

ORION

冷熱と真空でイノベーション
Innovating with Thermal Control and Vacuum

Chiller Product Guide

Evolution Continues...



Unit Cooler / DC Inverter Chiller / Inverter Chiller /
Digi-Eco Chiller / Free Cooling Chiller / Chiller Unit /
Precision Liquid Temperature Control Equipment

The Orion Chiller Lineup that Meets Ev

Cooling Liquid	Water Tank	Cooling Method	Comp. Control	Water Temp. Control Precision (°C)*2	Models Available	Cooling Capacity (kW)*1																
						0.5	1	5	10	20	30	40	50	100	200							
Clean Water	Built-In Water Tank	Air Cooled	DC INVERTER	±0.1	7 Models				1.3/1.5~4.9/5.3													
				±2	2 Models		2.2/2.5			4.9/5.3												
				±0.1	3 Models						2.7~8.7											
				±0.1	1 Models							9.6										
				±0.5	1 Models	Digi eco									29.2/31.4							
				±0.1	7 Models	DC INVERTER										12.2~96.0						
				±0.5	1 Models	AC INVERTER											57.0/60.0					
				±0.1	1 Models	DC INVERTER												6.1				
				±0.05	1 Models	DC INVERTER													6.2			
				±1	1 Models	DC INVERTER														37.0		
				±0.05	2 Models	DC INVERTER						1.0		4.0								
				±0.1	3 Models	DC INVERTER						1.3/1.5		2.2/2.5		4.9/5.3						
	±0.1	2 Models	DC INVERTER								6.0		10.4									
	±0.1	5 Models	DC INVERTER											14.1~48.0								
	±0.5	3 Models	AC INVERTER											57.0/60.0	70.0/73.0	96.0						
	±1.0	3 Models	DC INVERTER								8	15	30									
	No Water Tank	Air Cooled	DC INVERTER	±0.5	6 Models																	
					4 Models																	
3 Models					160/190 (W)																	
1 Models					500/520 (W)																	
1 Models																					55.5	
Water Cooled		DC INVERTER	±0.5	1 Models																		
				2 Models																		
				2 Models																		
				2 Models																		
				6 Models																		

*1. Note that conditions indicated for cooling capacity values will differ depending on the product series. Please check our specialized catalogs for details. *2. During periods of start-up.

D-RG11E Light Duty Chiller with Built-In Water Tank Full Functionality and Energy Savings. High-Spec. DC Inverter Chiller RKE-A2 / RKE-B2	High-Precision Control (±0.1 °C) at a Low Price. Mid-Grade Model Compact Chiller RKS-JM	Easy-to-Use, Compact, Low Price. Economical Compact Chiller. RKS-J	Mid-Grade Model, Water Cooled Compact Chiller RKS-GM	World-Top-Class Energy Savings, Heavy Duty Inverter Chiller RKE-A / RKE-B	Digital Control Energy Saving Chiller [Digi-Eco Chiller] RKED	Precision Liquid Temp. Control Equipped Compact and light-weight design for a conveniently portable chiller that also sports widerange control. LPC / LPB	High-Precision (±0.05 °C) and Energy-Saving Precision Chiller PEC
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Every Chiller Application

