

# The *all-time* guide to the UK Traction Classification System

## Part 4: Electric Multiple Units

Class	Description and sub class detail
Class 300	Paper classification allocated to 'Royal Mail' EMU project, changed to Class 325
Class 301	Not used
Class 302	LTS Fenchurch St-Shoeburyness 4-car sets. Built 1959, 201-312 (302201-302312)
Class 303	Glasgow area 3-car sliding door sets. Built 1960, 001- 091 (303001 303091)
Class 304	LM 4-car units. 001-045 (304001-045) Built 1960 All reduced to three-car status 304/1 - Original design 304/2 - Modified seating/equipment 304/3 - Modified seating/equipment
Class 305	GE outer suburban 4-car sets. Transferred to other Regional Railway areas 305/1 - 3-car sets non gangwayed 305/2 - 3 or 4 car sets gangwayed within sets
Class 306	Liverpool St-Shenfield 3-car sets. Built 1949 001-092 (306001 306092)
Class 307	GE Outer suburban 4-car sets. Built 1956 101-132 (307101-307132)
Class 308	GE outer suburban units 308/1 - GE Outer suburban 4-car sets. Built 1961 133-164 (308133-308164) 308/2 - GE Outer suburban 4-car sets 317-321 308/3 - GE Outer suburban 3-car sets 453-455 308/4 - GE Outer suburban 4-car sets. Built 1960 501-519 (308501-308519) Became class 305
Class 309	Clacton units. Built 1962, plus reforming 1974 309/1 4-car units 602-607 (revised) 309/2 4-car buffet sets 611-618 (1973) 309/3 4-car units 621-627 (1973) 309/4 4-car units 605-608 (1973)
Class 310	LM 4-car main line units. 046-095 (310046-095). Built 1966. Some units later modified for Centro use, others to NSE. Class 310/0 - Basic unit Class 310/1 - Centro modified Class 310/3 - Centro modified with refurbished interior and restored first class
Class 311	Glasgow area 3-car sliding door sets. Built 1967 092- 110 (311092 311110)
Class 312	GE/GN Outer suburban 4-car sets. Built 1975 312001 etc, modified to 312701-745 312/0 - Basic unit (312701-730) 312/1 - built with 6.25kV / 25kV dual equipment 312 781-799)
Class 313	GN inner suburban sets. Built 1976. 313001-313064 (Originally allocated Nos. 313801 etc NOT carried) 313/0 - As built sets 313/1 - Refurbished sets for Silverlink 313/9 - Short term allocation for sets allocated to Clacton for ac operation only
Class 314	ScotRail 3-car suburban units. Built 1979 314 201-314 216
Class 315	Great Eastern 4-car suburban units. Built 1980-81 315 801-315 861
Class 316	Classification given to traction development units, one rebuilt from class 307 stock and the other from class 210 and 455 vehicles
Class 317	Class 317 Original 'Bed-Pan' units, then to WAGN, now First Capital Connect/'one' Railway. Built from 1981 317/1 - Original units with pressure ventilation 317 301 317 348 317/2 - Modified sets with Convection heating 317 349 317 398 317/6 - Refurbished 317/2s, revised layout 317 649-317 672 317/7 - Refurbished and modified 317/0s for Stansted Airport duties 317708-317732 (9 sets)
Class 318	Glasgow area suburban units. Built 1986-87 318250-318270
Class 319	Originally built as 'Thameslink' units, now also on South Central 319/0 - Original build - 319 001-319 060 319/1 - Follow on build, modified style and equipment - 319 161-319 186 319/2 - 7 sets modified for SouthCentral Victoria-Brighton 'express' 319 214-319 220 319/3 - Refurbished 319/1 sets for Thameslink 'City Metro' service 319 361-319 386 319/4 - Refurbished 310/0 sets for Thameslink 'City Flier' service 319 421-319 460
Class 320	Glasgow area suburban units. Built 1990 320 301-321 322
Class 321	Outer suburban/main line units. Built 1988-90

