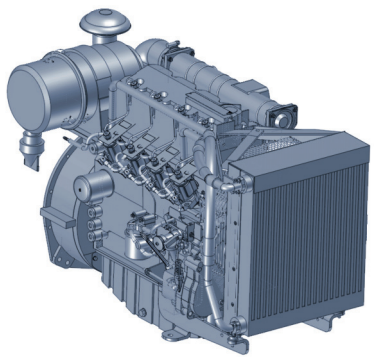
D 2011 L

for generator sets

12 - 31 kW| 16 - 41 hp at 1500 min^{-1}|rpm
EU Stage IIIA

- Oil-cooled 2-, 3- and 4-cylinder naturally aspirated in-line engines.
- Direct injection with single injection pumps and optional electronic governor.
- Minimised running costs due to low maintenance need and little wear.
- Best cold starting performance even under extreme conditions.



- The robust engine design allows worldwide operation even with high sulphur fuels.
- Low fuel consumption due to optimised combustion.
- Long oil change intervals of up to 1000 hours.
- A very good load response ensures an immediate power supply.

Technical data

Engine type		D 2011L02	D 2011L03	D 2011L04
No. of cylinders		2	3	4
Bore/stroke	mm | in	94/112 | 3.7/4.4	94/112 | 3.7/4.4	94/112 | 3.7/4.4
Displacement	l | cu in	1.6 | 95	2.3 | 142	3.1 | 190
Weight (incl. cooler and fan)	kg | lb	224 | 494	265 | 584	303 | 668
Governing standard[1)]		G2	G2	G2

50 Hz / 1500 min^{-1}

Power		D 2011L02	D 2011L03	D 2011L04
Continuous Power (COP)[2)]	kW | hp	11.8 | 15.8	19.4 | 26.0	27.9 | 37.4
Prime Power (PRP)[3)]	kW | hp	12.4 | 16.6	20.4 | 27.4	29.4 | 39.4
Limited Time Power (LTP)[4)]	kW | hp	13.0 | 17.4	21.4 | 28.7	30.9 | 41.4
Fan power consumption	kW | hp	0.4 | 0.5	0.4 | 0.5	0.4 | 0.5
Typical Generator Output COP[5)]	kVA	13	21	31
Typical Generator Output PRP[5)]	kVA	13	22	33
Typical Generator Output LTP[5)]	kVA	14	23	34

1) According to ISO 8528-5.
2) Continuous Power: No time limitation, plus 10% additional power for governing purpose only.
3) Prime Power: Average power output ≤ 80%, no time limitation, plus 5% additional power for governing purpose only.
4) Limited Time Running Power: For up to 500 h/year, thereof a maximum of 300 h/year continuous running.
5) In consideration of a generator efficiency level of 89 - 90 % and a power factor of 0.8.

50 Hz / 1500 min^{-1}

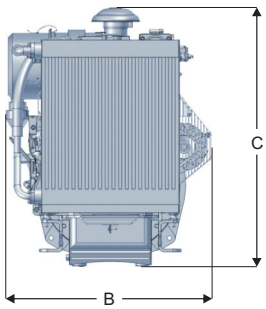
Fuel Consumption (PRP)[1]		D 2011L02	D 2011L03	D 2011L04
Fuel comsuption 25% load	g/kWh | lb/hph	305 | 0.50	303 | 0.50	268 | 0.44
Fuel comsuption 50% load	g/kWh | lb/hph	250 | 0.41	240 | 0.39	230 | 0.38
Fuel comsuption 75% load	g/kWh | lb/hph	239 | 0.39	228 | 0.37	220 | 0.36
Fuel comsuption 100% load	g/kWh | lb/hph	248 | 0.41	237 | 0.39	226 | 0.37

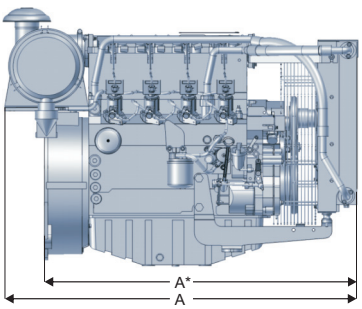
Heat balance & cooling system		D 2011L02	D 2011L03	D 2011L04
Heat dissipation (engine radiator)[2]	kW | hp	6.8 | 9.1	10.9 | 14.6	16.1 | 21.6
Heat dissipation (convection)	kW | hp	2.2 | 3.0	2.7 | 3.6	4.0 | 5.4
Cooling air flow	m^3/h | cfm	1800 | 1059	1800 | 1059	1800 | 1059

