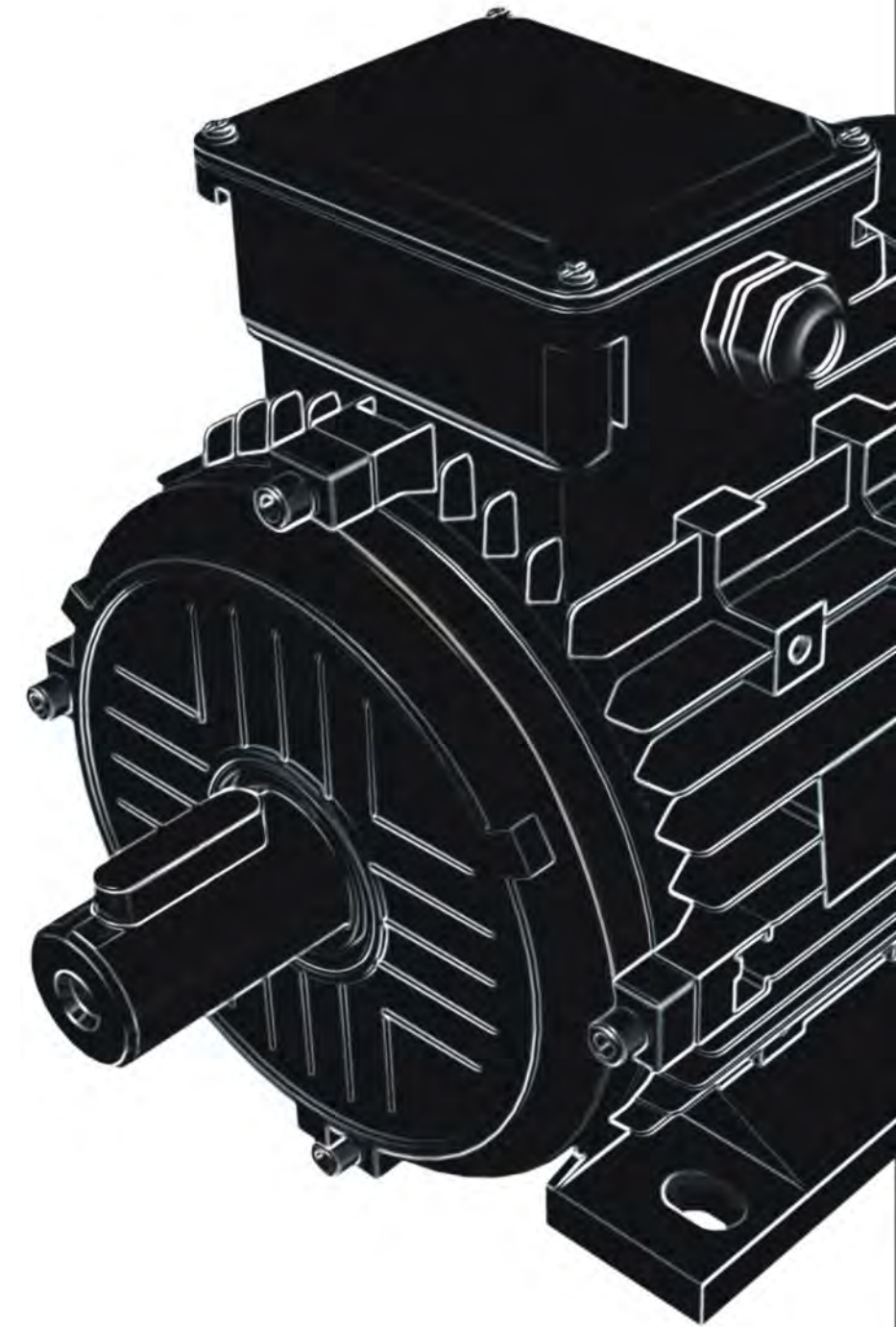


ATO

Three Phase Induction Motor Catalogue



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Y2 series three phase induction motor / asynchronous motor

Y2 series three phase asynchronous motor is a kind of totally enclosed fan-cooled (TEFC) squirrel-cage induction motor. The design of Y2 series induction motor absorbed the advanced technology of electric motors around the world. Y2 series 3-phase induction motors are characterized with high efficiency and energy saving, large starting torque, excellent performance, low noise and vibration, compact structure, high reliability, easy operation and so on.

