

Overview

The following overview explains the meaning of the individual positions of the Article No. The selection tables in Parts 2, 3 and 4 include the motors available as standard from this range.

Structure of the Article No., shaft heights 450 mm to 560 mm		Position:	1	2	3	4	5	6	7	-	8	9	10	11	12	-	Z		
1st to 3rd position: Motor version	Standard version	Degree of protection/cooling																	
			IEC	NEMA															
		Open-circuit ventilated	IP23/IC01	–	1	R	A												
		Open-circuit ventilated	IP24W/IC01	WP11	1	R	P												
		Air/air cooling	IP55/IC611 or IC616	TEAAC	1	R	Q												
		Air/water cooling	IP55/IC81W or IC86W	TEWAC	1	R	N												
		Ex ec version																	
		Air/air cooling	IP55/IC611 or IC616	–	1	S	G												
		Air/water cooling	IP55/IC81W or IC86W	–	1	S	L												
		Ex pxb version																	
		Air/air cooling	IP55/IC611 or IC616	–	1	S	B												
		Air/water cooling	IP55/IC81W or IC86W	–	1	S	Q												
		4th position: Motor version	SIMOTICS HV M						6										
5th to 6th position: Shaft height	• 450 mm						4	5											
	• 500 mm						5	0											
	• 560 mm						5	6											
7th position: Laminated core length	The laminated core length is coded in digits 0 to 9 (without fixed assignment)																		
8th position: Pole number	• 2-pole											2							
	• 4-pole											4							
	• 6-pole											6							
	• 8-pole											8							
	• 10-pole											3							
	• 12-pole											5							
	• Other pole numbers											Additional text data required		9					
9th position: Cooling method for:	IEC version:		Cooling method:																
	• With shaft-mounted fan (basic version) or shaft-mounted fan for the inner and separately-driven fan for the outer cooling circuit		IC01/IC81W										H						
			IC616										H						
	• With shaft-mounted fan for the inner and outer cooling circuits		IC611										J						
	• With separately-driven fan for the inner or for the inner and outer cooling circuits		IC86W/IC666										F						

Introduction

SIMOTICS HV M

Article number code · SIMOTICS HV M in shaft heights 450, 500, 560

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Overview (continued)

Structure of the Article No.:	Position:	1	2	3	4	5	6	7	-	8	9	10	11	12	-	Z	
10th position: Rotor version or drive converter type	Line operation																
	• Standard rotor with E-Cu	power-dependent											J				
	• Standard rotor with E-Cu	power-dependent											K				
	• Standard rotor with E-Cu	power-dependent											L				
	• Standard rotor with CuSi	power-dependent											M				
	• Standard rotor with CuSi	power-dependent											N				
	Converter operation																
	• LV drive converter; copper rotor	SINAMICS G/ SINAMCIS S											P				
	• LV drive converter; copper rotor	other converters											Q				
	• MV drive converter; copper rotor	SINAMICS GM/SINAMICS SM											S				
	• MV drive converter; copper rotor	SINAMICS PERFECT HARMONY GH150/GH180											T				
	• MV drive converter; copper rotor	other converters											U				
	Special rotor																
	• With E-Cu												X				
• With CuSi												Y					
11th position: Voltage code	Line operation (1R.6)																
	3.3 kV, 50 Hz	690 V, 50 Hz											0				
	6.6 kV, 60 Hz	690 V, 60 Hz											1				
	13.2 kV, 60 Hz	2,3 kV, 50 Hz											2				
	4.16 kV, 60 Hz	4,16 kV, 60 Hz											3				
	4.0 kV, 60 Hz	4,16 kV, 50 Hz											4				
	2.3 kV, 60 Hz	3,3 kV, 50 Hz											5				
	6.0 kV, 50 Hz	6,0 kV, 50 Hz											6				
	6.6 kV, 50 Hz	6,6 k V, 50 Hz											7				
	10 kV, 50 Hz	6,6 kV, 60 Hz											8				
Other voltage/frequency	Additional text data required										9						
12th position: Type of construction	• IM B3												0				
	• IM V1 with protective hood												4				
	• IM V1 without protective hood												8				
Z position	Options: Additional order code required. Refer to section Options and tests in Chapter 4.																

Overview

The following overview explains the meaning of the individual positions of the Article No. The selection tables in Parts 2, 3 and 4 include the motors available as standard from this range.

