# **EFFICIENT COOLING SOLUTIONS**

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Kirloskar



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# **140 Years of Engineering Excellence**

Kirloskar Chillers, proud to be a part of the 140year-old Kirloskar Group, is a trusted name in India and overseas for its 'Future Ready' technology and products. The Kirloskar Group is a USD 1.5 Bn conglomerate offering Diesel Engines, Generator Sets, Air & Gas Compressors, Industrial & Process Refrigeration Systems, Chillers and turnkey project solutions

# **Conforming to Global Standards**

Kirloskar Chillers was the first Indian chiller manufacturer to acquire AHRI certification for its chillers back in 2006. In 2008, we were the first to establish an AHRI Certified test facility. International business is one of our key areas of growth; our various certifications including IMS, CE/PED, ASME, EAC and SASO, among others, enable us to serve various international markets.

Being a founding member of the Indian Green Building Council (IGBC), we ensure to deliver our

# **Preferred in India & Overseas**

Headquartered in and having our manufacturing facility near Pune (INDIA), our regional and branch offices across India ensure pre- and post-sales services that are prompt, seamless, efficient and effective. Similarly, Sales & Services offices and business associates in Europe, South East Asian, the Middle East and Africa serve our customers in these regions. With more than 3500 chillers successfully in operation within India and overseas totaling an to customers from India and 70 countries across the globe.

Since its inception in 1996, Kirloskar Chillers has introduced many innovative products for various applications encompassing comfort cooling, process cooling and heating, delivering on its commitment of achieving customer delight.

commitment towards protecting our Mother Earth. Our products comply with LEED India / ECBC / ISHRAE efficiency standards and BEE's Star Labelling program.

Kirloskar Chillers is the only Indian manufacturer to offer chillers using virtually all the presently available compressor technologies, viz. Magnetic Bearing Centrifugal, conventional Centrifugal, Screw and Scroll compressors, with the widest range of cooling capacities, from 11 TR to 2400 TR.

installed capacity of > 100,0000 TR, we serve segments across Government and Infrastructure projects (Airports, Thermal power, Nuclear power, Atomic Energy & Space Research), Commercial applications (Hotels, Hospitals, Retails, IT, Data Centers and Office Buildings) and Industrial applications (Pharmaceuticals, FMCG, Food, Chemicals, Automobiles, Textiles and many other).

# Comprehensive Solutions for your Air Conditioning, Process Cooling & Heating Needs

Product	Series	Capacity	Refrigerant
Centrifugal Chillers (with Magnetic Bearing Compressor)	K <b>FRIOSKAR</b> TURB©LEV	95 to 1200 TR	HFC 134a & HFO 1234ze
Centrifugal Chillers (Conventional)	<b>K<sup>J</sup>rloskar</b> <sup>°</sup> TURB©TEK	250 to 2400 TR	HFC 134a
Water Cooled and Air Cooled Screw Chillers (with and without VFD)	<b>K<sup>*</sup>rloskar</b> <sup>®</sup> PR®DIGY	45 to 560 TR	HFC 134a, HFC 407C & HFO 1234ze
Scroll Chillers	K∻rloskar scr⊚ll	11 to 45 TR	HFC 410a



# Water Cooled Centrifugal Chillers with **Magnetic Bearing Compressors**

## With HFC 134a, HFO 1234ze refrigerant

### Features & Benefits:

- >> Outstanding energy efficiency, superlative part load performance
- » Frictionless, oil-free operation
- » Soft start: starting current < 2 Amps</p>
- » Exceptionally quiet operation
- >> Surge line control
- » Performance certified to AHRI 550/590 & AHRI 551/591, witnessed testing optional

» K-Connect<sup>®</sup> - Web Monitoring feature to remotely monitor the health of the chiller as optional feature



95 to 1200 TR



# Water Cooled Centrifugal Chillers

# With HFC 134a refrigerant

## Features & Benefits:

- » Outstanding energy efficiency, best in class COP and NPLVs
- » High speed gear drive for compact & flexible operation
- » Microprocessor controller with 13" LED touch screen user interface
- » Step-less capacity control down to 10%
- » Performance certified to AHRI 550/590 & AHRI 551/591, witnessed testing optional
- » BMS Compatible



## **Other Features:**

- >> Voltages range 400V (LV),  $3.3 \text{ kV}, \sim 6.6 \text{ kV}$  (MV) and 11 kV (HV)
- » Starter options Star Delta, Soft Starter, VFD for LV & DOL, ATS for MV & HV;
- >> Heat exchanger tubes MOC options Cu, SS, CuNi & Ti
- » Marine water boxes for ease of maintenance
- » K-Connect<sup>®</sup> Web Monitoring feature to remotely monitor the health of the chiller



# **Water Cooled Screw Chillers**

With HFC 134a, HFC 407C & HFO 1234ze refrigerants

# **Air Cooled Screw Chillers**

With HFC 134a, HFC 407C refrigerants and HFO 1234ze refrigerant

# **Heat Recovery Screw Chillers**

Total Heat Recovery Up to 1400 kw

# Features & Benefits:

- > Outstanding energy efficiency, best in class COP and NPLVs
- Microprocessor controller with alphanumeric
   7" LED touch screen user interface
- » Step-less capacity control
- » Suitable for voltages from 380 ~ 460 V LV
- » Multiple Starter options Star Delta, Soft Start, VFD
- Heat exchanger tubes MOC options Cu, SS, CuNi & Ti
- Performance certified to AHRI 550/590 & AHRI 551/591, witnessed testing optional
- » BMS Compatible

# **Other Options:**

- » Partial & total heat recovery options, reverse cycle heat pumps (air cooled)
- » Available for low temp. brine chilling applications (+4 to -29 °C evap. leaving temp.)
- >> Adiabatic cooling kit for air cooled chillers, suitable for high ambient, dry places
- >> Chiller Plant Managers for plant automation and optimization – controlling chillers, water pumps, cooling tower fans & motorized valves
- > K-Connect<sup>®</sup> Web Monitoring feature to remotely monitor the health of the chiller



45-550TR





# Scroll Chiller with HFC 410a refrigerant

**Range:** 11 TR ~ 45 TR (38.7 ~ 154.7 kW)

### Features & Benefits:

#### » Easy and Quick Installation:

Chillers are pre-wired, refrigerant charged and tested at the factory prior to dispatch, which makes installation and startup easy and less time consuming.

