Maximum picking performance with low energy consumption

Powerful motor for maximum throughput efficiency

Optional walk-on load section (L) or auxiliary mast (Z)



## **EKS 110**

### Vertical Order Picker (2,200 lbs.)

The EKS 110 is the ideal truck for order picking processes from the first to the third racking levels. With a maximum platform height of 118" (3 m.), order picking heights of up to 181" (4.6 m.) can be reached.

The cantilevered design enables both open and closed pallets to be picked up.

Options available for the load section are fixed forks (can also be walked on with a guard (L)) and auxiliary lift (Z) for the ergonomic depositing of picked items.

The new 3.2-kW drive system facilitates travel speeds of up to 8.7 mph (14 km/h). Acceleration is also optimized to contribute towards efficient order picking. Various option packages and the load/steer angle-dependent curveCONTROL system fully exploit the strengths of the EKS 110:

- Dynamic acceleration
- Better handling during cornering
- High maximum speed with the best possible energy utilization

The EKS 110 workstation is designed to make work easier:

- Optimum movement options enable fatigue-free working when entering and exiting and when travelling and order picking.
- Intuitive and ergonomic arrangement of all controls.
- The 4-inch full-color display provides information on the battery charge status, number of service hours, travel speeds and provides a choice of three travel programs via soft key.



## **Technical Data**

	1.1	Manufacturer				Jungheinrich		Jungh	einrich	
တ္သ	1.2	Model		EKS 110	(110 E) 1)	EKS 110	(160 E) 1)			
stic	1.3	Drive				elec	ctric	elec	electric	
eri	1.4	Type of operation				order picker		order	picker	
Characteristics	1.5	Load capacity / rated load	Q	lbs	kg	2,205	1,000	2,205	1,000	
nar	1.6	Load center distance	С	in	mm	24.0	610	24	610	
ប	1.8	Load distance, center of drive axle to fork		in	mm	5.6	148	5.6	143	
	1.9	Wheelbase	у	in	mm	52.4	1,330	52.4	1,330	
Ø	2.1	Service weight without battery		lbs	kg	2,604 2)	1,181 <sup>2)</sup>	2,877 2)	1,305 <sup>2)</sup>	
ght	2.1.1	Service weight including battery (see line 6.5)		lbs	kg	3,6072)	1,637 <sup>2)</sup>	3,880 <sup>2)</sup>	1,761 <sup>2)</sup>	
Weights	2.2	Axle loading – loaded, drive / load		lbs	kg	1,080 / 4,774 3)	491 / 2,170 <sup>3)</sup>	1,135 / 4,992 3)	516 / 2,269 <sup>3)</sup>	
>	2.3	Axle loading – unloaded, drive / load		lbs	kg	2,317 / 1,338 3)	1,053 / 608 <sup>3)</sup>	2,405 / 1,522 3)	1,093 / 6923)	
(n	3.1	Tire type / material				Vulkollan® Vulkollan®				
assi	3.2	Tire size, drive		in	mm	9.1 x 3.1	230 x 80	9.1 x 3.1	230 x 80	
Is, Cl	3.3	Tire size, load		in	mm	5.9 x 5.1	150 x 130	5.9 x 5.1	150 x 130	
Wheels, Chassis	3.5	Wheels, number, drive / load (x=driven)				1x / 2		1x / 2		
