

High performance and high energy efficiency with 4th generation AC technology

Electric power steering for improved operator comfort and reliability

soloPILOT or multiPILOT integrated into the adjustable armrest

Sealed components to help protect against dust and moisture

Available in 36 and 48 voltages



EFG 213 – 220 / 316k – 320

Three- And Four-Wheel Counterbalanced Truck (2,500 – 4,000 lbs.)

The advantages of electrics

The newest generation of AC technology offers numerous advantages for electric counterbalanced forklifts:

- Minimal energy consumption due to high efficiency and energy recovery.
- Minimal service costs due to the reduction of mechanical and hydraulic components.
- Efficient electric power steering using AC technology.

The advantage: industry-leading drive and lift performance levels and the ability to run up to two shifts on a single battery charge in most applications (guaranteed on 48 volt EFG 216-220 models). Combine this with reduced maintenance requirements, and you can significantly reduce your total cost of ownership.

Outdoor applications

Harsh environments are no problem for the EFG 213-220 / 316k-320 series of forklifts because major electrical components are highly sealed, including connectors, controllers, motors and more. The enclosed cabin option provides a comfortable and productive environment for operators – even in wet, cold or extreme conditions.

Technical data

Characteristics	1	Capacity at rated load center	lb	kg	EFG 213 (3-wheel)		EFG 216k (3-wheel)		
	2	Capacity at load center - distance	in	mm	2,510	1,300	3,100	1,600	
	3	Capacity at load center - distance	in	mm	24	500	24	500	
	4	Power – diesel, gasoline, LP gas, electric				electric		electric	
	5	Tire type – cushion, solid pneumatic				solid pneumatic		solid pneumatic	
Dimensions	11	Wheels (x = driven) – number front / rear				2x/2		2x/2	
	12	Maximum fork height*	in	mm	118	3,000	118	3,000	
	13	Free fork height*	in	mm	5.9	150	5.9	150	
	14	Fork dimensions (thickness x width x length)	in	mm	1.4x3.9x43.0	35x100x1,100	1.6x3.9x43.0	40x100x1,100	
	15	Fork spacing – out-to-out minimum / maximum	in	mm	12.3/36	312/914	12.3/36	312/914	
	16	Tilt – forward / backward	deg		7/6		7/6		
	17	Length to fork face	in	mm	69.8	1,774	74.3	1,887	
	18	Width – standard	in	mm	41.7	1,060	41.7	1,060	
	19	Width – w/ wide stance drive wheels	in	mm	n/a		n/a		
	20	Height with lowered mast	in	mm	79	2,000	79	2,000	
	21	Height – seat height to SIP	in	mm	36.2	920	36.2	920	
	22	Height to top of overhead guard	in	mm	80.4	2,040	80.4	2,040	
	23	Height with extended mast	in	mm	166	4,216	166	4,216	
	24	Minimum outside turning radius	in	mm	56.7	1,440	60.9	1,548	
	25	Load moment constant (36V)	in	mm	13.3	339	13.5	344	
	26	Load moment constant (48V)	in	mm	13.2 ¹⁾	335	13.4 ¹⁾	340	
	27	Minimum aisle - 90° stack** – and clearance	in	mm	69.9 ¹⁾	1,780	74.3 ¹⁾	1,890	
	Performance	28	Travel speed – loaded / empty (36V)	mph	km/h	9.3 / 9.9	15 / 16	9.3 / 9.9	15 / 16
