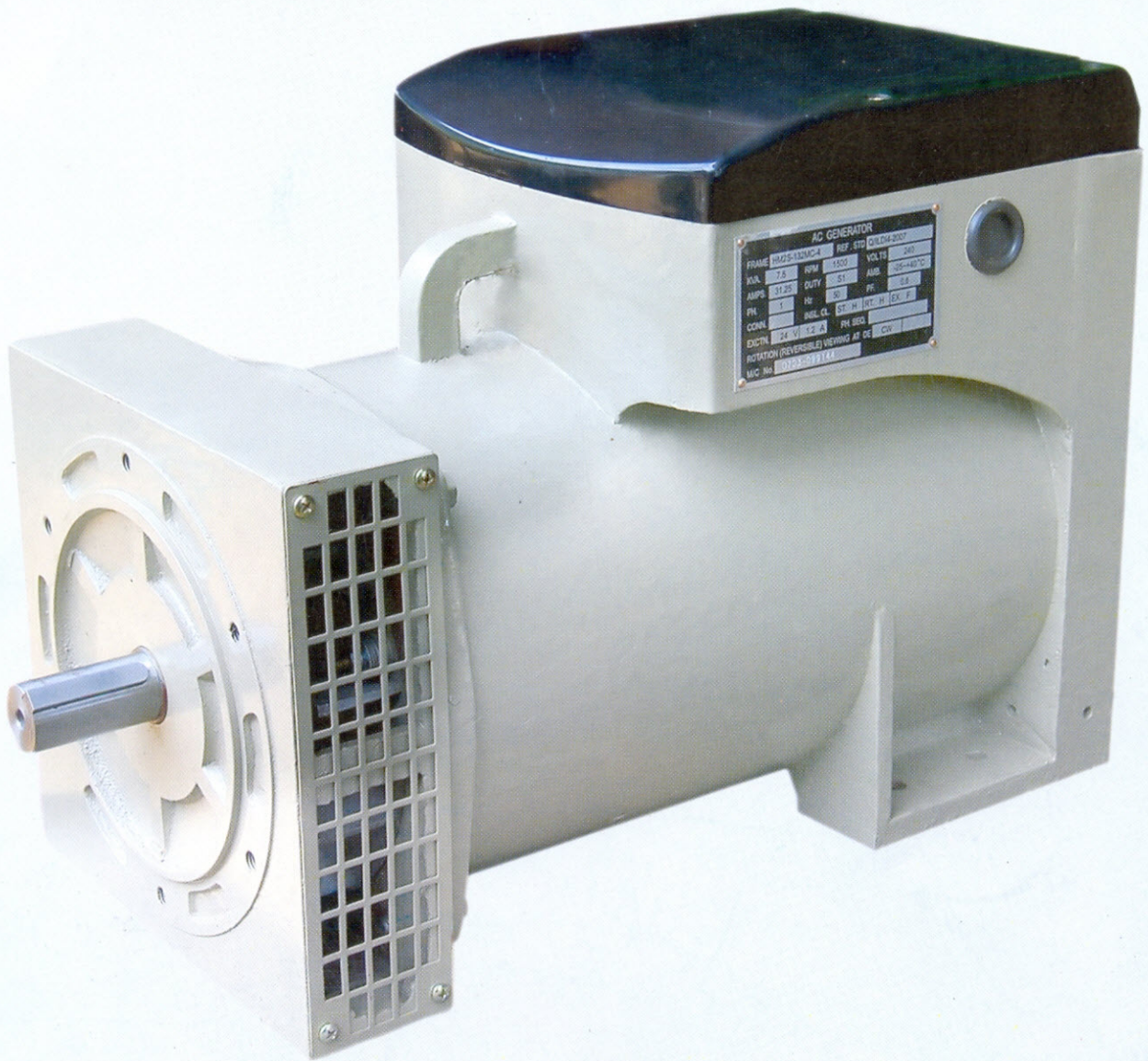


5 to 15 kVA
Brushless E-Series



KIRLOSKAR ELECTRIC

E-Series AC Generators

Kirloskar Electric Company (KEC) is well known for small, medium & large size AC Generators. Being the foremost company to introduce small & medium sized AC Generators in the country, Kirloskar Electric matched development of AC Generators keeping pace with availability of prime movers. The rugged & reliable designs offered by KEC have won the confidence of the users & hence is the preferred make of large number of users. Kirloskar Electric has developed a variety of generators varying in mechanical construction & electrical system including highly customized designs. In keeping with technological development, brushless AC Generators in single bearing constructions have been supplied for a variety of diesel engines. With proficiency in evaluating different designs, Kirloskar Electric offers E-Series brushless AC Generators.

