

## Scania truck, bus and coach engines September 2009

### Overview of EEV engines for trucks, buses and coaches

hp	<b>230</b>	<b>270</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>420</b>
kW	169	198	206	235	265	309
Nm	1050	1200	1400	1600	1600	2100
Litres	9.3	8.9	9.3	9.3	9.3	11.7
Emission control	EGR	EGR	EGR	EGR	EGR	SCR
Fuel	Diesel	Ethanol	Diesel	Diesel	Diesel	Diesel
Use	Truck Bus	Truck Bus	Truck Bus	Truck Bus	Bus	Truck

### Overview of Euro 5 engines for trucks, buses and coaches

hp	<b>230</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>380</b>	<b>400</b>	<b>420</b>	<b>440</b>	<b>480</b>	<b>500</b>	<b>560</b>	<b>620</b>
kW	169	206	235	265	280	294	309	324	353	368	412	456
Nm	1050	1400	1600	1850	1900	2100	2100	2300	2500	2500	2700	3000
Litres	9.3	9.3	9.3	12.7	11.7	12.7	11.7	12.7	12.7	15.6	15.6	15.6
Emission control	EGR	EGR	EGR	EGR	SCR	EGR	SCR	EGR	EGR	SCR	SCR	SCR
Fuel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel
Use	Truck Bus	Truck Bus	Truck Bus	Truck	Truck	Truck Bus	Truck	Truck Bus	Truck Bus	Truck	Truck	Truck

### Overview of Euro 4 engines for trucks, buses and coaches

hp	<b>230</b>	<b>270</b>	<b>310</b>	<b>340</b>	<b>340</b>	<b>380</b>	<b>380</b>	<b>420</b>	<b>420</b>	<b>480</b>	<b>500</b>	<b>560</b>	<b>620</b>
kW	169	198	228	250	250	280	280	309	309	353	368	412	456
Nm	1050	1250	1550	1700	1700	1900	1900	2100	2100	2250	2500	2700	3000
Litres	8.9	8.9	8.9	11.7	11.7	11.7	11.7	11.7	11.7	11.7	15.6	15.6	15.6
Emission control	EGR	EGR	EGR	EGR	SCR	EGR	SCR	EGR	SCR	EGR	SCR	SCR	SCR
Fuel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel
Use	Truck Bus	Truck Bus	Truck Bus	Truck Bus	Truck	Truck Bus	Truck	Truck Bus	Truck Bus	Truck Bus	Truck	Truck	Truck

### EEV and Euro 5: 230-360 hp 5-cylinder engines

	<b>230 hp EEV</b>	<b>230 hp Euro 5</b>	<b>270 hp EEV</b>	<b>280 hp EEV</b>	<b>280 hp Euro 5</b>	<b>320 hp EEV</b>	<b>320 hp Euro 5</b>	<b>360 hp EEV (only bus)</b>
Engine	DC9 30 230	DC9 39 230	DC9 E02 270	DC9 29 280	DC9 38 280	DC9 32 320	DC9 37 320	DC9 24 360
Fuel	Diesel	Diesel	Ethanol	Diesel	Diesel	Diesel	Diesel	Diesel
Principle	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled
Swept volume	9.3 litres	9.3 litres	8.9 litres	9.3 litres	9.3 litres	9.3 litres	9.3 litres	9.3 litres
Firing order	1-2-4-5-3	1-2-4-5-3	1-2-4-5-3	1-2-4-5-3	1-2-4-5-3	1-2-4-5-3	1-2-4-5-3	1-2-4-5-3
Cylinders	Inline 5	Inline 5	Inline 5	Inline 5	Inline 5	Inline 5	Inline 5	Inline 5
Cylinder heads	5	5	5	5	5	5	5	5
Valves per cylinder	4	4	4	4	4	4	4	4
Bore x stroke	130x140 mm	130x140 mm	127x140 mm	130x140 mm	130x140 mm	130x140 mm	130x140 mm	130x140 mm
Compression ratio	17:1	17:1	28:1	17:1	17:1	17:1	17:1	17:1
Fuel injection control	Scania XPI	Scania XPI	Scania PDE	Scania XPI	Scania XPI	Scania XPI	Scania XPI	Scania XPI
Emission control	Scania EGR, VGT, PM filter	Scania EGR, VGT, Oxicat	Scania EGR	Scania EGR, VGT, PM filter	Scania EGR, VGT, Oxicat	Scania EGR, VGT, PM filter	Scania EGR, VGT, Oxicat	Scania EGR, VGT, PM filter
Max. power at r/min	169 kW (230 hp) 1900	169 kW (230 hp) 1900	198 kW (270 hp) 1900	206 kW (280 hp) 1900	206 kW (280 hp) 1900	235 kW (320 hp) 1900	235 kW (320 hp) 1900	265 kW (360 hp) 1900
Max. torque at r/min	1050 Nm 1000-1500	1050 Nm 1000-1500	1200 Nm 1100-1400	1400 Nm 1000-1350	1400 Nm 1000-1350	1600 Nm 1100-1200	1600 Nm 1100-1200	1600 Nm 1100-1350
Max. engine-braking at r/min	181 kW 2400	181 kW 2400	170 kW 2400	181 kW 2400	181 kW 2400	181 kW 2400	181 kW 2400	181 kW 2400
Oil capacity	31 litres	31 litres	35 litres K-bus 36 litres N-bus 29 litres	31 litres	31 litres	31 litres	31 litres	31 litres

