

ECX

20/25/30/32

ELECTRIC 36/48 VOLT
4000 / 5000 / 6000 / 6500 lbs.
(2000 / 2500 / 3000 / 3000 kg)



CLARK[®]
THE FORKLIFT

- The low overhead guard height facilitates **easier trailer access** while providing the operator ample headroom.

- Rear posts add support to the overhead guard and help prevent objects from entering the operator compartment, keeping your employees as **safe** as possible.

- The **low step height** means frequent entry and exit is easy and less tiring for the operator.



Highly Maneuverable, Easily Serviceable, Broadly Flexible, Extremely Dependable

The CLARK ECX series of electric lift trucks is the ideal choice for demanding manufacturing and distribution applications. Superior **ergonomic design**, **operator comfort** and **safety** and **outstanding truck performance** are backed by the oldest and most trusted name in lift trucks.

100%

Recognizing the benefit of AC technology, CLARK developed the ECX with not just AC traction motors – but ALL AC MOTORS.

- Nested Upright Rails & Overhead Guard Safety Bars (running parallel to operator's line of sight) expand the vision window, **reduce product damage** and decrease pick times.

Maximum Visibility + Minimum Fatigue =
Ultimate Safety & Product Integrity



ECX STANDARD FEATURES & BENEFITS



PROVEN DRIVE AXLE

■ CLARK ED30

- One-piece housing reduces the possibility of leaks.

■ Utilizes Durable Helical Gears

- Provides smooth, quiet operation.



RUGGED CAST STEER AXLE

■ Maximum Protection

- Offers maximum protection for the dual-action steer cylinder and fittings while still allowing easy access to the components.



100% AC SYSTEM

■ Fewer Parts & Minimum Wear = Less Downtime and Cost = Higher ROI

- Enclosed • Brushless • Thermal protection
- Stall protection • Smart lift lock out
- One motor for both steering & hydraulics.

■ No Brushes To Change or Commutator to Turn...Ever

■ Heavy-Duty, High Torque Drive Motor

- Produces twice the draw bar pull of some competitors.
- Climb grades previously limited to IC trucks.

■ Stall Protection

- Circuitry helps protect the motors should the truck be stalled.

■ Three Forms of Regenerative Braking

- Returns energy into the battery.

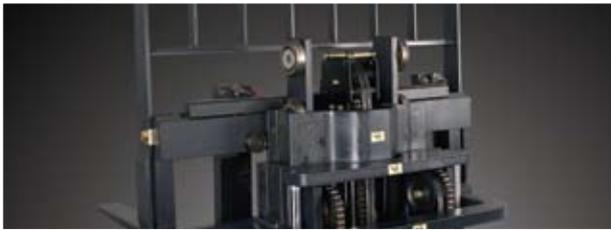
Available Equipment

- UL EE classification
- Cold storage specifications
- Unitrol foot operated direction control
- Various lights, audible alarms & mirrors
- Full feature cabs



FULLY ADJUSTABLE/PROGRAMMABLE

- A properly trained mechanic can completely customize parameters to operator's preference such as acceleration rate, deceleration rate, maximum speed (separate forward and reverse).



RUGGED UPRIGHT AND CARRIAGE

- **Hydraulic Cushioning Valves**
 - Silent staging reduces shock & vibration.
- **Shimmable, Sealed & Canted Load Rollers**
 - Maximize load distribution & reduce free play.



DASH DISPLAY

- **Parking Brake Reminder**
 - Sounds alarm if operator does not set parking brake.
- **Back-Lit**
 - Turns on with key switch.
 - Excellent visibility in direct sunlight.
- **Battery Discharge Indicator**
 - 10-segments used to display battery state of charge.



TRACTION CONTROL

- **Fully Programmable**
 - Up to 20 performance parameter settings such as acceleration, creep speed, and regen braking rate can be adjusted to meet your requirements.
- **Speed Limiting**
 - Maximum travel speed can be programmed to your requirements and if necessary, forward and reverse can be set independently.
- **Controlled Descent**
 - When the controller senses movement but no accelerator pedal input, it signals the drive motors to apply counter torque allowing the truck to slowly descend an incline in a controlled manner.
- **Ramp Start**
 - Added torque limits roll back when starting on an incline.



