



Air-Cooled Screw Chillers RTAF 300-2090 kW

The best bundled in one.
Our best.

SINTECIS™
PRIME



R134a R513A



The total package

Quality, performance and reliability

The Trane advantage

Trane is recognized as a world leader with over 100 years of experience in creating and sustaining safe, comfortable and energy efficient environments while improving the performance of buildings and processes around the world.

Trane solutions optimize indoor environments with a broad portfolio of energy efficient heating, ventilating and air conditioning systems, building services, parts support and advanced controls.

To ensure your equipment continues to work at its optimum, throughout the life of the building, Trane provides a full range of service solutions, combined with in-house expertise and an extensive support network.

The Trane offering is...

Smart



Reliable



Energy Efficient



Quiet



Smart Com interface

The Smart Com interface provides complete connectivity with LonTalk®, BACnet®, Modbus and Trane BMS for remote monitoring.

Total control over your system to optimize performance and reliability.

- 7" touch screen
- Intuitive menus
- Easy to use
- Full monitoring of data, settings and alarms
- Full connectivity for remote monitoring
- Trane will design the ideal control solution for your building

Smart flow control

- Trane Adaptive Frequency™ Drive on water pumps
- Variable primary flow to best adapt to jobsite conditions and energy savings

The best in quality, the best in reliability

At Trane we manufacture what we supply, so we enjoy full control from concept to delivery.

Our test procedures are the most rigorous in the industry, so your system will be totally dependable under the most demanding conditions.

Specialist industrial designers ensure every unit is as good looking as the building it is going into.

Because of the confidence we have in our products, we can offer the Trane Select 10 year warranty.

Total compliance

Trane ensures that all our products meet or exceed all requirements for efficiency, noise, refrigerants and safety. This means you can have total peace of mind.

Trane Proprietary Technology*

Provides the innovative solution your building needs

1 Electronically Commutated (EC) fans

- Improved capacity modulation
- Reduced power consumption
- Reduced energy costs

2 *Redesigned fan diffusers

- Remodelled to optimize airflow
- Fans consume less power
- Operating noise reduced

3 * Micro-channel condenser coils

- Leading edge coil design for increased corrosion resistance
- Longer life expectancy
- Increased efficiency with less refrigerant
- Reduced carbon footprint
- 10% overall unit weight reduction

4 * Trane smart control and interface combined

- Leading TD7 touch screen with 7" color display
- Clear display of critical information
- Monitor settings, data trending, reports and alarms
- Simple, intuitive navigation
- Effective operation, monitoring and management
- Durable construction for both indoor and outdoor use



* Compact - High performance - Integrated design - Low charge (CHIL) flooded evaporator

- Reduced refrigerant volume
- Increased efficiency
- Reduced carbon footprint



* Tracer™ UC800 controller

- New generation of Trane control platform for chillers
- Advanced algorithms for the most challenging conditions
- Perfect balance of performance and economy

* Connectivity

- Full interoperability via SmartCom interface Lontalk®, BACnet® and Modbus
- Full remote control capability via our Trane BMS



Adaptive Frequency™ Drive on HSE and HSS versions

- Improved efficiency under part load conditions
- Improved capacity modulation
- Current surge reduced by a factor of 5



Three different refrigerant alternatives

- R134a
- R513A
- R1234ze



5 * Trane Compressor

- Direct drive, two screws helical rotary design
- Infinite capacity modulation via the slide valve
- Trane legendary reliability



Sintesis Prime RTAF

Range description

Outstanding energy efficiency

Exceptional efficiency means less energy consumed and lower electricity bills.

