Jungheinrich<sup>®</sup> proprietary AC technology

Maximum performance and low energy consumption

Narrow tractor design for block stacking

Spacious operator compartment

Compact for maximum maneuverability

Microprocessor-controlled, fully-programmable AC electronic control



# EFG 110k – 115

### Electric Three-Wheel Counterbalanced Truck (2,000-3,000 lbs.)

Rear-wheel drive, a compact design, high performance and an ergonomic operator compartment – these are the strengths of the EFG 110k–115 electric forklift trucks.

#### The advantages:

- Excellent performance in restricted spaces, greater maneuverability and superior operator comfort.
- The truck features a low step for a secure and comfortable entrance into the compartment. The adjustable steering column and a three-way

adjustable, full-suspension seat offer customized settings for your operators. The compartment offers superior headroom with an overhead guard that is 82.3 inches high. A "container overhead guard" with a height of 77.6 inches is available as an option.

- Excellent visibility and ergonomicallypositioned controls allow for precise handling. Hydraulic functions are activated by using the soloPILOT control (separate levers).
- The informative operator display highlights important lift truck data, including operating hours, battery stateof-charge, lift interrupt, error codes and warning displays. The system also stores all relevant service data.
- Low steering and lever operating forces and a familiar automotive pedal layout help create a productive operation. Enclosed AC motors enable smooth acceleration and make the EFG 110k-115 suitable for a variety of applications.



### **Technical data**

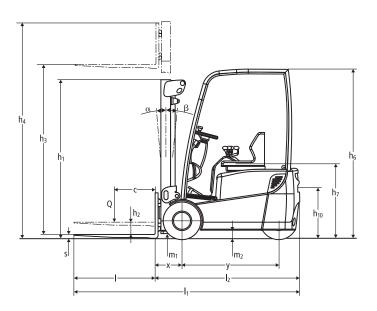
1	11	Manufasturar (abbreuistian)				June ale	aiariala	Juneale	airariala	1.
	1.1					Jungh			einrich	1
ics	1.2	3 Drive				EFG 110k electric		EFG 110 electric		
Characteristics	1.3						ited		ited	1.
cte	1.4	Load capacity / rated load	Q	lbs	t	1,920	1	1,920	1	
ara	1.5								500	
Ч.	1.6	Load center distance	С	in	mm	24.0 13.0 <sup>1)</sup>	500 330 <sup>1)</sup>	24.0 13.0 <sup>1)</sup>	330 <sup>1)</sup>	1
	1.8	Load distance, center of load axle to fork face	х	in	mm		984	40.9		
s	1.9	Wheelbase	У	in	mm	38.7			1,038	
Weights	2.1	Service weight including battery (see line 6.5)		lbs	kg	5,490	2,490	5,666	2,570	
/ei	2.2	Axle loading, loaded front / rear		lbs	kg	6,482 / 1,213	2,940 / 550 1,095 / 1,395	6,493 / 1,378	2,945 / 625	
-		Axle loading, unloaded front / rear		lbs	kg	2,414 / 3,075		2,524 / 3,142	1,145 / 1,425	
Chassis	3.1	1		in		solid pneumatic 18 x 7-8		solid pneumatic 18 x 7-8		
ha	3.2	Tire size, front								
	3.3	Tire size, rear		1	n	18 x			: 7-8	
Wheels,	3.5	Wheels, number front / rear ( $x = driven wheels$ )		1			1x		1x 070	
