

MXL

heavy duty electric counterbalance truck

heavy loads
4.0–5.5 t

best-in-class
energy
efficiency

1+
shifts

zero
emissions

MXL



**BIG
PERFORM**
SMALL FO

The MXL – handle heavy loads with less energy consumption and zero emissions.

Have you ever considered using an electric forklift for moving heavy loads? The MXL is every bit as tough, as fast and as powerful as any IC truck, and at the same time it's quieter, more environmentally friendly and way more cost-effective.

PERFORMANCE
FOOTPRINT



UNI CARRIERS



ENJOY THE SILENCE

The only sound you hear when you're driving is the fan.

Driver comfort and well-being are at the heart of everything we do. The MXL is comfortable, maneuverable, and as easy to drive as a car. And in addition to reducing CO₂ emissions, there's another thing our electric truck eliminates: noise. The virtually silent hydraulic pumps provide a massive noise reduction not just for the driver, but everyone else in the workplace.

Easy to use, hard not to love: features and benefits for the driver

- No need to turn off and on in use
- Automatic parking brake
- Oversteering rear-axle, more agile
- Better visibility due to new free lift setup
- Cabin warms very fast
- Quiet electric motors and pump
- No motor vibrations
- Sealed and dampened cabin
- Adaptive load handling
- Can be tuned to exact needs
- Load sensing hydraulics
- Instant torque

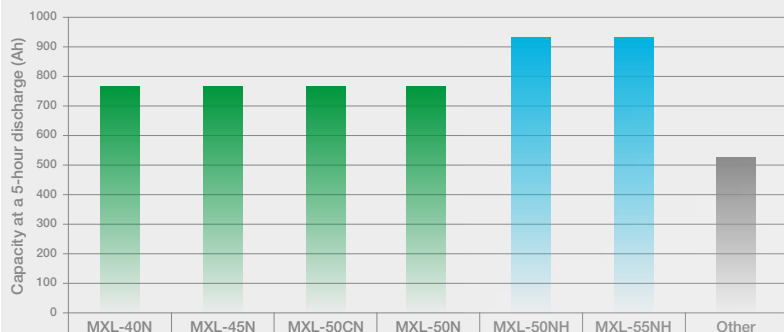
ENERGISE YOUR OPERATIONS

Maximised throughput, minimised costs

Single, double or triple shift operation, extra long-lasting batteries, quick battery change or in combination with other drive types – don't let the energy source dictate your work. With the lowest energy costs and minimal maintenance, investment in electric vehicles pays off – not only for the environment, but also for your bottom line.

- Better Total Cost of Ownership than any other drive type
- Less maintenance
- Inside/outside versatility
- Battery life longer than a single shift
- Best energy consumption in class

VDI Energy Consumption (80 battery voltage)





FEATURES AND BENEFITS

Load sensing hydraulic system

Hydraulic pressure of the system varies according to load.



Sliding windows

In front and back on both sides for best visibility.



Lowering adaption function (Pat. pend)

Software stabiliser flattens jerky movements of load and truck when lowering.



Dual joystick

Joystick actions can be set according to specific customer needs.

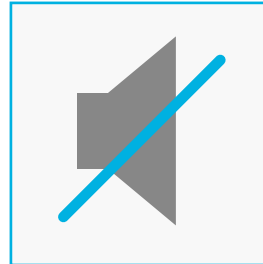


Mini steering wheel

The best driving position, view and minimised effort to operate the forklift.

Noise cancelling

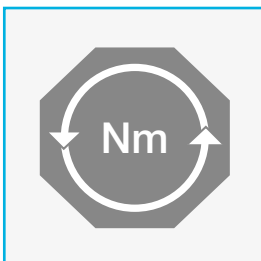
- Silent hydraulic pump
- Silent drive units
- Silent cabin



Boost function (Pat. pend)

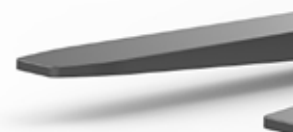
Acceleration boost
Activates when the accelerator is fully depressed.

Torque boost
Automatically senses when extra torque is needed to maintain truck speed.