OPERATOR COMPARTMENT

- **Low Step Height**
 - Steel grab handle and a low step height allow for easy entry/exit from either side.
- **CLARK Safety Seat**
 - 6" fore / aft adjustment
 - Molded for support
 - Non-cinching, retractable seat belt
 - Side safety wings
- **Visibility**
 - A clear, unobstructed view protects your product and your employees.

GENERAL DATA & STANDARD DIMENSIONS

Upright Table

Maximum Fork Height		Overall Height Lowered		Free Lift w/o LBR		Std. Tilt B°/F°
in	mm	in	mm	in	mm	
Standard Two Stage						
ECX 20/25/30						
83	2120	60	1525	4.3	110	6/10
106	2680	71	1805	4.3	110	8/8
117	2980	77	1955	4.3	110	8/8
• 130	3300	83	2115	4.3	110	8/8
146	3725	95	2405	4.3	110	8/8
152	3860	98	2480	4.3	110	5/6
164	4165	108	2750	4.3	110	5/6
172	4380	116	2950	4.3	110	5/6
182	4620	125	3180	4.3	110	5/6
203	5170	136	3445	4.3	110	5/3
ECX 32						
• 128	3250	83	2115	4.5	115	8/8
144	3650	95	2405	4.5	115	8/8
Hi-Lo Two Stage						
ECX 20/25						
115	2935	77	1955	55	1402	8/8
• 128	3255	83	2115	61.5	1562	8/8
139	3530	89	2255	67	1702	8/8
148	3760	95	2405	73	1852	8/8
154	3910	98	2480	76	1927	5/6
ECX 30						
115	2935	77	1955	53	1342	8/8
• 128	3255	83.3	2115	59	1502	8/8
139	3530	88.8	2255	64.6	1642	8/8
148	3760	94.7	2405	70.6	1792	8/8
154	3910	97.6	2480	73.5	1867	5/6
Triple Stage						
ECX 20/25						
152	3860	71	1805	49	1252	5/6
170	4320	77	1955	55	1402	5/6
• 189	4800	83	2115	61.5	1562	5/6
205	5210	89	2255	67	1702	5/3
217	5520	95	2405	73	1852	5/3
226	5740	97.6	2480	76	1927	5/3
240	6100	104	2640	82	2087	5/3
251	6370	108	2750	86.5	2197	3/0
269	6830	116	2950	94.4	2397	3/0
288	7315	125	3180	103.4	2627	3/0
ECX 30						
152	3860	71	1805	47	1192	5/6
170	4320	77	1955	53	1342	5/6
• 189	4800	83	2115	59	1502	5/6
205	5210	89	2255	64.6	1642	5/3
217	5520	95	2405	70.6	1792	5/3
226	5740	97.6	2480	73.5	1867	5/3
240	6100	104	2640	80	2027	5/3
251	6370	108	2750	84	2137	3/0
269	6830	116	2950	92	2337	3/0
288	7315	125	3180	101	2567	3/0
ECX 32						
146	3700	71	1805	45	1146	8/8
164	4160	77	1955	51	1296	5/6
• 189	4800	85	2170	59	1511	5/6
199	5050	89	2255	63	1596	5/3
211	5360	95	2405	69	1746	5/3
Quad Four Stage						
All Models						
216	5486	77	1956	52	1321	5/3
• 240	6096	83	2108	58	1473	5/3
258	6553	89	2261	64	1626	5/0

• Indicates preferred standard sizes. For overall height raised with load backrest, add 48 in. (1220 mm) to maximum fork height. Other uprights available, contact a CLARK representative.
 ** All free lift dimensions shown without standard 48 in. (1220 mm) high load backrest.