\$	3.7	Track width, drive / load (center of tires)	b <sub>11</sub>	in	mm	24.8	630	24.8	630	
	4.2	Lowered mast height	h <sub>1</sub>	in	mm	65.0 <sup>4)</sup>	1,650 <sup>4)</sup>	89.0	2,260	
	4.4	Maximum fork height (MFH)	h <sub>3</sub>	in	mm	39.4	1,000	63.0	1,600	
	4.5	Overall extended height (OAE)		in	mm	104.3 4)	2,650 <sup>4)</sup>	150.8	3,830	
	4.7	Overhead load guard (cab) height		in	mm	87.8 (optional)	2,230 (optional)	87.8	2,230	
į	4.8	Seat height / standing height		in	mm	7.9	200	7.9	200	
	4.11	Auxiliary lift		in	mm	31.5 7)	8007	31.5 7)	800 <sup>7)</sup>	
	4.14	Maximum platform height		in	mm	47.2	1,200	70.9	1,800	
ö	4.15	Lowered fork height		in	mm	3.1	80	3.1	80	
Dimensions	4.16	Length of platform		in	mm	30.5 5)	775 <sup>5)</sup>	30.55	775 <sup>5)</sup>	
me	4.19	Overall length (including forks)		in	mm	113.8	2,890	113.8	2,890	
Ö		Length to fork face, headlength		in	mm	66.5	1,690	66.5	1,690	
		Overall width – chassis / wheel legs		in	mm	31.9 / 31.9	810 / 810	31.9 / 31.9	810 / 810	
- 1		Fork dimensions, thickness / width / length		in	mm	2.4 x 6.3 x 47.2 <sup>6</sup>	60 x 160 x 1200 <sup>6)</sup>	2.4 x 6.3 x 47.2 <sup>6)</sup>	60 x 160 x 1200 <sup>6)</sup>	
		Overall fork width (fixed carriage)		in	mm	21.3	540	21.3	540	
		Distance between wheelarms (BLO)		in	mm	16.9	430	16.9	430	
		Ground clearance, under mast (loaded)		in	mm	1.4	35	1.4	35	
- 1		Aisle width (for 48 x 40 pallets (L x W))		in	mm	126.0	3,200	126.0	3,200	
		Turning radius		in	mm	60.9	1,548	60.9	1,548	
		Travel speed, loaded / unloaded		mph	kph	6.1 / 6.3	9.8 / 10.1	5.6 / 5.6	9.9 / 9.9	
မွ	5.2	Lift speed, loaded / unloaded		ft / min	m/s	37.4 / 51.2	0.19 / 0.26	29.5 / 39.4	0.15 / 0.20	
ance		Lowering speed, loaded / unloaded		ft / min	m/s	47.2 / 47.2	0.24 / 0.24	45.3 / 43.3	0.23 .0.22	
		Gradeability, loaded / unloaded		%		7 / 10		7 / 10		
Perforn		Maximum gradeability loaded / unloaded		%		10 / 15		10 / 15		
Ъ		Acceleration time loaded / unloaded		Sec		5.1 / 4.8		5.1 / 4.8		
İ		Service brake				regenerative electric electromagnetic		regenerative electric electromagnetic		
-	6.1	Parking brake Drive motor (rating 60 minutes)		hn	kW	3.75	2.8	3.75	2.8	
1	6.2	Lift motor rating at 15%		hp hp	kW	4.0	3.0	4.0	3.0	
SIS	6.4	Battery voltage / nominal capacity		V	Ah	24 /		24 /		
Motors	6.5	Battery weight, minimum		lb	kg	1,047	475	1,047	475	
Σ		Battery dimensions (length x width x height)		in	mm	14.00x24.57x30.87	356x624x784	14.00x24.57x30.87	356x624x784	
		Battery roller height (option)		in	mm	6.7	170	6.7	170	
		Type of drive control		111	.,,,,,,	AC Speed				
Other		3.			(A)	61		AC Speed Control 61		
ŏ		Steering about the search of t				Electric Power Steering Electric Power Steering				
1) Г	Data applies unless otherwise specified for configurations L and Z				5) For auxiliary lift Z: -2.6 inches (-65mm)					