Electric differential lock (Pat. pend)

Locks front wheels to spin simultaneously for best available traction in slippery conditions.



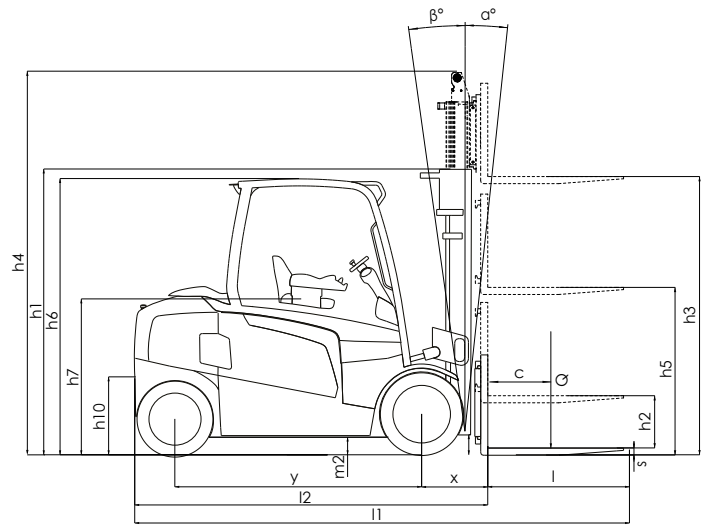
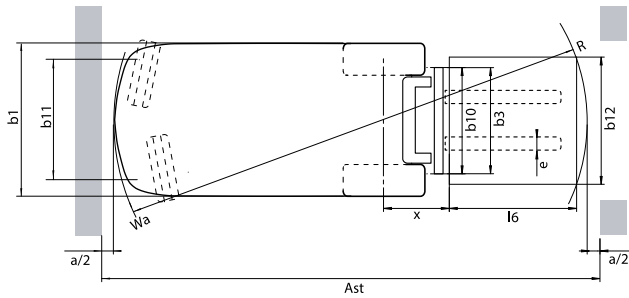