	321/3 - Built for Great Eastern use
	321/4 - Built for WCML use
	321/9 - Built for West Yorkshire PTE use
Class 322	Modified version of class 321 originally for 'Stansted Express' duties, now working for First ScotRail. 322481-322485
Class 323	Hunslet-Barclay suburban unit, built 1992-95 323201-323243
Class 324	Not issued
Class 325	Royal Mail 'Railnet' units, based on 'Networker' and 319 but with standard draw-gear and TDM. 1995 325001-325016
Class 326	Not issued
Class 327	Not issued
Class 328	Not issued
Class 329	Not issued
Class 330	Not issued
Class 331	Original classification for 'Heathrow Express' stock - amended to class 332
Class 332	Siemens built 3/4/5-car units for 'Heathrow Express' service. 1997-98, 332001-332014
Class 333	Siemens WYPTE/Arriva Northern 3/4 car sets for Leeds local services. 2000-2002, 333001-333016
Class 334	Alstom 'Juniper' 3-car units for ScotRail/SPT 2000-2002, 334001-334040
Class 335	Not issued
Class 336	Not issued
Class 337	Not issued
Class 338	Not issued
Class 339	Not issued
Class 340	Not issued
Class 341	Classification allocated to proposed 'CrossRail' units
Class 342	Allocated to fleet of 184 'Networker' EMUs for use on proposed high speed Channel Tunnel line between Kent Coast and London - Abandoned
Class 343	Not issued
Class 344	Not issued
Class 345	Not issued
Class 346	Not issued
Class 347	Not issued
Class 348	Not issued
Class 349	Not issued
Class 350	Allocated to the IC125 power-car train project - tilting body etc, rebuild for electric operation at 2,680hp Also allocated to Royal Mail 'Railnet' EMUs in 1994 - changed to 325 350/1 - Siemens 'Desiro' units for West Coast. 350101 - 350130 Built 2004/5
Class 351	Not issued
Class 352	Not issued
Class 353	Not issued
Class 354	Not issued
Class 355	Not issued
Class 356	Not issued
Class 357	Adtranz 'Electrostar' 4-car sets for c2c (ex LTS) 357/0 Porterbrook-owned units 357001-357046 357/2 Angel Trains-owned units 357201-357228
Class 358	Not issued
Class 359	Not issued
Class 360	Siemens 'Desiro' units 360/1 - 4-car sets for First Great Eastern now 'one' Railway 360101-360121 Built 2002/3 360/1 - 4/5-car sets for Heathrow Connect 360101-360105 Built 2004/6
Class 361	Not issued
Class 362	Not issued
Class 363	Not issued
Class 364	Not issued
Class 365	ABB 'Networker Express' stock for Connex SE and WAGN, now all WAGN/First Capital Connect, 365501-365541 Built 1994/5
Class 366	Not issued
Class 367	Not issued
Class 368	Not issued
Class 369	Not issued
Class 370	BR Advanced Passenger Train stock
Class 371	Allocated to 'Thameslink 2000' stock 6-car sets - cancelled
Class 372	Not issued

