

General specifications

	103H35 □□	103H55 □□	103H650 □	103H752 □	103H785 □	103H858 □	103H8958 □	103-45 □□	103-7556
Insulation class	Class B (130°C)								
Insulation resistance	Not less than 100M Ω between winding and frame by DC500V megger at normal temperature and humidity.								
Withstand voltage	Without abnormality when applying 50/60Hz,1000V AC (500V AC for 103H35 □□ and 103H55 □□) for 1 minute (leakage current 1mA) between winding and frame at normal temperature and humidity.					Without abnormality when applying 50/60Hz,1000V AC (500V AC for 103-45 □□) for 1 minute (leakage current 1mA) between winding and frame at normal temperature and humidity.			
Operating environment	Ambient temperature -10°C to +50°C								
	Ambient humidity 20% to 90%								
Wiring temperature increase	80K MAX. (based on Sanyo Denki standard)								
Standing angle error	± 0.09°	± 0.09°	± 0.09°	± 0.09°	± 0.09°	± 0.09°	± 0.09°	± 0.04°	± 0.09°
Axial play	0.075mm (0.002952inch)	0.075mm (0.002952inch)	0.075mm (0.002952inch)	0.075mm (0.002952inch)	0.075mm (0.002952inch)	0.075mm (0.002952inch)	0.075mm (0.002952inch)	0.075mm (0.002952inch)	0.075mm (0.002952inch)
	MAX., Load 4.4N (1lbs)	MAX., Load 4.4N (1lbs)	MAX., Load 9N (2lbs)	MAX., Load 9N (2lbs)	MAX., Load 9N (2lbs)	MAX., Load 9N (2lbs)	MAX., Load 9N (2lbs)	MAX., Load 4.4N (1lbs)	MAX., Load 9N (2lbs)
	Radial play (Note 1) 0.025mm (0.00098inch) MAX., Load 4.4N (1lbs)								
Shaft runout	0.025mm (0.00098inch)								
Inserted part concentricity against shaft	*0.05mm (0.00197inch)	*0.05mm (0.00197inch)	*0.075mm (0.00295inch)	*0.075mm (0.00295inch)	*0.075mm (0.00295inch)	*0.075mm (0.00295inch)	*0.075mm (0.00295inch)	*0.05mm (0.00197inch)	*0.075mm (0.00295inch)
Fitted surface angularity against shaft	0.1mm (0.00394inch)	0.1mm (0.00394inch)	0.075mm (0.00295inch)	0.075mm (0.00295inch)	0.075mm (0.00295inch)	0.075mm (0.00295inch)	0.075mm (0.00295inch)	0.075mm (0.00295inch)	0.075mm (0.00295inch)

(Note1) When load is applied at 1/3 length from output shaft edge.

General specifications (models to CE marking)

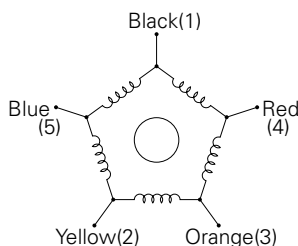
	103H752 □	103H858 □	103H8958 □
Rated voltage	DC12-200V	DC12-300V	
Applied standards (Low voltage directive)	EN60034-1, IEC34-5 (EN60034-5) , EN60204-1, EN60950, EN61010-1		
Specification type	S1 (continuous running duty type)		
Protection grade	IP43		
Protection class	Class I		
Operating environment	Pollution degree 2		
Insulation class	Class B (130°C)		
Insulation resistance	Not less than 100M Ω between winding and frame by DC500V megger at normal temperature and humidity.		
Withstand voltage	Without abnormality when applying 50/60Hz, 1600V AC (1500kV AC for 103H752 □) for 1 minute (leakage current 10mA) between winding and frame at normal temperature and humidity.		
Operating environment	Ambient temperature -10°C to +50°C		
Wiring temperature increase	80K MAX. (Based on Sanyo Denki standard)		
Standing angle error	± 0.09°	± 0.09°	± 0.09°
Axial play	0.075mm (0.002952inch) MAX., Load 9N (2lbs)		
Radial play (Note 1)	0.075mm (0.002952inch) MAX., Load 4.4N (1lbs)		
Shaft runout	0.025mm (0.00098inch)		
Inserted part concentricity against shaft	*0.075 mm (0.00295inch)	*0.075 mm (0.00295inch)	*0.075 mm (0.00295inch)
Fitted surface angularity against shaft	0.075 mm (0.00295inch)	0.075 mm (0.00295inch)	0.075 mm (0.00295inch)

(Note 1) When load is applied at 1/3 length from output shaft edge.

Internal wire connection and direction of motor rotate

Internal wire connection

Connector pin number in the parentheses



Direction of motor rotate

The direction of motor rotate is counterclockwise when viewed from the output shaft side at the direct current energization in the following order.

Type				Exciting order									
Color of leads	Black	Connector pin No.	(1)	1	2	3	4	5	6	7	8	9	10
	Red		(4)	—	—	—	—	—	+	+	+	+	—
	Orange		(3)	+	—	—	—	—	—	—	+	+	+
	Yellow		(2)	—	—	—	+	+	+	+	—	—	—
	Blue		(5)	+	+	+	—	—	—	—	—	—	+