

SELECTION AND ORDERING DATA

Three phase induction motor

THREE PHASE INDUCTION MOTOR

Type :

Totally enclosed fan-cooled squirrel cage

Number of poles

2 — 4 — 6 — 8 Poles

Type of protection

IP 54, IP 55, (IEC 34-5, DIN 40050)

Insulation

Class H (200 °C)

Output

0.25-30.0 Hp (0.18-22.0 kW)



• 2 Pole 3000 rpm

Type	Frame size	Rated output		Full load Speed rpm	Full load current at 380 V Amp	Torque Nm	Efficiency %	Power factor cos ϕ	Bearing		Weight approx kg
		Hp	kW						Power side	Fan side	
DS-A3-071N-02	71	0.50	0.37	2810	1.25	1.4	68.0	0.81	6202	6202	4.8
DS-A3-071M-02	71	0.75	0.55	2810	1.50	2.0	72.0	0.85	6202	6202	6.0
DS-A3-080N-02	80	1.10	0.75	2850	1.85	2.6	74.0	0.86	6204	6204	8.2
DS-A3-080M-02	80	1.50	1.10	2850	2.60	3.8	77.0	0.88	6204	6204	9.8
DS-A3-090S-02	90 S	2.00	1.50	2880	3.70	5.0	78.0	0.84	6205	6205	12.1
DS-A3-090L-02	90 L	3.00	2.20	2880	5.20	7.3	82.0	0.85	6205	6205	14.5
DS-A3-100L-02	100 L	4.00	3.00	2880	6.30	10.0	82.0	0.87	6206	6206	19.5
DS-A3-112M-02	112 M	5.50	4.00	2905	8.30	13.0	85.0	0.87	6206	6206	24.2
DS-A3-132T-02	132 S	7.50	5.50	2910	11.50	18.0	85.5	0.87	6308	6208	38.5
DS-A3-132S-02	132 S	10.00	7.50	2910	15.00	25.0	88.0	0.88	6308	6208	43.0
DS-A3-160N-02	160 M	15.00	11.00	2930	23.00	36.0	88.5	0.91	6309	6309	73.5
DS-A3-160M-02	160 M	20.00	15.00	2930	30.00	50.0	89.5	0.90	6309	6309	84.5
DS-A3-160L-02	160 L	25.00	18.50	2940	36.00	60.0	90.5	0.89	6310	6309	97.0
DS-A3-180M-02	180 L	30.00	22.00	2940	42.00	71.0	91.0	0.90	6310	6310	108.0

• 4 Pole 1500 rpm



Type	Frame size	Rated output		Full load Speed rpm	Full load current at 380 V Amp	Torque Nm	Efficiency %	Power factor cos ϕ	Bearing		Weight approx kg
		Hp	kW						Power side	Fan side	
DS-A3-071N-04	71	0.33	0.25	1390	0.90	1.8	65.0	0.72	6202	6202	4.8
DS-A3-071M-04	71	0.50	0.37	1400	1.20	2.6	69.0	0.71	6202	6202	6.0
DS-A3-080N-04	80	0.75	0.55	1400	1.50	3.8	74.0	0.77	6204	6204	7.7
DS-A3-080M-04	80	1.00	0.75	1400	2.20	5.2	76.0	0.78	6204	6204	8.6
DS-A3-090S-04	90 S	1.50	1.10	1420	3.00	7.5	74.0	0.79	6205	6205	11.0
DS-A3-090L-04	90 L	2.00	1.50	1420	3.90	10.0	77.0	0.79	6205	6205	13.5
DS-A3-100K-04	100 L	3.00	2.20	1420	5.30	15.0	80.0	0.80	6206	6206	19.0
DS-A3-100L-04	100 L	4.00	3.00	1420	7.00	20.0	81.5	0.82	6206	6206	21.0
DS-A3-112M-04	112 M	5.50	4.00	1430	9.00	27.0	84.5	0.83	6206	6206	28.0
DS-A3-132S-04	132 S	7.50	5.50	1440	12.50	36.0	85.5	0.83	6308	6208	39.5
DS-A3-132M-04	132 M	10.00	7.50	1450	16.50	50.0	87.0	0.85	6308	6208	48.0
DS-A3-160M-04	160 M	15.00	11.00	1460	24.00	72.0	88.5	0.84	6309	6309	72.0
DS-A3-160L-04	160 L	20.00	15.00	1460	31.00	98.0	90.0	0.86	6310	6309	86.0
DS-A3-180M-04	180 M	25.00	18.50	1470	38.00	121.0	91.0	0.83	6310	6310	101.0
DS-A3-180L-04	180 L	30.00	22.00	1470	45.00	145.0	91.5	0.84	6310	6310	114.0