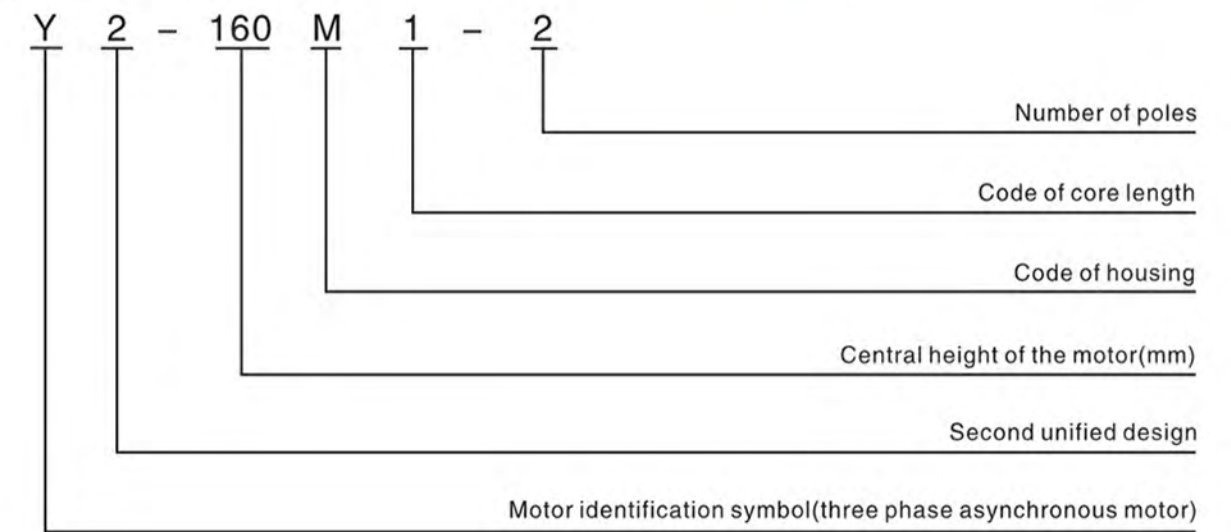
Y2 series three phase induction motors' dimensions and rated output are in conformity with international standard IEC 60072-1: 1991.

Y2 series 3 phase induction motors are widely used as drive mechanism in various kinds of machineries like machine tools, pumps, fans, compressors, gear boxes, etc., and can also be used in transportation, agricultural machinery, printing industry and food industry.