STANDARD SPECIFICATIONS

		Counterbalance trucks Designation according VDI 3586	Data sheet for materials handling equipment						VDI 2198
		Manufacturers Data and Design Characteristics							
CHARACTERISTICS	1.1	Manufacturer	UniCarriers						
	1.2	Manufacturer's model designation	MXL-40	MXL-45	MXL-50C	MXL-50	MXL-50H	MXL-55H	
	1.3	Power source: Battery, Diesel, LPG, Petrol	Electric						
	1.4	Operator type: pedestrian, (operator)-standing, -seated	Seated	Seated	Seated	Seated	Seated	Seated	
	1.5	Load capacity	Q (kg)	4000	4500	4990	4990	5000	5500
	1.6	Load centre	c (mm)	500	500	500	500	600	600
	1.8	Front overhang	x (mm)	540	540	540	540	560	560
	1.9	Wheel base	y (mm)	1946	1946	1946	2090	2090	2090
WEIGHTS	2.1	Truck weight, without load/including battery	kg	7290	7648	7991	8347	8472	8711
	2.2	Axle loading with maximum load, front/rear	kg	10040/1250	10795/1353	11574/1417	11563/1784	12009/1463	12799/1412
	2.3	Axle load without load, front/rear	kg	3902/3388	3890/3758	3902/4089	4075/4272	4234/4238	4246/4465
WHEELS, DRIVE TRAIN	3.1	Tyres: V=solid, L=pneumatic, SE=solid pneumatic - front/rear	SE	SE	SE	SE	SE	SE	
	3.2	Tyre dimensions, front	250x15 (710)	250x15 (710)	355/50-15 (710)	355/50-15 (710)	355/50-15 (710)	355/50-15 (710)	
	3.3	Tyre dimensions, rear	7.00x12 (650)	7.00x12 (650)	7.00x12 (650)	7.00x12 (650)	7.00x12 (650)	7.00x12 (650)	
	3.5	Number of wheels, front/rear (x=driven)	2X/2	2X/2	2X/2	2X/2	2X/2	2X/2	
	3.6	Track width (centre of tyres), front	b10 (mm)	1143	1143	1154	1154	1154	
	3.7	Track width (centre of tyres), rear	b11 (mm)	1169	1169	1169	1169	1169	
	DIMENSIONS	4.1	Mast tilt, forwards/backwards	α/β (°)	6/8	6/8	6/8	6/8	6/8
4.2		Height with mast lowered (see tables)	h_1 (mm)	2420	2420	2420	2420	2420	2420
4.3		Free lift (see tables)	h_2 (mm)	150	150	150	150	160	160
4.4		Lift height (see tables)	h_3 (mm)	3300	3300	3300	3300	3300	3300
4.5		Overall height with mast raised	h_4 (mm)	4205	4205	4205	4205	4345	4345
4.7		Height to top of overhead guard	h_5 (mm)	2340	2340	2340	2340	2340	2340
4.8		Seat height	h_7 (mm)	1320	1320	1320	1320	1320	1320
4.12		Tow coupling height	h_{10} (mm)	675	675	675	675	675	675
4.19		Overall length	l_1 (mm)	4025	4025	4025	4170	4190	4190
4.20		Length to fork face (includes fork thickness)	l_2 (mm)	2825	2825	2825	2970	2990	2990
4.21		Overall width	b_1/b_2 (mm)	1370	1370	1450	1450	1450	1450
4.22		Fork dimensions (thickness, width, length)	s/e/l (mm)	50/150/1200	50/150/1200	50/150/1200	50/150/1200	60/150/1200	60/150/1200
4.23		Fork carriage to DIN 15 173 A/B/no		3A	3A	3A	3A	4A	4A
4.24		Fork carriage width	b_3 (mm)	1190	1190	1190	1190	1190	1190
4.31		Ground clearance under mast, with load	m_1 (mm)	150	150	150	150	150	150
4.32		Ground clearance at centre of wheelbase, with load (forks lowered)	m_2 (mm)	150	150	150	150	150	150
4.33		Working aisle width with 1000 x 1200 mm pallets, crosswise	Ast (mm)	4125	4125	4125	4273	4291	4291
4.34a		Working aisle width with 800 x 1200 mm pallets, crosswise	Ast (mm)	3938	3938	3938	4086	4104	4104
4.34b		Working aisle width with 800 x 1200 mm pallets, lengthwise	Ast (mm)	4264	4264	4264	4412	4439	4439
4.35	Turning circle radius	Wa (mm)	2289	2289	2289	2434	2434	2434	
4.36	Minimum distance between centres of rotation	b_{13} (mm)	49	49	49	49	49	49	
PERFORMANCE	5.1	Travel speed, with / without load	km/h	18/20	18/20	18/20	18/20	18/20	18/20
	5.2	Lifting speed, with / without load	m/s	0.41/0.53	0.38/0.53	0.35/0.53	0.35/0.53	0.35/0.53	0.32/0.53
	5.3	Lowering speed, with / without load	m/s	0.53/0.51	0.52/0.51	0.52/0.51	0.52/0.51	0.52/0.51	0.51/0.51
	5.5	Rated drawbar pull, with / without load	N	16000/16400	16800/17700	16800/17700	17600/18100	17500/17700	17600/18000
	5.6	Maximum drawbar pull, with / without load (5 min short duty)	N	17300/18400	17300/18400	17300/18400	21500/22600	21500/22600	21500/22600
	5.7	Gradeability, with / without load	%	15/23	15/23	14/22	14/22	13.5/21.5	13/21
	5.8	Maximum gradeability with / without load	%	15.8/26.6	15.6/23.7	14.6/22.6	16.6/28.7	16.5/28.2	16.4/27.3
	5.9	Acceleration time (10 metres) with / without load	s	4.6/3.9	4.7/3.9	4.8/4.0	4.6/4.1	4.7/4.1	4.8/4.1
	5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)		Hydraulic					
	ELECTRIC MOTOR	6.1	Drive motor capacity (60 min. short duty)	kW	2x16	2x16	2x16	2x16	2x16
6.2		Lift motor output at 15% duty factor	kW	34	34	34	34	34	34
6.3		Dattery to DIN 43 531 / 35 / 36 A / B / C / no		DIN 43 536/A	DIN 43 536/A	DIN 43 536/A	DIN 43 536/A	DIN 43 536/A	DIN 43 536/A
6.4		Battery voltage / capacity at 5 - hour discharge	V/Ah	80/775	80/775	80/775	80/930	80/930	80/930
6.5		Battery weight	kg	1863	1863	1863	2178	2178	2178
6.6a		Energy consumption according to DIN EN 16796	kWh/h	10.2 ¹⁾	10.6 ¹⁾	11.0 ¹⁾	11.2 ¹⁾	7.8 ²⁾	8.2 ²⁾
MISCELLANEOUS	8.1	Type of drive control		AC electronic	AC electronic	AC electronic	AC electronic	AC electronic	AC electronic
	10.1	Maximum operating pressure for attachments	bar	210	210	210	210	210	210
	10.2	Oil flow for attachments	l/min	45	45	45	45	45	45
	10.7	Noise level, value at operator's ear (EN 12053)	dB(A)	65	65	65	65	65	65
	10.8	Towing coupling design/DIN type, ref.		15 170	15 170	15 170	15 170	15 170	15 170