<sup>1)</sup> Data applies unless otherwise specified for configurations L and  $\,$  Z 2) For auxiliary lift Z: +264.6 lbs. (120 kg)

<sup>3)</sup> For auxiliary lift Z: approximately +44 / +221 lbs. (+20 / +100 kg)

<sup>4)</sup> With overhead guard: +22.8 inches (+580mm)

<sup>5)</sup> For auxiliary lift Z: -2.6 inches (-65mm) 6) For auxiliary lift Z:  $2.6 \times 6.3 \times 47.2$  inches (65 x 160 x 1,200mm); with fixed carriage.

<sup>7)</sup> Z configuration only

# as of: 06/2015 **EKS 110**

1.1 Jungheirrich 1.2 EKS 110 (190 E) " 1.3 electric electric 1.4 order picker order picker 1.5 2,205 1,000 2,205 1,000 1.6 24 610 24 610 1.8 5.6 143 7.1 180 1.9 52.4 1,330 54.5 1,385 2.1 2,939 1,333 3,942 1,788 2 2.1 2,939 1,789 4,945 2,224 8 2.2 1,113 /5,075 3 506 /2,307 3 167 /5,513 762 /2,506 3 3.1 VUNIN 1 230 x 80 9.1 x 31 230 x 80 3.3 59 x 51 150 x 130 5.9 x 51 150 x 130 3.5 1x / 2 1x / 2 3.7 248 630 28.4 720 4.2 100.8 2,560 89.0 2,250 4.4 74.8 1,900 110.2 2,800 4.5 162.6 4,130 198.0 5,030 4.7 87.8 2,230 87.8 2,230 4.8 7.9 200 7.9 200 4.1 31.5 800 31.5 800 4.1 13.5 800 31.5 800 4.1 40 82.7 2,100 118.1 3,000 4.1 31.5 800 31.5 800 4.1 40 82.7 2,100 118.1 3,000 4.1 31.5 800 31.5 800 4.1 31.5 800 31.5 800 4.1 32.7 2,100 118.1 3,000 4.1 31.5 800 31.5 800 4.1 32.7 2,100 118.1 3,000 4.1 31.5 800 31.5 800 4.1 32.7 2,100 118.1 3,000 4.1 31.5 800 31.5 800 4.1 32.7 2,100 118.1 3,000 4.1 32.7 2,100 118.1 3,000 4.1 31.5 800 31.5 800 4.1 32.7 2,100 118.1 3,000 4.1 31.5 800 31.5 800 4.1 32.7 2,100 118.1 3,000 4.1 32.7 2,100 118.1 3,000 4.1 31.5 800 31.5 800 4.1 32.7 2,100 118.1 3,000 4.1 32.7 2,100 118.1 3,000 4.1 32.7 2,100 118.1 3,000 4.1 31.5 80 31. 80 4.1 32.7 2,100 118.1 3,000 4.1 32.7 2,100 118.1 3,000 4.1 32.7 2,100 118.1 3,000 4.1 33.5 31 80 31 80 4.0 3.5 775 30.5 775 3	8.5	Electric Power Stee	ering	Electric Power Steering			
1.2         EKS 110 (190 E) <sup>10</sup> 1.3         electric         electric           1.4         order picker         corder picker           1.5         2.205         1.000         2.205         1.000           1.6         24         610         24         610           1.8         5.6         1.43         7.1         1.80           1.9         5.2.4         1.330         54.5         1.788°           2.1         2.939°         1.333°         3.942°         1.788°           2.113 / 5,075°         506 / 2.307°         167 / 5.513°         762 / 2.506°           2.3         2.385 / 1.604°         1.084 / 729°         2.939 / 2.050°         1.336 / 932°           3.1         Vulkulan**         Vulkollan**         Vulkollan**           3.2         9.1 x 3.1         230 x 80         9.1 x 3.1         230 x 80           3.3         5.9 x 5.1         150 x 130         5.9 x 5.1         150 x 130           3.5         1x / 2         1x / 2         1x / 2           3.7         24.8         630         28.4         720           4.2         10.0.8         2.560         89.0         2.250							
1.2   1.3   electric corder picker         electric corder picker         electric corder picker           1.4   corder picker         1.000         2,205   1,000         1.000 <td></td> <td></td> <td></td> <td colspan="4">•</td>				•			
1.2   1.3   electric         electric electric electric corder picker           1.5   2,205   1,000   2,205   1,000         1.6   24   610   24   610         1.6   610   24   610         1.7   180   18				·			
1.2   SEKS 110 (190 E) "         celectric celectric corder picker           1.4   corder picker         corder picker corder picker           1.5   2,205   1,000   2,205   1,000         1,000   2,205   1,000           1.6   24   610   24   610   18   56   1,335   1,330   54.5   1,335   1,335   1,335   1,788   2.1   3,942   1,789   4,945   2,244   2.2   1,113 / 5,075   506 / 2,307   167 / 5,513   762 / 2,506   2.244   2.2   1,113 / 5,075   506 / 2,307   167 / 5,513   762 / 2,506   2.3   2,335 / 1,604   1,084 / 729   2,939 / 2,050   1,336 / 932   3.3   5.9 x 5.1   150 x 130   5.9 x 5.1   150 x 130   1.3 x 60   3.3   5.9 x 5.1   150 x 130   5.9 x 5.1   150 x 130   1.3 x 60   2.250   1.3 x 60   1.0 x 60							
