

Powerful 3-phase AC technology built into the drive, lift and steering motors

State-of-the-art, multifunction control handle allows operators to work three functions simultaneously

Rugged mast with excellent visibility and hydraulic cushioning for efficient load handling

Spacious operator compartment offers a combination of comfort, flexibility and function

Operator display offers information you need to know in an easy-to-read format



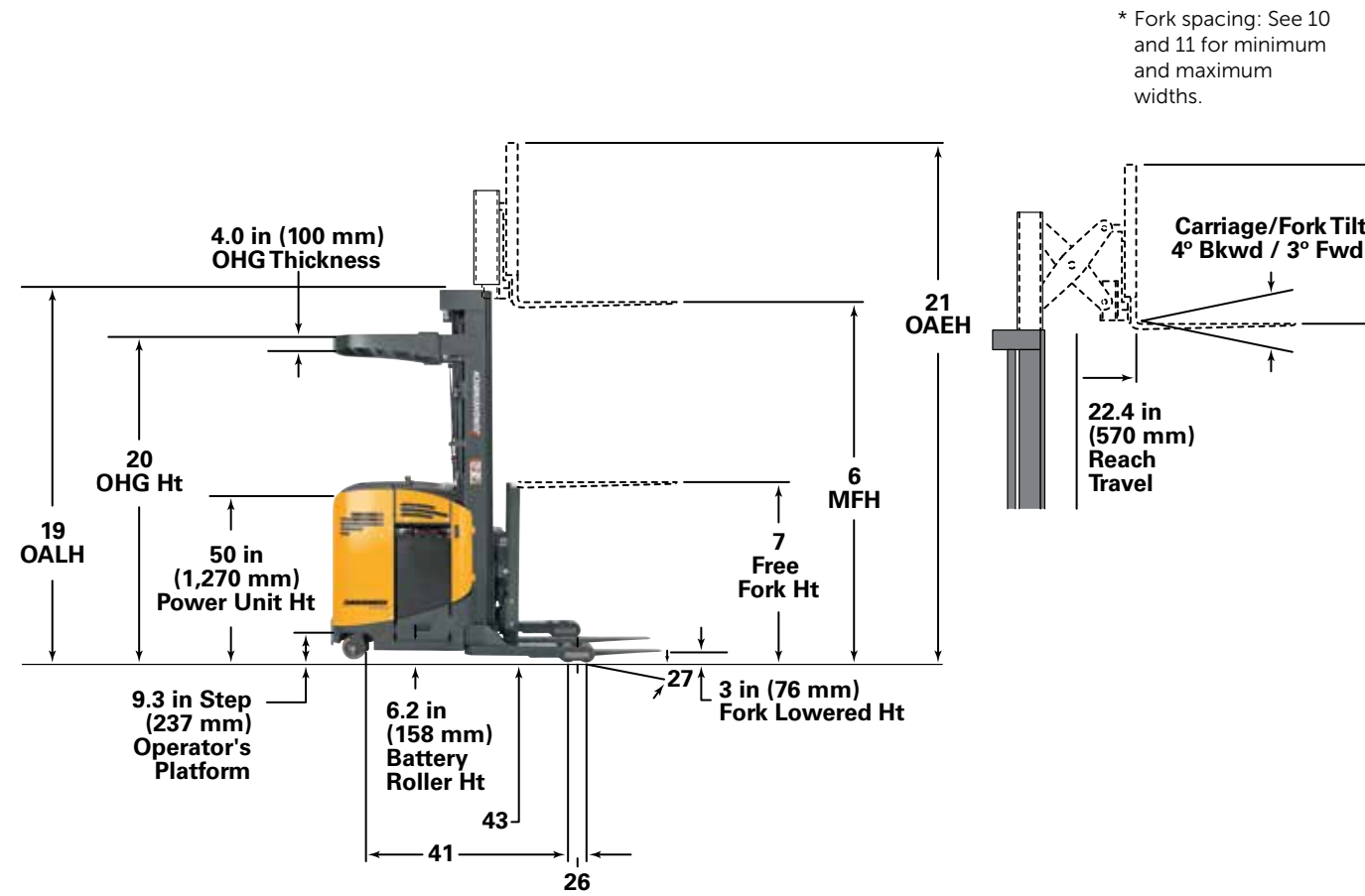
## ETR 230 – 235

### 36 Volt Electric Pantograph Reach Truck (3,000 - 3,500 lbs.)

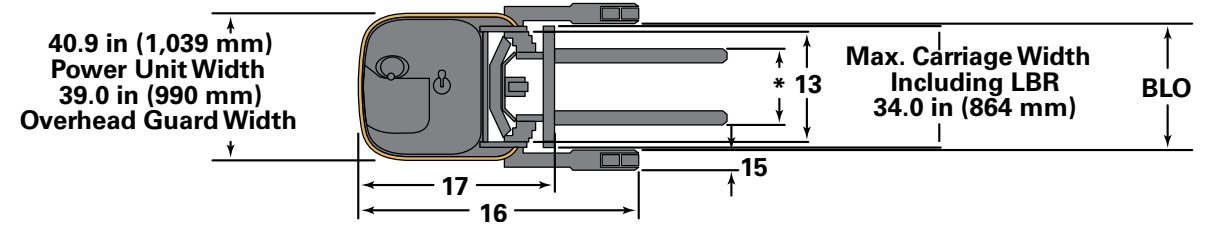
The ETR 230 – ETR 235 single reach truck boasts strong performance – helping to move more pallets per hour and lowering overall cost of ownership – while enhancing operator comfort and productivity.

#### The key advantages:

- Higher performance due to advanced 3-phase AC technology. AC motors require no carbon brushes, which eliminates the cost of replacements, reduces the need for servicing and allows for longer operating times.
- Greater productivity through a space-saving design. This means the trucks can work in smaller aisles, leaving more space available for products.
- Enhanced operator comfort and productivity due to the ergonomic compartment that minimizes operator fatigue. From the low step height, to the intuitive, multifunction control handle, the operator benefits from the excellent design. Productivity can be just as high in the last hour of the shift as in the first.
- The clear operator display shows information needed to perform the task at hand. In addition, it allows operators to select a number of pre-programmed drive and hydraulic settings to customize the truck for a particular application or operator preference. Information is immediately displayed, contributing to the operator's overall awareness – leading to a more productive work environment.
