World High Speed Rolling Stock

27th January 2020

Country /Region		Owners or Operators	Class	Train set Formula	Features	Number of train sets	Year in Service	Power [kW]	Tractive Effort [kN]	Acceleration[m/s2]	Max.Tr. Speed [km/h]	Max.Op. Speed [km/h]	Voltage	Weight of the train [t]	Power weight ratio [kW/t]	Max.Axle Load [t]	Train length [m]	Train width [mm]	Seats			Signaling systems	Suppliers	Observations
																			1st class	2nd class	Total			
				M: Motor Coach, T: Trailer Coach, L: Locomotive, MB: Motor Bogie, TB: Trailer Bogie	C: Concentrated powered, A: Articulated, T: Tilting, D: Double Decker	Train sets currently used and planned				Maximum acceleration	Maximum train speed	Current (planned) operation speed		Unloaded	Loaded (Calculated from the data on this table)	Loaded		For Passenger car	For 3 classes train, 1st and 2nd classes are included in '1st class'				Succeeded company is shown in case of original company disappeared. Some subsidary comapanies are neglected.	
Austria		ÖBB	"Railjet" Siemens Taurus (OBB 1216) + Siemens Viaggio	1L7T	C	60	2008-	6400	300		230	230	3kV(partially) 15kV16.7Hz 25kV50Hz	446	#VALUE!	22.5	206	2825	16+76, partially 6+42	316, partially 394	408, partially 442	LZB/PZB,ZUB, ETCS	Siemens	Locomotive: Class 1116, partially 1216
Austria		WestBahn	4010	2M4T		7	2011-	6000			200	200	15kV16.7Hz	296	17.9		150	2800	60	441	501	LZB/PZB,ZUB	Stadler	
Czech		CD	CD 680 "Pendolino"	4M3T	T	7	2003-	4000	200		230	230	3kV 15KV16.7Hz 25kV50Hz	385	9.7	14.75	184.4	2800	105	228	333	LS, LZB/PZB	Alstom	
Czech		CD	"ČD railjet" Siemens Taurus (OBB 1216) + Siemens Viaggio	1L7T	C	7	2014-	6000	300		230	230	3kV 15kV16.7Hz 25kV50Hz	479	11.7	21.5	204.78	2825	6+42	394	442	LZB/PZB,ZUB	Siemens	Locomotive: Class 1216 type
Finland		VR	SM3 "Pendolino"	4M2T	T	18	1995-	4000	163	0.5	220	220	25kV50Hz	328	11.5	14.3	159	3200	47	238(+2)	285(+2)	EBICAB900	Alstom	Broad gauge (1524)
Finland,Russia		Karelian Railways	Sm6 "Allegro"	4M3T	T	4	2010-	5500	226		220	220	3kV 25kV50Hz	409(Loaded)	13.4	17	184.8	3200	42+6	304	352+2hp		Alstom	Broad gauge (1522 and 1520) Operated by RZD and VR.
France, (Belgium,) UK		Eurostar	373 e300 TGV-TSMT	2L18T (+ 2MB)	C, A	26	1993-	12200			300	300	0.75kV 3kV 25kV50Hz	752	15.0	17	394	2814	206	544	750	TVM/KVB,TBL, AWS/TPWS	Alstom	No.3001-3232 SNCF 16 (No.3201-3232), BR 11 (No.3001-3022), SNCB 3 (No.3103-3108) 7 sets are equipped for DC 1,5kV operation. 26 sets: for Eurostar No.3101 exists, not operation. No.3102 for scrapping in 2015. No.3103/4 for scrapping in 2016. No.3015/6 were refurbished in 2015
France		SNCF	373 TGV-TSMT	2L14T (+ 2MB)	C, A	0	1993-	12200			300	300	0.75kV 3kV 25kV50Hz	665	16.8	17	320	2814	114	444	558	TVM/KVB,TBL, AWS/TPWS	Alstom	No.3301-3314 Built for Notrh of London,French domestic use one locomotive, No.3308, exists at National Train Museum in York
UK		Eurostar	374 e320	8M8T		12 (17)	2015-	16000			320	300	1.5kV 3kV 15kV16.7Hz 25kV50Hz			17	400	2950	222	672	894	TVM/KVB,TBL, AWS/TPWS,ETCS	Siemens	No.4001-4010 Siemens Velaro D series.
France, (Belgium,) Netherlands		Thalys	Thalys PBA	2L8T	C, A	9	1996-	8800			320	300	1.5kV 3kV 25kV50Hz	385	21.2	17	200	2904	120	257	377	TVM/KVB, TBL,ATB, ETCS	Alstom	No. 4531-4540, owned by SNCF Same series as TGV Réseau (tric.). 4531 (now 4551) is used for SNCF
France, (Belgium,) Netherlands		Thalys	Thalys PBKA	2L8T	C, A	17	1996-	8800			320	300	1.5kV 3kV 15kV16.7Hz 25kV50Hz	385	21.2	17	200	2904	120	257	377	TVM/KVB, TBL/TBL2, ATB,PZB/LZB, ETCS	Alstom	No.4301-4346 SNCF 6 (No.4341-4346), NS 4 (No.4321-4322,4331-4332) , SNCB 7 (No.4301-4307), No.4321-4322-> DB -> NS
France		SNCF	TGV PSE (bic.)	2L8T (+ 2MB)	C, A	31	1981-	6450			300	300	1.5kV 25kV50Hz	385	15.6	17	200	2814	110 69	240 276	350 345	TVM/KVB	Alstom	No. 1-102 No38 -> TGV Postal, No1 -> No38, No46 was abandoned after the accident at La Vavrette, No70 was abandoned after the accident at Voiron, No88 -> tri-current. No99 was abandoned.
France, Switzerland		SNCF, SBB	TGV PSE (tric.)	2L8T (+ 2MB)	C, A	0	1981-2014	6450			270	270	1.5kV 15kV16.7Hz 25kV50Hz	385	15.6	17	200	2814	110	248	358	TVM/KVB,ZUB	Alstom	No. 110-118, No118 <- bi-current set No88, No112, No114: SBB Operation finished in 2014.
