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AC MOTOR

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COMPANY OVERVIEW

A BRIEF INSIGHT INTO OUR BUSINESS AND VALUES







ESTABLISHED: 1958

MAIN BUSINESS: ELECTRIC INDUCTION MOTORS(IE3, IE4, IE5), GEARED MOTORS, HELICAL BEVEL GEARED MOTORS, EC FAN

HEAD OFFICE & MAIN FACTORY
631-5, WOLHA-RO, HASEONG-MYEON, GIMPO-SI, GYEONGGI-DO, REPUBLIC OF KOREA

FACTORY NO. 2
44, SAMDO-RO, YANGCHON-EUP, GIMPO-SI, GYEONGGI-DO, REPUBLIC OF KOREA

R&D OFFICE
ROOM 403-2, 5-25 JANGCHA-RO, 5BEON-GIL, GOCHON-EUP, GIMPO-SI, GYEONGGI-DO, KOREA.

CHINA PLANT
SICHUAN ROAD, FUSHAN ECONOMIC DEVELOPMENT ZONE, YANTAI, SHANDONG PROVINCE, CHINA

THREE PHASE INDUCTON MOTOR

TYPE: B3

VOLTAGE: 220V~ 480V

FREQUENCY: 60Hz(50Hz)

POLES: 2P, 4P, 6P, 8P, 2/4P, 4/6P, 4/8P

RATED OUTPUT: 0.2kW~375kW

RPM: 3,600(3,000), 1,800(1,500), 1,200(1,000), 900(750)

TYPE OF ENCLOSURE: TOTALLY ENCLOSED

COOLING SYSTEM: FAN COOLED TYPE

RATING: CONTINUOUS

INSULATION CLASS: F GRADE

IP RATING: IP54







THREE PHASE INDUCTON MOTOR

TYPE: B3B5

VOLTAGE: 220V~480V

FREQUENCY: 60Hz(50Hz)

POLES: 2P, 4P, 6P, 8P, 2/4P, 4/6P, 4/8P

RATED OUTPUT: 0.2kW~375kW

RPM: 3,600(3,000), 1,800(1,500), 1,200(1,000), 900(750)

TYPE OF ENCLOSURE: TOTALLY ENCLOSED

COOLING SYSTEM: FAN COOLED TYPE

RATING: CONTINUOUS

INSULATION CLASS: F GRADE

IP RATING: IP54



THREE PHASE INDUCTON MOTOR

TYPE: B5

VOLTAGE: 220V~480V

FREQUENCY: 60Hz(50Hz)

POLES: 2P, 4P, 6P, 8P, 2/4P, 4/6P, 4/8P

RATED OUTPUT: 0.2kW~375kW

RPM: 3,600(3,000), 1,800(1,500), 1,200(1,000), 900(750)

TYPE OF ENCLOSURE: TOTALLY ENCLOSED

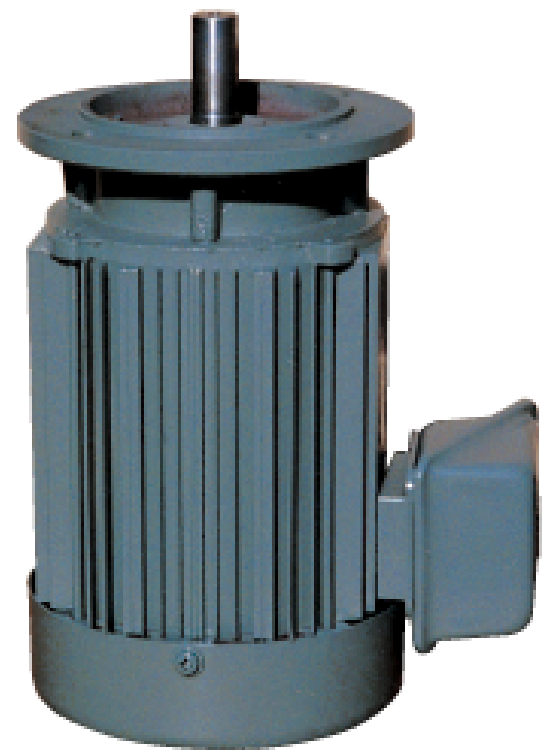
COOLING SYSTEM: FAN COOLED TYPE

RATING: CONTINUOUS

INSULATION CLASS: F GRADE

IP RATING:IP54





THREE PHASE INDUCTON MOTOR

OTHER SPECIAL MOTORS

VOLTAGE: 220V, 220/380V, 380V, 220/440V, 440V

FREQUENCY: 60Hz(50Hz)