#### » Microprocessor-based Control System: Ensures chiller safety by montoring necessary parameters and controlling operation of the chiller.

#### » BMS Compatibility:

Advanced microprocessor control has an optional feature for BMS compatibility over most open protocols.

» Highly Energy Efficient & Reliable Scroll Compressor with Built-in Time delay:

Advanced compressor design with a time delay provided between first and second compressor starting ensuring high reliability.

#### » Capacity Modulation:

Use of multiple compressors with independent refrigerant circuits provides redundancy and enable efficient part load operations and energy savings.

#### » Modular Construction:

Enables parallel operation of multiple units to achieve desired plant capacity.

### » Quiet Operation:

Axial fans designed for exceptionally silent operation.



11 to 45 TR

# Value-added Solutions from Kirloskar Chillers

>> Upgrade to VFD (Variable Frequency Drive) Starter

>> Ball Type Automatic Tube Cleaning System for Condenser & Evaporator

>> Upgrade to latest K-Smart® Controller

>> Chiller Plant Manager & Optimiser

>> Web-based Remote Monitoring of Chillers

>> Refrigerant Recovery Units

>> De-Superheater Retrofits

>> Rental Chillers

# Salient Features of Kirloskar Chillers Products and Services

- India's leading Chiller manufacturer, with a wide range of energy-efficient and reliable Screw and Centrifugal Chiller products, using state-of-the-art technology
- » No dependence on third party Service Providers or Contractors; all field Service staff are KCPL's own employees
- $\boldsymbol{\succ}$  Highly trained manpower competence and quality of service is assured
- >> Wide spread spread Service network throughout India and overseas
- >> Prompt spare parts support across the country and overseas

# Some of our Esteemed Customers

# **Textile Industry**

- » Indorama Synthetics, Indonesia
- » Indo Bharat Rayon, Indonesia
- » Indo Liberty Textiles -Indonesia
- » Elegant Textiles- Indonesia
- » JBF Industries Ltd.
- » Welspun India Ltd.
- » Garden Silk Mills Ltd.
- » Dicitex Décor

### Pharmaceutical Industry

- » Lupin Ltd.
- » Serum Institute of India
- » Bharat Biotech
- » Glenmark Generics.
- » Strides Shasun Ltd.
- » Biocon Ltd.
- » Wockhardt Ltd.
- » Mylan Laboratories Ltd.

### Power Industry

- >> NTPC Ltd., Multiple Locations
- >> NPCIL Multiple Locations
- » Reliance Power
- » Mukha Power Station, Yemen
- » Jhabua Thermal Power Project
- » Koyna Hydro Power Project

## Automobile Industry 🛲

- » Toyota Kirloskar Motor Pvt. Ltd.
- » Bridgestone India Pvt. Ltd.
- » Bosch Limited
- » Mahindra & Mahindra
- » JCB India Ltd.
- » Hyundai Motor India Ltd.

# Malls & Multiplexes

- » KaDeWe Mall, Berlin, Germany
- >> Lodha Experia Mall
- » Amanora Town Center
- Inorbit Mall
- >> WestEnd Mall

# Healthcare

- » Lung Center,
  - Manila, Philippines
- » Belluno Hospital, Italy
- » Palermo Hospital, Italy
- » Narayana Hrudayalaya
- » B M Birla Research Center
- » SRM Institute of Science & Technology
- » Ram Manohar Lohia Hospital
- » The Gujarat Cancer & Research Institute
- Sardar Vallabhbhai Patel Institute of Medical Sciences & Research
- » Sankara Nethralaya

### Commercial Buildings 🏢

» UB City

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- >> World Trade Center
- » Lodha Projects
- » SE TransStadia Pvt. Ltd.
- » Bengaluru International Exhibition Centre

# IT

- » Prestige Tech Park
- >> SLK Software
- » Reliance Infocom
- » Lanco Hills Tech Park
- » SQS Info Systems
- » CtrIS Datacenters
  » Okaya Blue Silicon
- » Okaya Blue Silicon Business Park

### Hotels

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- >> JW Marriott
- » Taj Hotels, Multiple Locations
- » Radisson, Multiple Locations
- » Crowne Plaza
- » Le Méridien Resort & Spa

## Overseas Installations 其

- » GSIS, Manila, Philippines
- Malacanang Presidential Palace, Manila, Philippines
- » MWSS Project, Philippines
- » Alfa Laval Ltd.- Vegetable Oil Plants in Iran, Egypt, Uganda, Zambia, Mozambique
- » Continental Tyres, Moscow, Russia
- » Pan Oil, UAE
- » Al Dhafra Union Paper Mill, Abu Dhabi, UAE
- » Unilever Sri Lanka Ltd., Colombo, Srilanka

## FMCG

- » Hindustan Unilever
- » Nivea Beiersdorf
- » Parle Agro
- » Patanjali
- » Adani Wilmar
- » Cargill
- » Emami

## Other Installations

- » PepsiCo India Holdings Pvt. Ltd.
- » John Deere
- » Sterlite Technologies Ltd
- » 3M India
- » Times of India

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