

Data Sheet

ED-DT318B

Electric Drivetrain System

Formerly the UQM PowerPhase DT HD2 220(+), 250(+)

These Danfoss Editron drivetrain systems are available with a two-speed transmission.

- ED-DT318B-PT2370E-360V
- ED-DT318B-PT3050E-600V

These systems allow for optimized packaging and increased payload capacity due to weight savings.

The reduced size and mass of this drivetrain is due to the Danfoss Editron motor and control technology, coupled with the torque multiplying function of the transmission. The two-speed transmission provides the ability to keep the e-motor in the highest efficiency operation region over more of the vehicle's drive cycle.

These systems are ideal for heavy-duty commercial vehicles and transit applications.

Features

- Compact Packaging Size
- Drivetrain efficiency (DC input to power/torque output) 90% plus at output speed of 1415 RPM
- High continuous torque, power and efficiency
- Danfoss Editron proprietary software that provides increased power and efficiency.

Performance highlights

Peak power	250 kW
Peak torque output	3050 Nm
Voltage range	450 - 750 VDC

For more detailed information, visit www.uqm.com

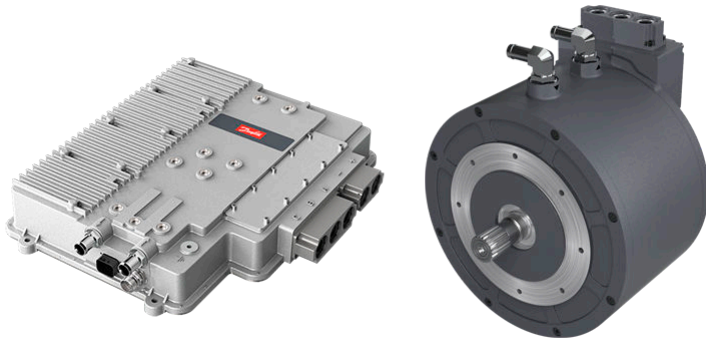


Drivetrain description

The components of the full e-drive assembly include:

- Danfoss electric motor: EM-PMI318B
- Danfoss electric converter: EC-C1200F-1200
- Danfoss two-speed transmission assembly

Motor and converter dimensions



	Motor	Converter	Transmission
Length	8.9 in [226 mm]	21.2 in [539.5 mm]	38.1 in [968 mm]
Width	n/a	16.0 in [407.4 mm]	15.4 in [390 mm]
Diameter	14.2 in [360 mm]	n/a	n/a
Height	n/a	3.8 in [96.1 mm]	19.5 in [496 mm]
Weight	187 lb [85 kg]	42 lb [19 kg]	203 lb [92 kg]

Electric motor and two-speed transmission assembly





Electric drivetrain performance

Requirement	ED-DT318B-PT-2370E-360V	ED-DT318B-PT3050E-600V
1st gear ratio	3.53:1	3.53:1
2nd gear ratio	1:1	1:1
Maximum speed (transmission output 2nd gear)	4800 RPM	4800 RPM
Maximum speed 1st gear (transmission output 1st gear)	1558 RPM	1558 RPM
Peak torque (transmission output 1st gear)	2370 Nm	3050 Nm
Peak motor power	220 kW	250 kW
Continuous motor power rating*	135 kW	180 kW
Continuous torque (0 - 283 RPM)	1491 Nm	1760 Nm
Voltage for peak, continuous power ratings	360 V	600 V
Peak system efficiency	94%	94%

* Continuous ratings stated at 60° C inlet coolant

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