

SIMOTICS motors

Dimensional drawings

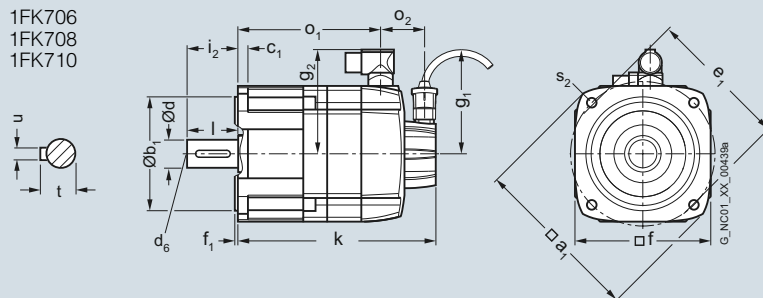
SIMOTICS S-1FK7 Compact synchronous motors with DRIVE-CLiQ – Natural cooling

Dimensional drawings

For motor		Dimensions in mm (inches)										Shaft extension DE			
Shaft height	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	i ₂ –	s ₂ S	d D	d ₆ –	l E	t GA	u F
1FK7 Compact, natural cooling, DQI encoder with DRIVE-CLiQ, with/without brake															
63	1FK706.-2A		155 (6.10)	110 (4.33)	10 (0.39)	130 (5.12)	126 (4.96)	3.5 (0.14)	50 (1.97)	9 (0.35)	24 (0.94)	M8	50 (1.97)	27 (1.06)	8 (0.31)
80	1FK708.-2A		194 (7.64)	130 (5.12)	11.5 (0.45)	165 (6.50)	155 (6.10)	3.5 (0.14)	58 (2.28)	11 (0.43)	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.39)
100	1FK710.-2A		245 (9.65)	180 (7.09)	13 (0.51)	215 (8.46)	192 (7.56)	4 (0.16)	80 (3.15)	14 (0.55)	38 (1.50)	M12	80 (3.15)	41 (1.61)	10 (0.39)

Shaft height	Type	DIN IEC	DQI encoder with DRIVE-CLiQ						g ₁ –	g ₂ –
			Without brake			With brake				
			o ₂ –	k LB	o ₁ –	k LB	o ₁ –			
63	1FK7060-2A		50 (1.97)	168 (6.61)	106 (4.17)	203 (7.99)	141 (5.55)	104.5 (4.11)	104 (4.09)	
	1FK7062-2A		50 (1.97)	190 (7.48)	128 (5.04)	226 (8.90)	163 (6.42)	104.5 (4.11)	104 (4.09)	
	1FK7063-2A		50 (1.97)	213 (8.39)	151 (5.94)	248 (9.76)	186 (7.32)	104.5 (4.11)	104 (4.09)	
80	1FK7080-2A		48 (1.89)	171 (6.73)	111 (4.37)	223 (8.78)	163 (6.42)	104.5 (4.11)	119 (4.69)	
	1FK7081-2A		48 (1.89)	190 (7.48)	130 (5.12)	242 (9.53)	182 (7.17)	104.5 (4.11)	119 (4.69)	
	1FK7083-2A		48 (1.89)	209 (8.23)	149 (5.87)	261 (10.28)	201 (7.91)	104.5 (4.11)	119 (4.69)	
	1FK7084-2A		48 (1.89)	229 (9.02)	168 (6.61)	281 (11.06)	221 (8.70)	104.5 (4.11)	119 (4.69)	
100	1FK7100-2A		53 (2.09)	183 (7.20)	118 (4.65)	220 (8.66)	170 (6.69)	104.5 (4.11)	137 (5.39)	
	1FK7101-2A		53 (2.09)	209 (8.23)	144 (5.67)	261 (10.28)	196 (7.72)	104.5 (4.11)	158 (6.22)	
	1FK7103-2A		53 (2.09)	235 (9.25)	170 (6.69)	287 (11.30)	222 (8.74)	104.5 (4.11)	158 (6.22)	
	1FK7105-2A		53 (2.09)	287 (11.30)	222 (8.74)	339 (13.35)	274 (10.79)	104.5 (4.11)	158 (6.22)	

1FK706
1FK708
1FK710



SIMOTICS S-1FK7 High Inertia synchronous motors with DRIVE-CLiQ – Natural cooling
Dimensional drawings

For motor		Dimensions in mm (inches)										Shaft extension DE			
Shaft height	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	i ₂ –	s ₂ S	d D	d ₆ –	l E	t GA	u F
1FK7 High Inertia, natural cooling, DQI encoder with DRIVE-CLiQ, with/without brake															
48	1FK704.-3B 8G		120 (4.72)	80 (3.15)	10 (0.39)	100 (3.94)	96 (3.78)	3 (0.12)	40 (1.57)	6.5 (0.26)	19 (0.75)	M6	40 (1.57)	21.5 (0.85)	6 (0.24)
63	1FK706.-3B 8G		155 (6.10)	110 (4.33)	10 (0.39)	130 (5.12)	126 (4.96)	3.5 (0.14)	50 (1.97)	9 (0.35)	24 (0.94)	M8	50 (1.97)	27 (1.06)	8 (0.31)
80	1FK708.-3B		194 (7.64)	130 (5.12)	11.5 (0.45)	165 (6.50)	155 (6.10)	3.5 (0.14)	58 (2.28)	11 (0.43)	32 (1.26)	M12	58 (2.28)	35 (1.38)	10 (0.38)
100	1FK710.-3B		245 (9.65)	180 (7.09)	13 (0.51)	215 (8.46)	192 (7.56)	4 (0.16)	80 (3.15)	14 (0.55)	38 (1.50)	M12	80 (3.15)	41 (1.61)	10 (0.39)

Shaft height	Type	DIN IEC	DQI encoder with DRIVE-CLiQ						
			Without brake			With brake			
			o ₂ –	k LB	o ₁ –	k LB	o ₁ –	g ₁ –	g ₂ –
48	1FK7042-3B		50 (1.97)	187 (7.36)	125 (4.92)	219 (8.62)	157 (6.18)	104.5 (4.11)	90 (3.54)
63	1FK7060-3B		50 (1.97)	182 (7.17)	120 (4.72)	217 (8.54)	155 (6.10)	104.5 (4.11)	104 (4.09)
	1FK7062-3B		50 (1.97)	216 (8.50)	153 (6.02)	251 (9.88)	189 (7.44)	104.5 (4.11)	104 (4.09)
80	1FK7081-3B		48 (1.89)	211 (8.31)	151 (5.94)	264 (10.39)	203 (7.99)	104.5 (4.11)	119 (4.69)
	1FK7084-3B		48 (1.89)	270 (10.63)	209 (8.23)	322 (12.68)	262 (10.31)	104.5 (4.11)	119 (4.69)
100	1FK7100-3B		104.5 (4.11)	137 (5.39)	53 (2.09)	183 (7.20)	118 (4.65)	220 (8.66)	170 (6.69)
	1FK7101-3B		104.5 (4.11)	158 (6.22)	53 (2.09)	209 (8.23)	144 (5.67)	261 (10.28)	196 (7.72)
	1FK7103-3B		104.5 (4.11)	158 (6.22)	53 (2.09)	235 (9.25)	170 (6.69)	287 (11.30)	222 (8.74)
	1FK7105-3B		104.5 (4.11)	158 (6.22)	53 (2.09)	287 (11.30)	222 (8.74)	339 (13.35)	274 (10.79)

 1FK704
 1FK706
 1FK708
 1FK710
