

## Rail

## mtu POWERPACK SERIES 1600

## for railcar applications EU Stage IIIB / EU Stage V



Additional equipment and finishing shown. Standard may vary.

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PowerPack	Dimensions (LxWxH) mm (in) *	Mass, wet kg (lbs) *		
<b>mtu</b> PowerPack	5.050 - 5.350 x 2.100 - 2.800 x 850	6.000 - 7.000		
Series 1600	(198.8 - 210.6 x 82.7 - 110.2 x 33.5)	(13.227 - 15.432)		

All dimensions are approximate and preliminar, for complete information refer to the installation drawing. \*The mentioned values are valid for PowerPacks with underfloor cooling system, for PowerPacks with roof cooling system please consult your **mtu** distributor/dealer.

Combustion engine types	Rated po	Rated power				
	kW	(bhp)	rpm	EU Stage		
12V 1600 R70 / R71	565	(757)	2100 / 1900	IIIB / V		
12V 1600 R70L / R71L	625	(838)	2100 / 1900	IIIB / V		
12V 1600 R80	660	(885)	1900	IIIB		
12V 1600 R80L / R81L	700	(952)	1900	IIIB / V		
12V 1600 R91	736	(987)	1900	V		
Bore/stroke mm	(in) 122/150	(4.8/5.9)				
Cylinder configuration	12V	12V				
Displacement l (cu	in) 1.75 (107	1.75 (107)				
Displacement, total l (cu	in) 21 (1284)	21 (1284)				
Fuel specification	DIN EN S	DIN EN 590; other fuels are under investigation				
Emission qualification	EU Stage	EU Stage IIIB and Stage V*				

\* Emission regulation (EU) 2016/1628

Ambient conditions for railcar: -25°C to 40°C

In case of deviations please consult your *mtu* distributor/dealer.



Standard equipment					
	Diesel-electric generator	Diesel-mechanic gearbox		Diesel-hydraulic gearbox	
Power transmission	Permanent magnet synchronous generator / external excited synchronous generator / asynchronous generator.	optional reverse	e-gear		
	Output voltage range at rated speed: 500 - 2800 V				
Cooling system Underfloor cooling unit with electric or hydraulic fan drives		electric or	Roof cooling unit with electric or hydraulic fan drives		
Exhaust gas aftertreatment system	EU Stage IIIB (SCR system)		EU Stage V (DOC, DPF and SCR system)		
Combustion air filter system					
Fuel filter system					
PowerPack automation system					
Additional equipment integrated in PowerPack					
On-board power generation					
Kit for cold ambient conditions (<-25°C)					
Coolant preheating system	Fuel burner Electric		Electric heat	: heater	
Automatic engine oil replenishment system					
Hybridization					
On-board power supply					
Additional equipment for separate installation					
CaPoS smart edition	Capacitor-based power supply system for starter				
DC/DC-converter	110 VDC/24VDC				
Fluid level display					

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 consult your **mtu** distributor/dealer.