Class 373	'Eurostar' Channel Tunnel units official classification -373/1 for GB, SNCF and SNCB sets, 373/2 'Regional' (short) sets Numeric classification 373/0 - GB sets 373/1 - SNCB sets 373/2 - SNCF sets 373/3 - Regional sets
Class 374	Not issued
Class 375	Adtranz/Bombardier 'Electrostar' for Connex then Southeastern, 1999-2005 375/3 3-car 'express' sets 375301-375310 3-car dc power 375/6 4-car 'express' sets 375601-375630 4-car dual power 375/7 4-car 'express' sets 375701-375715 4-car dc power 375/8 4-car 'express' sets 375801-375830 4-car dc power 375/9 4-car 'express' sets 375901-375927 4-car dc power
Class 376	Bombardier 'Electrostar' 5-car inner-suburban, high-density. 2004-05 376001-376036
Class 377	Adtranz/Bombardier 'Electrostar' for Connex then Southern, 2001-2005 377/1 4-car 'express' sets 377101-377164 4-car dc power 377/2 4-car 'express' sets 377201-377215 4-car dual power 377/3 3-car 'express' sets 377301-377328 3-car dc power (built as 375/3) 377/4 4-car 'express' sets 377401-377475 4-car dc power
Class 378	Not issued
Class 379	Not issued
Class 380	Not issued
Class 381	Allocated to dual-voltage 'Networker' - Project withdrawn
Class 382	Not issued
Class 383	Not issued
Class 384	Not issued
Class 385	Not issued
Class 386	Not issued
Class 387	Not issued
Class 388	Not issued
Class 389	Not issued
Class 390	Alstom/Virgin Trains 'Pendolino' stock for WCML 2000-2003 390001-390053
Class 391	Not issued
Class 392	Not issued
Class 393	Not issued
Class 394	Not issued
Class 395	Not issued
Class 396	Not issued
Class 397	Not issued
Class 398	Not issued
Class 399	Not issued
Class 400	Not issued
Class 401	SR design 2-BIL units
Class 402	SR design 2-HAL units - also covered 2-PAN series
Class 403	SR design 5-BEL units
Class 404	SR design 4-COR units (404/2)
Class 405	SR 4-SUB units 4101-4753 (various builds) 405/1 and 405/2 sub classes issued for detail technical differences
Class 406	Not issued
Class 407	Not issued
Class 408	Not issued
Class 409	Not issued
Class 410	BR design 4-BEP 7001-7022. Built 1956-59 410/1 - Fitted with 1951 equipment 410/2 - Fitted with 1957 equipment Later refurbished as class 412
Class 411	Original 1972 classification - SR design EPB stock Revised classification - BR design 4-CEP 7101-7211. Built 1956-58 411/1 - Original units fitted with 1951 equipment 411/2 - Units fitted with 1957 electric equipment 411/3 - Prototype refurbished unit 411/4 - Classification used for 3-car units in 1993-94 411/5 - Refurbished class 411/2 411/9 - 3-car sets for Connex operation in 2000

Class 412	Original 1972 classification - SR/BR design 2-HAP stock Revised classification - BR refurbished 4-BEP. 2301-2306, rebuilt from class 410
Class 413	Original 1972 classification - SR/BR design 2-EPB stock Revised classification - BR design HAP units coupled in pairs as 4-CAP 413/2 - 1951 equipment 413/3 - 1957 equipment
Class 414	Original 1972 classification 414/1 - 1951 equipped 4-CEP units, 414/2 - 1951 equipped 4-BEP units Revised classification - SR/BR 2-HAP units. Built 1957-58 414/1 - SR designed units 414/2 - BR designed units with 1951 equipment 414/3 - BR designed units with 1957 equipment
Class 415	SR/BR 4-EPB 5001-5366 (later amended) Built from 1951 415/1 - SR design units 415/2 - BR design units 415/4 - Facelifted 415/1s 415/5 - Sets formed with compartment vehicles in 1980s 415/6 - Refurbished 415/2s 415/7 - BR design units with express gear ratio
Class 416	SR/BR 2-EPB 5651-5795 (later amended) Built from 1953 416/1 - SR design units 416/2 - BR design units 416/3 - Refurbished SR design units 416/4 - Refurbished BR design units
Class 417	Not issued
Class 418	BR 2 SAP units - Modified from 2-HAP. 5901-5942. Intro 1974 as SAP 418/1 - Modified from 1951 equipped HAP 418/2 - Modified from 1957 equipped HAP
Class 419	Single MLVs. 68001-68010. Built 1959-61
Class 420	BR design 4-BIG. 7031-7058. Built 1965-70 - Code changed to 422 in 1983 420/1 - Original design fitted with electric parking brake 420/2 - Modified 1970 design
Class 421	Original 1972 classification - 421/1 - 1957 equipped 4-CEP, 421/2 - 1957 equipped 4-BEP Revised classification BR design 4-CIG 7301-7438. Built 1964-70 421/1 - Original phase 1 sets fitted with electric parking brake 421/2 - Production sets with manual parking brake 421/3 - Refurbished phase 1 electric park brake sets 421/4 - Refurbished phase 2 manual park brake sets 421/5 - Refurbished sets with 'Greyhound' speed equipment 421/7 - 3-car 3-COP units for Brighton-Portsmouth 'Coastway' use 421/8 - Refurbished sets with 'Greyhound' speed equipment, former 422s with 411TS vice TRBS
Class 422	Original 1972 classification - 422/1 - MLV, 422/2 - TLV Revised classification 4-BIG units from 1988 422/0 - 8 DIG units for London-Brighton service (formed of one class 421 and one class 422/0) 422/2 - 4 BIG refurbished phase 2 422/3 - 4 BIG facelifted phase 1 or 2 (Mk6 PBs)
Class 423	Original 1972 classification BR design EPB units Revised classification BR design 4-VEP 7701-7894. Built 1967-73 423/0 - Original units 423/1 - Refurbished sets 423/2 - Modified 423/1s with all standard seating (open) for 'South London Metro' 423/4 - Original classification for refurbished sets, changed to 423/1
Class 424	Original 1972 classification - 1957 equipped 2-HAP units Revised classification - Used for trial rebuilding of 'Networker Classic' from frames of 1963 stock
Class 425	Not issued
Class 426	Not issued
Class 427	Modified 4-VEP stock with extra luggage space 4-VEG for use on Victoria-Gatwick service
Class 428	Not issued
Class 429	Not issued
Class 430	SR 4-REP units 3001-3015. Built 1966-72 - classification until 1983
Class 431	Original 1972 classification 431/1 production 4-CIG units, 431/2 production 4-BIG units
Class 432	Original 1972 classification 4 VEP and 8 VAB units Revised classification BR 4-REP units 3001-3015, reclassified from class 430 in 1983
Class 433	Not issued
Class 434	Not issued

