
# EFW 1.5
# EFW 2
# EFW 3
# EFW 4
# EFW 5

Electric Platform Truck
Load capacity 1.5 – 5 t

VOLK
Fahrzeugbau GmbH


# *Lower life cycle costs*

Because the acquisition costs of investment goods typically make out only a fraction of the total life cycle costs, not only the purchase price but also the later operating costs, useful life and resale value play an important role in investment decisions. Balance sheet policies must also be considered when developing investment projects. Therefore, one of our basic objectives is to minimize the life cycle costs of our vehicles and to offer our customers not only traditional vehicle purchasing but also tailor-made leasing models.

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## Lower operating costs thanks to low-maintenance and service-friendly design

The VOLK Electric Platform Trucks EFW 1.5 – EFW 5 feature a low-maintenance design. For example they are equipped with an extremely durable and practically maintenance-free three-phase asynchronous motor as a standard feature. All drive systems and components are arranged in a service-friendly manner so that maintenance work can be completed easily and efficiently. Identical tire dimensions on the front and rear axle help to minimize spare parts and storage costs.

## Longer life thanks to rugged design

The VOLK Electric Platform Trucks EFW 1.5 – EFW 5 are extremely sturdy and bear up under the hardest strains lastingly. Various bumper options provide reliable protection against damage and the standard multi-layer paint finish ensures outstanding protection against corrosion. To optimize corrosion resistance even further, the VOLK Electric Platform Trucks EFW 1.5 – EFW 5 can naturally be supplied with a hot-dip galvanized finish, too.

## Off balance investment and financial scope thanks to individual leasing offers

We are pleased to make customized leasing offers for the VOLK Electric Platform Trucks EFW 1.5 – EFW 5. This saves equity capital and credit lines and preserves liquidity. Because capitalization on the balance sheet is effected at the lessor, the lessee's balance sheet also remains "slim". This means a considerable increase in flexibility.

Load-through platform

Tarpaulin structure

Crane

# *Higher utilization*

During hard daily use two things have always paid off in industrial trucks: a high range in order to minimize downtimes due to battery changing or battery charging processes and a high capacity in order to manage transport tasks efficiently. Today it is more important than ever, particularly in long-term investments, that investment goods can be configured as needed and used flexibly. Therefore the fulfillment of these requirements is one of our most important objectives. The VOLK Electric Platform Trucks EFW 1.5 – EFW 5 illustrate this very clearly.

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## Greater range

The VOLK Electric Platform Trucks EFW 1.5 – EFW 5 are designed so that they can be run on very large batteries. For example the EFW 2 – EFW 5 models can be equipped with batteries with a capacity of up to 80 V / 400 Ah as a standard feature. Even a capacity of 80 V / 575 Ah is possible with reduced payloads.

Furthermore, the VOLK Electric Platform Trucks EFW 1.5 – EFW 5 are very energy efficient due to their comparably low empty weight. This is due to the fact that they are consistently designed for use as a platform truck from the start and are not based on a towing vehicle chassis like other vehicles in this class.

The high battery capacity and the low vehicle weight in conjunction with the standard energy recovery (regenerative brake) help to achieve an outstanding range. And this minimizes downtimes due to battery changing or battery charging.

Hydraulic liftgate


Video rear view system

Solid steel bumper

## Outstanding performance characteristics and flexible applications

Due to their high speeds, the VOLK Electric Platform Trucks EFW 1.5 – EFW 5 can cover even great distances swiftly. The outstanding torque characteristic of the standard three-phase motors enables dynamic acceleration even with large bearing loads or on ramps.

The VOLK Electric Platform Trucks EFW 1.5 – EFW 5 can be used optimally even in cramped spaces. Especially the EFW 1.5 model with its extremely compact dimensions has been consistently optimized for use in small spaces. The continuously variable electric drive and hydraulic steering facilitate precise maneuvering.

And if necessary, the VOLK Electric Platform Trucks EFW 1.5 – EFW 5 can even be used as towing vehicles for towed loads of up to 10 tons.