France		SNCF	TGV Postal	2L8T (+ 2MB)	C, A Postal	0	1981-2015	6400			270	270	1.5kV 25KV50Hz	385		17	200	2904	N/A	N/A	N/A	TVM/KVB	Alstom	No.951-953 5 half sets are alternative for maintenance 2 additional half sets will come from PSE 38
France		SNCF	TGV Atlantique	2L10T	C, A	54	1989-	8800			300	300	1.5kV 25kV50Hz	435	18.6	17	237	2904	116	364	480	TVM/KVB	Alstom	No.301-405 Renovated to Lacroix 455 places(105+350) TVM430 is installed from No 386 to No 405
France		SNCF	TGV Réseau (bic.)	2L8T	C, A	26	1993-	8800			320	320	1.5kV, 25kV50Hz	383	21.3	17	200	2904	118	257	375	TVM/KVB	Alstom	No.501-553, 19 (No.515-533) sets are converted to POS and Duplex Réseau, 3sets are added from Réseau tric (No551-553). No 502 was abandoned after the accident at Bierne. Renovating by Lacroix to 355 places(105+252)
France		SNCF	TGV Réseau (tric.)	2L8T	C, A	27	1993-	8800			320	320	1.5kV 3kV 25kV50Hz	383	21.3	17	200	2904	118	257	375	TVM/KVB,TBL, SCMT	Alstom	No.4501-4529, No.4551 3 sets (No.4507-4509) are converted to Réseau bi. No.4530 -> IRIS320, No.4551 <- No.4531 Thalys PBA 4507-30: suited for Belgium(TBL), 4501-06: suited for Italy(SCMT)
France		SNCF	TGV Duplex	2L8T	C, A, D	88	1996-	8800			320	320	1.5kV 25kV50Hz	390	20.4	17	200	2896	182	330	512	TVM/KVB	Alstom	No.201-289
France		SNCF	TGV Réseau Duplex	2L8T	C, A, D	19	2006-	8800			320	320	1.5kV 25kV50Hz (15kV16.7Hz)	380	20.9	17	200	2896	182	330	512	TVM/KVB	Alstom	No.601-619 613-615: tri-voltage(+15kV16.7Hz)
France, Switzerland		SNCF, SBB	TGV POS	2L8T	C, A, D	18	2006-	9280			320	320	1.5kV 15kV16.7Hz 25kV50Hz	423	20.6	17	200	2904	105	252	357	TVM/KVB,PZB/ LZB,SUB,ETCS	Alstom	No. 4401-4419 4406: SBB
France		SNCF	TGV Duplex Dasye	2L8T	C, A, D	49	2009-	9280			320	320	1.5kV 25kV50Hz	390	21.5	17	200	2896	182	330	512	TVM/KVB,ETCS	Alstom	No.701-749
France		SNCF	TGV Duplex RGV2N2 (tric.)	2L8T	C, A, D	30	2011-	9280			320	320	1.5kV 15kV16.7Hz 25kV50Hz	390	21.5	17	200	2896			509	TVM/KVB,PZB/ LZB, ETCS	Alstom	No.4701-4730 These train sets are operable in Germany.
France		SNCF	TGV Duplex RGV2N2 (bic.)	2L8T	C, A, D	25 (56)	2013-	9280			320	320	1.5kV 25kV50Hz	390	21.5	17	200	2896			509	TVM/KVB, ETCS	Alstom	No.801-825 for first 25 sets. No. 801-810 are operable in Spain. No.811-825 are operable in Luxembourg. Additional 40 sets were ordered.
France		SNCF	TGV Euroduplex L'Océane	2L8T	C, A, D	41 (67)	2017-	9280			320	320	1.5kV 25kV50Hz	390	21.4	17	200	2896	158	398	556	TVM, ETCS	Alstom	No,851-854 for first 4 sets.
France		SNCF	IRIS320	2L8T	C, A Inspection	1	1993-	8800			320	320	1.5kV 3kV 25kV50Hz				200	2904	N/A	N/A	N/A	TVM/KVB,TBL, SCMT	Alstom	TGV Réseau (tric.) 4530
Germany		DB AG	401(ICE1)	2L12T	C	59	1991-	9600	400		280	280	15kV16.7Hz	782	11.5	19.5	358	3020	197	506	703	ETCS LZB/PZB,ZUB	Siemens Bombardier	Redesign 2005ff
Germany		DB AG	402(ICE2)	1L7T	C	44	1996-	4800	200		280	280	15kV16.7 Hz	418	10.7	19.5	205	3020	106	275	381	LZB/PZB	Siemens Bombardier	Redesign 2011ff
Germany		DB AG	403(ICE3)	4M4T		50	2000-	8000	300		330	300	15kV16.7 Hz	409	18.0	16	200	2950	101	349	450	EYCS LZB/PZB	Siemens Bombardier	Redesign 2011ff
Germany, Netherlands		DB AG, NS	406(ICE3M) DB 46(ICE3M) NS	4M4T		10	2000-	8000	300		330 220(DC)	300	1.5kV 3kV 15kV16.7Hz 25kV50Hz	435	17.1	16	200	2950	93	326	419	ETCS LZB/PZB, ATB,TBL	Siemens Bombardier	Redesign 2011ff

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																			1st class	2nd class	Total			
Germany		DB AG	406(ICE3MF)	4M4T		6	2000-	8000	300		330 220(DC)	320	1.5kV 3kV 15kV16.7Hz 25kV50Hz	435	17.1	16	200	2950	91	322	413	LZB/PZB, ATB,TBL, TVM/KVB	Siemens Bombardier	Redesign 2011ff
Germany		DB AG	407(ICE3)	4M4T		17	2013-	8000			320	320	1.5kV 3kV 15kV16.7Hz 25kV50Hz	454	16.3	14.2	201	2950	111	333	444	LZB/PZB, ATB,TBL, TVM/KVB, ETCS	Siemens	Redesign 2011ff
Germany, Austria		DB AG, ÖBB	411(ICE-T) DB 4011(ICE-T) ÖBB	4M3T	T	30	2000-	4000	200		230	230	15kV16.7 Hz	350	10.6	15	185	2850	55	304	359	LZB/PZB,ZUB	Siemens Bombardier Alstom	Redesign 2013ff
Germany		DB AG	411(ICE-T2)	4M3T	T	29	2004-	4000	200		230	230	15kV16.7 Hz	350	10.5	15	185	2850	55	321	376	LZB/PZB	Siemens Bombardier Alstom	Redesign 2013ff
Germany		DB AG	415(ICE-T)	3M2T	T	10	1999-	3000	150		230	230	15kV16.7 Hz	273	10.2	15	133	2850	41	209	250	LZB/PZB,ZUB	Siemens Bombardier Alstom	Redesign 2013ff
Germany		DB AG	412 (ICE4 7-car)	3M4T		0 (37)	-	4950		0.55	230	249	1.5kV 3kV 15kV16.7Hz 25kV50Hz	455	10.1	<18	200	2852	77	379	456	ETCS, LZB/PZB, ZUB	Siemens Bombardier	
Germany		DB AG	412 (ICE4 12-car)	6M6T		25 (100)	2016-	9900		0.53	250	249	15kV16.7Hz	659	13.6	<18	346	2852	205	625	830	ETCS, LZB/PZB	Siemens Bombardier	
Germany, Denmark		DB AG, DSB	605(ICE-TD)	4M	T	6	2001- (2017)	2240	160		200	200	Diesel	216	9.7	14.5	106	2850	41	154	195	LZB/PZB, ZUB	Siemens Bombardier Alstom	6 were transferred from DB to DSB.and are equipped with Danish signaling system and radio for international services. 14 is out of service. Tilting system is not used.