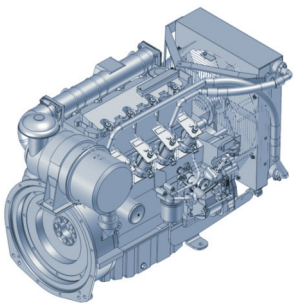
Inlet & exhaust data		D 2011L02	D 2011L03	D 2011L04
max. intake depression	mbar | psi	20 | 0.29	20 | 0.29	20 | 0.29
Combustion air volume	m^3/h | cfm	61 | 34	86 | 51	122 | 72
max. exhaust gas temperature	°C | °F	540 | 1004	611 | 1132	599 | 1110
Exhaust gas flow	m^3/h | cfm	169 | 99	236 | 139	337 | 198

1) Refers to diesel with a density of 0.835 kg/dm^3 at 15°C | 6.96 lb/US gallon at 60°F.
2) The heat quantities are valid for the dimensioning of the cooling system.

Dimensions







		A	A*	B	C
D 2011L02	mm | in	845 | 33	720 | 28	645 | 25	760 | 30
D 2011L03	mm | in	955 | 38	830 | 33	645 | 25	760 | 30
D 2011L04	mm | in	1065 | 42	940 | 37	645 | 25	780 | 31

Note: The engine dimensions and weights vary depending on the scope of delivery.

Order no. 0031 2540 / 07 / 2015 / MC-M

For more information please contact the DEUTZ AG Köln or the responsible sales partner.

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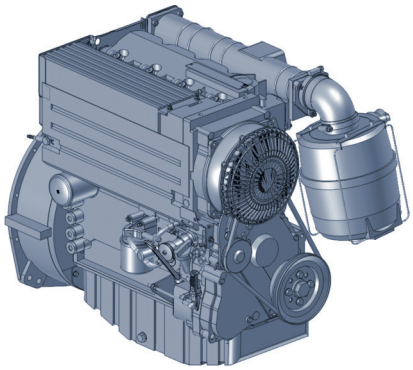
D 2011 Li

for generator sets

12 - 29 kW|15 - 39 hp at 1500 min^{-1}|rpm
EU Stage IIIA

- Oil-cooled 2, 3 and 4-cylinder aspirated engine in inline construction with integrated cooling system.
- Direct injection with single injection pumps and optional electronic governor.
- High reliability combined with durability. No corrosion or cavitation due to oil cooling and lubrication.



- Minimised running costs due to low maintenance need and little wear.
- Low fuel consumption due to optimised combustion.
- Long oil change intervals of up to 1000 hours.
- A very good load response ensures an immediate power supply.

Technical data

Engine type		D 2011L02i	D 2011L03i	D 2011L04i
No. of cylinders		2	3	4
Bore/stroke	mm | in	94/112 | 3.7/4.4	94/112 | 3.7/4.4	94/112 | 3.7/4.4
Displacement	l | cu in	1.6 | 95	2.3 | 142	3.1 | 190
Weight (incl. cooler and fan)	kg | lb	212 | 467	254 | 560	293 | 646
Governing standard[1]		G2	G2	G2

50 Hz / 1500 min^{-1}

Power		D 2011L02i	D 2011L03i	D 2011L04i
Continuous Power (COP)[2]	kW | hp	11.5 | 15.4	18.1 | 24.3	26.4 | 35.4
Prime Power (PRP)[3]	kW | hp	12.1 | 16.2	19.1 | 25.6	27.8 | 37.3
Limited Time Power (LTP)[4]	kW | hp	12.7 | 17.0	20.1 | 27.0	29.2 | 39.2
Fan power consumption	kW | hp	0.1 | 0.1	0.1 | 0.1	0.2 | 0.2
Typical Generator Output COP[5]	kVA	13	20	30
Typical Generator Output PRP[5]	kVA	13	21	31
Typical Generator Output LTP[5]	kVA	14	22	33

1) According to ISO 8528-5.
2) Continuous Power: No time limitation, plus 10% additional power for governing purpose only.
3) Prime Power: Average power output ≤ 80%, no time limitation, plus 5% additional power for governing purpose only.
4) Limited Time Running Power: For up to 500 h/year, thereof a maximum of 300 h/year continuous running.
5) In consideration of a generator efficiency level of 89 - 90 % and a power factor of 0.8.

