



TDL161/201

1600/2000kg

3-Wheel Dual-drive Counterbalance Forklift



- Premium 3 wheels truck designed around 48V Li-Ion battery
- Powerful dual drive AC traction motors
- Innovative design for higher operator comfort
- Great ergonomic design with adjustable steering wheel and comfortable bucket seat
- High-resolution LCD display installed at the upper right corner of the cabin
- Single phase integrated charger with 16A plug



| Manufacturer | | | EP | EP |
|----------------------------------|-------|------|------------|-------------|
| Model designation | | | TDL161 | TDL201 |
| Drive | | | Electric | Electric |
| Load capacity | Q | kg | 1600 | 2000 |
| Load center distance | c | mm | 500 | 500 |
| Service weight | | kg | 3380 | 3575 |
| Retracted mast height | h1 | mm | 2075 | 2075 |
| Lift height | h3 | mm | 3000 | 3000 |
| Height, mast extended | h4 | mm | 4058 | 4058 |
| Length to face of forks | l2 | mm | 2025 | 2025 |
| Overall width | b1/b2 | mm | 1050 | 1150 |
| Fork dimensions | s/e/l | mm | 40/100/920 | 40/122/1070 |
| Turning radius | Wa | mm | 1605 | 1605 |
| Travel speed, laden/unladen | | km/h | 15/16 | 15/16 |
| Lifting speed, laden/unladen | | m/s | 0.35/0.43 | 0.35/0.43 |
| Lowering speed, laden/unladen | | m/s | 0.45/0.37 | 0.45/0.37 |
| Max. gradeability, laden/unladen | | % | 15/17 | 15/17 |
| Drive motor rating S2 60 min | | kW | 5.4*2 | 5.4*2 |
| Battery voltage/nominal capacity | | V/Ah | 48/280 | 48/405 |

FEATURE

Hydraulic steering system with better human-vehicle interaction

The TDL series adopts the hydraulic steering system and this achieves more precise and responsive operation, which demonstrates better human-vehicle interaction. Plus, the hydraulic steering system comes with a simple and reliable structure with lower maintenance costs.



Electromagnetic joystick available for premium needs

For premium material handling, the electromagnetic joystick is available as an option which puts operation experience and productivity at the forefront. The joystick houses all controls of the truck and the operator are allowed to perform all functions in a palm-sized place with utmost precision.



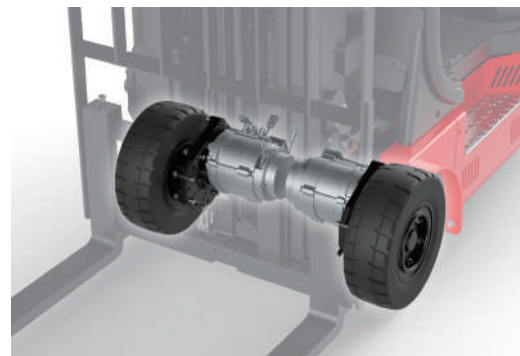
Larger legroom to amplify driving comfort

The integrated design of the operator compartment is intended to create a larger operational space to improve ergonomics to reduce operator work-related health issues, as well as to improve operational efficiency.



Powerful and constant working performance

The lithium battery with opportunity charging and 5.4kW*2 dual drive motors guarantee the TDL series operate at full power at all times with a permanently high performance. It comes with a 48V/50A integrated charger as standard for charging convenience and 48V/150A and 48V/200A external chargers available as options to better fit in your needs.



■ Optimized truck frame for cabin installation and detachment

The TDL series features the streamlined design as the L2 series and an optimized one-piece truck frame, which is easy for cabin installation as well as detachment.



■ New informative LCD display

The TDL series provides the high-resolution LCD display which is installed at the upper right corner of the cabin. Via a glance, the operator is able to find speed, working hours, battery status, miles driven and parking status. This informative and intuitive display ensures relaxed and safe working.

