



CPD15/18/20TVL

1500/1800/2000kg

3-Wheel Dual-drive Counterbalance Forklift



- Compact 3 wheels truck designed around 80V Li-Ion battery
- Powerful dual drive AC traction motors
- Big legroom (394mm) for higher operator comfort
- Great ergonomic design with adjustable steering wheel and comfortable bucket seat
- 80V Li-Ion battery grant efficiency, long autonomy and occasional charge
- Single phase integrated charger with 16A plug



| Manufacturer | | | EP | EP | EP |
|----------------------------------|-------|------|------------|------------|-------------|
| Model designation | | | CPD15TVL | CPD18TVL | CPD20TVL |
| Drive | | | Electric | Electric | Electric |
| Load capacity | Q | kg | 1500 | 1800 | 2000 |
| Load center distance | c | mm | 500 | 500 | 500 |
| Service weight | | kg | 2950 | 3269 | 3429 |
| Retracted mast height | h1 | mm | 2075 | 2075 | 2075 |
| Lift height | h3 | mm | 3000 | 3000 | 3000 |
| Height, mast extended | h4 | mm | 4055 | 4055 | 4055 |
| Length to face of forks | l2 | mm | 1813 | 1913 | 1950 |
| Overall width | b1/b2 | mm | 1070 | 1070 | 1170 |
| Fork dimensions | s/e/l | mm | 40/100/920 | 40/100/920 | 40/122/1070 |
| Turning radius | Wa | mm | 1450 | 1550 | 1585 |
| Travel speed, laden/unladen | | km/h | 13/14 | 13/14 | 13/14 |
| Lifting speed, laden/unladen | | m/s | 0.33/0.45 | 0.33/0.45 | 0.3/0.4 |
| Lowering speed, laden/unladen | | m/s | 0.4/0.44 | 0.4/0.44 | 0.38/0.4 |
| Max. gradeability, laden/unladen | | % | 10/15 | 10/15 | 10/15 |
| Drive motor rating S2 60 min | | kW | 5.0*2 | 5.0*2 | 5.0*2 |
| Battery voltage/nominal capacity | | V/Ah | 80/150 | 80/205 | 80/205 |

FEATURE

■ 80 Volt System Offering Powerful Performance

The 80 voltage 2*5.0 kW dual drive motors offer higher power efficiency than regular 48 voltage, thus The TVL series has greatly enhanced its productivity of 6 working hours per charge.



■ Compact Truck Size

The TVL series features a small turning radius, 1450mm of CPD15TVL, 1550mm of CPD18TVL and 1585mm of CPD20TVL, which makes it a perfect workhorse for small warehouses with narrow aisles within 3.5m.



■ Large Workspace

Due to the compact size of EP lithium battery and the ergonomic configuration of the control levers and the foot brake pedal, the small truck offers spacious legroom of 394mm and delivers the best in operation comfort.



■ EP Lithium-ion Technology

The TVL series comes with a EP in-house Li-ion battery and a 35A single phase integrated charger with 16amp plug allowing the truck to be charged at any power outlets. The Li-ion battery and the advantage of onboard charging make it ideal for forklift rental business.



■ Enhanced Mast with Optimal Visibility and Stability

The TVL series adopts the same high-strengthened mast of CPD20L2, offering the best all-around visibility and great stability with less wobbling even fully loaded.



