

36 Volt AC Technology

Outstanding residual capacity – even with double depth stacking

Highest handling turnover rates through superior lift speeds

Significantly higher driving safety and comfort due to ProTrac suspension system

Superior energy efficiency due to perfect balancing of all powertrain components



ETR 230/235/340/345/335d

36-V pantograph reach fork lift truck (1,400/1,600/1,800/2,000 kg)

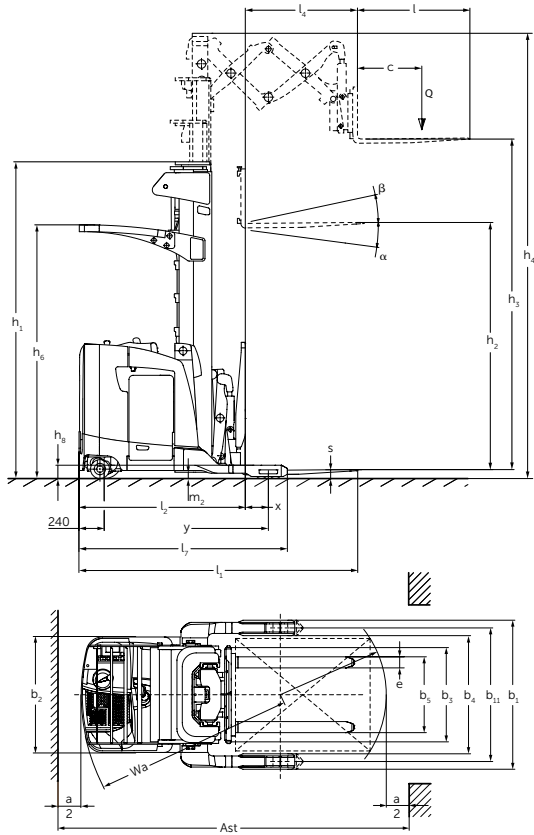
High residual capacity, high performance, an innovative suspension system and superior energy efficiency are only some of the strengths of the new Jungheinrich ETR pantograph reach trucks of series 2 and 3. Whether for handling pallets or operating in drive-through and drive-in racking, whether for extremely narrow areas, low clearances or for single shift or multishift applications: The series 2 and 3 pantograph reach trucks are the perfect solution for every application.

The main advantages:

- For deep (2 pallets depth) reach applications (ETR 335d only) at lift heights of up to 10 m the residual capacity is still at 1.600 kg.
- In addition to a substantial increase in overall stability the newly developed ProTrac suspension system generates a high level of driving safety and comfort, especially in corners and on rough floors. This performance helps to boost the drivers confidence while operating the truck, leading to higher productivity.
- Outstanding material handling throughput is achieved by combining excellent acceleration and the highest lift speeds on the market.
- Options like the fork camera, which allows for safe and efficient load handling at great lift heights, further enhance productivity.
- Remarkable energy efficiency is accomplished by a perfectly balanced setup of all powertrain components as well as the sophisticated Jungheinrich AC technology. This enables operators to run two consecutive shifts on a single battery charge.
- The compact design allows for working aisle widths as narrow as 2.652 mm (ETR 230).
- A wide range of baseleg openings, battery compartments and load wheel configurations facilitate optimum customization of the truck to the specific requirements of each material handling operation. In addition, there are numerous options and assistance systems available so that we are able to offer exactly the right ETR for your individual application!

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ETR 230/235/340/345/335d



Baselegs				
Baseleg opening b_4 (inch / mm)	Overall width across baselegs b_1 (mm)			
	4"/5" x 2,88" closed-face nose cone	5" x 3,62"	4"/5" x 3,62" closed-face nose cone / 10,5" x 3,5"	10,5" x 4,5" / 6" x 4"
33 / 838	1054	1117	1092	1136 / -
34 / 864	1080	1143	1118	1162 / -
35 / 889	1105	1168	1143	1187 / -
36 / 914	1130	1193	1168	1212 / -
37 / 940	1156	1219	1194	1238 / -
38 / 965	1181	1244	1219	1263 / -
39 / 991	1207	1270	1245	1289 / -
40 / 1016	1232	1295	1270	1314 / -
41 / 1041	1257	1320	1295	1339 / -
42 / 1067	1283	1346	1321	1365
43 / 1092	1308	1371	1346	1390
44 / 1118	1334	1397	1372	1416
45 / 1143	1359	1422	1397	1441
46 / 1168	1384	1447	1422	1466
47 / 1194	1410	1473	1448	1492
48 / 1219	1435	1498	1473	1517
49 / 1245	1461	1524	1499	1543

