Industrial engines for off-road and stationary applications
Stage 1 and 2

Engine	Type of Power [2]	Maximum power kW	hp	rpm	Peak torque Nm	rpm	Displ. litres	Length mm	Width mm	Height mm	Dry weight kg	Emission levels EU Stage	EPA Tier
TD720VE	ICFN	122	166	1800	701	1500	7.2	1626	885	1582	920 [3]	1	1
TAD620VE	IFN	155	211	2500	700	1500	5.7	1034	610	906	570	2	2
TAD720VE	IFN	174	237	2300	854	1400	7.2	1172	630	975	680	2	2
TAD721VE	IFN	195	265	2300	907	1600	7.2	1172	630	975	680	2	2
TAD722VE	IFN	220	300	2300	1050	1400	7.2	1172	630	975	680	2	2
TAD940VE	ICFN	190	258	2100	1251	1000	9.4	1312	902	1130	1015	2	2
TAD941VE	ICFN	220	300	2100	1401	1200	9.4	1312	902	1130	1015	2	2
TAD942VE	ICFN	250	340	2100	1617	1400	9.4	1312	902	1130	1015	2	2
TAD943VE	ICFN	280	380	1900	1719	1400	9.4	1312	902	1130	1015	2	2
TWD1240VE	ICFN	256	348	2100	1750	1200	12.1	1516	950	1243	1270	2	2
TWD1240VE	ICFN	275	374	2100	1800	1500	12.1	1516	950	1243	1270	2	2
TWD1240VE	ICFN	294	400	1800	1900	1200	12.1	1516	950	1243	1270	2	2
TWD1240VE	IFN	310	422	2100	2000	1200	12.1	1516	950	1243	1270 [3]	2	2
TAD1241VE	ICFN	343	466	1800	2150	1300	12.1	1516	950	1243	1270 [4]	2	2
TAD1242VE	ICFN	383	521	1800	2250	1300	12.1	1516	950	1243	1270 [4]	2	2
TAD1340VE*	IFN	256	348	2100	1745	1260	12.8	1427	868	1148	1237	2	2 [5]
TAD1341VE*	IFN	275	374	2100	1880	1260	12.8	1427	868	1148	1237	2	2 [5]
TAD1342VE*	IFN	310	422	2100	1990	1260	12.8	1427	868	1148	1237	2	2 [5]
TAD1343VE*	IFN	332	452	2100	2110	1260	12.8	1427	868	1148	1237	2	2 [5]
TAD1344VE*	IFN	352	479	2100	2215	1260	12.8	1427	868	1148	1237	2	2 [5]
TAD1345VE*	IFN	394	536	2100	2300	1260	12.8	1427	868	1148	1237	2	2 [5]
TAD1641VE	ICFN	420	571	1800	2700	1200	16.1	2071 [1]	1100 [1]	1750 [1]	1440	2	2
TAD1642VE	ICFN	494	672	1800	3150	1200	16.1	2071 [1]	1100 [1]	1750 [1]	1440	2	2
TAD1643VE	IFN	565	768	1900	3287	1200	16.1	2071 [1]	1100 [1]	1750 [1]	1440	2	2

Stage 3

Engine	Type of Power [2]	Maximum power kW	hp	rpm	Peak torque Nm	rpm	Displ. litres	Length mm	Width mm	Height mm	Dry weight kg	Emission levels EU Stage	EPA Tier
TAD650VE	IFN	147	200	2300	750	1600	6.0	1074	674	991	565	3A	3
TAD660VE	IFN	147	200	2300	800	1600	5.7	1074	674	991	565	3A	3
TAD750VE	IFCN	170	231	2300	952	1500	7.2	1190	697	1036	650	3A	3
TAD750VE	IFN	181	246	2300	1050	1500	7.2	1190	697	1036	650	3A	3
TAD750VE	IFN	200	272	2300	1050	1500	7.2	1190	697	1036	650	3A	3
TAD760VE	IFN	181	246	2300	1100	1500	7.2	1190	697	1036	650	3A	3
TAD950VE	ICFN	200	272	1900	1220	1500	9.4	1422	938	1136	1015	3A	3
TAD951VE	ICFN	224	305	2100	1703	1200	9.4	1422	938	1136	1015	3A	3
TAD952VE	ICFN	252	343	1900	1735	1300	9.4	1422	938	1136	1015	3A	3
TAD1250VE	ICFN	259	352	1600	1760	1400	12.1	1497	854	1199	1270	3A	3
TAD1251VE	ICFN	289	393	1800	1950	1200	12.1	1497	854	1199	1270	3A	3
TAD1252VE	ICFN	313	426	1800	2100	1200	12.1	1497	854	1199	1270	3A	3
TAD1650VE	ICFN	397	540	1800	2551	1400	16.1	2071	1100	1750	1425	3A	3

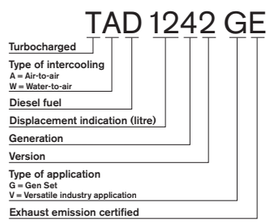
* Available from midyear 2009

Engine performance according to ISO 3046, without fan

1) Engine including cooling system
2) For power definitions, refer to Sales Guide
3) Weight of complete Powerpac
4) Weight of engine with cooling system
5) ICFN rating at 1800 rpm

Power	Emission levels EU Stage	EPA Tier	Legislation demanded from
130–560 kW	3A	3	2006
75–130 kW	3A	3	2007
>560 kW	N/A	2	2007

