

Hollow Shaft, Face Mount, Foot Mount Three-Phase/Single-Phase 90 W

Motor Specifications

Output	Number of phases	Number of poles	Frequency Hz	Voltage V 50/60/60Hz	Rated current A 50/60/60Hz	Rated revolution r/min 50/60/60Hz	Starting torque N·m(kgf·m) (Nominal torque ratio)	Protection	Cooling method	Rating	Insulation	Brake actuating method
90W	Three-phase	4	50/60/60	200/200/220	0.60/0.55/0.55	1313/1586/1622	1.13/0.87/1.01 {0.115/0.089/0.103} (172/161/191)	Totally enclosed (IP30)	Self-cooled (IC410)	Continuous	120 (E)	Non-excitation
	Single phase	4	50/60	100	1.73/1.60	1274/1614	0.40/0.40 {0.041/0.041} (59.6/75.5)					

Note: A single-phase motor uses the capacitor-start method. Connect and use the capacitor that is included with the product.

Specification Chart

Model number		Motor output	Actual reduction ratio	Number of reduction steps	Output shaft revolution r/min		Allowable output shaft torque				Allowable output shaft O.H.L.		Drawing number of outline dimensions			Moment of inertia
							N · m		{kgf · m}							N · m
					50Hz	60Hz	50Hz	60Hz	N	{kgf}	Hollow shaft	Face mount	Foot mount	{GD2 kgf · m ² }		
HMM T90	5	90 W	1/5	2	300	360	2.25	{0.23}	1.86	{0.19}	255	{ 26}	Three-phase non-brake 1	Three-phase non-brake 4	Three-phase non-brake 7	Three-phase non-brake 2.15×10 ⁻⁴ {8.61×10 ⁻⁴ }
	8		1/8		187.5	225	3.63	{0.37}	3.04	{0.31}	353	{ 36}				
	10		1/10		150	180	4.61	{0.47}	3.82	{0.39}	441	{ 45}				
	15		1/15		100	120	6.86	{0.70}	5.68	{0.58}	588	{ 60}				
	20		1/20		75	90	9.11	{0.93}	7.64	{0.78}	735	{ 75}				
	25		1/25		60	72	11.5	{1.17}	9.51	{0.97}	882	{ 90}				
HMM S90	30		1/30	50	60	13.7	{1.40}	11.5	{1.17}	980	{100}	Three-phase brake 2	Three-phase brake 5	Three-phase brake 8	Three-phase brake 2.18×10 ⁻⁴ {8.71×10 ⁻⁴ }	
	40		1/40	37.5	45	18.3	{1.87}	15.2	{1.55}	1080	{110}					
	50		1/50	30	36	22.8	{2.33}	19.0	{1.94}	1180	{120}					
	60		1/60	25	30	27.4	{2.80}	22.8	{2.33}	1180	{120}					
	80		1/80	18.8	22.5	34.7	{3.54}	28.9	{2.95}	1760	{180}					
	100		1/100	15	18	43.4	{4.43}	36.2	{3.69}	1760	{180}					
	120	1/120	12.5	15	52.1	{5.32}	43.4	{4.43}	1760	{180}						
	160	1/160	9.4	11.3	69.5	{7.09}	57.9	{5.91}	1760	{180}						
200	1/200	7.5	9	86.8	{8.86}	72.3	{7.38}	1760	{180}	Single-phase non-brake 3	Single-phase non-brake 6	Single-phase non-brake 9	Single-phase non-brake 1.93×10 ⁻⁴ {7.73×10 ⁻⁴ }			
240	1/240	6.2	7.5	104	{10.6}	86.8	{8.86}	1760	{180}							

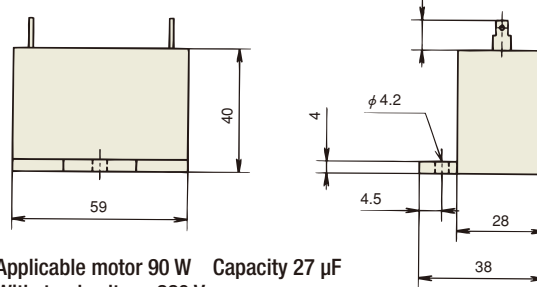
Note 1: The actual reduction ratio is shown as the reduction ratio.

(They are all integer ratios.)

Note 2: The output shaft revolution rate is calculated by dividing the synchronous motor revolution rate by the reduction ratio. Calculate the actual output revolution rate from the motor's rated revolution rate.

Note 3: For output shaft arrangement "T" where torque is applied to both shafts, the sum of both torques should be equal to or less than the value shown in the table above. In addition, the O.H.L. on one shaft should be equal to or less than 1/2 of the value shown in the table above.

Operation Capacitor for Single-Phase Motor



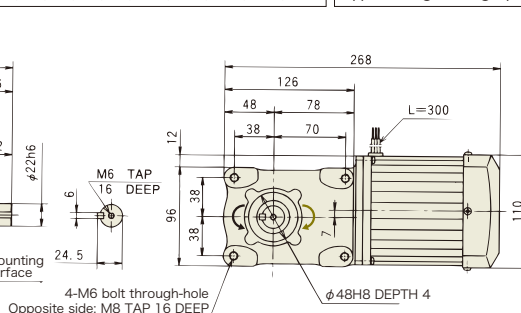
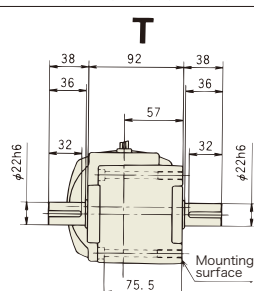
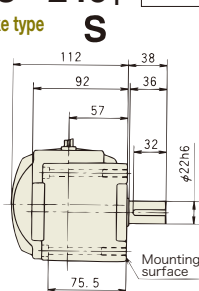
HMMS90U5 - 240S

Single-phase non-brake type

Reduction ratio : 5, 8, 10, 15, 20, 25, 30, 40, 50, 60, 80, 100, 120, 160, 200, 240

Approx. weight : Single-phase 6.5kg

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1/5-1/60
1/80-1/240