Standard mast designs ETR 230/235/340/345/335d													
	Lift h_3 (mm)	Lowered mast height h_1 (mm)			Free lift h_2 (mm)			Extended mast height h_4 (mm)			Tilt forks forward / back α/β (°)		
		ETR 230 / 235	ETR 340	ETR 345 / 335d	ETR 230 / 235	ETR 340	ETR 345 / 335d	ETR 230 / 235	ETR 340	ETR 345 / 335d	ETR 230 / 235	ETR 340	ETR 345 / 335d
Triplex DZ	4953	2261	2261	2261	965	965	965	6248	6248	6248	3/4	3/4	3/4
	5309	2413	2413	2413	1118	1118	1118	6604	6604	6604	3/4	3/4	3/4
	5411	-	2438	2438	-	1789	1789	-	6705	6705	-	3/4	3/4
	5970	-	2705	2705	-	2055	2055	-	7264	7264	-	3/4	3/4
	6071	2718	2718	2718	1423	1423	1423	7366	7366	7366	3/4	3/4	3/4
	6452	2870	2870	2870	1575	1575	1575	7747	7747	7747	3/4	3/4	3/4
	6783	-	2995	2995	-	2345	2345	-	8077	8077	-	3/4	3/4
	6833	3023	3023	3023	1727	1727	1727	8128	8128	8128	3/4	3/4	3/4
	7214	3175	3175	3175	1880	1880	1880	8509	8509	8509	3/4	3/4	3/4
	7595	3327	3327	3327	2032	2032	2032	8890	8890	8890	3/4	3/4	3/4
	8052	-	3505	3505	-	2210	2210	-	9347	9347	-	3/4	3/4
	8180	-	3558	3558	-	2909	2909	-	9474	9474	-	3/4	3/4
	8307	-	3613	3613	-	2963	2963	-	9601	9601	-	3/4	3/4
	8357	-	3632	3632	-	2337	2337	-	9652	9652	-	3/4	3/4
	8561	-	3714	3714	-	3065	3065	-	9855	9855	-	3/4	3/4
	8737	-	3785	3785	-	2489	2489	-	10033	10033	-	3/4	3/4
	9220	-	3962	3962	-	2667	2667	-	10516	10516	-	3/4	3/4
	9450	-	-	4053	-	-	3404	-	-	10744	-	-	3/4
	9831	-	-	4215	-	-	3566	-	-	11125	-	-	3/4
	10084	-	-	4318	-	-	3023	-	-	11379	-	-	3/4
10719	-	-	4572	-	-	3277	-	-	12014	-	-	3/4	
11354	-	-	4826	-	-	3539	-	-	12649	-	-	3/4	