1.2         EKS 110 (280 ZZ) "           1.3         electric         electric           1.4         order picker         corder picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           2.1         2,939 "         1,333 "         3,942 "         1,788 "           2.1         3,942 "         1,788 "         4,945 "         2,244 "           2.2         1,113 / 5,075 "         506 / 2,307 "         167 / 5,513 "         762 / 2,506 "           2.3         2,385 / 1,604 "         1,084 / 729 "         2,939 / 2,050 "         1,336 / 932 "           3.1         Vulkollan®         Vulkollan®         1,366 / 320 "         1,336 / 932 "           3.2         91 x 3.1         230 x 80         91 x 3.1         230 x 80           3.3         5.9 x 5.1         150 x 130         5.9 x 5.1         150 x 130           3.5         1x / 2         1x / 2         1x / 2           3.7         24.8         630         28.4         720           4.2         10.0.8							
1.2         EKS 110 (≥80 EZ) "           1.3         electric         electric           1.4         order picker         order picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,330         54.5         1,385           2.1         2,939 °         1,333°         3,942°         1,788°           2.1         3,942°         1,789°         4,945°         2,244°           2.2         1,113 / 5,075°         506 / 2,307°         167 / 5,513°         762 / 2,506°           2.3         2,385 / 1,604°         1,084 / 729°         2,939 / 2,050°         1,336 / 932°           3.1         Vulk—lin*         Vulk—lin*         Vulk—lin*           3.2         91 x 3.1         230 x 80         9.1 x 3.1         230 x 80           3.3         5.9 x 5.1         150 x 130         5.9 x 5.1         150 x 130           3.5         1x/2         1x/2         1x/2         1x/2           4.2         10.0.8         2,560         89.0         2,							
1.2         EKS 110 (280 ZZ) <sup>13</sup> 1.3         electric         electric           1.4         order picker         order picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           2.1         2,939 <sup>28</sup> 1,333         3,942 <sup>28</sup> 1,788 <sup>28</sup> 2.1         3,942 <sup>28</sup> 1,789 <sup>28</sup> 4,945 <sup>28</sup> 2,244 <sup>28</sup> 2.2         1,113 / 5,075 <sup>38</sup> 506 / 2,307 <sup>38</sup> 167 / 5,513 <sup>38</sup> 762 / 2,506 <sup>38</sup> 2.3         2,385 / 1,604 <sup>38</sup> 1,084 / 729 <sup>38</sup> 2,939 / 2,050 <sup>38</sup> 1,336 / 932 <sup>38</sup> 3.1         Vulkotlan®         Vulkotlan®         2,339 / 2,050 <sup>38</sup> 1,336 / 932 <sup>38</sup> 3.1         Vulkotlan®         9.1 x 3.1         230 x 80         9.1 x 3.1         230 x 80           3.3         5.9 x 5.1         150 x 130         5.9 x 5.1         150 x 130         150 x 130           3.5         1x / 2         150 x 130         5.9 x 5.1         150 x 130         150 x 130           4.2							
1.2         EKS 110 (190 E) ³         EKS 110 (280 ZZ) ³           1.3         electric           1.4         colspan="2">colspan="2">electric           1.5         2.205         1.000         2.205         1.000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,330         54.5         1,385           2.1         2,939 °         1,333°         3,942°         1,788°           2.1         3,942°         1,788°         2,244°           2.2         1,113 / 5,075°         506 / 2,307³         167 / 5,513°         762 / 2,506°           2.3         2,385 / 1,604°         1,084 / 729°         2,939 / 2,050°         1,336 / 932°           3.1         Vulkotlan°         Vulkotlan°           3.2         9.1 x 3.1         1,084 / 729°         2,939 / 2,050°         1,336 / 932°           3.3         5.9 x 5.1         1,084 / 729°         2,939 / 2,050°         1,336 / 932°           3.1         1.0         1,084 / 729°         2,939 / 2,050°         1,326 / 932°           3.1         1.0         1,138		3.75	2.8		2.8		
1.2         EKS 110 (190 E) ³         EKS 110 (280 ZZ) ³           1.3         electric           1.4         roder picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,330         54.5         1,385           2.1         2,939°         1,333°         3,942°         1,788°           2.1         3,942°         1,788°         4,945°         2,244°           2.2         1,113 / 5,075°         506 / 2,307°         167 / 5,513°         762 / 2,506°           2.3         2,385 / 1,604°         1,084 / 729°         2,939 / 2,050°         1,336 / 932°           3.1         Vulkollan°         Vulkollan°           3.2         9.1 x 3.1         230 x 80         9.1 x 3.1         230 x 80           3.3         5.9 x 5.1         150 x 130         5.9 x 5.1         150 x 130           3.5         1x / 2         1x / 2         1x / 2           3.7         24.8         630         28.4         720							