Ĕ	3.6	Track width, front		in	mm	33.0	838	33.0	838	
-		Track width, rear		in	mm	0	0	0	0	
	4.1	Mast / fork carriage tilt, forward / backward	le .		rees		/ 6 2,000		/ 6	
	4.2	Collapsed mast height	h <sub>1</sub>	in	mm	79		79	2,000	4
	4.3	Free-lift	h <sub>2</sub>	in	mm	5.9	150	5.9 118	150	
	4.4	Lift height	h <sub>3</sub>	in	mm	118	3,000		3,000	
	4.5	Extended mast height	h <sub>4</sub>	in	mm	166	4,216	166	4,216	
	4.7	Overhead guard height	h <sub>6</sub>	in	mm	82.3	2,090	82.3	2,090	
	4.8	Seat height / platform height	h <sub>7</sub>	in	mm	35.4	900	35.4	900	
	4.12	Tow hitch height	h <sub>10</sub>	in	mm	25.0	635	25.0	635	4
	4.19	0	l <sub>1</sub>	in	mm	107.0	2,719	109.2	2,773	4
		Length to fork face (headlength)	l <sub>2</sub>	in	mm	61.8	1,569	63.9	1,623	4
	4.21	Overall width	b <sub>1</sub>	in	mm	39.0 <sup>3)</sup>	990 <sup>3)</sup>	39.0 <sup>3)</sup>	990 <sup>3)</sup>	2
		Fork dimensions	s/e/l	in	mm	1.6 x 3.1 x 45.3	40 x 80 x 1,150	1.6 x 3.1 x 45.3	40 x 80 x 1,150	4
		3 Fork carriage ITA class 2				2A		2A		4
		Fork carriage width		in	mm	37.4	950	37.4	950	4
	4.31		m <sub>1</sub>	in	mm	3.5	90	3.5	90	4
		Ground clearance, center of wheelbase	m <sub>2</sub>	in	mm	3.9	100	3.9	100	4
j		Aisle width for pallets 48 x 40 (L x W)		in	mm	109.8 2)	2,789 2)	111.9 <sup>2)</sup>	2,842 2)	4
		Turning radius	147	in	mm	48.8	1,239	50.9	1,293	4
-	-	Internal turning radius	Wa	in	mm	0	0	0	0	2
		Travel speed, loaded / unloaded		mph	km/h	7.5 / 7.8	12 / 12.5	7.5 / 7.8	12 / 12.5	
	5.2	Lift speed, loaded / unloaded		ft/min		55.1 / 98.4	0.28 / 0.50	57.1/98.4	0.29 / 0.50	
	5.3	Lowering speed, loaded / unloaded		ft/min		114.2 / 118.1	0.58 / 0.60	114.2 / 118.1	0.58 / 0.60	
	5.5	Drawbar pull, loaded / unloaded		lbs	N	259 / 281	1,150 / 1,250	259 / 281	1,150 / 1,250	
	5.6	Maximum drawbar pull, loaded / unloaded, 60 min.		lbs	N	989 / 1,011	4,400 / 4,500	989 / 1,011	4,400 / 4,500	
0	5.7	Gradeability, loaded / unloaded, 30 min.		%		8.5 / 12		8 / 11.5		
ļ		Maximum gradeability, loaded / unloaded, 5 min.		%		13 / 18		12.5 / 17.5		
j	5.9			S		5.1 / 4.6 hydraulic		5.1 / 4.6		
_		Service brake		LUD.	1.1.47	-	1	-	aulic	
		-		HP	kW	5.4	4.0	5.4	4.0	
	6.2	Lift motor rating at $S_3 20\%$		HP	kW	8.0	6.0	8.0	6.0	
	6.4	Battery voltage, nominal capacity (at 6 hour rate)		V	Ah	24	500	24	625	
1	6.5	Battery weight (minimum / maximum)		lbs	kg	779 / 886	353 / 402	932 / 1,060	423 / 481	
_		Maximum battery compartment dimensions		in	mm	10.75 / 32.68 / 24.69	273 / 830 / 627	12.87 / 32.68 / 24.69	327 / 830 / 627	-
		1 Type of drive control				Impuls			se / AC	
	8.2	Operating pressure for attachments		psi	bar	2,321	160	2,321	160	
5	8.3	Flowrate for attachments			l/min	3.7	14	3.7	14	
	8.4	Sound level at the driver's ear		dB	(A)	6	3	6	3	