## Configuration as needed

A wide choice of accessories and extras enables optimization of the VOLK Electric Platform Trucks EFW 1.5 – EFW 5 for different requirements. For example different platform dimensions are available which also include a load-through option for very long goods. Different side panel options are available depending on the application. On request they can be combined with a tarpaulin structure which protects the cargo against adverse weather conditions. Loading jobs can be performed more easily with a crane or a hydraulic liftgate if required. Hitching and unhitching trailers can be simplified with automatic couplings or inching controls with automatically engaged and released brakes. The same purpose is also served by an optional video rear view system, which provides a perfect view of the trailer coupling at all times even with bulky cargo. The range of accessories is completed by various battery and tire options.

Window in the foot area

Drive components arranged in a service-friendly manner

Multi-adjustable steering column

# *Improved ergonomics*

Scientific findings prove that optimum working conditions promote employee productivity, stamina and satisfaction, thus leading to a gain in efficiency. Therefore designing our products as ergonomically as possible is one of our central objectives. This was consistently implemented also in the development of the VOLK Electric Platform Trucks EFW 1.5 – EFW 5.

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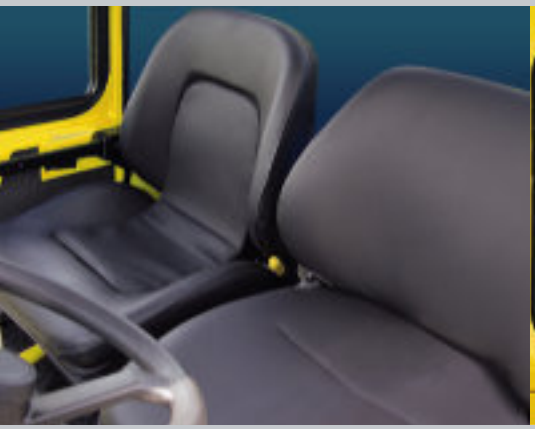
## Spaciously and ergonomically designed driver's cab and seat enable fatigue-free work

An outstanding feature of the VOLK Electric Platform Trucks EFW 1.5 – EFW 5 is the spacious and comfortable seat and driver's cab. The roomy driver's cabin and spaciously designed footwell enable a relaxed posture. The steering column is height and tilt adjustable and thus can be adjusted flexibly to the height of the respective driver. Easy and strength-saving maneuvering is enabled by a hydraulic steering support. A high degree of comfort is provided by the ergonomically designed, multi-adjustable and spring mounted driver's seat. Vibrations acting on the driver are minimized by the standard independent wheel suspension with coil springs on the front axle and the rear axle mounted on leaf springs. In addition the entire driver's cab is mounted on rubber pads and thus mechanically isolated from the chassis to reduce vibration and noise.



Ergonomically designed seats

Double windshield wipers

Clearly arranged control elements

## More safety thanks to good visibility and clearly arranged control elements

The driver's cab of the VOLK Electric Platform Trucks EFW 1.5 – EFW 5 is equipped with double windshield wipers as a standard feature. Compared to conventional windshield wipers with one arm, they feature a distinctly enlarged wiping range and provide added safety and convenience in adverse weather conditions. Outstanding visibility in all directions is ensured by large glass areas in the driver's cab.