Fully Closed Cabin (option)

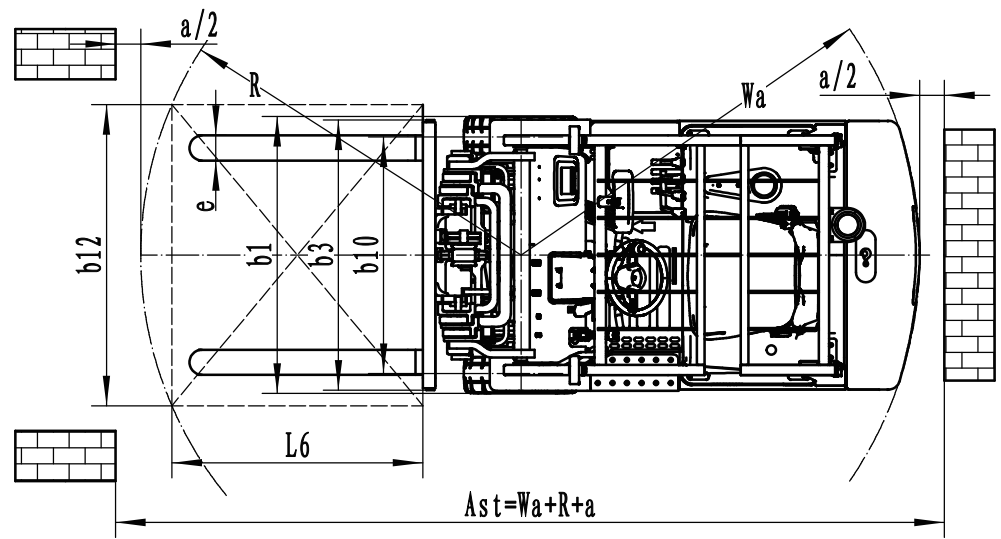
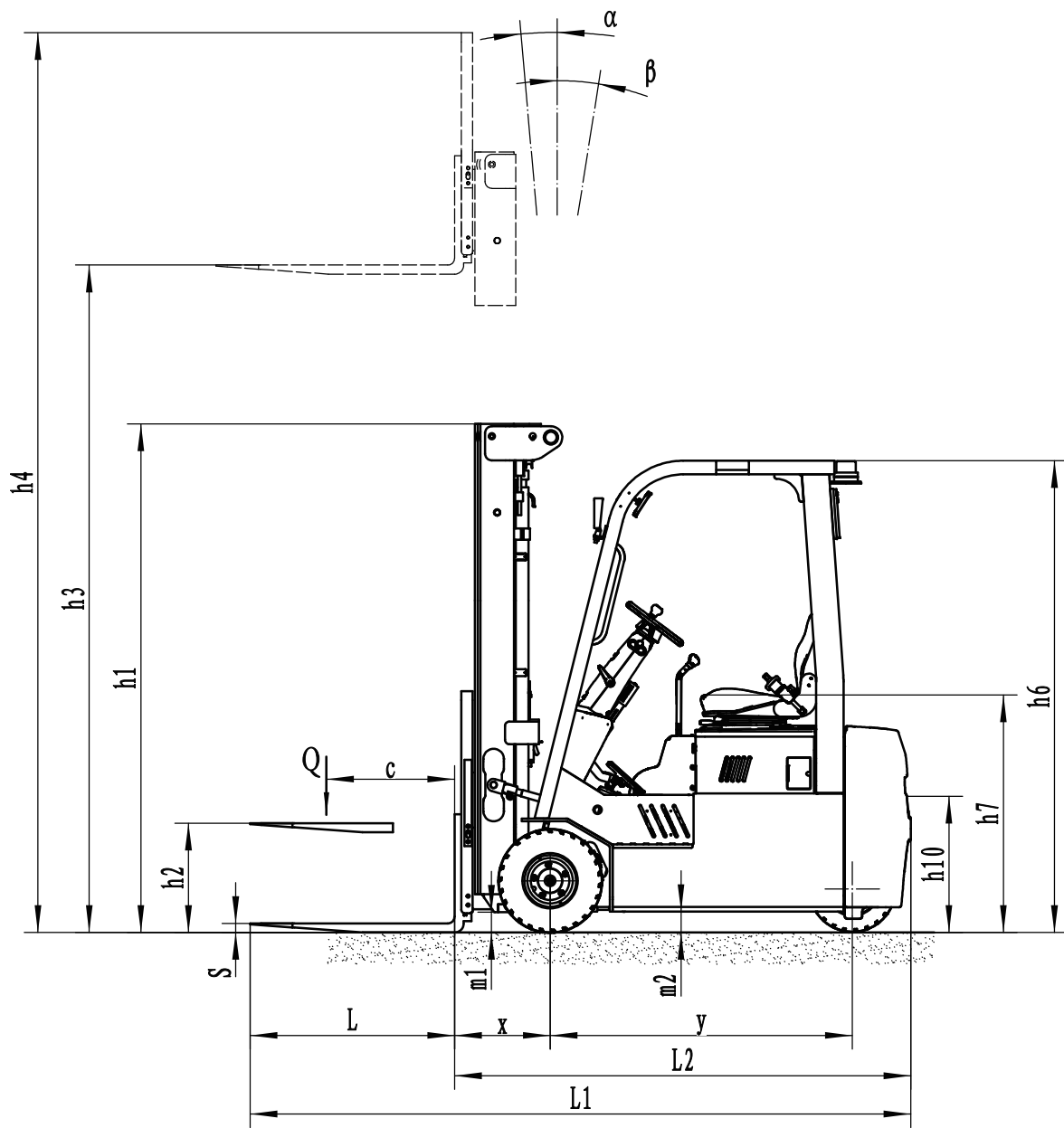