POLES: 2P

RATED OUTPUT: 0.75kW~5.5kW

RPM: 3,600(3,000)

TYPE OF ENCLOSURE: TOTALLY ENCLOSED

COOLING SYSTEM: FAN COOLED TYPE

RATING: CONTINUOUS

INSULATION CLASS: B, F GRADE

IP RATING: IP44



WOOD WORK MOTOR

THREE PHASE INDUCTON MOTOR

OTHER SPECIAL MOTORS

VOLTAGE: 220V, 220/380V, 380V, 220/440V, 440V

FREQUENCY: 60Hz(50Hz)

POLES: 4P

RATED OUTPUT: 0.75kW~7.5kW

RPM: 1,800(1,500)

TYPE OF ENCLOSURE: TOTALLY ENCLOSED

COOLING SYSTEM: FAN COOLED TYPE

RATING: CONTINUOUS

INSULATION CLASS: B, F GRADE

IP RATING: IP44





HYDRAULIC PUMP MOTOR

THREE PHASE INDUCTON MOTOR

OTHER SPECIAL MOTORS

VOLTAGE: 220V~480V

FREQUENCY: 60Hz(50Hz)

POLES: 4P, 6P, 8P

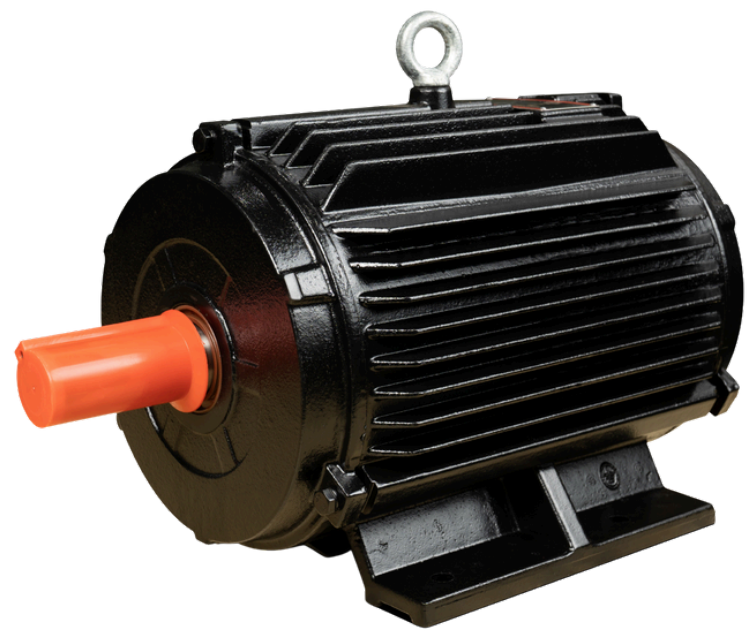
RATED OUTPUT: 2.2kW~11kW

RPM: 1,800(1,500), 1,200(1,000), 900(750)

TYPE OF ENCLOSURE: TOTALLY ENCLOSED

COOLING SYSTEM: FAN COOLED TYPE

RATING: CONTINUOUS



INSULATION CLASS: H GRADE

IP RATING: IP55

KEY FEATURES

HIGH TEMPS MOTOR

- **High-Temperature Insulation Performance:** Unlike standard motors, special insulation materials and windings are used to withstand high temperatures ranging from 150°C to over 300°C.
- **Operation During Fire Conditions:** Motors used in smoke-control fans and other firefighting systems are designed to operate normally for more than 2 hours at temperatures of 300°C during a fire.
- **Customized High-Temperature Components:** Bearings, magnets, plastic frames, and other parts are selected specifically for high-temperature applications to prevent thermal deformation.

THREE PHASE INDUCTON MOTOR

OTHER SPECIAL MOTORS

VOLTAGE: 220V~440V

FREQUENCY: 60Hz(50Hz)