Choose from five efficiency versions:

Standard Efficiency: SE

- SEER up to 5.00
- EER up to 3.24

High Efficiency: HE

- SEER up to 4.97
- EER up to 3.3

Extra Efficiency: XE

- SEER up to 5.13
- EER up to 3.37

High Seasonal Short: HSS

- Adaptive Frequency™ Drive, inverter technology  
- SEER up to 4.9
- EER up to 3.17

High Seasonal Efficiency: HSE

- Adaptive Frequency™ Drive, inverter technology   
- SEER up to 5.06
- EER up to 3.3



Quietest system on the market

- Choose from five levels of sound attenuation depending on the sensitivity of the application.
- Achieved without any loss of operating efficiency and even improving performances with the Extra Low Noise-EC version

Standard Noise: SN - average sound power Lw 99 dB(A)

Low Noise: LN - average sound power Lw 96 dB(A)

- Compressor enclosure
- Additional insulation on the refrigerant circuit

Low Noise Night Noise Set Back: LN-NNSB - average sound power Lw 96 dB(A)

- Compressor enclosure
- Additional insulation on the refrigerant circuit
- Night noise set back option

Extra Low Noise-AC: XLN-AC - average sound power Lw 93 dB(A)

- Compressor enclosure
- Refrigerant line insulation

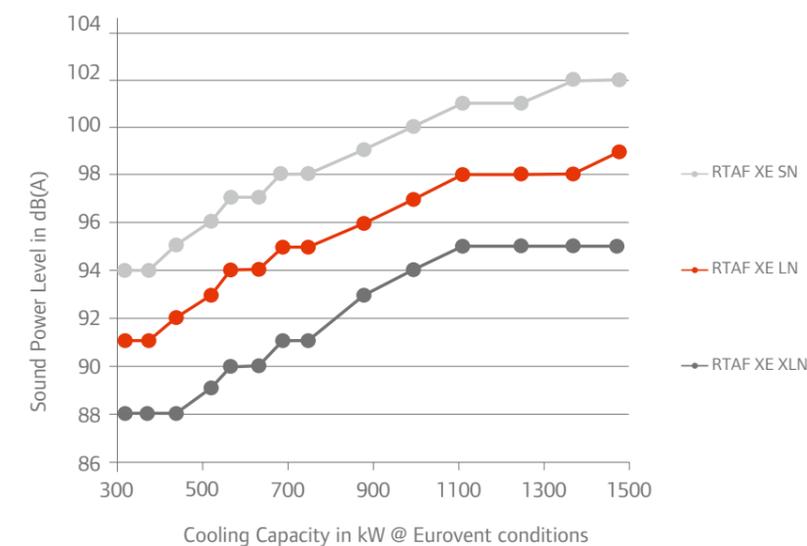
Extra Low Noise-EC: XLN-EC - average sound power Lw 93 dB(A)*

- Compressor enclosure
- Refrigerant line insulation
- EC fans with top diffusers



* The lowest noise rating on the market.

Sound levels



XLN-EC

The quietest in the industry!

The lowest sound levels...

Extra Low Noise EC (XLN-EC): Lw from 88 to 105dB(A) across the range thanks to:

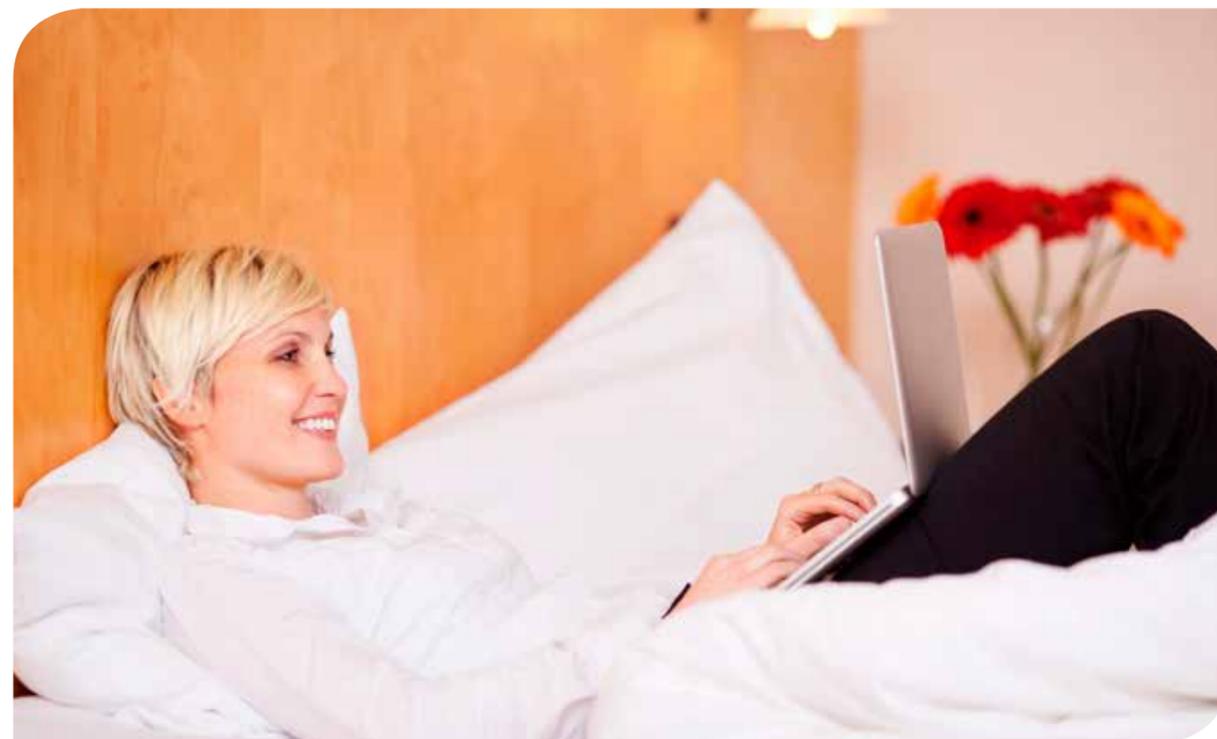
- Compressor enclosure
- Refrigerant line insulation
- EC fans with top diffusers



...at the efficiency that you need

The XLN-EC (Extra Low Noise EC)* version improves unit efficiency even further and is available in four efficiency levels for an optimized Total Cost of Ownership (TCO)

- **Standard Efficiency (SE):** Class B/A on the majority of sizes
- **Extra Efficiency (XE):** Class A with SEER up to 5.13
- **High Seasonal Short (HSS)** with Trane Adaptive Frequency™ Drive and a reduced footprint
- **High Seasonal Efficiency (HSE):** Large majority in Class A, using Trane Adaptive Frequency™ Drive technology on the compressors allowing SEER up to 5.06



Heat Recovery



Heat recovery is reusing the energy which is produced as a natural by-product of the cooling cycle. Trane Sintesis chillers with Partial or Total Heat Recovery option combine the energy savings from heat recovery operation with the cost savings from installation and maintenance. Units with the Heat Recovery option operate as a standard chiller as long as heat is not required or can simultaneously produce chilled and hot water for use in applications like:

- Heating or preheating of boiler systems or domestic cater
- Air conditioning
- Ventilation air pre-heating
- Industrial processes.

Trane Sintesis model RTAF offers a heating capacity

- up to 25% of the cooling capacity with Partial Heat Recovery (PHR) option.
- up to 130% of the cooling capacity with Total Heat Recovery (THR) option.

Free-Cooling



Take the advantage of low ambient conditions to help cool water in your HVAC system.

- A small footprint compared to a system where a dry cooler and a chiller are used
- One single equipment control
- A wide range of capacities

Choose from four free-cooling alternatives.

- Total Direct Free-cooling
- Partial Direct Free-cooling
- Total Glycol-Free Free-cooling
- Partial Glycol-Free Free-cooling