Li-Ion Three-Wheel Counterbalance Forklift 1.5/1.8/2.0T

CPD15/18/20TVL

| | | | | | | | |
|----------------------|---|--|--------------------------------|------------|---------------------|--------------------|---------------------|
| Distinguishing mark | 1.1 | Manufacturer | | | EP | EP | EP |
| | 1.2 | Model designation | | | CPD15TVL | CPD18TVL | CPD20TVL |
| | 1.3 | Drive | | | Electric | Electric | Electric |
| | 1.4 | Operator type | | | Seated | Seated | Seated |
| | 1.5 | Load capacity | Q | kg | 1500 | 1800 | 2000 |
| | 1.6 | Load center distance | c | mm | 500 | 500 | 500 |
| | 1.8 | Load distance, centre of drive axle to fork | x | mm | — | 420 | — |
| | 1.9 | Wheelbase | y | mm | 1230 | 1330 | 1330 |
| | Service weight | 2.1 | Service weight | | kg | 2950 | 3269 |
| 2.2 | | Axle loading, laden front/rear | | kg | 3928/522 | 4415/654 | 4745/684 |
| 2.3 | | Axle loading, unladen front/rear | | kg | 1305/1645 | 1368/1901 | 1359/2070 |
| Tyres/chassis | 3.1 | Tyre type | | | Solidrubber | Solidrubber | Solidrubber |
| | 3.2 | Tyre size, front | | | 18X7-8 | 18X7-8 | 200/50-10 |
| | 3.3 | Tyre size, rear | | | 15X4.5-8 | 15X4.5-8 | 15X4.5-8 |
| | 3.5 | Wheels, number front/rear (x=drive wheels) | | mm | 2X2 | 2X2 | 2X2 |
| | 3.6 | Tread width, front | b ₀ | mm | 943 | 943 | 969 |
| | 3.7 | Tread width, rear | b ₁ | mm | 175 | 175 | 175 |
| Dimensions | 4.1 | Tilt of mast/fork carriage forward/backward | α/β | ° | 6/6 | 6/6 | 6/6 |
| | 4.2 | Retracted mast height | h ₁ | mm | 2075 | 2075 | 2075 |
| | 4.3 | Free lift | h ₂ | mm | 100 | 100 | 100 |
| | 4.4 | Lift height | h ₃ | mm | 3000 | 3000 | 3000 |
| | 4.5 | Height, mast extended | h ₄ | mm | 4055 | 4055 | 4055 |
| | 4.7 | Height of overhead guard (cabin) | h ₆ | mm | 2078 | 2078 | 2078 |
| | 4.8 | Seat height/standing height | h ₇ | mm | 1050 | 1050 | 1050 |
| | 4.12 | Tow coupling height | h ₁₀ | mm | 600 | 600 | 600 |
| | 4.19 | Overall length | l ₁ | mm | 2733 | 2833 | 3020 |
| | 4.20 | Length to face of forks | l ₂ | mm | 1813 | 1913 | 1950 |
| | 4.21 | Overall width | b ₁ /b ₂ | mm | 1070 | 1070 | 1170 |
| | 4.22 | Fork dimensions | s×e×l | mm | 40X100X920 | 40X100X920 | 40X122X1070 |