ORION CHILLER & UNIT COOLER

Operable Liquid Temp. Range (°C)		Series	Catalog						
-10	0	10	20	30	40	50	60		
		5~40	RKS-J-MV	Air-Cooled Light Duty Chiller w/Water Tank	D-RG11E Light Duty Chiller with Built-In Water Tank				
		15~35	RKS753J-V RKS1503J-V						
		5~35	RKE-A2-V RKE-B2-V	Air-Cooled DC Inverter Chiller					
		5~40	RKE2200C-V	Air-Cooled Light Duty DC Inverter Chiller w/Water Tank	R80 RKE2200C-V				
		5~35	RKED9000A-V	Air-Cooled Digi-Eco Chiller	D-RG10E Heavy Duty Chiller with Built-In Water Tank				
		3~35 (When using brine:0~35)	RKE-B-V RKE11000B1-V	Air-Cooled Heavy Duty Inverter Chiller					
		5~35	RKE18000A-V						
		5~40	RKE1500C-VRA	HFC-Free Inverter Chiller	R83 HFC-Free Inverter Chiller				
		15~30	PEC1500A1-V	Air-Cooled Precision Chiller	Precision Liquid Temp. Control				
		5~35	FCC15B	Free Cooling Chiller	D-RG02E Eco Hybrid Chiller				
		400 Model: 10~60 900 Model: 10~45	PEC400B1-VW PEC900B1-VW	Water-Cooled Precision Chiller	Precision Liquid Temp. Control				
		402 Model: 5~40 5~35*3	RKS402J-MVW RKS750G-MVW RKS1500G-MVW	Water-Cooled Compact Chiller w/Water Tank	D-RG11E Light Duty Chiller with Built-In Water Tank				
		5~35	RKE1500B1-VW RKE2200B1-VW	Water-Cooled DC Inverter Chiller					
		3~35 (When using brine:0~35)	RKE-B-VW RKE11000B1-VW	Water-Cooled Heavy Duty Inverter Chiller					
		18000 Model: 5~35 15~30*4	RKE-A-VW		D-RG10E Heavy Duty Chiller with Built-In Water Tank				
		20~35	HEU	Refrigerant-Free Chiller					
		5~25	RKS-F	Air-Cooled Compact Unit Cooler	D-RG12E Chiller Unit without Water Tank				
		5~30	RKL-D	Air-Cooled Heavy Duty Unit Cooler					
		-20~+30	LPC1-J LPC2 LPC2-J	Carry Cool	Precision Liquid Temp. Control				
		-20~+40	LPB3						
		15~35	FCMC55A	Free Cooling Module Chiller	D-RG02E Eco Hybrid Chiller				
		5~25	RKS750F-W	Water-Cooled Compact Unit Cooler	D-RG12E Chiller Unit Without water tank				
		15~30 (Operable water supply temp. range)	RKP1500B RKP2200B	One Way Chiller	Food Refrigeration Equipment				
		0~30	RT55B RT130B	Stored-Ice Ice-Water Refrigeration Unit					
		15~40	RCC RCC-H	Coolant Chiller	R23 Coolant Chiller				

able load. *3. RKS750 and 1500G-MVW models. *4. RKE22000 and 30000A-VW models. *Please see our specialized catalogs for detailed specifications.

Component	D-RG12E Chiller Unit Without Water Tank	Food Refrigeration Equipment	D-RG02E Eco Hybrid Chiller	R23 Coolant Chiller	R83 HFC-Free Inverter Chiller
Control Ultra-er	Connections and controls are focused onto the front panel for improved ease of use. Compact Unit Cooler	Stored-Ice Ice-Water Refrigeration Unit uses ice made at night to curb peak electric power loads during daytime hours.	Chilled-water supply with just this one unit. One Way Chiller	Takes advantage of seasonal climates and offers significant energy savings. Eco Hybrid	Improves machine tool processing precision. Water-Soluble Coolant Temperature Control Equipment
	RKS-F	RT	RKP	FCMC/FCC	RCC
	RKL-D				R83 HFC-Free Inverter Chiller
					RKE1500C-VRA



Orion chillers are adopted in various industries.

ORION
R/AMBIENT COOLING

Light Duty Chiller with Built-In Water Tank



Lighting Capacity
1.1 ~ 3.0 kW
1.1 ~ 3.0 kW
1.1 ~ 3.0 kW

1.1 ~ 3.0 kW
1.1 ~ 3.0 kW
1.1 ~ 3.0 kW

The ORION 3-series chiller lineup has the right chiller to meet your diversified needs

Jan. 2022 | OR300E
Chiller (Built-in Water Tank Catalog)

Striving to Make Products that Move You

ORION
R/AMBIENT COOLING

Heavy Duty Chiller with Built-In Water Tank



Cooling Capacity
67.0kW, 75.0kW, 86.0kW

Cooling Capacity
12.0 ~ 84.0kW

Energy savings and high precision control

Jan. 2022 | OR300E
Chiller (Built-in Water Tank Catalog)

