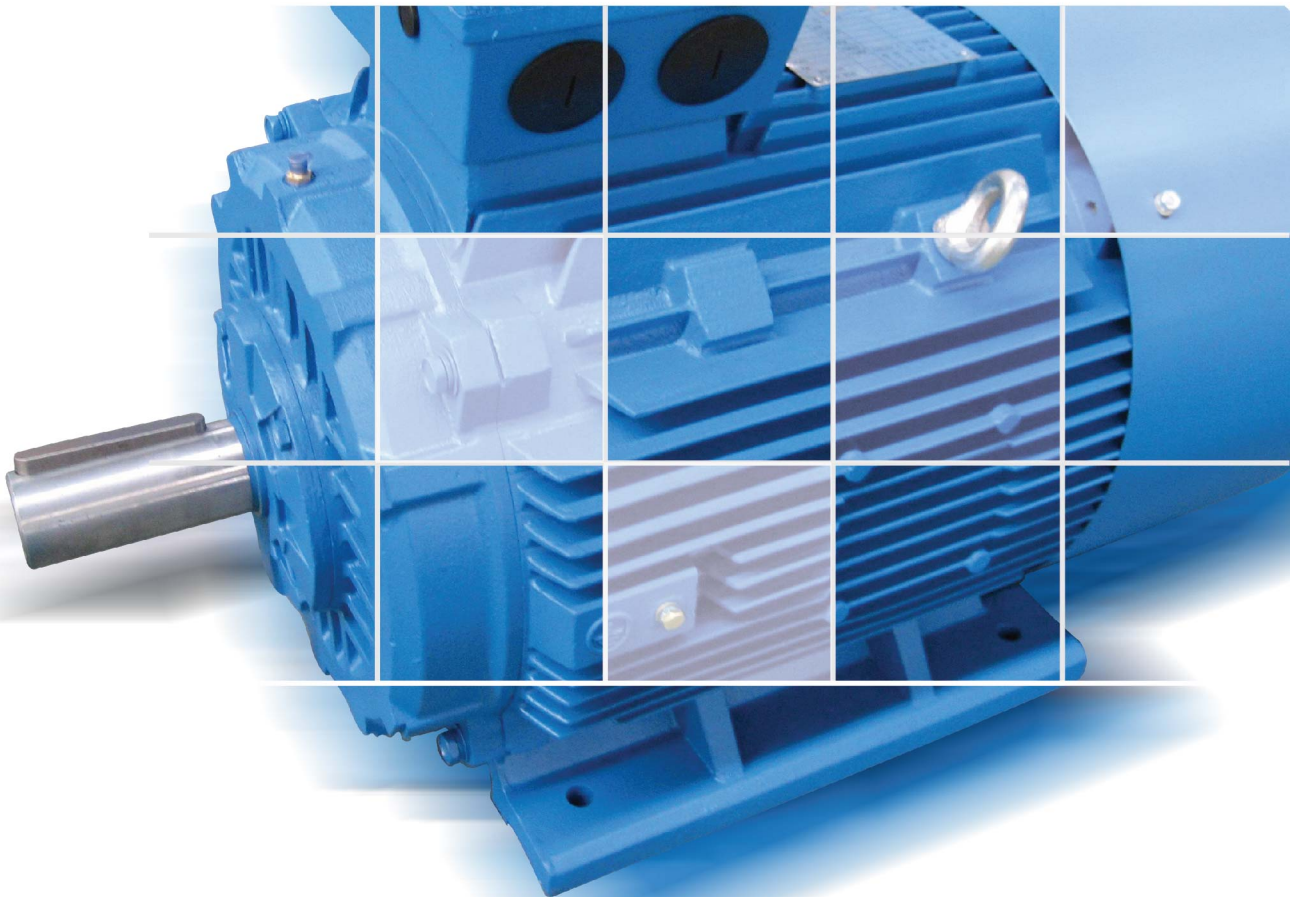


# Content

- 01** Standards Compliance
- 03** Specification, Arrangement & Parts List
- 04** Performance Data
- 07** Terminal Box Information
- 08** Dimension
- 12** Bearing & Oil Seals Information



# STANDARDS COMPLIANCE

ELEKTRA motors are designed and built to suit all industrial requirements, including operation outside in the weather, in the tropics, or sub zero temperatures.

ELEKTRA motors are built to comply with the requirements of the following international standard

1. International Electrotechnical Commission-IEC60034 and IEC60072.
2. British Standards-BS 5000 and BS 4999.
3. Australian Standards-AS 1359.
4. The requirements for European "CE" marking, Low Voltage Directive 73/23(1973), modified by Directive 93/68(1993) & the EMC-Directive 89/336. These ELEKTRA motors are designed for use with other machineries, and they should only be used if the complete

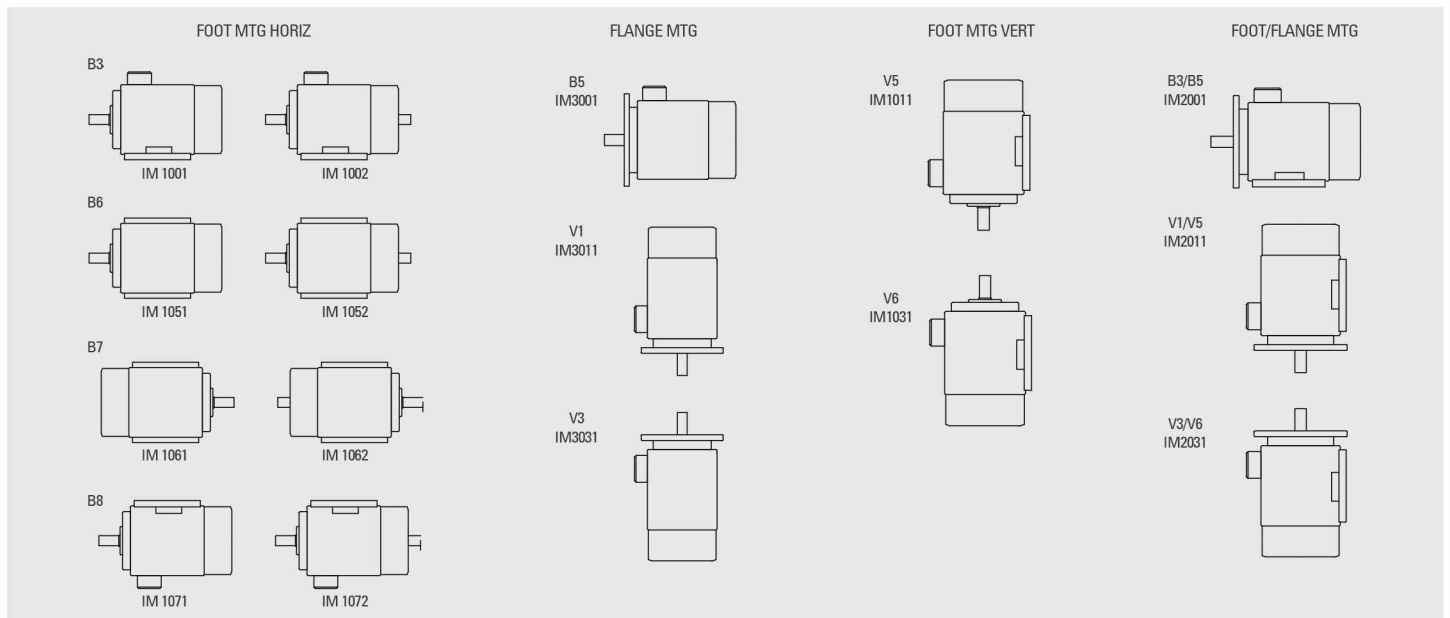
Standards	IEC	CEN/CENELEC	BS
<b>IEC60034</b>			
General Requirements for Electrical machines	60034-1	EN60034-1	4999-1 4999-69
Methods of Determining Losses & Efficiency	60034-2	HD 53 2	4999-34
Degrees of Protection	60034-5	EN 60034-5	4999-20
Method of Cooling	60034-6	EN 60034-6	4999-21
Mounting arrangements	60034-7	EN 60034-7	4999-22
Rotation	60034-8	HD53 8 S4	4999-3
Noise limits	60034-9	EN60034-9	4999-51
Starting Performance	60034-12	EN60034-12	4999-112
Mechanical vibration	60034-14	EN60034-14	4999-50
Standard voltages	60038	HD 472 S1	
Dimensions & Output ratings	60072		
Mounting Dimensions & relationship frame sizes-output ratings.	60072	HD 231	4999-10 51-110
Shaft dimensions	60072	HD 231	4999-10
Classification of environmental conditions	600721-2-1		
<b>IEC60085</b>			
Insulation material	60085		
Efficiency of 1D2E series	60034-30	IE2	
Efficiency of 1D series	60034-30	IE1	

