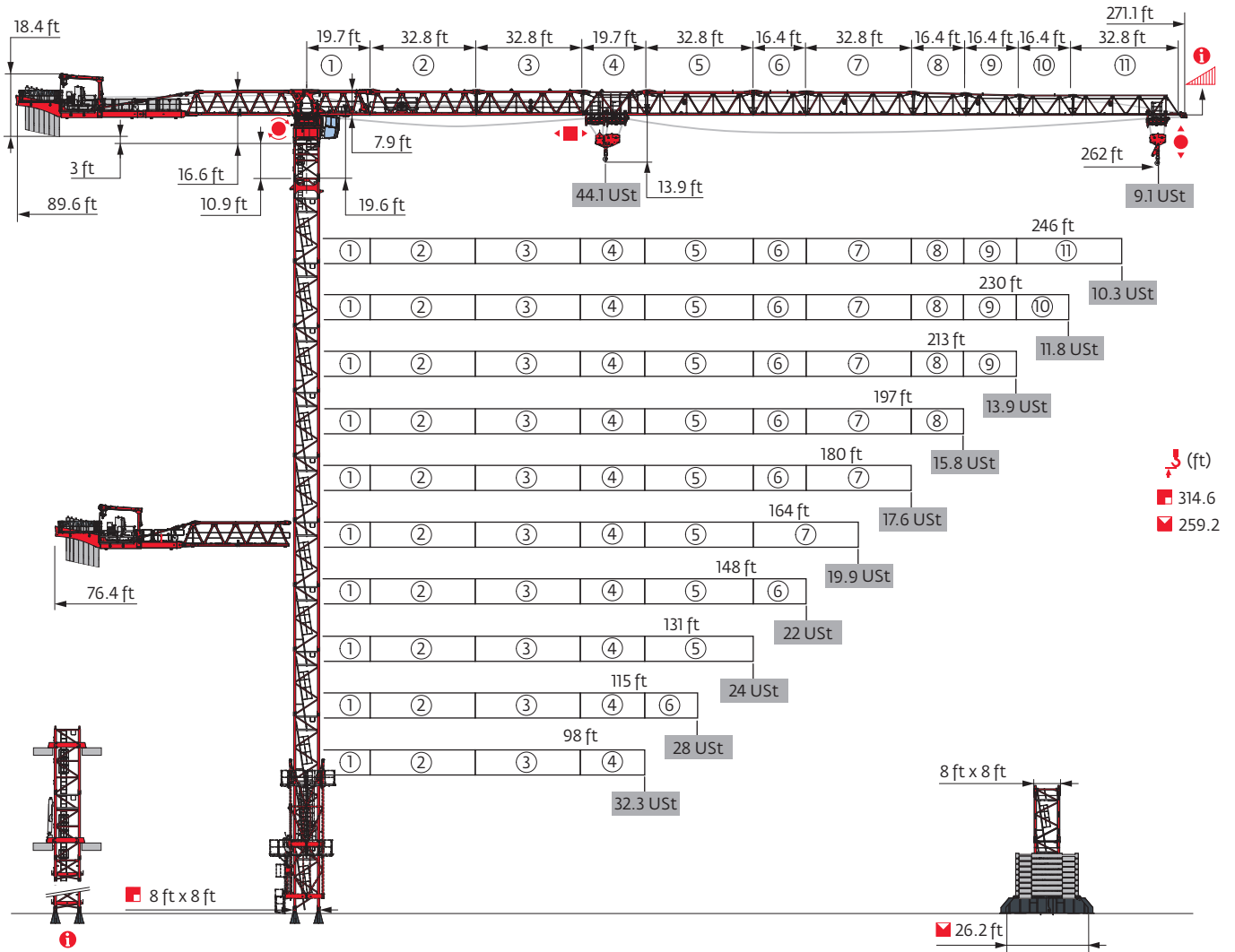


## MDT 809 M40



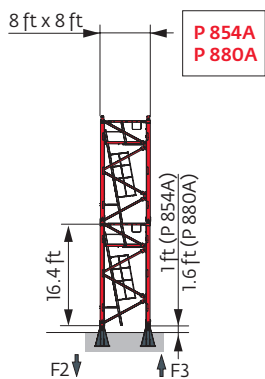
Potain Plus Power Control Top Site Top Tracing 3

