

## Rail

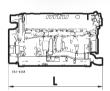
## DIESEL ENGINE 12V 1600

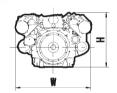
## for railcar applications EU Stage IIIB



Engine	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
12V 1600 R	1500 x 1250 x 845 (59.1 x 49.2 x 33.3)	2014 (4440)

All dimensions are approximate, for complete information refer to the installation drawing.





Optional equipment and finishing shown. Standard may vary.

Engine	
Bore/stroke mm (in)	122/150 (4.8/5.9)
Cylinder configuration	12V
Displacement I (cu in)	1.75 (107)
Displacement, total I (cu in)	21 (1284)
Fuel specification	DIN EN 590; Grade Nr. 1-D/2-D

	Rated power		Peak torque		Fuel consumpt. at rated power best point		Optim. *		
Engine type	kW	bhp	rpm	Nm	lb-ft	rpm	g/kWh	g/kWh	Stage
12V 1600 R70	565	758	2100	3083	2274	1200-1575	207	190	EU IIIB
12V 1600 R70L	625	838	2100	3410	2515	1200-1575	207	190	EU IIIB
12V 1600 R80	660	885	1900	3395	2504	1800	200	191	EU IIIB
12V 1600 R80L	700	939	1900	3601	2655	1800	200	191	EU IIIB

<sup>\*</sup> Emissions: EU: Nonroad Directive 97/68/EC (as amended by 2004/26/EC)



١	•		
'n	-		
•	1	1	
C		)	
Ċ	-	J	
Č	-	5	
	7	ú	
	_	_	
	2	2	
ζ	J	)	
L	1	J	
	_		
,	_	)	
	=		
		٧	
1		7	
C		)	
	2	_	
	7	5	
	٤		
	Ė	2	
	ζ	3	
L	1	J	
	_		
ċ	X		
	X	D	
	X	2	
	X	2	
	X	200	
	X	2010	
1	X / / /	21010	
1	X / Y	2010	
1	X / Y	0401040	
100	X / / / / / / / / / / / / / / / / / / /	0401040	
100	ζ	0401040	
1001	2	10 C C C C C C C C C C C C C C C C C C C	
100	200	18110 C. 1020 1040	
1001	2000	181100. John 1040	
1001	2000	CTGTGG. 0201040	
1001	2000	0.01010010101010	
1001	100000	C C C C C C C C C C C C C C C C C C C	
1001	100000	C.C. C.I. a.I.d.C.   0.20   0.40	
1001	2000000	C. C. C. C. B. C. L. C.	
1000	Dagger of tog	GCC CO C. G G G G G G G G G G G G G G G G G G	
1001	Dagger of tog	DECL 10 CHAINGE.   3231040	
1000	Dagger of tog	45 CC CIMINGS.   3231040	

Standard equipment	Optional equipment		
12 cylinder V diesel engine	28V DC battery-charging generator		
Four stroke diesel direct injection	Air compressor		
Electronic engine management	Resilient engine mountings		
Common rail injection system	PTO drive for hydrostatic pump		
SCR system, catalyst with silencer function, urea injection with supplying and metering unit*	Coolant water pump for low temperature charge air cooling circuit		
Turbocharging with charge air cooling (air/air)	_		

## Reference conditions:

24V Starter

> Intake temperature: 25°C (77°F)
> Ambient air pressure: 1000 mbar
> Charge air coolant temp.: 45°C (113°F)
> Altitude above sea level: 100 m (328 ft)

Subject to change without notice. Customization possible. Engines illustrated in this document may feature options not fitted as standard to standard engine.

\* Dimensions and weight on request