

TCL Series

**80V Supercompact Dual-drive
Three-wheel Counterbalance
Forklift 1000-1500kg**



EP
Let's grow together



- Lightweighted and compact size for smooth operation in extremely tight spaces
- Overhead guard height (h6) < 2000mm to work on mezzanines and across floors
- Dual drive motors and three-wheel design deliver high traction, sensitive steering and great maneuverability
- Large legroom of 464mm and great visibility through mast and dashboard
- Automatic parking brake, stop on ramp and turn speed control for safe operation
- 80V Li-ion battery and PMSM technology for high efficiency and performance
- Single phase on board battery charger for an easy and fast charging



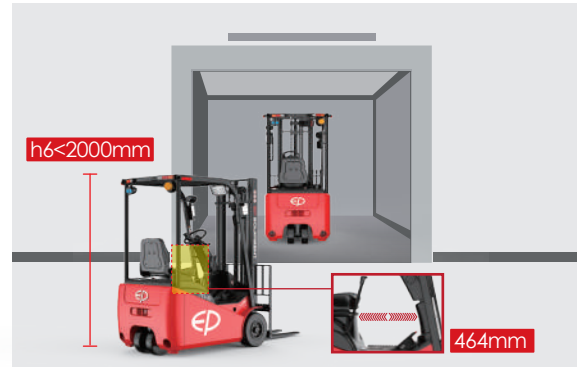
Manufacturer			EP	EP	EP
Model designation			TCL101	TCL122	TCL52
Drive			Electric	Electric	Electric
Load capacity	Q	kg	1000	1200	1500
Load center distance	c	mm	500	500	500
Service weight		kg	1950	2469	2698
Retracted mast height	h1	mm	1990	2012	2012
Lift height	h3	mm	3000	3000	3000
Height, mast extended	h4	mm	3919	4065	4065
Length to face of forks	l2	mm	1684	1812	1867
Overall width	b1/b2	mm	1020	1020	1020
Fork dimensions	s/e/l	mm	35X100X920	40X100X920	40X100X920
Turning radius	Wa	mm	1422	1519	1572
Travel speed, laden/unladen		km/h	11/13	11/13	11/13
Lifting speed, laden/unladen		m/s	280/350	0.28/0.35	0.28/0.35
Lowering speed, laden/unladen		m/s	350/350	0.35/0.35	0.35/0.35
Max. gradeability, laden/unladen		%	13/15	13/15	13/15
Drive motor rating S2 60 min		kW	2.0X2	2.0X2	2.0X2
Battery voltage/nominal capacity		V/Ah	80V/50Ah	80V/50Ah	80V/100Ah

FEATURE

Low weight and compact size with an ample legroom

Thanks to the lower service weight of the category, its compact size and overhead guard height (h_6) $< 2000\text{mm}$, the TCL Series is ideal for mezzanine usage as well as narrow spaces like crowded warehouses and HGVs. To fit the smallest of spaces, the TCL101 also provides optional folding forks for increased versatility.

Despite its compactness, the TCL Series prioritizes operator comfort with an ergonomic design, providing an ample legroom of 464mm and a great visibility through the mast and dashboard.



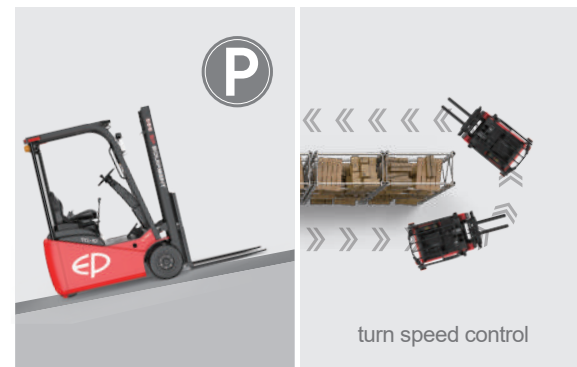
Dual drive motors for high agility and performance

The dual drive motors give the TCL Series sensitive steering and the 3-wheel design allows it to turn on the spot. Both contribute to its smaller turning radius of 1422mm and offers great maneuverability in crowded environments. With a top speed of 13km/h , the truck can move pallets quickly and ensures working efficiency.