Special Features:

- Compact & aesthetically Built.
- Conforms to all leading Standards.
- Simple design, fewer parts, easy access to coupling Bolts & Output terminals.
- Simple for Installation & maintenance.
- Popular range of flange adaptors & flexi disc couplings.
- Wound with 2/3rd Pitch in stator to eliminate harmonics.
- Sophisticated & reliable AVR.

Construction:

Stator frame is of cast iron to provide ruggedness & houses wound stator core; together they provide excellent mechanical stability for the Machine.

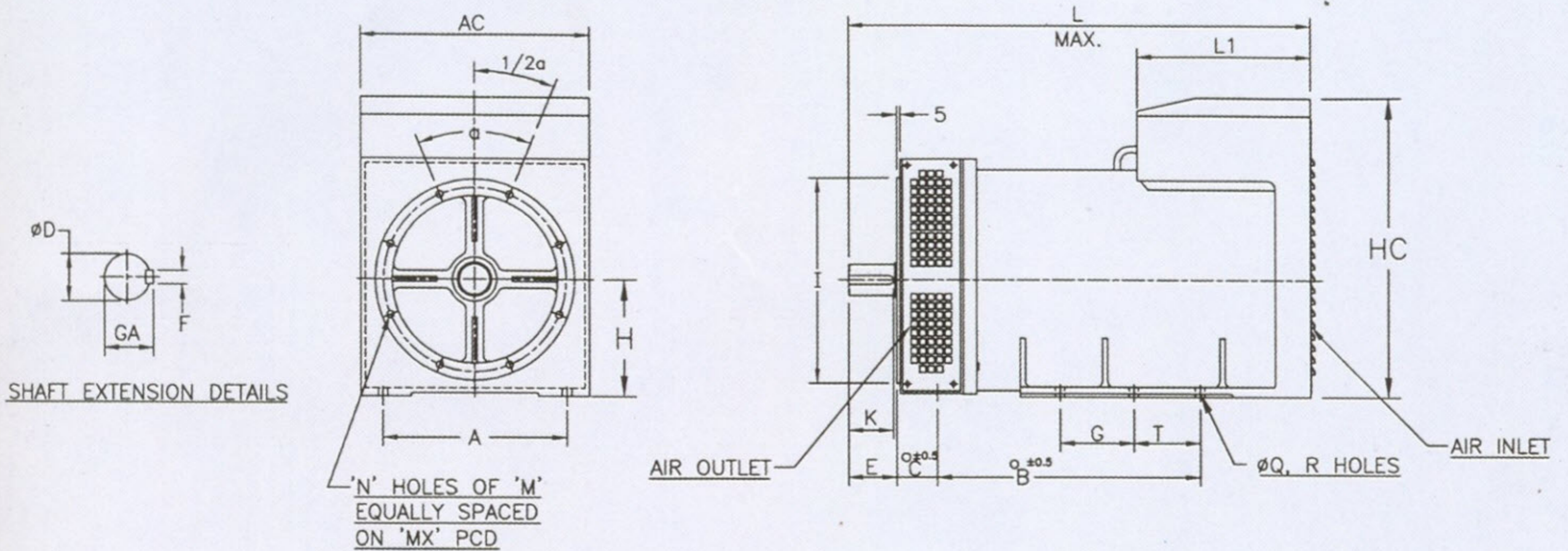
Rotor is of cruciform construction provided with damper cage. The combination of Pole profile & tooth ensures good voltage wave form. Rotors are dynamically balanced.