| | 4.23 | A,B Fork carriage class/type A, B | | | 2A | 2A | 2A |
| | 4.24 | Fork carriage width | b ₃ | mm | 1040 | 1040 | 1040 |
| | 4.31 | Ground clearance, laden, below mast | m ₁ | mm | 89 | 89 | 89 |
| | 4.32 | Ground clearance, center of wheelbase | m ₂ | mm | 92 | 92 | 92 |
| | 4.34.1 | Aisle width for pallets 1000×1200 crossways | Ast | mm | 3175 | 3275 | 3315 |
| 4.34.2 | Aisle width for pallets 800×1200 lengthways | Ast | mm | 3300 | 3400 | 3435 | |
| 4.35 | Turning radius | Wa | mm | 1450 | 1550 | 1585 | |
| Performance data | 5.1 | Travel speed, laden/unladen | | km/h | 13/14 | 13/14 | 13/14 |
| | 5.2 | Lifting speed, laden/unladen | | m/s | 0.33/0.45 | 0.33/0.45 | 0.3/0.4 |
| | 5.3 | Lowering speed, laden/unladen | | m/s | 0.4/0.44 | 0.4/0.44 | 0.38/0.4 |
| | 5.5 | Drawbar pull, laden/unladen | | N | — | — | — |
| | 5.6 | Max. drawbar pull, laden/unladen | | N | — | — | — |
| | 5.8 | Max. gradeability, laden/unladen | | % | 10/15 | 10/15 | 10/15 |
| | 5.10 | Service brake | | | Hydraulic | Hydraulic | Hydraulic |
| 5.11 | Parking brake | | | Mechanical | Mechanical | Mechanical | |
| Electric-engine | 6.1 | Drive motor rating S2 60 min | | kW | 5.0X2 | 5.0X2 | 5.0X2 |
| | 6.2 | Lift motor rating at S3 15% | | kW | 11 | 11 | 11 |
| | 6.4 | Battery voltage/nominal capacity | | V/Ah | 80V/150Ah | 80V/205Ah | 80V/205Ah |
| | 6.5 | Battery weight | | kg | — | 185 | 185 |
| | 6.6 | Energy consumption according to DIN EN 16796 | | kWh/h | 4.994 ¹⁾ | 4.48 ¹⁾ | 6.082 ¹⁾ |
| | 6.7 | Turnover output according to VDI 2198 | | t/h | 96 | 108 | 128 |
| | 6.8 | Turnover efficiency according to VDI 2198 | | t/kWh | 19.22 | 24.11 | 21.05 |
| Drive/lift mechanism | 8.1 | Type of drive control | | | AC | AC | AC |
| | 10.1 | Operating pressure for attachments | | bar | — | — | — |
| | 10.2 | Oil flow for attachments | | l/min | — | — | — |
| | 10.5 | Steering design | | | Hydraulic | Hydraulic | Hydraulic |
| | 10.7 | Sound pressure level at the driver's ear | | dB(A) | 68 | 70 | 74 |
| | 15.1 | Charger output current | | A | 35 | 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.