# STANDARDS COMPLIANCE

## DEGREES OF PROTECTION (IEC 60034-5)

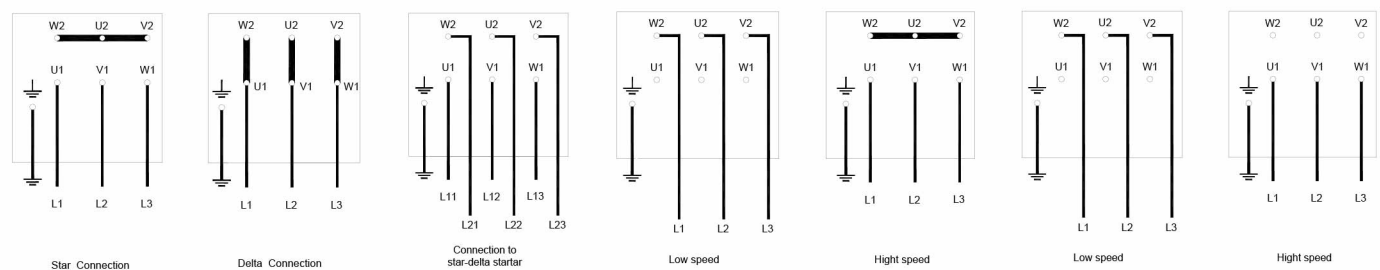
Designation	First Numeral	Second Numeral
	Protection against contact and ingress of foreign bodies. Protection against hazardous "Live" parts and moving mechanical parts	Protection against water
	5. Ingress of dust is not totally prevented, but dust shall not interfere with the proper operation of equipment. A probe of 1mm diameter shall not penetrate the enclosure	5. Water projected in jets against the enclosure from any direction will have no harmful effects.
	6. No ingress of dust	6. Water projected in power jets shall have no harmful effects.
IP55	Dust Protected	Jetting Water
IP56	Dust Protected	Powerful Jetting
IP65	Dust Tight	Jetting Water
IP66	Dust Tight	Powerful Jetting

## MOUNTING ARRANGEMENTS (IEC60034-7)



## CONNECTION DIAGRAMS

### Three Phase motors with cage rotor





# SPECIFICATION, ARRANGEMENT & PARTS LIST

## Part Description

- 1.Labyrinth Ring
- 2.Outer Bearing Cover D.E.
- 3.Flinger
- 4.Bearing D.E.
- 5.Endshield D.E.
- 6.Inner Bearing Cover D.E.
- 7.Terminal Box
- 8.Terminal Box Lid
- 9.Stator Lamination Pack
- 10.Rotor with shaft
- 11.Stator Frame
- 12.Inner Fan
- 13.Inner Bearing Cover N.D.E.
- 14.Endshield N.D.E.
- 15.Bearing N.D.E.
- 16.Flinger
- 17.Outer Bearing Cover N.D.E.
- 18.Labyrinth Ring
- 19.Fan
- 20.Fan Cowl

## Specification

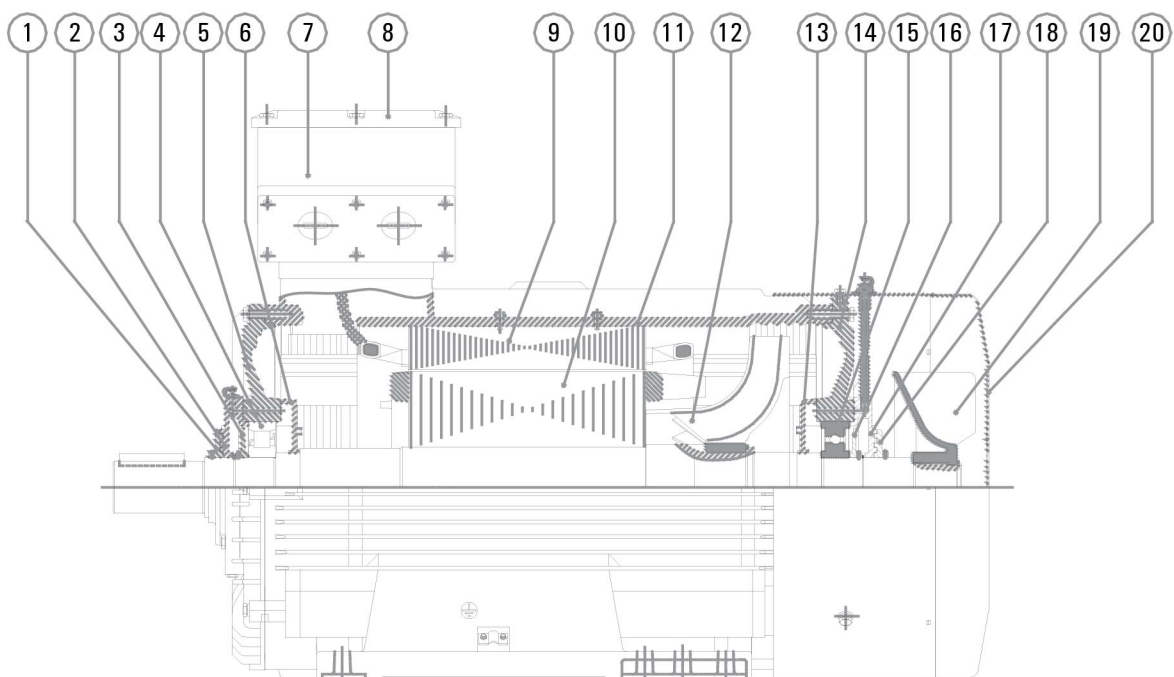
- Cast iron Frame, Endshields, Terminal Box
- Pressed Steel Fan Cowl
- Cast iron Bearings Cover
- Polypropylene, glass reinforced Fan
- NSK or Equivalent Bearings

## Features

- Dimensions and ratings to IEC60072
- IP55
- Top mounted Terminal Box
- Terminal Box rotates in 90 deg. Increments
- Drilled and tapped hole in D.E.of shaft
- Cooling IC411

## Mounting

- B3-Foot mounted
- B5-Flange mounted-horizontal
- B35-Foot and Flange mounted
- V1-Flange mounted-vertical