Structure of the Article No., shaft heights 630 mm to 800 mm		Position:	1	2	3	4	5	6	7	-	8	9	10	11	12	-	13	14	15	16	Z		
1st to 3th position: Motor version, Ex- protection	Standard version	Ex-protection																					
	Basic design, open-circuit ventilated	non Ex	1	R	A																		
	Weather protected design, open-circuit ventilated	non Ex	1	R	P																		
	Air/air cooling	non Ex	1	R	Q																		
	Air/water cooling	non Ex	1	R	N																		
	Ex ec																						
	Air/air cooling	Ex ec	1	S	G																		
	Air/water cooling	Ex ec	1	S	L																		
	Ex pxb																						
	Air/air cooling	Ex pxb	1	S	B																		
	Air/water cooling	Ex pxb	1	S	Q																		
	Ex eb																						
Air/air cooling	Ex eb	1	S	J																			
Air/water cooling	Ex eb	1	S	N																			
4th position: Motor series	SIMOTICS HV M					7																	
5th to 6th position: Shaft height	• 630 mm						6	3															
	• 710 mm						7	1															
	• 800 mm						8	0															
7th position: Laminated core length	The laminated core length is coded in digits 0 to 9 (without fixed assignment)																						
8th position: Pole number	• 2-pole											2											
	• 4-pole											4											
	• 6-pole											6											
	• 8-pole											8											
	• 10-pole											3											
	• 12-pole											5											
	• Other pole numbers					Additional text data required								9									
9th position: Cooling method for:	Cooling method:																						
	• Open inner cooling air circuit					IC01																F	
	• Weather-protected design, open circuit					WP11																H	
	• Air/air cooling					TEAAC – IC611																	J
	• Air/air cooling with forced ventilation for outer air circuit					TEAAC – IC616																	K
	• Air/air cooling with forced ventilation for inner air circuit					TEAAC – IC661																	L
	• Air/air cooling with forced ventilation for inner and outer air circuit					TEAAC – IC666																	M
	• Air/water cooling					TEWAC – IC81W																	
• Air/water cooling with forced ventilation					TEWAC – IC86W																		P

Introduction

SIMOTICS HV M

Article number code · SIMOTICS HV M in shaft heights 630, 710, 800

Overview (continued)

Structure of the Article No.:	Position:	1	2	3	4	5	6	7	-	8	9	10	11	12	-	13	14	15	16	Z		
10th position: Motor for line operation or for converter operation	For line operation with	• High voltage motor										A										
		• Low voltage motor										B										
	For converter operation with	• SINAMICS G150										C										
		• SINAMICS S120										D										
		• SINAMICS S150										E										
		• SINAMICS G180										F										
		• SINAMICS GM150										R										
		• SINAMICS SM150										S										
		• SINAMICS GH180										T										
		• SINAMICS GH150										U										
• Other converters (additional text data)										Z												
11th position: Voltage code	Line operation	Operation with MV drive converter		Line/converter operation							0											
		3.3 kV, 50 Hz		7.2 kV, 50 Hz		690 V, 60 Hz							1									
	6.6 kV, 60 Hz		11 kV, 50 Hz		690 V, 50 Hz							2										
	13.2 kV, 60 Hz		2.3 kV, 50 Hz		–							3										
	4.16 kV, 60 Hz		4.16 kV, 60 Hz		–							4										
	4 kV, 60 Hz		4.16 kV, 50 Hz		400 V							5										
	2.3 kV, 60 Hz		3.3 kV, 50 Hz		500 V							6										
	6.0 kV, 50 Hz		6 kV, 50 Hz		–							7										
	6.6 kV, 50 Hz		6.6 kV, 50 Hz		660 V							8										
	10 kV, 50 Hz		6.6 kV, 60 Hz		–							9										
Other voltages/frequency		Additional text data required							9													
12th position: Type of construction	• IM B3 (IM 1001)										0											
	• IM V1, without protective hood (IM 3011)										8											
	• Other mounting types										9											
13th position: Temperature class (for explosion protection)	• Without temperature class										0											
	• Temperature class T2										2											
	• Temperature class T3										3											
	• Temperature class T4										4											
14th position: Rotor version	• Standard rotor – E-Cu										C											
	• Special rotor – E-Cu										D											
	• Standard rotor – CuSi										E											
	• Special rotor – CuSi										F											
	• Special rotor – with other material type										G											
15th position: Housing and bearing version	• Steel fabricated housing / anti-friction bearings										G											
	• Steel fabricated housing / sleeve bearing										J											
16th position: Category	• Standard series										0											
Z position:	Options: Additional order code required. Refer to section Options and tests in Chapter 5.																			Z		