Germany		DB AG	605(ICE-TD)	4M	T	1	2001-	2240	160		200	200	Diesel	216		14.5	106	2850	N/A	N/A	N/A	-	Siemens Bombardier Alstom	advanced Train Lab
Germany		DB AG	ICE-S	2L1T	C Inspection	1	2006-	9600			280	280	15kV16.7 Hz	211			120.3	2856	N/A	N/A	N/A	-	Siemens	
Greece		TrainOSE	ETR485								250										480	ETCS	Alstom	
Italy		Trenitalia	ETR450	8M1T	T	6	1988-	5000			250	250	3kV	435	10.7	12.5 (unloaded)	233.9	2750	170	220	390	SCMT/BACC	Alstom	15 train sets were produced.
Italy		Trenitalia	ETR460	6M3T	T	9	1995-	5880	207		250	250	3kV	445	12.2	13.5 (unloaded)	237	2800			479	SCMT/BACC	Alstom	10 train sets were produced.
Italy, (Switzerland)		Trenitalia (SBB)	ETR470	6M3T	T	5	1996-	5880			200	200	3kV 15KV16.7Hz	460	11.8	15.1	236.6	2800	151	324	475	SCMT/BACC,Z UB	Alstom	Trenitalia: 5sets, SBB: 0 sets
Italy		Trenitalia	(ETR480) ETR485	6M3T	T	15	1997-	5880			280	250	3kV 25kV50Hz	422	12.8	13.5 (unloaded)	237	2800			489	SCMT/BACC	Alstom	AC electric equipment was installed to ETR480 and renumbered as ETR485
Italy		Trenitalia	ETR500	2L11T	C	59	1995-	8800	400		360	300	3kV 25kV50Hz	640(loaded)	13.8	17	354	2860			574	SCMT/BACC ETCS	Ansaldobreda Alstom Bombardier	Figures are for 3-class. 4-class are introduced from 2012
Italy		Trenitalia	ETR600	4M3T	T	12	2008-	5600		0.48	280	250	3kV 25kV50Hz	443(loaded)	12.6	17	187.4	2830	126	306	432	SCMT/BACCET CS	Alstom	
Italy, Switzerland		Trenitalia SBB	ETR610	4M3T	T	26	2009-	5500	226	0.48	250	250	3kV 15KV16.7Hz 25kV50Hz	466	12.2	17	187.4	2830	108+18	304(Trenitalia) 296(SBB)	430(Trenitalia) 422(SBB)	SCMT/BACC,L ZB/PZB,ZUB,E TCS	Alstom	Trenitalia: 7sets, SBB: 19sets
Italy		Trenitalia	ETR1000	4M4T		50 (64)	2015-	9800	370	0.7	400	300	1.5kV 3kV 15kV16.7Hz 25kV50Hz	500(loaded)	19.6	17	202	2924	10+71+76	300	457	ETCS	Ansaldobreda HRI* Bombardier	Operation from 2015 in 300km/h
Italy		Trenitalia	ETR700 (Frecciargento)			4 (17)	2019-					250	3kV 25kV50Hz								500		Ansaldobreda	Refuburished Fyra
Italy		NTV	AGV575	EMU-11 (5MB7TB)	A	25	2012-	7500	Approx. 273		300	300	3kV 25kV50Hz	398	15.0	17	201	3000	19+143	288	450	SCMT/BACC ETCS	Alstom	3-class
Italy		NTV	"Evo Pendolino"	4M3T		10 (22)	2017-				250	250					187				472		Alstom	Pendolino design
Italy		RFI	"Epsilon"	2L8T	C Inspection	2	2008-	8800			300	300	3kV 25kV50Hz			17	249	2860	N/A	N/A	N/A	SCMT/BACC ETCS	Ansaldobreda Alstom Bombardier	Based on ETR500
Netherlands Belgium		NS Hispeed SNCB	V250	4M4T		0	2012- 2013	5500	300	0.58	250	250	1.5kV 3kV 25kV50Hz	423	11.8	17	200.9	2870	127	419	546	ATB,TBL,LZB,E TCS	Ansaldobreda	NS Hispeed:9(7) sets, SNCB 0(3) sets 2013.1- service is suspended.
Norway		Flytoget	BM71	3M		16	1997-	1950			210	210	15KV16.7Hz	158	11.4		82.1	3048	0	168	168	EBICAB700	Bombardier	An intermediate car is being introduced for all sets.
Norway		NSB	BM73	4M	T	22	1999-	1950			210	210	15KV16.7Hz	212	8.5	16.5	108	3048			203 246	EBICAB700	Bombardier	"Signatur"
Poland		PKP Intercity	ED250	4M3T		20	2014-	5500		0.49	250	250	3kV 15KV16.7Hz 25kV50Hz	395.5	14.2	17	187.4	2830	57	345	402	ETCSL1/L2,SH P,Mirel,LZB/PZ B	Alstom	
Portugal		CP	CPA4000	4M2T	T	10	1999-	3920	210		220	220	25kV50Hz	299	12.1	14.4	158.9	2920	96	205	299 +2hp	EBICAB700	Alstom	Broad gauge (1668) Loading gauge meets CP requirement
Russia		RZD	ER200	8M2T		0	1974- 2009	7680		0.4	200	200	3kV	557.4	12.8		260	3130			544		RVR	Broad gauge (1520)
Russia		RZD	"Sapsan" B1	4M6T		12	2009-	8000	328	0.43	250	250	3kV	662(Loaded)	12.1	17	250	3265	104	500	604		Siemens	Broad gauge (1520)

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Russia		RZD	"Sapsan" B2	4M6T		4	2009-	8000	328	0.42	250	250	3kV 25kV50Hz	678(Loaded)	11.8	18	250	3265	104	500	604		Siemens	Broad gauge (1520)
Slovenia		SZ	ETR310	2M1T	T	2	2002-	1980			200	200	3kV			14.8	81.2	2800	30	136	166	SCMT/BACC,PZB	Alstom	
Spain		Renfe Operadora	S100 (bic.)	2L8T	C,A	14	1992-	8800	220		300	300	3kV 25kV50Hz	392	21.0	17.2	200.15	2904	38+78	211(+2hp)	330(+2hp)	ASFA/LZB,ERTMS	Alstom	"AVE" 3 classes
Spain		Renfe Operadora	S100 (tric.)	2L8T	C,A	10	1992-	8800	220		300	300	1,5kV 3kV 25kV50Hz	392	21.0	17.2	200.15	2904	N/A	N/A	347	ASFA/LZB,TVM /KVB,ERTMS	Alstom	"AVE" 3 classes 10 sets are tri-current and operable in France from 2013.