50 Hz / 1500 min^{-1}

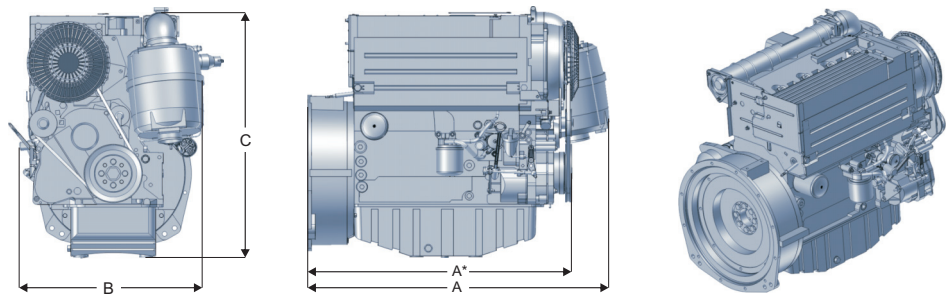
Fuel Consumption (PRP)[1]		D 2011L02i	D 2011L03i	D 2011L04i
Fuel comsuption 25% load	g/kWh | lb/hph	301 | 0.49	299 | 0.49	264 | 0.43
Fuel comsuption 50% load	g/kWh | lb/hph	246 | 0.40	236 | 0.39	226 | 0.37
Fuel comsuption 75% load	g/kWh | lb/hph	235 | 0.39	224 | 0.37	216 | 0.36
Fuel comsuption 100% load	g/kWh | lb/hph	244 | 0.40	233 | 0.38	222 | 0.36

Heat balance & cooling system		D 2011L02i	D 2011L03i	D 2011L04i
Heat dissipation (engine radiator)[2]	kW | hp	-	-	-
Heat dissipation (convection)	kW | hp	-	-	-
Cooling air flow	m^3/h | cfm	1065 | 627	1075 | 633	1490 | 877

Inlet & exhaust data		D 2011L02i	D 2011L03i	D 2011L04i
max. intake depression	mbar | psi	20 | 0.29	20 | 0.29	20 | 0.29
Combustion air volume	m^3/h | cfm	61 | 36	86 | 51	122 | 72
max. exhaust gas temperature	°C | °F	510 | 950	510 | 950	510 | 950
Exhaust gas flow	m^3/h | cfm	169 | 99	236 | 139	337 | 198

1) Refers to diesel with a density of 0.835 kg/dm^3 at 15°C \| 6.96 lb/US gallon at 60°F.
2) The heat quantities are valid for the dimensioning of the cooling system.

Dimensions



		A	A*	B	C
D 2011L02i	mm | in	645 | 25	540 | 21	590 | 23	705 | 28
D 2011L03i	mm | in	755 | 30	650 | 26	590 | 23	700 | 28
D 2011L04i	mm | in	870 | 34	760 | 30	590 | 23	720 | 28

Note: The engine dimensions and weights vary depending on the scope of delivery.

Order no. 0031 2631 / 05 / 2015 / MC-M

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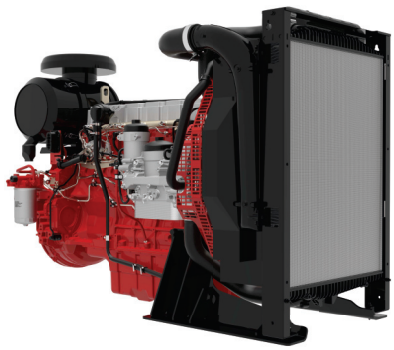
TCD 2013

for generator sets

90 - 260 kW|121 - 349 hp at 1500/1800 min^{-1}|rpm
EU Stage IIIA

- Watercooled 4 or 6-cylinder inline engines with turbocharging and charge air cooling.
- The powerful DEUTZ Common Rail (DCR®) injection system and the electronic engine control (EMR 4) with intelligent link to the drive management ensure optimum engine performance at low fuel consumption.
- Easy, inexpensive installation due to minimum weight and small installation space.