		29	Travel speed – loaded / empty (48V)	mph	km/h	10 / 10	16 / 16	10 / 10	16 / 16
30		Lift speed - loaded / empty (36V)	fpm	m/s	78.7 / 112.2	0.4 / 0.57	72.8 / 112.2	0.37 / 0.57	
31		Lift speed - loaded / empty (48V)	fpm	m/s	94.5 / 118.1	0.48 / 0.60	96.5 / 118.1	0.49 / 0.60	
32		Lowering speed – loaded / empty (36V)	fpm	m/s	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	
33		Lowering speed – loaded / empty (48V)	fpm	m/s	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	
34		Maximum gradeability – loaded / empty (36V)	%		22 / 32		21 / 30		
Weight	35	Maximum gradeability – loaded / empty (48V)	%		28 / 35		27 / 35		
	36	Empty with minimum weight battery (36V)	lb	kg	5,935	2,692	6,523	2,959	
	37	Empty with minimum weight battery (48V)	lb	kg	5,947	2,698	6,520	2,957	
	38	Axle load with rated load – front / rear (36V)	lb	kg	7,791 / 1,010	3,534 / 458	8,913 / 1,138	4,043 / 516	
	39	Axle load with rated load – front / rear (48V)	lb	kg	7,434 / 1,023	3,514 / 484	8,474 / 1,146	4,014 / 543	
	40	Axle load without load – front / rear (36V)	lb	kg	2,881 / 3,053	1,307 / 1,385	3,069 / 3,455	1,392 / 1,567	
	41	Axle load without load – front / rear (48V)	lb	kg	2,885 / 3,062	1,309 / 1,389	3,067 / 3,453	1,391 / 1,566	
Chassis	42	Tire size – front, standard solid pneumatic tires	in		18x7-8		18x7-8		
	43	Tire size – rear solid pneumatic tires	in		140/55-9		140/ 55-9		
	44	Wheelbase	in	mm	49.2	1,249	53.4	1,357	
	45	Tread width – front, standard solid pneumatic tires	in	mm	35.6	904	35.6	904	
	46	Tread width – rear solid pneumatic tires	in	mm	6.9	176	6.9	176	
	47	Ground clearance at lowest point at mast	in	mm	3.1	80	3.1	80	
	48	Ground clearance at center of wheelbase	in	mm	3.9	100	3.9	100	
	49	Service brakes	type		electric / mechanical		electric / mechanical		
	50	Parking brakes	type		electromagnetic		electromagnetic		
Powertrain	51	Battery type				lead-acid		lead-acid	
	52	Battery dimensions (length x width x height)	in		20.55 x 32.68 x 24.69		24.80 x 32.68 x 24.69		
	53	Maximum capacity at 6 hour discharge rate (36V)	Ah	kWh	510	18.4	595	21.4	
	54	Maximum capacity at 6 hour discharge rate (48V)	Ah	kWh	400	19.2	500	24.0	
	55	Battery weight, minimum (36V)	lb	kg	1,576	715	1,885	855	
	56	Battery weight, minimum (48V)	lb	kg	1,497	679	1,791	812	
	57	Motors – traction output (60 min. rating) x 2 (36V)	HP	kW	6.8	5	6.8	5	
	58	Motors – traction output (60 min. rating) x 2 (48V)	HP	kW	6.0	4.5	6.0	4.5	
	59	Lift output (15% rating)	HP	kW	15.4	11.5	15.4	11.5	
	60	Drive controls	type		Impulse / AC		Impulse / AC		
	61	Hydraulic controls	type		AC		AC		
	62	Relief pressure for attachments at auxiliary	psi	bar	2,900	200	2,900	200	
	63	Noise level (mean value at operator’s ear)	dB(A)		66		66		

* With standard two-stage mast (ZT)

1) Add 1.0" (25 mm) if truck is equipped with a triplex mast. Add an additional 0.9" (23 mm) if equipped with an integrated sideshifter, or an additional 2.4" (60 mm) if equipped with a hang-on sideshifter.