1.2         EKS 110 (190 E) ³         EKS 110 (280 ZZ) ³           1.3         electric           1.4         rorder picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,333°         5.942°         1,788°           2.1         2,939°         1,333°         3,942°         1,788°           2.11         3,942°         1,789°         4,945°         2,244°           2.2         1,113/5,075°         506/2,307°         167/5,513°         762/2,506°           2.3         2,385/1,604°         1,084/729°         2,939/2,050°         1,336/932°           3.1         Vulkollan°         Vulkollan°           3.2         91x31         230 x 80         9.1 x 3.1         230 x 80           3.3         5.9 x 5.1         150 x 130         5.9 x 5.1         150 x 130           3.5         1x/2         1x/2         1x/2           3.7         24.8         630         28.4         720           4		, ,		regenerative electric			
1.2         EKS 110 (190 E) ³         EKS 110 (280 ZZ) ³           1.3         electric           1.4         colspan="2">				5.1 / 4.8			
1.2         EKS 110 (190 E) ³ B         EKS 110 (280 ZZ) ³           1.3         electric           1.4         order picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,330         54.5         1,385           2.1         2,939²         1,333²         3,942²         1,788²           2.1.1         3,942²         1,788²         2,244²           2.1.1         3,942²         1,788²         2,244²           2.1.1         3,942²         1,788²         2,244²           2.1         1,135,5075³         5066/2,307³         1675,513³         762/2,506³           2.2         1,113 / 5,075³         5066/2,307³         1.991         1,336 / 932³           3.1         Vullbulm®         Vullbulm®         Vullbulm®           3.2         9.1 x 3.1         230 x 80         9.1 x 3.1         230 x 80           3.3         5.9 x 5.1         150 x 130         5.9 x 5.1         150 x 130           3.5	_						
1.2   EKS 110 (190 E) <sup>13</sup>   EKS 110 (280 ZZ) <sup>13</sup>   1.3   electric   electric   electric   1.4   order picker   Order picker   1.5   2,205   1,000   2,205   1,000   1.6   24   610   24   610   1.8   5.6   143   7.1   180   1.9   52.4   1,330   54.5   1,385   2.1   2,939	5.7	7 /	10	7 / 10			
1.2         EKS 110 (190 E) ³         EKS 110 (280 ZZ) ³           1.3         electric           1.4         order picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,330         54.5         1,385           2.1         2,939°         1,333°         3,942°         1,788°           2.1.1         3,942°         1,788°         2,244°         2,244°           2.1         3,942°         1,788°         4,945°         2,244°           2.1         3,942°         1,788°         2,248°         2,248°           2.1         1,35,5075°         5066/2,307°         1676,513°         762/2,506°         2,248°           2.2         1,113/5,075°         5066/2,307°         1676/5,513°         762/2,506°         3           3.1         Vulkulm®         Vulkulm®         Vulkulm®         1,336° 4932°         3           3.2         9.1 x 3.1         230 x 80         9.1 x 3.1         230 x 80         3		45.3 / 43.3	0.23 / 0.22	55.1 / 51.2	0.28 / 0.26		
1.2         EKS 110 (190 E) <sup>1)</sup> EKS 110 (280 ZZ) <sup>1)</sup> 1.3         electric           1.4         order picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,330         54.5         1,385           2.1         2,939 <sup>20</sup> 1,333 <sup>20</sup> 3,942 <sup>20</sup> 1,788 <sup>20</sup> 2.1.1         3,942 <sup>20</sup> 1,789 <sup>20</sup> 4,945 <sup>20</sup> 2,244 <sup>20</sup> 2.1         3,942 <sup>20</sup> 1,789 <sup>20</sup> 4,945 <sup>20</sup> 2,244 <sup>20</sup> 2.1         3,942 <sup>20</sup> 1,789 <sup>20</sup> 4,945 <sup>20</sup> 2,244 <sup>20</sup> 2.1         3,942 <sup>20</sup> 1,788 <sup>20</sup> 2,244 <sup>20</sup> 2.2         1,113 / 5,075 <sup>30</sup> 506 / 2,307 <sup>30</sup> 167 / 5,513 <sup>30</sup> 762 / 2,506 <sup>3</sup> 3.1         Vulkollan®         Vulkollan®         2,932 / 2,050 <sup>3</sup> 1,336 / 932 <sup>3</sup> 3.1         Vulkollan®         1,50 x 130         5.9 x 5.1         150 x 130	5.2	29.5 / 39.4		45.3 / 61.0	0.23 / 0.31		