**P+**
kVA
**POTAIN CONNECT**
Top Site
Top Tracing 3

Mast - Reactions

8 ft - P 854A											
Height (ft)	98	115	131	148	164	180	197	213	230	246	262
↓ (ft)	259.2	264.8	259.2	259.2	264.8	270.3	264.8	264.8	259.2	259.2	253.9
↓/P <sub>r</sub> (ft)	242.8	248.4	242.8	242.8	242.8	242.8	237.5	242.8	242.8	259.2	253.9
10.9 ft	1	1	1	1	1	1	1	1	1	1	1
6.2 ft	1	1	1	1	1	1	1	1	1	1	1
10.9 ft	0	2	0	0	2	1	2	2	0	0	1
16.4 ft	15	14	15	15	14	15	14	14	15	15	14
F2 (Ust)	● 414 ■ 496	415 518	418 496	412 503	420 532	417 553	419 540	413 547	406 531	418 533	414 523
F3 (Ust)	● 275 ■ 379	271 395	271 370	262 375	266 399	262 420	264 406	257 412	251 398	260 396	256 386

8 ft - P 880A											
Height (ft)	98	115	131	148	164	180	197	213	230	246	262
↓ (ft)	309.1	314.6	303.8	309.1	309.1	314.6	309.1	309.1	309.1	309.1	303.8
↓/P <sub>r</sub> (ft)	292.7	292.7	292.7	292.7	287.4	292.7	276.3	292.7	292.7	309.1	303.8
10.9 ft	1	1	1	1	1	1	1	1	1	1	1
6.2 ft	1	1	1	1	1	1	1	1	1	1	1
10.9 ft	0	2	1	0	0	2	0	0	0	0	1
16.4 ft	18	17	17	18	18	17	18	18	18	18	17
F2 (Ust)	● 505 ■ 789	507 859	501 761	499 784	499 783	492 849	498 795	482 773	490 807	509 829	506 805
F3 (Ust)	● 333 ■ 639	330 704	324 606	319 626	317 623	311 690	314 633	302 614	306 645	318 661	318 638



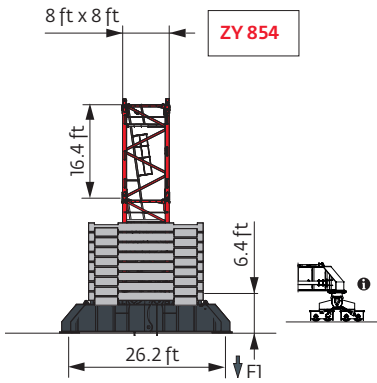
Note: When "ASCE" is noted in this data sheet it is referring to 115 mph Wind Zone, Exposure B, Design Wind Speed = 98 mph. See back cover for design wind speed calculations.

**i** Motorized accesses: adapted mast compositions, base ballast and reactions.

Other mast compositions - Please consult us

**8 ft - ZY 854 -**

WxH (ft)	98	115	131	148	164	180	197	213	230	246	262	
$\bar{r}$ (ft)	242.8	259.2	237.2	259.2	253.6	253.6	242.8	248.4	248.4	248.4	242.8	
$\bar{r}/P_r$ (ft)	210	204.4	193.6	188	177.2	199.2	177.2	199.2	193.6	226.4	226.4	
	10.9 ft	1	1	1	1	1	1	1	1	1	1	
	6.2 ft	1	1	1	1	1	1	1	1	1	1	
	10.9 ft	1	1	2	1	2	2	1	0	0	0	1
	16.4 ft	13	14	12	14	13	13	13	14	14	14	13
FI (Ust)	● 230	242	229	247	242	240	237	243	244	240	243	
	■ 201	234	194	243	231	233	215	227	237	237	236	