Striving to Make Products that Move You

ORION
R/AMBIENT COOLING

Chiller Unit without Water Tank



RKS Series
Cooling Capacity
0.5kW ~ 2.0kW, 2.5kW ~ 3.0kW

RKL Series
Cooling Capacity
1.0kW ~ 1.5kW, 2.0kW ~ 2.5kW

ORION UNIT COOLER
Adopted stainless steel coil type heat exchanger which is hard to clog

Jan. 2022 | OR300E
Chiller (Built-in Water Tank Catalog)

Striving to Make Products that Move You

ORION
R/AMBIENT COOLING

Oct. 2021 | R08E
Dual Channel Chiller for Fiber Laser

Dual Channel Chiller for Fiber Laser

Oscillator Output: 1 ~ 12 kW

Independent water circuits in a single chiller package provide different temp. settings for the oscillator and optical systems.

Space Saving
Footprint Size
Reduces as Much as
30%

Reduced Operator Burden
Two Channels in a Single Unit
Cooling Water Equipment



Dual Channel Chiller with 11 Models to Choose From

Oscillator Output (kW)	Model
1	RK21000A-VW-2CH
2	RK22000A-VW-2CH
3	RK23000A-VW-2CH
4	RK24000A-VW-2CH
5	RK25000A-VW-2CH
6	RK26000A-VW-2CH
7	RK27000A-VW-2CH
8	RK28000A-VW-2CH
9	RK29000A-VW-2CH
10	RK30000A-VW-2CH
11	RK31000A-VW-2CH
12	RK32000A-VW-2CH

RK25000A-VW-2CH

ORION
R/AMBIENT COOLING

July 2018 | R01E
Chilling Chiller for Welding Machine

For Welding Machines Chilled Water Circulation Equipment RKS-J Series

Cooling Water Troubles?

ORION'S new offering to the welding industry is a chiller based on extensive experience in plasma and laser welding.

ORION Chillers Are the Answer!

- Working Ambient Temp 45°C OK!**
A cooling capacity that matches the ambient temperature is essential for hard environments.
- Tough Construction**
The reinforced metal case is made of heavy-duty materials for long life.
- High-head Pump (30m or better)**
Stomping in 2nd floor! Powerful circulation can be during harvest.
- High Capacity Tank Built In**
No need to worry about water shortage when waiting for maintenance.



Applications: Air Welding Machine, Plasma Welding Machine, 6kW (up to) Welding Machine, Fiber Laser Welding Machine, VAG Welding Machine

ORION
R/AMBIENT COOLING

Oct. 2021 | R08E
High-Frequency Induction Heating Equipment
Light Duty Chiller with Built-In Water Tank
RKS-JM Series

The RKS-JM Series is the best cooling solution for high-frequency induction heating equipment!

Temperature Control for Stable Quality!
Circulation Cooling for Consistent Water Quality -- Prevents Fouling and Scorching of the Heating Coil!

Target Industries
Metal Part Production Plants for Automotive Applications
Metal Heat-processing Plants



Application Examples

- Power Supplies (High-frequency inverters and high-frequency oscillators)
- Heating Coils

High-frequency induction heating equipment uses inductive heating principle for the processing and oxidation of metal surfaces.

ORION is continuing to develop a complete and trustworthy nationwide network of expedient sales and service -- everywhere, anytime.



*ORION has wide reaching regional service bases in various countries throughout the world. Please consult your ORION dealer for details.



ISO9001 / ISO14001 obtained at Main Plant, Koshoku Plant and Chitose Plant.

SUSTAINABLE DEVELOPMENT GOALS

We at ORION Machinery support the Sustainable Development Goals (SDGs).

For inquiries, please contact the following representative:

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This catalog contains product specifications as of Sep. 2022.

- Actual product colors may vary slightly from the pictures.
- Please note that the structure or specifications of products contained in this catalog are subject to change without prior notice. Thank you for your understanding.