Battery Compartment Dimensions

Width (W)		Length (L)		Height (H)	
in	mm	in	mm	in	mm
ECX 20/25/30					
39.25	997	30.5	775	23.5	597
ECX 32 (available option on ECX 20/25/30)					
39.25	997	34.5	876	23.5	597

Battery without cover, termination: A-18", Connector: 6320 (SB 350 Gray)

Dimensions with Optional Battery Compartment

Compartment Size	39.25 in W x 34.5 in L x 23.5 in H 997 mm W x 876 mm x 597 mm H					
	ECX 20		ECX 25		ECX 30	
Length to fork face (in/mm)	86.8	2206	87.9	2233	90.2	2292
Turning radius (in/mm)	74.2	1885	74.8	1901	76.7	1948
Right angle stack (in/mm)	90.9	2309	91.9	2335	94.1	2390
Service wt., TSU (lb/kg)	9811	4450	10307	4675	11122	5045
Axle loading w/load, front (lb/kg)	11918	5406	13636	6185	15373	6973
Axle loading w/load, rear (lb/kg)	1892	858	1671	758	1748	793
Axle loading w/o load, front (lb/kg)	4877	2212	4833	2192	4786	2171
Axle loading w/o load, rear (lb/kg)	4934	2238	5474	2483	6336	2874
Max. capacity (6 hr. rate) (kWh)	48.6		48.6		48.6	
Weight, minimum (lb/kg)	3000	1361	3000	1361	3000	1361
Grade clearance (D%)	45%		42%		36%	

Notes

Performance may vary +5% and -10% due to motor and system efficiency tolerance. The performance shown represents nominal values which may be obtained under typical operating conditions of a standard machine.

ANSI/ITSDF and Insurance Classification

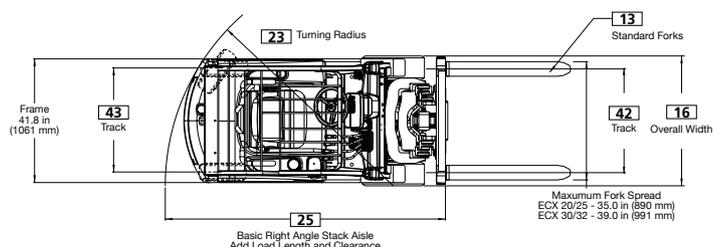
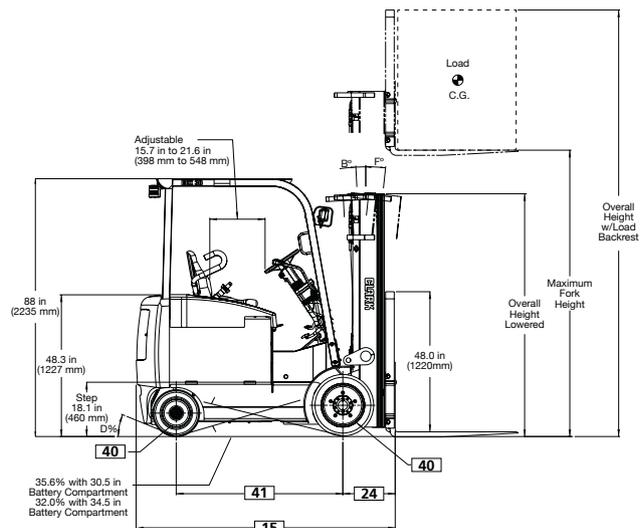
Standard truck meets all applicable mandatory requirements of Part III-ANSI/ITSDF B56.1 Safety Standard for Powered Industrial Trucks (latest edition at time of manufacture) and Underwriters Laboratories requirements as to fire and electrical shock hazard only for "E" classification. For further information contact a Clark representative.

Users should be aware of, and adhere to, applicable codes and regulations regarding operator training, use, operation and maintenance of powered industrial trucks, including:

- ANSI/ITSDF B56.1
- NFPA 505, fire safety standard for powered industrial trucks - type designations, areas of use, maintenance and operation.
- Occupational Safety and Health Administration (OSHA) regulations that may apply.