Designation

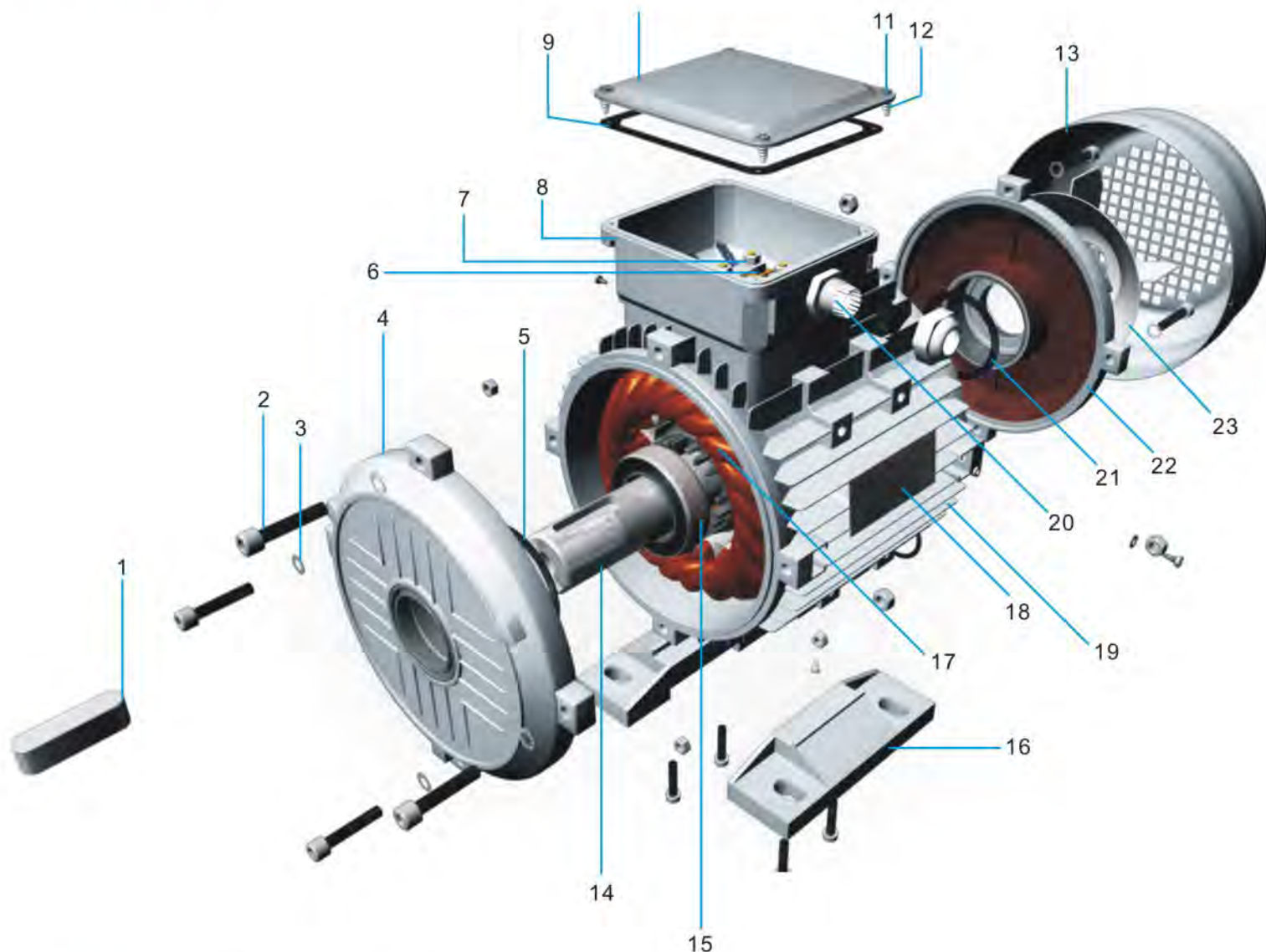
Explanation of induction motor type



Operating Conditions

Ambient Temperature: -15°C ~ +40°C
 Altitude: no more than 1000 meters
 Duty: Continuous (S1)
 Ingress Protection: IP54/IP55
 Insulation Class: Class F

Rated Voltage: 380V, 400V, 415V
 Rated Frequency: 50Hz, 60Hz
 Connection: Output ≤ 2.2hp (3kW), Y connection
 Output ≥ 3hp (4kW), Δ connection
 Cooling Method: IC411



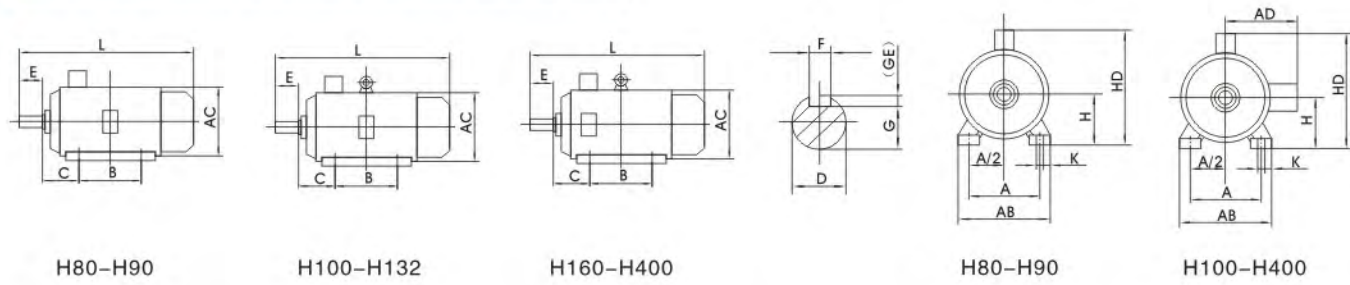
Induction Motor Construction

- | | | |
|----------------------|----------------------|---------------------|
| 1. Key | 9. Gasket | 17. Stator |
| 2. Bolt | 10. Terminal box lid | 18. Nameplate |
| 3. Spring washer | 11. Screw | 19. Housing |
| 4. Front end shield | 12. Washer | 20. Cable gland |
| 5. Wave washer | 13. Fan cover | 21. Wave washer |
| 6. Terminal board | 14. Rotor | 22. Rear end shield |
| 7. Brass lug | 15. Bearing | 23. Fan |
| 8. Terminal box base | 16. Feet | |