Technical data in line with VDI 2198

			Jungheinrich								
			ETR 230	ETR 235	ETR 340	ETR 345	ETR 335d				
Identification	1.1	Manufacturer (abbreviation)									
	1.2	Model									
	1.3	Drive	Electric								
	1.4	Manual, pedestrian, stand-on, seated, order picker operation	Transverse position								
	1.5	Load capacity/rated load	Q	t	1.4	1.6	1.8	2	1.6		
	1.6	Load centre distance	c	mm	600						
	1.8	Load distance	x	mm	480	480	404	404	219		
	1.9	Wheelbase	y	mm	1,511	1,562	1,562	1,562	1,562		
	Weights	2.1.1	Net weight incl. battery (see row 6.5)			kg	4,010	4,010	4,060	4,060	4,210
2.3		Axle load without load front/rear			kg	2,304 / 1,470					
2.4		Axle loading forks forward with load at front / rear			kg	1,138 / 4,602					
2.5		Axle loading forks retracted with load at front / rear			kg	2,018 / 3,724					
Wheels / frame		3.1	Tyres			Polyurethane					
	3.2	Tyre size, front			mm	343x140					
	3.3	Tyre size, rear			mm	127x73	127x92	127x92	127x92	127x92	
	3.4	Additional wheels (dimensions)			mm	180x100					
	3.5	Wheels, number front/rear (x = driven wheels)			1x + 1/2						
	3.7	Tread width, rear	b ₁₁	mm	979	979	979	979	966		
	Basic dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β	°	3/4					
4.2		Mast height (lowered)	h ₁	mm	2,720						
4.3		Free lift	h ₂	mm	1,500						
4.4		Lift	h ₃	mm	6,071						
4.5		Extended mast height	h ₄	mm	7,370						
4.7		Height of overhead guard	h ₆	mm	2,413						
4.8		Seat height/stand height	h ₇	mm	250						
4.10		height of support arms	h ₈	mm	127						
4.19		Overall length	l ₁	mm	2,382	2,999	2,999	2,999	2,999		
4.20		Length to face of forks	l ₂	mm	1,315	1,366	1,397	1,397	1,582		
4.21		Overall width	b ₁ /b ₂	mm	1,081 / 1,054	1,117 / 1,054	1,346 / 1,054	1,346 / 1,054	1,321 / 1,054		
4.22		Fork dimensions	s/e/l	mm	35 / 100 / 1,067	35 / 100 / 1,067	39 / 100 / 1,067	39 / 100 / 1,067	36 / 100 / 1,067		
4.23		Fork carriage ISO 2328, class/type A, B			2A						
4.24		Fork carriage width	b ₃	mm	826						
4.25		Width across forks	b ₅	mm	305 / 802						
4.26		Width between support arms/loading surfaces	b ₄	mm	838	838	1,067	1,067	1,067		
4.28		Mast reach	l ₄	mm	610	610	610	610	1,067		
4.32		Ground clearance, centre of wheelbase	m ₂	mm	51						
4.33		Aisle width for pallets 1000 x 1200 sideways	Ast	mm	2,773	2,824	2,847	2,847	2,986		
4.33.4		Aisle width for pallets 800 x 1200 sideways	Ast	mm	2,652	2,703	2,720	2,720	2,836		
4.34	Aisle width for pallets 800 x 1200 lengthways	Ast	mm	2,812	2,863	2,892	2,892	3,060			
4.35	Turning radius	W _a	mm	1,750	1,801	1,801	1,801	1,801			
4.37	Length over the support arms	l ₇	mm	1,881	1,932	1,932	1,932	1,983			
Performance data	5.1	Travel speed, laden/unladen			km/h	11 / 12.1	11 / 12.1	12.1 / 12.9	12.1 / 12.9	12.1 / 12.9	
	5.2	Lift speed, laden/unladen			m/s	0.55 / 0.6	0.55 / 0.6	0.55 / 0.84	0.55 / 0.84	0.55 / 0.84	
	5.3	Lowering speed, laden/unladen			m/s	0.55 / 0.55	0.55 / 0.55	0.53 / 0.57	0.53 / 0.57	0.53 / 0.57	
	5.4	Traverse speed w. / w.o. load			m/s	0.28 / 0.3					
	5.7	Gradeability laden/unladen			%	9 / 11					
	5.8	Max. gradeability, laden/unladen			%	11 / 16					
	5.9.1	Acceleration time w / w.o. load (to 10 m)			S	4.9 / 4.4					
	5.10	Service brake			electro-magnetic/generator						
	5.11	Parking brake			electromagnetic						
	Electrics	6.1	Drive motor, output S2 60 min.			kW	4.5				
		6.2	Lift motor rating at S3 10%			kW	20				
6.4		Battery voltage/nominal capacity K5			V/Ah	36	36 / 775	36 / 775	36 / 775	36 / 775	
6.5		Battery weight			kg	816	907	907	907	907	
		Battery dimensions L/W/H			mm	968 / 362 / 782	968 / 404 / 782	968 / 404 / 782	968 / 404 / 782	968 / 404 / 782	
6.6		Energy consumption according to VDI cycle Efficiency/drive&lift-PLUS			kWh/h			5.6 / 5.9	5.6 / 5.9	5.6 / 5.9	
6.7		Efficiency/drive&liftPLUS throughput			t/h			70 / 81.2	70 / 81.2	70 / 81.2	
6.8		Energy consumption at max. Efficiency/drive&liftPLUS throughput			kWh/h			4.2 / 5.7	4.2 / 5.7	4.2 / 5.7	
Misc.	8.1	Type of drive control			Mosfet / AC						
	8.4	Sound pressure level at operator's ear as per EN 12053			dB (A)	70					
	8.6	Steering			electric						

Benefit from the advantages



Pantograph for double-depth stacking



The ultra-efficient 36-V 3-phase AC technology from Jungheinrich



Ergonomic operator workstation



Clear view through slightly angled bars in the overhead guard

Double-depth stacking

Double-depth racking is the domain of the ETR 335d:

- The basic load capacity of 1600 kg can be achieved even at a height of 10 m height – and applies also in the rear racking space.
- Even at the highest possible lift height of 11.35 m loads weighing 1360 kg can still be stored at double depth.

Highly Adaptable

The modular design of the ETR allows for customised solutions that fit virtually any application:

- 17 baseleg openings
- 9 load wheel configurations
- 21 different masts
- Either single or double deep pantographs
- An optional drive&liftPlus package (ETR 340/345/335d only)
- Choose from a multitude of many other options and assistance systems

ProTrac suspension system

The safe and comfortable driving design increases the productivity of the operator:

- Sprung on both sides, the fully floating axle between the drive wheel and support wheel allows for safe cornering at high speed.
- The use of highly resilient elastomers makes the suspension virtually maintenance-free.

Strong performance

The high throughput of the ETR is thanks to the combination of its performance features.

- Superior lifting speed.
- Exceptional reach speeds - irrespective of the lifting height.
- Above-average acceleration and travel speed.
- Productivity-enhancing options such as the fork camera for fast and safe stacking even at high lift heights.

Highest efficiency

All powertrain components are perfectly harmonized:

- Pump motor, pump and controller are set up to jointly provide their maximum efficiency
- The innovative Jungheinrich AC technology - over 80,000 reach trucks in the market - is now available for 36 V systems

Intuitive ergonomics

The ETR is designed to accommodate the needs of the operator:

- The bars of the overhead guard are slightly angled to ensure an optimal view of the load
- The multiPILOT control handle allows simultaneous activation of various functions (travel & hydraulic functions) with the intuitive use of one joystick
- All controls are designed for easy and precise operations even while wearing gloves

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