

Industrial engines for off-road and stationary applications

Stage 1 and 2

Engine	Type of Power ²⁾	Rated power			Peak torque		Displ. litres	Length mm	Width mm	Height mm	Dry weight kg	Emission levels	
		kW	hp	rpm	Nm	rpm						EU Stage	EPA Tier
TAD720VE	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	954	1400	7.2	1172	630	975	680	2	2
TAD722VE	IFN	220	300	2300	1050	1400	7.2	1172	630	975	680	2	2
TAD940VE	IFN	190	258	2100	1251	1000	9.4	1312	902	1110	1015	2	2
TAD941VE	IFN	220	300	2100	1401	1200	9.4	1312	902	1110	1015	2	2
TAD942VE	IFN	250	340	2100	1617	1400	9.4	1312	902	1110	1015	2	2
TAD943VE	IFN	280	380	1900	1719	1400	9.4	1312	902	1110	1015	2	2
TWD1240VE	ICFN	294	400	1800	1900	1200	12.1	1407	854	1199	1270	2	2
TWD1240VE	IFN	310	422	2100	2000	1200	12.1	1407	854	1199	1647 ³⁾	2	2
TAD1241VE	ICFN	343	466	1800	2150	1300	12.1	1407	854	1199	1337 ⁴⁾	2	2
TAD1242VE	ICFN	383	521	1800	2250	1300	12.1	1407	854	1199	1337 ⁴⁾	2	2
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*	ICFN	565	768	1900	3720	1300	16.1	2071 ¹⁾	1100 ¹⁾	1750 ¹⁾	1440	2	2

Stage 3

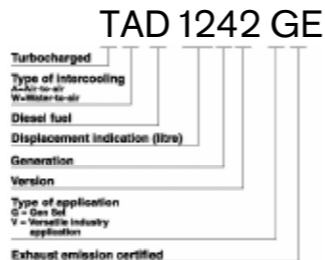
Engine	Type of Power ²⁾	Maximum power			Peak torque		Displ. litres	Length mm	Width mm	Height mm	Dry weight kg	Emission levels	
		kW	hp	rpm	Nm	rpm						EU Stage	EPA Tier
TAD650VE	IFN	147	200	2300	750	1600	6.0	1074	674	991	565	3A	3
TAD660VE	IFN	147	200	2300	800	1600	5.7	1074	674	991	565	3A	3
TAD750VE	IFN	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	1312	938	1110	1015	3A	3
TAD951VE	ICFN	224	305	2100	1703	1200	9.4	1312	938	1110	1015	3A	3
TAD952VE	ICFN	252	343	1900	1735	1300	9.4	1312	938	1110	1015	3A	3
TAD1250VE	ICFN	259	352	1600	1760	1400	12.1	1407	854	1199	1270	3A	3
TAD1251VE	ICFN	289	393	1800	1950	1200	12.1	1407	854	1199	1270	3A	3
TAD1252VE	ICFN	313	426	1800	2100	1200	12.1	1407	854	1199	1270	3A	3
TAD1650VE	ICFN	397	540	1800	2551	1400	16.1	1462	876	1330	1425	3A	3

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

* Available from midyear 2008

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



Power generation engines 1500 rpm, 50Hz

Engine	bhp	Prime power			bhp	Standby power			Generator efficiency (%)	Emission levels	
		kWm	kWe	kVA		kWm	kWe	kVA		EU Stage	EPA Tier
TD520GE	101	75	68	85	111	83	75	94	91%	1	1
TAD530GE	101	75	68	85	111	83	75	94	91%	2	2
TAD531GE	118	88	80	100	128	96	87	109	91%	2	2
TAD532GE	152	113	104	130	166	124	114	142	92%	2	2
TD720GE	152	113	104	130	166	124	114	142	92%	1	1
TAD730GE	152	113	104	130	166	124	114	142	92%	2	2
TAD731GE	177	132	121	152	194	145	133	167	92%	2	2
TAD732GE	217	162	149	186	240	179	165	205	92%	2	2
TAD733GE	240	179	165	205	264	197	181	226	92%	2	2
TAD734GE	290	216	199	250	323	241	222	275	92%	2	2
TAD940GE	323	241	222	277	355	265	244	305	92%	2	2
TAD941GE	375	280	260	326	413	308	286	358	93%	2	2
TAD1240GE	409	301	280	350	450	331	308	385	93%	2	2
TAD1241GE	433	323	300	375	475	354	329	412	93%	2	2
TAD1242GE	472	352	327	409	519	387	360	450	93%	2	2
TAD1640GE	527	392	369	462	578	431	405	506	94%	2	2
TAD1641GE	581	430	407	509	638	473	447	559	94%	2	2
TAD1642GE	650	485	456	570	719	536	504	630	94%	2	2
TWD1643GE	718	536	504	630	798	596	560	700	94%	2	2

Power generation engines 1800 rpm, 60Hz

Engine	bhp	Prime power			bhp	Standby power			Generator efficiency (%)	Emission levels	
		kWm	kWe	kVA		kWm	kWe	kVA		EU Stage	EPA Tier
TD520GE	103	77	70	88	114	85	77	96	91%	1	1
TAD530GE	103	77	70	88	114	85	77	96	91%	2	2
TAD531GE	123	92	84	105	136	101	92	115	91%	2	2
TAD532GE	154	115	106	132	170	127	117	146	92%	2	2
TD720GE	154	115	106	132	170	127	117	146	92%	1	1
TAD730GE	154	115	106	132	170	127	117	146	92%	2	2
TAD731GE	187	140	129	161	206	154	141	177	92%	2	2
TAD732GE	240	179	165	205	264	197	181	226	92%	2	2
TAD733GE	264	197	181	226	292	218	201	251	92%	2	2
TAD734GE	295	220	202	250	331	247	227	275	92%	2	2
TAD940GE**	333	248	228	285	366	273	251	314	92%	2	2
TAD941GE	397	296	276	345	437	326	303	379	93%	2	2
TAD1240GE	402	300	279	349	443	330	307	384	93%	2	2
TAD1241GE	472	352	327	409	519	387	360	450	93%	2	2
TAD1242GE	524	391	364	455	577	430	400	500	93%	2	2
TAD1350GE	329	245	227	284	361	269	250	313	93%	3	N/A
TAD1351GE	394	294	273	341	433	323	300	375	93%	3	N/A
TAD1352GE	461	344	320	400	504	376	350	438	93%	3	N/A
TAD1353GE**	558	410	364	455	611	449	400	500	93%	3	N/A
TAD1640GE	579	430	406	508	644	479	451	564	94%	2	2
TAD1641GE	657	485	461	576	739	546	518	647	94%	2	2
TAD1642GE	713	532	500	625	784	585	550	687	94%	2	2
TWD1643GE	783	585	550	687	862	644	605	757	94%	2	2

Net engine performance acc. to ISO3046, BS5514, DIN6271 and in general SAEJ1349 net power

bhp = brake horse power, net with fan = 1.341 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

** Available from midyear 2008