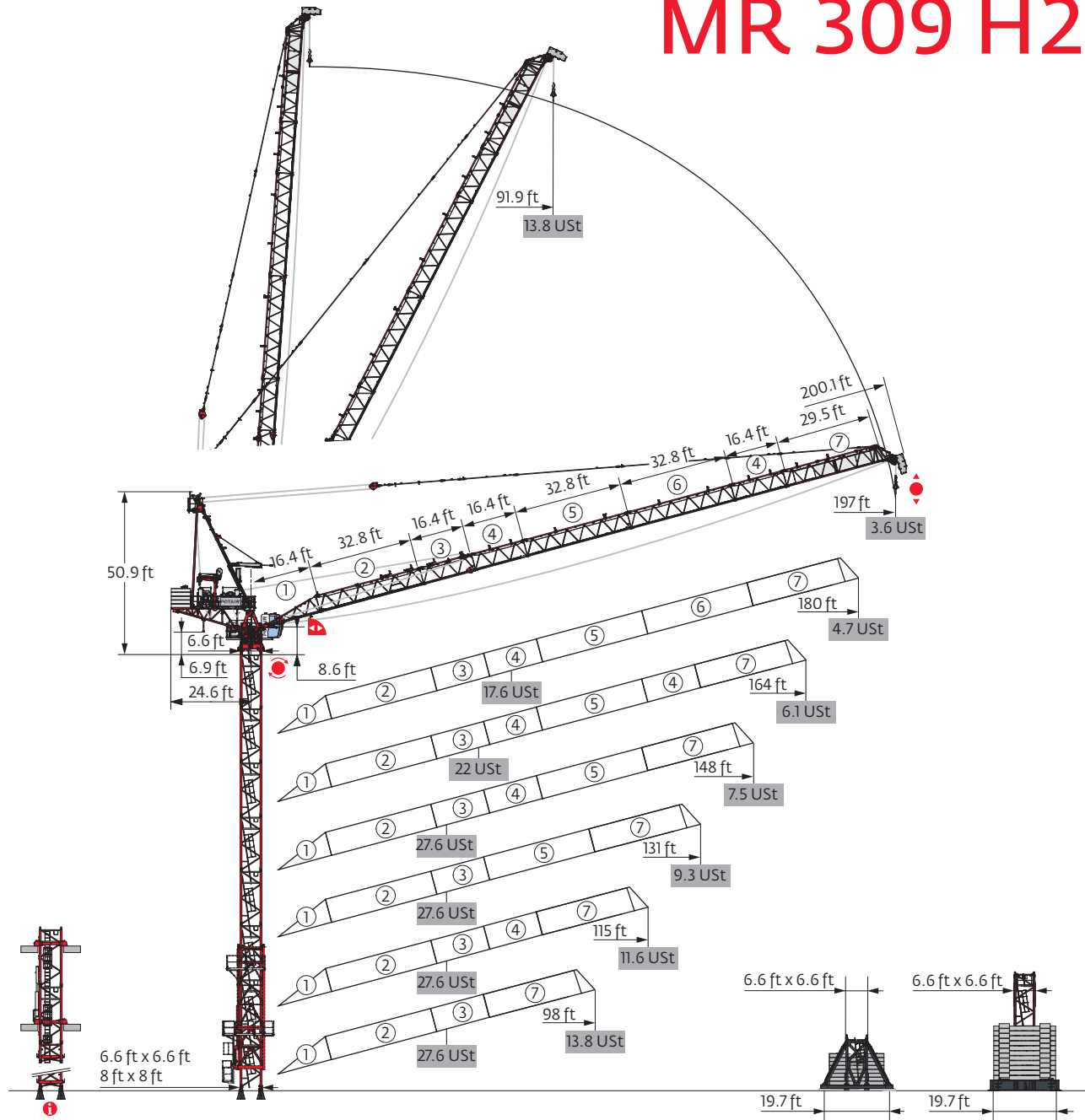


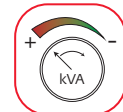
## MR 309 H25



Potain Plus



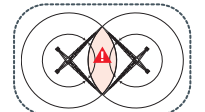
Power Control



POTAIN CONNECT



Top Tracing 3



Mast - Reactions

**6.6 ft - P 63A**

▲▼▲ (ft)	98	115	131	148	164	180	197
↑ (ft)	177.8	177.8	183.4	177.8	172.2	167	161.4
↑/P+ (ft)	177.8	177.8	177.8	172.2	167	167	161.4
	10.9 ft	2	2	1	2	0	1
	16.4 ft	7	7	8	7	8	7
	32.8 ft	1	1	1	1	1	1
F2 (Ust)	● 238	240	246	250	245	243	244
	■ 279	296	329	332	334	337	338
F3 (Ust)	● 175	177	182	174	172	180	182
	■ 218	235	266	270	271	275	277