Contact your authorized CLARK forklift truck dealer for further information including operator training programs and auxiliary visual and audible warning systems, fire extinguishers, etc., as available for specific user applications and requirements.

Specifications, equipment, technical data, photos and illustrations are based on information at time of printing and are subject to change without notice. Some products may be shown with optional equipment.



For corresponding data see Specification Chart

STANDARD SPECIFICATIONS

General Information	1	Manufacturer		Clark	
	2	Model	Manufacturer's Designation	ECX 20	
	3	Load Capacity		lbs(kg)	4000 (2000)
	4	Load Center	Fork Face to Load CG	in(mm)	24 (500)
	5	Power Unit	Electric		36 volt / 48 volt
	6	Operator Type			Rider Counterbalanced
	7	Tire Type			Cushion Electric Compound
	8	Wheels (x=driven)	Front/Rear		2X / 2
Basic Dimensions	9	Upright ¹	Maximum Lift Height, Full Capacity	in(mm)	189 (4800)
	10		Lift Height (Preferred Upright)	in(mm)	189 (4800)
	11		Freelift	in(mm)	59.1 (1562)
	12	Upright Tilt	Back/Forward (Triple Stage Upright)	degrees	5 / 6
	13	Fork	Std. Fork Size (T x W x L)	in(mm)	1.5 x 4 x 42 (40 x 100 x 1067)
	14	Carriage	Width of Carriage ⁵	in(mm)	37 (940)
	15	Overall Dimensions	Length to Fork Face (TSU) ²	in(mm)	82.8 (2104)
	16		Width Over Tires ⁴	in(mm)	41.9 (1063)
	17		Width Over Frame	in(mm)	41.8 (1061)
	18		Height, Upright Lowered	in(mm)	83.5 (2121)
	19		Height, Upright Extended	in(mm)	237 (6020)
	20		Height, Overhead Guard	in(mm)	88 (2235)
	21	Step Height	Ground to Top of Step Plate	in(mm)	18.1 (460)
	22				
23	Turning Radius		in(mm)	70.2 (1783)	
24	Load Center Distance	Center of Drive Axle to Fork Face ²	in(mm)	16.7 (424)	
25	Right Angle Stack Aisle	Add Load Length and Clearance ²	in(mm)	86.8 (2204)	
26					
Performance	27	Stability	According to ANSI		Yes
	28	Speeds	Travel Speed, Max, With Load	mph(kph)	8.8 (14.2) / 10.8 (17.4)
	29		Travel Speed, Max, Without Load	mph(kph)	9.2 (14.8) / 11.3 (18.2)
	30	Lift Speeds, Loaded	Triple Stage Upright	fpm(mps)	59 (0.30) / 96 (0.49)
	31	Lift Speeds, Unloaded	Triple Stage Upright	fpm(mps)	100 (0.51) / 114 (0.58)
	32	Lower Speeds, Loaded	Triple Stage Upright	fpm(mps)	88 (0.45)
	33	Lower Speeds, Unloaded	Triple Stage Upright	fpm(mps)	80 (0.41)
Weights³	34	Service Weight, TSU	W/Min Battery Weight	lbs(kg)	9348 (4240)
	35	Axle loading	With Load, Front	lbs(kg)	11810 (5357)
	36		With Load, Rear	lbs(kg)	1537 (697)
	37		W/O Load, Front	lbs(kg)	4766 (2162)
	38		W/O Load, Rear	lbs(kg)	4581 (2078)
Chassis	39	Tires	Number, Front/Rear		2 / 2
	40		Size, Front	in(mm)	21x7x15 (533x178x381)
			Size, Rear	in(mm)	16x6x10.5 (406x152x267)
	41	Wheelbase		in(mm)	53 (1346)
	42	Track	Front, Cushion	in(mm)	34.8 (884)
	43		Rear Cushion	in(mm)	34.2 (869)
	44	Ground Clearance	Min w/o Load	in(mm)	2.8 (71)
	45		At Center of Wheelbase	in(mm)	4.5 (114)
	46	Service Brake	Type		Drum and Shoe
47	Parking Brake	Type		Pedal Actuated	
	Steering	Type		Hydrostatic	
Drive Line	48	Battery	Type		Lead-Acid
			Max Capacity (6 hr. Rate) 30.5 in compt.	kWh	41.8
			Weight, Min	lbs(kg)	2600 (1180)
	49	Motors, Controls	Drive Motor, Diameter	in(mm)	10.6 (270)
			Hydraulic Motor, Diameter	in(mm)	7.9 (200)
			Drive Motor Control		Inverter
		Speed Control		Solid State	
		Hydraulic Motor Control		Inverter	
57	Hydraulic Pressure				Adjustable
58	Sound Level	Avg. at Operator's Ear Per ANSI B56.11.5	dB(A)		64

