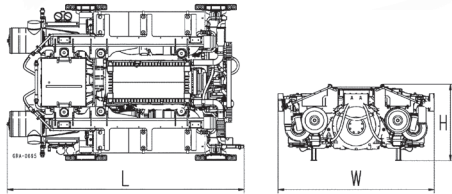
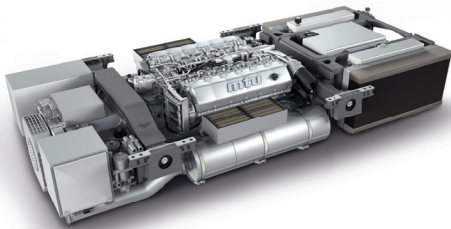




Rail

POWERPACKS[®] WITH 12V 1600

for railcar applications EU Stage IIIB



Optional equipment and finishing shown. Standard may vary.

Engine	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)	Mass, wet kg (lbs)
MTU PowerPack	L: 3900 – 5000 (153.5 – 196.9)	4500 – 6500 (9921 – 14330)	4700 – 6750 (10362 – 14881)
	W: 2100 – 2800 (82.7 – 110.2)		
	H: 850 – 950 (31.5 – 37.4)		

All dimensions are approximate.

Combustion engine types		
12V 1600 R70	kW (bhp)	565 (758)
12V 1600 R70L	kW (bhp)	625 (838)
12V 1600 R80	kW (bhp)	660 (885)
12V 1600 R80L	kW (bhp)	700 (939)
Speed	rpm	R70/R70L: 2100 R80/R80L: 1900
Bore/stroke	mm (in)	122/150 (4.8/5.9)
Cylinder configuration		12V
Displacement/cylinder	l (cu in)	1.75 (107)
Displacement, total	l (cu in)	21.0 (1284)
Fuel specification		DIN EN 590, DIN EN 590,
Emission qualification*		EU Stage IIIB

* Emission: EU: Nonroad Directive 97/68/EC (as amended by 2004/26/EC)

Power transmission	
Transmission for underfloor installation type	ZF 6 AP 2500R Voith T212
Traction alternator for underfloor installation type	Permanent magnet synchronous generator, external excited synchronous generator, asynchronous generator
Output voltage range at rated speed	Output voltage range at rated speed 500-2800
Cooling system	Integrated in PowerPack or separate roof installation, hydraulic or electrical fan drive
Exhaust system	EU Stage IIIB SCR system, catalyst with silencer function, urea injection with supplying and metering unit

Additional scope of supply									
Hybridization									
Onboard power supply	<table border="1"> <thead> <tr> <th>Types</th> <th>Power</th> </tr> </thead> <tbody> <tr> <td>28V/DC</td> <td>up to 18 kW</td> </tr> <tr> <td>110V/DC</td> <td>up to 18 kW</td> </tr> <tr> <td>3P-AC 50 Hz/60 Hz</td> <td>up to 70 kVA</td> </tr> </tbody> </table>	Types	Power	28V/DC	up to 18 kW	110V/DC	up to 18 kW	3P-AC 50 Hz/60 Hz	up to 70 kVA
	Types	Power							
	28V/DC	up to 18 kW							
110V/DC	up to 18 kW								
3P-AC 50 Hz/60 Hz	up to 70 kVA								
Air compressor									
Air conditioning compressor									
Preheating systems									
Automatic engine oil replenishment system									
CaPos smart editon	Capacitor-based power supply system for starter								
SafeMon	Safety monitoring unit and documentation								

Further variations on demand. Subject to change without notice. Customization possible. Engines illustrated in this document may feature options not fitted as standard. For further information please consult your distributor/dealer.