Anchorage

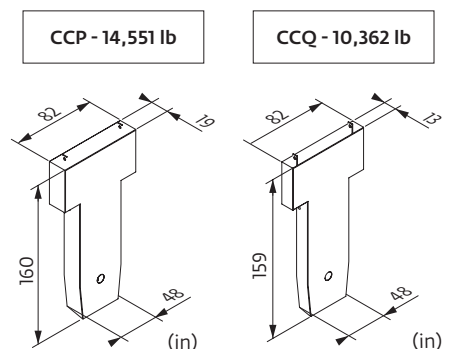


Base ballast

(Ust) / 8 ft - ZY 854 -											
(ft)	98	115	131	148	164	180	197	213	230	246	262
259.2		145.5		145.5							
253.6		145.5		132.3	132.3	158.7					
248.4		145.5		132.3	132.3	158.7		172	172	172	
242.8	145.5	145.5		132.3	132.3	158.7	158.7	172	172	172	185.2
237.2	145.5	145.5	132.3	132.3	119.1	158.7	158.7	158.7	172	172	172
220.8	132.3	119.1	119.1	105.8	105.8	145.5	158.7	158.7	158.7	172	172
204.4	132.3	119.1	105.8	92.6	92.6	145.5	145.5	158.7	158.7	158.7	172
188	105.8	105.8	105.8	105.8	92.6	145.5	145.5	145.5	145.5	158.7	172
171.6	92.6	92.6	92.6	92.6	92.6	132.3	145.5	145.5	145.5	145.5	172
155.2	92.6	92.6	79.4	92.6	92.6	132.3	132.3	132.3	145.5	145.5	172
138.8	92.6	92.6	79.4	92.6	92.6	119.1	132.3	132.3	132.3	145.5	172
122.4	92.6	92.6	79.4	92.6	92.6	119.1	119.1	132.3	132.3	145.5	172
106	92.6	92.6	79.4	92.6	92.6	119.1	119.1	119.1	132.3	145.5	172
89.6	92.6	92.6	79.4	92.6	92.6	105.8	119.1	119.1	132.3	145.5	172
73.2	92.6	92.6	79.4	92.6	92.6	105.8	105.8	105.8	132.3	145.5	172
56.8	92.6	92.6	79.4	92.6	92.6	105.8	105.8	105.8	132.3	145.5	172






Counter-jib ballast

	180 HPL™	320 LVF			320 LVF GH		
		14,551 lb	10,362 lb	(lb)	14,551 lb	10,362 lb	(lb)
262 ft		6	1	97,665	5	2	93,476
246 ft		5	2	93,476	4	3	89,287
230 ft		4	3	89,287	6	0	87,303
213 ft		4	3	89,287	5	1	83,114
197 ft		5	1	83,114	4	2	78,925
180 ft		4	2	78,925	5	0	72,753
164 ft		5	2	93,476	4	3	89,287
148 ft		6	0	87,303	5	1	83,114
131 ft		4	2	78,925	3	3	74,737
115 ft		4	1	68,564	3	2	64,375
98 ft		4	0	58,202	3	1	54,013