**6.6 ft - V 60A -**

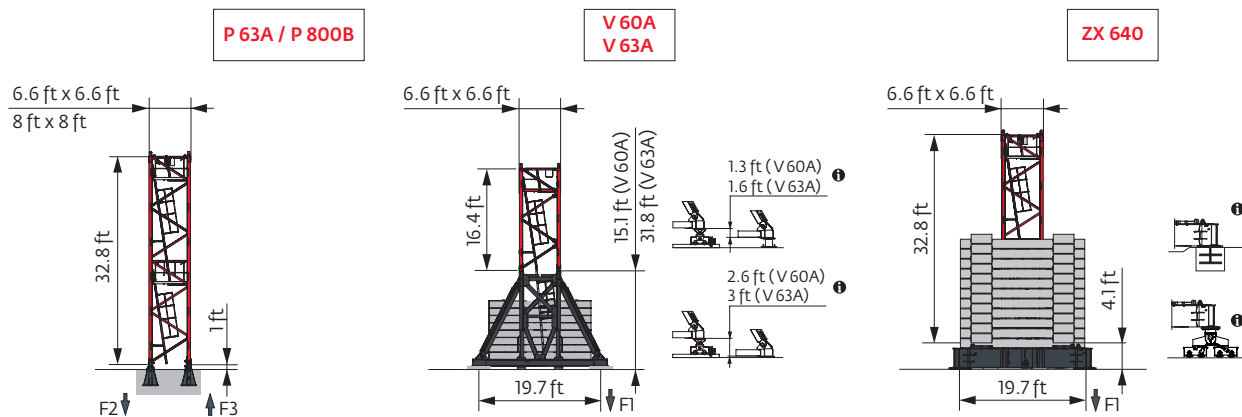
▲▼▲ (ft)	98	115	131	148	164	180	197
↑ (ft)	170	170	164.7	159.1	153.5	142.7	131.9
↑/P+ (ft)	170	170	164.7	159.1	153.5	142.7	131.9
	10.9 ft	0	0	1	2	0	2
	16.4 ft	9	9	8	7	8	6
F1 (Ust)	● 132	134	135	137	134	130	128
	■ 130	135	135	136	137	133	128

**6.6 ft - V 63A -**

▲▼▲ (ft)	98	115	131	148	164	180	197
↑ (ft)	170.3	170.3	170.3	170.3	164.7	164.7	159.1
↑/P+ (ft)	170.3	170.3	170.3	164.7	159.1	159.1	159.1
	10.9 ft	0	0	0	1	1	2
	16.4 ft	8	8	8	8	7	6
F1 (Ust)	● 132	138	140	144	141	143	145
	■ 132	140	145	155	157	168	169

**6.6 ft - ZX 640 -**

▲▼▲ (ft)	98	115	131	148	164	180	197
↑ (ft)	181.1	181.1	181.1	175.5	175.5	170	164.7
↑/P+ (ft)	181.1	181.1	181.1	175.5	170	170	164.7
	10.9 ft	2	2	2	0	0	1
	16.4 ft	7	7	7	8	8	7
	32.8 ft	1	1	1	1	1	1
F1 (Ust)	● 135	141	143	145	147	147	145
	■ 140	149	159	160	170	173	173



When "ASCE" is noted in this data sheet it is referring to 115 mph Wind Zone, Exposure B, Design Wind Speed = 98 mph. See back cover for design wind speed calculations.

**i** Other mast compositions - Please consult us.




Motorized accesses: adapted mast composition, base ballast and reactions.