# PERFORMANCE DATA

## 2 POLES - 3000 RPM SYNCHRONOUS SPEED 50Hz

IE2

MOTOR TYPE	Output kW	FULL LOAD SPEED (rpm)	IFL 380V (amps)	IFL 400V (amps)	IFL 415V (amps)	EFFICIENCY @			POWER FACTOR @			IST IFL	FULL LOAD TORQUE N-m	TST	TPU	TM	M of I J (kg-m <sup>2</sup> )	NOISE LEVEL 1m dB(A)	NET WEIGHT (kg)
						100%FL	75%FL	50%FL	100%FL	75%FL	50%FL			TFL	TFL	TFL			
1D2E801-2	0.75	2860	1.8	1.7	1.7	77.4	77.0	73.8	0.81	0.77	0.75	6.8	2.5	2.3	1.5	2.3	0.0012	65	17.5
1D2E802-2	1.1	2860	2.6	2.4	2.3	79.6	79.5	78.1	0.82	0.80	0.76	7.3	3.7	2.3	1.5	2.3	0.0017	65	19.5
1D2E90S-2	1.5	2850	3.3	3.2	3.1	81.3	81.2	80.1	0.84	0.82	0.81	7.6	5.0	2.3	1.5	2.3	0.0026	70	28
1D2E90L-2	2.2	2855	4.7	4.5	4.3	83.2	83.1	82.9	0.85	0.84	0.83	7.8	7.4	2.3	1.4	2.3	0.0034	72	32
1D2E100L-2	3	2890	6.3	6.0	5.8	84.6	84.5	83.1	0.85	0.83	0.82	8.1	9.9	2.3	1.4	2.3	0.006	75	38.5
1D2E112M-2	4	2895	8.3	7.9	7.6	85.8	85.6	85.5	0.85	0.83	0.79	8.3	13.2	2.3	1.4	2.3	0.0086	76	40
1D2E132S1-2	5.5	2910	11.0	10.5	10.1	87.0	86.9	86.3	0.87	0.86	0.83	8.0	18.0	2.2	1.2	2.3	0.016	78	62
1D2E132S2-2	7.5	2910	14.9	14.1	13.6	88.1	88.8	88.4	0.87	0.85	0.84	7.8	24.6	2.2	1.2	2.3	0.0188	80	69
1D2E160M1-2	11	2940	21.5	20.4	19.7	89.4	88.8	86.8	0.87	0.85	0.84	7.9	35.7	2.2	1.2	2.3	0.0618	86	125
1D2E160M2-2	15	2940	29.0	27.6	26.6	90.3	90.0	88.5	0.87	0.85	0.84	8.0	48.7	2.2	1.2	2.3	0.0674	86	135
1D2E160L-2	18.5	2935	35.5	33.8	32.5	90.9	90.8	89.8	0.87	0.85	0.83	8.1	60.2	2.2	1.1	2.3	0.0808	86	151
1D2E180M-2	22	2945	42.1	40.0	38.5	91.3	90.9	89.2	0.87	0.84	0.82	8.2	71.3	2.2	1.1	2.3	0.1003	89	182
1D2E200L1-2	30	2960	56.9	54.1	52.1	92.0	91.7	90.4	0.87	0.86	0.84	7.5	96.8	2.2	1.1	2.3	0.189	92	262
1D2E200L2-2	37	2960	69.9	66.4	64.0	92.5	92.3	91.2	0.87	0.85	0.82	7.5	119.4	2.2	1.1	2.3	0.1971	92	274
1D2E225M-2	45	2970	84.6	80.4	77.5	92.9	92.6	91.4	0.87	0.84	0.83	7.6	144.7	2.2	1.0	2.3	0.3619	92	380
1D2E250M-2	55	2975	101.9	96.8	93.3	93.2	92.8	91.5	0.88	0.85	0.81	7.6	176.6	2.2	1.0	2.3	0.4387	93	426
1D2E280S-2	75	2980	141.3	134.2	129.3	93.8	93.3	91.9	0.86	0.85	0.83	6.9	240.4	2.0	0.9	2.3	0.8084	94	573
1D2E280M-2	90	2980	165.1	156.9	151.2	94.1	93.7	92.5	0.88	0.87	0.82	7.0	288.4	2.0	0.9	2.3	0.9208	94	625
1D2E315S-2	110	2980	199.1	189.2	182.3	94.3	93.8	92.5	0.89	0.85	0.79	7.1	352.5	2.0	0.9	2.2	1.693	96	895
1D2E315M-2	132	2980	238.2	226.3	218.1	94.6	94.2	93.1	0.89	0.87	0.84	7.1	423.0	2.0	0.9	2.2	1.8746	96	1009
1D2E315L1-2	160	2980	284.9	270.7	260.9	94.8	94.3	93.0	0.90	0.85	0.82	7.1	512.8	2.0	0.9	2.2	2.2144	99	1128
1D2E315L2-2	200	2975	355.4	337.6	325.4	95.0	94.6	93.5	0.90	0.87	0.83	7.1	642.0	2.0	0.8	2.2	2.5171	99	1269
1D2E355M-2	250	2980	444.3	422.1	406.8	95.0	94.7	93.6	0.90	0.86	0.82	7.1	801.2	2.0	0.8	2.2	3.8265	103	1627
1D2E355L-2	315	2980	559.8	531.8	512.6	95.0	94.7	93.7	0.90	0.88	0.85	7.1	1009.5	2.0	0.8	2.2	4.5516	103	1780

- INL = No Load Current
- IST = Locked Rotor Current
- TST = Locked Rotor Torque
- TM = Maximum Torque
- TPU = Pull Up Torque
- TFL = Full Load Torque
- IFL = Full Load Current