1.2         EKS 110 (190 E) ¹¹         EKS 110 (280 ZZ) ¹¹           1.3         electric           1.4         order picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,330         54.5         1,385           2.1         2,939 ²¹         1,333²¹         3,942²¹         1,788²¹           2.1         3,942²¹         1,789³¹         4,945²¹         2,244²²           2.2         1,113 / 5,075³¹         506 / 2,307³¹         167 / 5,513³¹         762 / 2,506³¹           2.3         2,385 / 1,604³¹         1,084 / 729³¹         2,939 / 2,050³¹         1,336 / 932³¹           3.1         Vulkollan®           3.2         9.1 x 3.1         230 x 80         9.1 x 3.1         230 x 80           3.3         5.9 x 5.1         150 x 130         5.9 x 5.1         150 x 130           3.5         1x / 2         1x / 2         1x / 2           3.7         24.8         630         28.4         720	5.1	5.6 / 5.6	9.9 / 9.9		9.9 / 9.9		
1.2         EKS 110 (190 E) ¹¹         EKS 110 (280 ZZ) ¹¹           1.3         electric           1.4         order picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,330         54.5         1,385           2.1         2,939 ²¹         1,333²¹         3,942²¹         1,788²¹           2.1         3,942²¹         1,789³¹         4,945²¹         2,244²²           2.2         1,113 / 5,075³¹         506 / 2,307³¹         167 / 5,513³¹         762 / 2,506³¹           2.3         2,385 / 1,604³¹         1,084 / 729³¹         2,939 / 2,050³¹         1,336 / 932³¹           3.1         Vulkollan®           3.2         9.1 x 3.1         230 x 80         9.1 x 3.1         230 x 80           3.3         5.9 x 5.1         150 x 130         5.9 x 5.1         150 x 130           3.5         1x / 2         1x / 2         1x / 2           3.7         24.8         630         28.4         720	4.35	60.9	1,548	63.1	1,603		
1.2         EKS 110 (190 E) ¹¹         EKS 110 (280 ZZ) ¹¹           1.3         celectric           1.4         Order picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,330         54.5         1,385           2.1         2,939°         1,333°         3,942°         1,788°           2.1.1         3,942°         1,789°         4,945°         2,244°           2.2         1,113 / 5,075°         506 / 2,307°         167 / 5,513°         762 / 2,506°           2.3         2,385 / 1,604°         1,084 / 729°         2,939 / 2,050°         1,336 / 932°           3.1         Vulkollan®           3.2         9.1 x 3.1         230 x 80         9.1 x 3.1         230 x 80           3.3         5.9 x 5.1         150 x 130         5.9 x 5.1         150 x 130           3.5         1x / 2         1x / 2         1x / 2           3.7         24.8         630         28.4         720           4.2<					·		
1.2       EKS 110 (190 E) ³¹       EKS 110 (280 ZZ) ³¹         1.3       electric         1.4       order picker         1.5       2,205       1,000       2,205       1,000         1.6       24       610       24       610         1.8       5,6       143       7.1       180         1.9       52.4       1,330       54.5       1,385         2.1       2,939 ²¹       1,333 ²¹       3,942 ²¹       1,788 ²¹         2.1       3,942 ²¹       1,789 ²¹       4,945 ²¹       2,244 ²¹         2.2       1,113 / 5,075 ³¹       506 / 2,307 ³¹       167 / 5,513 ³¹       762 / 2,506 ³³         2.3       2,385 / 1,604 ³¹       1,084 / 729 ³¹       2,939 / 2,050 ³³       1,336 / 932 ³³         3.1       Vulkollan®         3.2       9.1 x 3.1       230 x 80       9.1 x 3.1       230 x 80         3.3       5.9 x 5.1       150 x 130       5.9 x 5.1       150 x 130         3.5       1x / 2       1x / 2       1x / 2         4.2       10.8       2,560       89.0       2,250         4.4       74.8       1,900       110.2       2,800 <td></td> <td></td> <td></td> <td></td> <td></td>							
1.2       EKS 110 (190 E) ¹¹       EKS 110 (280 ZZ) ¹¹         1.3       electric         1.4       order picker         1.5       2,205       1,000         1.6       24       610         1.8       5.6       143       7.1       180         1.9       52.4       1,330 ²²       54.5       1,385         2.1       2,939 ²²       1,788 ²²         2.1       2,939 ²²       1,788 ²²         2.1       2,939 ²²       1,788 ²²         2.1       1,13 5,075 ³³       506 ²,2307 ³³       167 ½,513 ³³       762 ½,256 ³³         2.3       2,385 ½,1604 ³³       1,084 ½,722 ³³       762 ½,256 ³³         3.1       Vulkollan®         Vulkollan®         3.1       Vulkollan®         3.2       9.1 x 3.1       230 x 80         3.2       9.1 x 3.1       230 x 80         3.2 <td cols<="" td=""><td></td><td></td><td></td><td></td><td colspan="2"></td></td>	<td></td> <td></td> <td></td> <td></td> <td colspan="2"></td>						