EFG 216 (3-wheel)		EFG 218k (3-wheel)		EFG 218 (3-wheel)		EFG 220 (3-wheel)		EFG 316k (4-wheel)	
3,100	1,600	3,490	1,800	3,490	1,800	3,880	2,000	3,100	1,600
24	500	24	500	24	500	24	500	24	500
electric		electric		electric		electric		electric	
solid pneumatic		solid pneumatic		solid pneumatic		solid pneumatic		solid pneumatic	
2x/2		2x/2		2x/2		2x/2		2x/2	
118	3,000	118	3,000	118	3,000	118	3,000	118	3,000
5.9	150	5.9	150	5.9	150	5.9	150	5.9	150
1.6x39x43.0	40x150x1,100	1.6x3.9x43.0	40x100x1,100	1.6x3.9x43.0	40x100x1,100	1.6x3.9x43.0	40x100x1,100	1.6x3.9x43.0	40x100x1,100
12.3/36	312/914	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914
7/6		7/6		7/6		7/6		7/6	
78.5	1,995	74.3	1,887	78.5	1,995	78.5	1,995	78.3	1,990
41.7	1,060	44.1	1,120	44.1	1,120	44.1	1,120	41.7	1,060
n/a		n/a		n/a		n/a		n/a	
79	2,000	79	2,000	79	2,000	79	2,000	79	2,000
36.2	920	36.2	920	36.2	920	36.2	920	36.2	920
80.4	2,040	80.4	2,040	80.4	2,040	80.4	2,040	80.4	2,040
166	4,216	166	4,216	166	4,216	166	4,216	166	4,216
65.2	1,655	60.9	1,548	65.2	1,655	65.2	1,655	73.2	1,859
13.5	344	14.3	364	14.3	364	14.3	364	13.5	344
13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340
78.6 ¹⁾	2,000	74.3 ¹⁾	1,890	78.6 ¹⁾	2,000	78.6 ¹⁾	2,000	86.6 ¹⁾	2,200
9.3 / 9.9	15 / 16	8.7 / 9.9	14 / 16	8.7 / 9.9	14 / 16	8.7 / 9.9	14 / 16	9.3 / 9.9	15 / 16
10 / 10	16 / 16	10 / 10	16 / 16	10 / 10	16 / 16	10 / 10	16 / 16	10.6 / 10.6	17.0 / 17.0
72.8 / 112.2	0.37 / 0.57	68.9 / 108.3	0.35 / 0.55	68.9 / 108.3	0.35 / 0.55	65.0 / 108.3	0.33 / 0.55	76.8 / 112.2	0.39 / 0.57
96.5 / 118.1	0.49 / 0.60	86.6 / 108.3	0.44 / 0.55	86.6 / 108.3	0.44 / 0.55	78.7 / 108.3	0.40 / 0.55	96.5 / 118.1	0.49 / 0.60
108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55
108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55
21 / 30		19 / 24		19 / 26		18 / 20		21 / 30	
27 / 35		26 / 35		25 / 35		24 / 35		27 / 35	
6,654	3,018	7,143	3,240	7,035	3,191	7,421	3,366	6,601	2,994
6,627	3,006	7,084	3,213	6,957	3,156	7,343	3,331	6,597	2,992
8,929 / 1,248	4,050 / 566	9,826 / 1,285	4,457 / 583	9,870 / 1,133	4,477 / 514	10,547 / 1,283	4,784 / 582	8,807 / 1,321	3,995 / 599
8,480 / 1,247	4,015 / 590	9,306 / 1,268	4,412 / 601	9,191 / 1,256	4,360 / 596	9,814 / 1,409	4,661 / 669	8,542 / 1,155	3,967 / 625
3,261 / 3,393	1,479 / 1,539	3,137 / 4,006	1,423 / 1,817	3,382 / 3,653	1,534 / 1,657	3,338 / 4,083	1,514 / 1,852	3,003 / 3,598	1,362 / 1,632
3,243 / 3,384	1,471 / 1,535	3,066 / 4,018	1,391 / 1,822	3,298 / 3,659	1,496 / 1,660	3,259 / 4,084	1,478 / 1,853	2,999 / 3,598	1,360 / 1,632
18x7-8		200/50-10		200/50-10		200/50-10		18x7-8	
140/55 - 9		140/55-9		140/55-9		140/55-9		16x6-8	
57.7	1,465	53.4	1,357	57.7	1,465	57.7	1,465	55.1	1,400
35.6	904	36	914	36	914	36	914	35.6	904
6.9	176	6.9	176	6.9	176	6.9	176	32.7	830
3.1	80	3.1	80	3.1	80	3.1	80	3.1	80
3.9	100	3.9	100	3.9	100	3.9	100	3.9	100
electric / mechanical		electric / mechanical		electric / mechanical		electric / mechanical		electric / mechanical	
electromagnetic		electromagnetic		electromagnetic		electromagnetic		electromagnetic	
lead-acid		lead-acid		lead-acid		lead-acid		lead - acid	
29.06 x 32.68 x 24.69		24.80 x 32.68 x 24.69		29.06 x 32.68 x 24.69		29.06 x 32.68 x 24.69		24.80 x 32.68 x 24.69	
680	24.5	595	21.4	680	24.5	680	24.5	595	21.4
600	28.8	500	24.0	600	28.8	600	28.8	500	24.0
2,260	1,025	1,885	855	2,260	1,025	2,260	1,025	1,885	855
2,147	974	1,791	812	2,147	974	2,147	974	1,791	812
6.8	5	6.8	5	6.8	5	6.8	5	6.8	5
6.0	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0	4.5
15.4	11.5	15.4	11.5	15.4	11.5	15.4	11.5	15.4	11.5
Impulse / AC		Impulse / AC		Impulse / AC		Impulse / AC		Impulse / AC	
AC		AC		AC		AC		AC	
2,900	200	2,900	200	2,900	200	2,900	200	2,900	200
66		66		66		66		67	

