH2	3.00	76.2	6.00	152.4	6.00	152.4	10	3.04
4771AC-3PH	3.00	76.2	6.00	152.4	6.00	152.4	10	3.04
4771DC	3.00	76.2	6.00	152.4	6.00	152.4	10	3.04
4771PN	3.00	76.2	6.00	152.4	6.00	152.4	10	3.04
4771HY	3.00	76.2	6.00	152.4	6.00	152.4	10	3.04
4777	3.00	76.2	6.00	152.4	4.00	101.6	7	2.13
4777DC	3.00	76.2	6.00	152.4	4.00	101.6	7	2.13

Dimensions are for reference only and subject to change without notice.

<sup>1</sup> Recommended minimum distance between drum and lead sheave for smooth drum.



**MADE IN USA** 

**Thern, Incorporated**

World Headquarters  
5712 Industrial Park Road Winona, MN USA  
Toll Free: 1-800-843-7648  
Phone: 1-507-454-2996  
[www.thern.com](http://www.thern.com)

**Thern Europe**

Bedrijvenpark Twente 454e  
7602 KM Almelo The Netherlands  
Phone: +31-546-898-380  
[europa@thern.com](mailto:europa@thern.com)