Automatic stop on ramp, parking brake and turn speed control for safe operation

The TCL Series features an automatic stop on ramp and automatic parking brake which can protect the forklift from accidentally rolling back when parked on a slope. It's also equipped with turn speed control as standard for operation safety and stability even in the tightest of corners.



80V Li-ion battery and PMSM technology for improved efficiency and runtime

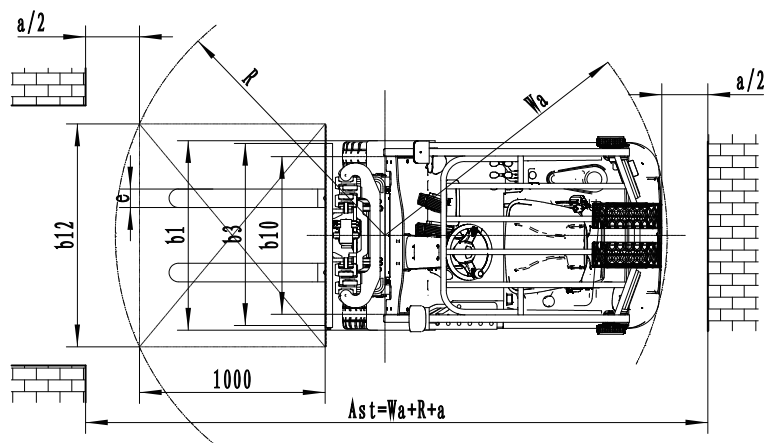
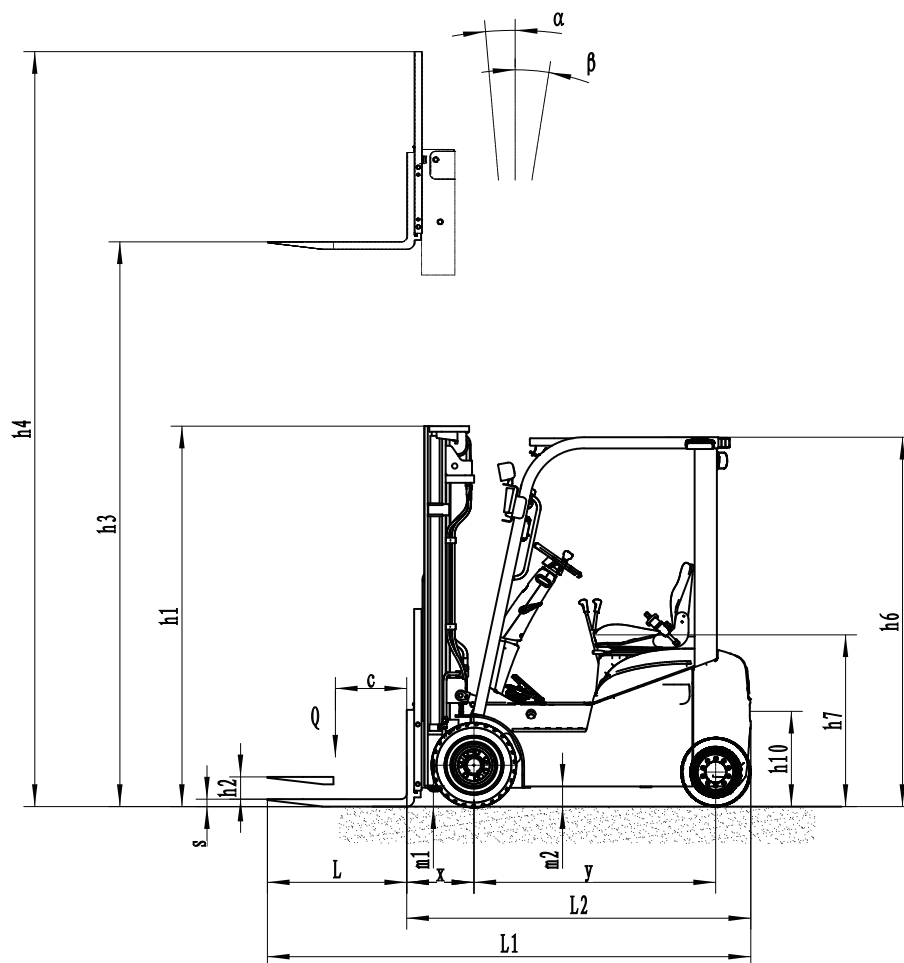
Equipped with 80V Li-ion battery and integrated charger as standard, the TCL Series supports fast opportunity charging with no maintenance. Additionally, the TCL Series employs advanced permanent magnet synchronous motor (PMSM) technology and can achieve 10-15% energy savings and extend runtime by 10% compared to conventional motors.