- The Jungheinrich® ETR series features a high-visibility, heavy-duty mast with durable rollers and mast rails designed to meet your most demanding applications. Hydraulic cushioning and mast staging functions help operators to precisely and securely position loads at all lift heights.
- The ETR 230 – 235 single reach truck delivers productivity in applications where space is at a premium. Its space-saving design means the truck can stack and retrieve goods efficiently in narrow aisles. Operators can also customize the drive and hydraulic settings to suit the application and their preferences.



\* Fork spacing: See 10 and 11 for minimum and maximum widths.



Mast Table 36 Volt Reach Trucks										
	Maximum Fork Height <sup>2)</sup>		Overall Lowered Height <sup>1)</sup>		Overall Extended Height <sup>4)</sup>		Free Lift <sup>5)</sup>		Overhead Guard Height <sup>1)</sup>	
	in	mm	in	mm	in	mm	in	mm	in	mm
	Three stage mast ETR 230 / ETR 235	170	4,310	89	2,265	218	5,550	38	965	88.75
198		5,000	89	2,265	246	6,250	38	965	88.75	2,260
210		5,300	95	2,415	258	6,600	44	1,115	94.75	2,410
240		6,050	107	2,720	288	7,350	56	1,420	94.75	2,410
258		6,550	113	2,880	306	7,800	62	1,580	94.75	2,410
	270	6,850	119	3,030	318	8,100	68	1,730	94.75	2,410

P = Performance  
 1) Tolerance = ± 0.5 in. (± 13 mm).  
 2) Tolerance = +2.5 in. / - 0.5 in. (+67 mm / - 13 mm).  
 3) Tolerance = ± 1 in. (± 25 mm).  
 4) Calculated with standard 48 in. (1,219 mm) high load backrest.  
 5) Calculated with standard 48 in. (1,219 mm) high load backrest. May be increased if lower backrest (optional) is ordered.