# PERFORMANCE DATA

## 4 POLES - 1500 RPM SYNCHRONOUS SPEED 50Hz

## IE2

MOTOR TYPE	Output kW	FULL LOAD SPEED (rpm)	IFL 380V (amps)	IFL 400V (amps)	IFL 415V (amps)	EFFICIENCY @			POWER FACTOR @			IST IFL	FULL LOAD TORQUE N-m	TST TFL	TPU TFL	TM TFL	M of I J (kg-m2)	NOISE LEVEL LW dB(A)
						100%FL	75%FL	50%FL	100%FL	75%FL	50%FL							
1D2E802-4	0.75	1425	1.93	1.84	1.77	79.6	79.5	77.3	0.74	0.69	0.56	6.5	5.0	2.3	1.6	2.3	0.0036	58
1D2E90S-4	1.1	1420	2.74	2.60	2.51	81.4	82.4	80.8	0.75	0.76	0.67	6.6	7.4	2.3	1.6	2.3	0.0044	60
1D2E90L-4	1.5	1425	3.7	3.5	3.4	82.8	83.8	83.2	0.75	0.76	0.66	6.9	10.1	2.3	1.6	2.3	0.0056	60
1D2E100L1-4	2.2	1440	5.0	4.8	4.6	84.3	84.1	83.5	0.79	0.78	0.67	7.5	14.6	2.3	1.5	2.3	0.0109	63
1D2E100L2-4	3	1445	6.7	6.4	6.2	85.5	85.4	84.4	0.79	0.79	0.69	7.6	19.8	2.3	1.5	2.3	0.0144	61
1D2E112M-4	4	1440	8.9	8.4	8.1	86.6	86.1	85.8	0.79	0.79	0.69	7.7	26.5	2.3	1.5	2.3	0.0171	63
1D2E132S-4	5.5	1450	11.9	11.3	10.9	87.7	87.3	86.9	0.80	0.79	0.7	7.5	36.2	2.0	1.4	2.3	0.0385	69
1D2E132M-4	7.5	1455	15.9	15.1	14.5	88.7	88.2	88.0	0.81	0.83	0.74	7.4	49.2	2.2	1.4	2.3	0.0514	69
1D2E160M-4	11	1465	23.0	21.8	21.0	89.8	89.6	88.9	0.81	0.8	0.7	7.5	71.7	2.2	1.4	2.3	0.1076	70
1D2E160L-4	15	1465	30.3	28.8	27.8	90.6	90.4	89.9	0.83	0.82	0.73	7.5	97.8	2.2	1.4	2.3	0.139	73
1D2E180M-4	18.5	1470	36.7	34.9	33.6	91.2	90.9	90.7	0.84	0.83	0.74	7.7	120.2	2.2	1.2	2.3	0.1913	75
1D2E180L-4	22	1475	43.4	41.3	39.8	91.6	91.7	91.0	0.84	0.82	0.73	7.8	142.4	2.2	1.2	2.3	0.2192	75
1D2E200L-4	30	1475	58.1	55.2	53.2	92.3	92.5	92.0	0.85	0.84	0.76	7.2	194.2	2.2	1.2	2.3	0.3187	80
1D2E225S-4	37	1480	71.3	67.8	65.3	92.7	92.6	91.6	0.85	0.84	0.76	7.3	238.8	2.2	1.2	2.3	0.6463	81
1D2E225M-4	45	1485	86.4	82.1	79.1	93.1	92.9	91.8	0.85	0.83	0.74	7.4	289.4	2.2	1.1	2.3	0.7547	82
1D2E250M-4	55	1480	105.1	99.9	96.3	93.5	93.4	92.5	0.85	0.84	0.76	7.4	354.9	2.2	1.1	2.3	0.9344	83
1D2E280S-4	75	1485	139.3	132.4	127.6	94	93.8	92.8	0.87	0.85	0.77	6.7	482.3	2.2	1.0	2.3	1.7867	86
1D2E280M-4	90	1490	166.9	158.5	152.8	94.2	94.0	93.1	0.87	0.85	0.77	6.9	576.8	2.2	1.0	2.3	2.1229	86
1D2E315S-4	110	1490	203.3	193.1	186.1	94.5	94.2	93.2	0.87	0.88	0.83	6.9	705.0	2.2	1.0	2.2	3.8188	93
1D2E315M-4	132	1485	243.4	231.3	222.9	94.7	94.6	93.8	0.87	0.88	0.84	6.9	848.9	2.2	1.0	2.2	3.8306	93
1D2E315L1-4	160	1485	281.5	267.4	257.8	94.9	94.9	94.2	0.91	0.9	0.87	6.0	1029.0	2.0	0.8	2.4	4.6727	97
1D2E315L2-4	200	1485	351.1	333.6	321.5	95.1	95.2	94.7	0.91	0.9	0.88	6.3	1286.2	2.2	1.6	2.4	5.3463	101
1D2E355M-4	250	1490	438.9	417.0	401.9	95.1	94.9	94.1	0.91	0.9	0.87	6.0	1602.3	2.2	1.7	2.5	8.2188	101
1D2E355L-4	315	1490	533.0	525.4	506.4	95.1	94.9	94.1	0.91	0.9	0.86	7.0	2019.0	2.3	1.8	2.7	10.5146	101

- INL = No Load Current
- IST = Locked Rotor Current
- TST = Locked Rotor Torque
- TM = Maximum Torque
- TPU = Pull Up Torque
- TFL = Full Load Torque
- IFL = Full Load Current

# PERFORMANCE DATA

## 6 POLES - 1000 RPM SYNCHRONOUS SPEED 50Hz

IE2

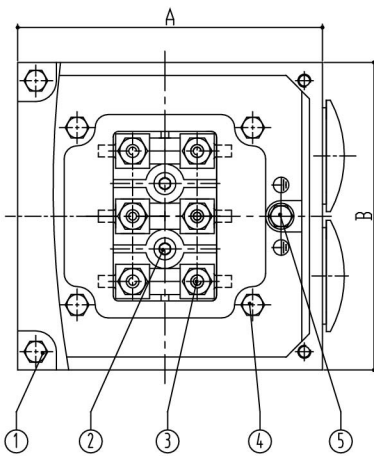
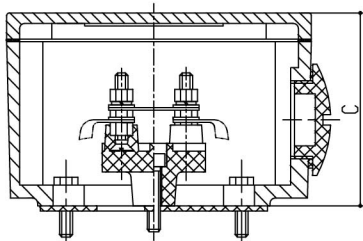
MOTOR TYPE	Output kW	FULL LOAD SPEED (rpm)	IFL 380V (amps)	IFL 400V (amps)	IFL 415V (amps)	EFFICIENCY @			POWER FACTOR @			IST IFL	FULL LOAD TORQUE N-m	TST	TPU	TM	M of I J (kg-m2)	NOISE LEVEL LW dB(A)
						100%FL	75%FL	50%FL	100%FL	75%FL	50%FL			TFL	TFL	TFL		
1D2E90S-6	0.75	935	2.1	2.0	2.0	75.9	76.2	73.1	0.70	0.64	0.58	5.8	7.7	2.1	1.5	2.1	0.0057	57
1D2E90L-6	1.1	940	3.1	2.9	2.8	78.1	77.8	75.1	0.70	0.62	0.59	5.9	11.2	2.1	1.3	2.1	0.0072	57
1D2E100L-6	1.5	950	3.9	3.7	3.6	79.8	80.1	78.0	0.73	0.69	0.58	6.0	15.1	2.1	1.3	2.1	0.0144	61
1D2E112M-6	2.2	950	5.6	5.3	5.1	81.8	82.5	81.3	0.73	0.69	0.56	6.0	22.1	2.0	1.3	2.1	0.0229	65
1D2E132S-6	3	960	7.5	7.1	6.9	83.3	84.1	83.1	0.73	0.7	0.58	6.2	29.8	2.0	1.3	2.1	0.039	69
1D2E132M1-6	4	960	9.7	9.2	8.9	84.6	85.5	84.8	0.74	0.71	0.60	6.8	39.8	2.0	1.3	2.1	0.0499	69
1D2E132M2-6	5.5	965	13.1	12.5	12.0	86	86.8	86.3	0.74	0.73	0.61	7.1	54.4	2.0	1.3	2.1	0.0714	69
1D2E160M-6	7.5	970	17.7	16.8	16.2	87.2	87.4	86.3	0.74	0.73	0.62	6.7	73.8	2.1	1.3	2.1	0.1248	71
1D2E160L-6	11	970	25.5	24.2	23.3	88.7	88.8	87.7	0.74	0.73	0.62	6.9	108.3	2.1	1.2	2.1	0.18	73
1D2E180L-6	15	975	33.0	31.3	30.2	89.7	90.0	89.2	0.77	0.77	0.67	7.2	146.9	2.0	1.2	2.1	0.3415	73
1D2E200L1-6	18.5	980	38.9	36.9	35.6	90.4	90.7	90.0	0.80	0.79	0.70	7.2	180.3	2.1	1.2	2.1	0.4894	75
1D2E200L2-6	22	980	46.0	43.7	42.1	90.9	91.2	90.6	0.80	0.79	0.70	7.3	214.4	2.1	1.2	2.1	0.552	75
1D2E225M-6	30	985	61.4	58.3	56.2	91.7	92.0	91.4	0.81	0.82	0.76	7.1	290.9	2.0	1.2	2.1	0.7063	76
1D2E250M-6	37	985	72.6	69.0	66.5	92.2	92.4	92.0	0.84	0.83	0.77	7.1	358.7	2.1	1.2	2.1	1.1189	78
1D2E280S-6	45	985	87.8	83.4	80.4	92.7	92.8	92.1	0.84	0.83	0.75	7.2	436.3	2.1	1.1	2.0	2.1645	80
1D2E280M-6	55	985	106.9	101.5	97.8	93.1	93.2	92.6	0.84	0.83	0.76	7.2	533.2	2.1	1.0	2.0	2.6692	80
1D2E315S-6	75	990	144.8	137.5	132.6	93.7	93.6	92.8	0.84	0.82	0.77	6.7	723.5	2.0	1.0	2.0	4.11	85
1D2E315M-6	90	990	173.2	164.5	158.6	94	93.9	93.2	0.84	0.82	0.79	6.7	868.2	2.0	1.0	2.0	4.8746	85
1D2E315L1-6	110	990	211.0	200.4	193.2	94.3	94.2	93.5	0.84	0.82	0.79	6.7	1061.1	2.0	1.0	2.0	5.9125	85
1D2E315L1-6	132	990	243.7	231.5	223.1	94.6	94.4	94.0	0.87	0.84	0.80	7.0	1929.3	2.0	0.9	2.0	6.9504	85
1D2E315L1-6	160	990	288.1	273.7	263.8	94.8	94.7	93.7	0.89	0.87	0.82	6.7	2411.6	2.0	0.9	2.0	9.9993	90
1D2E355M2-6	200	990	367.7	349.3	336.7	95	94.9	94.2	0.89	0.87	0.83	6.7	1929.3	2.0	0.9	2.0	11.1898	90
1D2E355L-6	250	990	459.6	436.6	420.8	95	94.9	94.2	0.879	0.88	0.84	6.7	2411.6	2.0	0.9	2.0	14.0614	92