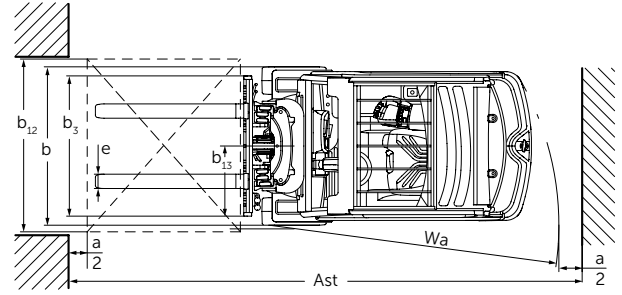
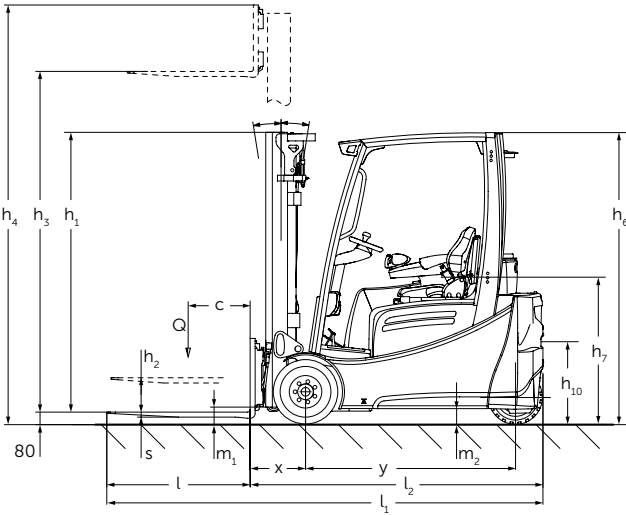
This specification sheet only provides technical values for the standard truck. Non-standard tires, different masts, different axle widths, additional equipment, etc. could produce other values. Rights reserved for technical changes and improvements.