80V Supercompact Dual-drive Three-wheel Counterbalance Forklift 1000-1500kg TCL Series

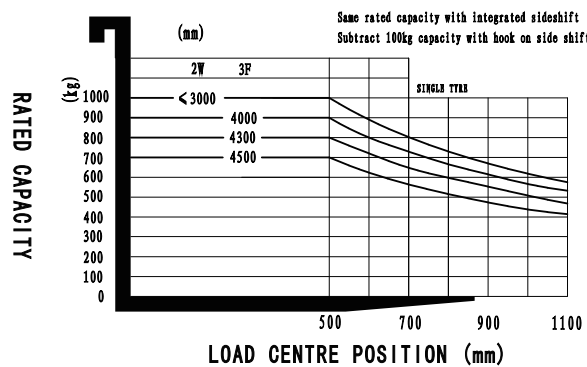
Distinguishing mark	1.1	Manufacturer			EP	EP	EP
	1.2	Model designation			TCL101	TCL122	TCL52
	1.3	Drive			Electric	Electric	Electric
	1.4	Operator type			Seated	Seated	Seated
	1.5	Load capacity	Q	kg	1000	1200	1500
	1.6	Load center distance	c	mm	500	500	500
	1.8	Load distance, centre of drive axle to fork	x	mm	310	365	365
	1.9	Wheelbase	y	mm	1200	1300	1300
	2.1	Service weight			1950	2469	2698
Service weight	2.2	Axle loading, laden front/rear			2585/365	3288/381	3681/517
	2.3	Axle loading, unladen front/rear			910/1040	1288/1181	1186/1512
Tyres/chassis	3.1	Tyre type			Solid rubber	Solid rubber	Solid rubber
	3.2	Tyre size, front			16X6-8	18X7-8	18X7-8
	3.3	Tyre size, rear			3.5-5	15X4.5-8	140/55-9
	3.5	Wheels, number front/rear (x=drive wheels)			2X/2	2X/2	2X/2
	3.6	Tread width, front	b10	mm	838	850	850
	3.7	Tread width, rear	b11	mm	208	210	210
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β	°	6/6	6/6	6/6
	4.2	Retracted mast height	h1	mm	1990	2012	2012
	4.3	Free lift	h2	mm	120	120	120
	4.4	Lift height	h3	mm	3000	3000	3000
	4.5	Height, mast extended	h4	mm	3919	4065	4065
	4.7	Height of overhead guard (cabin)	h6	mm	1960	1988	1988
	4.8	Seat height/standing height	h7	mm	925	948	948
	4.12	Tow coupling height	h10	mm	483	513	513
	4.19	Overall length	l1	mm	2604	2732	2787
	4.20	Length to face of forks	l2	mm	1684	1812	1867
	4.21	Overall width	b1/b2	mm	1020	1020	1020
	4.22	Fork dimensions	s×e×l	mm	35X100X920	40X100X920	40X100X920
	4.23	A,B Fork carriage class/type A, B			2A	2A	2A
	4.24	Fork carriage width	b3	mm	960	960	960
	4.31	Ground clearance, laden, below mast	m1	mm	93	93	93
	4.32	Ground clearance, center of wheelbase	m2	mm	89	115	115
	4.34.1	Aisle width for pallets 1000×1200 crossways	Ast	mm	3063	3207	3260
	4.34.2	Aisle width for pallets 800×1200 lengthways	Ast	mm	3184	3336	3384
	4.35	Turning radius	Wa	mm	1422	1519	1572
Performance data	5.1	Travel speed, laden/unladen			km/h	11/13	11/13
	5.2	Lifting speed, laden/unladen			mm/s	280/350	0.28/0.35
	5.3	Lowering speed, laden/unladen			mm/s	350/350	0.35/0.35
	5.8	Max. gradeability, laden/unladen			%	13/15	13/15
	5.10	Service brake			Electromagnetic	Electromagnetic	Electromagnetic
	5.11	Parking brake			Electromagnetic	Electromagnetic	Electromagnetic
Electric-engine	6.1	Drive motor rating S2 60 min			kW	2.0X2	2.0X2
	6.2	Lift motor rating at S3 15%			kW	7	7
	6.4	Battery voltage/nominal capacity			V/Ah	80V/50Ah	80V/100Ah
	6.5	Battery weight			kg	65	66
Drivellift mechanism	8.1	Type of drive control			PMSM	PMSM	PMSM
	10.5	Steering design			Hydraulic	Hydraulic	Hydraulic
Addition data	10.7	Sound pressure level at the driver's ear			dB(A)	68	68
	15.1	Charger output current			A	35	35