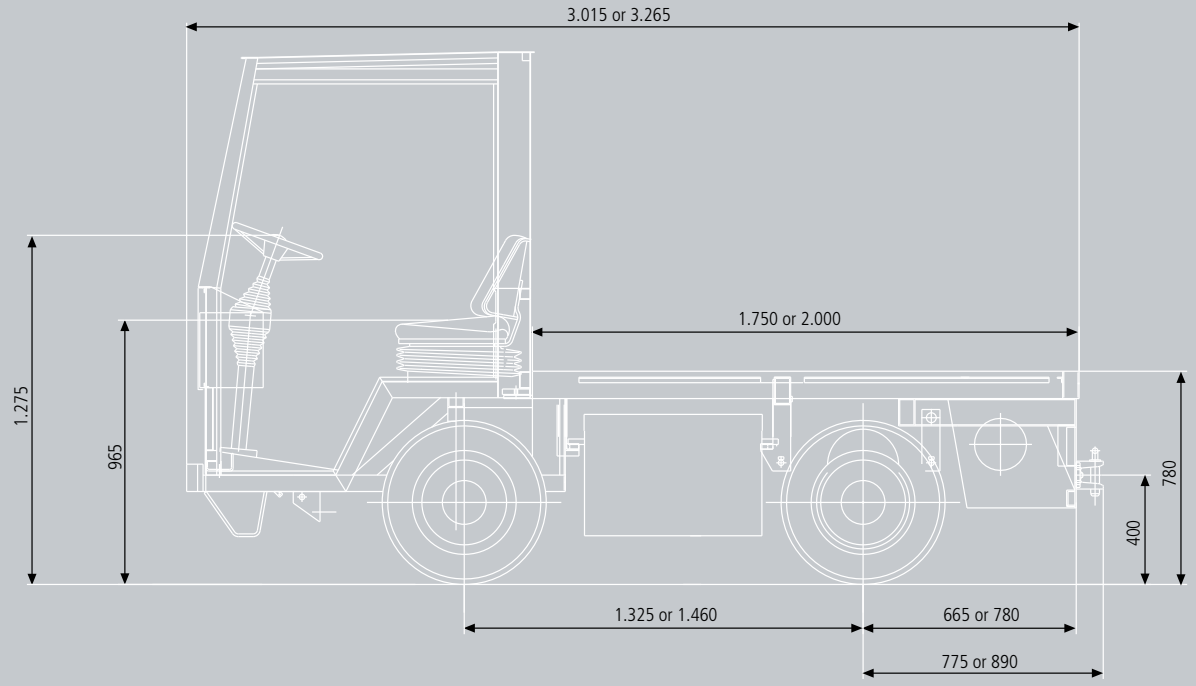
Unlike any vehicles in their class, the VOLK Electric Platform Trucks EFW 1.5 – EFW 5 have a spaciously dimensioned and shatter-proof window in the foot area which enables precise maneuvering. Clearly arranged control elements complete the user-friendly range of features and ensure that the driver can perform his work intently and productively.

## Comfort thanks to excellent ventilation and pleasant climate in the driver's cab

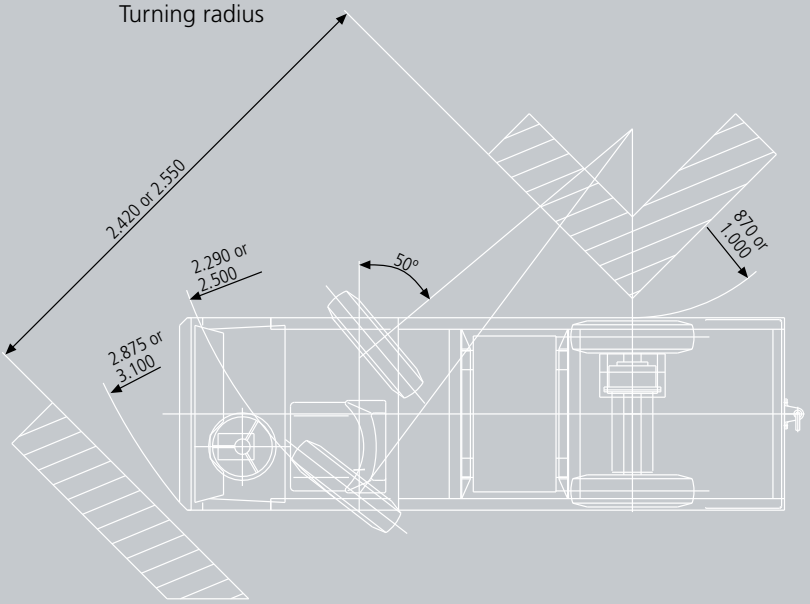
The driver's cab of the VOLK Electric Platform Trucks EFW 1.5 – EFW 5 is equipped with large sliding windows on the sides as a standard feature. To improve the supply of fresh air even further, a fresh air shutter can be installed in the cab roof. On request a heater or an air conditioner ensures comfortable temperatures in the driver's cab at all times.