HSE/HSS

With Trane Adaptive Frequency™ Drive

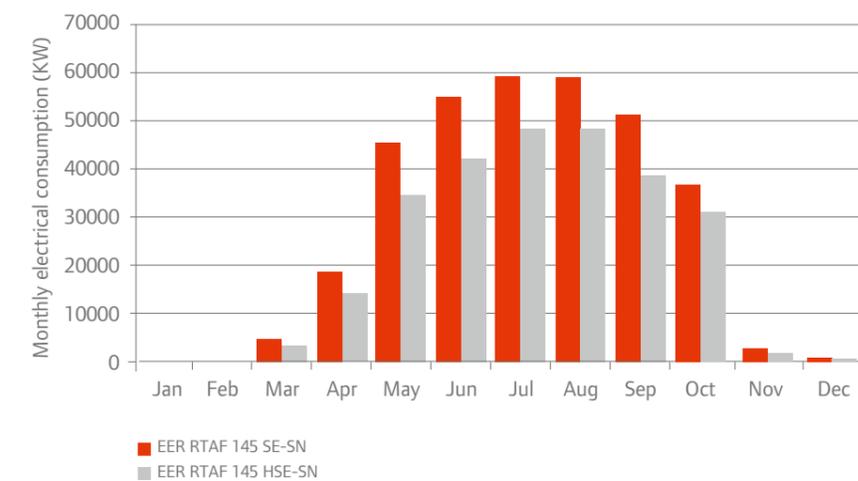
The highest efficiencies - and up to 2090 kW

High Seasonal Efficiency (HSE)*: with Trane Adaptive Frequency™ Drive technology on the compressors and fans:

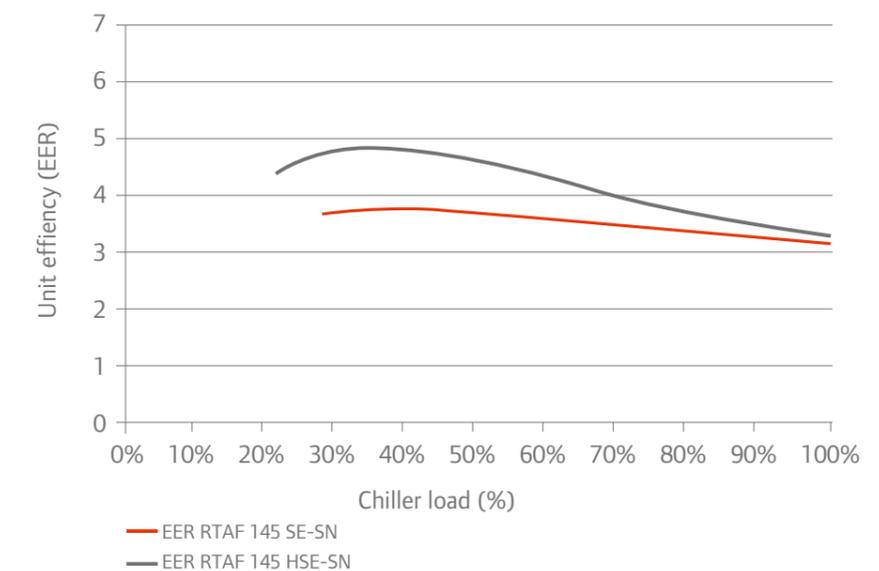
- EER up to 3.3
- SEER up to 5.06
- Reduced inrush current
- Improved capacity modulation
- The High Seasonal Efficiency Short (HSS) version equipped with one condensing coil less, shortening its length.



Monthly chiller consumption



Unit efficiency improvement



General specifications

HSE



RTAF HSE - High Seasonal Efficiency - Extra Low Noise - EC

Eurovent performances (1)		090	105	125	145	155	175	190	205	245	250	280
Net cooling capacity (1) (2)	(kW)	332	386	453	535	580	642	702	760	877	890	1010
Net EER (1) (2)		3.30	3.22	3.15	3.23	3.19	3.17	3.25	3.20	2.87	3.17	3.21
Eurovent Energy class - Cooling		A	A	A	A	A	A	A	A	C	A	A
Net ESEER (2)		4.56	4.46	4.48	4.50	4.57	4.60	4.63	4.61	4.36	4.64	4.71
SEER (3)		4.63	4.60	4.63	4.86	4.89	4.84	5.05	5.04	4.83	4.67	4.60
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	182	181	182	191	193	191	199	199	190	184	181
Sound power level	(dB(A))	88	88	88	89	91	91	92	92	101	94	95
Compressor												
Circuit 1		1	1	1	1	1	1	1	1	1	2	2
Circuit 2		1	1	1	1	1	1	1	1	1	1	1
Refrigerant												
Type		R134a										
Charge Circuit 1	(kg)	43	42	45	48	50	60	62	66	66	108	104
Charge Circuit 2	(kg)	41	40	41	46	44	46	56	62	62	43	53
Dimensions & Weight												
Length	(mm)	5645	5645	5645	6770	6770	6770	7895	7895	7895	9390	10135
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg)	3810	3845	4025	4455	4605	4930	5310	5510	5620	7067	7548