- INL = No Load Current
- IST = Locked Rotor Current
- TST = Locked Rotor Torque
- TM = Maximum Torque
- TPU = Pull Up Torque
- TFL = Full Load Torque
- IFL = Full Load Current

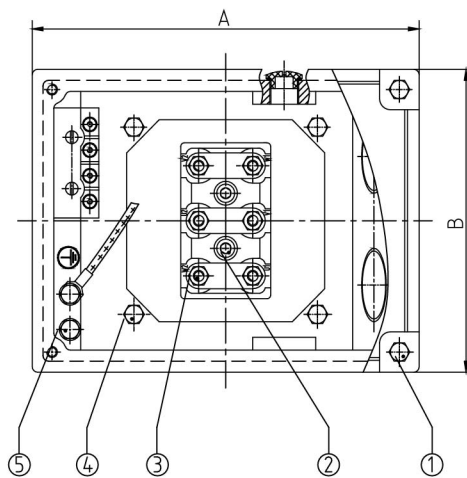
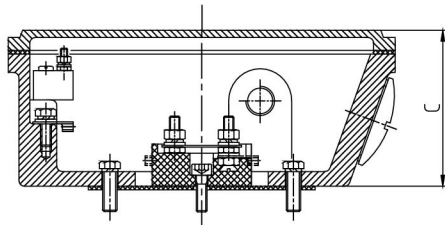


# 1D2E TERMINAL BOX INFORMATION

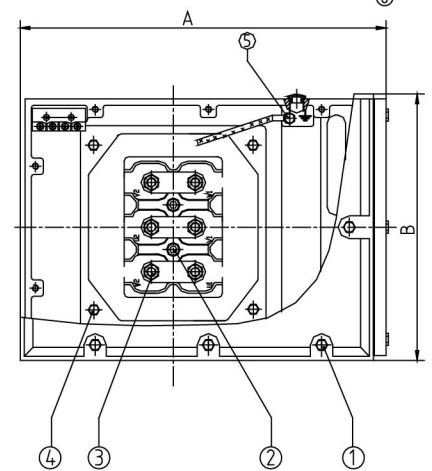
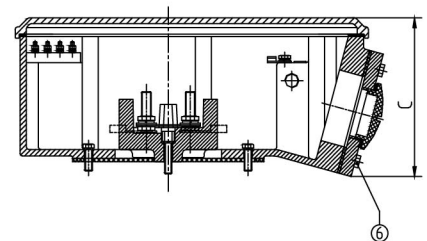
80 ~ 132



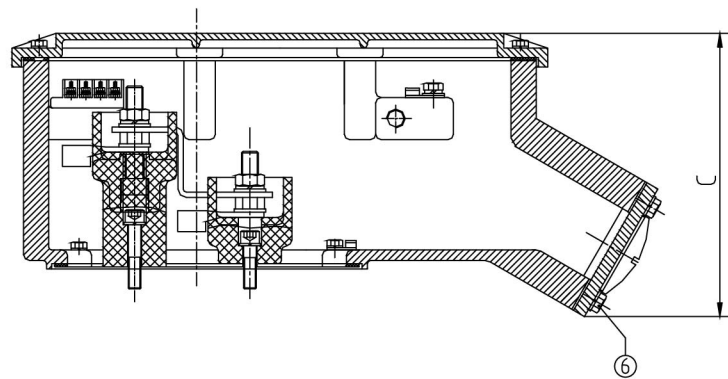
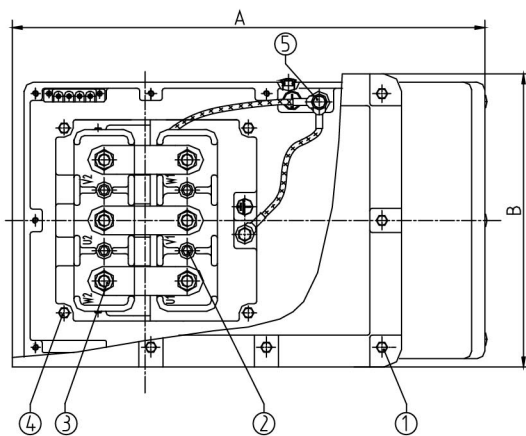
160 ~ 280



