

# TDL162

## COUNTERBALANCE FORKLIFT TRUCK 1.6 T

 1600 kg    3000 mm    80 V Li-Ion



**Indoor/Outdoor Versatility:** Designed for high-end use in large warehouses, docks, side-bay lorries, and logistics centres.

**Productive Operations:** Equipped with dual-drive power and ergonomic features to support long shifts in high-demand settings.

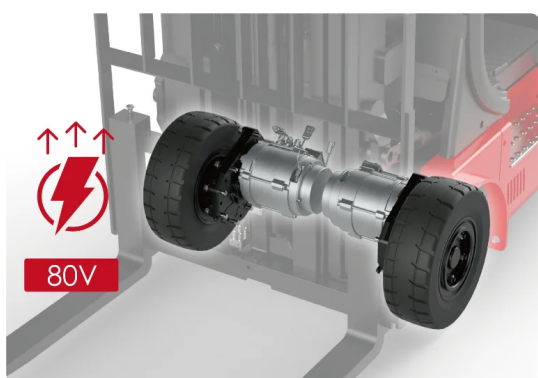
**Adaptable to Conditions:** Optional configurations like joystick control and heated cabin provide flexibility for varying operational environments.

| SPECIFICATION                               | REF       | UNIT | VALUE      |
|---------------------------------------------|-----------|------|------------|
| Battery type                                |           |      | Li-Ion     |
| Battery nominal capacity                    |           | Ah   | 280        |
| Battery voltage                             |           | V    | 80         |
| Load capacity                               | Q         | kg   | 1600       |
| Load centre distance                        | c         | mm   | 500        |
| Service weight                              |           | kg   | 3146       |
| Retracted mast height                       | $h_1$     | mm   | 1985       |
| Lift height                                 | $h_3$     | mm   | 3000       |
| Height, mast extended                       | $h_4$     | mm   | 3650       |
| Overall length                              |           | mm   | 2935       |
| Overall width                               | $b_1/b_2$ | mm   | 1050       |
| Length to face of forks                     | $I_2$     | mm   | 2015       |
| Fork dimensions                             | s/e/l     | mm   | 40X100X920 |
| Turning radius                              |           | Wa   | 1639       |
| Operator type                               |           |      | Seated     |
| Load distance, centre of drive axle to fork |           | mm   | 375        |

# Features

## Outstanding performance for productivity boost

Thanks to the optimised structure and design, the TDL162 features significant increases in travel speed, lifting speed, lowering speed, residual load capacity and max gradeability, compared to its class. The forklift maintains the nominal capacity of 1600kg up to 4.35 metres elevation with triple-stage mast, demonstrating exceptional stability and performance. With these outstanding strengths, the TDL162 speeds up warehouse turnover and maximises transport efficiency.



## 80V Li-ion dual-drive power system for high energy efficiency

The dual-drive power system of the TDL162 has been upgraded from 48V to 80V and the truck comes with an 80V/280Ah Li-ion battery as standard, ensuring lower energy consumption, a powerful drive and long endurance.

## 2 charging possibilities on the same truck

TDL162 comes standard with a single-phase integrated charger with plug and a plug for an external charger. Thanks to this new feature, TDL162 charging becomes extremely flexible and can meet all kinds of application needs up to multi-shift operation using an external fast charger.



## Ergonomic design to improve driving comfort and convenience

The TDL162 is designed around ergonomic requirements: a large workspace, improved steering sensitivity, wider visibility, a lower noise level and an informative LED display with performance selector switch, all of which provide the driver with a comfortable and safe operation experience.