Eurovent performances (1)		310	350	370	380	400	410	450	510	550	600
Net cooling capacity (1) (2)	(kW)	1128	1259	1416	1371	1513	1480	1612	1836	1927	2093
Net EER (1) (2)		3.20	3.21	3.20	3.22	2.95	3.15	2.92	3.08	2.95	2.60
Eurovent Energy class - Cooling		A	A	A	A	B	A	C	B	B	D
Net ESEER (2)		4.75	4.73	4.46	4.72	4.40	4.75	4.52	4.51	4.46	4.55
SEER (3)		4.71	5.03	4.87	4.82	4.73	5.01	4.77	5.05	5.06	4.70
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	185	198	192	190	186	197	188	199	200	184
Sound power level	(dB(A))	96	96	104	96	105	96	102	104	105	107
Compressor											
Circuit 1		2	2	2	2	2	2	2	2	2	2
Circuit 2		1	2	1	2	1	2	2	2	2	2
Refrigerant											
Type		R134a									
Charge Circuit 1	(kg)	112	102	112	103	112	107	107	140	140	140
Charge Circuit 2	(kg)	54	96	54	108	54	110	110	140	140	140
Dimensions & Weight											
Length	(mm)	11260	12385	11260	13510	11260	13510	13510	13510	13510	13510
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg)	7998	9369	8278	9574	8318	9519	9955	9799	9799	10244

(1) Evaporator 12/7°C and 0.0 m³/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016



RTAF HSE - High Seasonal Efficiency - Standard and Low Noise

Eurovent performances (1)		090	105	125	145	155	175	190	205	245	250	280
Net cooling capacity (1) (2)	(kW)	333	386	454	535	581	643	702	754	877	891	1010
Net EER (1) (2)		3.27	3.19	3.12	3.20	3.17	3.13	3.21	3.17	2.85	3.14	3.18
Eurovent Energy class - Cooling		A	A	A	A	A	A	A	A	C	A	A
Net ESEER (2)		4.50	4.39	4.41	4.43	4.51	4.53	4.56	4.56	4.30	4.59	4.65
SEER (3)		4.58	4.55	4.58	4.80	4.83	4.77	4.99	4.98	4.77	4.62	4.56
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	180	179	180	189	190	188	197	196	188	182	179
Sound power level (standard noise)	(dB(A))	94	94	95	96	98	98	99	99	107	100	101
Sound power level (low noise)	(dB(A))	91	91	92	93	95	95	96	96	103	97	98
Compressor												
Circuit 1		1	1	1	1	1	1	1	1	1	2	2
Circuit 2		1	1	1	1	1	1	1	1	1	1	1
Refrigerant												
Type		R134a										
Charge Circuit 1	(kg)	43	42	45	48	50	60	62	66	66	108	104
Charge Circuit 2	(kg)	41	40	41	46	44	46	56	62	62	43	53
Dimensions & Weight												
Length	(mm)	5645	5645	5645	6770	6770	6770	7895	7895	7895	9390	10135
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg)	3710	3745	3925	4335	4485	4810	5170	5370	5480	6907	7368

