Three-Phase Electric Motors

0.55 to 3.0 kW, IEC frame 71 to 100, B3, B35 and B5

Series: S-SNA9



Overview

Motor type	Three-phase asynchronous motor
Power	0.55 kW to 3.0 kW
Rated speed at 50 Hz	4-pole: approx. 1500 rpm. 2-pole: approx. 3000 rpm.
IEC frame	71 A, 80 A, 80 B, 90 A, 90 B, 100 A
Mounting	B3 (feet), B35 (feet and flange), B5 (flange)
Voltage	230/400 V (0.55 kW to 1.5 kW), 400/690 V (from 2.2 kW)
Degree of protection	IP55

Application

These three-phase motors drive pumps, gearboxes and other machines with a continuous load (duty S1). The flange versions (B5 and B35) attach directly to a pump carrier or a gearbox.

The motors have IEC frame sizes with standard shaft and flange dimensions. Thus they can replace other IEC motors of the same frame size.

Each motor operates on a 400 V three-phase supply. Motors up to 1.5 kW have a 230/400 V winding. Motors from 2.2 kW have a 400/690 V winding.

Technical Data

Motor type	Three-phase asynchronous motor
Number of phases	3
Frequency	50 Hz
Rated voltage (Δ/Y)	230/400 V (0.55 kW to 1.5 kW), 400/690 V (from 2.2 kW)
Number of poles	2 (approx. 3000 rpm) or 4 (approx. 1500 rpm)
Housing material	Aluminium
Cooling	Surface-cooled
Degree of protection	IP55
Insulation class	F
Duty type	S1 (continuous operation)
Terminal box	On top
Shaft end	With parallel key
Mounting forms	B3 (IM 1001), B35 (IM 2001), B5 (IM 3001)
Ambient temperature	-15 °C to +40 °C

4-Pole Motors, 1500 rpm

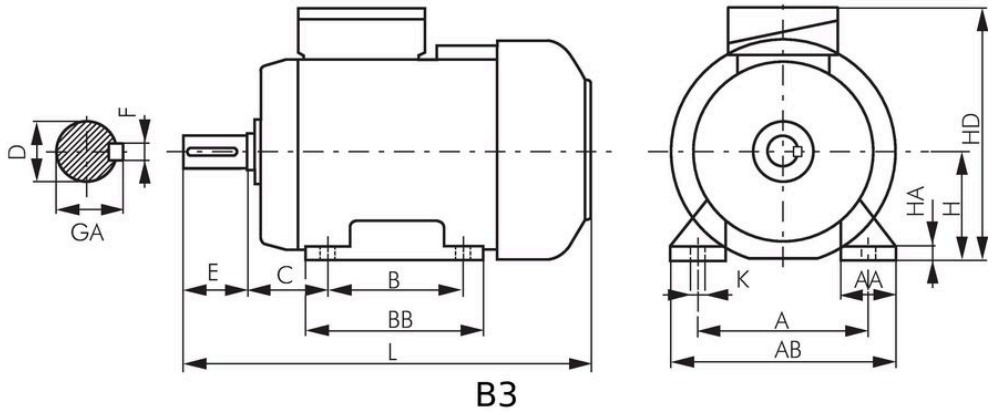
Power	IEC frame	Voltage (Δ/Y)	Rated speed	B3	B35	B5
0.55 kW	80 A	230/400 V	1410 rpm	H22KJ	H22KZ	H22MC
0.75 kW	80 B	230/400 V	1390 rpm	H22KK	H22M2	H22MD
1.1 kW	90 A	230/400 V	1405 rpm	H22KM	H22M3	H22ME
1.5 kW	90 B	230/400 V	1410 rpm	H22KN	H22M4	H22MF
2.2 kW	100 A	400/690 V	1425 rpm	H22KP	-	H22MG