## Premium options to fulfil high-end needs

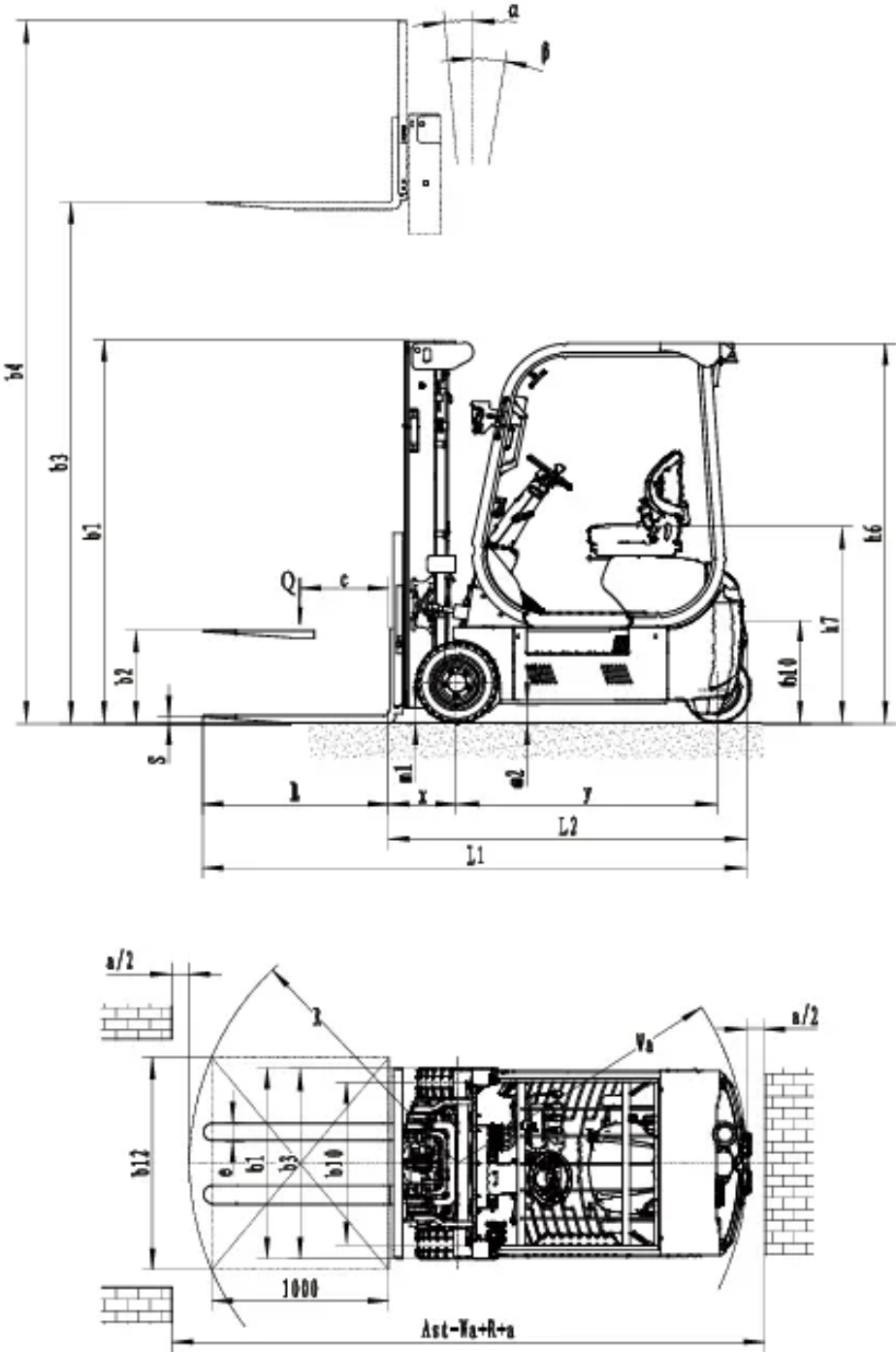
The TDL162 can be fitted with the joystick option positioned at the end of the armrest to replace manual levers and it allows all controls to be performed in a palm-sized area without fatigue: all hydraulic functions, direction changes, horn, and emergency stop, all within a compact, ergonomic design. For operations in challenging weather, the all-weather cabin option extends the forklift's operation across various conditions, ensuring consistent productivity regardless of the environment.