Technical Data - Y2 series induction motor - 2 poles - 50Hz

Type	Rated output		Full Load						Rated Torque (Tn)	Locked Rotor Torque	Max. Torque	Locked Rotor Current	Noise	Weight
			Speed	Input Current (Amp)			Efficiency	Power factor						
	KW	HP	RPM	380V	400V	415V	$\eta\%$	Cos ϕ	N.m	Tst/ Tn	Tmax/ Tn	Ist/ In	dB/ (A)	Kg
Y2-80M1-2	0.75	1.0	2825	1.83	1.74	1.68	75.0	0.83	2.54	2.2	2.3	6.1	67	15
Y2-80M2-2	1.1	1.5	2825	2.61	2.84	2.39	76.2	0.84	3.72	2.2	2.3	7.0	67	16.5
Y2-90S-2	1.5	2.0	2840	3.46	3.28	3.16	78.5	0.84	5.04	2.2	2.3	7.0	72	20
Y2-90L-2	2.2	3.0	2840	4.85	4.61	4.45	81.0	0.85	7.40	2.2	2.3	7.0	72	24
Y2-100L-2	3.0	4.0	2870	6.34	6.03	5.81	82.6	0.87	9.98	2.2	2.3	7.5	76	31
Y2-112M-2	4.0	5.5	2880	8.20	7.79	7.51	84.2	0.88	13.30	2.2	2.3	7.5	77	38
Y2-132S1-2	5.5	7.5	2900	11.1	10.5	10.1	85.7	0.88	18.10	2.2	2.3	7.5	80	58
Y2-132S2-2	7.5	10	2900	14.9	14.1	13.6	87.0	0.88	24.70	2.2	2.3	7.5	80	62
Y2-160M1-2	11	15	2930	21.2	20.2	19.5	88.4	0.89	35.90	2.2	2.3	7.5	86	103
Y2-160M2-2	15	20	2930	28.6	27.2	26.2	89.4	0.89	48.90	2.2	2.3	7.5	86	112
Y2-160L-2	18.5	25	2930	34.7	33.0	31.8	90.0	0.90	60.30	2.2	2.3	7.5	86	135
Y2-180M-2	22	30	2940	41.0	39.0	37.6	90.5	0.90	71.50	2.0	2.3	7.5	89	165
Y2-200L1-2	30	40	2950	55.4	52.6	50.7	91.4	0.90	97.10	2.0	2.3	7.5	92	215
Y2-200L2-2	37	50	2950	67.9	64.5	62.2	92.0	0.90	119.8	2.0	2.3	7.5	92	232
Y2-225M-2	45	60	2960	82.1	78.0	75.2	92.5	0.90	145.2	2.0	2.3	7.5	92	285
Y2-250M-2	55	75	2965	99.8	94.8	91.4	93.0	0.90	177.2	2.0	2.3	7.5	93	375
Y2-280S-2	75	100	2970	135.3	128.5	123.9	93.6	0.90	241.2	2.0	2.3	7.5	94	500
Y2-280M-2	90	120	2970	160.0	152.0	146.5	93.9	0.91	289.4	2.0	2.3	7.5	94	550
Y2-315S-2	110	150	2975	195.4	185.6	178.9	94.0	0.91	353.1	1.8	2.2	7.1	96	860
Y2-315M-2	132	180	2975	233.2	221.6	213.6	94.5	0.91	423.7	1.8	2.2	7.1	96	960
Y2-315L1-2	160	220	2975	279.3	265.4	255.8	94.6	0.92	513.6	1.8	2.2	7.1	99	1020
Y2-315L2-2	200	270	2975	348.4	331.0	319.0	94.8	0.92	642.0	1.8	2.2	7.1	99	1080
Y2-355M-2	250	340	2980	433.7	412.0	397.1	95.2	0.92	801.2	1.6	2.2	7.1	103	1700
Y2-355L-2	315	430	2980	545.3	518.0	499.3	95.4	0.92	1009.5	1.6	2.2	7.1	103	1850
Y2-4001-2	355	480	2980	614.6	583.8	562.7	95.4	0.92	1137.7	1.3	2.0	6.5	106	2850
Y2-4002-2	400	550	2980	692.5	657.8	634.1	95.4	0.92	1281.9	1.3	2.0	6.5	106	3000
Y2-4003-2	450	600	2980	779.0	740.1	713.3	95.4	0.92	1442.1	1.3	2.0	6.5	109	3150
Y2-4004-2	500	680	2980	865.6	822.3	792.6	95.4	0.92	1602.3	1.3	2.0	6.5	109	3300
Y2-4005-2	560	760	2980	969.4	921.0	887.7	95.4	0.92	1794.6	1.3	2.0	6.5	109	3450

