



we know the
value of
environment



Shared value in action...

www.impelmotors.com

we are
transforming



CORE PURPOSE

To **SHAPE** the **FUTURE** of the society by **DISCOVERING** new technologies and **SHARE** our **RESOURCES** with the world.



CORE VALUES

Grab **OPPORTUNITIES** Focus on **SOLUTIONS**
Exceed **EXPECTATIONS**
Have A Friendly **POSITIVE ATTITUDE**
Constantly **LEARN** & Seek **IMPROVEMENT**
Think And Create **WIN WIN** Situation



BHAG

(Big Hairy Audacious Goal)

To establish product streamline like **SIEMENS** and to be known as world's **MOST EMINENT** place to **WORK** with **the value of ₹ 1000 CR** diversified group of companies by **2025**.

LET'S CONSERVE ENERGY BY USING IE2 & IE3 MOTORS

*To produce 1.0 kWh Electricity,
thermal power plant emits

0.9 kg Co2

To Switch from Standard Motors to
IE2 / IE3 will save **minimum 0.07 kWh.**

So we can save **(0.9 x 0.07) = 0.06 kg CO2**
per hour to be produce by power plant.

In a year

0.06 x 5000 (Operating Hrs) = **300 kg CO2**

1 tree can absorb 20 kg CO2 in a year. **

So switching to IE2 / IE3 will be

equivalent to **min. seeding 15 Trees per year.**



(*PGVCL Tariff HTP III 2014/15)

(** From EPA US Environmental Protection Agency)



IE2 | High Efficiency

IE3 | Premium Efficiency

IP55

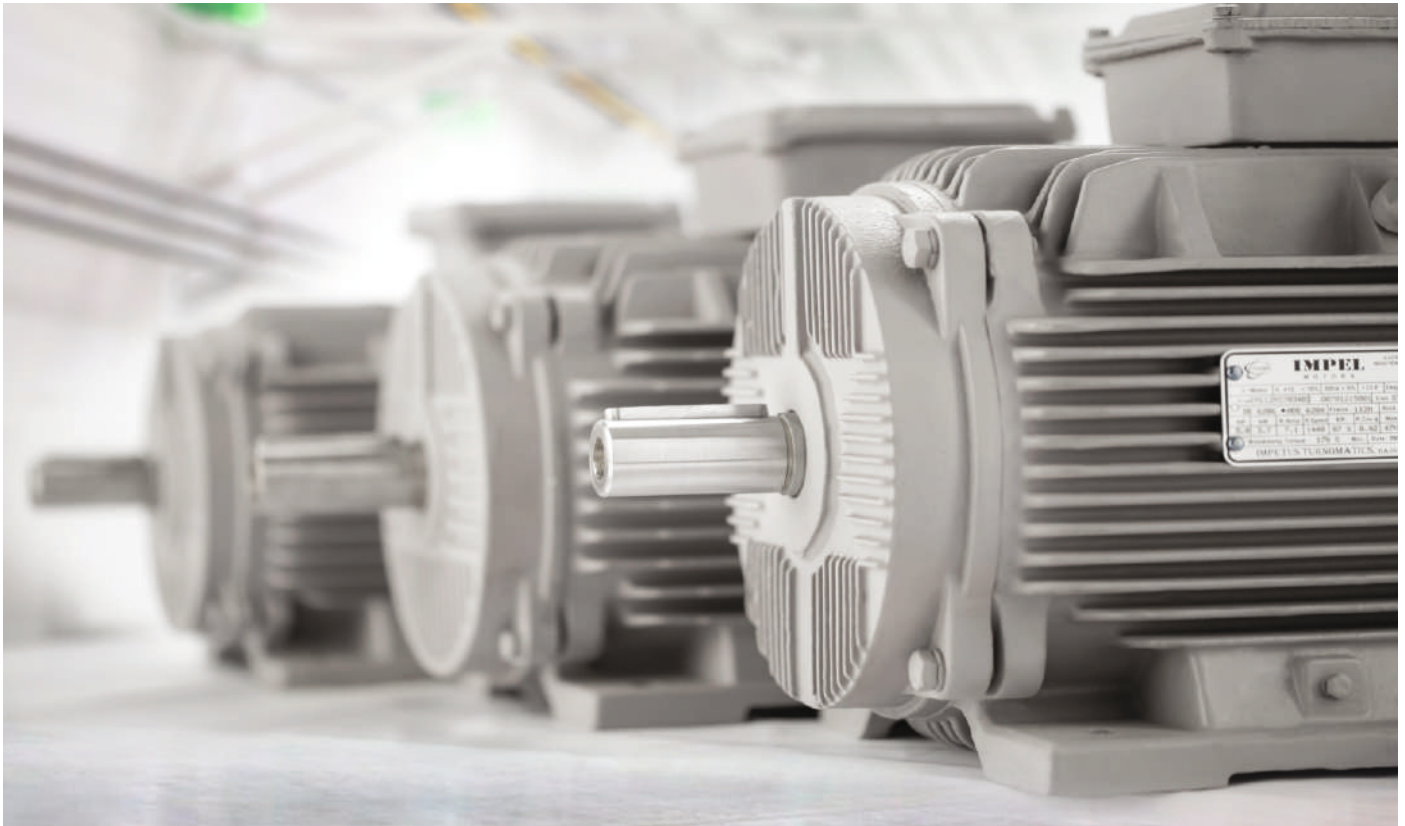
IE2

HIGH EFFICIENCY

IM-SERIES CAST IRON MOTOR

IMPEL[®]

MOTORS



FEATURES

- High Efficiency and Long Life Product
- Motors are fitted with dynamically balanced aluminium die cast - squirrel cage rotors
- High Torque Level.
- High Power Factor.
- Low Temperature Rise.
- Minimum copper losses due to use of electrolytic grade of copper
- Minimum friction losses with SKF/FAG
- Easy maintenance
- Minimum Pay Back Period

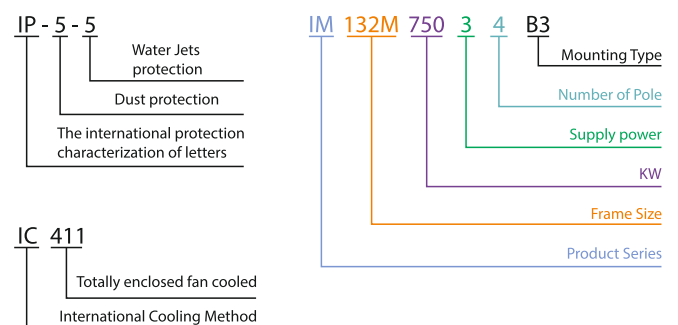
BENEFITS

- Longer insulation and bearing lives
- Lower heat output and less vibration
- Extended winding life
- Increased tolerance of overload conditions
- Higher tolerance for increased voltage rates - or phase imbalance

OPERATING CONDITIONS

- Frequency Variation: 50Hz (+5%)
- Voltage Variation: 415V or 230V (±10%)
- Enclosure: TEFC (Total Enclose Fan Cooled)
- Cooling Method: IC411 (Shaft Mounted Fan)
- Degree of Protection: IP44/IP55
- Duty: S1/ Continuous.
- Ambient Temperature: 50° C
- Insulation Class: "F", The temperature rise of the stator winding limited to Class B (Resistance Method)
- Direction of Rotation: Clock wise & anticlockwise as seen from Drive End Side.
- Altitude: Should be lower than 1000 meters Above Sea Level.