If there are improvements of technical parameters or configurations, no further notice will be given.
The diagram shown may contain non-standard configurations.



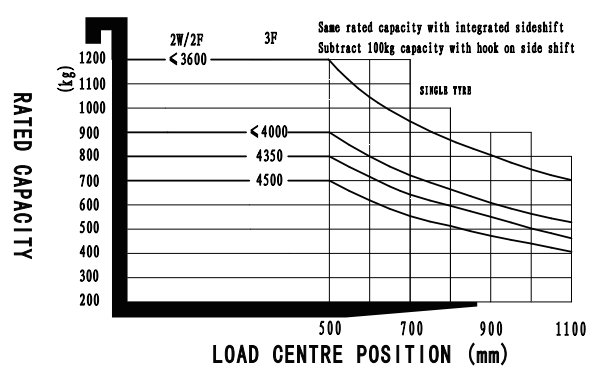
TCL101

RATED CAPACITIES AND LOAD CENTERS GRAPH



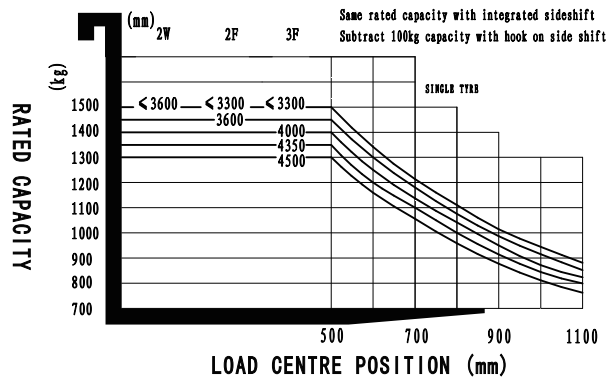
TCL122

RATED CAPACITIES AND LOAD CENTERS GRAPH



TCL152

RATED CAPACITIES AND LOAD CENTERS GRAPH



Mast Option

TCL101

Mast types	Lift height (h3)	Height, Mast			Height,Free lift(h2)		Tilt		Load distance(X)
		Height, mast lowered(h1)	Height, mast extended(h4)		No backrest	With backrest			without sideshift, single solid tyres
			No backrest	With backrest					
	mm	mm	mm	mm	mm	mm	Deg	mm	kg
2-Standard Mast	2500	1745	2995	3565	120	120	6	6	310
	2700	1845	3195	3765	120	120	6	6	310
	3000	1990	3495	4065	120	120	6	6	310
	3300	2145	3795	4365	120	120	6	6	310
3-Free Mast	4000	1775	4525	5055	1280	750	6	6	360
	4300	1925	4805	5335	1430	900	6	6	360
	4500	2025	5025	5555	1530	1000	6	6	360

TCL122/152

Mast types	Lift height (h3)	Height, Mast			Height,Free lift(h2)		Load distance(X)
		Height, mast lowered(h1)	Height, mast extended(h4)		No backrest	With backrest	without sideshift, single solid tyres
			No backrest	With backrest			
	mm	mm	mm	mm	mm	mm	mm
2-Standard Mast	2500	1798	3045	3555	105	105	357
	2700	1898	3245	3755	105	105	357
	3000	2048	3545	4055	105	105	357
	3300	2198	3845	4355	105	105	357
	3600	2348	4145	4655	105	105	357
2-Free Mast	2500	1773	3045	3555	1280	745	357
	2700	1873	3245	3755	1380	845	357
	3000	2023	3545	4055	1530	995	357
	3300	2173	3845	4355	1680	1145	357
	3600	2323	4145	4655	1830	1295	357
3-Free Mast	4000	1883	4546	5055	1390	855	362
	4300	1983	4826	5335	1490	955	362
	4500	2048	5046	5555	1555	1020	362