Spain		Renfe Operadora	S101	2L8T	C,A	0	1996-2010	5400			200	200	3kV	392	12.9	17.2	200.15	2904	112	200(+2hp)	314(+2hp)	ASFA/EBICAB900	Alstom	"Euromed" Gauge 1668 All sets converted to S100.
Spain		Renfe Operadora	S102	2L12T	C, A, T	16	2005-	8000			330	300	25kV50Hz	324	22.9	17	200.244	2960	45+76	193(+2hp)	314(+2hp)	ASFA/LZB/ETCS	Talgo Bombardier	"AVE" 3 classes
Spain		Renfe Operadora	S103	4M4T		26	2007-	8800	283		350	300	25kV50Hz	439	18.7	<17	200	2950	38+103	262(+2hp)	403(+2hp)	ASFA/LZB/ETCS	Siemens	"AVE" 3 classes
Spain		Renfe Operadora	S104	4M		20	2004-	4000	212	0.72	250	250	25kV50Hz	222	16.6	17	107.1	2920	30	206(+1hp)	236(+1hp)	ASFA/LZB/ETCS	CAF Alstom	"Avant"
Spain		Renfe Operadora	S106 (S106.000/ S106.050)	2L12T	C,A	0 (30)	(2020-)	8000 (DC:6500, 4300)	200		330	300	1.5kV, 3kV 25kV50Hz	323.4	23.4	17	200	2960	105(+2hp)	416	521(+2hp)	ASFA/LZB/ETCS/TVM430/KVB/RPS	Talgo	There will be 15 units series 106.000(1435) and 15 units series 106.050 Dual gauge(1435/1668) 10 trainsets for international use, include TVM430,KVB,RPS
Spain		Renfe Operadora	S112	2L12T	C,A,T	30	2010-	8000	200		330	300	25kV50Hz	322	23.5	17	200.244	2960	71	292(+2hp)	363(+2hp)	ASFA/LZB/ETCS	Talgo Bombardier	Similar to S102 but capacity is increased.
Spain		Renfe Operadora	S114	4M		13	2011-	4000	212	0.74	250	250	25kV50Hz	248	15.0	16	107.9	2830	N/A	237(+1hp)	237(+1hp)	ASFA/LZB/ETCS	Alstom	"Avant"
Spain		Renfe Operadora	S120	4M		12	2006-	4000 (DC:2700)	150	0.52	250 220(DC)	250 220(DC)	3kV 25kV50Hz	256	14.5	16.2	107.3	2920	81(+1hp)	156	237(+1hp)	ASFA/LZB/ETCS	CAF Alstom Bombardier	"Alvia" Dual gauge (1668,1435)
Spain		Renfe Operadora	S120.5	4M		15	2006-	4000 (DC:2700)	150	0.52	250 220(DC)	250 220(DC)	3kV 25kV50Hz	256	14.5	16.2	107.3	2920	74(+1hp)	148	222(+1hp)	ASFA/LZB/ETCS	CAF Alstom Bombardier	"Alvia" Dual gauge (1668,1435)
Spain		Renfe Operadora	S121	4M		29	2008-	4800	212	0.68	250 220(DC)	250 220(DC)	3kV 25kV50Hz	252	17.5		107.4	2920	N/A	N/A	282	ASFA/LZB/ETCS	CAF Alstom	"Avant" Dual gauge (1668,1435)
Spain		Renfe Operadora	S130	2L11T	C,A,T	32	2007-	4800 (DC:4000)	220		250 220(DC)	250 220(DC)	3kV 25kV50Hz	312	15.4	18	185.2	2960	62(+1hp)	236	298(+1hp)	ASFA/LZB/EBICAB900/ETCS	Talgo Bombardier	"Alvia" Dual gauge (1668,1435) 15 sets will be converted to S130H.
Spain		Renfe Operadora	S730	2L11T (2T are dedicated for diesel engine)	C,A,T	12	2012-	4800 (DC:4000) (Diesel:3600)	220		250 220(DC) 180(diesel)	250 220(DC) 180(diesel)	3kV 25kV50Hz Diesel	385	12.5	18	186	2960	44(+2hp)	216	260(+2hp)	ASFA/LZB/EBICAB900/ETCS	Talgo Bombardier	Diesel hybrid version of S130. Diesel engines are installed on 2 end cars next to the locomotive. 15 sets are converted from S130. Dual gauge (1668,1435).No12 was abandoned after the accident at Santiago de Compostela.
Spain		Renfe Operadora	S490	2M1T	T	0	1999-	2200	130		220	220	3kV	159	12.8	16		3282	49	111	160(+1hp)	ASFA	Alstom	"Alaris" Broad gauge (1668) Not Operative since 2013.
