KEYTER



oneida eco inverter

Water-to-water chillers
screw

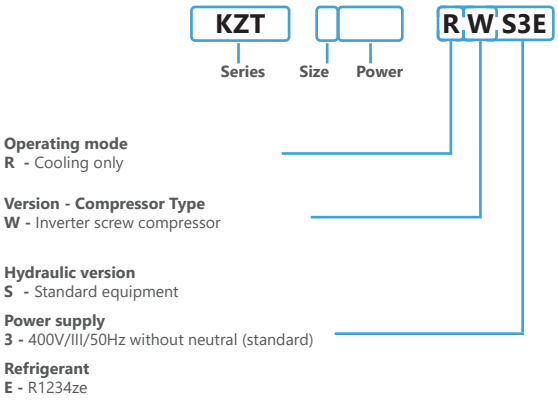
❄ 232-1368 kW



Adaptation and Environment

- Reduced charge of low GWP HFO refrigerant R-1234ze, minimizing CO_2 footprint (99.5% lower GWP than R-134a or R-32).
- Incorporate the latest generation AQUAMATIX Siemens programmable modular electronic control.
- Optional condensing pressure control via a 3-way valve.
- Adaptability to the installation with a wide range of models.
- Maximum accessibility and easy maintenance.

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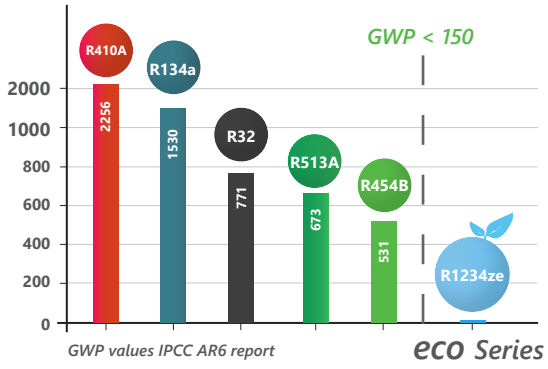


Energy Efficiency

- High energy efficiency chillers equipped with INVERTER screw compressors and state-of-the-art Multitubular Heat Exchangers.
- High energy efficiency at partial and full loads, reducing operating costs.
- Electronic expansion valve for minimum energy consumption.
- Partial recovery system that uses waste heat from condensation to heat water for DHW or industrial applications.

HT Heat only version for high temperature water supply up to 85ºC.

Refrigerants - GWP



Decarbonize today, breathe tomorrow

oneida eco *inverter*

range specification

		KZT
General characteristics		
Refrigerant	Refrigerant R1234ze Low GWP	✓
	Refrigerant leak detector (recommended for equipment with R1234ze refrigerant)	●
Compressor	Semi-hermetic screw compressor with Inverter technology	✓
	Compressor anti-vibration mounts	✓
	Compressor port fitting for an economiser with a muffle (silencer) to absorb vibrations in the piping	●
Expansions valve	Electronic expansion valve	✓
	Compressor suction valve	●
Hydraulic		
Exchanger	Shell and tube heat exchangers in evaporator and condenser	✓
	Triple protection for the heat exchanger with a water flow switch, antifreeze protection for freon and antifreeze protection for water	✓
Hydraulic components	Glycol sweeping of the hydraulic circuit for negative temperatures	✓
	Low-temperature kit for operation with water outlet temp. < 0°C	●
	Hydraulic connections with flanges	●
	Hydraulic unit with water flow pump as an independent module	●
Installation		
Electrical panel	Main switch	●
	Numbering of cables in electrical panel	✓
Power supply	400 V / III / 50 Hz without neutral	✓
	Other electrical voltages (see other options)	●
Insulation	Sheet compartment for compressor protection	●
	Sheet compartment for compressors with acoustic insulation in panels	●
	Original manufacturer high-performance acoustic installation jacket	●
Transportation	Clamps for transportation	✓
	Skid for container transportation	●
Control		
	AQUAMATIX configurable electronic control	✓
	Climatix HMI user terminal for AQUAMATIX control	✓
	RS485 communication interface for ModBus communication	✓
	Bacnet communication	●
	PREMIUM phase control relay, with phase failure detection and rotation direction protection	✓
	EXCELLENT phase control relay, adds phase imbalance, overvoltage and undervoltage detection	●
	Transformer for control system	✓
	Oil level switch	●
	Condensation pressure control for year-round operation	●
	Electricity meter	●