- Notes: 1 See upright table for other available uprights.
 2 Dimensions are for TSU and standard forks – make the following adjustments for other uprights: +2.74" for Quad, -1.2" for STD, +0.9 for HiLo. Add 2.3" for SS.
 3 Specifications are given with preferred triple stage upright on line 10 and minimum battery weight.

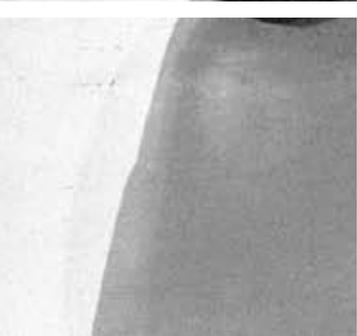
ECX 20/25/30/32

Clark ECX 25	Clark ECX 30	Clark ECX 32
5000 (2500)	6,000 (3000)	6,500 (3000)
24 (500)	24 (500)	24 (500)
36 volt / 48 volt	36 volt / 48 volt	36 volt / 48 volt
Rider Counterbalanced	Rider Counterbalanced	Rider Counterbalanced
Cushion Electric Compound	Cushion Electric Compound	Cushion Electric Compound
2X / 2	2X / 2	2X / 2
189 (4800)	170 (4318)	164 (4166)
189 (4800)	189 (4800)	189 (4800)
59.1 (1562)	59.1 (1562)	59.5 (1511)
5 / 6	5 / 6	5 / 6
1.5 x 4 x 42 (40 x 100 x 1067)	1.75 x 5 x 42 (45 x 125 x 1067)	2 x 5 x 42 (50 x 125 x 1067)
37 (940)	41 (1041)	41 (1041)
86.2 (2190)	87.7 (2228)	92.2 (2342)
43.9 (1114)	43.9 (1114)	45.4 (1154)
41.8 (1061)	41.8 (1061)	41.8 (1061)
83.5 (2121)	83.5 (2121)	83.5 (2121)
237 (6020)	237 (6020)	237 (6020)
88 (2235)	88 (2235)	88 (2235)
18.1 (460)	18.1 (460)	18.1 (460)
72.6 (1845)	73.9 (1877)	78.3 (1989)
16.7 (424)	16.9 (429)	17.5 (445)
89.7 (2279)	91.3 (2319)	96.2 (2444)
Yes	Yes	Yes
8.5 (13.7) / 10.6 (17.1)	8.2 (13.2) / 9.8 (15.8)	7.5 (12.1) / 9.4 (15.1)
9.1 (14.6) / 11.0 (17.7)	8.7 (14.0) / 10.8 (17.4)	8.0 (12.9) / 10.4 (16.7)
55 (0.28) / 90 (0.46)	49 (0.25) / 82 (0.42)	45 (0.23) / 80 (0.41)
100 (0.51) / 114 (0.58)	84 (0.43) / 104 (0.53)	84 (0.43) / 104 (0.53)
90 (0.46)	92 (0.47)	92 (0.47)
80 (0.41)	80 (0.41)	80 (0.41)
10582 (4800)	11155 (5060)	11828 (5365)
13422 (6088)	15181 (6886)	16219 (7357)
2161 (980)	1975 (896)	2108 (956)
4621 (2096)	4594 (2084)	5027 (2280)
5961 (2704)	6561 (2976)	6801 (3085)
2 / 2	2 / 2	2 / 2
21x8x15 (533x203x381)	21x8x15 (533x203x381)	21x9x15 (533x229x381)
16x6x10.5 (406x152x267)	16x6x10.5 (406x152x267)	16x6x10.5 (406x152x267)
53 (1346)	53 (1346)	57 (1448)
35.8 (909)	35.8 (909)	36.5 (927)
34.2 (869)	34.2 (869)	34.2 (869)
2.8 (71)	2.8 (71)	2.8 (71)
4.5 (114)	4.5 (114)	4.5 (114)
Drum and Shoe	Drum and Shoe	Drum and Shoe
Pedal Actuated	Pedal Actuated	Pedal Actuated
Hydrostatic	Hydrostatic	Hydrostatic
Lead-Acid	Lead-Acid	Lead-Acid
41.8	41.8	48.6 ⁶
2600 (1180)	2600 (1180)	3100 (1407)
10.6 (270)	10.6 (270)	10.6 (270)
7.9 (200)	7.9 (200)	7.9 (200)
Inverter	Inverter	Inverter
Solid State	Solid State	Solid State
Inverter	Inverter	Inverter
Adjustable	Adjustable	Adjustable
64	64	64

