



## Industrial

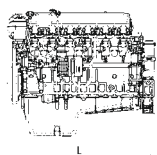
# DIESEL ENGINE 6R 460 C

for C&I and Mining, Agriculture and Forestry application

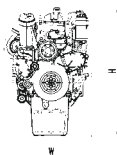


Engine	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
6R 460 C11R-C21	1315 x 785 x 1142 (52 x 31 x 45)	920 (2028)
6R 460 C31-C71	1320 x 750 x 1115 (52 x 30 x 44)	920 (2028)
6R 460 C02	1320 x 750 x 1115 (52 x 30 x 44)	930 (2072)

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



manufactured by



customized by



Engine		
Bore/stroke	mm (in)	128/166 (5.0/6.5)
Cylinder configuration		6 cyl./In-line
Displacement/cylinder	l (cu in)	2.13 (129)
Displacement, total	l (cu in)	12.8 (781)
Fuel specification		EN 590, Grade No.1-D/2-D

Optional equipment and finishing shown. Standard may vary.

	Rated power ICFN			Peak torque			Optimization
	kW	bhp	rpm	Nm	lb-ft	rpm	
Application	Heavy duty operation (5A)						
6R 460 C11R	220	295	1800	1400	1033	1300	20, 23, 31
6R 460 C11	242	325	1800	1600	1180	1300	20, 23, 31
6R 460 C21	260	349	1800	1750	1291	1300	20, 23, 31
6R 460 C31	295	396	1800	1900	1401	1300	20, 23, 31
6R 460 C22	265	355	1800	1850	1290	1300	29, 38, 39
6R 460 C32	295	396	1800	2000	1475	1300	29, 38, 39

Optimization: 20 EPA Nonroad T3 Comp (40CFR89)  
 23 EU Nonroad St IIIA Comp (97/68/EC)  
 29 China Onroad Stage V (GB17691-2005)

31 China NRMM Stage III (GB20981-2014)  
 38 EPA Nonroad T4i Comp (40CFR1039)  
 39 EU Nonroad St IIIB Comp (97/68/EC)



A Rolls-Royce solution

	Rated power ICFN			Peak torque			Optimization
	kW	bhp	rpm	Nm	lb-ft	rpm	
Application	Medium duty operation (5B)						
6R 460 C41	315	422	1800	2000	1475	1300	20, 23, 31*
6R 460 C51	335	449	1800	2000	1475	1300	20, 23, 31*
6R 460 C61	360	483	1800	2200	1623	1300	20, 23, 31*
6R 460 C71	375	503	1800	2200	1586	1300	20, 23, 31*
6R 460 C42	315	422	1800	2000	1475	1300	29, 38, 39
6R 460 C52	335	449	1800	2000	1475	1300	29, 38, 39
6R 460 C62	360	483	1800	2200	1620	1300	29, 38, 39
6R 460 C72	375	503	1800	2200	1620	1300	38, 39

Optimization: 20 EPA Nonroad T3 Comp (40CFR89) 31 China NRMM Stage III (GB20981-2014)  
23 EU Nonroad St IIIA Comp (97/68/EC) 38 EPA Nonroad T4i Comp (40CFR1039)  
29 China Onroad Stage V (GB17691-2005) 39 EU Nonroad St IIIB Comp (97/68/EC)

Application	Power definition	
5A	Continuous operation w/100% load	Load factor: ≥ 60 %, operating hours: unrestricted, overload: fuel stop (ICFN)
5B	Continuous operation w/variable load	Load factor: < 60 %, operating hours: unrestricted, overload: fuel stop (ICFN)

Power output within 5% tolerance at standard conditions. Power definition according to ISO 3046 (ratings also correspond to SAE J 1995 and SAE J 1349 standard conditions)  
Consult your distributor/dealer for the rating that will apply to your specific application.

Standard equipment	
Starting system	Electrical starter 24 V, alternator 28 V/80 A
Fuel system	High pressure fuel injection with solenoid-valve controlled unit injection pumps and multijet fuel injectors, fuel filter
Lube oil system	Oil filter
Air system	Turbo charging with charge-air cooling
Exhaust gas system	Four valves per cylinder
Coolant system	Water-charge-air cooling
Flywheel/housing	SAE 1
Engine mounting	Resilient
Electronics and instrumentation	Electronic engine management
SCR Aftertreatment System Engine (engines with EPA Tier 4i/EU Stage 3B certification only)	Engine mounted SCR components with urea dosing unit, urea injection nozzle and heating valve, vehicle mounted SCR components with SCR catalyst including muffler, urea supply unit and SCR control unit
Optional equipment	
on request	

Reference conditions:  
> Intake-air temperature: 25°C (77°F)  
> Ambient air pressure: 1000 mbar (14.5 psi)  
> 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.