ONEIDA

CHILLERS
water-to-water screw



170-1813 kW
150-1610 kW

Screw

50 Hz
60 Hz

ACS

Made in Spain

R134a R513A R450A R1234ze

ONEIDA

Adaptation and Versatility

- High-performance chillers equipped with action screw compressors and low speed and the latest generation shell and tube heat exchangers
- Condensing pressure control as standard for all year operation
- Adaptability to the facility offering a wide range of models
- Maximum accessibility and easy maintenance

Energy efficiency

- High energy efficiency in partial and full load, reducing operating costs
- Compliance with ErP 2018 and ErP 2021
- NEW equipment available with inverter screw compressor as an option for maximum energy efficiency
- Electronic expansion valve for minimal energy consumption
- Hot gas partial heat reclaim system with plate heat exchanger for sanitary hot water

Low noise level

- Available panelled and closed unit with acoustic insulation
- Compressors available with acoustic jacket

Environment

- Optimised design for reduced refrigerant charge R-134a and low GWP refrigerants
- NEW availability of unit with low GWP refrigerants R-513A (ODP 0, GWP 513) and R-450A (ODP 0, GWP 547)
- NEW ONEIDA ECO availability of unit with low GWP refrigerant R-1234ze (ODP 0, GWP <1)

Easy control

- Electronic regulation and SIEMENS supervision for simple use and high performance
- Wide variety of communication protocols (Modbus, BACnet and LonWorks)

Applications

Industry | Retail & Shopping centres | Culture | Hotels

ONEIDA

R134a 224-774 kW

KZT models			1240	1320	1370	1420	1460	1530	1600	1700	2800
Cooling only version (R) or water reversible heat pump (C)											
Powers (condensing water 30-35°C)	Cooling capacity (1)	kW	224.4	302.9	365.7	425.0	436.5	505.2	606.4	654.8	774.1
		TR	64	86.5	104	121	124.5	144	172.5	186.5	220.5
		kBTU/hr	765.8	1033.6	1247.8	1450.2	1489.2	1723.9	2069.3	2234.2	2641.2
	Power in the condenser	kW	270.4	366.3	435.2	504.1	522.3	604.9	720.8	782.8	920.0
	Power input (2)	kW	45.9	63.4	69.5	79.1	85.9	99.7	114.3	128.0	146.0
	EER (3)	W/W	4.9	4.8	5.3	5.4	5.1	5.1	5.3	5.1	5.3
ESEER (3)			6.0	5.8	6.4	6.6	6.2	6.2	6.5	6.3	6.5
SEER (4)			5.5	5.4	6.0	6.1	5.8	5.8	6.0	5.8	6.0
ηs,c (5)			214%	209%	231%	236%	223%	222%	233%	224%	233%
Technical characteristics											
Power supply			400 V/III/50 HZ without neutral								
Refrigerant circuit	Refrigerant fluid/GWP	Kg CO_2	R134a/1300								
	Type of compressor		Semi-Hermetic Compact Screw								
	No. circuits/compressors		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/2
Hydraulic circuit evaporator side	Water flow	m^3/h	38.7	52.2	63.0	73.2	75.2	87.0	104.5	112.8	133.3
	Type of heat exchanger		Shell and tube								
	Hydraulic connections		VICTAULIC DN125			VICTAULIC DN150			VICTAULIC DN200		
Hydraulic circuit Condenser side	Water flow	m^3/h	46.6	63.1	75.0	86.8	90.0	104.2	124.1	134.8	158.5
	Type of heat exchanger		Shell and tube								
	Hydraulic connections	condenser 1	3"			VICTAULIC DN100			VICTAULIC DN125		3"
		condenser 2	-	-	-	-	-	-	-	-	VICTAULIC DN100
Sound pressure (Lp10) (7)		dB(A)	65.3	66.1	65.7	68.1	68.1	67.5	64.9	72.1	72.4
Weight		kg	1211	1714	1771	2621	2628	2674	2908	3040	4297

R134a 800-1815 kW

KZT models			2850	2950	2M00	2M10	2M11	2M12	2M13	3M14	3M15	3M18
Cooling only version (R) or water reversible heat pump (C)												
Powers (condensing water 30-35°C)	Cooling capacity (1)	kW	799.6	866.8	939.9	1012.8	1078.7	1154.0	1227.2	1300.4	1397.1	1813.0
		TR	227.5	246.5	267.5	288	307	328.5	349	370	397.5	515.5
		kBTU/hr	2728.2	2957.6	3207.1	3455.8	3680.7	3937.7	4187.4	4437.1	4767.1	6186.2
	Power in the condenser	kW	957.1	1037.9	1124.7	1211.3	1291.8	1381.7	1468.6	1555.4	1670.0	2154.1
	Power input (2)	kW	157.6	171.1	184.8	198.6	213.1	227.7	241.4	255.0	272.9	341.1
	EER (3)	W/W	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.3
ESEER (3)			6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.3	6.5
SEER (4)			5.8	5.8	5.8	5.8	5.7	5.8	5.8	5.8	5.8	6.0
ηs,c (5)			222%	222%	223%	224%	222%	222%	223%	224%	224%	233%
Technical characteristics												
Power supply			400 V/III/50 HZ without neutral									
Refrigerant circuit	Refrigerant fluid/GWP	Kg CO_2	R134a/1300									
	Type of compressor		Semi-Hermetic Compact Screw									
	No. circuits/compressors		2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	3/3
Hydraulic circuit evaporator side	Water flow	m^3/h	137.7	149.3	161.9	174.5	185.8	198.8	211.4	224.0	240.6	312.3
	Type of heat exchanger		Shell and tube									
	Hydraulic connections		VICTAULIC DN200									VICTAULIC DN250
Hydraulic circuit Condenser side	Water flow	m^3/h	164.9	178.8	193.7	208.7	222.5	238.0	253.0	267.9	287.7	371.0
	Type of heat exchanger		Shell and tube									
	Hydraulic connections	condenser 1	3"				VICTAULIC DN100		VICTAULIC DN125		VICTAULIC DN100	VICTAULIC DN125
		condenser 2	VICTAULIC DN100		VICTAULIC DN125		VICTAULIC DN125		VICTAULIC DN125		VICTAULIC DN100	VICTAULIC DN125
		condenser 3	-	-	-	-	-	-	-	-	VICTAULIC DN100	VICTAULIC DN125
Sound pressure (Lp10) (7)		dB(A)	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	74.8	74.8
Weight		kg	4285	4399	4575	4705	5574	5609	5659	5862	8046	8795

(1) Nominal cooling capacity for a water inlet/outlet temp. in the evaporator of 12/7°C.
(2) Nominal power input by compressors.
(3) EER and ESEER calculated based on EN 14511.
(4) Seasonal Energy Efficiency Ratio (SEER) for cooling factor and seasonal coefficient of performance for heating (SCOP), calculated based on standard EN 14825:2013.
(5) Seasonal Energy Efficiency Ratio for cooling (ηs,c) and heating (ηs,h) of spaces, in line with Ecodesign Regulation EU 2016/2281.
(6) Seasonal Energy Efficiency factor in line with AHRI Standards 550/590.
(7) Sound pressure level in dB(A) measured in a free field at 10 m from the source.