¹⁾ Measured with 60 cycles test

²⁾ Measured with 45 cycles test



STANDARD LIFTING CARRIAGE, FORKS L1000, L1100, L1150 AND L1200

Mast type	h3 mm	h1 mm	h4 mm	h2/h5*** mm	Tilt angle		MXL-40				MXL-45				MXL-50C				MXL-50			
					(fwd-rev)		Load Capacity Q		Nominal Capacity**		Load Capacity Q		Nominal Capacity**		Load Capacity Q		Nominal Capacity**		Load Capacity Q		Nominal Capacity**	
					STD	Cabin	500 mm	600 mm	500 mm	600 mm	500 mm	600 mm	500 mm	600 mm	500 mm	600 mm	500 mm	600 mm	500 mm	600 mm	500 mm	600 mm
SIMPLEX	3050	2270*	3905	150	6-8	6-8	4000	4000	4000	4000	4500	4500	4500	4500	5000	4825	5000	4825	5000	4825	5000	4825
	3350	2420*	4205	150	6-8	6-8	4000	4000	4000	4000	4500	4500	4500	4500	5000	4825	5000	4825	5000	4825	5000	4825
	3550	2520	4405	150	6-8	6-8	4000	4000	4000	4000	4500	4500	4500	4500	5000	4825	5000	4825	5000	4825	5000	4825
	3750	2620	4605	150	6-8	6-8	4000	4000	4000	4000	4500	4500	4500	4500	5000	4825	5000	4825	5000	4825	5000	4825
	4050	2870	4905	150	6-8	6-8	4000	4000	4000	4000	4500	4500	4500	4500	5000	4825	5000	4825	5000	4825	5000	4825
	4550	3120	5405	150	6-8	6-8	4000	4000	4000	4000	4500	4500	4500	4500	5000	4825	5000	4825	5000	4825	5000	4825
	5050	3370	5905	150	6-8	6-8	4000	3900	4000	4000	4500	4350	4500	4500	5000	4775	5000	4825	5000	4825	5000	4825
	5550	3620	6405	150	6-8	6-8	4000	3775	4000	4000	4500	4225	4500	4475	4975	4625	5000	4825	5000	4825	5000	4825
TRIPLEX	6050	3870	6905	150	6-8	6-8	3925	3650	4000	4000	3900	3875	4500	4475	4775	4500	5000	4825	4950	4825	5000	4825
	3750	2070*	4627	1193	6-8	6-6	4000	4000	4000	4000	4500	4475	4500	4475	5000	4825	5000	4825	5000	4825	5000	4825
	4090	2190*	4967	1313	6-8	6-6	4000	4000	4000	4000	4500	4475	4500	4475	5000	4825	5000	4825	5000	4825	5000	4825
	4360	2280*	5237	1403	6-8	6-8	4000	4000	4000	4000	4500	4475	4500	4475	5000	4825	5000	4825	5000	4825	5000	4825
	4550	2340*	5427	1463	6-8	6-8	4000	3975	4000	4000	4500	4450	4500	4475	5000	4825	5000	4825	5000	4825	5000	4825
	4800	2420*	5677	1543	6-8	6-8	4000	3925	4000	4000	4500	4400	4500	4475	5000	4800	5000	4825	5000	4825	5000	4825
	5100	2520	5977	1643	6-8	6-8	4000	3850	4000	4000	4500	4300	4500	4450	5000	4725	5000	4825	5000	4825	5000	4825
	5550	2670	6427	1793	6-8	6-8	4000	3750	4000	4000	4500	4200	4500	4450	4950	4600	5000	4825	5000	4825	5000	4825
	6050	2870	6927	1993	6-8	6-8	3875	3600	4000	3975	4025	4000	4500	4425	4775	4425	5000	4825	5000	4825	5000	4825
	6550	3070	7427	2193	6-8	6-8	3600	3475	4000	3950	3075	3050	4500	4425	3725	3675	5000	4825	3900	3875	5000	4825
7050	3270	7927	2393	6-8	6-8	2850	2825	4000	3950	2425	2425	4500	4400	2875	2825	5000	4800	3075	3050	5000	4825	