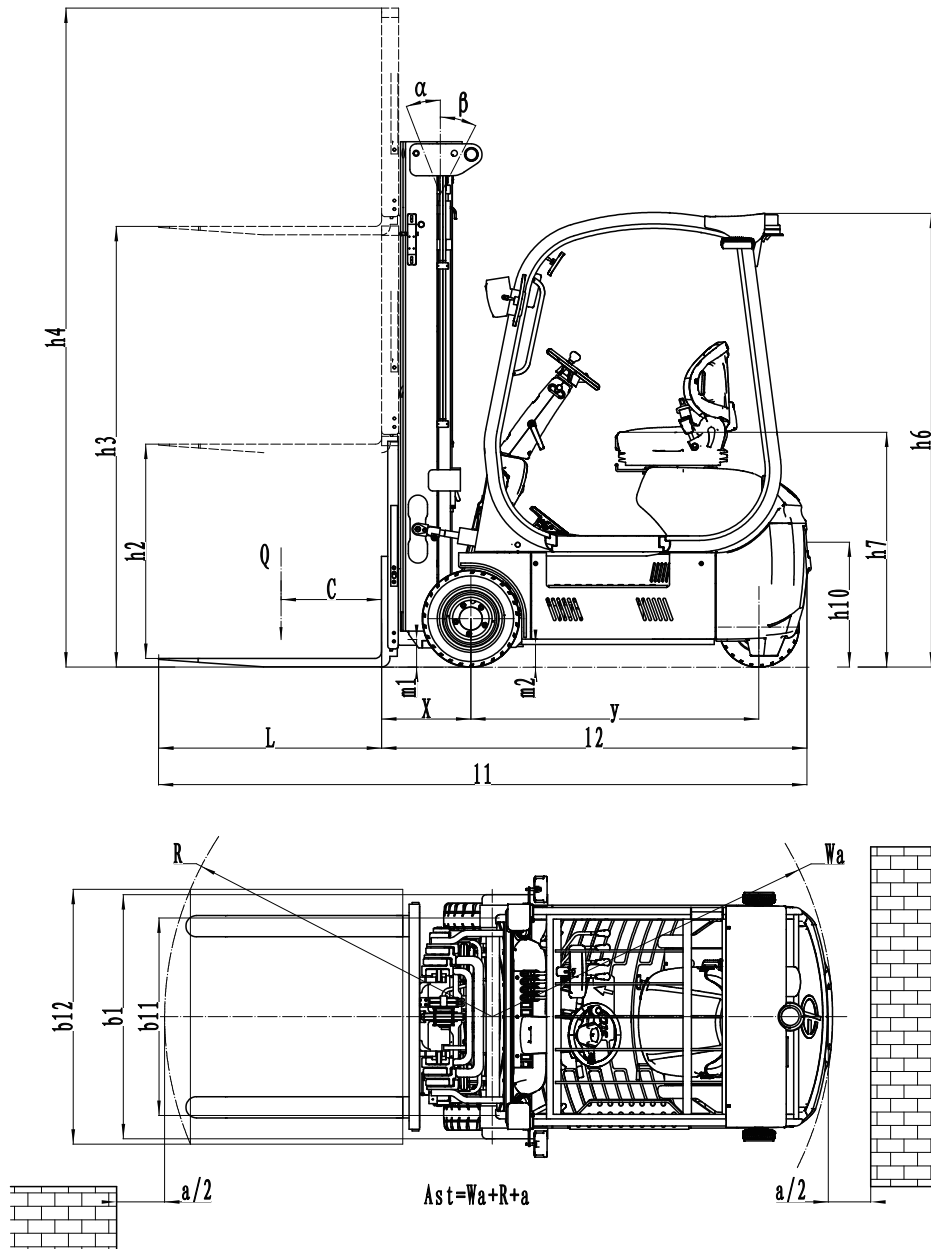


Li-ion Counterbalance Forklift Truck 1.6/2.0T

TDL 161/201

| | | | | | | |
|----------------------|---|--|--------------------------------|-------|-----------------|---------------------|
| Distinguishing mark | 1.1 | Manufacturer | | | EP | EP |
| | 1.2 | Model designation | | | TDL161 | TDL201 |
| | 1.3 | Drive | | | Electric | Electric |
| | 1.4 | Operator type | | | Seated | Seated |
| | 1.5 | Load capacity | Q | kg | 1600 | 2000 |
| | 1.6 | Load center distance | c | mm | 500 | 500 |
| Service weight | 1.8 | Load distance, centre of drive axle to fork | x | mm | 420 | 420 |
| | 1.9 | Wheelbase | y | mm | 1358 | 1358 |
| | 2.1 | Service weight | | kg | 3380 | 3575 |
| Tyres/classes | 2.2 | Axle loading, laden front/rear | | kg | 4153/827 | 4892/683 |
| | 2.3 | Axle loading, unladen front/rear | | kg | 1468/1912 | 1535/2040 |
| | 3.1 | Tyre type | | | Solidrubber | Solidrubber |
| | 3.2 | Tyre size, front | | | 18x7-8 | 200/50-10 |
| | 3.3 | Tyre size, rear | | | 15/4.5-8 | 15/4.5-8 |
| | 3.5 | Wheels, number front/rear (x=drive wheels) | | mm | 2X2 | 2X2 |
| Dimensions | 3.6 | Tread width, front | b ₁₀ | mm | 910 | 936 |
| | 3.7 | Tread width, rear | b ₁₁ | mm | 175 | 175 |
| | 4.1 | Tilt of mast/fork carriage forward/backward | α/β | ° | 5/6 | 5/6 |
| | 4.2 | Retracted mast height | h ₁ | mm | 2075 | 2075 |
| | 4.3 | Free lift | h ₂ | mm | 100 | 100 |
| | 4.4 | Lift height | h ₃ | mm | 3000 | 3000 |
| | 4.5 | Height, mast extended | h ₄ | mm | 4058 | 4058 |
| | 4.7 | Height of overhead guard (cabin) | h ₆ | mm | 2140 | 2140 |
| | 4.8 | Seat height/standing height | h ₇ | mm | 1070 | 1070 |
| | 4.12 | Tow coupling height | h ₁₀ | mm | 560 | 560 |
| | 4.19 | Overall length | l ₁ | mm | 2945 | 3095 |
| | 4.20 | Length to face of forks | l ₂ | mm | 2025 | 2025 |