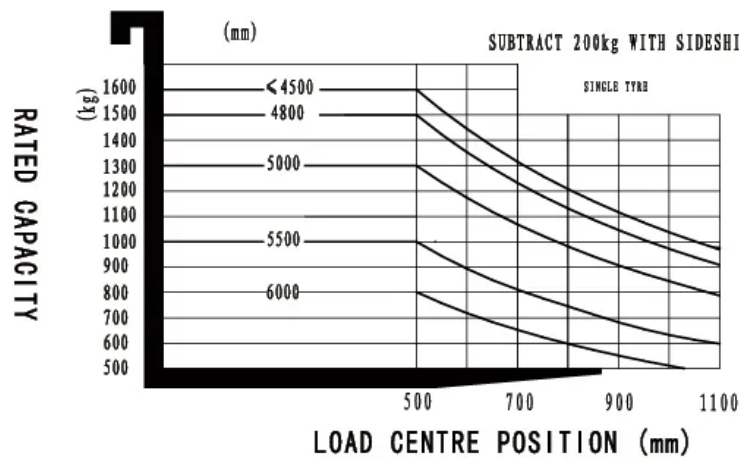
## VDI Chart

|      | SPECIFICATION                               | REF                            | UNIT | VALUE        |
|------|---------------------------------------------|--------------------------------|------|--------------|
| 1.4  | Operator type                               |                                |      | Seated       |
| 1.5  | Load capacity                               | Q                              | kg   | 1600         |
| 1.6  | Load centre distance                        | c                              | mm   | 500          |
| 1.8  | Load distance, centre of drive axle to fork |                                | mm   | 375          |
| 1.9  | Wheelbase                                   |                                | mm   | 1470         |
| 2.1  | Service weight                              |                                | kg   | 3146         |
| 2.2  | Axle loading, laden front/rear              |                                | kg   | 4129/617     |
| 2.3  | Axle loading, unladen front/rear            |                                | kg   | 1576/1570    |
| 3.1  | Tyre type                                   |                                |      | Solid rubber |
| 3.2  | Tyre size, front                            |                                |      | 18x7-8       |
| 3.3  | Tyre size, rear                             |                                |      | 140/55-9     |
| 3.5  | Wheels, number front/rear (x=drive wheels)  |                                |      | 2X/2         |
| 3.6  | Tread width, front                          | b <sub>10</sub>                | mm   | 910          |
| 3.7  | Tread width, rear                           | b <sub>11</sub>                | mm   | 210          |
| 4.1  | Tilt of mast/fork carriage forward/backward |                                | °    | 7/6          |
| 4.12 | Tow coupling height                         |                                | mm   | 580          |
| 4.19 | Overall length                              |                                | mm   | 2935         |
| 4.2  | Retracted mast height                       | h <sub>1</sub>                 | mm   | 1985         |
| 4.20 | Length to face of forks                     | I <sub>2</sub>                 | mm   | 2015         |
| 4.21 | Overall width                               | b <sub>1</sub> /b <sub>2</sub> | mm   | 1050         |
| 4.22 | Fork dimensions                             | s/e/l                          | mm   | 40X100X920   |
| 4.23 | A,B Fork carriage class/type A, B           |                                |      | 2A           |
| 4.24 | Fork carriage width                         |                                | mm   | 1040         |

|        | SPECIFICATION                               | REF            | UNIT  | VALUE           |
|--------|---------------------------------------------|----------------|-------|-----------------|
| 4.3    | Free lift                                   |                | mm    | 500             |
| 4.31   | Ground clearance, laden, below mast         |                | mm    | 90              |
| 4.32   | Ground clearance, centre of wheelbase       |                | mm    | 107             |
| 4.34.1 | Aisle width for pallets 1000×1200 crossways |                | Ast   | 3339            |
| 4.34.2 | Aisle width for pallets 800×1200 lengthways |                | Ast   | 3464            |
| 4.35   | Turning radius                              |                | Wa    | 1639            |
| 4.4    | Lift height                                 | h <sub>3</sub> | mm    | 3000            |
| 4.5    | Height, mast extended                       | h <sub>4</sub> | mm    | 3650            |
| 4.7    | Height of overhead guard (cabin)            |                | mm    | 2140            |
| 4.8    | Seat height/standing height                 |                | mm    | 1070            |
| 5.1    | Travel speed, laden/unladen                 |                | km/h  | 16/17           |
| 5.10   | Service brake                               |                |       | Electromagnetic |
| 5.11   | Parking brake                               |                |       | Electromagnetic |
| 5.2    | Lifting speed, laden/unladen                |                | m/s   | 0.5/0.52        |
| 5.3    | Lowering speed, laden/unladen               |                | m/s   | 0.55/0.55       |
| 5.8    | Max. gradeability, laden/unladen            |                | %     | 20/25           |
| 6.1    | Drive motor rating S2 60 min                |                | kW    | 5.4X2           |
| 6.2    | Lift motor rating at S3 15%                 |                | kW    | 18              |
| 6.4    | Battery nominal capacity                    |                | Ah    | 280             |
| 6.4    | Battery voltage                             |                | V     | 80              |
| 6.4.1  | Battery type                                |                |       | Li-Ion          |
| 6.5    | Battery weight                              |                | kg    | 220             |
| 6.5    | Charger output current                      |                |       | 35              |
| 8.1    | Type of drive control                       |                |       | AC              |
| 10.5   | Steering design                             |                |       | Hydraulic       |
| 10.7   | Sound pressure level at the drivers ear     |                | dB(A) | 65              |