# *Technical Drawings EFW 1.5*

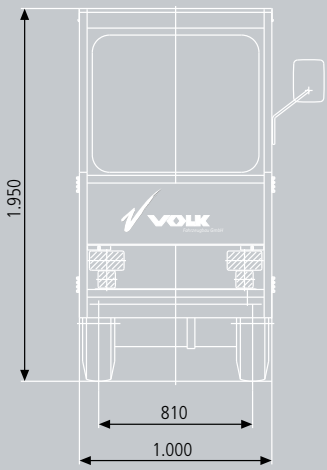
Side view




Turning radius




Front view

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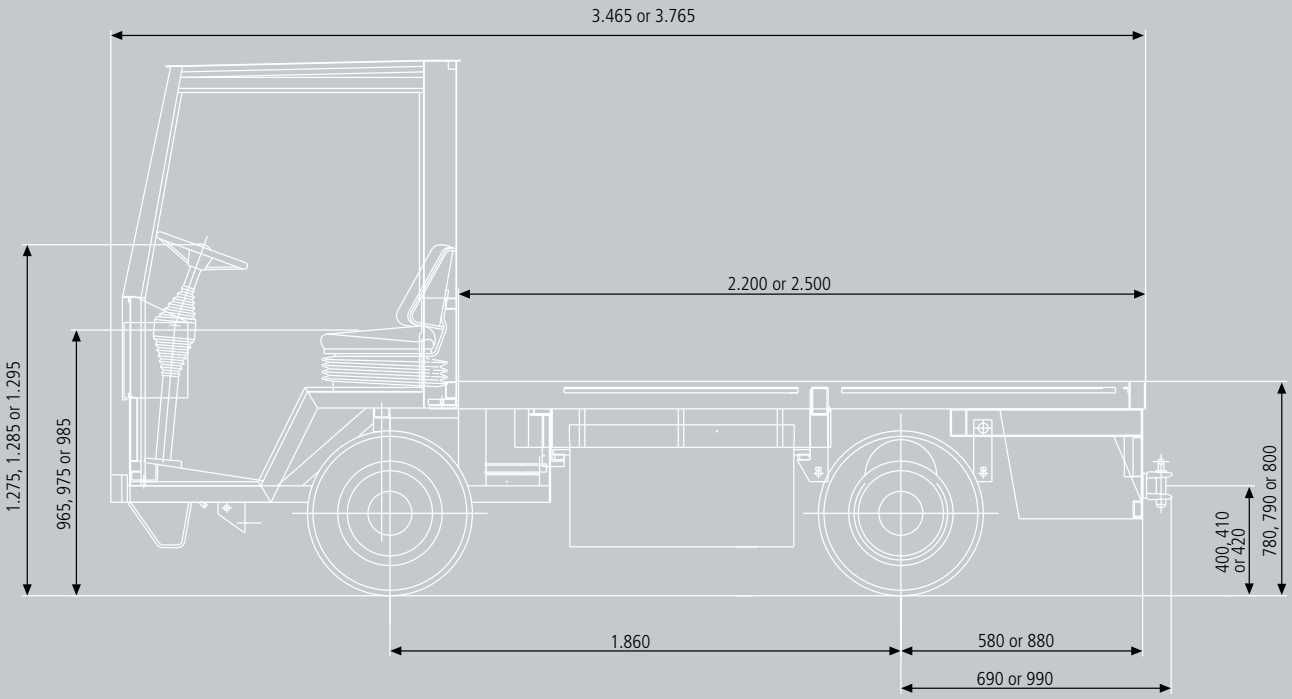
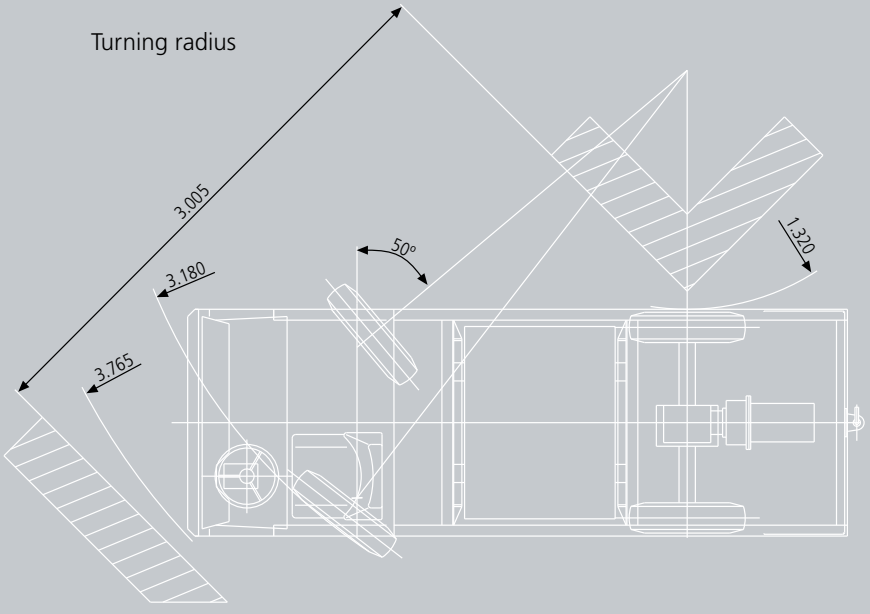
# *EFW 2 – EFW 5*