- Air filter and cooling system are fully pre-assembled.

- Low noise emissions due to acoustically optimized components with very smooth running and high durability.
- Wet cylinder liners, long oil change intervals and easy changing of the engine fluids reduce the running costs and increase the availability of the machinery.
- Best cold starting performance even under extreme conditions.
- The TCD 2013 meets the requirements of EU Stage IIIA.

Technical data

Engine type		TCD 2013 L4 2V	TCD 2013 L6 2V	TCD 2013 L6 4V
No. of cylinders		4	6	6
Bore/stroke	mm | in	108/130 |4.3/5.1	108/130 |4.3/5.1	108/130 |4.3/5.1
Displacement	l | cu in	4.8 |293	7.2 |439	7.2 |439
Weight with cooling system and air filter	kg | lb	624 |1376	815 |1797	870 |1918
Governing standard[1]		G2	G3	G3

50 Hz / 1500 min^{-1}

Power		TCD 2013 L4 2V	TCD 2013 L6 2V	TCD 2013 L6 4V
Continuous Power (COP)[2]	kW | hp	90.3 |121.1	135.9 |182.2	225.6 |302.5
Prime Power (PRP)[3]	kW | hp	95.3 |127.8	143.5 |192.4	238.2 |319.4
Limited Time Power (LTP)[4]	kW | hp	100.3 |134.5	151.0 |202.5	250.7 |336.2
Fan power consumption	kW | hp	2.6 |3.5	5.5 |7.4	8.8 |11.8
Typical Generator Output COP[5]	kVA	99	150	249
Typical Generator Output PRP[5]	kVA	104	159	264
Typical Generator Output LTP[5]	kVA	110	167	278

60 Hz / 1800 min^{-1}

Power output		TCD 2013 L4 2V	TCD 2013 L6 2V	TCD 2013 L6 4V
Continuous Power (COP)[2]	kW | hp	102.9 |138.0	156.2 |209.5	234.4 |314.3
Prime Power (PRP)[3]	kW | hp	108.6 |145.6	164.8 |221.0	247.4 |331.8
Limited Time Power (LTP)[4]	kW | hp	114.3 |153.3	173.5 |232.7	260.4 |349.2
Fan power consumption	kW | hp	4.4 |5.9	9.6 |12.9	15.2 |20.4
Typical Generator Output COP[5]	kWe	89	135	202
Typical Generator Output PRP[5]	kWe	94	143	214
Typical Generator Output LTP[5]	kWe	99	151	226

1) According to ISO 8528-5.
2) Continuous Power: No time limitation, plus 10% additional power for governing purpose only.
3) Prime Power: Average power output ≤ 80%, no time limitation, plus 5% additional power for governing purpose only.
4) Limited Time Running Power: For up to 500 h/year, thereof a maximum of 300 h/year continuous running.
5) In consideration of a generator efficiency level of 90 - 92 % and a power factor of 0.8.

50 Hz / 1500 min^{-1}

Fuel Consumption (PRP)[6]		TCD 2013 L4 2V	TCD 2013 L6 2V	TCD 2013 L6 4V
Fuel comsuption 25% load	g/kWh | lb/hph	296 |0.49	256 |0.42	253 |0.42
Fuel comsuption 50% load	g/kWh | lb/hph	260 |0.43	248 |0.41	235 |0.39
Fuel comsuption 75% load	g/kWh | lb/hph	250 |0.41	235 |0.39	225 |0.37
Fuel comsuption 100% load	g/kWh | lb/hph	215 |0.35	210 |0.35	210 |0.35