8 ft - P 800B							
Span (ft)	98	115	131	148	164	180	197
$r_1$ (ft)	228	228	222.8	217.2	211.6	206.4	200.8
$r_2/P_2$ (ft)	228	228	222.8	217.2	211.6	206.4	200.8
10.9 ft	0	0	1	2	0	1	2
16.4 ft	7	6	5	3	6	5	3
6.6 ft	1	1	1	1	1	1	1
16.4 ft	6	7	7	8	6	6	7
F2 (Ust)	● 230	233	235	240	234	229	230
	■ 361	381	383	390	384	386	390
F3 (Ust)	● 157	159	149	155	151	157	159
	■ 290	309	311	318	312	315	320


Anchorage






Base ballast

 (USt) /  6.6 ft - V 60A - 

Δ (ft)	98	115	131	148	164	180	197
170	145.5	145.5					
164.7	145.5	145.5	145.5				
159.1	132.3	145.5	145.5	145.5			
153.5	132.3	132.3	145.5	145.5	145.5		
142.7	119.1	132.3	132.3	132.3	145.5	145.5	
131.9	119.1	119.1	119.1	132.3	132.3	132.3	145.5
115.5	105.8	105.8	105.8	119.1	119.1	119.1	132.3
99.1	92.6	92.6	92.6	105.8	105.8	105.8	119.1
82.7	79.4	79.4	79.4	92.6	92.6	92.6	105.8

 (USt) /  6.6 ft - V 63A - 

Δ (ft)	98	115	131	148	164	180	197
170.3	145.5	158.7	158.7	158.7			
164.7	145.5	145.5	158.7	158.7	158.7	172	
159.1	145.5	145.5	145.5	158.7	158.7	172	185.2
142.7	132.3	132.3	132.3	145.5	145.5	145.5	158.7
126.3	119.1	119.1	119.1	119.1	132.3	132.3	145.5
109.9	105.8	105.8	105.8	105.8	119.1	119.1	132.3
93.5	92.6	92.6	92.6	92.6	105.8	105.8	119.1
77.1	79.4	79.4	79.4	92.6	92.6	92.6	105.8

 (USt) /  6.6 ft - ZX 640 - 

Δ (ft)	98	115	131	148	164	180	197
181.1	143.3	154.3	154.3				
175.5	143.3	143.3	154.3	154.3	165.4		
170	132.3	143.3	143.3	154.3	154.3	176.4	
164.7	132.3	132.3	143.3	143.3	154.3	165.4	176.4
148.3	121.3	121.3	132.3	132.3	143.3	143.3	154.3
131.9	110.2	110.2	110.2	121.3	121.3	132.3	143.3
115.5	88.2	99.2	99.2	99.2	110.2	110.2	121.3
99.1	77.2	88.2	88.2	88.2	99.2	99.2	110.2
82.7	66.1	77.2	77.2	77.2	88.2	88.2	99.2

Load curves



Δ (ft)	49	56	66	72	82	89	98	101.7	105	115	117.6	121	131	133.4	138	148	149.3	154	164	165.1	171	180	181	ft			
180	15.7 → 72.2	87.3 - 89.8	17.6	17.6	17.6	17.6	15	13.8	12.1	-	11.1	9.6	-	8.8	7.7	-	7.1	6.2	-	5.7	4.9	-	4.5	3.9	3.9	USt	
164	15.1 → 62.3	90.4 - 92.8	22	22	20.8	18.5	15.7	14.2	12.7	-	11.6	10.1	-	9.3	8.1	-	7.5	6.6	-	6	5.3	5.2	USt			USt P+	
148	14.4 → 52.5	91.9 - 94.4	27.6	25.8	21.3	19	16.1	14.5	13	-	11.9	10.4	-	9.5	8.4	-	7.7	6.8	6.6	USt						USt P+	
131	13.5 → 52.5	92.8 - 95.4	27.6	25.8	21.4	19.1	16.2	14.7	13.2	-	12.1	10.6	-	9.8	8.6	8.4	USt									USt P+	
115	12.1 → 52.5	95 - 97.7	27.6	25.9	21.6	19.4	16.6	15.1	13.7	-	12.5	11.1	10.7	USt													
98	10.2 → 52.5	97.4 - 100.3	27.6	25.9	21.9	19.7	17	15.5	13.8	13.5	USt																











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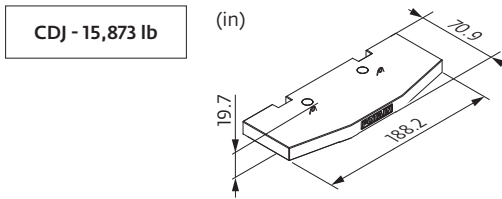