The amply sized terminal box is integral with the machine to arrest vibrations encountered in diesel generating sets. This box also houses the automatic voltage regulator (AVR). Single large sized terminal box cover, upon removal allows maximum access to winding termination & AVR.

Performance:

The generators are highly efficient. The voltage regulation is less than +/-1%. The temperature rise is well within Class "H" Limits. Overloads as per standards are complied with. The generators have excellent transient load handling capability.

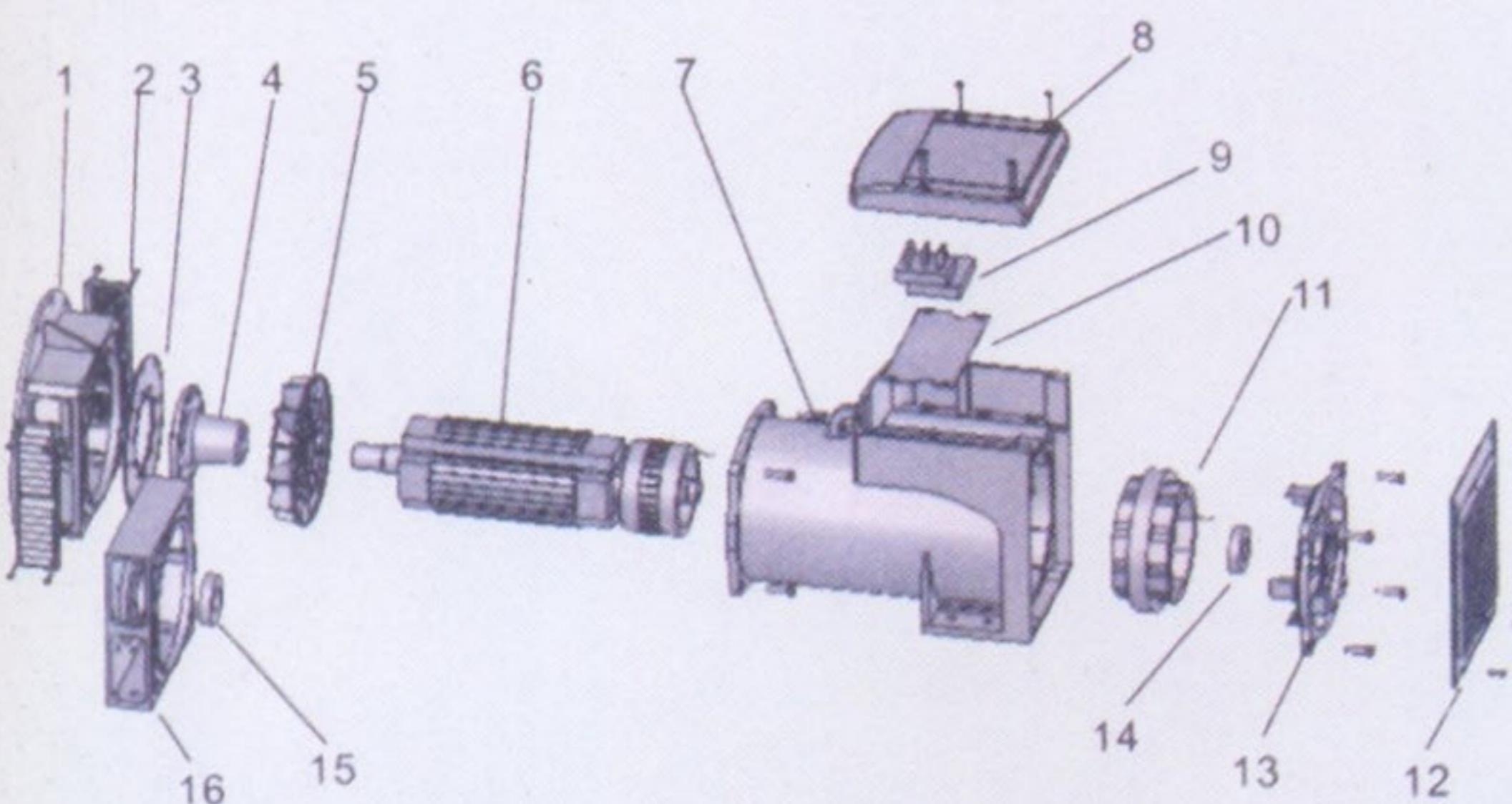
Dimensions for E-Series frames 132 to 160