Mast type	h3 mm	h1 mm	h4 mm	h2/h5*** mm	Tilt angle		MXL-50H		MXL-55H	
					(fwd-rev)		Load Capacity Q	Nominal Capacity**	Load Capacity Q	Nominal Capacity**
					STD	Cabin	600 mm	600 mm	600 mm	600 mm
SIMPLEX	3060	2270*	4045	160	6-8	6-8	5000	5000	5500	5500
	3360	2420*	4345	160	6-8	6-8	5000	5000	5500	5500
	3560	2520	4545	160	6-8	6-8	5000	5000	5500	5500
	3760	2620	4745	160	6-8	6-8	5000	5000	5500	5500
	4060	2870	5045	160	6-8	6-8	5000	5000	5500	5500
	4560	3120	5545	160	6-8	6-8	5000	5000	5500	5500
	5060	3370	6045	160	6-8	6-8	5000	5000	5500	5500
	5560	3620	6545	160	6-8	6-8	5000	5000	5500	5500
	6060	3870	7045	160	6-8	6-8	4950	5000	4725	5500
TRIPLEX	3760	2070*	4757	1073	6-8	6-6	5000	5000	5500	5500
	4100	2190*	5097	1193	6-8	6-6	5000	5000	5500	5500
	4370	2280*	5367	1283	6-8	6-8	5000	5000	5500	5500
	4560	2340*	5557	1343	6-8	6-8	5000	5000	5500	5500
	4810	2420*	5807	1423	6-8	6-8	5000	5000	5500	5500
	5110	2520	6107	1523	6-8	6-8	5000	5000	5500	5500
	5560	2670	6557	1673	6-8	6-8	5000	5000	5500	5500
	6060	2870	7057	1873	6-8	6-8	5000	5000	4775	5500
	6560	3070	7557	2073	6-8	6-8	3800	5000	3625	5500
	7060	3270	8057	2273	6-8	6-8	2975	5000	2825	5500

Battery dimensions		40	45	50C	50	50H	55H
Battery voltage	V	80	80	80	80	80	80
Capacity at a 5-hour discharge	Ah	775	775	775	775	930	930
Battery weight, Min.	kg	1760	1760	1760	1760	2060	2060
Battery weight, Max.	kg	1960	1960	1960	1960	2290	2290

* Lower than overheadguard ** Up to lifting height 3700 mm *** h5 does not include load backrest (with load backrest it is 207 mm smaller)

It's all about
the price.
**But what
price?**

Reduce your Total Cost of Operation with UniCarriers

We agree. Price is everything. Or to be more specific: your Total Cost of Operation (TCO). That's why we're so focused on cutting costs and improving your material handling. The truck and its performance play an important role, but this is even more about how we can support you in optimising your warehouse operations to give you the best value for your money. Which – in the long run – is what creates a winner.