1.2         EKS 110 (190 E) ³¹         EKS 110 (280 ZZ) ³¹           1.3         electric           1.4         order picker           1.5         2,205         1,000           1.6         24         610           1.8         5.6         143         7.1         180           1.9         5.24         1,330         54.5         1,385           2.1         2,939°         1,333°         3,942°         1,788°           2.1         2,939°         1,788°           2.1         2,939°         1,788°           2.1         2,939°         1,788°           2.1         2,939°         1,788°           2.1         2,939°         1,788°           2.1         1,332°         1,667         1,788°           2.1         1,135,075°         506/2,307°°         167/5,513°°         762/2,506°°           3.1         Vulk							
1.2       EKS 110 (190 E) ³¹       EKS 110 (280 ZZ) ³¹         1.3       electric         1.4       order picker         1.5       2,205       1,000         1.6       24       610         1.8       5.6       143       7.1       180         1.9       52.4       1,333 °²       3,942 °²       1,788 °²         2.1       2,939 °²       1,333 °²       3,942 °²       1,788 °²         2.1.1       3,942 °²       1,788 °²         2.1.1       3,942 °²       1,788 °²         2.1.1       3,942 °²       1,788 °²         2.1.1       3,942 °²       1,788 °²         2.1.1       3,942 °²       1,788 °²         2,939 / 2,050 ³³       1,788 °²         2,385 / 1,604 °³       1,084 / 729 °³         1,1336 / 932 ³³         1,2939 / 2,050 ³³       1,336 / 932 ³³         1,2939 / 2,050 ³³       1,336 / 932 ³³ <td></td> <td></td> <td></td> <td></td> <td></td>							
1.2       EKS 110 (190 E) ³¹       EKS 110 (280 ZZ) ³¹         1.3       electric         1.4       order picker         1.5       2,205       1,000         1.6       24       610         1.8       5.6       143       7.1       180         1.9       52.4       1,333 ²³       3,942 ²³       1,788 ²³         2.1       2,939 ²       1,333 ²³       3,942 ²³       1,788 ²³         2.1       3,942 ²³       1,788 ²³         2.1       3,942 ²³       1,788 ²³         2,11       3,942 ²³       1,788 ²³         2,335 / 1,604 ³³       1,084 / 729 ³³       4,945 ²³       2,244 ²³         2,385 / 1,604 ³³       1,084 / 729 ³³       2,939 / 2,050 ³³       1,336 / 932 ³³         3.1       Vulkollam®         3.2       9.1 x 3.1       230 x 80         3.2       9.1 x 3.1       230 x							
1.2         EKS 110 (190 E) <sup>1)</sup> EKS 110 (280 ZZ) <sup>1)</sup> 1.3         electric order picker           1.4         Order picker           1.5         2,205         1,000         2,205         1,000           1.6         24         610         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,330         54.5         1,385           2.1         2,939 <sup>20</sup> 1,333 <sup>20</sup> 3,942 <sup>20</sup> 1,788 <sup>20</sup> 2.1.1         3,942 <sup>20</sup> 1,789 <sup>20</sup> 4,945 <sup>20</sup> 2,244 <sup>20</sup> 2.2         1,113 / 5,075 <sup>30</sup> 506 / 2,307 <sup>30</sup> 167 / 5,513 <sup>30</sup> 762 / 2,506 <sup>30</sup> 2.3         2,385 / 1,604 <sup>30</sup> 1,084 / 729 <sup>30</sup> 2,939 / 2,050 <sup>30</sup> 1,336 / 932 <sup>30</sup> 3.1         Vulkollan®           3.2         9.1 x 3.1         230 x 80         9.1 x 3.1         230 x 80           3.3         5.9 x 5.1         150 x 130         5.9 x 5.1         150 x 130           3.5         1x / 2         1x / 2         1x / 2         1x / 2           4.2         10.0.8         <				-	·		
1.2         EKS 110 (190 E) <sup>3)</sup> EKS 110 (280 ZZ) <sup>3)</sup> 1.3         electric           1.4         order picker           1.5         2,205         1,000           1.6         24         610           1.8         5.6         143         7.1         180           1.9         52.4         1,330         54.5         1,788 <sup>2)</sup> 2.1         2,939 ½         1,788 <sup>2)</sup> 2,244 <sup>2)</sup> 2.1.1         3,942 <sup>2)</sup> 1,788 <sup>2)</sup> 2,244 <sup>2)</sup> 2.1         3,942 <sup>2)</sup> 1,788 <sup>2)</sup> 2,244 <sup>2)</sup> 2.1         3,942 <sup>2)</sup> 1,788 <sup>2)</sup> 2,244 <sup>2)</sup> 2.2         1,113 / 5,075 <sup>3)</sup> 506 / 2,307 <sup>3)</sup> 167 / 5,513 <sup>3)</sup> 762 / 2,506 <sup>3)</sup> 3.1         Vulkollane           3.1         Vulkollane           3.2         9.1 x 3.1         230 x 80							