Dimension Table

| FRAME | A | AC | B | C | D^{k6} | E | F^{h2} | G | $GA^{0.0-0.2}$ | $H^{0.0-0.5}$ | HC | I^{j6} | K | L | L1 | M | MX | a | N | Q | R | T |
|----------|-----|-----|-----|----|-----------|----|----------|---|----------------|---------------|-----|--------------|----|-----|-----|-----|--------------|-----|---|-----------|---|----|
| 4AE132/2 | 206 | 262 | 372 | 40 | $\phi 32$ | 60 | 10 | — | 35 | 132 | 370 | $\phi 180$ | 56 | 556 | 290 | M10 | $\phi 210$ | 60° | 6 | $\phi 12$ | 6 | 56 |
| 4AE132/3 | | | 427 | | | | | | | | | | | | | | | | | | | |
| 4AE160/1 | 270 | 344 | 292 | 66 | $\phi 48$ | 82 | 14 | — | 51.5 | 160 | 418 | $\phi 266.7$ | 80 | 640 | 274 | M10 | $\phi 285.8$ | 45° | 8 | $\phi 14$ | 6 | 95 |

Exploded view of E-Series AC Generator



1. Adaptor of single-bearing generator
2. Ventilation Grid
3. Coupling disc of single-bearing generator
4. Hub of single-bearing generator
5. Fan
6. Rotor
7. Stator
8. Terminal box cover
9. AVR
10. Chassis
11. Exciter stator
12. NDE Cover
13. NDE endshield
14. NDE bearing
15. Front bearing for double bearing generator
16. DE endshield of double bearing generator

Rating chart of AC Generators

415V, 3ph, 0.8pf (lag), 50Hz, 1500rpm

| Frame | kVA | KW | % Efficiency | Nett weight - Kg |
|----------|------|----|--------------|------------------|
| 4AE132/2 | 7.5 | 6 | 82.6 | 93 |
| 4AE132/2 | 10 | 8 | 83.5 | 97 |
| 4AE132/3 | 12.5 | 10 | 84 | 120 |
| 4AE132/3 | 15 | 12 | 84.5 | 120 |

240V, 1ph, 0.8pf (lag), 50 Hz, 1500rpm

| Frame | kVA | KW | % Efficiency | Nett weight - Kg |
|----------|------|----|--------------|------------------|
| 4AE132/2 | 7.5 | 6 | 78 | 100 |
| 4AE132/2 | 10 | 8 | 78.5 | 113 |
| 4AE160/1 | 12.5 | 10 | 79.5 | 185 |
| 4AE160/1 | 15 | 12 | 80 | 185 |

NOTES:

1. Outgoing cables to be independently supported such that the weight of the cable does not come on the machine.
2. A minimum of one meter clear space around the machine is necessary for good ventilation.
3. Lifting provision provided to be used for lifting the AC generator only and not the DG set.
4. Dimensions are subject to alteration without notice.
5. Screws for fixing discs to hub shall be tightened with torque of 30kgm.
6. The design and manufacture of our products are subjected to constant improvement. Hence the above specifications and illustrations may vary slightly from the product supplied.



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