

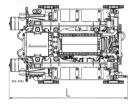
## Rail

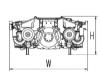
## POWERPACKS® WITH 12V 1600

## for railcar applications EU Stage IIIB



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 discounting			





Optional equipment and finishing shown. Standard may vary.

Αll	aimensions	are	approximate	

Combustion engine	e 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/cylin	nder l (cu in)	1.75 (107)	
Displacement, tota	l (cu in)	21.0 (1284)	
Fuel specification		DIN EN 590, DIN EN 590,	
Emission qualification*		EU Stage IIIB	

 $<sup>^{\</sup>ast}$  Emission: EU: Nonroad Directive 97/68/EC (as amended by 2004/26/EC)



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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		Types	Power	
		28V/DC	up to 18 kW	
		110V/DC	up to 18 kW	
Air compressor		3P~AC 50 Hz/60 Hz	up to 70 kVA	
		3P~AC 50 Hz/60 Hz	up to 70 kVA	
Air conditioning compressor	r	3P~AC 50 Hz/60 Hz	up to 70 kVA	

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.

Capacitor-based power supply system for starter

Safety monitoring unit and documentation

Preheating systems

CaPos smart editon

SafeMon

Automatic engine oil replenishment system