315



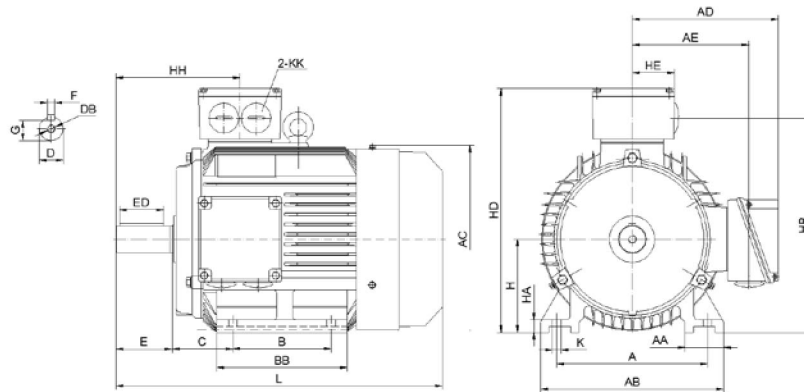
355



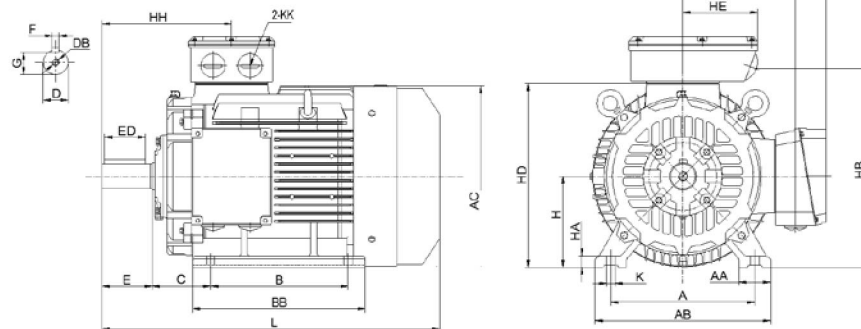
FRAME	A	B	C	1	2	3	4	5	6	Metric Gland Sizes	PG Gland Sizes
80-100	118	118	61	M5X16	M5X20	M4	M5X16	M5X12		2XM25X1.5	2XPG16
112-132	118	118	77	M5X16	M5X25	M5	M5X20	M5X12		2XM32X1.5	2XPG21
160-180	215	165	85	M6X20	M6X20	M6	M6X25	M6X16		2XM40X1.5	2XPG29
200-225	285	190	102	M6X16	M8X25	M8	M8X25	M8X16		2XM50X1.5	2XPG36
250-280	314	218	110	M6X20	M10X30	M10	M8X25	M10X20		2XM63X1.5	2XPG42
315	460	317	190	M8X25	M10X55	M12	M12X30	M10X25	M8X30	2XM63X1.5	2XPG42
355	620	390	275	M8X30	M12X60	M16	M12X40	M10X20	M10X40	2XM63X1.5	2XPG42