Eurovent performances (1)		310	350	370	380	400	410	450	510	550	600
Net cooling capacity (1) (2)	(kW)	1129	1259	1409	1371	1504	1491	1613	1826	1914	2075
Net EER (1) (2)		3.16	3.18	3.15	3.19	2.90	3.12	2.87	3.04	2.90	2.55
Eurovent Energy class - Cooling		A	A	A	A	B	A	C	B	B	D
Net ESEER (2)		4.69	4.68	4.42	4.67	4.36	4.68	4.46	4.47	4.42	4.51
SEER (3)		4.66	4.97	4.83	4.76	4.69	4.93	4.71	5.01	5.02	4.64
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	183	196	190	187	185	194	185	198	198	183
Sound power level (standard noise)	(dB(A))	102	102	106	102	107	103	108	106	107	109
Sound power level (low noise)	(dB(A))	99	99	105	99	106	100	104	105	106	109
Compressor											
Circuit 1		2	2	2	2	2	2	2	2	2	2
Circuit 2		1	2	1	2	1	2	2	2	2	2
Refrigerant											
Type		R134a									
Charge Circuit 1	(kg)	112	102	112	103	112	107	107	140	140	140
Charge Circuit 2	(kg)	54	96	54	108	54	110	110	140	140	140
Dimensions & Weight											
Length	(mm)	11260	12385	11260	13510	11260	13510	13510	13510	13510	13510
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg)	7798	9149	8078	9334	8078	9279	9715	9559	9559	10004

(1) Evaporator 12/7°C and 0.0 m³/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016

General specifications

HSS



RTAF HSS - High Seasonal Short - Extra Low Noise - EC

Eurovent performances (1)	090	105	125	140	145	150	155	170	175	185	
Net cooling capacity (1) (2)	(kW)	333	381	447	513	531	549	572	586	622	662
Net EER (1) (2)		3.17	3.09	2.99	2.91	3.12	2.76	3.01	2.62	2.93	2.82
Eurovent Energy class - Cooling		A	B	B	B	A	C	B	D	B	C
Net ESEER (2)		4.43	4.33	4.34	4.23	4.36	4.29	4.45	4.26	4.46	4.37
SEER (3)		4.52	4.48	4.49	4.56	4.74	4.55	4.75	4.50	4.68	4.71
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	178	176	177	179	187	179	187	177	184	185
Sound power level	(dB(A))	88	89	89	89	89	90	90	90	90	91
Compressor											
Circuit 1		1	1	1	1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1	1	1	1
Refrigerant											
Type		R134a									
Charge Circuit 1	(kg)	41	40	42	42	45	44	47	54	57	56
Charge Circuit 2	(kg)	39	38	38	40	43	38	41	40	43	50
Dimensions & Weight											
Length	(mm)	4520	4520	4520	4520	5645	4520	5645	4520	5645	5645
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2672	2672	2672	2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg)	3515	3545	3725	3885	4205	4155	4470	4590	4735	4960

Eurovent performances (1)	190	200	205	245	250	280	310	350	380	410	
Net cooling capacity (1) (2)	(kW)	682	716	737	847	872	979	1078	1209	1327	1448
Net EER (1) (2)		3.01	2.76	2.95	2.68	2.95	2.95	2.84	2.84	2.9	2.91
Eurovent Energy class - Cooling		B	C	B	D	B	B	C	C	B	B
Net ESEER (2)		4.53	4.32	4.48	4.33	4.44	4.54	4.29	4.55	4.59	4.62
SEER (3)		4.90	4.61	4.80	4.71	4.66	4.70	4.68	4.55	4.56	4.62
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	193	181	189	185	183	185	184	179	179	182
Sound power level	(dB(A))	91	91	91	97	93	94	94	94	95	95
Compressor											
Circuit 1		1	1	1	1	2	2	2	2	2	2
Circuit 2		1	1	1	1	1	1	1	2	2	2
Refrigerant											
Type		R134a									
Charge Circuit 1	(kg)	59	60	63	63	93	96	97	94	98	107
Charge Circuit 2	(kg)	53	56	59	59	45	49	52	91	100	104
Dimensions & Weight											
Length	(mm)	6770	5645	6770	6770	8265	9390	9390	10135	11260	12385
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2672	2672	2672	2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg)	5220	4990	5255	5365	6747	7248	7378	8724	8994	9229

(1) Evaporator 12/7°C and 0.0 m³/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016