2-Pole Motors, 3000 rpm

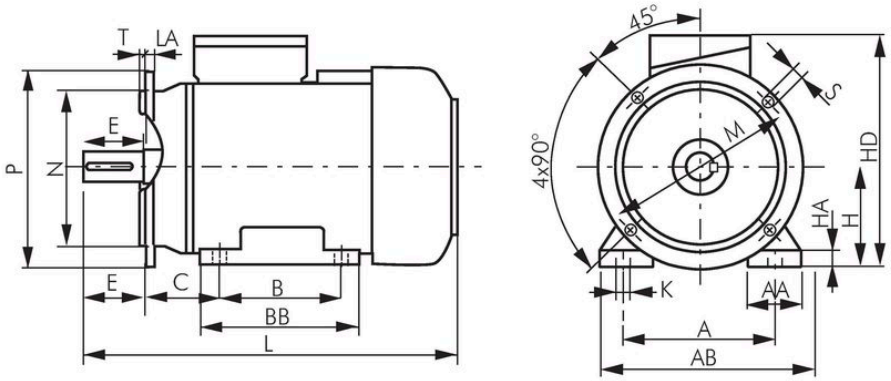
Power	IEC frame	Voltage (Δ/Y)	Rated speed	B3	B35	B5
0.55 kW	71 A	230/400 V	2790 rpm	H22KR	H22M6	H22MH
0.75 kW	80 A	230/400 V	2800 rpm	H22KS	H22M7	H22MJ
1.1 kW	80 B	230/400 V	2780 rpm	H22KT	H22M8	H22MK
1.5 kW	90 A	230/400 V	2835 rpm	H22KU	H22M9	H22MM
2.2 kW	90 B	400/690 V	2855 rpm	H22KV	H22MA	H22MN
3.0 kW	100 A	400/690 V	2905 rpm	H22KW	H22MB	-

Dimensions

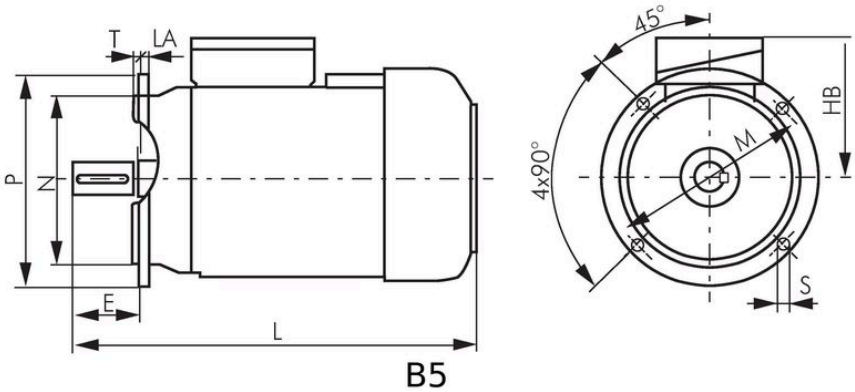
The mounting form is below each drawing. The table below gives the dimensions in mm for each IEC frame.



B3



B35



B5

Dimension Table

Dimensions in mm, one row for each IEC frame. All mounting forms: L to GA. Feet (B3, B35): A to K, 4 holes, diameter K. Flange (B5, B35): M to LA, 4 holes, diameter S, on pitch circle M.

IEC frame	L	HB	HD	D	E	F	GA	A	AA	AB	B	BB	C	H	HA	K	M	N	P	S	T	LA
71 A	245	111	182	14j6	30	5h9	16.0	112	45	142	90	116	45	71	8	7	130	110j6	160	10	3.5	9
80 A	266	115	200	19j6	40	6h9	21.5	125	55	160	100	130	50	80	9	10	165	130j6	200	12	3.5	10
80 B	278	115	200	19j6	40	6h9	21.5	125	55	160	100	130	50	80	9	10	165	130j6	200	12	3.5	10
90 A	305	130	220	24j6	50	8h9	27.0	140	50	170	100	153	56	90	10	10	165	130j6	200	12	3.5	8
90 B	330	130	220	24j6	50	8h9	27.0	140	50	170	125	153	56	90	10	10	165	130j6	200	12	3.5	8
100 A	376	140	240	28j6	60	8h9	31.0	160	45	200	140	172	63	100	14	12	215	180j6	250	15	4.0	11

Installation

1 **Select the mounting form**
B3: feet. B5: flange. B35: feet and flange.

2 **Attach the motor**
Feet: use the 4 holes, diameter K. Flange: use the 4 holes, diameter S, on pitch circle M.

> ⚠ **Warning**
> Disconnect the power supply before you open the terminal box.

3 **Connect the winding**
230/400 V (Δ/Y) motors: connect in star (Y) on a 400 V three-phase supply, or in delta (Δ) on a 230 V three-phase supply.
400/690 V (Δ/Y) motors: connect in delta (Δ) on a 400 V three-phase supply, or in star (Y) on a 690 V three-phase supply.
All supply voltages are line-to-line.

4 **Keep the ambient temperature in the limits**
-15 °C to +40 °C.

Tameson B.V.
Torenallee 20, 5617 BC Eindhoven,
The Netherlands
CoC: 72902531
VAT: NL859280263B01

Contact Information
support@tameson.com
tameson.com

Document Information
Version: 1.0

Scan for product info

Specifications subject to change without notice. Verify current specifications before ordering.