Product Code Explanation



3 Phase TEFC Squirrel Cage A C Induction Motors Frame - 71 to 200L 2Pole : 3000 RPM

Voltage : 415±10%		Insu. Class : "F"		Ambient : 50°C							
Protection : IP44/IP55		Frequency : 50Hz±5%		Duty : S1/Continuous							
Rating Output		Frame Size	Operating Characteristics at Rated Output				With DOL Starting			Net Weight	
			Rated Speed	FL Efficiency] %	Power Factor	Full Load Ampere	Rated Torque	STG. Current % FLC	STG Torque %FLT		POT Torque %
KW	HP	ISI	RPM	IE2	Cos Ø	At 415V	Kgm				Kgs
0.37	0.5	71	2800	69.5	0.85	1.0	0.13	500	210	245	13
0.75	1	80	2840	77.4	0.70	1.9	0.25	650	250	260	18
1.1	1.5	80	2860	79.6	0.82	2.3	0.37	650	250	258	18
1.5	2	90S	2860	81.3	0.85	3.1	0.50	650	230	240	22
2.2	3	90L	2850	83.2	0.88	4.0	0.75	700	250	280	24
3.7	5	100L	2850	85.5	0.85	7.0	1.24	700	220	275	34
5.5	7.5	132S	2880	87	0.86	10.5	1.84	700	200	286	68
7.5	10	132S	2880	88.1	0.86	13.5	2.50	700	200	270	72
11	15	160M	2900	89.4	0.88	20.0	3.62	700	200	275	110
15	20	160M	2900	90.3	0.88	27.2	4.90	700	200	240	120
18.5	25	160L	2910	90.9	0.88	33.1	6.10	700	220	245	140
22	30	180M	2930	91.3	0.92	38.1	7.31	700	220	250	170
30	40	200L	2930	92	0.88	53.8	9.97	700	210	240	220
37	50	200L	2930	92.5	0.90	65.5	12.29	700	210	240	260

3 Phase TEFC Squirrel Cage A C Induction Motors Frame - 71 to 225S 4Pole : 1500 RPM

Voltage : 415±10%		Insu. Class : "F"		Ambient : 50°C							
Protection : IP44/IP55		Frequency : 50Hz±5%		Duty : S1/Continuous							
Rating Output		Frame Size	Operating Characteristics at Rated Output				With DOL Starting			Net Weight	
			Rated Speed	FL Efficiency] %	Power Factor	Full Load Ampere	Rated Torque	STG. Current % FLC	STG Torque %FLT		POT Torque %
KW	HP	ISI	RPM	IE2	Cos Ø	At 415V	Kgm				Kgs
0.37	0.5	71	1380	72.7	0.63	1.2	0.26	500	200	220	13
0.75	1	80	1410	79.6	0.77	1.8	0.51	600	240	248	18
1.1	1.5	90S	1420	81.4	0.76	2.4	0.74	600	230	243	22
1.5	2	90L	1430	82.8	0.75	3.2	1.01	600	240	269	24
2.2	3	100L	1430	84.3	0.76	4.7	1.48	650	230	260	34
3.7	5	112M	1440	86.3	0.80	7.2	2.48	650	210	260	44
5.5	7.5	132S	1440	87.7	0.80	11.0	3.68	700	200	250	68
7.5	10	132M	1440	88.7	0.84	13.8	5.02	700	200	250	78
11	15	160M	1450	89.8	0.78	21.5	7.20	700	220	262	120
15	20	160L	1450	90.6	0.80	28.0	9.91	700	210	250	140
18.5	25	180M	1460	91.2	0.82	34.1	12.14	700	230	250	150
22	30	180L	1460	91.6	0.86	39.8	14.55	700	230	280	170
30	40	200L	1460	92.3	0.84	55.5	20.01	700	210	260	260
37	50	225S	1460	92.7	0.88	67.0	24.5	700	220	260	300

3 Phase TEFC Squirrel Cage A C Induction Motors Frame - 71 to 250M 6Pole : 960 RPM

Voltage : 415±10%		Insu. Class : "F"		Ambient : 50°C							
Protection : IP44/IP55		Frequency : 50Hz±5%		Duty : S1/Continuous							
Rating Output		Frame Size	Operating Characteristics at Rated Output				With DOL Starting			Net Weight	
			Rated Speed	FL Efficiency] %	Power Factor	Full Load Ampere	Rated Torque	STG. Current % FLC	STG Torque %FLT		POT Torque %
KW	HP	ISI	RPM	IE2	Cos Ø	At 415V	Kgm				Kgs
0.37	0.5	80	920	67.6	0.63	1.2	0.39	500	210	231	18
0.75	1	90S	920	75.9	0.65	2.0	0.78	600	200	226	22
1.1	1.5	90L	930	78.1	0.60	3.2	1.14	600	240	247	24
1.5	2	100L	940	79.8	0.75	3.3	1.53	600	210	221	34
2.2	3	112M	940	81.8	0.65	5.4	2.21	650	230	250	44
3.7	5	132S	950	84.3	0.70	8.2	3.68	650	200	253	68
5.5	7.5	132M	950	86	0.70	12.2	5.45	650	210	273	78
7.5	10	160M	950	87.2	0.74	16.1	7.43	700	210	263	110
11	15	160L	950	88.7	0.76	22.0	10.83	700	210	226	140
15	20	180L	960	89.7	0.82	28.0	14.77	700	210	246	160
18.5	25	200L	960	90.4	0.80	35.4	18.77	700	200	230	220
22	30	200L	960	90.9	0.81	41.5	22.32	700	200	230	230
30	40	225M	965	91.7	0.81	56.3	30.28	700	200	230	320
37	50	250M	965	92.2	0.81	68.9	37.34	700	200	230	420

IE3

PREMIUM EFFICIENCY

IM-SERIES CAST IRON MOTOR

IMPEL[®]
M O T O R S



FEATURES

High Efficiency and Long Life Product
Motors are fitted with dynamically balanced aluminium die cast - squirrel cage rotors
High Torque Level.
High Power Factor.
Low Temperature Rise.
Minimum copper losses due to use of electrolytic grade of copper
Minimum friction losses with SKF/FAG
Easy maintenance
Minimum Pay Back Period