Spain		ADIF	A330	2L3T	C,A,T Inspection	1	2007-				330	300	25kV50Hz	190			82	2960	N/A	N/A	N/A	ASFA ETCS	Talgo Bombardier	
Sweden		SJ	X2(X2000)	1L5T 1L6T	C,T	7 36	1990-	3260	160		200	200	15kV16.7Hz	360(6T)	8.5	18.5	140 165	3080	48 96	213	261(+2hp) 309(+2hp)	EBICAB700	Bombardier	
Sweden		SJ	X40	2M 3M	D	16 27	2005-	1600 2400		0.64	200	200	15kV16.7Hz	140 205	10.4		55.1 81.5	2960	0	180 288	180 288	EBICAB700	Alstom	
Sweden		Arlanda Express	X3	2M2T		7	1999-	2240			200	200	15kV16.7Hz	193	10.8		93.4	3063	0	190	190	EBICAB700	Alstom	
Sweden		SJ	X55 (SJ 3000)	EMU-4		(20)	2012-	3180			250	200	15kV16.7Hz	274	10.8		107	3430	64	181	245	EBICAB700 ETCS	Bombardier	
Sweden		SJ	Snabbtåg			(30)	(<2030)														350			
Switzerland		SBB	RABDe500(ICN)	4M3T	T	44	2000-	5200	210		220	200	15kV16.7Hz	355	13.3		188	2830	125	326	451	ZUB	Bombardier Alstom	
Switzerland		SBB	Giruno (EC250)	4M7T	A	1 (29)	(2019-)	6000	300		250	250	15kV16.7Hz 25kV50Hz 3kV				202	2900	117	288	405	SCMT/BACC/LZB/PZB/ZUB/ETCS	Stadler	
UK		CC, EC, EM, FGW, GC,V	IC125	2L7T 2L8T	C	80	1976-	3360			200	200	Diesel	383(2L7T)			197 220	2740			472 etc	AWS/TPWS	BREL	CC: Cross Country,EC: East Coast, EM: East Midlands, FGW:First Great Western, GC: Grand Central, V:Virgin
UK		East Coast	IC225	1L9T	C	30	1989-	4350			225	200	25kV50Hz				226	2740	112	368	480	AWS/TPWS	BREL, Alstom	
UK		EC, GC, HT, NR	180	5M		14	2000-	2800			200	200	Diesel	252.5	10.2		116.5	2730	42	226	268	AWS/TPWS	Alstom	"Adelante" EC: East Coast, GC: Grand Central, HT: Hull Trains, NR: Northern Rail
UK		Cross Country	220	4M		34	2001-	2200			200	200	Diesel	185.6	11.0		93.34	2730	26	162	188	AWS/TPWS	Bombardier	"Voyger"
UK		Cross Country, Virgin	221	4M 5M	T	4 40	2002-	2800(5M)			200	200	Diesel	227(4M) 282.8(5M)	9.2		93.3(4M) 116.2(5M)	2730	26	162(4M) 224(5M)	188(4M) 250(5M)	AWS/TPWS	Bombardier	"Super Voyger"

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Country /Region		Owners or Operators	Class	Train set Formula	Features	Number of train sets	Year in Service	Power [kW]	Tractive Effort [kN]	Acceleration[m/s2]	Max.Tr. Speed [km/h]	Max.Op. Speed [km/h]	Voltage	Weight of the train [t]	Power weight ratio [kW/t]	Max.Axle Load [t]	Train length [m]	Train width [mm]	Seats			Signaling systems	Suppliers	Observations
																			1st class	2nd class	Total			
UK		East Midlands	222	4M 5M 7M		4 17 6	2004-	3920(7M)			200	200	Diesel				161.8(7M)	2730	106	236	342	AWS/TPWS	Bombardier	"Meridian"
UK		Virgin	390	6M3T	T	56	2002-	5500	204		225	200	25KV50Hz	458 (loaded)	12.0	16.1	217	2730	145	294	439	AWS/TPWS	Alstom	Decided to increasing train length to 11 car for 31 train sets and creation of 4 new 11 car trainsets.
UK		Southeastern	395	4M2T		29	2009-	3360		0.7	225	225	0.75KV 25kV50Hz			11 (unloaded, Avg.)	121.8	2810	0	348	348	TVM/KVB AWS/TPWS	Hitachi	
UK		IEP(GreatWestern, EastCoastmainline)	800	3M2T		6 (46)	2017-			0.7	200	200	25kV50Hz + Diesel (Bi-mode)	230 249 (bi-mode)		18.4	130	2740				AWS/TPWS	Hitachi (H&HRE*)	Agility Trains, Bi-mode Bi-mode is possible to be propelled by both electricity and diesel engine who provide electricity to motors. 46 sets: 5-cars; 36 sets for Great Western Main Line, 10 sets for East Coast main line
UK		IEP(GreatWestern, EastCoastmainline)	800	9-cars		(34)	2017-			0.7	200	200	25kV50Hz + Diesel (Bi-mode)	230 249 (bi-mode)		18.4	130	2740				AWS/TPWS	Hitachi (H&HRE*)	Agility Trains, Bi-mode Bi-mode is possible to be propelled by both electricity and diesel engine who provide electricity to motors. 34 sets: 9-cars 21 sets for Great Western Main Line, 13 sets for East Coast main line
UK		IEP(EastCoastmainline)	801	3M2T		(12)	(2018-)			0.7	200	200	25kV50Hz + Diesel (Bi-mode)			18.4	234	2740				AWS/TPWS	Hitachi (H&HRE*)	Agility Trains 12 sets: 5-cars; for East Coast Main Line
UK		IEP(EastCoastmainline)	801	9-cars		(30)	(2018-)			0.7	200	200	25kV50Hz + Diesel (Bi-mode)			18.4	234	2740				AWS/TPWS	Hitachi (H&HRE*)	Agility Trains 30 sets: 9-cars; for East Coast Main Line
UK		GreatWestern	802	3M2T		(22)	(2018-)			0.75	200	200	25kV50Hz + Diesel (Bi-mode)									AWS/TPWS	Hitachi (H&HRI*)	Bi-mode, AT300 Bi-mode is possible to be propelled by both electricity and diesel engine who provide electricity to motors.
UK		GreatWestern	802	9-cars		(14)	(2018-)			0.75	200	200	25kV50Hz + Diesel (Bi-mode)									AWS/TPWS	Hitachi (H&HRI*)	Bi-mode, AT300 Bi-mode is possible to be propelled by both electricity and diesel engine who provide electricity to motors.
China		CR	CRH1A	5M3T		128 (151)	2006-	5500	320	0.6	250	200	25kV50Hz	435	11.3	16.5	213.5	3328	144(128)	524(483)	668(611)	CTCS 2	CSR-Bombardier	As for the number of seats, outside the parenthesis is for the fixed seats, inside the parenthesis is for the rotatable seats. No.46 was abandoned after the accident in Wenzhou.
China		CR	CRH1A-A	5M3T		87	2016-																	
China		CR	CRH1B	10M6T		24	2008-	11000	320	0.6	250	200	25kV50Hz	850	11.5	16.5	426.3	3328			1299+2	CTCS 2	CSR-Bombardier	
China		CR	CRH1E	10M6T		20	2009-	11000		0.6	250	200	25kV50Hz	890	11.7	16.5	428.9	3328	16+480 (Sleeping Car)	122	618+2	CTCS 2	CSR-Bombardier	13 cars are 1st class sleeping cars(1 car is special 1st class sleeping), 2 cars are 2nd class seating cars, 1 car is a dining car.
China		CR	CRH2A	4M4T		473	2008-	4800	176		250	200	25kV50Hz	359.7	11.8	14	201.4	3380	51	559	610	CTCS 2	KHI*, CSR-Sifang	1 car is 1st seating car,7 cars are 2nd seating cars 1 set is used as the inspection car.