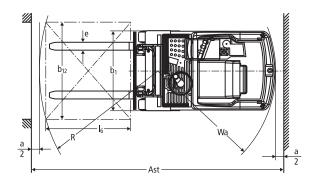
13.3 inches (337mm) with DZ (three-stage) mast; with integrated sideshift: x = 14.3 inches (362mm) (14.6 inches (369mm) with DZ mast); with sideshift attachment: x = 15.4 inches (390mm) (15.7 inches (397mm) with DZ mast).
2) Without an 8 inch (200mm) maneuvering space; data is for ground storage.
3) 41.8 inches (1,062mm) for masts with h<sub>3</sub> (MFH) dimension of 177 inches (4,500mm) or higher.

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.

	1.1	Junghe	einrich	Jungheinrich			
	1.2	EFG	113	EFG 115			
	1.3	elec	tric	electric			
	1.4	sea	ted	seated			
	1.5	2,400	1.25	2,880	1.5		
	1.6	24.0	500	24.0	500		
	1.8	13.0 <sup>1)</sup>	330 <sup>1)</sup>	13.0 <sup>1)</sup>	330 <sup>1)</sup>		
	1.9	45.1	1,146	47.2	1,200		
	2.1	6,085	2,760	6,327	2,870		
	2.2	7,474 / 1,367	3,390 / 620	8,389 / 1,246	3,805 / 565		
	2.3	2,723 / 3,362	1,235 / 1,525	2,800 / 3,527	1,270 / 1,600		
	3.1	solid pre	eumatic	solid pneumatic			
	3.2	18 x		18 x 7-8			
	3.3	18 x		18 x 7-8			
	3.5	2/		2 / 1x			
	3.6	33.0	838	33.0 838			
	3.7	0	0	0	0		
_	4.1	5 /		5/6			
	4.2	79	2,000	79	2,000		
	4.3	5.9	150	5.9	150		
	4.4	118	3,000	118	3,000		
	4.5			166	4,216		
	4.7	166 4,216		82.3	2,090		
	4.7	82.3 <i>2,090</i> 35.4 <i>900</i>		35.4	900		
	4.0	25.0	635	25.0	635		
	1	113.4			2,935		
	4.19	-	2,881	115.6			
	4.20	68.1	1,731	70.3	1,785		
	4.21	39.0 <sup>3)</sup>	990 <sup>3)</sup>	39.0 <sup>3)</sup>	990 <sup>3)</sup>		
	4.22	1.6 x 3.1 x 45.3	40 x 80 x 1,150	1.6 x 3.1 x 45.3 40 x 80 x 1,150 2A			
	4.23 4.24	27.4					
	1	37.4	950	37.4	950		
	4.31	3.5	90	3.5	90		
	4.32	3.9	100	3.9	100		
	4.33	116.2 <sup>2)</sup>	2,951 2)	118.3 <sup>2)</sup>	3,005 <sup>2)</sup>		
	4.35	55.2	1,401	57.3	1,455		
	4.36	0	0	0	0		
	5.1	7.5 / 7.8	12 / 12.5	7.5 / 7.8	12 / 12.5		
	5.2	49.2 / 98.4	0.25 / 0.50	47.2 / 98.4	0.24 / 0.5		
	5.3	114.2 / 118.1 0.58 / 0.60		114.2 / 118.1	0.58 / 0.60		
	5.5	247 / 281	1,100 / 1,250	237 / 281	1,055 / 1,250		
	5.6	984 / 1,011 4,375 / 4,500		978 / 1,011	4,350 / 4,500		
	5.7	7/		6.5 / 10.5			
	5.8	11 / 1		10 / 16			
	5.9	5.4 /		5.6 / 4.8 hydraulic			
	5.10	hydra					
	6.1	5.4	4.0	5.4	4.0		
	6.2	8.0	6.0	8.0	6.0		
	6.4	24	875	24	1,000		
	6.5	1,257 / 1,429 570 / 648		1,416 / 1,610	642 / 730		
		17.13 / 32.68 / 24.69	435 / 830 / 627	19.25/32.68/24.69 489/830/627			
	8.1	Impulse / AC		Impuls			
	8.2	2,683	185	3,046	210		
	8.3	3.7	14	3.7 14 63			
	8.4	6	4	6			

EFG 110k-115





Note: Equipping this model (these models) with a power source (e.g. Lithium-ion, Hydrogen Fuel cell, etc.) that has not been previously approved by the factory is considered a modification. Per OSHA 1910.178 and ANSI/ITSDF B56.1, please consult with your factory representative prior to installing any non-OEM power source that has not been previously approved.

## The Jungheinrich Advantage

#### **High productivity**

Exceptional productivity due to a comfortable operator compartment, high performance characteristics and low life-cycle costs.

#### High residual capacity

Due to excellent stability, lift heights up to 171 inches on the EFG 115 and 188 inches on the EFG 110k / 110 / 113 can be achieved without reducing nominal capacity.

#### Performance-enhancing workplace

- Standard high overhead guard for superior headroom.
- Clear view: mast and fork carriage allow for excellent visibility to the forks.
- Comfortable, low-fatigue operation of travel direction and hydraulics by soloPILOT controls.
- Hydraulic power steering is precise and low-effort (5.2 turns lock-to-lock).

#### Significantly-reduced maintenance

- Single-piece metal cover ensures quick and easy access to the battery compartment.
- Low-maintenance AC motors.
- Fully-enclosed motors and electronic components comply with IP 54, protecting against dust, dirt and moisture ingress.
- Prolonged service intervals, up to 500 operating hours.
- Hydraulic pinion gear steering eliminates the need for chains.

#### Innovative drive and steering technology

- Programmable performance
- parameters ensure maximum flexibility. • Five drive programs can be individually
- selected and adjusted (optional).
- curveCONTROL reduces travel speed when cornering.



Drive and lift motor with AC technology

#### Innovative motor technology

With AC technology, the drive and lift motors offer excellent heat management.

#### Jungheinrich proprietary AC technology motors

- Fully enclosed, brushless AC motors are the key components of the EFG 1 Series low-maintenance drive unit. They are resistant to dust, dirt and moisture.
- Temperature control protects the motors from overheating by adjusting the performance.

#### Economic driving and lifting

- AC technology ensures
- exceptional performance.
- Regenerative braking system.
- No motor fans required.
- Extremely energy efficient resulting in more battery run time per charge.
- Progressive lowering brake valve allows for a consistent lowering speed with and without a load.



soloPILOT

#### soloPILOT

- soloPILOT (standard equipment) combines the direction switch, horn and the lifting/lowering function in one control lever.
- Additional functions, such as forward/ backward tilting, sideshifting (optional) and auxiliary hydraulics (optional), can be operated with additional levers placed directly next to the lift/lower lever.

#### Parts when you need them

Jungheinrich's Parts Fast or Parts Free Guarantee ensures next-business-day delivery by 5:00 p.m. 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.