### EEV and Euro 5: 360-480 hp 6-cylinder engines

	<b>360 hp Euro 5</b>	<b>380 hp Euro 5</b>	<b>400 hp Euro 5</b>	<b>420 hp EEV</b>	<b>420 hp Euro 5</b>	<b>440 hp Euro 5</b>	<b>480 hp Euro 5</b>
Engine	DC13 06 360	DC12 18 380	DC13 05 400	DC12 22 420	DC12 15 420	DC13 10 440	DC13 07 480
Fuel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel
Principle	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled
Swept volume	12.7 litres	11.7 litres	12.7 litres	11.7 litres	11.7 litres	12.7 litres	12.7 litres
Firing order	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4
Cylinders	Inline 6	Inline 6	Inline 6	Inline 6	Inline 6	Inline 6	Inline 6
Cylinder heads	6	6	6	6	6	6	6
Valves per cylinder	4	4	4	4	4	4	4
Bore x stroke	130x160 mm	127x154 mm	130x160 mm	127x154 mm	127x154 mm	130x160 mm	130x160 mm
Compression ratio	17.3:1	18:1	17.3:1	18:1	18:1	17.3:1	17.3:1
Fuel injection control	Scania XPI	Scania HPI	Scania XPI	Scania HPI	Scania HPI	Scania XPI	Scania XPI
Emission control	Scania EGR, VGT	Scania SCR	Scania EGR, VGT	Scania SCR	Scania SCR	Scania EGR, VGT	Scania EGR, VGT
Max. power at r/min	265 kW (360 hp) 1900	280 kW (380 hp) 1800	294 kW (400 hp) 1900	309 kW (420 hp) 1800	309 kW (420 hp) 1800	324 kW (440 hp) 1900	353 kW (480 hp) 1900
Max. torque at r/min	1850 Nm 1000-1300	1900 Nm 1100-1400	2100 Nm 1000-1300	2100 Nm 1100-1400	2100 Nm 1100-1400	2300 Nm 1000-1300	2500 Nm 1000-1300
Max. engine-braking at r/min	262 kW 2400	247 kW 2400	262 kW 2400	247 kW 2400	247 kW 2400	262 kW 2400	262 kW 2400
Oil capacity	40 litres	35 litres	40 litres	35 litres	35 litres	40 litres	40 litres

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### Euro 5: 500-620 hp V8 engines

	<b>500 hp Euro 5</b>	<b>560 hp Euro 5</b>	<b>620 hp Euro 5</b>
Engine	DC16 19 500	DC16 18 560	DC16 17 620
Fuel	Diesel	Diesel	Diesel
Principle	Charge-cooled	Charge-cooled	Charge-cooled
Swept volume	15.6 litres	15.6 litres	15.6 litres
Firing order	1-5-4-2-6-3-7-8	1-5-4-2-6-3-7-8	1-5-4-2-6-3-7-8
Cylinders	90° V8	90° V8	90° V8
Cylinder heads	8	8	8
Valves per cylinder	4	4	4
Bore x stroke	127x154 mm	127x154 mm	127x154 mm
Compression ratio	18:1	17:1	17:1
Fuel injection control	Scania PDE	Scania PDE	Scania PDE
Emission control	Scania SCR	Scania SCR	Scania SCR
Max. power at r/min	368 kW (500 hp) 1800	412 kW (560 hp) 1900	456 kW (620 hp) 1900
Max. torque at r/min	2500 Nm 1000-1350	2700 Nm 1000-1400	3000 Nm 1000-1400
Max. engine-braking at r/min	304 kW 2400	304 kW 2400	304 kW 2400
Oil capacity	32 litres	32 litres	32 litres