# 1D2E SERIES DIMENSIONS FOOT MOUNT B3 IM1001

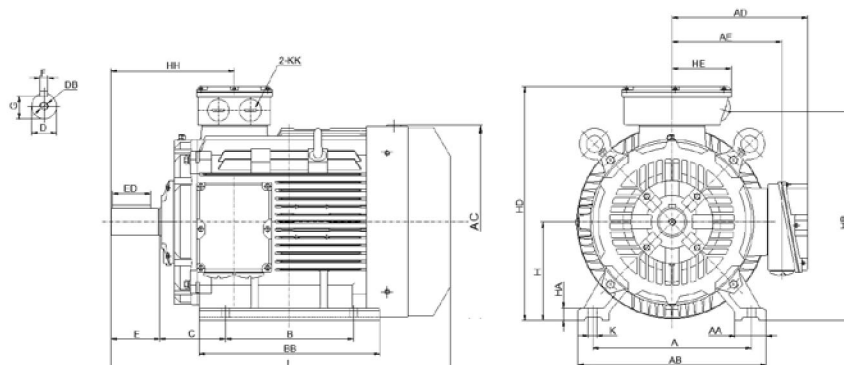
1D2E80 ~ 132



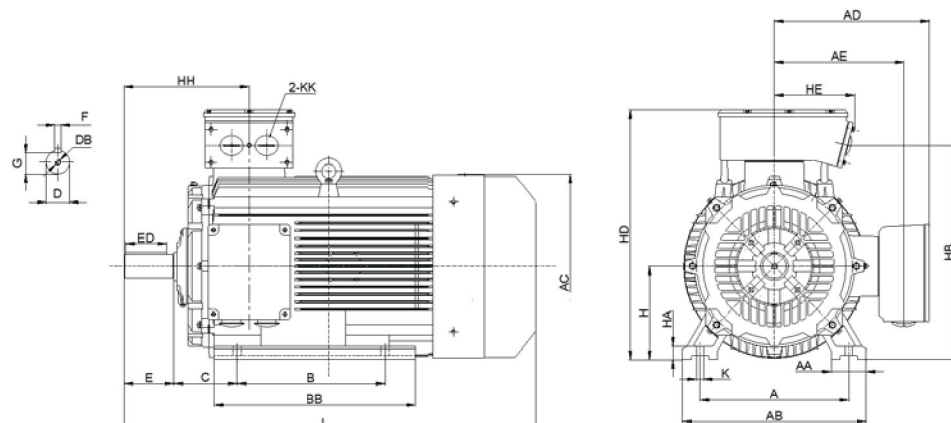
1D2E160 ~ 200



1D2E225 ~ 280



1D2E315 ~ 400

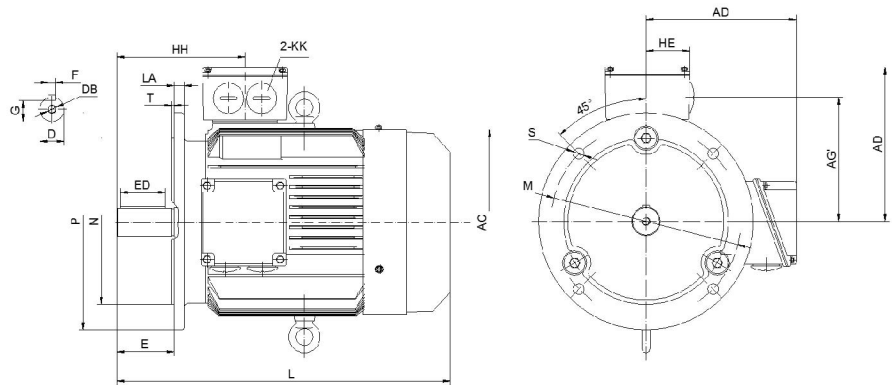


# 1D2E SERIES DIMENSIONS FOOT MOUNT B3 IM1001

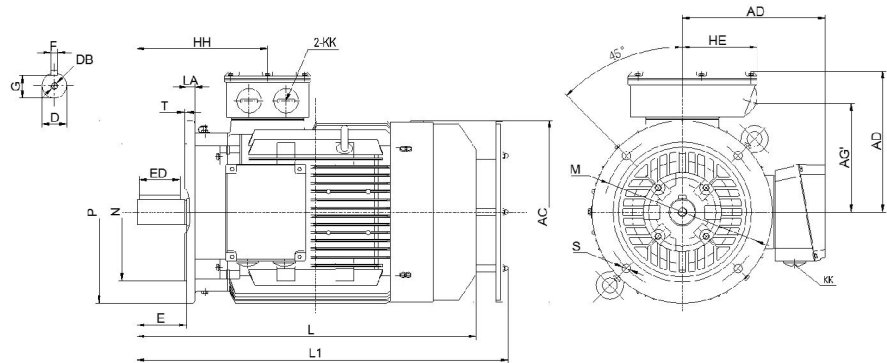
FRAME	A	AA	AB	AC	AD	AE	B	BB	C	D	DB	E	ED	F	G	H	HA	HB	HD	HE	HH	K	KK	L
80	125	34	165	160	145	91	100	130	50	19	M6X16	40	25	6	15.5	80	10	195	225	59	112	10	M25X1.5	295
90S	140	36	180	176	155	104	100	140	56	24	M8X19	50	40	8	20	90	12	215	245	59	166	10	M25X1.5	320
90L	140	36	180	176	155	111	125	165	56	24	M8X19	50	40	8	20	90	12	215	245	59	166	10	M25X1.5	345
100L	160	40	200	200	170	104	140	233	63	28	M10X22	60	45	8	24	100	14	228	270	59	144	12	M25X1.5	380
112M	190	45	226	220	198	124	140	180	70	28	M10X22	60	45	8	24	112	13	265	310	59	154	12	M32X1.5	400
132S	216	55	262	260	218	141	140	186	89	38	M12X28	80	63	10	33	132	18	305	350	59	179	12	M32X1.5	470
132M	216	55	262	260	205	164	178	224	89	38	M12X28	80	63	10	33	132	18	305	350	59	179	12	M32X1.5	510
160M	254	65	320	330	270	205	210	268	108	42	M16X36	110	90	12	37	160	20	370	420	120	262	14.5	M40X1.5	625
160L	254	65	320	330	270	205	254	312	108	42	M16X36	110	90	12	37	160	20	370	420	120	262	14.5	M40X1.5	670
180M	279	70	355	380	285	220	241	311	121	48	M16X36	110	90	14	42.5	180	22	405	455	120	270	14.5	M40X1.5	700
180L	279	70	355	380	285	220	279	349	121	48	M16X36	110	90	14	42.5	180	22	405	455	120	270	14.5	M40X1.5	740
200L	318	70	388	420	325	255	305	383	133	55	M20X42	110	90	16	49	200	25	445	510	165.5	296	18.5	M50X1.5	780
225S-4,6,8	356	75	431	470	340	270	286	380	149	60	M20X42	140	110	18	53	225	28	507	550	165.5	329	18.5	M50X1.5	820
225M-2	356	75	431	470	340	270	311	405	149	55	M20X42	110	90	16	49	225	28	507	550	165.5	299	18.5	M50X1.5	820
225M-4,6,8	356	75	431	470	340	270	311	405	149	60	M20X42	140	110	18	53	225	28	507	550	165.5	329	18.5	M50X1.5	850
250M-2	406	80	490	510	365	290	349	460	168	60	M20X42	140	110	18	53	250	30	560	620	185	347	24	M63X1.5	935
250M-4,6,8	406	80	490	510	365	290	349	460	168	65	M20X42	140	110	18	58	250	30	560	620	185	347	24	M63X1.5	935
280S-2	457	90	542	580	391	320	368	519	190	65	M20X42	140	110	18	58	280	35	600	670	185	356	24	M63X1.5	1010
280S-4,6,8	457	90	542	580	391	320	368	519	190	75	M20X42	140	110	20	67.5	280	35	600	670	185	356	24	M63X1.5	1010
280M-2	457	90	542	580	391	320	419	570	190	65	M20X42	140	110	18	58	280	35	600	670	185	356	24	M63X1.5	1060
280M-4,6,8	457	90	542	580	391	320	419	570	190	75	M20X42	140	110	20	67.5	280	35	600	670	185	356	24	M63X1.5	1060
315S-2	508	120	628	645	525	440	406	617	216	65	M20X42	140	110	18	58	315	45	755	848	275	400	28	M63X1.5	1200
315S-4,6,8	508	120	628	645	525	440	406	617	216	80	M20X42	170	140	22	71	315	45	755	848	275	430	28	M63X1.5	1230
315M-2	508	120	628	645	525	440	457	690	216	65	M20X42	140	110	18	58	315	45	755	848	275	400	28	M63X1.5	1375
315M-4,6,8	508	120	628	645	525	440	457	690	216	80	M20X42	170	140	22	71	315	45	755	848	275	430	28	M63X1.5	1405
315L-2	508	120	628	645	525	440	508	690	216	65	M20x42	140	110	18	58	315	45	755	848	275	400	28	M63X1.5	1375
315L-4,6,8	508	120	628	645	525	440	508	690	216	80	M20X42	170	140	22	71	315	45	755	848	275	430	28	M63X1.5	1405
355M-2	610	150	740	720	710	483	560	805	254	75	M24X50	140	110	20	67.5	355	55	838	1060	447	419	28	M63X1.5	1650
355M-4,6,8	610	150	740	720	710	483	560	805	254	95	M24X50	170	140	25	86	355	55	838	1060	447	449	28	M63X1.5	1680
355L-2	610	150	740	720	710	483	630	805	254	75	M24X50	140	110	20	67.5	355	55	838	1060	447	419	28	M63X1.5	1650
355L-4,6,8	610	150	740	720	710	483	630	805	254	95	M24X50	170	140	25	86	355	55	838	1060	447	449	28	M63X1.5	1680
400M-2	686	120	806	821	690	530	630	1090	280	85	M24X50	170	200	25	81	400	45	930	1090	340	572	35	M63X1.5	1890
400M-4,6,8	686	120	806	821	690	530	630	1090	280	120	M24X50	210	200	32	109	400	45	930	1090	340	572	35	M63X1.5	1930
400L-2	686	120	806	821	690	530	710	1090	280	85	M24X50	170	200	25	81	400	45	930	1090	340	572	35	M63X1.5	1890
400L-4,6,8	686	120	806	821	690	530	630	1090	280	120	M24X50	210	200	32	109	400	45	930	1090	340	572	35	M63X1.5	1930

# 1D2E SERIES DIMENSIONS FLANGE MOUNT B5 IM3001

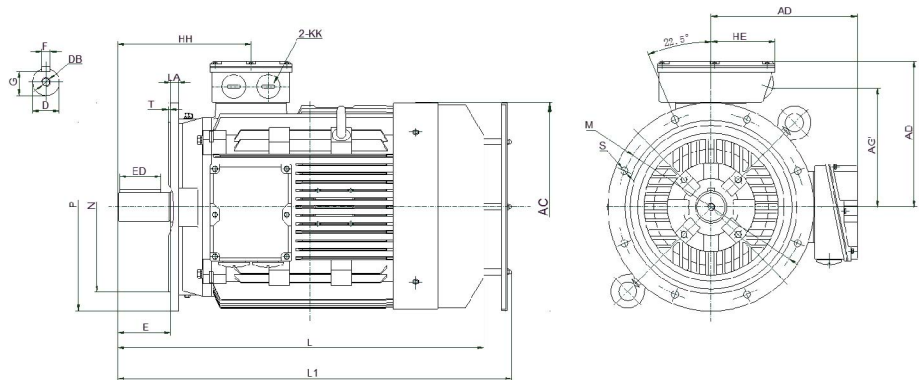
1D2E80 ~ 132



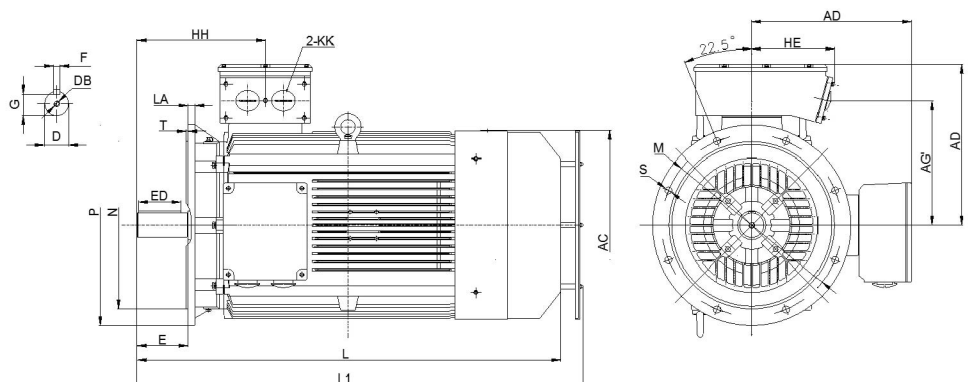
1D2E160 ~ 200



1D2E225 ~ 280



1D2E315 ~ 400





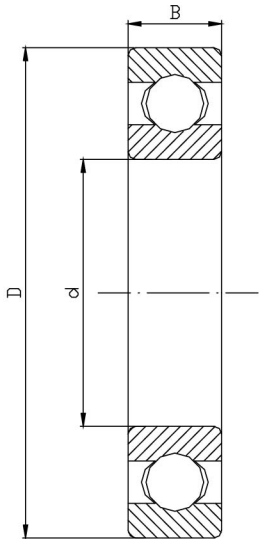
# 1D2E SERIES DIMENSIONS FLANGE MOUNT B5 IM3001