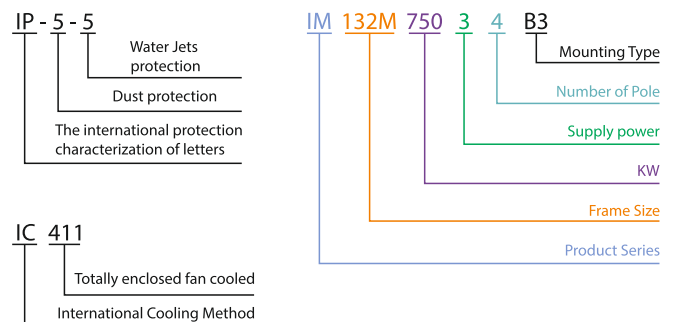
BENEFITS

Premium Efficiency Series
High Load Carrying Capacity
Maintain Efficiency Throughout The Life
Easy Installation
No Cost Of Up gradation From IE2 Or Ie1
Electrolytic Grade Aluminium Die Cast
Low heat Dissipation
Minimum Pay Back Periodct

OPERATING CONDITIONS

Frequency Variation: 50Hz (±5%)
Voltage Variation: 415V or 230V (±10%)
Enclosure: TEFC (Total Enclose Fan Cooled)
Cooling Method: IC411 (Shaft Mounted Fan)
Degree of Protection: IP44/IP55
Duty: S1/Continuous.
Ambient Temperature: 50° C
Insulation Class: "F", The temperature rise of the stator winding limited to Class B (By resistance method)
Direction of Rotation: Clock wise & anticlockwise as seen from Drive End Side.
Altitude: Should be lower than 1000 meters Above Sea Level.

Product Code Explanation



3 Phase TEFC Squirrel Cage A C Induction Motors Frame - 71 to 160M 2Pole : 3000 RPM

Voltage : 415±10%		Insu. Class : "F"		Ambient : 50°C							
Protection : IP44/IP55		Frequency : 50Hz±5%		Duty : S1/Continuous							
Rating Output		Frame Size	Operating Characteristics at Rated Output					With DOL Starting			Net Weight
			Rated Speed	FL Efficiency η %	Power Factor	Full Load Ampere	Rated Torque	STG. Current % FLC	STG Torque %FLT	POT Torque %	
kW	HP	ISI	RPM	IE3	Cos \emptyset	At 415V	Kgm				Kgs
0.37	0.5	71	2810	73.8	0.74	0.95	0.13	550	210	240	14
0.75	1	80	2840	80.7	0.70	1.85	0.26	650	220	240	18
1.1	1.5	80	2860	82.7	0.84	2.20	0.37	650	230	260	20
1.5	2	90S	2860	84.2	0.83	3.00	0.51	700	220	250	22
2.2	3	90L	2850	85.9	0.89	4.00	0.75	750	220	250	25
3.7	5	100L	2855	87.8	0.84	7.00	1.26	750	220	250	36
5.5	7.5	132S	2890	89.2	0.82	10.50	1.85	750	220	250	70
7.5	10	132S	2890	90.1	0.86	13.50	2.53	750	230	250	75
11	15	160M	2900	91.2	0.85	19.85	3.69	750	220	250	115
15	20	160M	2900	91.9	0.84	27.20	5.04	750	220	250	130

3 Phase TEFC Squirrel Cage A C Induction Motors Frame - 71 to 160L 4Pole : 1500 RPM

Voltage : 415±10%		Insu. Class : "F"		Ambient : 50°C							
Protection : IP44/IP55		Frequency : 50Hz±5%		Duty : S1/Continuous							
Rating Output		Frame Size	Operating Characteristics at Rated Output					With DOL Starting			Net Weight
			Rated Speed	FL Efficiency η %	Power Factor	Full Load Ampere	Rated Torque	STG. Current % FLC	STG Torque %FLT	POT Torque %	
kW	HP	ISI	RPM	IE3	Cos \emptyset	At 415V	Kgm				Kgs
0.37	0.5	71	1380	77.3	0.67	1.00	0.26	650	200	240	14
0.75	1	80	1420	82.5	0.74	1.70	0.51	650	220	250	20
1.1	1.5	90S	1420	84.1	0.78	2.35	0.75	650	220	250	24
1.5	2	90L	1430	85.3	0.79	3.10	1.02	650	220	250	26
2.2	3	100L	1430	86.7	0.76	4.65	1.50	700	210	240	36
3.7	5	112M	1440	88.4	0.82	7.10	2.50	700	210	250	48
5.5	7.5	132S	1440	89.6	0.81	10.55	3.72	700	230	250	70
7.5	10	132M	1440	90.4	0.84	13.75	5.07	700	220	250	78
11	15	160M	1455	91.4	0.78	21.40	7.36	720	210	260	130
15	20	160L	1450	92.1	0.81	27.85	10.08	750	215	250	140

