# Manufacturer's Data and Design Characteristics

## January 2002

|                           |     |                                      |            | 1.2            | l          |
|---------------------------|-----|--------------------------------------|------------|----------------|------------|
|                           |     | Manufacturer                         |            | Linde          |            |
| S                         |     | Model Designation (ITA Class)        |            | ETR            |            |
| Unaracteristics           |     | Load Capacity, Base                  | lb dbp     | 200            |            |
| eri                       | 1.3 | Load Capacity, Maximum               | lb dbp     | 750            |            |
| act                       |     | Power Unit Electric, Diesel, LP, CNG |            | Electric       |            |
| dic                       | 1.5 |                                      |            | Stand-up Rider |            |
| 5                         |     | Tire Type F/R, R=Rubber, P=Poly      |            | R/R            |            |
|                           | 1.7 | Wheels Front/Rear (x = driven)       |            | 1 x /2         |            |
|                           |     | Steering, Power/Manual               |            | Manual         |            |
| S                         | 2.1 | Total Length                         | l4 in (mm) | 55.9           | (1,419)    |
| -ID                       | 2.2 | Overall Width                        | w in (mm)  | 33.5           | (851)      |
| Dimensions                |     |                                      | h6 in (mm) | 53.8           | (1,367)    |
|                           |     | Turning Radius                       | TR in (mm) | 42.2           | (1,073)    |
|                           | 2.5 | Skirt or Bumper, Height              | H8 in (mm) | 11.5           | (293)      |
|                           |     | Skirt or Bumper, Clearance           | H9 in (mm) | 2.6            | (65)       |
| Perfor-<br>mance Operator |     | Platform Depth                       | in (mm)    | 16             | (406)      |
|                           |     | Platform Width                       | in (mm)    | 33.5           | (851)      |
|                           |     | Platform Height                      | in (mm)    | 9.4            | (238)      |
|                           | 4.1 | Travel Speed, With/Without Load      | mph (kmh)  | 5.5/7.3        | (8.8/11.7) |
|                           | 4.2 | Gradeability, With Load              | %          | 10             |            |
| Weight                    | 5.1 | Weight, Without Battery              | lb (kg)    | 1,000          | (453)      |
|                           |     | Weight, With Min. Battery            | lb (kg)    | 1,850          | (839)      |
| Chassis                   |     | Tire Size, Drive (Front)             | in (mm)    | 12 x 4         |            |
|                           | 6.2 | Tire Size, Total Number/Trail (Rear) | in (mm)    | 2/3.0 x 5.0    |            |
| i la                      |     | Wheel Base                           | WB in (mm) | 35.2           | (894)      |
| 0                         |     | Brake System, Type                   |            | Hydraulic      |            |
| Drive                     | 7.1 | Battery Compartment, w1 x l          | in         | 13.5 x 32.75   |            |
|                           | 7.2 |                                      | V          | 24             |            |
|                           | 7.3 | Amp Hours, Recommended               | Ah         | 450            |            |
|                           | 7.4 | Battery Weight, Minimum              | lb         | 850            | (385)      |
|                           |     | Drive Motor Size, Diameter           | in         | 6.63           | (168)      |
|                           | -   | Gear Ratio                           |            | 18:1           |            |
|                           | 7.7 | Travel Control, Standard             |            | GE SEM         |            |

Standard Equipment:

- · Programmable microprocessor-based G.E. transistor travel control
- G.E. SEM drive motor
- Regenerative braking
- Ramp anti-rollback
- Operator presence switch •
- Rubber, anti-fatigue mat
- Horn/key switch
- Knee pad
- · Lean seat
- On-board diagnostics
- ٠ Sealed harness connectors
- Soft-touch handle

**Optional Equipment:** 

- Multifunction dash display
- Wheels and tires
- Battery compartment rollers •
- Storage tray (available with shrink wrap holder) •
- Button package (horn and reverse)
- Easy pick system •
- Cold storage/corrosion protection •
- Travel/backup alarm
- Travel/backup flashing lights
- U.L. EE construction

Contact dealer/manufacturer for additional equipment availability.



Linde Material Handling North America Corporation 2450 West 5th North Street Summerville, SC 29483 (843) 875-8000 E-mail: trucksales@Imh-na.com Web site: http://www.lmh-na.com

ANSI CLASSIFICATION: Standard truck meets all applicable mandatory requirements of ANSI/ASME B56.9-1992 standards for powered industrial trucks. NOTE: Performance data may vary due to motor and system efficiency tolerances. The performance depicted represents nominal values obtained under typical operating conditions. Metric dimensions are in millimeters unless otherwise specified. All metric dimensions are not direct equivalents due to rounding data. The descriptions and specifications included on this data sheet were in effect at the time of printing. Linde Material Handling North America Corporation reserves the right to make improvements and changes in specification or design without notice and without incurring obligation. Please check with your authorized Linde dealer for information on possible updates or revisions. 01/01/5M/CCG Graphic Revision: 061407

# Electric Center Ride Tow Tractor

ETR 24-Volts 200 lbs. dbp



#### Introduction

This modern truck series offers the following outstanding features:

#### Design

Maximum operator comfort and productivity define the design parameters of this truck series. The ETR model features a large, fully-cushioned operator platform. All models are equipped with soft-touch operator accelerator control twist grips as well as an adjustable steering column.

#### Frame

Truck frames feature fixed platform height and all seam-welded unitized construction. Plate steel contoured to shape for rigid strength provides maximum durability and protection for all vital components. The battery compartment is an integral part of the chassis, further adding strength to the frame.

#### Drive motor

The 24-volt equipped ETR model features G.E. separately excited drive motor (SEM). This high performance motor features class H insulation, is open- ventilated for energy efficient, cool operation. Excellent performance, dependability, control and lowest possible energy consumption are provided through the utilization of quality materials and the matching of motor to

drive system. Four long-life motor brushes interface with the diamond-turned commutator.

### Drive unit

The ETR series is fitted with heavy-duty, bottom-mounted Kordel drive units. They feature a top seal turntable bearing with encapsulated ball bearings easily lubricated from the top down. These high capacity drive units are precisionmachined utilizing heat-treated chromium alloy steel gears for maximum life and dependability.

#### Travel control

Microprocessor-based G.E. transistor travel controls are offered as standard equipment. These ultramodern electronic controls eliminate forward/reverse contactors, numerous relays, resistors and diodes. Standard control features include two unique speed limits, anti-rollback and regenerative braking. The controls are fully programmable to allow for specific application requirements and feature diagnostic capability with stored fault codes. Sealed wiring harness connectors prevent moisture and contaminants from interrupting truck operation in all environments. In combination with the G.E. SEM drive motor, the electronic package delivers unbeatable truck control and performance with unrivalled energy efficiency.

### Operator controls

The operator control handle features heavy-duty cast design and construction. Soft-touch accelerator twist grips govern travel direction and speed and feature automatic return to neutral. Integral, easyto-use, push button control switches actuate the horn.

#### Motor compartment covers

The ETR series features a thermoplastic one-piece, lift off motor compartment cover. This style cover is a product of the latest scientific advances in the field of chemistry. In addition to their resistance to rust and corrosion, these covers offer superior impact strength, durability, lifelong proper fit. The same rugged material is used today by most large construction machinery OEM's.

### Brake system

Smooth, controlled braking is accomplished by one of four methods:

- 1. Applying the hand brakes
- 2. Auto brake
- 3. Regenerative braking
- 4. Stepping off rider platform.