Load curves



 (ft)		56	66	82	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	220	230	236	246	253	262	ft	
 44.1 USt  22 USt																											
	262	13.8 → 61	108.8 - 117.5	44.1	40.5	31.1	24.9	23	22	21.2	19.4	18.3	16.9	16.1	14.9	14.2	13.3	12.7	11.9	11.5	10.8	10.4	9.8	9.5	9	8.7	8.3
262	13.8 → 65.3	116.8 - 126.2	44.1	43.9	33.8	27.2	25.1	22.5	22	21.1	19.9	18.4	17.5	16.2	15.5	14.5	13.9	13.1	12.5	11.8	11.4	10.8	10.4	9.9	9.6	9.1	USt P+
	246	13.8 → 62.3	111.7 - 120.4	44.1	41.6	32	25.7	23.8	22	21.8	20	18.9	17.4	16.6	15.4	14.7	13.7	13.2	12.4	11.9	11.2	10.8	10.2	9.9	9.4	USt	
246	13.8 → 66.9	120.3 - 129.7	44.1	44.1	34.9	28.1	26	23.4	22	21.7	20.6	19	18.1	16.8	16.1	15	14.4	13.5	13	12.3	11.9	11.2	10.8	10.3	USt P+		
	230	13.8 → 64.6	116.1 - 124.7	44.1	43.3	33.4	26.9	24.9	22.3	22	20.8	19.7	18.2	17.3	16.1	15.4	14.4	13.8	13	12.5	11.8	11.3	10.7	USt			
230	13.8 → 69.6	125.4 - 134.7	44.1	44.1	36.5	29.5	27.3	24.5	22.9	22	21.5	19.9	18.9	17.6	16.8	15.8	15.1	14.2	13.7	12.9	12.5	11.8	USt P+				
	213	13.8 → 68.6	123.4 - 132.5	44.1	44.1	35.8	28.9	26.8	24.1	22.5	22	21.1	19.5	18.6	17.3	16.5	15.5	14.8	13.9	13.4	12.7	USt					
213	13.8 → 74.1	133.3 - 143.5	44.1	44.1	39.2	31.7	29.4	26.4	24.7	22.5	22	21.3	20.3	18.9	18.1	17	16.3	15.3	14.7	13.9	USt P+						
	197	13.8 → 69.9	126.2 - 135.6	44.1	44.1	36.7	29.7	27.5	24.7	23.1	22	21.6	20	19	17.7	16.9	15.9	15.2	14.3	USt							
197	13.8 → 75.8	136.3 - 147	44.1	44.1	40.3	32.6	30.2	27.2	25.4	23.1	22	21.9	20.9	19.5	18.6	17.4	16.7	15.8	USt P+								
	180	13.8 → 70.5	126.9 - 136.4	44.1	44.1	37	29.9	27.7	24.9	23.3	22	21.8	20.1	19.2	17.9	17.1	16	USt									
180	13.8 → 76.4	137.1 - 148	44.1	44.1	40.6	32.9	30.5	27.4	25.6	23.3	22	22	21	19.6	18.8	17.6	USt P+										
	164	13.8 → 71.5	129 - 138.6	44.1	44.1	37.7	30.5	28.2	25.4	23.7	22	22	20.5	19.5	18.2	USt											
164	13.8 → 76.1	139.1 - 149.7	44.1	44.1	40.5	33	30.6	27.6	25.9	23.6	22.3	22	21.3	19.9	USt P+												
	148	13.8 → 71.2	128.3 - 137.8	44.1	44.1	37.4	30.3	28.1	25.2	23.6	22	22	20.4	USt													
148	13.8 → 75.1	137.2 - 147.6	44.1	44.1	39.9	32.5	30.2	27.2	25.5	23.2	22	22	USt P+														
	131	13.8 → 73.8		44.1	44.1	39.1	31.7	29.4	26.4	24.7	22.5	USt															
131	13.8 → 76.1		44.1	44.1	40.7	33.2	30.9	27.9	26.2	24	USt P+																
	115	13.8 → 72.8		44.1	44.1	38.4	31.1	28.8	25.9	USt																	
115	13.8 → 76.4		44.1	44.1	40.8	33.3	31	28	USt P+																		
	98	13.8 → 72.2		44.1	44.1	38.2	30.9	USt																			
98	13.8 → 75.1		44.1	44.1	39.9	32.3	USt P+																				

$$\text{Diagram} = \text{Diagram} - 2.24 \text{ USt max.}$$




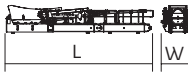
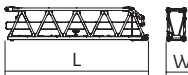


