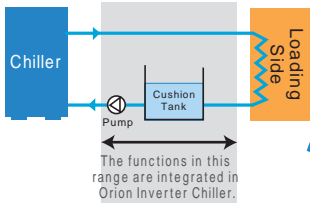


New Inverter Chiller (RKE-A) Series Actualises both Energy Saving and Precise Control to Satisfy Your Specific Needs.

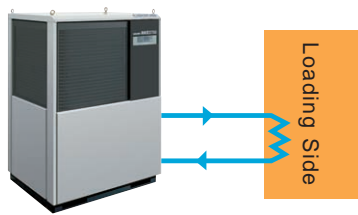
ALL FUNCTIONS BUILT IN ONE

All-in package of refrigerating components, tank, discharge pump, and temperature controller provides all the functions necessary for water-cooling of thermal load with minimal installation work at site.

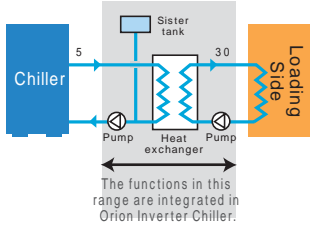
Piping example for common chillers



Inverter Chiller : RKE-A Series



Piping example to cope with middle or high water temperature

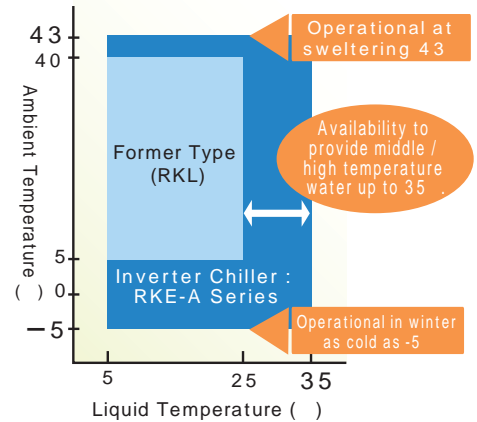


Great reduction in facilities expense!

LIQUID TEMPERATURE CONTROLLED IN WIDE RANGE

The liquid temperature controlling range is enlarged to those from 5 to 35. Dew condensation on piping can be prevented with high temperature operation. Allowable ambient temperature range* is also widened to -5 to +43 to endure operation in severer environment.

* Piping out of chillers require protection against freezing if the ambient temperature falls below 5.

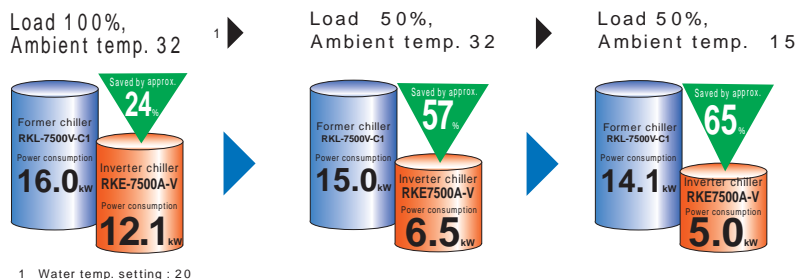


ENERGY SAVING UP TO MAX. 80%*



ORION has uniquely developed optimum control of refrigeration cycle with frequency PID control of the inverter compressor and stepless aperture regulation of electronic expansion valve. This development has realized highly efficient operation and greater energy saving than RKL series (hot gas bypass control) even at normal operation. Also, ORION Inverter Chillers save power consumption corresponding to the load fluctuation. Up to 80% of energy can be saved compared to the conventional models.

* Total load 30%, ambient temperature -5



Free Frequency



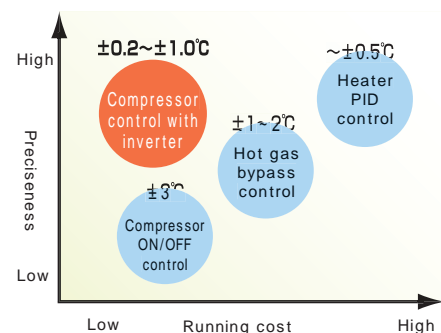
Provides the same cooling capacity at 50Hz and 60Hz. (except RKE18000)

*The pump capacity will be reduced at 50Hz for RKE3750, 5500, and 7500.

PRECISE CONTROL WITH RUNNING COST SAVE

The inverter compressor responds to the fluctuations in the loads directly to achieve highly precise control with the minimum energy consumption. Also, ORION's unique capacity control method has realized highly accurate temperature control even when a load factor is low.

(Energy-saving or preciseness under low load may be selected by switching mode.)