RTAF HSS - High Seasonal Short - Standard and Low Noise

Eurovent performances (1)	090	105	125	140	145	150	155	170	175	185	
Net cooling capacity (1) (2)	(kW)	333	381	447	513	531	549	572	586	622	662
Net EER (1) (2)		3.12	3.05	2.96	2.89	3.09	2.74	2.98	2.60	2.90	2.79
Eurovent Energy class - Cooling		A	B	B	C	B	C	B	D	B	C
Net ESEER (2)		4.37	4.27	4.28	4.16	4.30	4.21	4.38	4.19	4.40	4.30
SEER (3)		4.47	4.43	4.44	4.50	4.68	4.48	4.69	4.42	4.61	4.64
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	176	174	175	177	184	176	185	174	181	183
Sound power level (standard noise)	(dB(A))	95	95	95	96	96	96	96	97	97	97
Sound power level (low noise)	(dB(A))	92	92	92	93	93	93	93	94	94	94
Compressor											
Circuit 1		1	1	1	1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1	1	1	1
Refrigerant											
Type		R134a									
Charge Circuit 1	(kg)	41	40	42	42	45	44	47	54	57	56
Charge Circuit 2	(kg)	39	38	38	40	43	38	41	40	43	50
Dimensions & Weight											
Length	(mm)	4520	4520	4520	4520	5645	4520	5645	4520	5645	5645
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg)	3415	3445	3625	3785	4085	4055	4350	4490	4615	4840

Eurovent performances (1)	190	200	205	245	250	280	310	350	380	410	
Net cooling capacity (1) (2)	(kW)	683	712	737	848	872	980	1078	1210	1327	1449
Net EER (1) (2)		2.98	2.72	2.92	2.69	2.92	2.93	2.83	2.82	2.88	2.89
Eurovent Energy class - Cooling		B	C	B	D	B	B	C	C	C	C
Net ESEER (2)		4.47	4.26	4.42	4.27	4.33	4.49	4.26	4.50	4.54	4.57
SEER (3)		4.84	4.54	4.74	4.65	4.61	4.64	4.63	4.50	4.50	4.57
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	191	179	187	183	181	183	182	177	177	180
Sound power level (standard noise)	(dB(A))	97	97	97	104	99	100	101	101	101	102
Sound power level (low noise)	(dB(A))	94	94	94	101	96	97	98	98	98	99
Compressor											
Circuit 1		1	1	1	1	2	2	2	2	2	2
Circuit 2		1	1	1	1	1	1	1	2	2	2
Refrigerant											
Type		R134a									
Charge Circuit 1	(kg)	59	60	63	63	93	96	97	94	98	107
Charge Circuit 2	(kg)	53	56	59	59	45	49	52	91	100	104
Dimensions & Weight											
Length	(mm)	6770	5645	6770	6770	8265	9390	9390	10135	11260	12385
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg)	5080	4870	5115	5225	6587	7068	7178	8504	8754	8989

(1) Evaporator 12/7°C and 0.0 m³/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016

General specifications

XE



RTAF XE - Extra Efficiency- Extra Low Noise -EC

Eurovent performances (1)		090	105	125	145	155	175	190	205	245
Net cooling capacity (1) (2)	(kW)	328	383	450	531	573	638	695	758	830
Net EER (1) (2)		3.37	3.31	3.25	3.34	3.23	3.21	3.24	3.22	3.37
Eurovent Energy class - Cooling		A	A	A	A	A	A	A	A	A
Net ESEER (2)		4.23	4.16	4.21	4.25	4.18	4.15	4.11	4.09	4.19
SEER (3)		4.38	4.33	4.36	4.47	4.42	4.34	4.33	4.29	4.65
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	172	170	171	176	174	171	170	169	183
Sound power level	(dB(A))	88	88	88	89	90	90	91	91	97
Compressor										
Circuit 1		1	1	1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1	1	1
Refrigerant										
Type		R134a								
Charge Circuit 1	(kg)	43	42	45	48	50	60	62	66	66
Charge Circuit 2	(kg)	41	40	41	46	44	46	56	62	62
Dimensions & Weight										
Length	(mm)	5645	5645	5645	6770	6770	6770	7895	6770	7895
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2672	2672	2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg)	3710	3740	3920	4350	4615	4775	5225	5365	5445