Heat balance & cooling system		TCD 2013 L4 2V	TCD 2013 L6 2V	TCD 2013 L6 4V
Heat dissipation (engine radiator)[2]	kW | hp	50.0 |67.1	74.0 |99.2	133.0 |178.4
Heat dissipation (CAC)[2]	kW | hp	18.8 |25.2	23.0 |30.8	39.0 |52.3
Heat dissipation (convection)	kW | hp	9.0 |12.1	14.0 |18.8	23.0 |30.8
Cooling air flow	m^3/h | cfm	6480 |3814	9360 |5509	15480 |9111

Inlet & exhaust data		TCD 2013 L4 2V	TCD 2013 L6 2V	TCD 2013 L6 4V
max. intake depression	mbar | psi	10 |0.15	10 |0.15	10 |0.15
Combustion air volume	m^3/h | cfm	450 |265	600 |353	744 |438
max. exhaust gas temperature	°C | °F	530 |986	485 |905	515 |959
Exhaust gas flow	m^3/h | cfm	1248 |735	1764 |1038	2304 |1356

60 Hz / 1800 min^{-1}

Fuel Consumption (PRP)[6]		TCD 2013 L4 2V	TCD 2013 L6 2V	TCD 2013 L6 4V
Fuel comsuption 25% load	g/kWh | lb/hph	311 |0.51	274 |0.45	255 |0.42
Fuel comsuption 50% load	g/kWh | lb/hph	274 |0.45	255 |0.42	234 |0.38
Fuel comsuption 75% load	g/kWh | lb/hph	237 |0.39	241 |0.40	245 |0.40
Fuel comsuption 100% load	g/kWh | lb/hph	212 |0.35	213 |0.35	218 |0.36

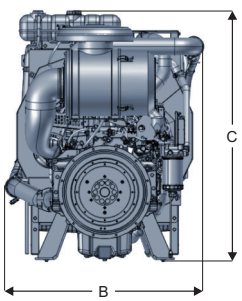
Heat balance & cooling system		TCD 2013 L4 2V	TCD 2013 L6 2V	TCD 2013 L6 4V
Heat dissipation (engine radiator)[7]	kW | hp	57.0 |76.4	73.0 |97.9	141.0 |189.1
Heat dissipation (CAC)[7]	kW | hp	20.4 |27.4	26.0 |34.9	46.0 |61.7
Heat dissipation (convection)	kW | hp	10.0 |13.3	16.0 |21.5	24.0 |32.2
Cooling air flow	m^3/h | cfm	7560 |4450	13320 |7840	18720 |11018

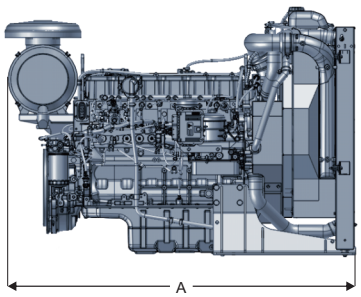
Inlet & exhaust data		TCD 2013 L4 2V	TCD 2013 L6 2V	TCD 2013 L6 4V
max. intake depression	mbar | psi	20 |0.29	20 |0.29	20 |0.29
Combustion air volume	m^3/h | cfm	492 |290	660 |388	834 |505
max. exhaust gas temperature	°C | °F	540 |1004	511 |952	485 |905
Exhaust gas flow	m^3/h | cfm	1398 |823	2046 |1204	2382 |1402

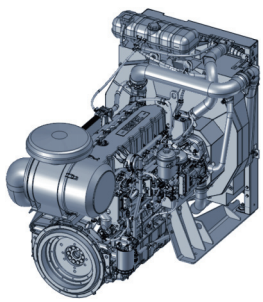
6) Refers to diesel with a density of 0.835 kg/dm^3 at 15°C | 6.96 lb/US gallon at 60°F.
7) The heat quantities are valid for the dimensioning of the cooling system.

The data on this data sheet are for information purposes only and are not binding values. The data in the quotation is definitive.

Dimensions







		A	B	C
TCD 2013 L4 2V	mm	1589	880	1247
TCD 2013 L6 2V	mm	1909	879	1263
TCD 2013 L6 4V	mm	1865	1046	1322

Note: The engine dimensions and weights vary depending on the scope of delivery.

For more information please contact the DEUTZ AG Köln or the responsible sales partner.

Order no. 0031 2387/ 08 / 2015 / MC-M

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