3 Phase TEFC Squirrel Cage A C Induction Motors Frame - 80 to 180L 6Pole : 1000 RPM

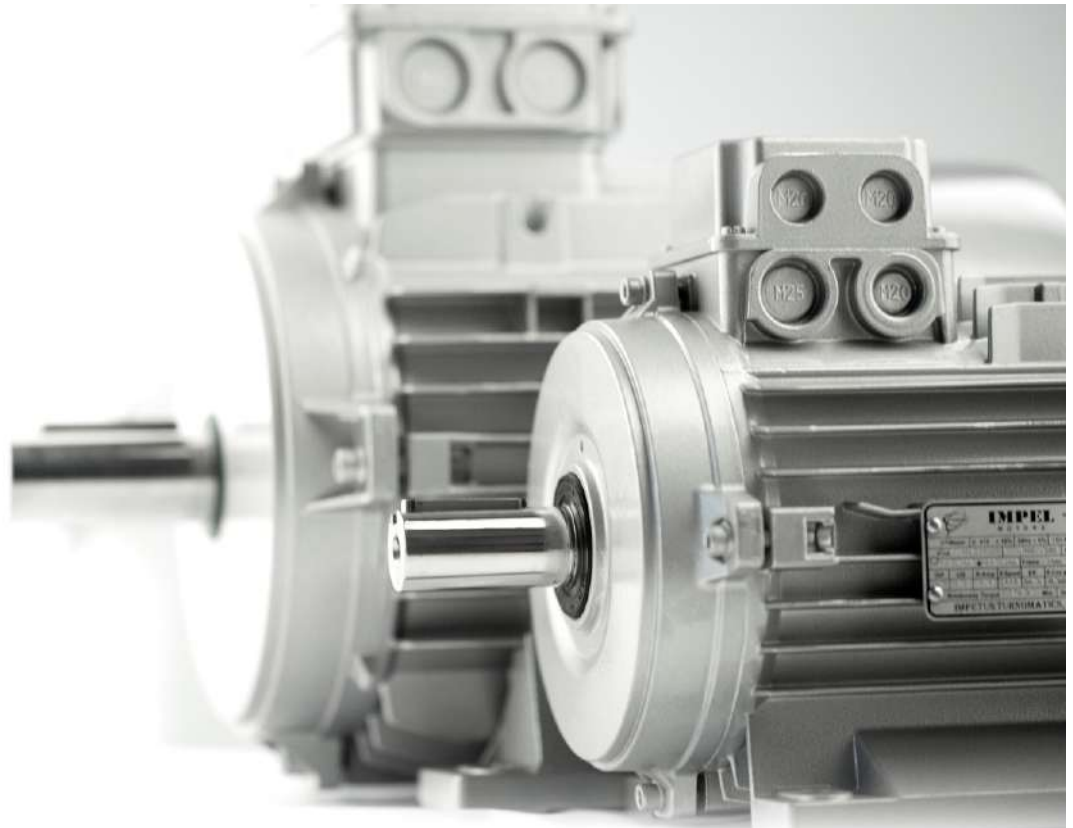
Voltage : 415±10%		Insu. Class : "F"		Ambient : 50°C							
Protection : IP44/IP55		Frequency : 50Hz±5%		Duty : S1/Continuous							
Rating Output		Frame Size	Operating Characteristics at Rated Output					With DOL Starting			Net Weight
			Rated Speed	FL Efficiency η %	Power Factor	Full Load Ampere	Rated Torque	STG. Current % FLC	STG Torque %FLT	POT Torque %	
kW	HP	ISI	RPM	IE3	Cos \emptyset	At 415V	Kgm				Kgs
0.37	0.5	80	920	73.5	0.64	1.10	0.39	450	190	210	18
0.75	1	90S	920	78.9	0.68	1.95	0.79	650	190	220	22
1.1	1.5	90L	930	81	0.60	3.15	1.15	650	190	220	24
1.5	2	100	940	82.5	0.77	3.30	1.55	650	200	210	36
2.2	3	112M	940	84.3	0.69	5.30	2.28	600	210	220	46
3.7	5	132S	950	86.5	0.74	8.10	3.79	650	200	240	70
5.5	7.5	132M	950	88	0.73	12.00	5.64	650	210	230	78
7.5	10	160M	950	89.1	0.74	15.95	7.69	700	200	240	110
11	15	160L	950	90.3	0.78	21.85	11.28	750	200	250	140
15	20	180L	960	91.2	0.83	27.50	15.22	750	200	250	180

IE2

HIGH EFFICIENCY

EX-SERIES ALUMINUM MOTOR

IMPEL[®]
M O T O R S



FEATURES

- High Efficiency and Long Life Product
- Motors are fitted with dynamically balanced aluminium die cast - squirrel cage rotors
- High Torque Level.
- High Power Factor.
- Low Temperature Rise.
- Minimum copper losses due to use of electrolytic grade of copper
- Minimum friction losses with SKF/FAG
- Easy maintenance
- Minimum Pay Back Period

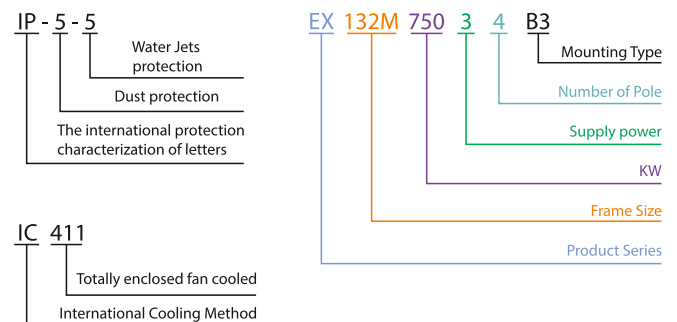
APPLICATIONS

- Light Duty Machines as lathe, Pillar type Drilling Machine
- Pumps
- Domestic Floor mills, Rolling Mills.
- Cooling Towers.
- Compressors, Wood Working Machinery & Varied Machine Tools.
- Plastic Machinery
- Textile Machinery.
- Food Processing Machinery.
- Materials Handling Equipment
- Printing Machinery

OPERATING CONDITIONS

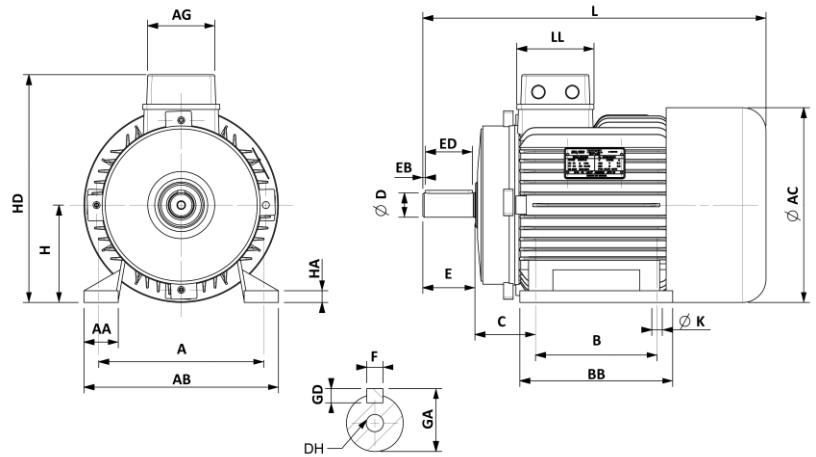
- Frequency Variation: 50Hz (±5%)
- Voltage Variation: 415V or 230V (±10%)
- Enclosure: TEFC (Total Enclose Fan Cooled)
- Cooling Method: IC411 (Shaft Mounted Fan)
- Degree of Protection: IP44/IP55
- Duty: S1/ Continuous.
- Ambient Temperature: 50° C
- Insulation Class: "F", The temperature rise of the stator winding limited to Class B (By resistance method)
- Direction of Rotation: Clock wise & anticlockwise as seen from Drive End Side.
- Altitude: Should be lower than 1000 meters Above Sea Level.