Characteristics	Model		ETR 230		ETR 235		
	Type		Single Reach		Single Reach		
3	Power voltage		36		36		
4	Capacity at rated load center	lb	kg	3,000	1,400	3,500	1,600
5	Capacity load center - distance from fork face	in	mm	24	600	24	600
6	Maximum fork height	in	mm	240	6,050	240	6,050
7	Free fork height	in	mm	56	1,420	56	1,420
8	Fork width	in	mm	3.9	100	3.9	100
9	Fork thickness	in	mm	1.4	35	1.4	35
10	Fork spacing - out-to-out minimum	in	mm	10.0	254	10.0	254
11	Fork spacing - out-to-out maximum <sup>1)</sup>	in	mm	31.5	800	31.5	800
12	Tilt angle - forward / backward	deg		3°/4°		3°/4°	
13	Mast width <sup>2)</sup>	in	mm	30.6	776	30.6	776
14	Baseleg opening	in	mm	33-49	839-1,245	33-49	839-1,245
15	Baseleg width	in	mm	4.75	120	5.5	140
16	Overall length	in	mm	75.9	1,930	78.0	1,985
17	Length to fork face	in	mm	53.8	1,370	55.8	1,420
18	Overall chassis width	in	mm	40.9	1,039	40.9	1,039
19	Overall lowered height	in	mm	107	2,720	107	2,720
20	Overall lowered height to top of overhead guard	in	mm	94.75	2,410	94.75	2,410
21	Overall height with extended mast	in	mm	288	7,350	288	7,350
22	Step height	in	mm	9.3	237	9.3	237
23	Battery roller height	in	mm	6.2	158	6.2	158
24	Minimum outside turning radius	in	mm	70.8	1,800	72.8	1,850
25	Minimum aisle - 90° stack - zero clearance	in	mm	PLEASE CONSULT YOUR JUNGHEINRICH DEALER			
26	Load wheel centerline	in	mm	5.3	133	5.3	133
27	Grade clearance <sup>3)</sup>	in	mm	13.7		13.2	
28	Travel speed tractor first <sup>4)</sup>	mph	kph	7.5	12	7.5	12
29	Travel speed forks first <sup>4)</sup>	mph	kph	7.0	11.2	7.0	11.2
30	Lift speed loaded (triplex)	fpm	m/s	64.0	0.32	58.0	0.29
31	Lift speed empty (triplex)	fpm	m/s	95.0	0.47	95.0	0.47
32	Lower speed loaded (triplex)	fpm	m/s	110	0.55	110	0.55
33	Lower speed empty (triplex)	fpm	m/s	90.0	0.45	90.0	0.45
35	Gradeability - loaded - maximum	%		9.0		9.0	
36	Gradeability - empty - maximum	%		9.0		9.0	
37	Truck weight - empty - with min. weight battery	lb	kg	7,600	3,450	8,000	3,650
38	Battery weight - minimum	lb	kg	1,600	730	2,000	910
39	Battery weight - maximum	lb	kg	2,000	910	2,300	1,050
40	Chassis type (stand / sit)			Stand		Stand	
41	Wheelbase	in	mm	61.5	1,560	63.5	1,615
42	Ground clearance - center of wheelbase	in	mm	2.0	51.0	2.0	51.0
43	Ground clearance - lowest point at mast	in	mm	2.0	51.0	2.0	51.0
44	Tire size - steer	in	mm	13.5 x 5.5	343 x 140	13.5 x 5.5	343 x 140
45	Tire size - caster	in	mm	7.0 x 4.0	180 x 100	7.0 x 4.0	180 x 100
46	Tire size - load wheels	in	mm	5.0 x 2.88	127 x 73	5.0 x 3.62	127 x 92
47	Brake type			Electric Disc		Electric Disc	
48	Traction motor type			AC Induction		AC Induction	
49	Traction motor output (60 minute rating)	hp	kW	6.8	5.1	6.8	5.1
50	Pump motor type			AC Induction		AC Induction	
51	Pump motor output (5 minute rating)	hp	kW	14.7	11.0	14.7	11.0
52	Steer motor type			AC Induction		AC Induction	
53	Steer motor output (60 minute rating)	hp	kW	0.5	0.4	0.5	0.4
54	Battery maximum capacity - A/H (6 hour rating)			775		1,240	
55	Battery compartment length	in	mm	14.25	361	16.25	412
56	Battery compartment width	in	mm	38.58	980	38.58	980
57	Battery compartment height	in	mm	31.65	804	31.65	804

