

Special Specifications

Electromagnetic brake specifications

Motor model HC-		KFS, MFS				MFS	SFS 1000 r/min			
		053B	13B	23B	43B	73B	81B	121B	201B	301B
Type		Spring-action safety brake					Spring-action safety brake			
Rated voltage		DC24V _{-10%}					DC24V _{-10%}			
Static friction torque	(N-m)	0.32	0.32	1.3	1.3	2.4	8.3	43.1	43.1	43.1
	(oz-in)	45.3	45.3	184	184	340	1176	6103	6103	6103
Rated current (A) at 20°C		0.26	0.26	0.33	0.33	0.42	0.8	1.4	1.4	1.4
Coil resistance (Ω) at 20°C		91	91	73	73	57	29	16.8	16.8	16.8
Power consumption (W) at 20°C		6.3	6.3	7.9	7.9	10	19	34	34	34
Permissible braking work	(J)/time	5.6	5.6	22	22	64	400	4500	4500	4500
	(J)/hour	56	56	220	220	640	4000	45000	45000	45000
Brake life (Note 1) (Braking work per braking action)		20000 (4J)	20000 (4J)	20000 (15J)	20000 (15J)	20000 (32J)	20000 (200J)	20000 (1000J)	20000 (1000J)	20000 (1000J)

Motor model HC-		SFS 2000 r/min							
		52B	102B	152B	202B	352B	502B (Note 3)	702B (Note 3)	
Type		Spring-action safety brake							
Rated voltage		DC24V _{-10%}							
Static friction torque	(N-m)	8.3	8.3	8.3	43.1	43.1	43.1	43.1	
	(oz-in)	1176	1176	1176	6103	6103	6103	6103	
Rated current (A) at 20°C		0.8	0.8	0.8	1.4	1.4	1.4	1.4	
Coil resistance (Ω) at 20°C		29	29	29	16.8	16.8	16.8	16.8	
Power consumption (W) at 20°C		19	19	19	34	34	34	34	
Permissible braking work	(J)/time	400	400	400	4500	4500	4500	4500	
	(J)/hour	4000	4000	4000	45000	45000	45000	45000	
Brake life (Note 1) (Braking work per braking action)		20000 (200J)	20000 (200J)	20000 (200J)	20000 (1000J)	20000 (1000J)	20000 (1000J)	20000 (1000J)	

Motor model HC-		SFS 3000 r/min					RFS				
		53B	103B	153B	203B	353B	103B	153B	203B	353B (Note 3)	503B (Note 3)
Type		Spring-action safety brake					Spring-action safety brake				
Rated voltage		DC24V _{-10%}					DC24V _{-10%}				
Static friction torque	(N-m)	8.3	8.3	8.3	43.1	43.1	6.8	6.8	6.8	16.7	16.7
	(oz-in)	1176	1176	1176	6103	6103	964	964	964	2365	2365
Rated current (A) at 20°C		0.8	0.8	0.8	1.4	1.4	0.8	0.8	0.8	0.96	0.96
Coil resistance (Ω) at 20°C		29	29	29	16.8	16.8	30	30	30	25	25
Power consumption (W) at 20°C		19	19	19	34	34	19	19	19	23	23
Permissible braking work	(J)/time	400	400	400	4500	4500	400	400	400	400	400
	(J)/hour	4000	4000	4000	45000	45000	4000	4000	4000	4000	4000
Brake life (Note 1) (Braking work per braking action)		20000 (200J)	20000 (200J)	20000 (200J)	20000 (1000J)	20000 (1000J)	20000 (200J)	20000 (200J)	20000 (200J)	20000 (200J)	20000 (200J)

