

Induction Motor Catalog



Line definition **Dimensions**

thermal sensor (Standard)

PT-1000 red,white
 PTC-130 blue

Rotor Type:
 Cu · Al

3 leads length :400 mm

U x 1 red
 V x 1 white
 W x 1 black

unit:mm

Type	Poles	D1	D2	W1(max)	W2(max)	d3min	d3Max	h (Al)	h (Cu)	L (= 1)
IM35	2	35.8	22	13	8	9.6	12	4.9	2	30 / 40 / 50 / 60
IM40	2	40.3	22	7	6	9.6	12	4.9	2	20 / 30 / 40 / 50 / 60
IM48	2	48.3	28	11	9	12	21	5.5	3.5	30 / 40 / 50 / 60
	4		32	16	14			-	2.5	
IM60	2	60.3	32 / 35	16	14	12 / 15 / 16.6	20	6	3.5	40 / 50 / 60 / 80
	4			16	14					
IM70	2	70.3	35	19	17	17.7 / 23.7	25	6	3.5	40 / 50 / 60 / 70 / 80 / 90
	4		42	18	15			-	3.5	
IM80	2	80.3	42.3	25	23	17.7 / 23.7	25	-	3.5	50 / 70 / 90 / 100
IM83	4	83.8	52	22	19	25.7 / 29.7	32	-	3.5	50 / 60 / 70 / 100 120 / 140
IM90	2	90.3	52.3	25	22	25.7 / 29.7	32	-	3.5	50 / 60 / 65 / 80
	4	90.3	57	23	18	32.7 / 34.7	40	-	4.5	100 / 130 / 140
IM96	4	96.2	65	25	20	39.7 / 47.9	48	-	4.5	80 / 100
IM106	2	106.8	57.3	33	27	32.7 / 34.7	40	-	4.5	80 / 130 / 140
	6	106.8	70	25	20	42.7 / 45.5	48	-	4.5	
IM110	4	110	70	25	20	42.7 / 45.5	48	-	4.5	70 / 80 / 90 / 100 120 / 155 / 200
IM120	4	120.3	83	30	30	41 / 53	60	12	4.5	100 / 120 / 130 / 155 / 200
	6			30	25					
	8			30	25					
IM135	4	135.3	90	35	30	41 / 53	60	12	3.5	80 / 100 / 120 / 155 / 200
	6	135.3	90	32	27					
IM156	6	156.3	110	35	30	58 / 74	80	14.5	5.5	100 / 120 / 200
IM160	4	160.3	110	42	36	58 / 74	80	14.5	5.5	80 / 100 / 115 / 120 / 150 / 170 / 200 / 225 / 295
	6			37	32					
	8			37	32					



Line definition		Dimensions								
thermal sensor (Standard)										
PT-1000	red,white									
PTC-130	blue									
Rotor Type:										
Cu · Al										
3 leads length :400 mm										
U x 1	red									
V x 1	white									
W x 1	black									
unit:mm										
type	poles	D1	D2	W1(max)	W2(max)	d3min	d3Max	h (Al)	h (Cu)	L (= 1)
IM180	4	180	110	40	36	58 / 74	80	14.5	5.5	100 / 150 / 180
	6	180.3	120	40	36	60 / 76	82	14.5	5.5	200 / 225 / 250
IM200	6	200.5	145	45	40	89 / 99	110	-	5.5 / 7.5	150 / 170 / 225
	8			45	40					
IM220	8	220	155	55	45	99 / 108	120	-	5.5 / 7.5	120 / 140 / 170 250
IM275	8	175.5	190	60	55	70 / 120	140	-	7.5	250 / 300