Product Code Explanation



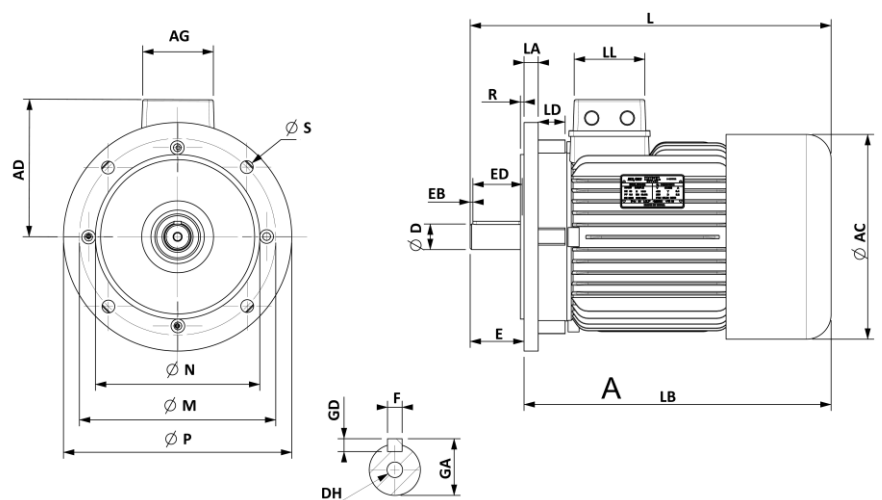
FOOT MOUNTED (EXB3) OUTLINE DIMENSIONS

Frame Size	71	80	90S	90L	100L	112M
H	71	80	90	90	100	112
A	112	125	140	140	160	190
B	90	100	100	125	140	140
C	45	50	56	56	63	70
D	14	19	24	24	28	28
E	30	40	50	50	60	60
F	5	6	8	8	8	8
GA	16	21.5	27	27	31	31
GD	5	6	7	7	7	7
ED	25	30	40	40	50	50
AA	23	30	36	36	37	40
AB	136	153	174	174	192	224
BB	108	136	130	155	176	176
K	7	10	10	10	12	12
HD	177	204	217	217	236	262
HA	11	12	13	13	14	14
AG	77	89	89	89	89	89
L	241	264	292	317	369	395
LL	77	89	89	89	89	89
AC	138	155	175	175	195	224



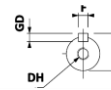
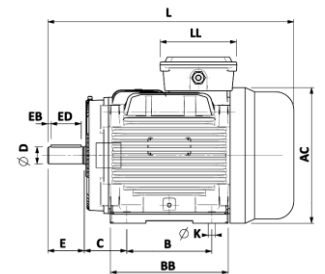
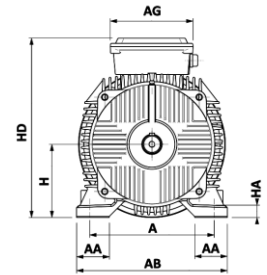
FLANGE MOUNTED (EXB5) OUTLINE DIMENSIONS

Frame Size	63	71	80	90L	100L	112M
M	115	130	165	165	215	215
N	95	110	130	130	180	180
P	140	160	200	200	250	250
D	11	14	19	24	28	28
E	23	30	40	50	60	60
ED	19	26	35	44	8	8
F	4	5	6	8	31	31
GA	12.5	16	21.5	27	7	7
GD	4	5	6	8	50	50
LA	8	11	11	11	11	11
LD	7.5	8	22	22	27	30
T	3	3.5	3.5	3.5	4	4
S	10	10	12	12	15	15
AD	98	105	114	131	138	150
AG	81	81	81	85	89	89
L	220	257	295	305	369	395
LL	81	81	81	85	89	89
LB	196	226	255	265	309	336
AC	120	135	153	180	195	224



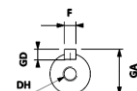
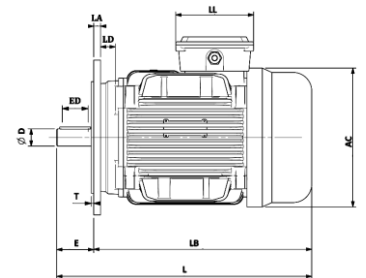
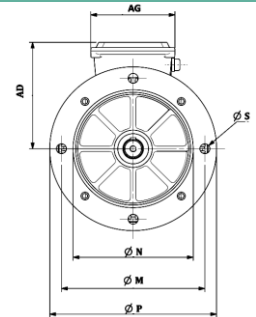
FOOT MOUNTED (IMB3) OUTLINE DIMENSIONS

Frame Size	71	80	90-S	90-L	100-L	112-M	132-S	132-M	160-M	160-L	180M	180L	200L	225S/M
H	71	80	90	90	100	112	132	132	160	160	180	180	200	225
A	112	125	140	140	160	190	216	216	254	254	279	279	318	356
B	90	100	100	125	140	140	140	178	210	254	241	279	305	286/311
C	45	50	56	56	63	70	78.9	89	108	108	121	121	133	149
D	14	19	24	24	28	28	38	38	42	42	48	48	55	60
E	30	40	50	50	60	60	80	80	110	110	110	110	110	140
F	5	6	8	8	8	8	10	10	12	12	14	14	16	18
GA	16	21.5	27	27	31	31	41	41	45	45	51.5	51.5	59	64
GD	5	6	7	7	7	7	8	8	8	8	9	9	10	11
ED	26	35	44	44	54	54	70	70	100	100	100	100	100	135
AA	27	35	42.5	38	47	52	56	45	60	60	78	78	86	80
AB	137	155	179	179	200	232	260	250	301	301	348	348	402	430
BB	132	151	140.5	172	192	194	196	215	319	319	298	328	348	355
K	7	10	10	10	12	12	12	12	15	15	15	15	19	19
HD	190	210	230	222	252	272	315	345	400	400	430	430	480	560
HA	10.5	12.5	12	15	17	20	19	16.5	25	25	26	26	32	25
AG	115	115	115	115.6	126	126	126	166	166	166	260	260	260	240
L	265	294	313	344	383	400	478	216	620	620	702	742	786	860
LL	105	105	105	105	126	126	126	166	166	166	155	155	155	240
AC	140	161	177	177	197	218	264	265	306	306	355	355	392	420



FLANGE MOUNTED (IMB5) OUTLINE DIMENSIONS

Frame Size	71	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S/M
M	130	165	165	165	215	215	265	265	300	300	250	250	300	400
N	110	130	130	130	180	180	230	230	250	250	300	300	350	350
P	160	200	200	200	250	250	300	300	350	350	350	350	400	450
D	14	19	24	24	28	28	38	38	42	42	48	48	55	55
E	30	40	50	50	60	60	80	80	110	110	110	110	110	110
ED	26	35	44	44	54	54	70	70	100	100	100	100	100	100
F	5	6	8	8	8	8	10	10	12	12	14	14	16	16
GA	16	21.5	27	27	31	31	41	41	45	45	51.5	51.5	59	59
GD	5	6	8	8	8	8	10	10	12	12	9	9	10	10
LA	10	14	11	11	14	14	14	14	19	19	13	13	15	15
LD	18	9.75	18	18	19	29	41	41	41	41	32	32	32	32
T	3.5	3.5	3.5	3.5	4	4	4	4	5	5	5	5	5	5
S	10	12	12	12	15	15	15	15	19	19	19	19	19	19
AD	114	104	105	105	110	134	198	224	236	236	250	250	280	280
AG	115	115	115	115	126	126	126	166	166	166	260	260	260	260
L	296	296	343	343	384	384	453	510	605	605	714	745	801	801
LL	105	105	105	105	126	126	166	166	166	166	155	155	155	155
LB	264	252	293	293	324	324	383	430	495	495	604	644	691	691
AC	140	161	177	177	197	218	264	265	306	306	355	355	392	392





OVERVIEW

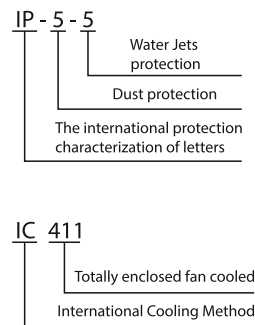
IMPEL - brake motors are asynchronous three-phase totally enclosed fan cooled motors. The braking action is always obtained through a very quick and precise stop, thereby guaranteeing a safe and prompt intervention in the event of an unforeseen power supply failure.