• 6 Pole 1000 rpm

Type	Frame size	Rated output		Full load Speed rpm	Full load current at 380 V Amp	Torque Nm	Efficiency %	Power factor cos ϕ	Bearing		Weight approx kg
		Hp	kW						Power side	Fan side	
DS-A3-071N-06	71	0.25	0.18	900	0.90	2.7	57.0	0.64	6202	6202	5.8
DS-A3-071M-06	71	0.33	0.25	920	1.20	2.9	62.0	0.68	6202	6202	5.8
DS-A3-080N-06	80	0.50	0.37	920	1.30	3.9	66.0	0.68	6204	6204	7.7
DS-A3-080M-06	80	0.75	0.55	920	2.00	5.8	70.0	0.72	6204	6204	9.2
DS-A3-090S-06	90 S	1.00	0.75	920	2.25	7.9	72.0	0.72	6205	6205	11.5
DS-A3-090L-06	90 L	1.50	1.10	940	3.10	11.0	74.0	0.75	6205	6205	13.7
DS-A3-100L-06	100 L	2.00	1.50	945	4.00	16.0	76.0	0.75	6206	6206	18.6
DS-A3-112M-06	112 M	3.00	2.20	950	5.60	22.0	81.5	0.77	6206	6206	23.8
DS-A3-132S-06	132 S	4.00	3.00	950	7.60	30.0	82.5	0.78	6308	6208	34.0
DS-A3-132N-06	132 M	5.50	4.00	960	9.60	40.0	84.0	0.80	6308	6208	40.0
DS-A3-132M-06	132 M	7.50	5.50	960	13.00	55.0	84.5	0.76	6308	6208	48.5
DS-A3-160M-06	160 M	10.00	7.50	970	18.00	74.0	87.0	0.77	6309	6309	71.5
DS-A3-160L-06	160 L	15.00	11.00	970	25.00	108.0	88.0	0.79	6310	6309	89.5
DS-A3-180L-06	180 L	20.00	15.00	970	33.00	148.0	89.0	0.84	6310	6310	110.0

• 8 Pole 750 rpm

Type	Frame size	Rated output		Full load Speed rpm	Full load current at 380 V Amp	Torque Nm	Efficiency %	Power factor cos ϕ	Bearing		Weight approx kg
		Hp	kW						Power side	Fan side	
DS-A3-080M-08	80 M	0.25	0.18	680	1.10	2.6	51.0	0.60	6204	6204	9.8
DS-A3-080Q-08	80 Q	0.33	0.25	680	1.30	3.7	52.0	0.61	6204	6204	11.0
DS-A3-090S-08	90 S	0.50	0.37	685	1.45	5.2	63.0	0.63	6205	6205	11.4
DS-A3-090L-08	90 L	0.75	0.55	685	1.90	7.7	69.0	0.65	6205	6205	13.1
DS-A3-100K-08	100 L	1.00	0.75	700	2.30	11.0	70.0	0.73	6206	6206	16.7
DS-A3-100L-08	100 L	1.50	1.10	700	3.30	16.0	72.0	0.71	6206	6206	17.4
DS-A3-112M-08	112 M	2.00	1.50	700	4.20	20.0	72.0	0.73	6206	6206	23.5
DS-A3-132S-08	132 S	3.00	2.20	700	6.00	30.0	78.0	0.73	6308	6208	34.5
DS-A3-132M-08	132 M	4.00	3.00	705	7.70	40.0	80.0	0.76	6308	6208	40.5
DS-A3-160N-08	160 N	5.50	4.00	720	9.80	53.0	84.0	0.76	6309	6309	67.0
DS-A3-160M-08	160 M	7.50	5.50	720	13.50	73.0	84.0	0.76	6309	6309	68.0
DS-A3-160L-08	160 L	10.00	7.50	720	17.50	108.0	84.0	0.76	6310	6309	82.5
DS-A3-180L-08	180 L	15.00	11.00	720	26.00	146.0	86.0	0.76	6310	6310	108.5



DIMENSIONS

Three phase induction motor

THREE PHASE INDUCTION MOTOR

FOOT : B3, B6, B8, V5, V6

Frame size 71-180

IEC-Publication 72, 5th issue and DIN 42673/4.64

Shaft heights DIN 747/6.67 H tol-0.5 mm.

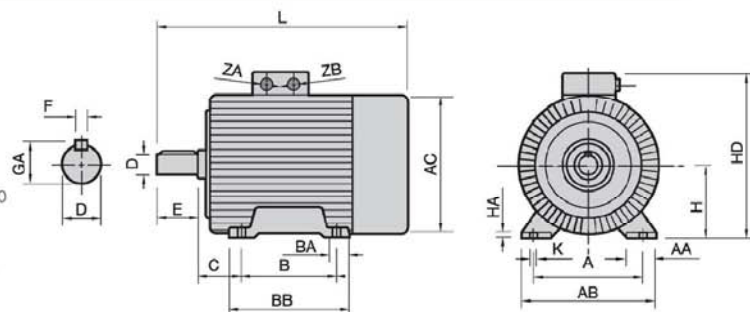
Shaft ends DIN 748/1.70 D DA, k6°, DIN 7160

Keys DIN 6885, p. 1/8.68

Tapped center hole DIN 332, p. 2/10.70, form D

All dimensions in mm.

