

Transport-Systeme GmbH Design specification Eidechse MTE 3/30 L D-series 493,099,0009-A

1 Drive train

1.1 Traction drive

AC asynchronous motor

Power: 20 kW @ S2 - 60 min

Protection class: IP 54

1.2 Battery

Voltage: 80 V

Battery compartment with pneumatic spring-loaded cover for batteries compliant with DIN 43536 wiring type A 5 PzS 700L, 5 PzS 775; 320 A battery connector according to DIN 43589 T1

1.3 Controller

High-frequency MOSFET asynchronous inverter

2. Chassis

2.1 Front axle

Steering axle designed as a pendulum axle with rocker arm, coil springs and vibration dampers

2.2 Rear axle

Rigid rear axle with integrated lateral drive motor, coil springs and dampers

2.3 Wheels and tyres

4 steel-disk wheels with tubeless taper-seat tyres for utility vehicles, size $185\ R\ 14\ C$

2.4 Steering

Demand-controlled hydrostatic power steering with nonwearing analogue sensor, Silence external gear steering pump with asynchronous motor, Steering column with adjustable height and angle

2.5 Brakes

- electrical regenerative brake acting on the drive axle
- hydraulic dual-circuit brake system acting on all
 4 wheels, front axle with disk brake, rear axle with wet brake
- deceleration according to ISO 6292 > 50%
- parking brake acting on the rear axle
- corrosion free brake lines

2.6 Vehicle frame

Sturdy, welded-steel profile frame as a collision protection on all sides

2.7 Paint

MAFI 2K paint consisting of

- high-solid zinc phosphate primer
- 2-component coating varnish

Colour: RAL2000 yellow orange

3. Superstructure and working equipment

3.1 Rear tow bar

Fully automatic, type 244A35002 compact tow bar with \emptyset 25 mm pin for \emptyset 35 mm lunette eye, possible coupling heights of 280, 335, 390, 445, 500 mm; window in the cargo bed to provide a view on the tow bar

3.2 Front towing eye

3.3. Electrical system

- 80 V DC system in a central electric box for traction drive and steering pump
- 24 V DC system for vehicle electrical system:
- two main headlights, front (parking light and dimmed light)
- two direction indicators, front
- two combined brake lamps/direction indicators

3.4 Tractor platform

1560 x 1130/1270 mm cargo bed with anti-skid rubber mat or corrugated aluminium surface

3.5 Forward/reverse inching system

Forward/reverse inching system for convenient hitching of trailers by the driver on the left side of the vehicle rear

4. Driver's cab

4.1 Superstructure

- spacious driver's cab with large window areas for good all-round view, with shaded safety-glass panes
- vibration-isolated cabin

- ergonomically designed drivergs area
- two easily detachable doors with shaded horizontal sliding windows opening to both sides
- windscreen wiper at front windscreen
- plastic roof with built-in rain gutters
- two outside mirrors

4.2 Cabin furnishings

- comfortable driver's seat, adjustable fore-and-aft position and angle of inclination, fully suspended with shock absorbers, adjustable to driver's weight, artificial leather, type MSG20
- passenger seat, adjustable fore-and-aft position and angle of inclination, adjustable for three weight classes, artificial leather surface, type GS12
- dual-level 1500 W electric heater with 3-stage blower;
 3 air nozzles, 2 for windscreen defrosting, one in the foot space, airflow over 300 m³/h
- accelerator and brake pedal in passenger-car configuration
- anti-skid, easily cleaning rubber floor mat
- sound-absorbing roof covering
- inside mirror and cabin light
- stowing compartment, bottle holder, coat hanger
- sun visor for driver

4.3 Displays, controls, and indicators

- combination lever at the steering column for turn light, parking lights and low beam,
- switch for driving direction, hazard lights, windscreen wiper ,forward/reverse inching mode, key switch
- display with speedometer, battery discharging indicator, hour meter, maintenance indicator, error display
- dual-level switch for heater and three-stage blower switch
- emergency-off switch

4.4 Cabin paint finish

Cataphoretic immersion primer with powder stove-enamel finish, colour code RAL7024 graphite, roof RAL7046 telegrey II

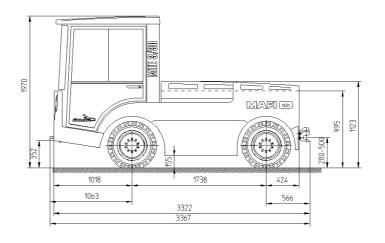


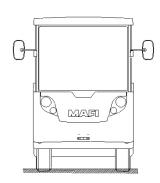
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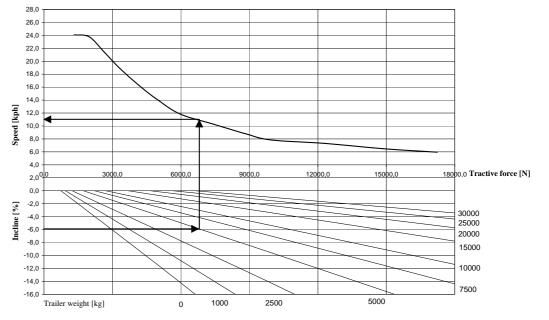
Specification sheet according to VDI 2198

1	Manufacturer		MAFI
1.2	Type designation		MTE 3/30 D-series
1.3	Drive		Electric
1.4	Operation		Driver's seat
1.5	Load capacity	t	-
1.7	Nominal towing capacity	N	5600
1.9	Wheel base	mm	1738
2.1	Dead weight (incl. battery)	kg	3880
2.2	Axle load - loaded, front/rear	kg	-
2.3	Axle load - unloaded, front/rear	kg	2080/1800
3.1	Tyres		Pneumatic
3.2	Tyre size, front		185 R 14 C
3.3	Tyre size, rear		185 R 14 C
3.5	No. of wheels front/rear ($x = driven$)		2/2x
3.6	Track width, front	mm	1018
3.7	Track width, rear	mm	1099
4.7	Height incl. driver's cab	mm	1970
4.8	Seat height (SIP acc. to ISO 5253)	mm	960
4.12	Coupling height	mm	280, 335, 390, 445, 500
4.13	Loading height, unloaded	mm	995
4.16	Length of loading platform	mm	1560
4.17	Projecting length	mm	566
4.18	Total length	mm	3367
4.21	Total width	mm	1300
4.32	Ground clearance, centre of wheel base	mm	155
4.35	Turning radius	mm	3328
4.36	Minimum pivot distance	mm	670
5.1	Driving speed loaded/unloaded	kph	11/25
5.5	Tractive force loaded/unloaded	N	5600
5.6	Max. tractive force loaded/unloaded	N	16000
5.7	Gradability loaded/unloaded	%	See diagram
5.8	Max. gradability loaded/unloaded	%	See diagram
5.10	Service brake		Hydraulic
6.1	Drive motor, power S 2 60 min	kW	20
6.3	Battery according to DIN 43536 A		5PzS
6.4	Rated voltage, rated capacity	V/Ah	80/700, 775
6.5	Battery weight	kg	1864
8.1	Type of drive control		Asynchronous inverte
8.5	Rear coupling	1	244A35002





Tractive force diagram



Example:

a tractor with a tow load of travels an incline of

5000 kg 6%

the maximum achievable speed is

11 kph