IMPEL - brake motors are particularly suitable for hoisting and traverse applications, tooling machinery, automatic and transfer machinery in textile, ceramic and packing fields and in every situation where precision and quickness in braking are required.

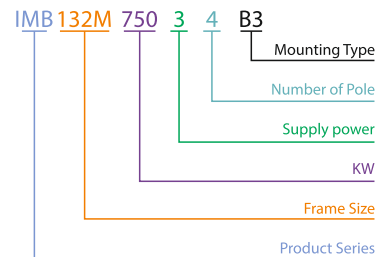
Brake motor is a standard motor modified for braking duties, i.e. a three phase induction motor with standard dimensions and output rating. The electro-magnetic disc brake is powered, by either DC current through a rectifier located in terminal box or three phase AC current. When the brake coil is de-energized, the brake is actuated by spring pressure.

OPERATING CONDITIONS

- Frequency Variation: 50Hz (±5%)
- Voltage Variation: 415V or 230V (±10%)
- Enclosure: TEFC (Total Enclose Fan Cooled)
- Cooling Method: IC411 (Shaft Mounted Fan)
- Degree of Protection: IP44/IP55
- Duty: S1/S4
- Ambient Temperature: 50° C
- Insulation Class: "F", The temperature rise of the stator winding limited to Class B (By resistance method)
- Direction of Rotation: Clock wise & anticlockwise as seen from Drive End Side.
- Altitude: Should be lower than 1000 meters Above Sea Level.



Product Code Explanation



2 Pole : 3000 RPM

Rating Output		Frame Size	Brake Size	Brake Torque
kW	HP	ISI	Brake No.	Nm
0.37	0.5	71	8	8
0.75	1	80	10	16
1.1	1.5	80	10	16
1.5	2	90S	12	32
2.2	3	90L	12	32
3.7	5	100L	14	60
5.5	7.5	132S	18	150
7.5	10	132S	18	150
9.3	12.5	132S	18	150
11	15	160M	20	260
15	20	160M	20	260

4 Pole : 1500 RPM

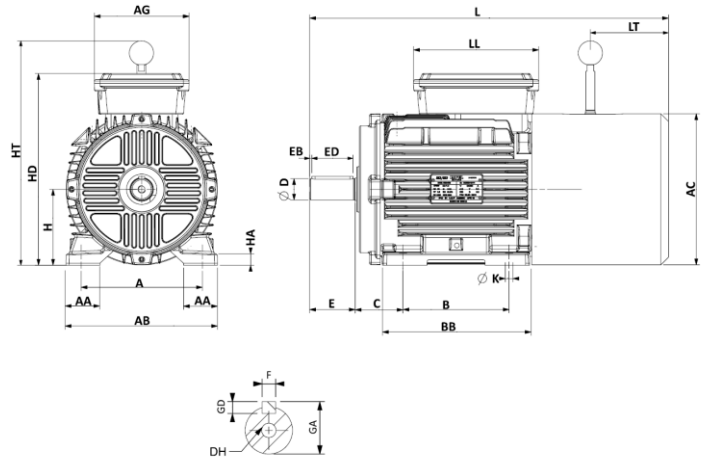
Rating Output		Frame Size	Brake Size	Brake Torque
kW	HP	ISI	Brake No.	Nm
0.37	0.5	71	8	8
0.75	1	80	10	16
1.1	1.5	90S	12	32
1.5	2	90L	12	32
2.2	3	100L	14	60
3.7	5	112M	16	100
5.5	7.5	132S	18	150
7.5	10	132M	18	150
9.3	12.5	160M	20	260
11	15	160M	20	260
15	20	160L	20	260

6 Pole : 1000 RPM

Rating Output		Frame Size	Brake Size	Brake Torque
kW	HP	ISI	Brake No.	Nm
0.37	0.5	80	10	16
0.75	1	90S	12	32
1.1	1.5	90L	12	32
1.5	2	100L	14	60
2.2	3	112M	16	100
3.7	5	132S	18	150
5.5	7.5	132M	18	150
7.5	10	160M	20	260
9.3	12.5	160L	20	260
11	15	160L	20	260

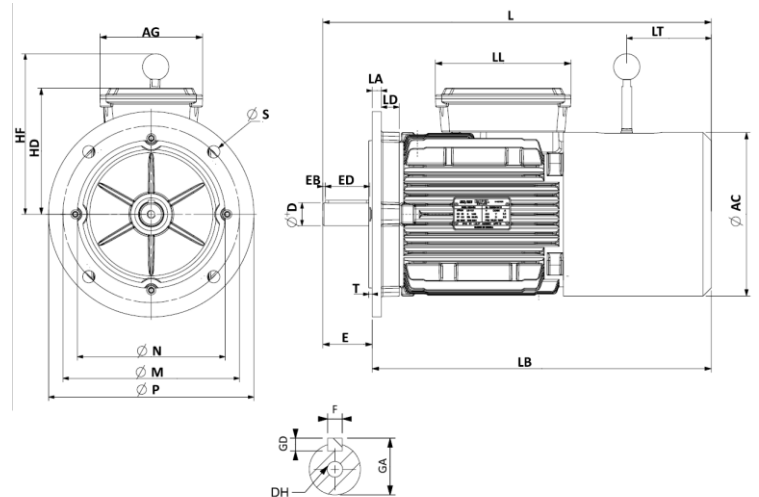
FOOT MOUNTED (IMB3) BRAKE TYPE OUTLINE DIMENSIONS