| | 4.21 | Overall width | b ₁ /b ₂ | mm | 1050 | 1150 |
| | 4.22 | Fork dimensions | s×e×l | mm | 40X100X920 | 40X122X1070 |
| | 4.23 | A,B Fork carriage class/type A, B | | | 2A | 2A |
| | 4.24 | Fork carriage width | b ₃ | mm | 1040 | 1040 |
| | 4.31 | Ground clearance, laden, below mast | m ₁ | mm | 86 | 86 |
| | 4.32 | Ground clearance, center of wheelbase | m ₂ | mm | 104 | 104 |
| | 4.34.1 | Aisle width for pallets 1000×1200 crossways | Ast | mm | 3348 | 3348 |
| 4.34.2 | Aisle width for pallets 800×1200 lengthways | Ast | mm | 3485 | 3485 | |
| 4.35 | Turning radius | Wa | mm | 1605 | 1605 | |
| Performance data | 5.1 | Travel speed, laden/unladen | | km/h | 15/16 | 15/16 |
| | 5.2 | Lifting speed, laden/unladen | | m/s | 0.35/0.43 | 0.35/0.43 |
| | 5.3 | Lowering speed, laden/unladen | | m/s | 0.45/0.37 | 0.45/0.37 |
| | 5.8 | Max. gradeability, laden/unladen | | % | 15/17 | 15/17 |
| | 5.10 | Service brake | | | Electromagnetic | Electromagnetic |
| | 5.11 | Parking brake | | | Electromagnetic | Electromagnetic |
| Electric-engine | 6.1 | Drive motor rating S2 60 min | | kW | 5.4X2 | 5.4X2 |
| | 6.2 | Lift motor rating at S3 15% | | kW | 11 | 11 |
| | 6.4 | Battery voltage/nominal capacity | | V/Ah | 48V/280Ah | 48V/405Ah |
| | 6.5 | Battery weight | | kg | 165 | 207 |
| | 6.6 | Energy consumption according to DIN EN 16796 | | kWh/h | — | 5.288 ¹⁾ |
| | 6.7 | Turnover output according to VDI 2198 | | t/h | — | 120 |
| Drive/lift mechanism | 6.8 | Turnover efficiency according to VDI 2198 | | t/kWh | — | 22.69 |
| | 8.1 | Type of drive control | | | AC | AC |
| Addition data | 10.5 | Steering design | | | Hydraulic | Hydraulic |
| | 10.7 | Sound pressure level at the driver's ear | | dB(A) | 75 | 79 |
| | 15.1 | Charger output current | | A | 50 | 50 |