Motor model HC-		UFS 2000 r/min					UFS 3000 r/min			
		72B	152B	202B	352B (Note 3)	502B (Note 3)	13B	23B	43B	73B
Type		Spring-action safety brake					Spring-action safety brake			
Rated voltage		DC24V _{-10%}					DC24V _{-10%}			
Static friction torque	(N-m)	8.3	8.3	43.1	43.1	43.1	0.32	1.3	1.3	2.4
	(oz-in)	1176	1176	6103	6103	6103	45.3	184	184	340
Rated current (A) at 20°C		0.8	0.8	1.4	1.4	1.4	0.26	0.33	0.33	0.42
Coil resistance (Ω) at 20°C		29	29	16.8	16.8	16.8	91	73	73	57
Power consumption (W) at 20°C		19	19	34	34	34	6.3	7.9	7.9	10
Permissible braking work	(J)/time	400	400	4500	4500	4500	5.6	22	22	64
	(J)/hour	4000	4000	45000	45000	45000	56	220	220	640
Brake life (Note 1) (Braking work per braking action)		20000 (200J)	20000 (200J)	20000 (1000J)	20000 (1000J)	20000 (1000J)	20000 (4J)	20000 (15J)	20000 (15J)	20000 (32J)

Notes:

1. The brake gap cannot be adjusted, so the brake life is the time until readjustment by braking needed.
2. The electromagnetic brake is for holding. It cannot be used for braking applications.
3. Consult Mitsubishi for availability.

Special Specifications

Special shaft end specifications

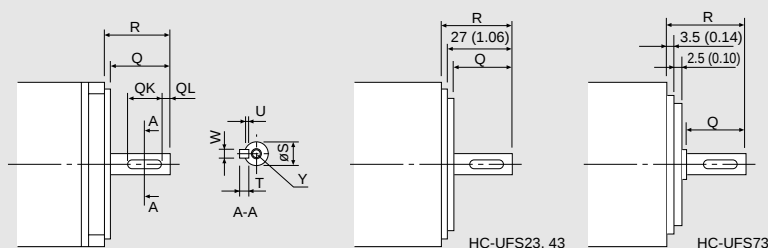
Motors with the following modifications are available.

HC-KFS, HC-MFS, HC-UFS 3000r/min series

● With key (200, 400, 750W) Variable dimension table

Motor series	Capacity (W)	Variable dimensions								Y
		T	S	R	Q	W	QK	QL	U	
HC-KFS HC-MFS	200, 400	5 (0.197)	14h6 (0.5512 ⁰ _{-0.0004})	30 (1.18)	27 (1.06)	5 (0.197)	20 (0.79)	3 (0.12)	3 (0.12)	M4 screw Depth: 15mm (0.591 inch)
	750	6 (0.236)	19h6 (0.7480 ⁰ _{-0.0005})	40 (1.57)	37 (1.46)	6 (0.236)	25 (0.98)	5 (0.20)	3.5 (0.14)	M5 screw Depth: 20mm (0.787 inch)
HC-UFS	200, 400	5 (0.197)	14h6 (0.5512 ⁰ _{-0.0004})	30 (1.18)	23.5 (0.93)	5 (0.197)	20 (0.79)	3 (0.12)	3 (0.12)	M4 screw Depth: 15mm (0.591 inch)
	750	6 (0.236)	19h6 (0.7480 ⁰ _{-0.0005})	40 (1.57)	32.5 (1.28)	6 (0.236)	25 (0.98)	5 (0.20)	3.5 (0.14)	M5 screw Depth: 20mm (0.787 inch)

(Note 1)

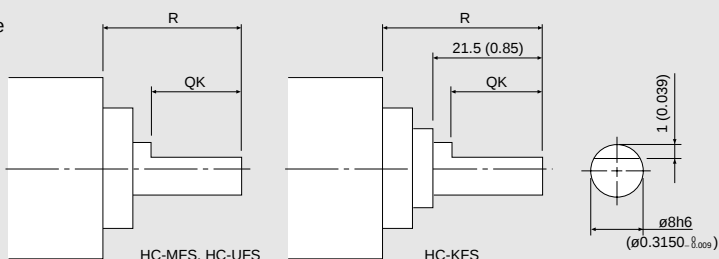


Unit: mm (inch)