Mast Option

CPD15TVL

| Mast types | Lift height (h3) | Height, Mast | | | Height, Free lift(h2) | |
|-----------------|--------------------|--------------------------|---------------------------|------|-----------------------|---------------|
| | | Height, mast lowered(h1) | Height, mast extended(h4) | | No backrest | With backrest |
| | No backrest | | With backrest | 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 |

CPD18/20TVL

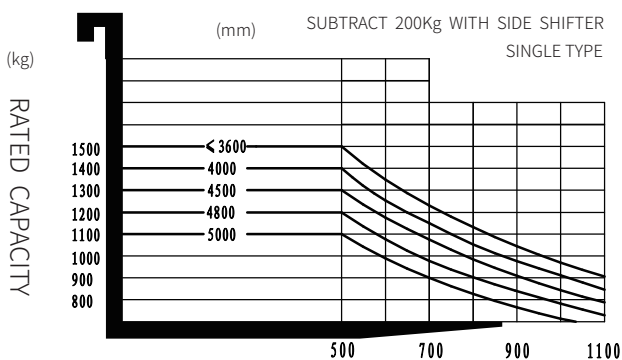
| Mast types | Lift height (h3) | Height, Mast | | | Height, Free lift(h2) | |
|-----------------|--------------------|--------------------------|---------------------------|------|-----------------------|---------------|
| | | Height, mast lowered(h1) | Height, mast extended(h4) | | No backrest | With backrest |
| | No backrest | | With backrest | 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 |

Note*

| CPD18TVL | Lift height (h3)mm | Tyre size, front | Overall width (b1/b2)mm |
|-------------|--------------------|------------------|-------------------------|
| 3-Free Mast | 5000 | 200/50-10 | 1170 |
| | 5500 | | |
| | 6000 | | |

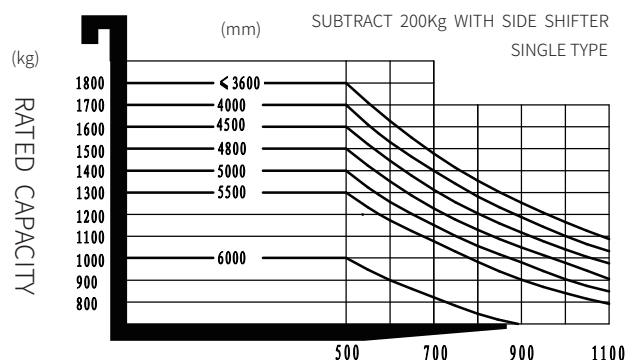
*The parameters of CPD18TVL will be altered in tyre size and overall width, when choosing triplex mast with lift height over 5000mm.

RATED CAPACITIES AND LOAD CENTERS GRAPH



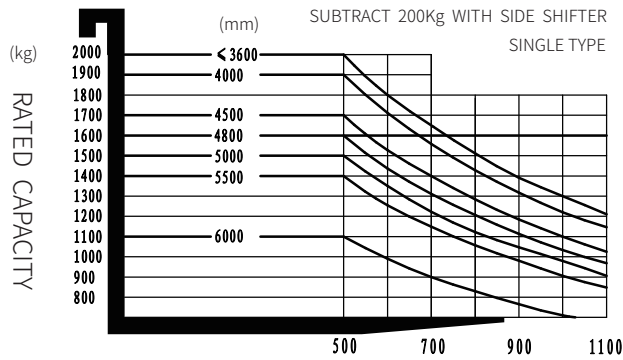
CPD15TVL LOAD CENTRE POSITION (mm)

RATED CAPACITIES AND LOAD CENTERS GRAPH



CPD18TVL LOAD CENTRE POSITION (mm)