✓ Included as standard
● Optional
- Not applicable

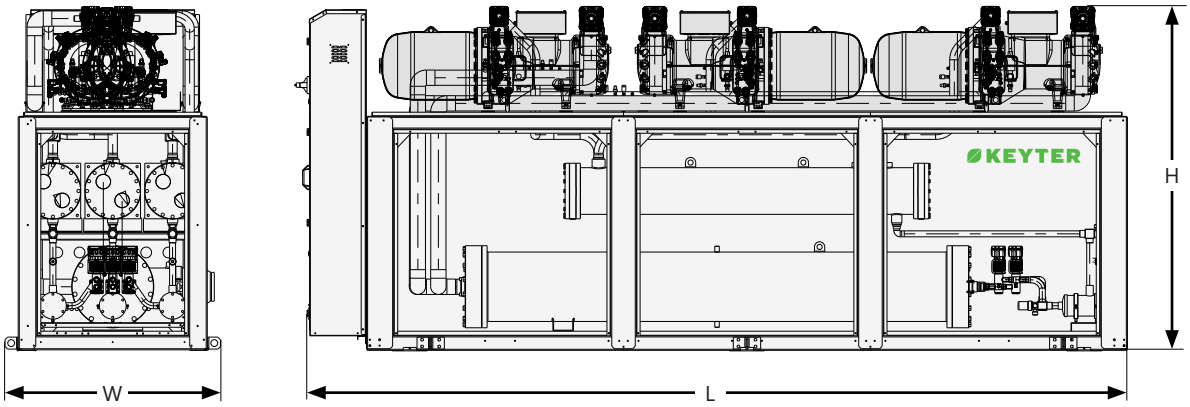
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R1234ze technical data

KZT model			1320	1460	1700	2M00	2M11	3M14	3M18
COOLING									
Cooling capacity	Nominal cooling capacity (1)	kW	232,0	332,0	474,0	698,0	814,0	948,0	1368,0
		TR	66,0	94,5	135,0	198,5	231,5	270,0	389,0
		kBTU/h	792	1134	1620	2382	2778	3240	4668
	Absorbed power (2)	kW	51,5	81,1	107,7	175,8	179,4	214,8	315,6
	Power in the condenser	kW	283,5	413,1	581,7	873,8	993,4	1162,8	1683,6
	EER (3)	kW/kW	4,5	4,1	4,4	4,0	4,5	4,4	4,3
		BTU/(h*W)	15,4	14,0	15,0	13,5	15,5	15,1	14,8
	SEER (4)	kWh/kWh	7,1	7,5	7,4	6,8	7,3	7,6	7,6
	ηs,c (5)	%	276%	290%	287%	262%	284%	295%	294%
TECHNICAL SPECIFICATIONS									
Power supply			400V / III / 50HZ without neutral						
Refrigeration circuit	Refrigerant fluid / GWP	kg CO_2	R1234ze / 4						
	Compressor type		screw compressors with Inverter technology						
	No. of refrig. circuits / compressors		1/1	1/1	1/1	2/2	2/2	2/2	3/3
	No. power stages			25-100%			12.5-100%		8.5-100%
Hydraulic circuit evaporator side	Water flow rate	m^3/h	40,0	57,2	81,6	120,2	140,2	163,3	235,6
	Type of heat exchanger		Shell and tube heat exchanger						
	Ø Hydraulic connections		VICTAULIC DN100	VICTAULIC DN125	VICTAULIC DN150	VICTAULIC DN200	VICTAULIC DN200	VICTAULIC DN200	VICTAULIC DN250
Hydraulic circuit condenser side	Water flow rate	m^3/h	48,8	71,2	100,2	150,5	171,1	200,3	290,0
	Type of heat exchanger		Shell and tube heat exchanger						
	Ø Hydraulic connections		VICTAULIC DN100	VICTAULIC DN125	VICTAULIC DN150	VICTAULIC DN150	VICTAULIC DN150	VICTAULIC DN150	VICTAULIC DN150
			-	-	-	VICTAULIC DN150	VICTAULIC DN150	VICTAULIC DN150	VICTAULIC DN150
			-	-	-	-	-	-	VICTAULIC DN150
Sound pressure level of the equipment (Lp10) (6)		dB(A)	66,1	68,1	72,1	72,9	72,9	72,9	74,8
Empty weight		kg	2253	3031	3367	4884	5732	5980	8444

(1) Nominal cooling capacity for a water inlet/outlet temp. of 12/7ºC in the evaporator. Capacities calculated with a fouling factor in the plate heat exchanger of 0.43·10E-4 ($m^2 \cdot K/W$).
(2) Nominal power input by compressors.
(3) EER and COP calculated according to the EN 14511:2022 standard.
(4) Seasonal efficiencies calculated according to EN 14825:2022.
(5) Seasonal energy efficiencies (ηs,c) in compliance with EU Ecodesign Regulation 2016/2281 for comfort applications.
(6) Sound pressure level in dB(A) in free field, at 10 m distance from the source, and directivity 1.

Dimensions of KZT Oneida ECO (standard equipment without hydraulic unit):



Dimensions S Version (mm)			
	KZT1 ON/OFF KZT1 INVERTER	KZT2 ON/OFF KZT2 INVERTER	KZT3 ON/OFF KZT3 INVERTER
L	3895	5135	6000
W	1500	1500	2100
H	2000	2350	2500