● D-cut (50, 100W) Variable dimension table

Motor series	Capacity (W)	Variable dimensions	
		R	QK
HC-MF HC-MFS	50, 100	25 (0.98)	20.5 (0.81)
HC-UFS	100	25 (0.98)	17.5 (0.69)

(Note 1)



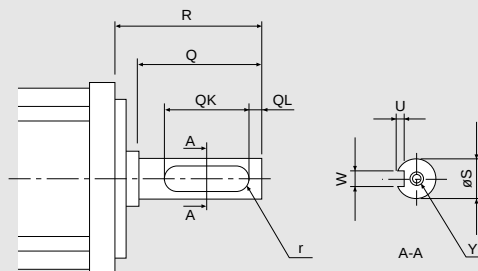
Unit: mm (inch)

HC-SFS, HC-RFS, HC-UFS 2000r/min series

● Key way Variable dimension table

Motor series	Capacity (kW)	Variable dimensions								Y
		S	R	Q	W	QK	QL	U	r	
HC-SFS (Note 3)	0.5~1.5	24h6 (0.9449 ⁰ _{-0.0005})	55 (2.17)	50 (1.97)	8 ⁰ _{-0.036} (0.315 ⁰ _{-0.001})	36 (1.42)	5 (0.20)	4 ^{+0.2} ₀ (0.16 ^{+0.008} ₀)	4 (0.16)	M8 screw Depth: 20mm (0.787 inch)
	2.0~7.0	35 ^{+0.01} ₀ (1.3780)	79 (3.11)	75 (2.95)	10 ⁰ _{-0.036} (0.394 ⁰ _{-0.001})	55 (2.17)	5 (0.20)	5 ^{+0.2} ₀ (0.20 ^{+0.008} ₀)	5 (0.20)	
HC-RFS	1.0, 1.5, 2.0	24h6 (0.9449 ⁰ _{-0.0005})	45 (1.77)	40 (1.57)	8 ⁰ _{-0.036} (0.315 ⁰ _{-0.001})	25 (0.98)	5 (0.20)	4 ^{+0.2} ₀ (0.16 ^{+0.008} ₀)	4 (0.16)	
	3.5, 5.0	28h6 (1.1024 ⁰ _{-0.0005})	63 (2.48)	58 (2.28)	8 ⁰ _{-0.036} (0.315 ⁰ _{-0.001})	45 (1.77)	5 (0.20)	4 ^{+0.2} ₀ (0.16 ^{+0.008} ₀)	4 (0.16)	
HC-UFS	0.75	22h6 (0.8661 ⁰ _{-0.0005})	55 (2.17)	50 (1.97)	6 ⁰ _{-0.036} (0.236 ⁰ _{-0.001})	42 (1.65)	3 (0.12)	3.5 ^{+0.2} ₀ (0.14 ^{+0.008} ₀)	3 (0.12)	
	1.5	28h6 (1.1024 ⁰ _{-0.0005})	55 (2.17)	50 (1.97)	8 ⁰ _{-0.036} (0.315 ⁰ _{-0.001})	45 (1.77)	5 (0.20)	4 ^{+0.2} ₀ (0.16 ^{+0.008} ₀)	4 (0.16)	
	2.0, 3.5, 5.0	35 ^{+0.01} ₀ (1.3780)	65 (2.56)	60 (2.36)	10 ⁰ _{-0.030} (0.394 ⁰ _{-0.001})	50 (1.97)	5 (0.20)	5 ^{+0.2} ₀ (0.20 ^{+0.008} ₀)	5 (0.20)	

(Note 1, 2)



Unit: mm (inch)

Notes:

1. Cannot be used in applications that involve high frequency. Loose keys may damage motor shaft – voiding motor warranty.
2. Keys are not installed. Keys are installed by the purchaser.
3. The HC-SFS121 is the same as the lower row (2.0-7.0kW).