Option

Optional items	TCL101	TCL122	TCL152
Fork dimension	●600*600, 2A、100*35*920 ●600*600, 2A、100*35*750 ○600*600, 2A、100*35*1070 ○900*600, 2A、100*40*1150 ○900*600, 2A、100*40*1220	●100*40*920 ○100*40*1070 ○100*40*1100 ○100*40*1150 ○100*40*1220 ○100*40*1370 ○100*40*1520 ○100*40*1800	●100*40*920 ○100*40*1070 ○100*40*1100 ○100*40*1150 ○100*40*1220 ○100*40*1370 ○100*40*1520 ○100*40*1800
Front wheel material	○Normal solid ○Non-marking solid	●Normal solid ○Non-marking solid	●Normal solid ○Non-marking solid
Rear wheel material	○Normal solid ○Non-marking solid	●Normal solid ○Non-marking solid	●Normal solid ○Non-marking solid
Battery capacity	●80V50Ah ○80V100Ah	●80V50Ah ○80V100Ah	○80V50Ah ●80V100Ah
Charger	●80V-35A Single-phase integrated charger	●80V-35A single-phase integrated charger	●80V-35A single-phase integrated charger
Battery display indicator (BDI)	●Standard, with hourmeter (Bluetooth) ○LED display without hourmeter (Bluetooth) without ESP	●Standard, with hourmeter (Bluetooth) ○LED display without hourmeter (Bluetooth) without ESP	●Standard, with hourmeter (Bluetooth) ○LED display without hourmeter (Bluetooth) without ESP
Seat type	○Comfortable + safety belt switch ○Suspension + safety belt switch	○Comfortable + safety belt switch ○Suspension + safety belt switch	○Comfortable + safety belt switch ○Suspension + safety belt switch
Attachments	●No ○Built-in sideshifter ○External shifter	●No ○Built-in sideshifter ○External shifter	●No ○Built-in sideshifter ○External shifter
Traction pin	●Yes and not customized	●Yes and not customized	●Yes and not customized
Anti-static chain	●Yes and not customized	●Yes and not customized	●Yes and not customized
Front lamp	●LED	●LED	●LED
Rear lamp	●No ○LED	●No ○LED	●No ○LED
Warning lamp	●Yes and not customized	●Yes and not customized	●Yes and not customized
Turn signal light	●Yes and not customized	●Yes and not customized	●Yes and not customized
Blue lamp	●No ○Rear ○Front ○Front and rear	●No ○Rear ○Front ○Front and rear	●No ○Rear ○Front ○Front and rear
Area warning lamp	●No ○Both side ○Both side and rear	●No ○Both side ○Both side and rear	●No ○Both side ○Both side and rear
Rearview mirror	●One in front ○Two on sides and one in front	●One in front ○Two on sides and one in front	●One in front ○Two on sides and one in front
Buzzer	●Yes and not customized	●Yes and not customized	●Yes and not customized
OPS system	●Yes and not customized	●Yes and not customized	●Yes and not customized
Telematics	●Yes and not customized	●Yes and not customized	●Yes and not customized
Speed reduction for elevated mast-Australian standard	●No ○Only for Australia standard	●No ○Only for Australia standard	●No ○Only for Australia standard
Turn speed control	●Yes and not customized	●Yes and not customized	●Yes and not customized
Heating system during lithium battery charging	●No ○Yes and not customized	●No ○Yes and not customized	●No ○Yes and not customized
Operator identification device	●No ○Swipe card device	●No ○Swipe card device	●No ○Swipe card device
Hydraulic control	●Mechanical lever	●Mechanical lever	●Mechanical lever
Rear armrest horn	●No	●No ○Yes and not customized	●No ○Yes and not customized
Overhead guard	●Yes and not customized	●Yes and not customized	●Yes and not customized
Note: ●Standard ○ Optional - Inconformity			