Δ (ft)	49	56	66	72	82	89	98	101.7	105	115	117.6	121	131	133.4	138	148	149.3	154	164	165.1	171	180	181	197	ft		
197	15.4 → 91.9	13.8	13.8	13.8	13.8	13.8	13.8	12.5	-	11.4	10	-	9.2	8	-	7.4	6.5	-	6	5.2	-	4.8	4.2	-	3.3	USt	
180	15.4 → 91.9	13.8	13.8	13.8	13.8	13.8	13.8	12.5	-	11.5	10.1	-	9.3	8.2	-	7.6	6.7	-	6.2	5.5	-	5.1	4.5	-	3.6	USt P+	
164	15.1 → 91.9	13.8	13.8	13.8	13.8	13.8	13.8	12.6	-	11.6	10.3	-	9.5	8.5	-	7.9	7	-	6.5	5.8	5.7	USt					
148	14.4 → 93.5	13.8	13.8	13.8	13.8	13.8	13.8	12.9	-	11.9	10.6	-	9.8	8.8	-	8.1	7.3	7.2	USt								
131	13.5 → 95.1	13.8	13.8	13.8	13.8	13.8	13.8	13.2	-	12.3	10.9	-	10.2	9.1	8.9	USt											
115	12.1 → 96.8	13.8	13.8	13.8	13.8	13.8	13.8	13.6	-	12.7	11.5	11.2	USt														
98	10.2 → 101.7	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	USt														

