2.5 Selection based on the article number

The article number comprises a combination of digits and letters. It is divided into three hyphenated blocks.

Possible combinations are contained in Catalog D 21.4 (https://support.industry.siemens.com/cs/document/109747019/). Note that not every theoretical combination is available.

Description			Position of the article number																			
			1	2	3	4	5	6	7	-	8	9	10	11	12	-	13	14	15	16	-	Z
SIMOTICS S-1FT7 synchronous built-in motors			1	F	D	7																
Frame size / shaft height			SH 36				0	3														
			SH 48				0	4														
			SH 63				0	6														
			SH 80				0	8														
			SH 100				1	0														
			SH 132				1	3														
Overall length									2													
									4													
									5													
									6													
									7													
									8													
Feature	Core type										1											
	Compact										5											
	High Dynamic										7											
	Special version										9											
Cooling	Natural cooling											A										
	Water cooling											W										
	Forced ventilation											S										
Rated speeds	(380 V ... 480 V 3 AC)	1500 rpm											B									
		2000 rpm											C									
		3000 rpm											F									
		4500 rpm											H									
		6000 rpm											K									
		Special version											Z									
DC-link voltage (600 V ... 720 V)														7								
Flange-mounted version	compact (recessed)	With DRIVE-CLiQ interface													0							
		Without DRIVE-CLiQ interface													5							
	classic (compatible with 1FT6/1FK7) [1]	With DRIVE-CLiQ interface													1							
		Without DRIVE-CLiQ interface													4							

Description				Position of the article number																						
				1	2	3	4	5	6	7	-	8	9	10	11	12	-	13	14	15	16	-	Z
Connector outlet direction				Connector size M23 and M40				Rotatable connector										1					
				Connector size M58 [2]				Transverse right										1					
								Transverse left										2					
								Axial NDE										3					
								Axial DE										4					
Terminal box / cable entry				Top				Transverse from the right										5					
								Transverse from the left										6					
								Axial from the NDE										7					
								Axial from the DE										8					
Encoder	With DRIVE-CLiQ	IC22DQ						RJ45 signal connection											D				
		AM22DQ						RJ45 signal connection											F				
		AS24DQI						RJ45 signal connection											B				
								M17 signal connection											K				
		AM24DQI						RJ45 signal connection											C				
								M17 signal connection											L				
	Without DRIVE-CLiQ	IC2048S/R						M23 signal connection											N				
		AM2048S/R						M23 signal connection											M				
Shaft extension	Feather key and keyway			**Shaft and flange accuracy**				Tolerance N							**Holding brake**			None	A				
																		With	B				
								Tolerance R										None	D				
																		With	E				
	Plain shaft							Tolerance N										None	G				
																		With	H				
								Tolerance R										None	K				
																		With	L				
Vibration severity grade		Grade A		**Degree of protection** [3]				IP64													0		
								IP65													1		
								IP67													2		
		Grade R						IP64													3		
								IP65													4		
								IP67													5		
Options [4]				**Planetary gearbox mounting**																			J□□
				Reinforced bearing																			K20
				Version for increased vibration loads																			L03
				Version for increased shock loads [5]																			L06
				Alternative shaft geometry																			N05
				Increased chemical resistance																			N16
				Brake with low moment of inertia																			N27
				Stainless steel shaft and coating for increased chemical resistance																			N40
				Factory certificate																			B02

Description	Position of the article number																		
	1	2	3	4	5	6	7	-	8	9	10	11	12	-	13	14	15	16	- Z
	Sealing air connection																		Q12
	Encoder sealing																		Q13
	Connector outlet directions for fixed ventilation connectors with 1FT7117 force-ventilated																		Q41...Q44
	Customer data on the rating plate																		Y84
	Special paint finish for environmental conditions according to climate group 3K4, primer and paint finish in anthracite gray, RAL 7016																		K23
	Special paint finish for environmental conditions according to climate group 3K4, primer and additional paint finish																		K23+ X..
	Primed (unpainted)																		K24
	Paint finish [6]								jet black, matt						RAL 9005				X01
									cream						RAL 9001				X02
									reseda green						RAL 6011				X03
									pebble grey						RAL 7032				X04
									sky blue						RAL 5015				X05
									light ivory						RAL 1015				X06
									white aluminum						RAL 9006				X08
									anthracite gray						RAL 7016				X09

1) Only up to shaft height 100
2) Connector size M58, cannot be rotated. A terminal box can only be selected as an alternative up to connector size M58.
3) For motors with forced ventilation IP54 or IP55
4) More detailed information is provided in Chapter "Special options (Page 80)" and in the associated Chapter "SIMOTICS Servomotors" in Catalog D 21.4 (https://support.industry.siemens.com/cs/document/109747019/)
5) Only for 1FT7117 motors
6) Additional colors can be found in Chapter "Special options (Page 80)" and in the associated Chapter "SIMOTICS Servomotors" in Catalog D 21.4 (https://support.industry.siemens.com/cs/document/109747019/)

2.6 Rating plate data (type plate)

The rating plate contains the technical specifications applicable to the motor. A second rating plate is provided loose with the motor when it is delivered.

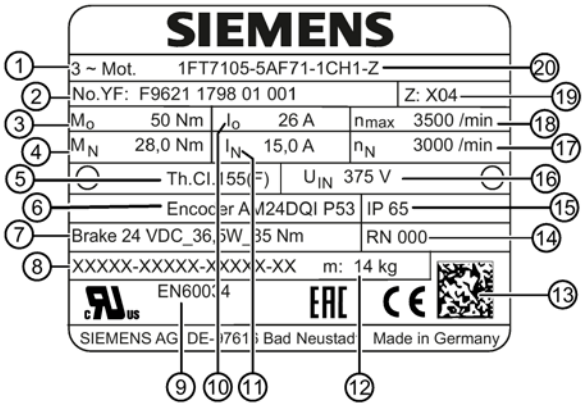


Figure 2-3 Rating plate 1FT7

Table 2- 5 Description of the rating plate data

Position	Description / Technical specifications
1	Motor type: Synchronous motors
2	ID No., serial number
3	Static torque M_0
4	Rated torque M_N
5	Temperature class
6	Code, encoder type
7	Holding brake data: Typical, voltage, power consumption
8	Field for customer data for the option Y84 (max. 20 characters, any distribution)
9	Standard according to which the motor is constructed
10	Stall current I_0
11	Rated current I_N
12	Motor weight m
13	2D code
14	Motor version
15	Degree of protection
16	Induced voltage at rated speed V_{IN}
17	Rated speed n_N
18	Maximum speed n_{max}
19	Options of the motor (up to 2 options can be represented, no marking for further options)
20	Motor type/order number