China		CR	CRH2B	8M8T		20	2008-	9600	352		250	200	25kV50Hz	758.8	11.8	14	401.4	3380	155	1074	1229	CTCS 2	CSR-Sifang	3 Cars are 1st seating cars,12 cars are 2nd seating cars,1 car is dining car.
China		CR	CRH2C	6M2T		49	2008-	8760	264		350	300	25kV50Hz	370.8	19.5	14	201.4	3380	51	559	610	CTCS 2, 3	CSR-Sifang	1 car is 1st seating car, 6 cars are 2nd seating cars, 1 car is 2nd seating/dining car 1 set is used as the inspection car.
China		CR	CRH2C2	6M2T		11	2008-	8760	264		350	300	25kV50Hz	370.8	19.5	14	201.4	3380	51	559	610	CTCS 2, 3	CSR-Sifang	1 car is 1st seating car, 6 cars are 2nd seating cars, 1 car is 2nd seating/dining car 1 set is used as the inspection car.
China		CR	CRH2E	8M8T		24	2009-	9600	352		250	200	25kV50Hz	778.9	11.6	14	401	3380	520 (Sleeping Car)	100	620	CTCS 2	CSR-Sifang	13 cars are 1st class sleeping cars, 2 cars are 2nd class seating cars, 1 car is dining car.
China		CR	CRH2G	4M4T		20	2015-	9280		0.39	250	250	25kV50Hz			15.45	201.4	3380	48	565	613	CTCS 2	CSR-Sifang	
China		CR	CRH3A	4M4T		1	2017-				250	250	25kV50Hz								616			
China		CR	CRH3C	4M4T		80	2008-	8800	300	0.46	350	300	25kV50Hz	425	18.7	17	200	3260	66	490	556+1	CTCS 2, 3	Siemens, CNR-Tanshang	1 car is 1st class seating car, 6 cars are 2nd seating cars, 1 car is 1st seating/dining car.
China		CR	CRH5A	5M3T		140	2007-	5500	302	0.6	250	200	25kV50Hz	451.3	11.0	<17	211.5	3200	60(112)	562(474)	622(586)	CTCS 2	Alstom, CNR-Changchun	As for the seat's number,the figure outside the parenthesis is for the fixed seats.inside the parenthesis is for the rotatable seat.
China		CR	CRH5G	5M3T		88	2007-	5500	302	0.6	250	200	25kV50Hz	451.3	11.0	<17	211.5	3200	60(112)	562(474)	622(586)	CTCS 2	Alstom, CNR-Changchun	As for the seat's number,the figure outside the parenthesis is for the fixed seats.inside the parenthesis is for the rotatable seat.
China		CR	CRH6A	4M4T		27	2013-	5520		0.65	220	200	25kV50Hz			15.5	201.4	3300		557	1488	CTCS 2, 3	CSR-Puzhen Rollngstock Co.Lit.	CRH6A will be existed. operating speed is under 200km/h.
China		CR	CRH380A	6M2T		316	2010-	9600			350	300	25kV50Hz			<15	203	3380	12+95	373	480	CTCS 2, 3	CSR-Sifang	12 seats: "sightseeing". There are other 14 seats for dining car.
China		CR	CRH380AL	14M2T		113	2011-	21560			350	300	25kV50Hz			<15	403	3380	56+6+76	923	1061	CTCS 2, 3	CSR-Sifang	56 seats: business class, 6 seats: "sightseeing".
China		CR	CRH380AG			16																		
China		CR	CRH380B	4M4T		354	2011-	9200			350	300	25kV50Hz			<17	200	3260	72	528	600+1	CTCS 2, 3	CNR-Changchun	
China		CR	CRH380BL	8M8T		149	2011-	18400		0.41	350	300	25kV50Hz			<17	400	3260	24+190	791	1005	CTCS 2, 3	CNR-Tanshang, CNR-Changchun	24 seats: business
China		CR	CRH380BG	4M4T		141	2011-	9200			350	300	25kV50Hz			<17	200	3260	72	528	600+1	CTCS 2, 3	CNR-Changchun	

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Country /Region		Owners or Operators	Class	Train set Formula	Features	Number of train sets	Year in Service	Power [kW]	Tractive Effort [kN]	Acceleration[m/s2]	Max.Tr. Speed [km/h]	Max.Op. Speed [km/h]	Voltage	Weight of the train [t]	Power weight ratio [kW/t]	Max.Axle Load [t]	Train length [m]	Train width [mm]	Seats			Signaling systems	Suppliers	Observations
																			1st class	2nd class	Total			
China		CR	CRH380CL	8M8T		25	2011-	18400			350	300	25kV50Hz			<17	428	3358			1004	CTCS 2, 3	CNR-Changchun	
China		CR	CRH380D	4M4T		85	(2012-)	10000		0.48	350	300	25kV50Hz	462	17.6	17	215.3	3358	14+90	391	495	CTCS 2, 3	CSR-Bombardier	VIP class: 14 seats
China		CR	CRH380DL	8M8T		(60)	(2012-)	20000		0.48	350	300	25kV50Hz	934	19.2	17	428.1	3358	52+126	835	1013	CTCS 2, 3	CSR-Bombardier	VIP class: 52 seats
China		CR	CR400AF	4M4T		18 (21)	2017-	9750			400	350	25kV50Hz			17	209	3360	10+28	518	556			Business class: 10 seats First class: 28 seats
China		CR	CR400BF	4M4T		9	2017-	9750			400	350	25kV50Hz			17	209	3360	10+28	518	556			Business class: 10 seats First class: 28 seats
China		CR	CR400AF-A	8M8T		(16)		19200			400		25kV50Hz								1193			
China		CR	CR400BF-A	8M8T		(16)		20280			400	350	25kV50Hz								1193		CRRC Tangshan	
China		CR	CJ2									250												
China		CR	CIT001	5M3T	Inspection	1	2007-	5500	302	0.6	250	200	25kV50Hz			<17	211.5	3200	N/A	N/A	N/A	CTCS 2, 3	CNR-Changchun	Based on CRH5A
China		CR	CIT400A	7M1T	Inspection	1	2011-				400	300	25kV50Hz				201	3380	N/A	N/A	N/A	CTCS 2, 3	CSR-Sifang	Based on CRH380A
China		CR	CIT400B	6M2T	Inspection	1	2011-				400	300	25kV50Hz						N/A	N/A	N/A	CTCS 2, 3	CNR-Tanshang, CNR-Changchun	Based on CRH380B and CRH380C
China		MTR	MTR CRH380A	6M2T		9	2018-	9600			350	300	25kV50Hz	408		<15	203	3380			579	CTCS 2, 3	CRRC	for Guangzhou, Shenzhen and Hong Kong link
Chinese Taipei		THSRC	700T	9M3T		34	2007-	10260			300	300	25kV60Hz	503	17.6		304	3380	66	923	989	ATP	H,KHI,NS*	
Japan		JRW	0	6M		0	1964-2008	4440		0.33	220	220	25kV60Hz	970 for original 16-car set (Loaded)	12.2	16	150	3380	0	400	400	ATC	H,KHI,KS,NS,TCC*	First HS train in the world. Shortened from 16 cars to 6cars for local transportation. Operation finished in 11/2008. 3216 cars were produced.