Y2 Series Induction Motor Dimensions



Type	Poles	Mounting Dimensions										Overall Dimensions				
		A	A/2	B	C	D	E	F	G	H	K	AB	AC	AD	HD	L
63M	2.4	100	50	80	40	11	23	4	8.5	63	7	135	130	70	180	230
71M	2.4.6	112	56	90	45	14	30	5	11	71	7	150	145	80	195	255
80M	2.4.6.8	125	62.5	100	50	19	40	6	15.5	80	10	165	175	145	220	295
80S	2.4.6.8	140	70	100	56	24	50	8	20	90	10	180	195	155	250	320
90L	2.4.6.8	140	70	125	56	24	50	8	20	90	10	180	195	155	250	345
100L	2.4.6.8	160	80	140	63	28	60	8	24	100	12	205	215	180	270	385
112M	2.4.6.8	190	95	140	70	28	60	8	24	112	12	230	240	190	300	400
132S	2.4.6.8	216	108	140	89	38	80	10	33	132	12	270	275	210	345	470
132M	4.6.8	216	108	178	89	38	80	10	33	132	12	270	275	210	345	510
160M	2.4.6.8	254	127	210	108	42	110	12	37	160	14.5	320	330	255	420	615
160L	2.4.6.8	254	127	254	108	42	110	12	37	160	14.5	320	330	255	420	670
180M	2.4.6.8	279	139.5	241	121	48	110	14	42.5	180	14.5	355	380	280	455	700
180L	4.6.8	279	139.5	279	121	48	110	14	42.5	180	14.5	355	380	280	455	740
200L	2.4.6.8	318	159	305	133	55	110	16	49	200	18.5	395	420	305	505	770
225S	4.8	356	178	286	149	60	140	18	53	225	18.5	435	470	335	560	815
225M	2	356	178	311	149	55	110	16	49	225	18.5	435	470	335	560	820
	4.6.8	356	178	311	149	60	140	18	53	225	18.5	435	470	335	560	845
250M	2	406	203	349	168	60	140	18	53	250	24	490	510	370	615	910
	4.6.8	406	203	349	168	65	140	18	58	250	24	490	510	370	615	910
280S	2	457	228.5	368	190	65	140	18	58	280	24	550	580	410	680	985
	4.6.8	457	228.5	368	190	75	140	20	67.5	280	24	550	580	410	680	985
280M	2	457	228.5	419	190	65	140	18	58	280	24	550	580	410	680	1035
	4.6.8	457	228.5	419	190	75	140	20	67.5	280	24	550	580	410	680	1035
315S	2	508	254	406	216	65	140	18	58	315	28	635	645	530	845	1240
	4.6.8.10	508	254	406	216	80	170	22	71	315	28	635	645	530	845	1270
315M	2	508	254	457	216	65	140	18	58	315	28	635	645	530	845	1350
	4.6.8.10	508	254	457	216	80	170	22	71	315	28	635	645	530	845	1380
315L	2	508	254	508	216	65	140	18	58	315	28	635	645	530	845	1350
	4.6.8.10	508	254	508	216	80	170	22	71	315	28	635	645	530	845	1380
355M	2	610	305	560	254	75	140	20	67.5	355	28	730	710	655	1010	1500
	4.6.8.10	610	305	560	254	95	170	25	86	355	28	730	710	655	1010	1530
355L	2	610	305	630	254	75	140	20	67.5	355	28	730	710	655	1010	1500
	4.6.8.10	610	305	630	254	95	170	25	86	355	28	730	710	655	1010	1530
400	2	686	343	710	280	85	170	22	76	400	35	806	850	-	1090	1880
	4.6.8.10	686	343	710	280	110	210	28	100	400	35	806	850	-	1090	1920