as of: 10/2017

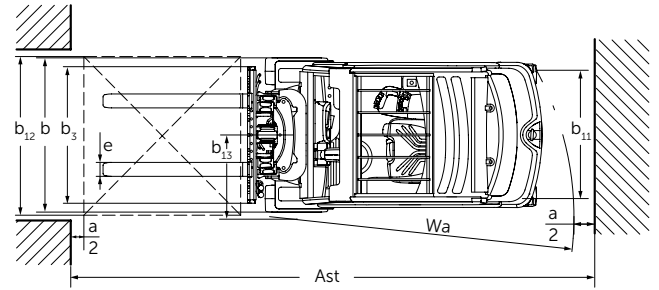
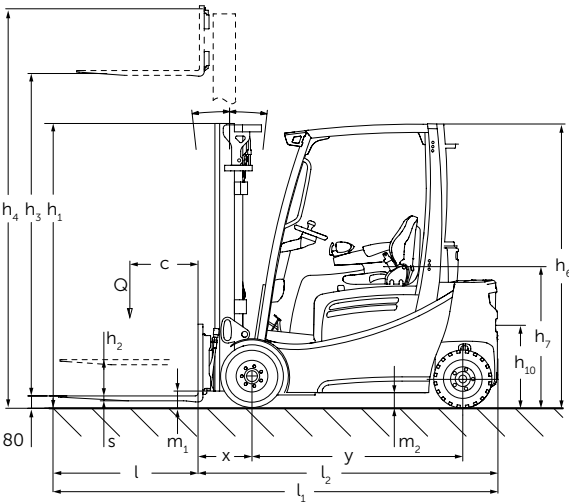
EFG 316 (4-wheel)		EFG 318k (4-wheel)		EFG 318 (4-wheel)		EFG 320 (4-wheel)	
3,100	1,600	3,490	1,800	3,490	1,800	3,880	2,000
24	500	24	500	24	500	24	500
electric		electric		electric		electric	
solid pneumatic		solid pneumatic		solid pneumatic		solid pneumatic	
2x/2		2x/2		2x/2		2x/2	
118	3,000	118	3,000	118	3,000	118	3,000
5.9	150	5.9	150	5.9	150	5.9	150
1.6x3.9x43.0	40x100x1,100	1.6x3.9x43.0	40x100x1,100	1.6x3.9x43.0	40x100x1,100	1.6x3.9x43.0	40x100x1,100
12.3/36	312/914	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914
7/6		7/6		7/6		7/6	
82.6	2,098	78.3	1,990	82.6	2,098	82.6	2,098
41.7	1,060	44.1	1,120	44.1	1,120	44.1	1,120
n/a		n/a		n/a		n/a	
79	2,000	79	2,000	79	2,000	79	2,000
36.2	920	36.2	920	36.2	920	36.2	920
80.4	2,040	80.4	2,040	80.4	2,040	80.4	2,040
166	4,216	166	4,216	166	4,216	166	4,216
78.1	1,985	73.2	1,859	78.1	1,985	78.1	1,985
13.5	344	14.3	364	14.3	364	14.3	364
13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340
91.5 ¹⁾	2,325	86.6 ¹⁾	2,200	91.5 ¹⁾	2,325	91.5 ¹⁾	2,325
9.3 / 9.9	15 / 16	9.3 / 9.9	15 / 16	9.3 / 9.9	15 / 16	9.3 / 9.9	15 / 16
10.6 / 10.6	17.0 / 17.0	10.6 / 10.6	17.0 / 17.0	10.6 / 10.6	17.0 / 17.0	10.6 / 10.6	17.0 / 17.0
76.8 / 112.2	0.39 / 0.57	72.8 / 108.3	0.37 / 0.55	72.8 / 108.3	0.37 / 0.55	65.0 / 108.3	0.33 / 0.55
96.5 / 118.1	0.49 / 0.60	86.6 / 108.3	0.44 / 0.55	86.6 / 108.3	0.44 / 0.55	78.7 / 108.3	0.40 / 0.55
108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55
108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55	108.3 / 108.3	0.55 / 0.55
21 / 30		18 / 20		18 / 20		18 / 20	
27 / 35		26 / 35		25 / 35		24 / 35	
6,537	2,965	6,964	3,159	6,900	3,130	7,253	3,290
6,503	2,950	6,906	3,133	6,812	3,090	7,175	3,255
8,891 / 1,173	4,033 / 532	9,729 / 1,204	4,413 / 546	9,782 / 1,087	4,437 / 493	10,479 / 1,184	4,753 / 537
8,372 / 1,231	3,998 / 552	9,149 / 1,247	4,300 / 632	9,063 / 1,239	4,322 / 568	9,667 / 1,388	4,631 / 624
3,250 / 3,287	1,474 / 1,491	3,084 / 3,880	1,399 / 1,760	3,333 / 3,567	1,512 / 1,618	3,314 / 3,940	1,503 / 1,787
3,235 / 3,268	1,467 / 1,482	3,012 / 3,894	1,366 / 1,766	3,251 / 3,561	1,475 / 1,615	3,232 / 3,943	1,466 / 1,789
18x7-8		200/50-10		200/50-10		200/50-10	
16x6-8		16x6-8		16x6-8		16x6-8	
59.4	1,508	55.1	1,400	59.4	1,508	59.4	1,508
35.6	904	36.0	914	36.0	914	36.0	914
32.7	830	32.7	830	32.7	830	32.7	830
3.1	80	3.1	80	3.1	80	3.1	80
3.9	100	3.9	100	3.9	100	3.9	100
electric / mechanical		electric / mechanical		electric / mechanical		electric / mechanical	
electromagnetic		electromagnetic		electromagnetic		electromagnetic	
lead - acid		lead - acid		lead - acid		lead - acid	
29.06 x 32.68 x 24.69		24.80 x 32.68 x 24.69		29.06 x 32.68 x 24.69		29.06 x 32.68 x 24.69	
680	24.5	595	21.4	680	24.5	680	24.5
600	28.8	500	24.0	600	28.8	600	28.8
2,260	1,025	1,885	855	2,260	1,025	2,260	1,025
2,147	974	1,791	812	2,147	974	2,147	974
6.8	5	6.8	5	6.8	5	6.8	5
6.0	4.5	6.0	4.5	6.0	4.5	6.0	4.5
15.4	11.5	15.4	11.5	15.4	11.5	15.4	11.5
Impulse / AC		Impulse / AC		Impulse / AC		Impulse / AC	
AC		AC		AC		AC	
2,900	200	2,900	200	2,900	200	2,900	200
67		67		67		67	