POLES: 2P, 4P

RATED OUTPUT: 0.2kW~0.75kW

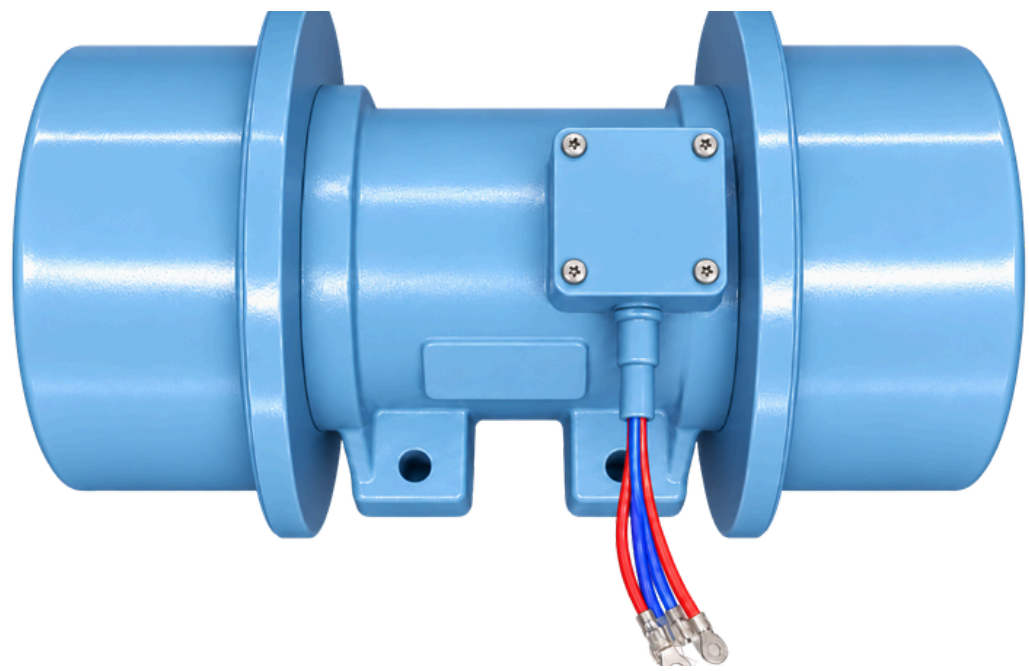
RPM: 3,600(3,000), 1,800(1,500)

TYPE OF ENCLOSURE: TOTALLY ENCLOSED

RATING: CONTINUOUS

INSULATION CLASS: B GRADE

IP RATING: IP44



VIBRATION MOTOR

SINGLE PHASE INDUCTON MOTOR

VOLTAGE: 110V~220V

FREQUENCY: 60Hz(50Hz)

POLES: 4P

RATED OUTPUT: 0.2kW~3.7kW

RPM: 1,800(1,500)

TYPE OF ENCLOSURE: OPEN DRIP-PROOF, TOTALLY ENCLOSED

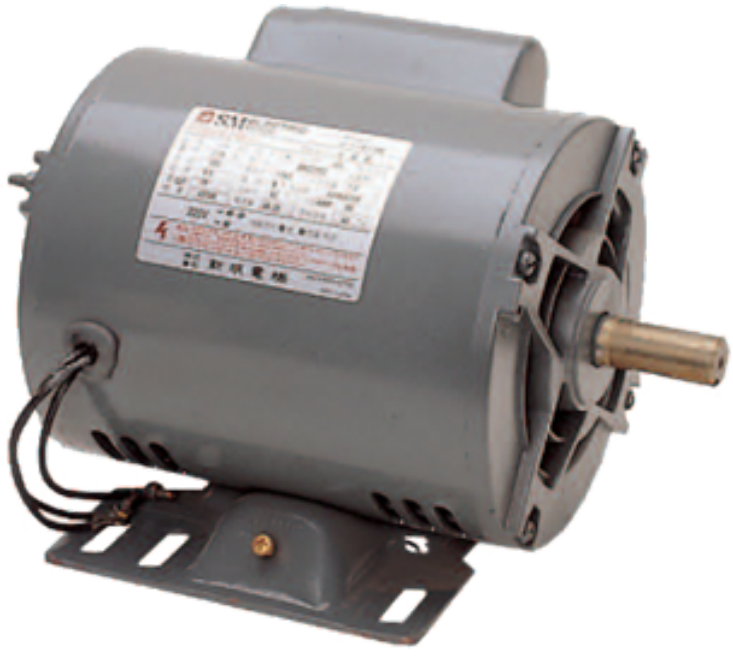
RATING: CONTINUOUS

INSULATION CLASS: B, F GRADE

STARTING METHOD:

- SPLIT PHASE STARTING
- CAPACITOR STARTING
- CAPACITOR STARTING & RUN

IP RATING: IP22





SINGLE PHASE INDUCTON MOTOR

VOLTAGE: 110V~220V

FREQUENCY: 60Hz(50Hz)

POLES: 4P

RATED OUTPUT: 0.2kW~2.2kW

RPM: 1,800(1,500)

