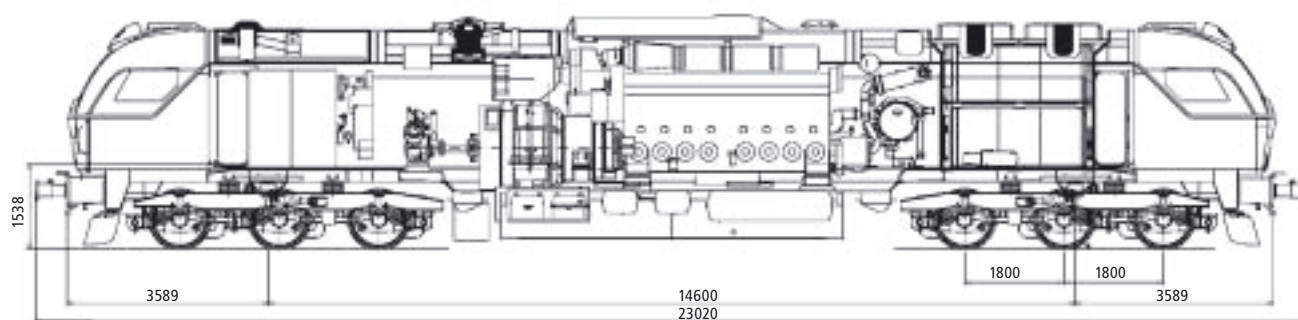




# EURO 4000 Freight

Diesel-Electric Locomotives

powered by  
**ELECTRO-MOTIVE.**



## GENERAL CHARACTERISTICS

|                                  |                                       |
|----------------------------------|---------------------------------------|
| <b>Axle arrangement:</b>         | <b>Co'Co'</b>                         |
| <b>Gauge:</b>                    | <b>1435 mm</b>                        |
| <b>Loading Gauge:</b>            | <b>UIC 505-1</b>                      |
| <b>Weight:</b>                   | <b>123 t</b>                          |
| <b>Axle load:</b>                | <b>20,50 t</b>                        |
| <b>Maximum Speed:</b>            | <b>120 km/h</b>                       |
| <b>Starting Tractive Effort:</b> | <b>400 kN</b>                         |
| <b>Cabs:</b>                     | <b>Two, Air-Conditioned</b>           |
| <b>Coupler:</b>                  | <b>UIC type</b>                       |
| <b>Crash:</b>                    | <b>prEN15227</b>                      |
| <b>Fuel tank:</b>                | <b>7000 l</b>                         |
| <b>Multiple unit:</b>            | <b>Yes (27 pin)</b>                   |
| <b>Emissions:</b>                |                                       |
| <b>Noise:</b>                    | <b>TSI Conventional Rolling Stock</b> |
| <b>Exhaust:</b>                  | <b>EU97/68 Stage IIIA</b>             |

powered by  
**ELECTRIC MOTIVE**



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## Diesel engine

|                     |               |
|---------------------|---------------|
| Manufacturer        | EMD           |
| Model               | 16-710 G3C-U2 |
| Power rating        | 3178 kW       |
| Number of Cylinders | 16            |
| Rated Speed         | 900 rpm       |

## Brake equipment

|                                |        |
|--------------------------------|--------|
| Pneumatic                      | UIC    |
| Dynamic Brake                  | YES    |
| Wheel slide Protection         | YES    |
| Compressor:                    |        |
| - Gardner Denver WLU           |        |
| - 4270 l/min-10 bar at 900 rpm |        |
| Air Capacity                   | 1000 l |

## Electrical transmission

|                 |          |
|-----------------|----------|
| Type            | AC/DC    |
| Traction Motors | 6 X D43  |
| Main Generator  | AR20     |
| Dynamic Brake   | 600 Amp. |

## Bogie

|            |                  |
|------------|------------------|
| Body Shell | Fabricated steel |
| Axle       | Hollow, EA1N     |
| Wheel      | 1067 mm, R7T     |

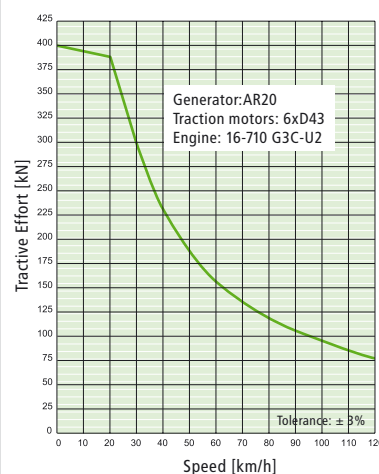
## Suspension:

- Primary: Coil Springs
- Secondary: Rubber-metal
- Vertical, Horizontal Dampers

|                |                    |
|----------------|--------------------|
| Traction Motor | Nose suspended     |
| Brake          | One disk per wheel |

## Performance Curves

TRACTION EFFORT - SPEED CURVE  
71:18 Gear ratio - 1067 mm Wheels  
UIC Site condition



DYNAMIC BRAKE EFFORT - SPEED CURVE  
71:18 Gear ratio - 1067 mm Wheels