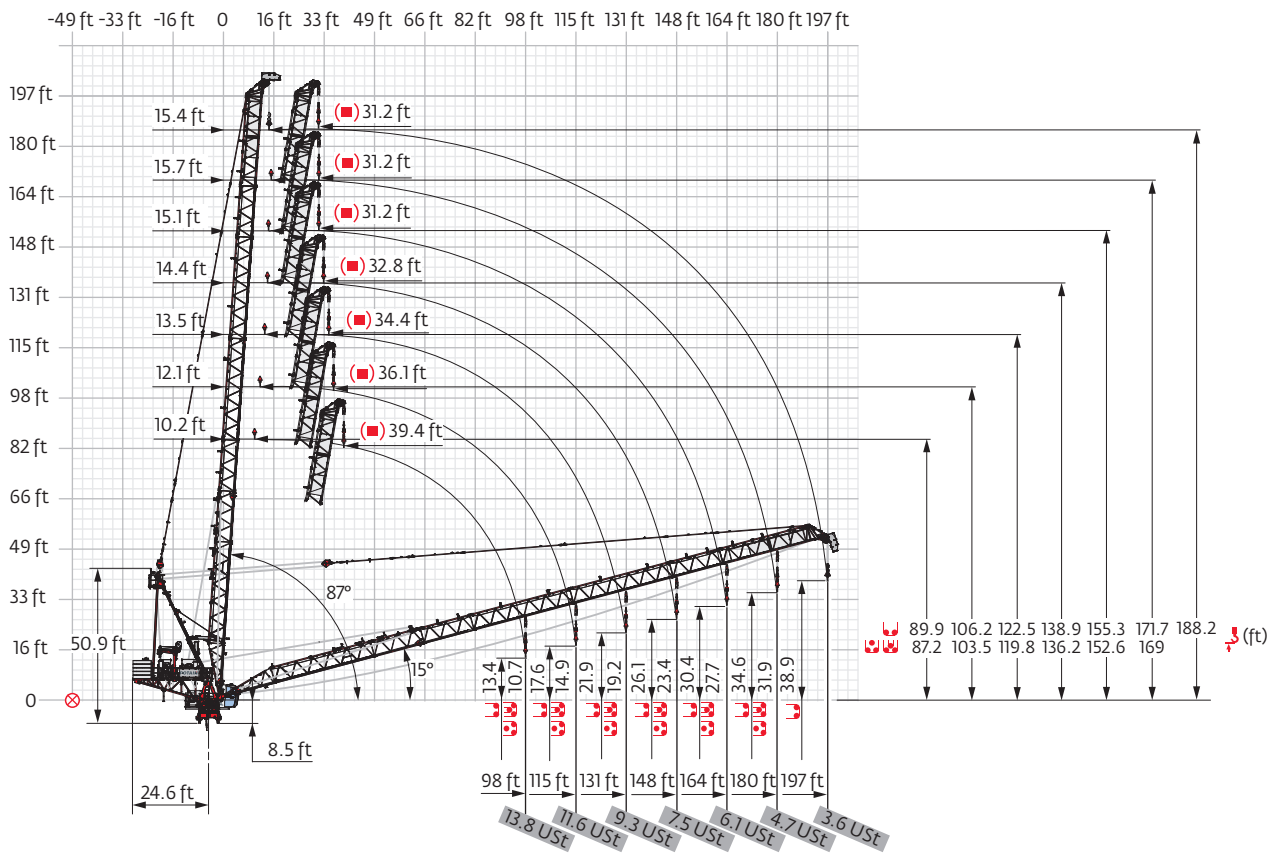


Jib weight & counter-jib ballast

	 (lb) (+/- 5%)			 (lb)
				
			15,873 lb	 (lb)
197 ft	24,251 (  )	14,771 / 9,480 (  )	5	79,366
180 ft	24,251	14,771 / 9,480	5	79,366
164 ft	22,928	14,771 / 8,157	5	79,366
148 ft	21,385	14,771 / 6,614	5	79,366
131 ft	19,180	9,700 / 9,480	5	79,366
115 ft	17,857	9,700 / 8,157	5	79,366
98 ft	16,314	9,700 / 6,614	5	79,366



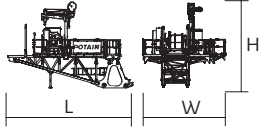
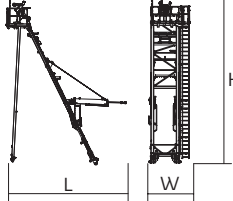
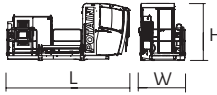
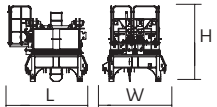
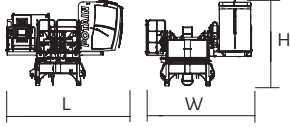

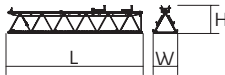


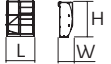
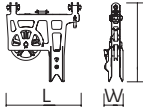
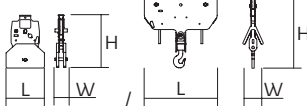
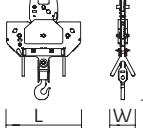
Luffing jib

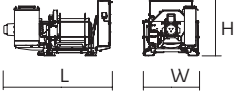



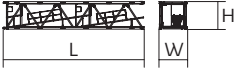


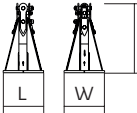
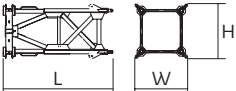
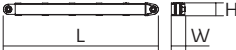
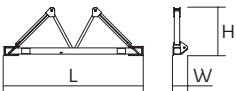




Dimensions and weight

Slewing crane part:  197 ft - L - 132 HPL™



Slewing crane part		L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Counter-jib	 100 VVF	28.3	16.5	19.3	24,482
Strut		23.6	9	37.8	14,440
Cab	 Ultra View	17.1	6.4	8.2	4,079
Towerhead	 6.6 ft	10.2	8.1	9.7	20,944
		17.1	15.7	12.5	25,023
Jib section	 ①	19.3	7.2	6.1	3,086
	 ② ⑤ ⑥ ⑦	33.4	6.2	6.9	3,086
		33.4	6	6.6	2,866
		33.4	6	6.6	2,756
		31	6	6.6	3,086
	 ③ ④	17	6	6.9	2,116
17		6	6.6	1,521	
 ④	5.9	5.1	7.4	959	
Jib nose inspection platform		4.7	2.5	6	187
Pulley block		4.1	1	4.4	342
		2.8	0.9	3.8	1,025
		5.3	1.8	5.6	1,135
	5.3	1.8	7.8	2,160	