TYPE OF ENCLOSURE: OPEN DRIP-PROOF, TOTALLY ENCLOSED

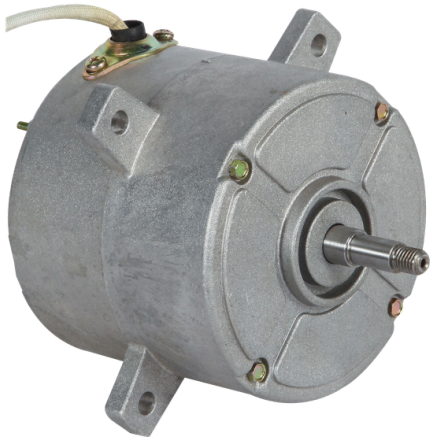
RATING: CONTINUOUS

INSULATION CLASS: F GRADE

STARTING METHOD:

- SPLIT PHASE STARTING
- CAPACITOR STARTING
- CAPACITOR STARTING & RUN

IP RATING: IP44





AGRICULTURAL DRYER & FAN TYPE

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SMC GEARED MOTOR

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GEARED MOTOR SERIES

EP+ GEARED MOTOR

THREE PHASE HORIZONTAL: 3PH 4P 0.2kW~22kW

THREE PHASE VERTICAL: 3PH 4P 0.2kW~15kW

SINGLE PHASE HORIZONTAL: 1PH 4P 0.2kW~0.75kW

SINGLE PHASE VERTICAL: 1PH 4P 0.2kW~0.75kW

DIA METER OF OUTPUT SHAFT Ø22~Ø90

RATIO RANGE 1/5~1/120



GEARED MOTOR SERIES

EP2 GEARED MOTOR

THREE PHASE HORIZONTAL: 3PH 4P 0.2kW~15kW

THREE PHASE VERTICAL: 3PH 4P 0.2kW~15kW

SINGLE PHASE HORIZONTAL: 1PH 4P 0.2kW~0.75kW

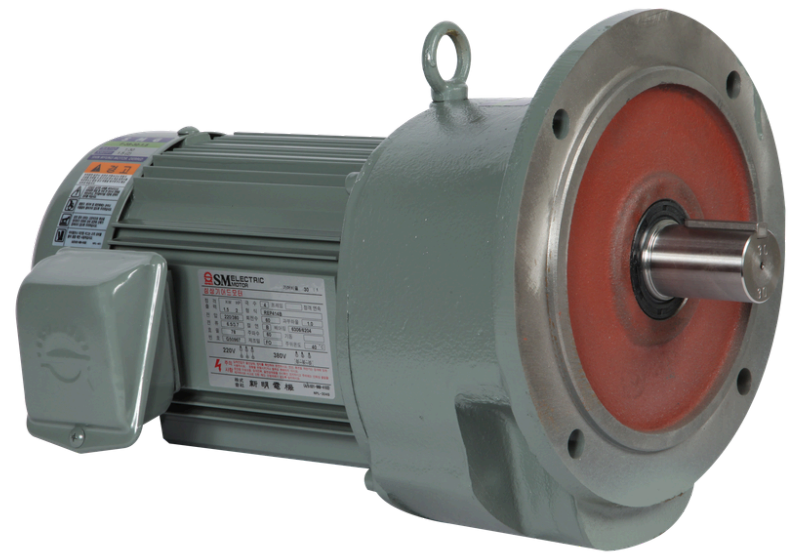
SINGLE PHASE VERTICAL: 1PH 4P 0.2kW~0.75kW