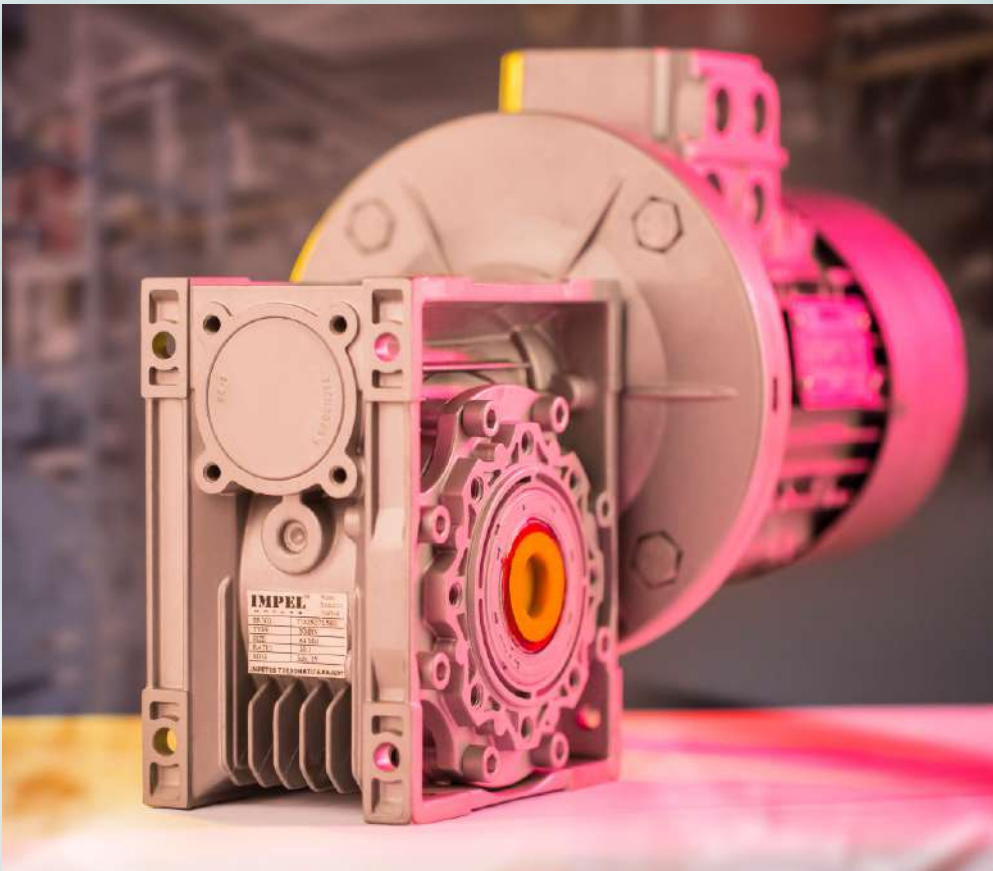
Frame Size	71	80	90S	90L	100L	112M	132S	132M
H	71	80	90	90	100	112	132	132
A	112	125	140	140	160	190	216	216
B	90	100	100	125	140	140	140	178
C	45	50	56	56	63	70	89	89
D	14	19	24	24	28	28	38	38
E	30	40	50	50	60	60	80	80
F	5	6	8	8	8	8	10	10
GA	16	21.5	27	27	31	31	41	41
GD	5	6	7	7	7	7	8	8
ED	25	30	40	40	50	50	70	70
AA	29	33	40	34	45	50	68	68
AB	132	156	175	175	200	230	256	256
BB	120	144	140	175	194	194	194	222
K	7	10	10	10	12	12	12	12
HD	175	201	215	220	252	274	324	324
HA	8	12	12	15	15	18	18	18
AG	92	98	98	98	125	125	125	125
L	306	365	382	418	473	500	576	614
LL	92	98	98	98	125	125	125	125
AC	138	158	175	175	199	222	256	256
HT	212	215	258	258	296	356	347	347
LT	70	78	87	87	103	113	135	135



FLANGE MOUNTED (IMB5) BRAKE TYPE OUTLINE DIMENSIONS

Frame Size	71	80	90L	100L	112M	132S	132M
N	110	130	130	180	180	230	230
M	130	165	165	215	215	265	265
P	160	200	200	250	250	300	300
D	14	19	24	28	28	38	38
E	30	40	50	60	60	80	80
ED	25	30	40	50	50	70	70
F	5	6	8	8	8	10	10
GA	16	21.5	17	31	31	41	41
GD	5	6	7	7	7	8	8
LA	9	10	10	11	11	12	12
LD	16	20	20	24	24	24	24
T	3.5	3.5	3.5	4	4	4	4
S	10	12	12	15	15	15	15
AD	104	121	130	152	162	192	192
AG	92	98	98	125	125	125	125
L	306	365	418	473	500	576	614
LL	92	98	98	125	125	125	125
LB	238	263	300	337	348	412	450
AC	138	158	175	199	222	256	256
HF	141	135	168	196	244	215	215
LT	70	78	87	103	113	135	135





Torque transmission

with **High Efficiency**

EX-SERIES

ALUMINUM GEAR BOX

IMPEL[®]
M O T O R S

CALCULATION OF SERVICE FACTOR FOR MOTOR INPUT

Selection of Gear box is very important it is made by comparing actual loads with catalogue ratings. Catalogue ratings are made according to a standard set of loading conditions where actual load conditions may vary according to type of application. Service factors are used to calculate an equivalent load to compare with catalogue ratings.

DURATION OF SERVICE (HOURS PER DAY)	UNIFORM LOAD	MODERATE LOAD	HEAVY SHOCK	EXTREME SHOCK
Occasional ½ hour	0.80	0.90	1.00	1.25
Less than 3 hours	1.00	1.00	1.25	1.50
3 – 10 hours	1.00	1.25	1.50	1.75
Over 10 hours	1.25	1.50	1.75	2.00

OVERHUNG LOAD

Overhung load is the radial force imposed on a shaft by a mounted pinion, pulley, or sprocket. The overhung load ratings expressed in this catalog are the allowable load measured at a distance of one shaft diameter from the housing. When one of the above items is mounted on the output shaft of a reducer a calculation should be made to determine whether the resulting overhung load exceeds the overhung load rating of the reducer.

FEATURES & BENEFITS

One-piece gear case, with external ribs, is made of close-grained cast iron and provides for rigid gear and bearing support. - It also offers excellent heat dissipation.

Double lip, spring-loaded seals guard against oil leakage and prevent dirt from entering.

Stepped shafts with oversized ball and tapered roller bearings.

Carbon steel shafts for greater strength.

High tensile strength cast bronze worm wheel and hardened and ground alloy steel worm made integral with the shaft for - long and trouble-free life.

Every unit test run prior to shipment.

Universal mounting with bolt-on feet.

Highly modifiable design.