EFG 213 – 220 / 316k – 320

EFG 213-220



EFG 316k-320



The Jungheinrich® Advantage

Superior operator comfort

The ergonomic operator compartment allows for relaxed and productive operation, particularly beneficial at the end of long shifts:

- Low-effort electric power steering allows for a smaller steering wheel and minimizes the number of revolutions necessary to make a turn.
- The elimination of hydraulic components in the leg area reduces steering-related noise and provides more leg room.
- Ability to tilt and telescope the steering column to suit the operator's needs.
- All essential controls are located on the highly-adjustable armrest, allowing for easy, intuitive operator control.
- Operators will experience an extremely comfortable ride on rough or uneven floors with the combination of solid pneumatic tires, a full-suspension seat and floating cabin.

Maintenance-free braking system

- Regenerative braking with the traction motor allows for smooth, energy efficient deceleration.
- Automatically engaging parking brake for secure stopping, even on ramps.
- Brake pedal operated, maintenance-free disc brakes allow for more aggressive stopping.

Maintenance-free motors

The new generation of 3-phase AC motors will impress – providing quiet and precise operation at all speeds.

- High torque for faster operation cycles.
- Lifetime lubrication of main components.
- Individually mounted drive motors for easier service and maintenance.
- Dust and water protection to IP54.



Convenient controls

Control systems

High performance also requires a high degree of control. That's why the EFG series includes a comprehensive range of equipment for more secure operation:

- Deactivation of all hydraulic functions when the operator seat is not occupied.
- No roll-back on ramps or inclines with the automatic parking brake, even when the vehicle is switched off.
- Automatic progressive reduction of the driving speed during cornering with Jungheinrich Curve Control.

Intelligent electronics

- Smooth travel / reversing and precise positioning.
- Optimally adapts to any situation using five individual work programs.
- Efficient communication between the truck and operator / technician with the highly informative, interactive display.



Interactive display

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.