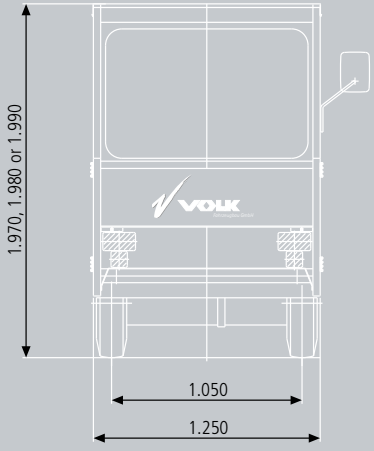
Side view




Turning radius




Front view



# *Technical Data EFW 1.5*

| Performance | | EFW 1.5 | |
|---|---|---|---|
| Towing capacity | rated load | 5.000 kg | |
| Load capacity | rated load | 1.500 kg | |
| Rated drawbar pull | | 1.000 N | |
| Max. drawbar pull | | 2.900 N | |
| Travel speed | with rated load | 18 km/h | |
| | without load | 25 km/h | |
| Max. gradeability | with rated load | 7% | |
| | without load | 17% | |
| **Drive/Electric System** | | | |
| Electric motor | type | three-phase-asynchronous | |
| | power rating | 4.0 KW | |
| Gears | transmission ratio | i = 19.9 | |
| Batterie options | voltage/capacity | 80 V/160 Ah<br>80 V/250 Ah | 80 V/210 Ah |
| **Dimension/Weights** | | | |
| Length | | 3.015 mm | 3.265 mm |
| Width | | 1.000 mm | |
| Access height | | 400 mm | |
| Seat height | | 965 mm | |
| Height of driver's cabin | | 1.950 mm | |
| Loading area | length | 1.750 mm | 2.000 mm |
| | width | 1.000 mm | |
| Loading height | without load | 780 mm | |
| Coupling height | | 400 mm | |
| Ground clearance | with rated load, center of wheel base | 110 mm | |
| Turning radius | outside | 2.875 mm | 3.100 mm |
| Vehicle weight | without battery | 920 kg | |
| Battery weight | | 580 kg/730 kg | 700 kg |
| **Chassis** | | | |
| Tires | number at front/back | 2/2 | |
| | front dimensions | 23 x 5 | |
| | rear dimensions | 23 x 5 | |
| Wheel base | | 1.325 mm | 1.460 mm |
| Track width | front | 810 mm | |
| | rear | 840 mm | |
| Steering | | hydraulic power steering | |
| Service brake | type | hydraulic double-circuit brake system | |
| | number of braked wheels | 4 | |
| Parking brake | | hand brake | |
| Suspension | front | independent suspension with coil springs | |
| | rear | leaf springs | |

(1) *Depending on gear transmission ratio*

(2) *Battery capacity of 575 Ah leads to reduced load capacity due to the increased battery weight*