RATED CAPACITIES AND LOAD CENTERS GRAPH



Option

| No. | Optional items | CPD15TVL |
|------|----------------------|--|
| 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 rubber○Non-marking solid |
| 2.6 | Rear wheel material | ●Solid rubber○Non-marking solid |
| 2.7 | Battery capacity | ●150Ah |
| 2.8 | Charger | ●80V-35A single-phase internal ○80V-60A three-phase internal ○80V-35A single-phase external ○80V-65A three-phase external ○80V-130A three-phase external |
| 2.9 | Battery indicator | ●With time |
| 2.10 | Seat type | ●Regular○Premium○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 | ●Yes |
| 3.9 | Blue lamp | ●No○2 front○1 rear○2 front + 1 rear |
| 3.10 | Area warning lamp | ●No○Red, 1 left + 1 right |
| 3.11 | Rearview mirror | ●1 rearview mirror○Add rearview mirrors on both sides |
| 3.12 | Buzzer | ●Yes |
| 3.17 | OPS system | ●Yes |
| 3.23 | Telematics | ●No○Yes and not customized |
| 4.3 | Cabin | ●No○Basic semi-enclosed cabin○Upgrade semi-enclosed cabin○Full cabin |
| 4.9 | Heater | ●No○Yes and not customized |

Note: ●Standard ○ Optional - Inconformity

Option

| No. | Optional items | CPD18TVL |
|---|----------------------|--|
| 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 rubber○Non-marking solid |
| 2.6 | Rear wheel material | ●Solid rubber○Non-marking solid |
| 2.7 | Battery capacity | ●205Ah |
| 2.8 | Charger | ●80V-35A single-phase internal○80V-60A three-phase internal ○80V-35A single-phase external○80V-65A three-phase external ○80V-130A three-phase external |
| 2.9 | Battery indicator | ●With time |
| 2.10 | Seat type | ●Regular○Premium○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 | ●Yes |
| 3.9 | Blue lamp | ●No○2 front○1 rear○2 front + 1 rear |
| 3.10 | Area warning lamp | ●No○Red, 1 left + 1 right |
| 3.11 | Rearview mirror | ●1 rearview mirror○Add rearview mirrors on both sides |
| 3.12 | Buzzer | ●Yes |
| 3.17 | OPS system | ●Yes |
| 3.23 | Telematics | ●No○Yes and not customized |
| 4.3 | Cabin | ●No○Basic semi-enclosed cabin○Upgrade semi-enclosed cabin○Full cabin |
| 4.9 | Heater | ●No○Yes and not customized |
| Note: ●Standard ○ Optional - Inconformity | | |

Option

| No. | Optional items | CPD20TVL |
|------|----------------------|--|
| 1.1 | Fork dimension | ○122*40*920●122*40*1070○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 rubber○Non-marking solid |
| 2.6 | Rear wheel material | ●Solid rubber○Non-marking solid |
| 2.7 | Battery capacity | ●205Ah |
| 2.8 | Charger | ●80V-35A single-phase internal○80V-60A three-phase internal ○80V-35A single-phase external○80V-65A three-phase external ○80V-130A three-phase external |
| 2.9 | Battery indicator | ●With time |
| 2.10 | Seat type | ●Regular○Premium○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 | ●Yes |
| 3.9 | Blue lamp | ●No○2 front○1 rear○2 front + 1 rear |
| 3.10 | Area warning lamp | ●No○Red, 1 left + 1 right |
| 3.11 | Rearview mirror | ●1 rearview mirror○Add rearview mirrors on both sides |
| 3.12 | Buzzer | ●Yes |
| 3.17 | OPS system | ●Yes |
| 3.23 | Telematics | ●No○Yes and not customized |
| 4.3 | Cabin | ●No○Basic semi-enclosed cabin○Upgrade semi-enclosed cabin○Full cabin |
| 4.9 | Heater | ●No○Yes and not customized |

Note: ●Standard ○ Optional - Inconformity

Dimension



CPD15TVL Length to face of forks: 1813mm(L2) overall width: 1070mm(b1/b2)



CPD18TVL Length to face of forks: 1913mm(L2) overall width: 1070mm(b1/b2)



CPD20TVL Length to face of forks: 1950mm(L2) overall width: 1170mm(b1/b2)