*ATF can adjust the value according to customer customization

*The speed of the blue area is only available for AI rotor

*All values are suggested values in water cooling

2 Poles											
Speed(krpm)	3.6	12	18	24	36	48	60	80	100	120	Max S1 Torque (Nm)
frequency(Hz)	60	200	300	400	600	800	1000	1333.3	1666.7	2000	
Type	S1 Power in water cooling (kW)										
IM35-L30	0.03	0.10	0.15	0.20	0.30	0.40	0.50	0.67	0.84	1.00	0.08
IM35-L40	0.05	0.16	0.24	0.33	0.49	0.65	0.82	1.09	1.36	1.63	0.13
IM35-L60	0.08	0.25	0.38	0.50	0.75	1.00	1.26	1.67	2.09	2.51	0.2

IM40-L20	0.02	0.05	0.08	0.10	0.15	0.20	0.25	0.33	0.42	0.50	0.04
IM40-L30	0.04	0.13	0.19	0.25	0.38	0.50	0.63	0.84	1.05	1.26	0.10
IM40-L40	0.06	0.19	0.28	0.38	0.56	0.75	0.94	1.26	1.57	1.88	0.15
IM40-L60	0.09	0.31	0.47	0.63	0.94	1.26	1.57	2.09	2.62	3.14	0.25

IM48-L30	0.09	0.31	0.47	0.63	0.94	1.26	1.57	2.09	-	-	0.25
IM48-L40	0.12	0.40	0.60	0.80	1.20	1.61	2.01	2.68	-	-	0.32
IM48-L50	0.13	0.44	0.66	0.88	1.32	1.76	2.20	2.93	-	-	0.35
IM48-L60	0.15	0.50	0.75	1.00	1.51	2.01	2.51	3.35	-	-	0.4

IM60-L40	0.21	0.69	1.0	1.4	2.1	2.8	3.5	4.6	-	-	0.55
IM60-L50	0.27	0.90	1.4	1.8	2.7	3.6	4.5	6.0	-	-	0.72
IM60-L60	0.34	1.1	1.7	2.3	3.4	4.5	5.6	7.5	-	-	0.90
IM60-L80	0.48	1.6	2.4	3.2	4.8	6.4	8.0	10.7	-	-	1.28

IM70-L40	0.23	0.75	1.1	1.5	2.3	3.0	3.8	-	-	-	0.6
IM70-L60	0.36	1.2	1.8	2.4	3.6	4.8	6.0	-	-	-	0.95
IM70-L80	0.51	1.7	2.5	3.4	5.1	6.8	8.5	-	-	-	1.35
IM70-L90	0.55	1.8	2.7	3.6	5.5	7.3	9.1	-	-	-	1.45

IM80-L50	0.58	1.9	2.9	3.9	5.8	7.8	-	-	-	-	1.55
IM80-L70	0.9	3.0	4.5	6.0	9.0	12.0	-	-	-	-	2.40
IM80-L80	1.2	4.1	6.1	8.2	12.2	16.3	-	-	-	-	3.25
IM80-L90	1.5	5.0	7.5	10.0	15.1	20.1	-	-	-	-	4.00

IM90-L65	0.9	3.0	4.5	6.0	9.0	12.0	-	-	-	-	2.40
IM90-L80	1.2	4.0	6.0	8.0	12.0	16.1	-	-	-	-	3.20
IM90-L100	1.7	5.6	8.5	11.3	16.9	22.6	-	-	-	-	4.50
IM90-L140	2.4	8.2	12.2	16.3	24.5	32.6	-	-	-	-	6.50

IM106-L80	1.3	4.4	6.6	8.8	13.2	-	-	-	-	-	3.50
IM106-L100	1.9	6.3	9.4	12.6	18.8	-	-	-	-	-	5.00
IM106-L130	2.8	9.4	14.1	18.8	28.2	-	-	-	-	-	7.50
IM106-L140	3.1	10.2	15.3	20.3	30.5	-	-	-	-	-	8.10