# RATED CAPACITIES AND LOAD CENTERES GRAPH



## Mast Options

| MAST TYPE       | LIFT HEIGHT (H3, MM) | MAST LOWERED HEIGHT (H1, MM) | MAST EXTENDED HEIGHT, NO BACKREST (H4, MM) | MAST EXTENDED HEIGHT, WITH BACKREST (H4, MM) | FREE LIFT HEIGHT, NO BACKREST (H2, MM) | FREE LIFT HEIGHT, WITH BACKREST (H2, MM) | HEIGHT, MAST EXTENDED, NO SHELIVING (H4, MM) | HEIGHT, MAST EXTENDED, WITH SHELIVING (H4, MM) | HEIGHT, FREE LIFT, NO SHELIVING (H2, MM) |
|-----------------|----------------------|------------------------------|--------------------------------------------|----------------------------------------------|----------------------------------------|------------------------------------------|----------------------------------------------|------------------------------------------------|------------------------------------------|
| 2-Standard Mast | 3000                 | 1985                         | 3650                                       | 3965                                         | 100                                    | 100                                      | 7                                            | 6                                              | 375                                      |
| 2-Standard Mast | 3600                 | 2285                         | 4250                                       | 4565                                         | 100                                    | 100                                      | 7                                            | 6                                              | 375                                      |
| 2-Standard Mast | 4000                 | 2365                         | 4650                                       | 4965                                         | 100                                    | 100                                      | 7                                            | 6                                              | 375                                      |
| 3-Free Mast     | 4000                 | 1860                         | 4650                                       | 4965                                         | 1140                                   | 825                                      | 7                                            | 6                                              | 387                                      |
| 3-Free Mast     | 4350                 | 2010                         | 5000                                       | 5315                                         | 1290                                   | 975                                      | 7                                            | 6                                              | 387                                      |
| 3-Free Mast     | 4500                 | 2050                         | 5150                                       | 5465                                         | 1340                                   | 1025                                     | 7                                            | 6                                              | 387                                      |
| 3-Free Mast     | 4800                 | 2150                         | 5450                                       | 5765                                         | 1440                                   | 1125                                     | 7                                            | 6                                              | 387                                      |
| 3-Free Mast     | 5000                 | 2215                         | 5650                                       | 5965                                         | 1505                                   | 1190                                     | 7                                            | 6                                              | 387                                      |
| 3-Free Mast     | 5500                 | 2385                         | 6150                                       | 6465                                         | 1675                                   | 1360                                     | 7                                            | 6                                              | 387                                      |
| 3-Free Mast     | 6000                 | 2600                         | 6650                                       | 6965                                         | 1890                                   | 1575                                     | 7                                            | 6                                              | 387                                      |

# Options

| ITEM                                                      | OPTIONS (optional items marked in yellow)                                                                    |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 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 |
| Seat type                                                 | Comfortable   Suspension   Suspension with armrests                                                          |
| Attachments                                               | No   Built-in sideshifter   External shifter   Fork positioner with sideshift                                |
| Traction pin                                              | Yes and not customized                                                                                       |
| Front wheel material                                      | Normal solid   Traceless solid                                                                               |
| Rear wheel material                                       | Normal solid   Traceless solid                                                                               |
| Battery capacity                                          | 80V280Ah                                                                                                     |
| Charger                                                   | 80V35A internal   80V60A external   80V100A external   80V150A external                                      |
| Battery display indicator (BDI)                           | With hourmeter (Bluetooth) without PSE                                                                       |
| Area warning lamp                                         | No   Both side   Both side and rear                                                                          |
| Rearview mirror                                           | One in front   Two on side and one in front                                                                  |
| Buzzer                                                    | Yes and not customized                                                                                       |
| OPS system                                                | Yes and not customized                                                                                       |
| USB interface                                             | No   Yes and not customized                                                                                  |
| Telematics                                                | Yes and not customized                                                                                       |
| Front lamp                                                | LED                                                                                                          |
| Rear lamp                                                 | No   LED                                                                                                     |
| Warning lamp                                              | Yes and not customized                                                                                       |
| Blue lamp                                                 | No   Front   Rear   Front and rear                                                                           |
| Cabin                                                     | No   Basic half cabin   Upgrade half cabin   Full cabin                                                      |
| Overhead guard                                            | Yes and not customized                                                                                       |
| Anti-static chain                                         | Yes and not customized                                                                                       |
| Turn signal light                                         | LED                                                                                                          |
| Speed reduction for elevated mast-<br>Australian standard | No   Yes and not customized(only for Australia standard)                                                     |
| Turn speed control                                        | Yes and not customized                                                                                       |
| Heating system during lithium<br>battery charging         | No   Yes and not customized                                                                                  |
| Operator identification device                            | No   Swipe card device   Fingerprint lock                                                                    |
| Lifting electronic limit                                  | Yes and not customized                                                                                       |

| ITEM              | OPTIONS (optional items marked in yellow) |
|-------------------|-------------------------------------------|
| Hydraulic control | Mechanical lever   Joystick   Fingertip   |
| Rear armrest horn | Yes and not customized                    |