# Yale

Electric wire rope winch RPE



## Electric wire rope winch model RPE

#### **Features**

- Compact dimensions due to internal brake motor, Standard: Euro-voltage 230/400 V, 50 Hz., 3-phase, protected to IP 54, Insulation class F.
- Adjustable slip clutch to protect the winch from overloading (1000 kg capacity only).
- Spur gear transmission with helical first gear ensures smooth motion. Lubricated by grease and can, therefore, be used in any position.
- Spring pressure disc brake incorporated in the motor holds the load secure even in the event of a power failure.
- Plain rope drum standard.
- The rope is secured to the drum in a recess so that the rope can be wound onto the drum in several layers without damage.
- · Direct control as standard.



Rope attachment



Spring pressure disc brake



Gearbox with slip clutch (1000 kg capacity)



Brake motor

Special design according to BGV C1 for theater stage applications available.



#### **Technical Data**

| Model      | Pulling force<br>in<br>the upper layer | Lifting speed | Rope Ø | Motor<br>performance | ED at 120 c/h | Useable<br>rope length in<br>the upper layer | Weight<br>without rope |
|------------|--|---------------|--------|----------------------|---------------|--|------------------------|
|            | daN                                    | m/min         | mm     | kW                   | %             | in m   | kg                     |
| RPE 2-13   | 250                                    | 13,0          | 4      | 0,55                 | 40            | 54,5   | 31,8                   |
| RPE 5-6    | 500                                    | 6,5           | 6      | 0,55                 | 40            | 38,8   | 32,8                   |
| RPE 5-12   | 500                                    | 12,0          | 6      | 1,10                 | 40            | 55,4   | 41,0                   |
| RPE 9-6    | 990                                    | 6,0           | 8      | 1,10                 | 40            | 37,4   | 76,0                   |
| RPE 10-6** | 1000                                   | 6,0           | 8      | 1,10                 | ()) 40        | 37,4   | 76,9                   |

<sup>\*\*</sup>with slip clutch

### Optional

- Different drum designs, e.g. extended to accommodate longer rope, machined grooves for exact reeling, with separation web and 2<sup>nd</sup> rope outlet for working with two ropes, traversing operation.
- Gearbox end switches to limit rope motion in both directions
- Single-phase A.C. motor 230 V, 50 Hz, for mobile application of the winch.
- Control by means of pendant control including control switch with emergency stop and 2 m long control cable.
- Contactor control with 42 V control voltage when using end or slack rope switches.
- Slack rope switch to automatically stop the wirch when rope tension eases e.g. when the load touches down.
- Frequency converter for stepless speed control.



Different drum designs



Single-phase A.C. motor



Geared limit switches

| Pulling force<br>in all layers<br>daN                          | Lifting speed<br>upper layer<br>m/min.                   | Drum size                                      | Max rope length<br>upper layer<br>m                   |
|--|--|--|---|
| 250  | 13,0   | 2  | 80  |
| 500  | 6,5  | 2  | 58  |
| 990/1000   | 6,0  | 2  | 56  |
| 250  | 13,0   | 3  | 200   |
| 500  | 6,5  | 3  | 140   |
| 500  | 12,0   | 3  | 140   |
| 990/1000   | 6,0  | 3  | 100   |
|  | (larger drum diame                                       | eter)  | 1st lavas /   |
|  | (larger drum diamo<br>ayer operation                     | eter)  | 1 <sup>st</sup> layer/m                               |
|  | -  | <b>eter)</b>                                   | 1 <sup>st</sup> layer/m<br>8,6                        |
| nly for single l   | ayer operation   |  |   |
| nly for single I   | ayer operation   | 1  | 8,6   |
| nly for single I<br>250<br>500                                 | 13,0<br>6,5  | 1 1  | 8,6<br>5,8  |
| 250<br>500<br>990/1000   | 13,0<br>6,5<br>6,0                                       | 1<br>1<br>1                                    | 8,6<br>5,8<br>6,8                                     |
| 250<br>500<br>990/1000<br>250                                  | 13,0<br>6,5<br>6,0<br>13,0                               | 1<br>1<br>1<br>2                               | 8,6<br>5,8<br>6,8<br>15                               |
| 250<br>500<br>990/1000<br>250<br>500                           | 13,0<br>6,5<br>6,0<br>13,0<br>6,5                        | 1<br>1<br>1<br>2<br>2                          | 8,6<br>5,8<br>6,8<br>15<br>10,7                       |
| 250<br>500<br>990/1000<br>250<br>500<br>500                    | 13,0<br>6,5<br>6,0<br>13,0<br>6,5<br>12,0                | 1<br>1<br>1<br>2<br>2<br>2                     | 8,6<br>5,8<br>6,8<br>15<br>10,7<br>10,7               |
| 250<br>500<br>990/1000<br>250<br>500<br>500<br>990/1000        | 13,0<br>6,5<br>6,0<br>13,0<br>6,5<br>12,0<br>6,0         | 1<br>1<br>1<br>2<br>2<br>2<br>2<br>2           | 8,6<br>5,8<br>6,8<br>15<br>10,7<br>10,7<br>12,7       |
| 250<br>500<br>990/1000<br>250<br>500<br>500<br>990/1000<br>250 | 13,0<br>6,5<br>6,0<br>13,0<br>6,5<br>12,0<br>6,0<br>13,0 | 1<br>1<br>1<br>2<br>2<br>2<br>2<br>2<br>2<br>2 | 8,6<br>5,8<br>6,8<br>15<br>10,7<br>10,7<br>12,7<br>44 |