DIA METER OF OUTPUT SHAFT FOR THREE PHASE: Ø22~Ø70

DIA METER OF OUTPUT SHAFT FOR SINGLE PHASE: Ø22~Ø32

RATIO RANGE 1/5~1/120





GEARED MOTOR SERIES

SMG GEARED MOTOR

THREE PHASE HORIZONTAL: 3PH 4P 0.2kW~1.5kW

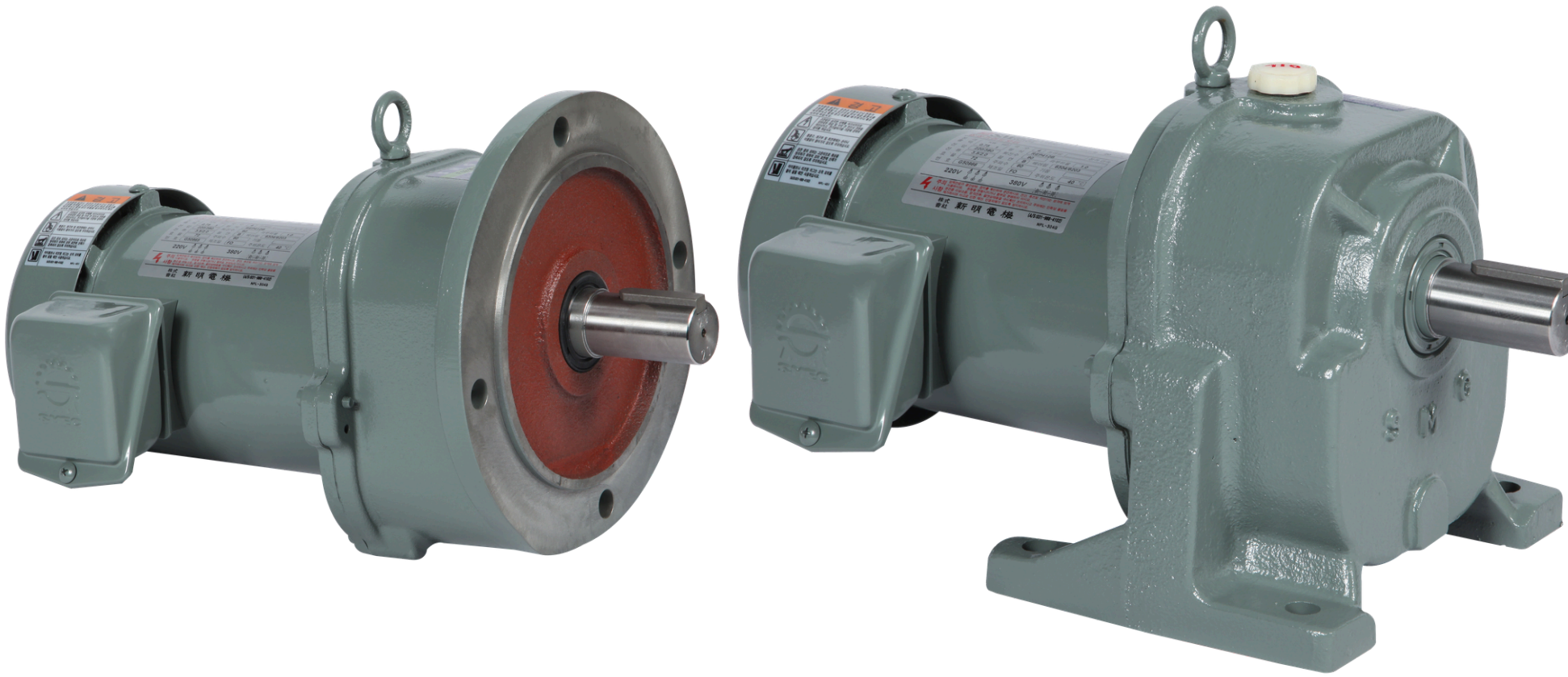
THREE PHASE VERTICAL: 3PH 4P 0.2kW~0.75kW

SINGLE PHASE HORIZONTAL: 1PH 4P 0.2kW~0.75kW

SINGLE PHASE VERTICAL: 1PH 4P 0.2kW~0.75kW

DIA METER OF OUTPUT SHAFT: Ø22~Ø38

RATIO RANGE 1/5~1/75



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HELICAL GEARBOX SERIES

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HELICAL GEARBOX SERIES

SMF Parallel Shaft Helical Gear Units



POWER: : 0.4 ~ 200KW

GEARBOX MAX TORQUE: 18,000Nm

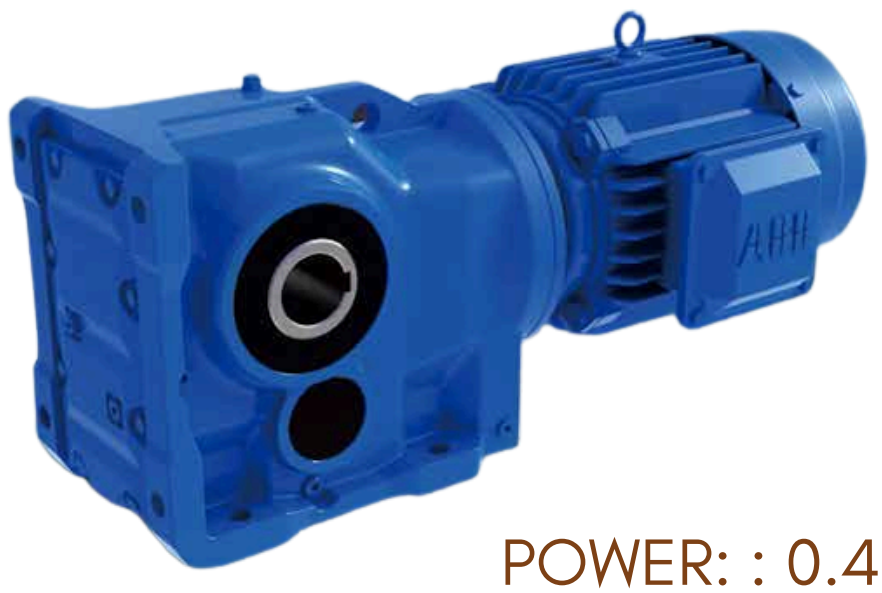
RATIO : 3.77 ~ 22,323

FEATURES:

- PRODUCTION OF A WIDE RANGE OF PRODUCTS FOR VARIOUS APPLICATIONS, DEPENDING ON FRAME TYPE, SPECIFICATIONS, AND SIZE.
- SMF SERIES (PARALLEL-SHAFT HELICAL GEARBOX): IDEAL FOR INSTALLATIONS WHERE SPACE IS LIMITED.

HELICAL GEARBOX SERIES

SMK Helical Bevel Gear Units



POWER: : 0.4 ~ 200KW

GEARBOX MAX TORQUE: 50,000Nm

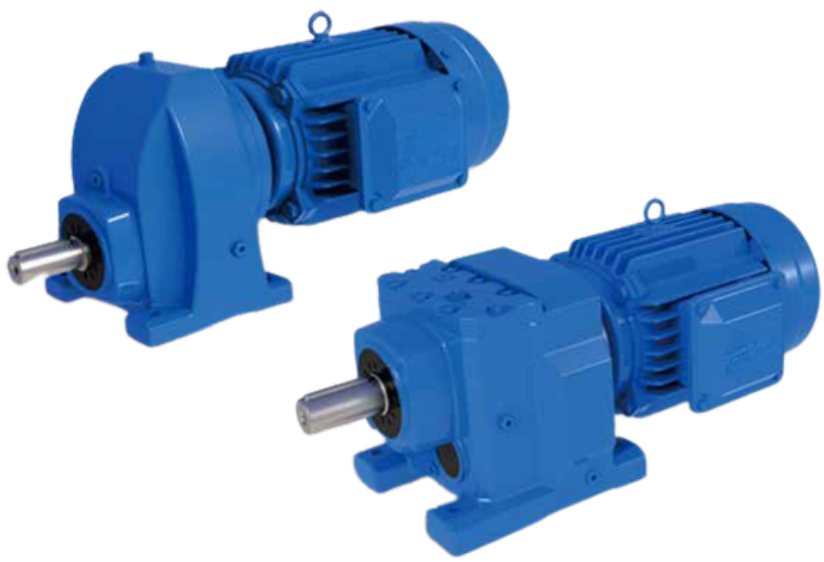
RATIO : 5.36 ~ 17,550

FEATURES:

- PRODUCTION OF A WIDE RANGE OF PRODUCTS FOR VARIOUS APPLICATIONS, DEPENDING ON FRAME TYPE, SPECIFICATIONS, AND SIZE.
- SMK SERIES (BEVEL-HELICAL GEARBOX): TRANSMITS POWER AT A 90-DEGREE ANGLE AND IS SUITABLE FOR HEAVY-DUTY INDUSTRIAL APPLICATIONS.

HELICAL GEARBOX SERIES

SMR Helical Gear Units



POWER: : 0.4 ~ 160KW

GEARBOX MAX TORQUE: 18,000Nm

RATIO : 3.37 ~ 4,606

FEATURES:

- PRODUCTION OF A WIDE RANGE OF PRODUCTS FOR VARIOUS APPLICATIONS, DEPENDING ON FRAME TYPE, SPECIFICATIONS, AND SIZE.
- SMR SERIES (COAXIAL HELICAL GEARBOX): A STANDARD CONFIGURATION IN WHICH THE INPUT AND OUTPUT SHAFTS ARE ALIGNED ON THE SAME AXIS, PROVIDING HIGH EFFICIENCY AND HIGH TORQUE TRANSMISSION.