Class 435	Not issued
Class 436	Not issued
Class 437	Not issued
Class 438	Amended classification of 4-TC sets (42)8001-(42)8034
Class 439	Not issued
Class 440	Not issued
Class 441	Original 1972 classification REP units
Class 442	Original 1972 classification TC stock 442/1 - 3TC, 442/2 - 4-TC Revised classification 'Wessex Electric 5-WES units, Built 1988-1989, 2401-2422
Class 443	Not issued
Class 444	Siemens 'Desiro 5-car 23m vehicle main line sets for SWT Built 2002-05, 444001-444045
Class 445	BR 4-PEP prototype suburban unit 4001-4002. Built 1971
Class 446	BR 2-PEP prototype suburban unit 2001. Built 1972
Class 447	Classification allocated to 'Battersea Bullet' EMUs - cancelled
Class 448	Not issued
Class 449	Not issued
Class 450	Siemens 'Desiro' outer-suburban 20m vehicle sets. Built 2003-03 450001-450110 - 17 extra units on order 450/2 Allocated to 32 5-car 20m vehicle 'Desiro' EMUs for SWT- cancelled
Class 451	Original 1972 classification for 3-TIS units
Class 452	Original 1972 classification for 4-VEC units
Class 453	Original 1972 classification for Waterloo & City stock
Class 454	Not issued
Class 455	BR/SR replacement suburban stock. Built 1982-85 455/7 - Phase 2 units 455/8 - Phase 1 units 455/9 - Phase 3 units
Class 456	BR/SR replacement suburban stock two-car units. Built 1990-91 456001-456024
Class 457	Used for modified class 455 and 210 stock when used for dc 'Networker' traction development work
Class 458	Alstom 'Juniper' sets for SWT - (45)8001-(45)8030 Built 1998-2000
Class 459	Not issued
Class 460	Alstom 'Juniper' 8-car sets for Gatwick Express 460001-460008
Class 461	Original 1972 classification for 2-PEP
Class 462	Original 1972 classification for 4-PEP
Class 463	Not issued
Class 464	Not issued
Class 465	BREL/Met-Cam/ 'Networker' units, replacement stock for Kent Link Built 1991-94 465/0 - BREL/ABB phase 1 sets 465001-465050 465/1 - ABB phase 2 sets 465151-465197 465/2 - Metro Cammell (GEC) phase 1 sets 465201-465250 465/3 - Originally allocated to 'Networker Express' project - changed to 365/5 465/9 - Refurbished 465/2s with low-density interiors and first class 465906-465932
Class 466	Met Cam 'Networker' two-car sets for Kent Link Built 1993-94 466001-466043
Class 467	Not issued
Class 468	Not issued
Class 469	Not issued
Class 470	Not issued
Class 471	Allocated to Kent Coast main Line 'Networker' units (800 vehicles as main line version of 465) - cancelled
Class 472	Not issued
Class 473	Not issued
Class 474	Not issued
Class 475	Not issued
Class 476	Not issued
Class 477	Not issued
Class 478	Not issued
Class 479	Not issued
Class 480	8-car 8-VAB unit. 8001, modified from VEP stock plus loco hauled buffet
Class 481	Not issued
Class 482	Temp allocation given to reformed 8-MIG units (CIG with Buff) 2601, 2602 Replacement Waterloo & City line stock, built as part of LUL Central line order. Built 1993 Class number now withdrawn - Stock sold to LUL 482501-482510
Class 483	Replacement Isle of Wight stock. Rebuilt 1989-90 from ex LUL stock 001-009
Class 484	Not issued
Class 485	Isle of Wight 4-VEC units. Intro 1967 041-046
Class 486	Isle of Wight 3-TIS units. Intro 1967 031-035