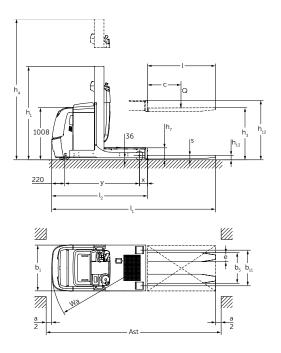


Illustration shows version 100 E.

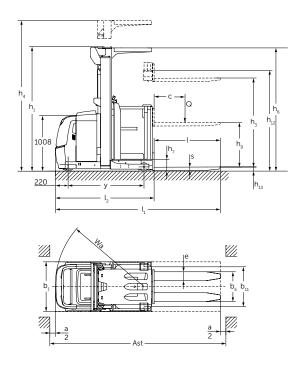


Illustration shows version 280 ZZ. Top view shown without overhead guard (OHG).

<sup>\*</sup>Fork design and carriage design may be different than illustrated.

## The Jungheinrich Advantage



Ergonomic workstation

#### Efficient order picking

Order-picking even in tough applications thanks to a capacity of up to 2,200 lbs. (1,000 kg.) with a load center of 24" (600 mm.) The low load provides stable cornering, giving operators a feeling of security while traveling. The optimized lowering of the walk-on load section (optional) means that the platform plus loading device is lowered to the lowest level when order picking - for the lowest entry every time and no depositing of the pallet. Particularly with low lift heights and frequent entry and exit, the drive control via external jog buttons provides a fast way of reaching the next picking point. With the auxiliary lift, the touch mode button is located on the backrest to enable direct access to the loading device.

#### Robust design

- High-quality stainless steel skirt raised extra high on the front panel.
- Impact-protected steel drive panel protects the components behind it.
- Optional rubber or steel bumper provides additional protection.

#### Optimal visibility

- Integrated dayLED daytime running lights for better visibility in poorly lit warehouses (optional).
- LED working lights on the overhead guard can be used as additional running lights or to illuminate the racking when order picking (optional).
- The LED workstation lighting ensures that the operator position is well lit (optional).
- Floor Spot: The risk of collision at blind spots is significantly reduced by a dot of red light projected on the floor approximately 10 ft. (3 m.) in front of the truck (optional).



Driver's display

#### **Ergonomic workstation**

- · Low entry height for easy entry and exit.
- Padded backrest for efficient depositing of goods on the forks and a continuous, comfortable rubber mat providing noticeable relief for the operator.
- The tilted steering wheel supports natural hand movements.
- Good storage capabilities are offered by the integrated paper holder and other storage compartments. All the equipment required for order picking as well as personal items can be stowed away.

#### Long operation times

- Energy-saving 3-phase technology and high battery capacities ensure long operation times.
- Lateral battery removal for multi-shift operation (optional).

#### Standard equipment:

- · Robust steel covers.
- Powerful 3.2kW drive motor.
- Regenerative braking for gradual slowing and energy recovery.
- Proportional lifting and lowering.
- Ergonomic cabin with low step height and freedom of movement.
- Paperwork holder & writing surface.
- Edge-to-edge floor cushioning across the entire operator platform.
- · Padded backrest.
- Conveniently located open storage compartment.
- Full-color, interactive instrument display with soft key menu selection buttons.
- Load-side operation of the auxiliary mast forks.
- Operator side gates (standard when ordered with lifting heights at 47" / 1200 mm or higher).
- Easy access to the battery.
- Shrink wrap / cellophane roll storage well integrated in hood.
   (-E version only)

#### Lithium-ion Package Advantages

- Fast charging with no need for battery exchanges
- Maintenance-free with no odors from gases or acidification
- Longer service life and lower maintenance compared with lead-acid batteries
- Charging can be interrupted at anytime
- 5-year battery warranty included

#### Optional equipment:

- Side battery removal.
- drivePLUS performance option for increased travel speed.
- Auxiliary mast to raise pallet to comfortable height for easier load building.
- Various fork dimensions.
- Optional ITA/ISO fork carriage for use with hook-mount forks.
- Platform extensions.
- · Electric steering.
- Dual controls.
- Drive & lift control via external buttons.
- PIN code access system to start unit.
- · dayLED daytime running lights.
- · LED work light.
- LED interior lighting.
- Rotating beacon.
- · Accessory mounting bracket.
- Storage on the battery cover.USB port 5V power supply.

#### 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.

