KIRLOSKAR ELECTRIC

Committed to Innovation and Excellence

PRIMO AND SPECTRUM 3 PHASE CAGE MOTORS - IE2 & IE3

Product Line of Kirloskar Electric

AC & DC Motors | Generators | Transformers | Switchgear | Drives | DG Sets | Projects | Engineering

ISO 9001:2008

BUREAU VERITAS

PRIMO AND SPECTRUM 3 PHASE CAGE MOTORS - IE2 & IE3

SIGNIFICANCE OF IE

IE is defined as "International Efficiency" which has the three classes IE1, IE2 and IE3. Fourth one ie IE4 is still under consideration.

Efficiency Class	Description
IE1	Standard - Only for VFD application
IE2	High
IE3	Premium
IE4	Super Premium under consideration

The losses and efficiency shall be calculated as per IEC 60034-2-1.

PRODUCT

"**IE2 – HIGH EFFICIENCY**" in **PRIMO** and **SPECTRUM** series is the new range of Low Voltage Cage Motors from Kirloskar Electric in compliance with IS 12615-2011. These motors are compact, reliable and robust in nature and embody the unrivaled experience of Kirloskar Electric in manufacturing electric motors for diverse applications.

GOVERNING STANDARDS

Performance	:	IS/IEC 60034-1
	:	IS 12615-2011
Output and Dimension	:	IS 1231 and IS 2223
Degree of Protection	:	IS/IEC 60034-5
Testing	:	IEC 60034-2-1
Cooling	:	IS 6362
Noise Level	:	IS 12065
Vibration Level	:	IS 12075

TESTING

- All the motors are routine tested before dispatch as per IS 12615-2011
- The determination of efficiency will be carried out with low uncertainty as per clause 8.2.2.5.1 of IEC 60034-2-1

EFFICIENCY COMPARISON

Figure A & B shows the comparison between the efficiency of high efficiency motors and standard motors. As shown in the figure, the efficiency of high efficiency motor is always higher than standard motors for all range of motors.

APPLICATIONS

- Pumps
- Fans
- Machine Tools
- Conveyors
- Compressors
- Crushers
- Textiles

SPECIFICATIONS

• Output (kW)	:	0.37 - 200kW
• Input Voltage (V)	:	415V ± 10%
• Frequency (Hz)	:	50 Hz ± 5%
• Combined variations	:	± 10%
• Ambient Temp	:	0-50^{0}C
• Duty	:	S1, S3 80% & above CDF
• Insulation	:	Class F
• Protection	:	IP 55
• Cooling	:	IC 411
• Frame	:	63 - 315

FEATURES

- IE2 level efficiency as per IS 12615 – 2011 and IEC 60034-30
- Class 'F' insulation with class 'B' temperature rise limit.
- High starting and pull-up torques to accelerate the load.
- Robust and shock resistant stator construction with optimally designed ribs for cooling
- Die-cast aluminum rotors designed to withstand the severe forces encountered during starting
- Terminal box located at RHS from driving End
- Large terminal boxes with sufficient electrical clearances and improved aesthetics
- Optimum fan design for better cooling & minimum energy consumption

WHEN YOU ORDER, PLEASE FURNISH

- Application
- Mounting
- Input supply conditions & % variation
- Ambient temperature
- Load GD2
- Method of starting

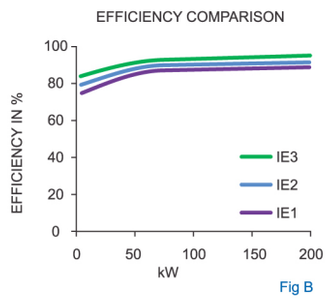

Fig B

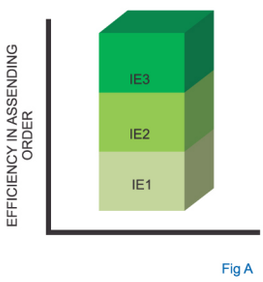

Fig A

EFFICIENCY COMPARISON

PRODUCT VARIETIES

- Foot or flange or foot cum flange Mounting
- Single or double shaft extension
- Supply voltages of 220/380/400/415/660V
- Supply frequency 50 or 60 Hz
- Output other than those specified in rating chart
- Thermisters from frame size 63 & above
- Space heaters from frame size 180 & above
- Increased safety & non-sparking type