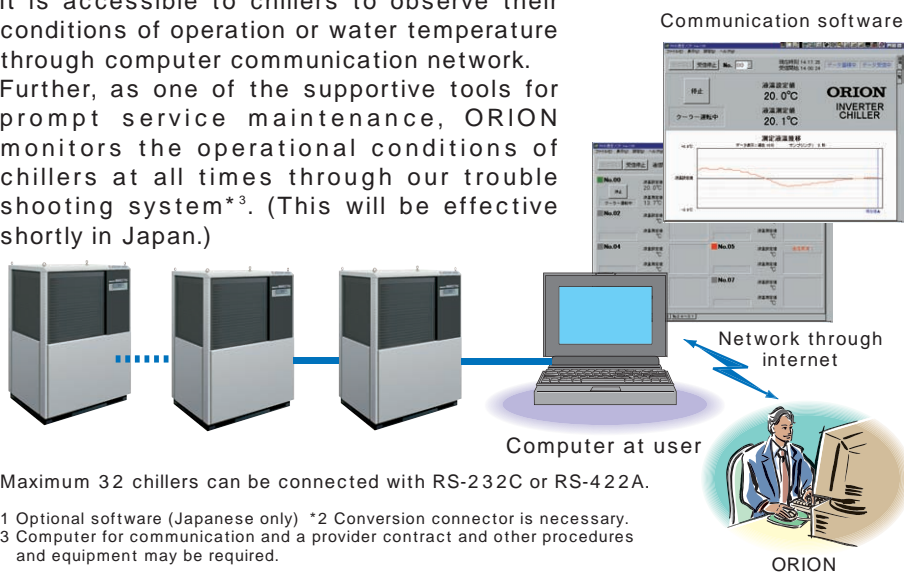


COMMUNICATION CAPABILITY

Communication

Communication software for centralized control*¹
USB connection*²

It is accessible to chillers to observe their conditions of operation or water temperature through computer communication network. Further, as one of the supportive tools for prompt service maintenance, ORION monitors the operational conditions of chillers at all times through our trouble shooting system*³. (This will be effective shortly in Japan.)



Maximum 32 chillers can be connected with RS-232C or RS-422A.

*1 Optional software (Japanese only) *2 Conversion connector is necessary.
*3 Computer for communication and a provider contract and other procedures and equipment may be required.

HFC REFRIGERANT ADOPTED

HFC 407C



New refrigerant 407C, which does not destroy the ozone, is adopted.

OUTDOOR* INSTALLATION

IPX4 Equivalent

ORION Inverter Chillers are designed according to IP-X4 for outdoor installation.

*Avoid direct sunshine, strong wind over 8m/s and/or snowfall upon chillers. (Windbreak panel and snow hood are available as option.)

PLENTY OF OPTIONAL COMPONENTS

A variety of options such as communication software, windbreak panel, snow hood, and such are available.

WIDE SELECTION OF FUNCTIONS

Elective Functions

The user may customize the chiller by selecting functions.

Functions	Contents
Recovery from Power Cut	"No recovery," "automatic recovery," or "dependent on remote control status"
Local / Remote Control	"Local Only," "Remote Only," or "Both"
Alarm Signal Output	Contact is "closed" or "open" when alarm signal is on.
Operation Upon Alarm	Operation of equipment unrelated to alarm may be "continued" or "stopped" for alarm.
Alarm Buzzer	To activate or not to activate buzzer sound for alarm.
Warning Alarm Buzzer	To activate or not to activate buzzer sound for warning alarm.
Antifreezing Operation	Automatic pump operation prevents freeze when this is on.
Warming-Up Operation	Automatic pump operation keeps water temperature at set temperature if this is on even when chiller is off.
Energy-Saving Operation Mode	This function saves more energy while thermal load is approx. 30% or less by stopping compressor.
Low Operational Sound Mode	Keeps fan rotation 40Hz or less to lower operation sound. (Refrigeration capacity may be 20% less.)
Snow Protection Mode	Turns on fan for 3 minutes for every 30 minutes even when chiller is off to prevent snow from covering on top.
Filter 500 Hours	To activate or not to activate warning alarm for noticing dust filter replacement every 500 hours.
Water Temperature Alarm	Five patterns may be preset for upper and lower limit of water temperature.

USEFUL EQUIPMENT

Preset temperature and measured temperature as well as error codes are displayed on highly visible digital controller. Displayed error codes provide quick diagnosis in case.

Also, equipped with various functions such as easily detachable dust filter for condenser to meet variety of needs.

Digital control panel



Status indicator

Dust filter for condenser