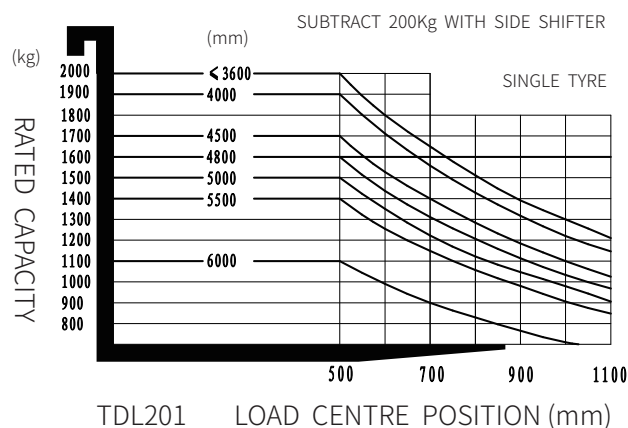
If there are improvements of technical parameters or configurations, no further notice will be given.
The diagram shown may contain non-standard configurations.



Mast Option

| Mast types | Lift height (h3) | Height, Mast | | | Height, Free lift(h2) | |
|-----------------|-----------------------|-----------------------------|---------------------------|---------------|-----------------------|---------------|
| | | Height, mast lowered(h1) | Height, mast extended(h4) | | No shelving | With shelving |
| | | | No shelving | With shelving | | |
| | mm | mm | mm | mm | mm | mm |
| 2-Standard Mast | 3000 | 2075 | 3740 | 4055 | 100 | 100 |
| | 3600 | 2375 | 4340 | 4655 | 100 | 100 |
| | 4000 | 2625 | 4740 | 5055 | 100 | 100 |
| 3-Free Mast | 4500 | 2140 | 5240 | 5555 | 1430 | 1115 |
| | 4800 | 2240 | 5540 | 5855 | 1530 | 1215 |
| | 5000 | 2305 | 5740 | 6055 | 1595 | 1280 |
| | 5500 | 2475 | 6240 | 6555 | 1765 | 1450 |
| | 6000 | 2690 | 6740 | 7055 | 1980 | 1665 |