The dimensions A, B, C, H, K, D, E, F, GA are certified



Frame size	Mounting (mm)											Body (mm)					Shaft ends (mm)			
	A	AA	AB	B	BA	BB	C	CA	H	HA	K	AC	HD	L	ZA	ZB	D	E	F	GA
71 N, M	112	27	135	90	29	110	45	77	71	7	7	142	189	236.5	-	Pg16	14	30	5	16
80 N, M	125	32	153	100	33	125	50	86	80	9	10	160	209	268.5	-	Pg16	19	40	6	21.5
90 S	140	35	170	100	35	128	56	104	90	10	10	183	229	302	-	Pg16	24	50	8	27
90 L	140	35	170	125	35	153	56	104	90	10	10	183	229	327	-	Pg16	24	50	8	27
100 K, L	160	42.5	195	140	42.5	175	63	112	100	12	13	204	258	366	-	Pg21	28	60	8	31
112 M	190	50	230	140	45	175	70	128	112	14	13	228	282	390	-	Pg21	28	60	8	31
132 T, S	216	50	256	140	50	180	89	153	132	17	13	272	324	454.5	-	Pg21	38	80	10	41
132 N, M	216	50	256	178	50	218	89	153	132	17	13	272	324	492.5	-	Pg21	38	80	10	41
160 N, M	254	60	306	210	75	300	108	181.5	160	20	14	327	392	599.5	Pg29	Pg29	42	110	12	45
160 L	254	60	306	254	75	300	108	159.5	160	20	14	327	392	621.5	Pg29	Pg29	42	110	12	45
180 M	279	80	340	241	95	330	121	180	180	25	14	327	412	643.5	Pg29	Pg29	48	110	14	51.5
180 L	279	80	340	279	95	330	121	142	180	25	14	327	412	643.5	Pg29	Pg29	48	110	14	51.5

FLANGE : B5, V1, V3

Frame size 71-180

IEC-Publication 72, 5th issue and DIN 42677/11.65

Shaft heights DIN 42948/11.65 N max. $\varnothing 230$,
j6° DIN 7169: N over $\varnothing 230$, h6°
DIN 7160

Shaft ends DIN 748/1.70 D DA, k6° . DIN 7160

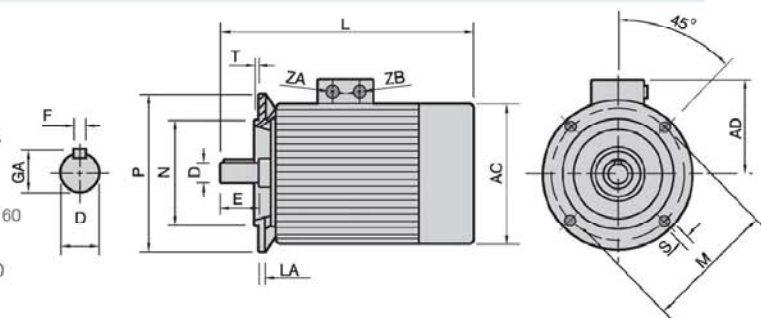
Keys DIN 6885,p. 1/8.68

Tapped center hole DIN 332, p. 2/10.70, form D

Flange connection surface and shaft collar are in one plane.

All dimensions in mm.

The dimensions M, N, S, D, E, F, GA are certified



Frame size	Mounting (mm)						Body (mm)					Shaft ends (mm)			
	LA	M	N	P	S	T	AC	AD	L	ZA	ZB	D	E	F	GA
71 N, M	9	130	110	160	10	3.5	142	110	236.5	-	Pg16	14	30	5	16
80 N, M	10	165	130	200	12	3.5	160	129	268.5	-	Pg16	19	40	6	21.5
90 S	10	165	130	200	12	3.5	183	139	302	-	Pg16	24	50	8	27
90 L	10	165	130	200	12	3.5	183	139	327	-	Pg16	24	50	8	27
100 K, L	11	215	180	250	14	4.0	204	158	366	-	Pg21	28	60	8	31
112 M	11	215	180	250	14	4.0	228	170	390	-	Pg21	28	60	8	31
132 T, S	12	265	230	300	14	4.0	272	192	454.5	-	Pg21	38	80	10	40
132 N, M	12	265	230	300	14	4.0	272	192	492.5	-	Pg21	38	80	10	41
160 N, M	13	300	250	350	18	5.0	327	232	599.5	Pg29	Pg29	42	110	12	45
160 L	13	300	250	350	18	5.0	327	232	621.5	Pg29	Pg29	42	110	12	45
180 M	13	300	250	350	18	5.0	327	232	643.5	Pg29	Pg29	48	110	14	51.5
180 L	13	300	250	350	18	5.0	327	232	643.5	Pg29	Pg29	48	110	14	51.5

Outstanding Features :

- DS motor use class H (200 °C) enamel copper wire for a longer operating life.
- Aluminum alloy frame construction with dimensions according to IEC publication 72, issue 5 standard means long term durability with lighter weight and superior in heat dissipation.
- Protection level IP54 according to IEC 34-5 standard and DIN 40050, sheet 2 standard guarantees the motor operations according to the international required operating conditions.
- DS motors are continuous duty S1 type.