# *EFW 2 – EFW 5*

| EFW 2 | EFW 3 | EFW 4 | EFW 5 |
|---|---|---|---|
| 10.000 kg | 10.000 kg | 10.000 kg | 10.000 kg |
| 2.000 kg | 3.000 kg | 4.000 kg | 5.000 kg |
| 2.400 N or 2.800 N[1] | 2.300 N or 2.600 N[1] | 2.400 N or 3.000 N[1] | 2.700 N or 3.300 N[1] |
| 5.900 N or 7.000 N[1] | 6.200 N or 7.400 N[1] | 6.000 N or 7.500 N[1] | 9.500 N or 11.900 N[1] |
| 20 km/h or 17 km/h[1] | 16 km/h or 14 km/h[1] | 14 km/h or 13 km/h[1] | 16 km/h or 13 km/h[1] |
| 27 km/h or 22 km/h[1] | 28 km/h or 23 km/h[1] | 28 km/h or 23 km/h[1] | 29 km/h or 23 km/h[1] |
| 11% or 14%[1] | 9% or 11%[1] | 7% or 9%[1] | 10% or 14%[1] |
| 26% or 31%[1] | 28% or 34%[1] | 27% or 34%[1] | > 50% |
| | | | |
| three-phase-asynchronous | three-phase-asynchronous | three-phase-asynchronous | three-phase-asynchronous |
| 7.5 KW | 7.5 KW | 7.5 KW | 11.5 KW |
| i = 20.5 or i = 24.4 | i = 20.5 or i = 24.4 | i = 20 or i = 25 | i = 20 or i = 25 |
| 80 V/320 Ah | 80 V/320 Ah | 80 V/320 Ah | 80 V/320 Ah |
| 80 V/400 Ah | 80 V/400 Ah | 80 V/400 Ah | 80 V/400 Ah |
| 80 V/575 Ah[2] | 80 V/575 Ah[2] | 80 V/575 Ah[2] | 80 V/575 Ah[2] |
| | | | |
| 3.465 mm / 3.765 mm | 3.465 mm / 3.765 mm | 3.765 mm | 3.765 mm |
| 1.250 mm | 1.250 mm | 1.250 mm | 1.250 mm |
| 400 mm | 420 mm | 420 mm | 410 mm |
| 965 mm | 985 mm | 985 mm | 975 mm |
| 1.970 mm | 1.990 mm | 1.990 mm | 1.980 mm |
| 2.200 mm / 2.500 mm | 2.200 mm / 2.500 mm | 2.500 mm | 2.500 mm |
| 1.250 mm | 1.250 mm | 1.250 mm | 1.250 mm |
| 780 mm | 800 mm | 800 mm | 790 mm |
| 400 mm | 420 mm | 420 mm | 410 mm |
| 160 mm | 180 mm | 180 mm | 170 mm |
| 3.765 mm | 3.765 mm | 3.765 mm | 3.765 mm |
| 1.050 kg | 1.050 kg | 1.080 kg | 1.100 kg |
| 860 kg/1.050 kg/1.600 kg | 860 kg/1.050 kg/1.600 kg | 860 kg/1.050 kg/1.600kg | 860 kg/1.050 kg/1.600 kg |
| | | | |
| 2/2 | 2/2 | 2/2 | 2/2 |
| 195/70 R 15 | 25 x 6 | 25 x 6 | 7.00 – 12 |
| 195/70 R 15 | 25 x 6 | 25 x 6 | 7.00 – 12 |
| 1.860 mm | 1.860 mm | 1.860 mm | 1.860 mm |
| 1.050 mm | 1.050 mm | 1.050 mm | 1.050 mm |
| 1.050 mm | 1.050 mm | 1.050 mm | 1.050 mm |
| hydraulic power steering | hydraulic power steering | hydraulic power steering | hydraulic power steering |
| hydraulic double-circuit brake system | hydraulic double-circuit brake system | hydraulic double-circuit brake system | hydraulic double-circuit brake system |
| 4 | 4 | 4 | 4 |
| hand brake | hand brake | hand brake | hand brake |
| independent suspension with coil springs | independent suspension with coil springs | independent suspension with coil springs | independent suspension with coil springs |
| leaf springs | leaf springs | leaf springs | leaf springs |

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