4 Poles											
Speed(krpm)	1.8	4	8	12	16	20	24	36	48	60	Max S1 Torque (Nm)
frequency(Hz)	60	133.3	266.7	400	533.3	666.7	800	1200	1600	2000	
Type	Rated Power in water cooling (kW)										
IM48-L30	0.05	0.10	0.21	0.31	0.42	0.52	0.63	0.94	1.26	1.57	0.25
IM48-L40	0.06	0.13	0.27	0.40	0.54	0.67	0.80	1.20	1.61	2.01	0.32
IM48-L50	0.07	0.15	0.29	0.44	0.59	0.73	0.88	1.32	1.76	2.20	0.35
IM48-L60	0.08	0.17	0.33	0.50	0.67	0.84	1.00	1.51	2.01	2.51	0.40

IM60-L40	0.12	0.27	0.54	0.82	1.09	1.36	1.63	2.45	3.26	4.08	0.65
IM60-L50	0.16	0.36	0.71	1.07	1.42	1.78	2.13	3.20	4.27	5.33	0.85
IM60-L60	0.20	0.44	0.88	1.32	1.76	2.20	2.64	3.95	5.27	6.59	1.05
IM60-L80	0.28	0.63	1.26	1.88	2.51	3.14	3.77	5.65	7.53	9.41	1.50

IM70-L40	0.19	0.42	0.84	1.26	1.67	2.09	2.51	3.77	5.02	-	1.0
IM70-L60	0.28	0.63	1.26	1.88	2.51	3.14	3.77	5.65	7.53	-	1.5
IM70-L80	0.40	0.88	1.76	2.64	3.51	4.39	5.27	7.91	10.54	-	2.1
IM70-L90	0.47	1.05	2.09	3.14	4.18	5.23	6.28	9.41	12.55	-	2.5

IM83-L50	0.34	0.75	1.5	2.3	3.0	3.8	4.5	6.8	-	-	1.8
IM83-L70	0.53	1.2	2.3	3.5	4.7	5.9	7.0	10.5	-	-	2.8
IM83-L100	0.85	1.9	3.8	5.6	7.5	9.4	11.3	16.9	-	-	4.5
IM83-L140	1.4	3.1	6.2	9.3	12.4	15.5	18.6	27.9	-	-	7.4

IM90-L50	0.5	1.2	2.3	3.5	4.7	5.9	7.0	10.5	-	-	2.8
IM90-L80	0.9	2.0	4.0	6.0	8.0	10.0	12.0	18.1	-	-	4.8
IM90-L100	1.2	2.6	5.3	7.9	10.5	13.2	15.8	23.7	-	-	6.3
IM90-L130	1.7	3.8	7.5	11.3	15.1	18.8	22.6	33.9	-	-	9.0

IM110-L70	1.2	2.7	5.4	8.2	10.9	13.6	16.3	-	-	-	6.5
IM110-L90	1.7	3.8	7.5	11.3	15.1	18.8	22.6	-	-	-	9.0
IM110-L120	2.4	5.4	10.9	16.3	21.8	27.2	32.6	-	-	-	13.0
IM110-L155	3.6	7.9	15.9	23.8	31.8	39.7	47.7	-	-	-	19.0
IM110-L200	4.7	10.5	20.9	31.4	41.8	52.3	62.8	-	-	-	25.0

IM120-L100	2.8	6.3	12.6	18.8	25.1	31.4	37.7	-	-	-	15.0
IM120-L130	3.8	8.4	16.7	25.1	33.5	41.8	50.2	-	-	-	20.0
IM120-L155	4.9	10.9	21.8	32.6	43.5	54.4	65.3	-	-	-	26.0
IM120-L200	6.6	14.6	29.3	43.9	58.6	73.2	87.9	-	-	-	35.0

IM135-L80	2.5	5.6	11.3	16.9	22.6	28.2	33.9	-	-	-	13.5
IM135-L100	3.4	7.5	15.1	22.6	30.1	37.7	45.2	-	-	-	18.0
IM135-L120	4.1	9.2	18.4	27.6	36.8	46.0	55.2	-	-	-	22.0
IM135-L155	5.5	12.1	24.3	36.4	48.5	60.7	72.8	-	-	-	29.0
IM135-L200	7.2	15.9	31.8	47.7	63.6	79.5	95.4	-	-	-	38.0