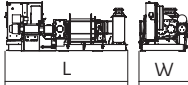

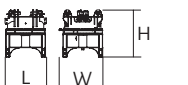







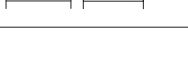
 (m)		56	66	82	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	220	230	236	246	253	262	ft	
 44.1 USt  22 USt																											
	262	11.2 → 60.7	107.8 - 110.1	44.1	40.2	30.9	24.7	22.8	20.9	19.5	17.7	16.6	15.2	14.3	13.2	12.5	11.6	11	10.2	9.8	9.1	8.7	8.1	7.8	7.3	7	6.6
262	11.2 → 65.1	115.8 - 118.2	44.1	43.7	33.6	27	24.9	22.3	21.4	19.4	18.2	16.7	15.8	14.5	13.8	12.8	12.2	11.3	10.8	10.1	9.7	9.1	8.7	8.2	7.8	7.4	USt P+
	246	11.2 → 62.1	110.8 - 113.1	44.1	41.3	31.8	25.5	23.6	21.6	20.2	18.3	17.2	15.8	14.9	13.8	13.1	12.1	11.5	10.7	10.3	9.6	9.2	8.6	8.2	7.7	USt	
246	11.2 → 66.8	119.3 - 121.8	44.1	44.1	34.7	27.9	25.8	23.1	22	20.1	18.9	17.4	16.4	15.2	14.4	13.4	12.8	11.9	11.4	10.7	10.2	9.6	9.2	8.7	USt P+		
	230	11.2 → 64	114.2 - 116.6	44.1	42.8	33	26.5	24.5	22	21	19.1	17.9	16.4	15.5	14.3	13.6	12.6	12	11.2	10.7	10	9.6	9	USt			
230	11.2 → 69	123.4 - 126	44.1	44.1	36	29	26.9	24.1	22.5	21	19.7	18.1	17.2	15.9	15.1	14	13.4	12.5	11.9	11.2	10.7	10.1	USt P+				
	213	11.2 → 68.2	122.4 - 125	44.1	44.1	35.6	28.7	26.6	23.8	22.3	20.8	19.6	18	17	15.8	15	13.9	13.3	12.4	11.9	11.2	USt					
213	11.2 → 73.7	132.2 - 135.2	44.1	44.1	39	31.5	29.2	26.2	24.5	22.3	21.6	19.8	18.8	17.4	16.6	15.4	14.7	13.8	13.2	12.4	USt P+						
	197	11.2 → 69.7	125.2 - 128	44.1	44.1	36.5	29.5	27.3	24.5	22.9	21.4	20.1	18.5	17.5	16.2	15.4	14.4	13.7	12.8	USt							
197	11.2 → 75.4	135.3 - 138.5	44.1	44.1	40	32.4	30	27	25.2	22.9	22	20.4	19.4	17.9	17.1	15.9	15.2	14.2	USt P+								
	180	11.2 → 70.4	126.9 - 129.6	44.1	44.1	37	29.9	27.7	24.9	23.3	21.7	20.5	18.8	17.9	16.6	15.8	14.7	USt									
180	11.2 → 76.3	137.1 - 140.7	44.1	44.1	40.6	32.9	30.5	27.4	25.6	23.3	22	20.7	19.7	18.3	17.5	16.3	USt P+										
	164	11.2 → 71.5	129 - 131.7	44.1	44.1	37.7	30.5	28.2	25.4	23.7	22	20.9	19.2	18.2	16.9	USt											
164	11.2 → 76.1	139.1 - 142.2	44.1	44.1	40.5	33	30.6	27.6	25.9	23.6	22.3	20.7	20	18.6	USt P+												
	148	11.2 → 71.2	128.3 - 131.2	44.1	44.1	37.4	30.3	28.1	25.2	23.6	22	20.8	19.1	USt													
148	11.2 → 75.1	137.2 - 147.6	44.1	44.1	39.9	32.5	30.2	27.2	25.5	23.2	22	22	USt P+														
	131	11.2 → 73.9		44.1	44.1	39.1	31.7	29.4	26.4	24.7	22.5	USt															
131	11.2 → 76.2		44.1	44.1	40.7	33.2	30.9	27.9	26.2	24	USt P+																
	115	11.2 → 72.8		44.1	44.1	38.4	31.1	28.8	25.9	USt																	
115	11.2 → 76.3		44.1	44.1	40.8	33.3	31	28	USt P+																		
	98	11.2 → 72.3		44.1	44.1	38.2	30.9	USt																			
98	11.2 → 75.2		44.1	44.1	39.9	32.3	USt P+																				

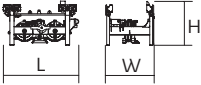

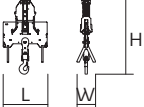

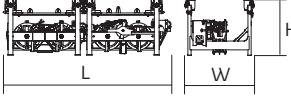



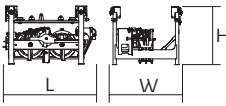

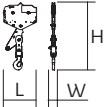

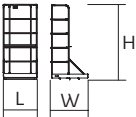


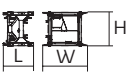



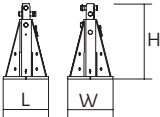
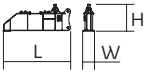