### Euro 4: 230-480 hp 5- and 6-cylinder engines

	<b>230 hp Euro 4</b>	<b>270 hp Euro 4</b>	<b>310 hp Euro 4</b>	<b>340 hp Euro 4</b>	<b>340 hp Euro 4</b>	<b>380 hp Euro 4</b>	<b>380 hp Euro 4</b>	<b>420 hp Euro 4</b>	<b>420 hp Euro 4</b>	<b>480 hp Euro 4</b>
Engine	DC9 16 230	DC9 17 270	DC9 18 310	DC12 10 340	DC12 26 340	DC12 13 380	DC12 24 380	DT12 12 420	DC12 23 420	DT12 17 480
Fuel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel
Principle	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled	Charge-cooled turbocomp.	Charge-cooled	Charge-cooled turbocomp.
Swept volume	8.9 litres	8.9 litres	8.9 litres	11.7 litres	11.7 litres	11.7 litres	11.7 litres	11.7 litres	11.7 litres	11.7 litres
Firing order	1-2-4-5-3	1-2-4-5-3	1-2-4-5-3	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4
Cylinders	Inline 5	Inline 5	Inline 5	Inline 6	Inline 6	Inline 6	Inline 6	Inline 6	Inline 6	Inline 6
Cylinder heads	5	5	5	6	6	6	6	6	6	6
Valves per cylinder	4	4	4	4	4	4	4	4	4	4
Bore x stroke	127x140 mm	127x140 mm	127x140 mm	127x154 mm	127x154 mm	127x154 mm	127x154 mm	127x154 mm	127x154 mm	127x154 mm
Compression ratio	17:1	17:1	17:1	17:1	17:1	17:1	18:1	17:1	18:1	17:1
Fuel injection control	Scania PDE	Scania PDE	Scania PDE	Scania HPI	Scania HPI	Scania HPI	Scania HPI	Scania HPI	Scania HPI	Scania HPI
Emission control	Scania EGR	Scania EGR	Scania EGR	Scania EGR with venturi	Scania SCR	Scania EGR with venturi	Scania SCR	Scania EGR	Scania SCR	Scania EGR
Max. power at r/min	169 kW (230 hp) 1800	198 kW (270 hp) 1800	228 kW (310 hp) 1800	250 kW (340 hp) 1800	250 kW (340 hp) 1800	280 kW (380 hp) 1800	280 kW (380 hp) 1800	309 kW (420 hp) 1900	309 kW (420 hp) 1800	353 kW (480 hp) 1900
Max. torque at r/min	1050 Nm 1100-1500	1250 Nm 1100-1450	1550 Nm 1100-1350	1700 Nm 1100-1350	1700 Nm 1100-1350	1900 Nm 1100-1350	1900 Nm 1100-1400	2100 Nm 1100-1350	2100 Nm 1100-1400	2250 Nm 1100-1450
Max. engine-braking at r/min	180 kW 2400	180 kW 2400	180 kW 2400	247 kW 2400	247 kW 2400	247 kW 2400	247 kW 2400	247 kW 2400	247 kW 2400	247 kW 2400
Oil capacity	35 litres K-bus 36 N-bus 29	35 litres K-bus 36 N-bus 29	35 litres K-bus 36 N-bus 29	35 litres Bus 22 litres	35 litres	35 litres Bus 22 litres	35 litres	35 litres Bus 22 litres	35 litres	35 litres Bus 22 litres

### Euro 4: 500-620 hp V8 engines

	<b>500 hp Euro 4</b>	<b>560 hp Euro 4</b>	<b>620 hp Euro 4</b>
Engine	DC16 06 500	DC16 05 560	DC16 08 620
Fuel	Diesel	Diesel	Diesel
Principle	Charge-cooled	Charge-cooled	Charge-cooled
Swept volume	15.6 litres	15.6 litres	15.6 litres
Firing order	1-5-4-2-6-3-7-8	1-5-4-2-6-3-7-8	1-5-4-2-6-3-7-8
Cylinders	90° V8	90° V8	90° V8
Cylinder heads	8	8	8
Valves per cylinder	4	4	4
Bore x stroke	127x154 mm	127x154 mm	127x154 mm
Compression ratio	17:1	17:1	17:1
Fuel injection control	Scania PDE	Scania PDE	Scania PDE
Emission control	Scania SCR	Scania SCR	Scania SCR
Max. power at r/min	368 kW (500 hp) 1900	412 kW (560 hp) 1900	456 kW (620 hp) 1900
Max. torque at r/min	2400 Nm 1100-1400	2700 Nm 1100-1400	3000 Nm 1100-1400
Max. engine-braking at r/min	304 kW 2400	304 kW 2400	304 kW 2400
Oil capacity	32 litres	32 litres	32 litres