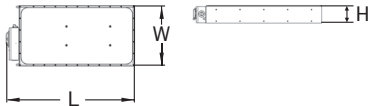
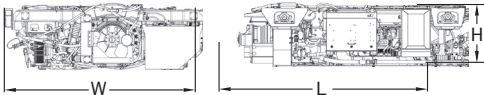
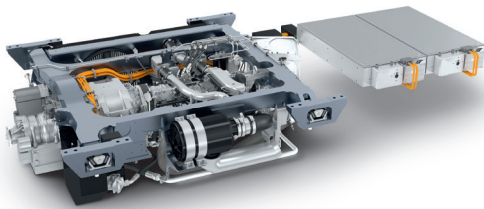




Rail

HYBRID POWERPACKS WITH 6H 1800

For Railcar Applications | EU Stage IIIB



Optional equipment and finishing shown. Standard may vary.

Drive systems		
Diesel mechanical (incl. ZF transmission)		
ZF Ecolife Rail (transmission type)		
Ratio	i = 3.36 - 0.62	
Max. input torque	Nm	2500
MTU electrical drive		
Max. power output	kVA	370

Engine	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)	Mass, wet kg (lbs)
Hybrid PowerPack	L: 2600 – 3300 (102 – 130)	3050 – 3700 (6724 – 8157)	3300 – 3900 (7275 – 8598)
	W: 2200 – 2600 (87 – 102)		
	H: 770 – 820 (30 – 32)		
MTU EnergyPack	L.: 1564 (62)	350 (772)	
	W.: 750 (29)		
	H.: 216 (9)		

All dimensions are approximate.

Combustion engine types		
6H 1800 R75P	kW (bhp)	315 (422)
6H 1800 R75LP	kW (bhp)	335 (449)
6H 1800 R85P	kW (bhp)	360 (483)
6H 1800 R85LP	kW (bhp)	390 (523)
Speed	rpm	1800
Bore/stroke	mm (in)	128/166 (5.0/6.5)
Cylinder configuration		6 inline
Displacement/cylinder	l (cu in)	2.14 (130)
Displacement, total	l (cu in)	12.8 (782)
Fuel specification		DIN EN 590
Emission qualification*		EU Stage IIIB

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

Battery system types		15M1P	15M2P	15M3P	15M4P
MTU EnergyPack					
Energy Content	kWh	30.6	61.2	91.8	122.4
Max. charging power (cont.)*	kW	92	184	276	368
Max. charging power (10 sec.)	kW	153	306	459	612
Max. discharge power (10 sec.)	kW	245	490	735	980
Usable lifetime (10% DoD)*	h	30.000	30.000	30.000	30.000
Calendaric lifetime	year	8	8	8	8
Dimensions	mm	1564 x 750 x 216	x2	x3	x4
Weight	kg	350	700	1050	1400
Protection class		IP67	IP67	IP67	IP67
Validation (selection/others on request)		DIN EN 61373 (Shock); DIN EN 50121-3-2 (EMC); DIN EN 12663; UIC 566; DIN EN 50155; DIN EN 45545-5 (fire protection)			

Standard equipment		
Exhaust system		SCR system, catalyst with silencer function, urea injection with supplying and metering unit
Auxiliary power supply		The configuration is project specific. These options are free combinable with the different PowerPack® types above
		Output voltages (options) in V:
		1.) 28 V DC 2.) 110 V DC 3.) 230 V AC 4.) 400 V AC
		Power in kW: ≤ 70
Electronics cooling device		
Air conditioning compressor	°C	-25 – +45
Power	kW	6
Weight (wet)	kg	150
Dimensions	mm	1300 x 600 x 430
Charging rectifier		
Input voltage (40 Hz – 66 Hz)	V	230 (single phase)/400 (three-phase)
Power	kW	3.3/9.9
Dimensions		19 " rack-mount module 4U (340 mm)/12 U (1020 mm)
Weight	kg	21/63

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.