$$\text{Diagram} = \text{Diagram} - 1.86 \text{ USt max.}$$

Dimensions and weight

Slewing crane part:  262 ft -  180 HPL™



Slewing crane part		L (ft)	W (ft)	H (ft)	lb (+/- 5%)	
Counter-jib		25.9	7.4	7.4	23,171	
		39.4	7.4	7.4	31,978	
		34	4.5	8.1	21,142	
		39.7	21.9	13.7	27,040	
		52.8	21.9	13.7	35,891	
Hoisting winch (+ rope)	 180 HPL™ 320 LVF 320 LVF GH	16.2 16.8 18.4	6.6 7.3 7.2	6.6 7.3 7.8	20,459 21,437 31,150	
	Cab	 Ultra View	11	7.5	8.2	6,614
		Towerhead	 8 ft	8.5	8.2	9.7
	22.5		8.2	9.7	41,006	
Jib section	 ①		25.6	5.1	8.2	27,893
	 ② ③	34.5 34.1	7.3 4.8	8.2 8.1	27,133 18,683	
	 ④	20.9	4.5	7.9	8,754	
	 ⑤ ⑦ ⑪	34.4 33.9 33.2	4.5 4.5 4.5	7.8 7.5 6.4	10,983 7,043 3,103	
	 ⑥ ⑧ ⑨	17.8 17.3 17.3	4.5 4.5 4.5	7.7 7.3 6.8	4,859 3,013 2,175	
	 ⑩	17.3	4.5	6.7	1,955	
		5.5	5.2	1.9	728	

			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Trolley			8.6	5.7	5.2	2,678
Pulley block			6.2	2.6	10.4	3,120
Trolley			13.8	5.9	4.9	3,219
Pulley block			7.5	1.1	9.7	2,888
Trolley			6.9	5.9	4.9	1,720
Pulley block			5	1.1	10	1,786
Trolley inspection platform			3.1	3.4	7	125
<b>Crane tower</b>						
T 851			36.7	15.9	19	34,723
K 85/K 85-2			7.3	10.7	8.2	7,937
KM 850.10B KM 850.14B KMT 850.10A KMT 850.14A K 88/K 85A2 KM 880.10A KMT 850.10C			33.9 33.9 17.5 17.5 17.5 17.8 12	8.3 8.3 8.3 8.3 8.2 8.3 8.3	8.2 8.2 8.2 8.2 8.2 8.3 8.2	22,201 24,670 12,015 13,206 18,281 18,453 9,326
Fixing angles		P 854A P 880A	3 3.3	3 3.3	4.9 6.2	2,072 3,536
1/2 Cross girder		ZY 854	18.7	3.2	7.4	14,176
Cross girder		ZY 854	39	4.7	7.4	30,865

Mechanisms

480 V - 60 Hz													hp	kW	
	180 HPL™ 100	fpm	107	131	174	274	323	53	66	89	143	161	180	132	1,745 ft
		USt	22	16.5	11	5.5	4	44.1	33.1	22	11	8.9			
	320 LVF 100 Optima	fpm	220	282	387	486	531	112	141	197	243	266	320	240	1,745 ft
		USt	22	16.5	11	7.5	6.6	44.1	33.1	22	15.7	14			
	320 LVF 100 GH Optima	fpm	220	279	369	436		112	141	187	218		320	240	3,488 ft
		USt	22	16.5	11	8		44.1	33.1	22	18.1				
	15 DVF 16 Optima	fpm	0 → 108 (44.1 USt) 0 → 164 (22 USt) 0 → 220 (11 USt) 0 → 328 (2.8 USt)									15	11		
	RVF 174 Optima +	rpm	0 → 0.7									4 x 10	4 x 7.5		

	IEC 60204-32		kVA
480 V (+6% -10%) 60 Hz		180 HPL™: 194 → 122 kVA 320 LVF: 306 → 178 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.

- Jib elevation
- Standard equipment
- Options
- Potain Plus function: Plus load curves
- Hook heights with Plus load curves
- Reactions in service
- Reactions out of service
- Total ballast weight
- Lorry 44 ft
- Container High Cube 40 ft, and/or Flat Rack 20 ft
- Hoisting
- Trolleying
- 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.