Class 487	Waterloo & City 1940 stock. Motors 51-62, Trailers 71-86
Class 488	Gatwick Express modified loco hauled passenger stock 1983-84 488/2 - two-car sets 8201 fleet 488/3 - three car sets 8301 fleet
Class 489	Gatwick Express driving vans, rebuilt from class 414 stock in 1983-84. 68500-09, set Nos. 9101-9110
Class 490	Not issued
Class 491	BR 4-TC sets 401-434. Rebuilt 1966/72
Class 492	BR 3-TC units 301-303, rebuilt 1966 from loco hauled stock 492/8 - used by temp formation of 5 TCB sets for Bournemouth line 280x series
Class 493	Not issued
Class 494	Not issued
Class 495	Not issued
Class 496	Not issued
Class 497	Not issued
Class 498	Not issued
Class 499	Rebuilt loco-hauled BGs as trailer vehicles for MLV. Classified TLV. Nos. 68201-206. Most returned to loco-hauled stock
Class 500	Not issued
Class 501	3-car LM sets for North London line. Built 1957. Car Nos. M61135-88, M70135-88, M75135-88
Class 502	3-car LM sets for Liverpool-Southport line. Built 1939. Car Nos. M28311-66, M29545-98, M29862-96
Class 503	3-car LM sets for Wirral and Mersey lines. Built 1938-56. Car Nos. M28371-94/672-90, M29702-20/29821-846, M29131-156/271-289
Class 504	2-car LM sets for Manchester-Bury line. Built 1959. Car Nos. M65436-460, M77157-82
Class 505	Not issued
Class 506	3-car LM sets for Manchester-Hadfield line. Built 1954 Car Nos. M59401-08, M59501-08, M59601-08
Class 507	BR/BREL Merseyrail 3-car units. Built 1978-80. 507001-507033
Class 508	BR/BREL Four-car suburban units built 1979-80 for SR, 508001-508043. transferred to Merseyrail as three car sets, some later returned to Connex (Southeastern) and Silverlink 508/0 - As delivered - 508001 - 508043 508/1 - Merseyrail sets - 508103 - 508143 508/2 - Southeastern sets 508201 - 508212 508/3 - Silverlink sets - 508301 - 508303
Class 509	Not issued
Class 510	Originally allocated to SR suburban replacement stock - changed to class 455



**Above: Based on the Mk1 coach design, the Class 423 4VEP electric multiple units were allocated to all three of the Southern Region operating divisions. Here South West-allocated No. 7847 departs from West Byfleet on 8 April 1980 forming a semi-fast Guildford-Waterloo via Woking service. Colin J. Marsden**