4 Poles											
Speed(krpm)	1.8	4	8	12	16	20	24	36	48	60	Max S1 Torque (Nm)
frequency(Hz)	60	133.3	266.7	400	533.3	666.7	800	1200	1600	2000	
Type	S1 Power in water cooling (kW)										
IM160-L80	4.5	10.0	20.1	30.1	40.2	50.2	60.2	-	-	-	24.0
IM160-L120	7.5	16.7	33.5	50.2	66.9	83.7	100.4	-	-	-	40.0
IM160-L150	10.4	23.0	46.0	69.0	92.0	115.1	138.1	-	-	-	55.0
IM160-L170	13.2	29.3	58.6	87.9	117.2	146.4	175.7	-	-	-	70.0
IM160-L200	16.0	35.6	71.1	106.7	142.3	177.8	213.4	-	-	-	85.0

IM180-L100	6.8	15.1	30.1	45.2	60.2	75.3	-	-	-	-	36.0
IM180-L150	11.3	25.1	50.2	75.3	100.4	125.5	-	-	-	-	60.0
IM180-L180	15.1	33.5	66.9	100.4	133.9	167.4	-	-	-	-	80.0
IM180-L200	16.9	37.7	75.3	113.0	150.6	188.3	-	-	-	-	90.0
IM180-L250	22.6	50.2	100.4	150.6	200.8	251.0	-	-	-	-	120.0

6 Poles											
Speed(krpm)	1.2	2	4	6	8	10	12	16	20	24	Max S1 Torque (Nm)
frequency(Hz)	60	100	200	300	400	500	600	800	1000	1200	
Type	S1 Power in water cooling (kW)										
IM106-L80	0.8	1.4	2.7	4.1	5.4	6.8	8.2	10.9	13.6	16.3	6.5
IM106-L140	1.6	2.7	5.4	8.2	10.9	13.6	16.3	21.8	27.2	32.6	13.0

IM120-L100	1.9	3.2	6.5	9.7	13.0	16.2	19.5	25.9	32.4	38.9	15.5
IM120-L130	2.6	4.4	8.8	13.2	17.6	22.0	26.4	35.1	43.9	52.7	21.0
IM120-L155	3.5	5.9	11.7	17.6	23.4	29.3	35.1	46.9	58.6	70.3	28.0
IM120-L200	5.0	8.4	16.7	25.1	33.5	41.8	50.2	66.9	83.7	100.4	40.0

IM135-L80	2.0	3.3	6.7	10.0	13.4	16.7	20.1	26.8	33.5	-	16.0
IM135-L100	2.9	4.9	9.8	14.7	19.7	24.6	29.5	39.3	49.2	-	23.5
IM135-L120	3.6	6.1	12.1	18.2	24.3	30.3	36.4	48.5	60.7	-	29.0
IM135-L155	4.8	7.9	15.9	23.8	31.8	39.7	47.7	63.6	79.5	-	38.0
IM135-L200	6.3	10.5	20.9	31.4	41.8	52.3	62.8	83.7	104.6	-	50.0

IM156-L100	3.0	5.0	10.0	15.1	20.1	25.1	30.1	40.2	50.2	-	24.0
IM156-L120	5.0	8.4	16.7	25.1	33.5	41.8	50.2	66.9	83.7	-	40.0
IM156-L150	6.9	11.5	23.0	34.5	46.0	57.5	69.0	92.0	115.1	-	55.0
IM156-L170	8.8	14.6	29.3	43.9	58.6	73.2	87.9	117.2	146.4	-	70.0
IM156-L200	10.7	17.8	35.6	53.3	71.1	88.9	106.7	142.3	177.8	-	85.0