Japan		JRW	100	6M		0	1985-2012	5520		0.44	230	220	25kV60Hz	925 for original 16-car set (Loaded)	11.9	15	152	3380	0	394	394	ATC	H,KHI,KS,NS,TCC*	Max. speed was 230km/h for V sets.
Japan		JRE	200	10M		0	1982-2013	9200		0.44	240	240	25kV50Hz	583	14.6	16.4	250	3380	52	710	762	ATC DS-ATC	H,KHI,KS,NS,TCC*	It was 12 cars when introduced. A train set was abandoned after the derailment at Chuetsu Earthquake.
Japan		JRC JRW	300 300-3000	10M6T		0	1992-2012	12000		0.44	270	270	25kV60Hz	710 (Loaded)	16.9	12	402.1	3380	200	1123	1323	ATC ATC-NS	H,KHI,KS,NS*	70 sets had existed.
Japan		JRE	400	6M1T		0	1992-2010	5040		0.44	240	240	25kV50Hz 20kV50Hz	318	14.7	12.9	149	2947	20	379	399	ATC DS-ATC ATS-P	KHI,TCC*	For through operation b/w Shinkansen line and improved classical line (Yamagata line). All 12 sets were replaced by E2-2000.
Japan		JRW	500	16M	T	0	1996-2010	18240 or 17600		0.44	300	300	25kV60Hz	688 (Loaded)	26.5	11.7	404	3380	200	1124	1324	ATC ATC-NS	H,KHI,KS,NS*	9 sets had existed.
Japan		JRW	500-7000	8M	T	8	2008-	8800		0.44	285	285	25kV60Hz				204	3380	0	608	608	ATC ATC-NS	H,KHI,KS,NS*	8 sets were renovated from 16-car 500.
Japan		JRC JRW	700 700-3000	12M4T		6 8	1998-	13200		0.56	285	285	25kV60Hz	708 (Loaded)	18.6	11.4	404.7	3380	200	1123	1323	ATC ATC-NS	H,KHI,KS,NS*	JRC 32 sets, JRW 700-3000:15 sets, 700:8 sets - moved from JRC to JRW.
Japan		JRW	700-7000	6M2T		16	2000-	6600		0.56	285	285	25kV60Hz	356 (Loaded)	18.5	11.4	204.7	3380	0	571	571	ATC ATC-NS	H,KHI,KS,NS*	
Japan		JRC JRW	N700-2000 N700-5000 N700A-1000 N700A-4000	14M2T	T	80 16 46 17	2007-	17080		0.72	300	300	25kV60Hz	715 (Loaded)	23.9	11.4	404.7	3360	200	1123	1323	ATC ATC-NS	H,KHI,KS,NS*	JRC: (N700A(N700-1000,-2000,-9000)) 100 sets, JRW: (N700(N700-3000) & N700A(N700-5000)) 16 sets, (N700A(N700-4000)) 1 sets JRC was converted from N700 to N700A(N700-2000) and JRW is converting from N700-3000 to N700A(N700-5000). N700-9000 is a trial train-set and also converted to N700A.
Japan		JRW JRK	N700-7000 N700-8000	8M	T	19 11	2011-	9760		0.72	300	300	25kV60Hz			Approx 11	204.7	3360	24	522	546	ATC KS-ATC	H,KHI,KS,NS*	JRW(N700-7000) 19 sets, JRK(N700-8000) 11 sets
Japan		JRC	N700S	14M2T	T	1	2020-				300	300					404.7	3360					H,NS	
Japan		JRK	800	4M2T		5	2004-	6600		0.69	260	260	25kV60Hz	276 (Loaded)	23.9	11.4	154.7	3380	0	392	392	ATC KS-ATC	H*	
Japan		JRK	800-1000 800-2000	4M2T		2 1	2009-	6600		0.72	260	260	25kV60Hz				154.7	3380	0	384	384	ATC KS-ATC	H*	2sets: 800-1000, track inspection is capable. 1set: 800-2000, catenary, signalling and communication inspection are capable.
Japan		JRE	E1	6M6T	D	0	1994-2012	9840		0.44	240	240	25kV50Hz	693	12.8	17	302	3380	102	1133	1235	ATC DS-ATC	H,KHI*	
Japan		JRE	E2	8M2T		2	1997-	7200		0.44	275	275	25kV50Hz 25kV60Hz	349	18.6	13.0	201.4	3380	51	579	630	ATC DS-ATC	H,KHI,NS,TCC*	For Joetsu line.
Japan		JRE	E2-1000	8M2T		24	2002-	9600		0.44	275	275	25kV50Hz	442	19.6	13.0	251.4	3380	51	763	814	ATC DS-ATC	H,KHI,NS,TCC*	For Tohoku and Joetsu line.

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Country /Region		Owners or Operators	Class	Train set Formula	Features	Number of train sets	Year in Service	Power [kW]	Tractive Effort [kN]	Acceleration[m/s2]	Max.Tr. Speed [km/h]	Max.Op. Speed [km/h]	Voltage	Weight of the train [t]	Power weight ratio [kW/t]	Max.Axle Load [t]	Train length [m]	Train width [mm]	Seats			Signaling systems	Suppliers	Observations
																			1st class	2nd class	Total			
Japan		JRE	E3	4M2T		2	1997-	4800		0.44	275	275	25kV50Hz 20kV50Hz	258	17.2	12.3	128.2	2945	23	315	338	ATC DS-ATC ATS-P	KHI,TCC*	For Tohoku line.
Japan		JRE	E3-700	4M2T		1	2014-	4800		0.44	275	275	25kV50Hz 20kV50Hz	258	18.0	12.3	128.2	2945			143	ATC DS-ATC ATS-P	KHI*	A luxry train for tourist-oriented services,"Toreiyu", on Yamagata-shinkansen line(the regauged section). It was convered from E3 on 2014.