4 OAW with wide drive tires is 48.7in for all models with quad uprights above 222.5in. and with triple stage uprights above 240in.

5 36in. max fork spread w/37in. carriage. 40in. fork spread w/41in. carriage.

6 Standard compartment size on ECX32 is 34.5" (876mm).



& Don't Forget... **Safety Starts With You!**

Before operating a lift truck, an operator must:

- Be trained and authorized
- Read and understand operator's manual
- Not operate a faulty lift truck
- Not repair a lift truck unless trained and authorized
- Have the overhead guard and load backrest extension in place
- Perform daily inspections

During operation, a lift truck operator must:

- Keep feet, legs and all parts of body inside operator compartment
- Never carry passengers or lift people
- Keep truck away from people and obstructions
- Travel with lift mechanism as low as possible and tilted back
- Allow safe stopping distance and come to a complete stop before leaving operator compartment

To park a lift truck, an operator must:

- Completely lower forks or attachments
- Move directional lever to neutral
- Apply parking brake
- Turn key off

- We don't just build forklifts. As a company, we are also focused on providing our customers with the best possible technical service support and aftermarket parts available.
- Even though our business starts with a quality, cost-effective product, our organization understands that it is the support and services we provide after the sale that help keep your business running at peak efficiency.
- **THE CLARK PartsPRO® SYSTEM** is our industry-leading electronic parts and service documentation tool that provides dealers with a quick and accurate method of identifying parts for every CLARK forklift built since 1961. PartsPRO® ensures the availability of the most current technical information and has the unique capability to create parts manuals specific to your mixed CLARK fleet, making it simple to positively identify and order the correct part(s) from your local CLARK dealer. The right CLARK part — The First Time, Every Time.
- **UNRIVALED PARTS SUPPORT** Our Aftermarket Distribution Center provides parts to over 250 North American CLARK dealers and many international dealers. This CLARK operated 184,000 square foot facility is dedicated to supporting the CLARK models built over the last 90 years. This facility is focused on providing excellent off-the-shelf availability, quality parts, quick response time and competitive pricing.

DEPENDABLE PARTS = DEPENDABLE TRUCKS



BUILT TO LAST.®



CLARK MATERIAL HANDLING COMPANY

North American Headquarters
 700 Enterprise Drive • Lexington, KY 40510
 866-252-5275 • www.clarkmhc.com

ECX 20/25/30/32

59-894-0988 Printed in USA CR04095M

© 2009 CLARK Material Handling Company