FRAME	AC	AD	AG'	D	DB	E	ED	F	G	HE	HH	KK	L1	L	LA	M	N	P	S	T
80	160	145	115	19	M6X16	40	25	6	15.5	59	112	M25X1.5	350	295	12	165	130	200	4×12	3.5
90S	176	155	125	24	M8X19	50	40	8	20	59	166	M25X1.5	375	320	12	165	130	200	4×12	3.5
90L	176	155	125	24	M8X19	50	40	8	20	59	166	M25X1.5	400	345	12	165	130	200	4×12	3.5
100L	200	170	140	28	M10X22	60	45	8	24	59	143	M25X1.5	43.5	380	15	215	180	250	4×14.5	4
112M	220	198	162	28	M10X22	60	45	8	24	59	154	M32X1.5	465	400	14	215	180	250	4×14.5	4
132S	260	218	182	38	M12X28	80	63	10	33	59	179	M32X1.5	535	470	14	265	230	300	4×14.5	4
132M	260	205	182	38	M12X28	80	63	10	33	59	179	M32X1.5	575	510	14	265	230	300	4×14.5	4
160M	330	260	215	42	M16X36	110	90	12	37	120	262	M40X1.5	695	625	15	300	250	350	4×18.5	5
160L	330	260	215	42	M16X36	110	90	12	37	120	262	M40X1.5	740	670	15	300	250	350	4×18.5	5
180M	380	275	225	48	M16X36	110	90	14	42.5	120	270	M40X1.5	785	700	18	300	250	350	4×18.5	5
180L	380	275	225	48	M16X36	110	90	14	42.5	120	270	M40X1.5	820	740	18	300	250	350	4×18.5	5
200L	420	320	254	55	M20X42	110	90	16	49	165.5	296	M50X1.5	865	780	18	350	300	400	4×18.5	5
225S-4,6,8	470	345	282	60	M20X42	140	110	18	53	165.5	329	M50X1.5	900	820	20	400	350	450	8×18.5	5
225M-2	470	345	282	55	M20X42	110	90	16	49	165.5	299	M50X1.5	900	820	20	400	350	450	8×18.5	5
225M-4,6,8	470	345	282	60	M20X42	140	110	18	53	165.5	329	M50X1.5	930	850	20	400	350	450	8×18.5	5
250M-2	510	370	310	60	M20X42	140	110	18	53	185	347	M63X1.5	1010	935	22	500	450	550	8×18.5	5
250M-4,6,8	510	370	310	65	M20X42	140	110	18	58	185	347	M63X1.5	1010	935	22	500	450	550	8×18.5	5
280S-2	580	387	314	65	M20X42	140	110	18	58	185	356	M63X1.5	1085	1010	22	500	450	550	8×18.5	5
280S-4,6,8	580	387	314	75	M20X42	140	110	20	67.5	185	356	M63X1.5	1085	1010	22	500	450	550	8×18.5	5
280M-2	580	387	314	65	M20X42	140	110	18	58	185	356	M63X1.5	1135	1060	22	500	450	550	8×18.5	5
280M-4,6,8	580	387	314	75	M20X42	140	110	20	67.5	185	356	M63X1.5	1135	1060	22	500	450	550	8×18.5	5
315S-2	645	530	410	65	M20X42	140	110	18	58	275	400	M63X1.5	1275	1200	24	600	550	660	8×24	6
315S-4,6,8	645	530	410	80	M20X42	170	140	22	71	275	430	M63X1.5	1305	1230	24	600	550	660	8×24	6
315M-2	645	530	410	65	M20X42	140	110	18	58	275	400	M63X1.5	1450	1375	24	600	550	660	8×24	6
315M-4,6,8	645	530	410	80	M20x42	170	140	22	71	275	430	M63X1.5	1480	1405	24	600	550	660	8×24	6
315L-2	645	530	410	65	M20x42	140	110	18	58	275	400	M63X1.5	1450	1375	24	600	550	660	8×24	6
315L-4,6,8	645	530	410	80	M20X42	170	140	22	71	275	430	M63X1.5	1480	1405	24	600	550	660	8×24	6
355M-2	710	720	500	75	M24X50	140	110	20	67.5	447	419	M63X1.5	1710	1650	24	740	680	800	8×24	6
355M-4,6,8	710	720	500	95	M24X50	170	140	25	86	447	449	M63X1.5	1740	1680	24	740	680	800	8×24	6
355L-2	710	720	500	75	M24X50	140	110	20	67.5	447	419	M63X1.5	1710	1650	24	740	680	800	8×24	6
355L-4,6,8	710	720	500	95	M24X50	170	140	25	86	447	449	M63X1.5	1740	1680	24	740	680	800	8×24	6

# 1D2E SERIES BEARING & OIL SEALS

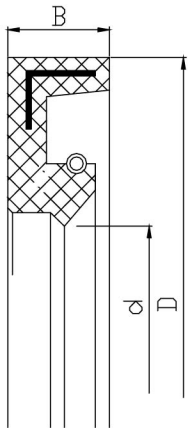
## INFORMATION

### BEARING DATA



FRAME	DE	d	D	B	NDE	d	D	B
80	6204ZZCM	20	47	14	6204ZZCM	20	47	14
90	6205ZZCM	25	52	15	6205ZZCM	25	52	15
100	6206ZZCM	30	62	16	6206ZZCM	30	62	16
112	6206ZZCM	30	62	16	6206ZZCM	30	62	16
132	6208ZZCM	40	80	18	6208ZZCM	40	80	18
160	6309C3	45	100	25	6309C3	45	100	25
180	6311C3	55	120	29	6311C3	55	120	29
200L	6312C3	60	130	31	6312C3	60	130	31
225	6313C3	65	140	33	6313C3	65	140	33
250	6314C3	70	150	35	6314C3	70	150	35
280-2	6314C3	70	150	35	6314C3	70	150	35
280-4,6,8	6317C3	85	180	41	6317C3	85	180	41
315-2	6317C3	85	180	41	6317C3	85	180	41
315-2 V1	6317C3	85	180	41	7317B	85	180	41
315-4,6,8	6319C3	95	200	45	6319C3	95	200	45
315-4,6,8 V1	6319C3	95	200	45	7319B	95	200	45
355-2	6319C3	95	200	45	6319C3	95	200	45
355-2 V1	6319C3	95	200	45	7319B	95	200	45
355-4,6,8	NU322C3	110	240	50	6322C3	110	240	50
355-4,6,8 V1	NU322C3	110	240	50	7322B	110	240	50
400-2	6322C3	110	240	50	6322C3	110	240	50
400-4,6,8	NU326C3	130	280	58	6326C3	130	280	58

### OIL SEAL DATA



FRAME	DE			NDE		
	d	D	B	d	D	B
80	20	35	7	20	35	7
90	25	40	7	25	40	7
100	30	42	7	30	42	7
112	30	42	7	30	42	7
132	40	55	8	40	55	8
160	45	65	8	45	65	8
180	55	72	8	55	72	8
200	60	80	8	60	80	8
225	65	85	10	65	85	10
250	70	90	10	70	90	10
280-2	70	90	10	70	90	10
280-4,6,8	85	110	12	85	110	12
315-2	85	110	12	85	110	12
315-4,6,8	95	120	12	95	120	12
355-2	95	120	12	95	120	12
355-4,6	110	140	12	110	140	12
400-2	110	140	12	110	140	12
400-4,6,8	130	160	12	130	160	12