Japan		JRE	E3-700	4M2T		1	2016-	4800		0.44	275	275	25kV50Hz 20kV50Hz	258	18.0	12.3	128.2	2945			143	ATC DS-ATC ATS-P	KHI*	A luxry train for tourist-oriented services,"Genbi-Shinkansen", on Joetsu-shinkansen line. It was convered from E3 on 2015.
Japan		JRE	E3-1000	5M2T		3	1999- 2014-	6000		0.44	275	275	25kV50Hz 20kV50Hz	311	17.9	12.2	148.7	2945	23	379	402	ATC DS-ATC ATS-P	KHI,TCC*	For through operation b/w Shinkansen line and improved classical line (Yamagata Shinkansen line). 1 additional train set was convered from E3 of 2 train sets on 2014.
Japan		JRE	E3-2000	5M2T		12	2008-	6000		0.44	275	275	25kV50Hz 20kV50Hz	307	18.1	12.5	148.7	2945	23	371	394	ATC DS-ATC ATS-P	KHI,TCC*	All sets had replaced Series 400.
Japan		JRE	E4	4M4T	D	20	1997-	6720		0.46	240	240	25kV50Hz	428	14.1	16	201.4	3380	54	763	817	ATC DS-ATC	H,KHI*	
Japan		JRE	E5	8M2T	T	43 (59)	2011-	9600		0.47	320	320 (300[-2012])	25kV50Hz	453.5	19.3	13	253	3350	18 55	658	731	ATC DS-ATC	H,KHI*	3 classes, For Hokkaido-shinkansen, through operation between JR East and JR Hokkaido
Japan		JRH	H5	8M2T	T	4	2016-	9600		0.47	320	320	25kV50Hz	453.5	19.3	13	253	3350	18 55	658	731	ATC DS-ATC	H,KHI*	3 classes, For Hokkaido-shinkansen, through operation between JR East and JR Hokkaido
Japan		JRE	E6	5M2T	T	24	2013-	6000		0.47	320	320 (300[-2014])	25kV50Hz 20kV50Hz	306.5	18.4		148.7	2945	23	315	338	ATC DS-ATC ATS-P	H,KHI*	For through operation b/w Shinkansen line and improved classical line (Akita Shinkasen line)
Japan		JRE JRW	E7 W7	10M2T		22 11	2014-	12000		0.44	275	260	25kV50Hz 25kV60Hz	540	20.1		302	3380	18 63	853	934	ATC DS-ATC	H,KHI,KS,J-TREC*	3 classes, JRE(E7) 17sets, JRW(W7) 11sets For Hokuriku-shinkansen, operating from 2014
Japan		JRC JRW	923 923-3000	6M1T	Inspection	1 1	2001- 2005-	6600		0.56	270	270	25kV60Hz				179.7	3380	N/A	N/A	N/A	ATC ATC-NS	H, NS*	Based on 700
Japan		JRE	E926	5M1T	Inspection	1	2001-	6000		0.44	275	275	25kV50Hz 20kV50Hz	275		12.4	128.2	2945	N/A	N/A	N/A	ATC DS-ATC ATS-P	TCC*	Based on E3
Korea		KORAIL	KTX	2L18T (+ 2MB)	C,A	46	2004-	13560	382	0.45	300	300	25kV60Hz	701	17.4	17	388	2904	92	863	955	ATC(TVM), ATS, ATP	Alstom HyundaiRotem	
Korea		KORAIL	KTX-Sancheon	2L8T	C,A	61	2010-	8800	210	0.45	330	300	25kV60Hz	434	19.0		201	2970	30	345	375	ATC(TVM), ATS, ATP	HyundaiRotem	"Sancheon"
Korea		KORAIL	KTX-Honam	2L8T	C,A	22	2015-	8800	210	0.45	330	300	25kV60Hz	434	18.9		201	2970	33	377	410	ATC(TVM), ATS, ATP	HyundaiRotem	"Honam"
Korea		KORAIL	E320 8 cars			(2)	2019-				320										515		HyundaiRotem	
Korea		KORAIL	E320 6 cars			(6)	2019-				250										380		HyundaiRotem	
Korea		SR	SRT-Suseo	2L8T	C,A	10	2016-	8800	210	0.45	330	300	25kV60Hz	434	18.9		201	2970	33	377	410	ATC(TVM), ATS, ATP	HyundaiRotem	"Suseo" SR is on of the High Speed train operation company in South Korea.
Korea		KORAIL	KTX-Wongang	2L8T	C,A	15	2017-	8800	210	0.45	330	300	25kV60Hz	434	18.9		201	2970	33	377	410	ATC(TVM), ATS, ATP	HyundaiRotem	"Wongang", For Wonju - Gangneung.
Turkey		TCDD Transport	HT65000	4M2T		12	2009-	4800	200	0.48	250	250	25kV50Hz	297	-	17	158.9	2920	55	356	411	ETCS, ATS	CAF SA (SPAIN)	8 seats in cafeteria are excluded.
Turkey		TCDD Transport	HT80000	4M4T		1 (17)	2015-	8000	300	0.55	320	300	25kV50Hz	456	-	17	200.7	2924	111	335	446	ETCS	Siemens (GERMANY)	Siemens Velaro D series. 16 seats in cafeteria are excluded.
Turkey		TCDD Transport	HT80100	4M4T		6 (96)	2016-	8000	300	0.55	300	300	25kV50Hz	456	-	17	200.7	2924	57	426	483	ETCS	Siemens (GERMANY)	Siemens Velaro Turkey series. 36 seats in cafeteria are excluded.
Turkey		TCDD Transport	HT80100	4M4T		(10+2)	(2020-)	8000	300	0.55	300	300	25kV50Hz	456	-	17	200.7	2924	57	426	483	ETCS	Siemens (GERMANY)	Siemens Velaro Turkey series. 36 seats in cafeteria are excluded. Note: 2 additional train sets are not certain yet.
Saudi Arabia		Haramain HSR	(Talgo 350)	2L13T	C,A	35 (36)	2018-	8000	200		350	300	25kV60Hz	373.9			215	2960 (Loco)/294 2(Coach)	100	304	404	ETCS	Talgo	
Morocco		ONCF	RGV-M	2L8T	C,A,D	12	2018-				320	300	3kV 25kV50Hz				200	2896			533	ETCS	Alstom	No.1201-1212
USA		Amtrak	Acela	2L6T	C	20	2000-	9200	225		241 (150mph)	241 (150mph)	25kV60Hz 12.5kV60Hz 12kV25Hz	566	15.6	23	203	3175	44	260	304	ATP	Bonbardier Alstom	
USA		Amtrak	Avelia Liberty	2L9T	C, A, T	(28)	(2021-)				300 (186mph)	255 (159mph)									386		Alstom	
Total (current)						4959																		