HELICAL GEARBOX SERIES

SMS Helical -Worm Gear Units



POWER: : 0.4 ~ 22KW

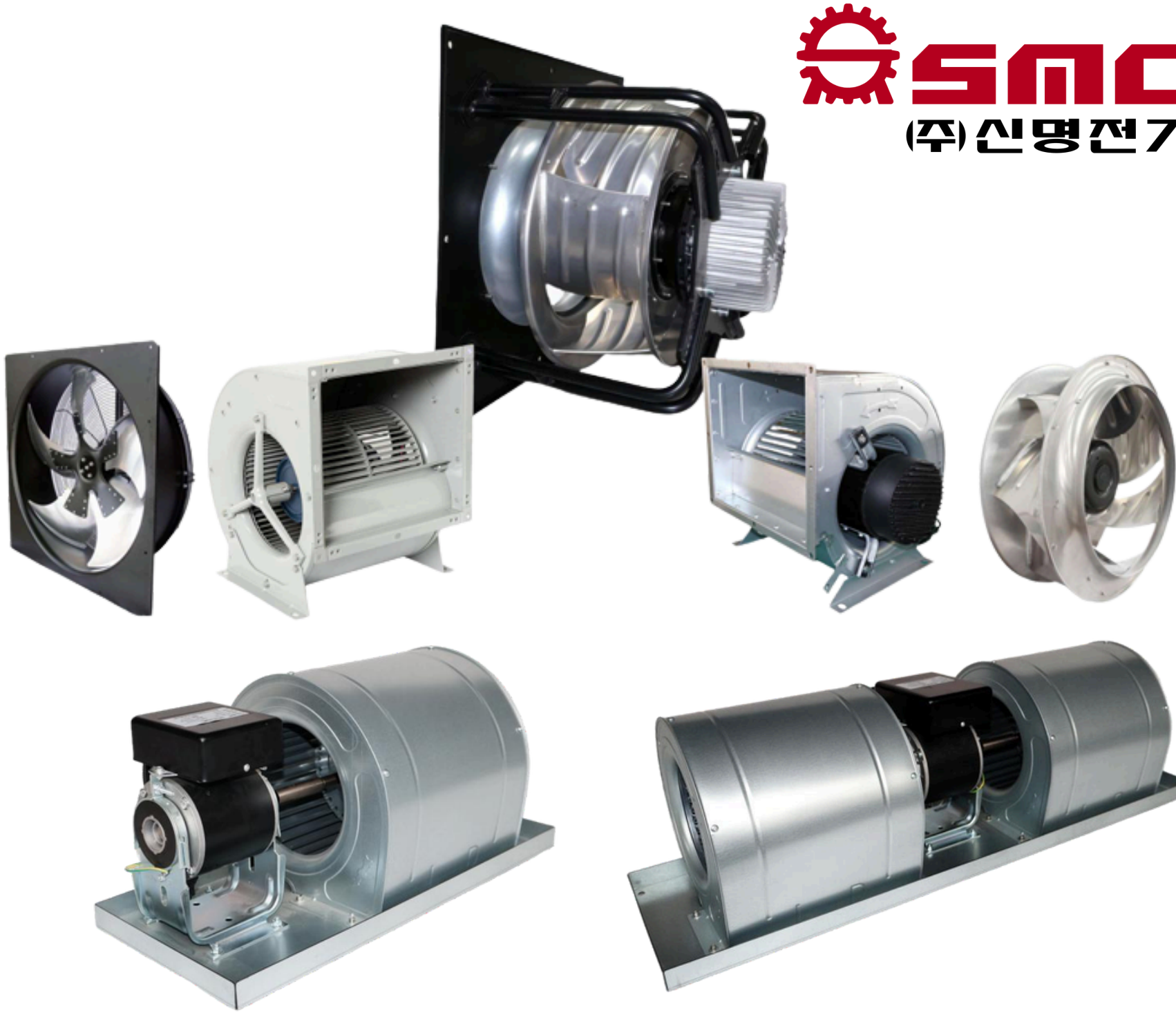
GEARBOX MAX TORQUE: 4,000Nm

RATIO : 10.27 ~ 230.48

FEATURES:

- PRODUCTION OF A WIDE RANGE OF PRODUCTS FOR VARIOUS APPLICATIONS, DEPENDING ON FRAME TYPE, SPECIFICATIONS, AND SIZE.
- SMS SERIES (HELICAL-WORM GEARBOX): COMBINES HELICAL AND WORM GEARS TO PROVIDE SMOOTH OPERATION AND IMPROVED EFFICIENCY.