RATED CAPACITIES AND LOAD CENTERS GRAPH



Option

| No. | Optional items | TDL161 |
|------|----------------------------|---|
| 1.1 | Fork dimension | ●100*40*920○100*40*1070○100*40*1100○100*40*1150 ○100*40*1220○100*40*1370○100*40*1520○100*40*1800 |
| 1.4 | Fork carriage width | ●1040mm○Yes and can be customized |
| 1.5 | Fork carriage height | ●1067mm (42in) ○1220mm (48in) ○1520mm (60in) ○Yes and can be customized |
| 2.5 | Front wheel material | ●Solid○Non-marking solid |
| 2.6 | Rear wheel material | ●Solid○Non-marking solid |
| 2.7 | Battery capacity | ●280Ah○405Ah |
| 2.8 | Charger | ●48V-50A internal○48V-150A external○48V-200A external |
| 2.9 | Battery indicator | ●With time |
| 2.10 | Seat type | ○Regular●Premium●Premium + seatbelt logic switch(CE) ○Suspension ○Suspension + seatbelt logic switch |
| 2.11 | Attachments | ●No○Built-in sideshifter○External shifter○Fork positioner |
| 2.13 | Traction pin | ●Yes |
| 2.14 | Electrostatic chain | ●Yes |
| 3.5 | Front lamp | ●LED |
| 3.6 | Rear lamp | ●No○LED |
| 3.7 | Warning lamp | ●Yes |
| 3.8 | Steering lamp | ●LED |
| 3.9 | Blue lamp | ●No○2 front○1 rear○2 front + 1 rear |
| 3.10 | Area warning lamp | ●No○Red, add 1 on both sides |
| 3.11 | Rearview mirror | ●1 rearview mirror○2 rearview mirrors |
| 3.12 | Hummer | ●Yes |
| 3.17 | OPS system | ●Yes |
| 3.19 | USB interface | ●No○Yes and not customized |
| 3.22 | Electronic sale with print | ●No○Yes and not customized |
| 3.23 | Telematics | ●No○Yes and not customized |
| 4.3 | Cabin | ●No○Yes and not customized |
| 4.5 | Proportional lift system | ●No○Yes and not customized |
| 4.9 | Heater | ●No○Yes and not customized |

Note: ● standard ○ option — NA

| No. | Optional items | TDL201 |
|------|----------------------------|---|
| 1.1 | Fork dimension | ●122*40*1070○122*40*920○122*40*1150○122*40*1220 ○122*40*1370○122*40*1500○122*40*1600○122*40*1700 ○122*40*1820○122*40*1900○122*40*2000○122*40*2200 |
| 1.4 | Fork carriage width | ●1040mm ○Yes and can be customized |
| 1.5 | Fork carriage height | ●1067mm (42in) ○1220mm (48in) ○1520mm (60in) ○Yes and can be customized |
| 2.5 | Front wheel material | ●Solid○Non-marking solid |
| 2.6 | Rear wheel material | ●Solid○Non-marking solid |
| 2.7 | Battery capacity | ●405Ah |
| 2.8 | Charger | ●48V-50A internal ○48V-150A external ○48V-200A external |
| 2.9 | Battery indicator | ●With time |
| 2.10 | Seat type | ○Regular ●Premium ●Premium + seatbelt logic switch(CE) ○Suspension ○Suspension + seatbelt logic switch |
| 2.11 | Attachments | ●No○Built-in shifter○External shifter○Fork positioner |
| 2.13 | Traction pin | ●Yes |
| 2.14 | Electrostatic chain | ●Yes |
| 3.5 | Front lamp | ●LED |
| 3.6 | Rear lamp | ●No○LED |
| 3.7 | Warning lamp | ●Yes |
| 3.8 | Steering lamp | ●LED |
| 3.9 | Blue lamp | ●No○2 front○1 rear○2 front + 1 rear |
| 3.10 | Area warning lamp | ●No○Red, add 1 on both sides |
| 3.11 | Rearview mirror | ●1 rearview mirror○2 rearview mirrors |
| 3.12 | Hummer | ●Yes |
| 3.17 | OPS system | ●Yes |
| 3.19 | USB interface | ●No○Yes and not customized |
| 3.22 | Electronic sale with print | ●No○Yes and not customized |
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Note: ● standard ○ option — NA