Net engine performance acc. to ISO3046, BS5514, DIN6271 and in general SAEJ1349 net power
hp = horse power, net with fan = 1.36 × kWm
kWm = kiloWatt mechanical, net with fan
kWe = kiloWatt electrical = kWm × gen. eff.
kVA = kiloVoltAmpere calculations based on a 0.8 power factor = kWe / 0.8



Power generation engines 1500 rpm, 50Hz

Engine	Prime power hp	kWm	kWe	kVA	Standby power hp	kWm	kWe	kVA	Generator efficiency (%)	Emission levels EU Stage	EPA Tier
TD520GE	102	75	68	85	113	83	76	94	91%	1	1
TAD530GE	102	75	68	85	113	83	76	94	91%	2	2
TAD531GE	120	88	80	100	131	96	87	109	91%	2	2
TAD532GE	154	113	104	130	169	124	114	143	92%	2	2
TD720GE	154	113	104	130	169	124	114	143	92%	1	1
TAD730GE	154	113	104	130	169	124	114	143	92%	2	2
TAD731GE	180	132	121	152	197	145	133	167	92%	2	2
TAD732GE	220	162	149	186	243	179	165	206	92%	2	2
TAD733GE	243	179	165	206	268	197	181	227	92%	2	2
TAD734GE	295	217	200	250	328	241	222	277	92%	2	2
TAD940GE	328	241	222	277	360	265	244	305	92%	2	2
TAD941GE	381	280	260	326	419	308	286	358	93%	2	2
TAD1240GE	409	301	280	350	450	331	308	385	93%	2	2
TAD1241GE	439	323	300	375	481	354	329	412	93%	2	2
TAD1242GE	479	352	327	409	526	387	360	450	93%	2	2
TAD1341GE*	369	271	252	315	405	298	277	346	93%	2	2
TAD1342GE*	412	303	282	352	453	333	310	387	93%	2	2
TAD1343GE*	442	325	302	378	484	356	331	413	93%	2	2
TAD1344GE*	481	354	329	412	529	389	362	452	93%	2	2
TAD1345GE*	528	388	361	451	586	431	401	501	93%	2	2
TAD1640GE	533	392	368	461	586	431	405	506	94%	2	2
TAD1641GE	585	430	404	505	643	473	445	556	94%	2	2
TAD1642GE	660	485	456	570	729	536	504	630	94%	2	2
TWD1643GE	729	536	504	630	811	596	560	700	94%	2	2

Power generation engines 1800 rpm, 60Hz

Engine	Prime power hp	kWm	kWe	kVA	Standby power hp	kWm	kWe	kVA	Generator efficiency (%)	Emission levels EU Stage	EPA Tier
TD520GE	105	77	70	88	116	85	77	97	91%	1	1
TAD530GE	105	77	70	88	116	85	77	97	91%	2	2
TAD531GE	125	92	84	105	137	101	92	115	91%	2	2
TAD532GE	156	115	106	132	173	127	117	146	92%	2	2
TD720GE	156	115	106	132	173	127	117	146	92%	1	1
TAD730GE	156	115	106	132	173	127	117	146	92%	2	2
TAD731GE	190	140	129	161	209	154	142	177	92%	2	2
TAD732GE	243	179	165	206	268	197	181	227	92%	2	2
TAD733GE	268	197	181	227	296	218	201	251	92%	2	2
TAD734GE	299	220	202	253	336	247	227	284	92%	2	2
TAD940GE	337	248	228	285	371	273	251	314	92%	2	2
TAD941GE	403	296	275	344	443	326	303	379	93%	2	2
TAD1240GE	408	300	279	349	449	330	307	384	93%	2	2
TAD1241GE	479	352	327	409	526	387	360	450	93%	2	2
TAD1242GE	532	391	364	455	585	430	400	500	93%	2	2
TAD1341GE*	390	287	267	334	431	317	295	369	93%	2	2
TAD1342GE*	469	345	321	401	513	377	351	438	93%	2	2
TAD1343GE*	480	353	328	410	528	388	361	451	93%	2	2
TAD1344GE*	533	392	365	456	586	431	401	501	93%	2	2
TAD1345GE*	533	392	365	456	586	431	401	501	93%	2	2
TAD1350GE	333	245	228	285	366	269	250	313	93%	N/A	3
TAD1351GE	400	294	273	342	439	323	300	375	93%	N/A	3
TAD1352GE	468	344	320	400	511	376	350	437	93%	N/A	3
TAD1353GE	532	391	364	455	585	430	400	500	93%	N/A	3
TAD1640GE	585	430	404	505	651	479	450	563	94%	2	2
TAD1641GE	660	485	456	570	743	546	513	642	94%	2	2
TAD1642GE	724	532	500	625	796	585	550	687	94%	2	2
TWD1643GE	796	585	550	687	876	644	605	757	94%	2	2

* Available from midyear 2009

Power generation engines 2000 rpm, 400Hz

Engine	Prime power hp	kWm	kWe	kVA	Standby power hp	kWm	kWe	kVA	Generator efficiency (%)	Emission levels EU Stage	EPA Tier
TD720GE	162	119	109	137	180	132	121	152	92%	1	1
TAD731GE	194	143	132	164	216	159	146	183	92%	2	2
TAD733GE	233	171	157	197	261	192	177	221	92%	2	2