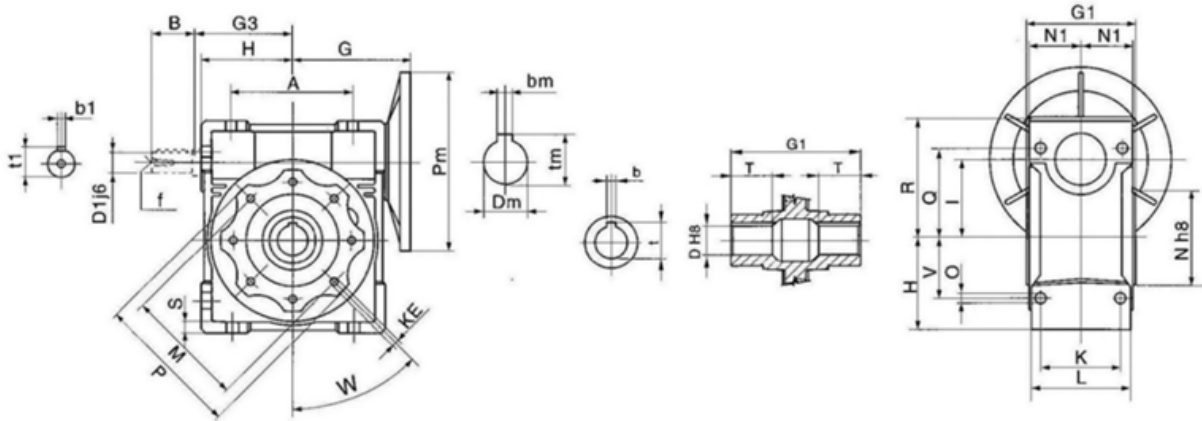
All this at substantially lower prices than you have been accustomed to paying for reducers of lesser quality.

PRODUCT RANGE 40mm TO 150mm

SELECTION GUIDE (FOR 1500 INPUT RPM)

Size	Ratio	Motor Selection	Size	Ratio	Motor Selection	Size	Ratio	Motor Selection	Size	Ratio	Motor Selection		
EX 040	7.5:1	0.25hp/ 0.18kW	EX 050	7.5:1	0.5hp/ 0.37kW	EX 063	7.5:1	1hp/ 0.75kW	EX 075	7.5:1	2 hp/ 1.5kW		
	10:1			10:1			10:1			10:1			
	15:1			15:1			15:1			15:1			
	20:1			20:1			20:1			20:1			
	25:1			25:1			25:1			25:1			
	30:1	0.17hp/ 0.12kW		30:1	0.25hp/ 0.18kW		30:1	0.5hp/ 0.37kW		30:1	1.5hp/ 1.1kW	30:1	1hp/ 0.75kW
	40:1			40:1			40:1			40:1			
	50:1			50:1			50:1			50:1			
	60:1			60:1			60:1			60:1			
	80:1			80:1			80:1			80:1			
100:1	100:1	100:1	100:1										
EX 090	7.5:1	3hp/ 2.20kW	EX 110	7.5:1	5hp/ 3.7kW	EX 130	7.5:1	7.5hp/ 5.5kW	EX 150	7.5:1	15hp/ 11.25kW		
	10:1			10:1			10:1			10:1			
	15:1			15:1			15:1			15:1			
	20:1			20:1			20:1			20:1			
	25:1			25:1			25:1			25:1			
	30:1	2 hp/ 1.5kW		30:1	3hp/ 2.20kW		30:1	10hp/ 7.5kW		30:1	7.5 hp/ 5.5kW	30:1	10hp/ 7.5kW
	40:1			40:1			40:1			40:1			
	50:1			50:1			50:1			50:1			
	60:1			60:1			60:1			60:1			
	80:1			80:1			80:1			80:1			
100:1	100:1	100:1	100:1										

OVERALL DIMENSIONS

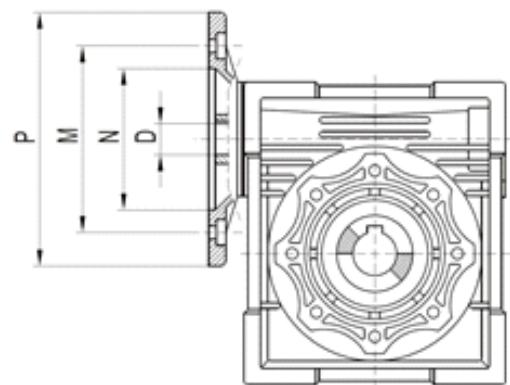


Detail	Gear Box Size				
	Ex040	Ex050	Ex063	Ex075	Ex090
A	70	80	100	120	140
B	23	30	40	50	50
D	18	25	25	28	35
D1	14	14	19	24	24
G	70	80	95	112.50	129.50
G1	78	92	112	120	140
G3	53	64	75	90	108
H	50	60	72	86	103
I	40	50	63	75	90
K	60	70	85	90	100
KE	M6*10	M8*10	M8*14	M8*14	M10*18
L	71	85	103	112	130
M	75	85	95	115	130
N	60	70	80	95	110
N1	36.50	43.50	53	57	67

Detail	Gear Box Size				
	Ex040	Ex050	Ex063	Ex075	Ex090
O	6.50	8.50	8.50	11.50	13
P	87	100	110	140	160
Q	55	64	80	93	102
R	71.50	84	102	119	135
S	6.50	7	8	10	11
T	26	30	36	40	45
V	35	40	50	60	70
W	45	45	45	45	45
b	6	8	8	8	10
T	20.80	28.30	28.30	31.30	38.30
b1	4	5	6	8	8
t1	12.50	16	21.50	27	27
f	-	M6	M6	M8	M8
Kg	2.30	3.50	6.20	9	13

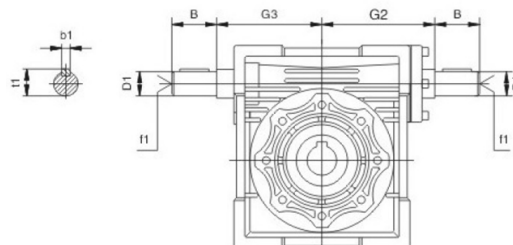
INPUT FLANGE AND SHAFT

Size	Frame Size	N	M	P	D (Ratio)							
					10	15	20	25	30	40	50	60
Ex040	71B5	110	130	160	14	14	14	14	14	14	-	-
	63B5	95	115	140	14	14	14	14	14	14	14	14
Ex050	80B5	130	165	200	19	19	19	19	19	-	-	-
	71B5	110	130	160	14	14	14	14	14	14	14	14
Ex063	63B5	95	115	140	-	-	-	-	-	14	14	14
	90B5	130	165	200	24	24	-	-	-	-	-	-
	80B5	130	165	200	19	19	24	24	24	24	19	19
Ex075	71B5	110	130	160	-	-	19	19	19	19	14	14
	100/112B5	180	215	250	28	28	-	-	-	-	-	-
	90B5	130	165	200	24	24	28	28	28	-	-	-
	80B5	130	165	200	-	-	24	24	24	24	19	19
Ex090	71B5	110	130	160	-	-	-	-	-	19	14	14
	100/112B5	180	215	250	28	28	28	28	28	-	-	-
	90B5	130	165	200	24	24	24	24	24	24	24	24
	80B5	130	165	200	-	-	-	-	-	19	19	19



DIMENSION

Size	G2	B	D1	f1	b1	t1
Ex040	60	23	11j6	-	4	12.50
Ex050	74	30	14j6	M6	5	16
Ex063	90	40	19j6	M6	6	21.50
Ex075	105	50	24j6	M8	8	27
Ex090	125	50	24j6	M8	8	27



OUR CLIENTELES



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