IM160-L80	3.5	5.9	11.7	17.6	23.4	29.3	35.1	46.9	58.6	-	28.0
IM160-L120	5.6	9.4	18.8	28.2	37.7	47.1	56.5	75.3	94.1	-	45.0
IM160-L150	7.5	12.6	25.1	37.7	50.2	62.8	75.3	100.4	125.5	-	60.0
IM160-L170	9.4	15.7	31.4	47.1	62.8	78.5	94.1	125.5	156.9	-	75.0
IM160-L200	12.0	20.1	40.2	60.2	80.3	100.4	120.5	160.7	200.8	-	96.0

IM180-L100	6.3	10.5	20.9	31.4	41.8	52.3	62.8	83.7	104.6	-	50.0
IM180-L180	13.2	22.0	43.9	65.9	87.9	109.8	131.8	175.7	219.7	-	105.0
IM180-L200	15.1	25.1	50.2	75.3	100.4	125.5	150.6	200.8	251.0	-	120.0
IM180-L225	17.6	29.3	58.6	87.9	117.2	146.4	175.7	234.3	292.9	-	140.0

IM200-L150	11.3	18.8	37.7	56.5	75.3	94.1	113.0	-	-	-	90.0
IM200-L170	13.8	23.0	46.0	69.0	92.0	115.1	138.1	-	-	-	110.0
IM200-L225	18.8	31.4	62.8	94.1	125.5	156.9	188.3	-	-	-	150.0

8 Poles											
Speed(krpm)	0.9	2	4	6	8	10	12	16	20	24	Max S1 Torque (Nm)
frequency(Hz)	60	133.3	266.7	400	533.3	666.7	800	1066.7	1333.3	1600	
Type	S1 Power in water cooling (kW)										
IM160-L80	2.6	5.9	11.7	17.6	23.4	29.3	35.1	46.9	58.6	70.3	28.0
IM160-L120	4.2	9.4	18.8	28.2	37.7	47.1	56.5	75.3	94.1	113.0	45.0
IM160-L150	5.6	12.6	25.1	37.7	50.2	62.8	75.3	100.4	125.5	150.6	60.0
IM160-L170	7.1	15.7	31.4	47.1	62.8	78.5	94.1	125.5	156.9	188.3	75.0
IM160-L200	9.0	20.1	40.2	60.2	80.3	100.4	120.5	160.7	200.8	241.0	96.0

IM180-L100	4.7	10.5	20.9	31.4	41.8	52.3	62.8	83.7	104.6	-	50.0
IM180-L180	9.9	22.0	43.9	65.9	87.9	109.8	131.8	175.7	219.7	-	105.0
IM180-L200	11.3	25.1	50.2	75.3	100.4	125.5	150.6	200.8	251.0	-	120.0
IM180-L225	13.2	29.3	58.6	87.9	117.2	146.4	175.7	234.3	292.9	-	140.0

IM200-L150	8.5	18.8	37.7	56.5	75.3	94.1	113.0	-	-	-	90.0
IM200-L170	10.4	23.0	46.0	69.0	92.0	115.1	138.1	-	-	-	110.0
IM200-L225	14.1	31.4	62.8	94.1	125.5	156.9	188.3	-	-	-	150.0

IM220-L120	11.3	25.1	50.2	75.3	100.4	125.5	-	-	-	-	120.0
IM220-L150	14.1	31.4	62.8	94.1	125.5	156.9	-	-	-	-	150.0
IM220-L170	16.9	37.7	75.3	113.0	150.6	188.3	-	-	-	-	180.0
IM220-L250	28.2	62.8	125.5	188.3	251.0	313.8	-	-	-	-	300.0

IM275-L150	26.4	58.6	117.2	175.7	234.3	292.9	-	-	-	-	280.0
IM275-L250	47.1	104.6	209.2	313.8	418.4	523.0	-	-	-	-	500.0
IM275-L300	60.2	133.9	267.8	401.7	535.6	669.4	-	-	-	-	640.0