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- SUPERIOR EFFICIENCY AND ENERGY SAVINGS
- DISTINCTIVE OUTER-ROTOR DESIGN
- EXCELLENT SPEED REGULATION AND CONTROL PERFORMANCE
- HIGH RELIABILITY AND LONG SERVICE LIFE
- INTELLIGENT CONTROL FUNCTIONS

EC FAN SERIES

ENERGY-SAVING HIGH-EFFICIENCY HVAC SOLUTIONS

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IE4

PREMIUM EFFICIENCY
THREE-PHASE ASYNCHRONOUS INDUCTION MOTOR



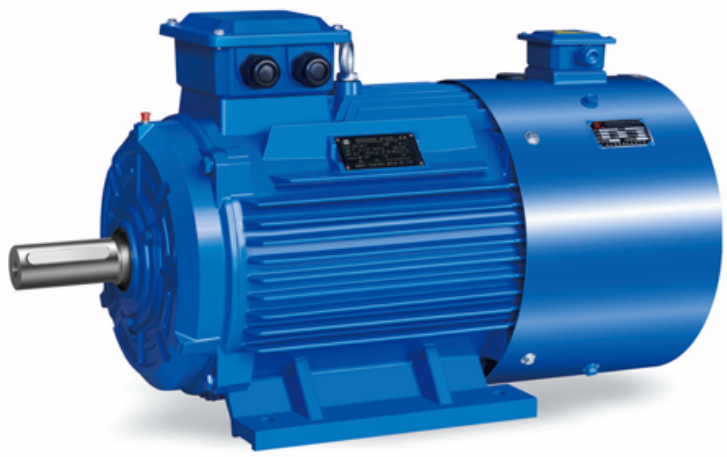
Nominal efficiency limits(%)for 60 Hz IE4				
PN kW	Number of poles/synchromous speed			
	2/3600	4/1800	6/1200	8/900
0.12	66.0	70.0	68.0	64.0
0.18	70.0	74.0	72.0	68.0
0.25	74.0	77.0	75.5	72.0
0.37	77.0	81.5	78.5	75.5
0.55	80.0	84.0	82.5	77.0
0.75	82.5	85.5	84.0	78.5
1.1	85.5	87.5	88.5	81.5
1.5	86.5	88.5	89.5	85.5
2.2	88.5	91.0	90.2	87.5
3.7	89.5	91.0	90.2	88.5
5.5	90.2	92.4	91.7	88.5
7.5	91.7	92.4	92.4	91.0
11	92.4	93.6	93.0	91.0
15	92.4	94.1	93.0	91.7
18.5	93.0	94.5	94.1	91.7
22	93.0	94.5	94.1	93.0
30	93.6	95.0	95.0	93.0
37	94.1	95.4	95.0	93.6
45	94.5	95.4	95.4	93.6
55	94.5	95.8	95.4	94.5
75	95.0	96.2	95.8	94.5
90	95.4	96.2	95.8	95.0
110	95.4	96.2	96.2	95.0
150	95.8	96.5	96.2	95.4
185	96.2	96.5	96.2	95.4
220	96.2	96.8	96.5	95.4
250-1000	96.2	96.8	96.5	95.8

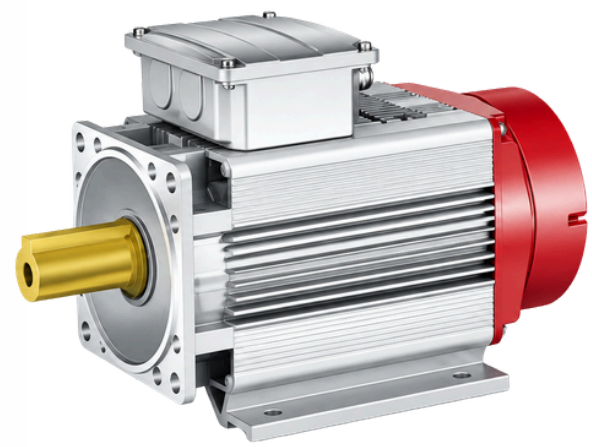
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IE5

PERMANENT MAGNET SYNCHRONOUS MOTOR







Efficiency level standards

Power [kW]	IEC Efficiency[%]			SMC MOTOR
	IE3 [%]	IE4 [%]	IE5 [%]	IE5 [%]
0.75	83.5	85.5	87.7	88.2
1.5	86.5	87.5	89.4	90.4
2.2	89.5	91	92.4	91.4
3.7	89.5	91	92.4	
5.5	91.7	92.4	93.5	93.4
7.5	91.7	92.4	93.5	94
11.	92.4	93.6	94.6	94.6
15.	93	94.1	95	95.1
18.5	93.6	94.5	95.3	95.3
22.	93.6	94.5	95.3	95.5
30.	94.1	95	95.8	95.9
37.	94.5	95.4	96.1	96.1
45.	95	95.4	96.1	96.3
55.	95.4	95.8	96.4	96.5
75.	95.4	96.2	96.8	96.7
90.	95.4	96.2	96.8	96.9
110.	95.8	96.2	96.8	97
132.	95.8	96.5	97	97.1
160.	96.2	96.5	97	97.2
200.	96.2	96.5	97	97.4
250.				97.4

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