1) 27.5 inches (698 mm) for BLO less than 37 inches (889 mm).  
 2) Add 3 inches (77 mm) at cross bar.  
 3) Reduce grade clearance by 0.4% with 18.25 inches (463 mm) battery compartment length and 1% with 21.25 inches (539 mm) battery compartment length vs. 16.25 inches (412 mm) length.  
 4) Maximum speed attainable, after break-in period, varies with truck weight, rolling resistance, mast height, options and battery condition.

This specification sheet only provides technical values for the standard truck. Non-standard tires, different masts, additional equipment, etc., could produce other values. Rights reserved for technical changes and improvements.

# The Jungheinrich Advantage

## High-visibility, heavy-duty mast

Jungheinrich masts provide maximum space utilization and visibility to high lift heights.

- The sturdy mast and narrow, angled overhead guard promote good visibility to the load even in high stacking applications.
- The hydraulic mast cushioning and mast staging functions help to handle loads smoothly.
- Shim-adjustable canted mast rollers.
- Heavy, interlocking mast rails.
- Optional integral sidsifter helps improve capacity retention and maneuverability.
- Fork heights up to 270 inches on standard performance models.



Overhead guard visibility

## Spacious and ergonomic operator compartment

The spacious operator compartment combines comfort and functionality to help improve operator efficiency.

- Location of operator controls allows for a flexible side stance position within the compartment.
- Low-effort electric power steering for precise control with minimal effort.
- Display with multiple hour meters, travel speed, travel direction, load weight display, fault code read-out and battery state-of-charge gauge with lift monitoring.

- Intuitive multifunction control handle offers simultaneous control of drive, lift, lower and auxiliary hydraulic functions.
- Anti-fatigue floor mat and generous padding for knees, hips, back and armrest.
- Storage space for operator's equipment.



Operator compartment

## Multifunction control handle

The intuitive, multifunction control handle is centrally positioned for easy access to truck functions.

- Maximum efficiency through simultaneous operation of travel, lift and auxiliary functions.
- Rounded palm rest helps reduce operator fatigue over long shifts.



Multifunction control handle

## Customized programming

Performance profiling allows you to customize drive and hydraulic settings based on the application, individual operator preferences. All display-based programming, performance requests and information queries can be performed with easily accessible buttons.

## Operator display

The easy-to-read control panel displays the information the operator needs to perform daily tasks.

- Travel speed.
- Travel direction.
- Battery state-of-charge.
- Load weight display.
- Language options.
- Informational and warning icons.
- Optional features such as shelf height selector and tilt position are also available to help the operator work more efficiently.

## Powerful 3-phase AC technology

3-phase AC technology for drive, lift and steering offers several advantages over traditional direct current motors.

- Rapid acceleration and precise speed control.
- Smooth directional changes.
- Greater directional availability due to maintenance-free motors without carbon brushes.
- Longer operating times due to energy reclamation during braking.

## Parts when you need them

Jungheinrich's Parts Fast or Parts Free Guarantee ensures next-business-day delivery by 5:00 PM of all Jungheinrich parts in the United States, or they're free, including freight. For customers in Canada and Mexico, the guarantee ensures shipping of parts within 24 hours from the time the order was placed by the dealer. See your local Jungheinrich dealer for program details.

\* Programs may be subject to change without notice and may vary by region. Please ask your local Jungheinrich dealer for complete terms and conditions.