Hoisting winch (+ rope)		132 HPL™ 180 HPL™ GH	11.6 15	6.1 6.3	6.2 6.5	11,100 19,103
Luffing winch (+ rope)		100 VVF	10.6	5.5	5.9	7,948
<b>Crane tower</b>			<b>L (ft)</b>	<b>W (ft)</b>	<b>H (ft)</b>	<b>lb (+/- 5%)</b>
T 61 T 851		□ 6.6 ft □ 8 ft	35.5 36.7	13.6 15.9	14.7 19	21,385 34,723
K80/KR60-2 Connecting mast		□ 8/6.6 ft	7.3	10.7	8.1	8,852
K 649B KM 649E KRM 6410B KRM 849B		□ 6.6 ft □ 6.6 ft □ 6.6 ft □ 8 ft	33.6 33.8 33.6 33.6	6.8 6.7 6.9 8.4	6.7 6.7 6.8 8.3	11,663 10,692 15,653 17,196
K 649A KMT 649A KR 649A KRMT 649A K 849A KMT 849A KR 849A KRMT 849A		□ 6.6 ft □ 6.6 ft □ 6.6 ft □ 6.6 ft □ 8 ft □ 8 ft □ 8 ft □ 8 ft	17.2 17.2 17.2 17.2 17.2 17.2 17.2 17.2	6.8 6.8 6.9 6.9 8.3 8.4 8.3 8.4	6.7 6.7 6.8 6.8 8.2 8.3 8.2 8.3	6,184 5,666 7,165 6,724 7,496 6,945 9,458 9,017
K 649C KMT 649C KRMT 649C KRMT 849C		□ 6.6 ft □ 6.6 ft □ 6.6 ft □ 8 ft	11.7 11.7 11.7 11.7	6.8 6.8 6.9 8.4	6.7 6.7 6.8 8.3	4,376 4,542 5,401 7,066
Fixing angles		P 63A / P 800B	2.5	2.5	4.2	1,025
Basic mast unit		V 60A V 63A	16.4 32.9	7.9 7.9	7.9 7.9	10,494 16,887
Struts		V 60A V 63A	14.8 14.8	1 1.1	1 1.1	1,036 1,235
Half-bearer		V 60A V 63A	22 22	2.3 2.3	7.6 7.6	4,057 4,101
1/2 Cross girder		ZX 640	14.3	3.3	5.1	7,319
Cross girder		ZX 640	30	3.9	5.1	15,168

Mechanisms

480 V - 60 Hz													hp	kW	
	132 HPL™ 63	fpm	133	172	243	363	502	67	87	125	185	251	132	98	2,815 ft
		USt	13.8	10.4	6.9	3.4	1.1	27.6	20.7	13.8	6.9	2.9			
	180 HPL™ 63 GH	fpm	179	220	289	438	640	90	112	149	238	320	180	132	3,937 ft
		USt	13.8	10.4	6.9	3.4	0.9	27.6	20.7	13.8	6.9	3.3			
	100 VVF 50		2 min									100	75		
	RVF 172 Optima+	rpm	0 → 0.8									2 x 10	2 x 7.5		

IEC 60204-32		
480 V (+6% -10%) 60 Hz	132 HPL™ + 100 VVF: 205 → 112 kVA	
	180 HPL™ + 100 VVF: 243 → 131 kVA	

These mast combinations meet the EN 14439 and ASME B30.3-2016 specifications for “out of service” wind conditions, provided the illustrated wind speed matches required design wind speed for the location of the tower crane. The “out of service” design wind speed was determined in accordance with ASCE 7-10, Figure 26.5-1A. The wind velocity, used for this configuration was 98 mph (158 kph), which represents a nominal design 3-second wind gust at 33 ft (10 m) above ground for Exposure B category. A factor of 0.85 was applied to the 700-year ultimate design wind speed of 115 mph (185 kph), per ASCE 37-02, with the assumption that this crane is considered a temporary structure used during a construction period of 2 years or less.

- Standard equipment
- Options
- Potain Plus function: Plus load curves
- Hook heights with Plus load curves
- Reactions in service
- Reactions out of service
- Jib weight
- Total ballast weight
- Jib articulation axis
- Weather vaning position
- Lorry 44 ft
- Container High Cube 40 ft, and/or Flat Rack 20 ft
- Hoisting
- Luffing
- Slewing
- Travelling
- Required power
- Power Control Function: winch speeds adapted to the available power
- Consult us

This commercial document is not legally binding. For any technical information, please refer to the corresponding instructions.