Eurovent performances (1)		250	280	310	350	355	380	410	450
Net cooling capacity (1) (2)	(kW)	887	1002	1120	1253	1200	1375	1481	1624
Net EER (1) (2)		3.27	3.32	3.26	3.31	3.30	3.30	3.21	3.21
Eurovent Energy class - Cooling		A	A	A	A	A	A	A	A
Net ESEER (2)		4.62	4.71	4.62	4.65	4.52	4.66	4.59	4.33
SEER (3)		4.67	4.92	4.74	5.12	5.06	5.12	5.07	5.13
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	184	194	187	202	200	202	200	202
Sound power level	(dB(A))	93	94	95	95	103	95	95	103
Compressor									
Circuit 1		2	2	2	2	2	2	2	2
Circuit 2		1	1	1	2	1	2	2	2
Refrigerant									
Type		R134a							
Charge Circuit 1	(kg)	108	104	112	102	112	103	107	107
Charge Circuit 2	(kg)	43	53	54	96	54	108	110	110
Dimensions & Weight									
Length	(mm)	9390	10135	11260	12385	11260	13510	13510	13510
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2672	2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg)	6847	7298	7748	9129	7833	9334	9279	9399

(1) Evaporator 12/7°C and 0.0 m³/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016



RTAF XE - Extra Efficiency - Standard and Low Noise

Eurovent performances (1)		090	105	125	145	155	175	190	205	245
Net cooling capacity (1) (2)	(kW)	329	383	451	532	574	639	695	758	830
Net EER (1) (2)		3.36	3.30	3.24	3.33	3.23	3.20	3.22	3.20	3.33
Eurovent Energy class - Cooling		A	A	A	A	A	A	A	A	A
Net ESEER (2)		4.19	4.12	4.17	4.22	4.15	4.12	4.09	4.06	4.10
SEER (3)		4.34	4.29	4.33	4.44	4.39	4.31	4.30	4.26	4.55
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	171	169	170	175	173	169	169	167	179
Sound power level (standard noise)	(dB(A))	94	94	95	96	97	97	98	98	99
Sound power level (low noise)	(dB(A))	91	91	92	93	94	94	95	95	98
Compressor										
Circuit 1		1	1	1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1	1	1
Refrigerant										
Type		R134a								
Charge Circuit 1	(kg)	43	42	45	48	50	60	62	66	66
Charge Circuit 2	(kg)	41	40	41	46	44	46	56	62	62
Dimensions & Weight										
Length	(mm)	5645	5645	5645	6770	6770	6770	7895	6770	7895
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg)	3610	3640	3820	4230	4495	4655	5085	5225	5305

Eurovent performances (1)		250	280	310	350	355	380	410	415	450
Net cooling capacity (1) (2)	(kW)	887	1002	1120	1253	1200	1376	1481	1498	1625
Net EER (1) (2)		3.23	3.28	3.22	3.26	3.26	3.26	3.18	3.16	3.17
Eurovent Energy class - Cooling		A	A	A	A	A	A	A	A	A
Net ESEER (2)		4.56	4.64	4.56	4.59	4.40	4.60	4.53	4.51	4.21
SEER (3)		4.61	4.86	4.54	5.05	4.94	5.05	5.00	5.00	4.99
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	181	191	179	199	195	199	197	197	197
Sound power level (standard noise)	(dB(A))	99	100	101	101	105	102	102	103	105
Sound power level (low noise)	(dB(A))	96	97	98	98	104	98	99	100	104
Compressor										
Circuit 1		2	2	2	2	2	2	2	2	2
Circuit 2		1	1	1	2	1	2	2	2	2
Refrigerant										
Type		R134a								
Charge Circuit 1	(kg)	108	104	112	102	112	103	107	107	107
Charge Circuit 2	(kg)	43	53	54	96	54	108	110	110	110
Dimensions & Weight										
Length	(mm)	9390	10135	11260	12385	11260	13510	13510	13510	13510
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg)	6687	7118	7548	8909	7633	9094	9039	9039	9159

(1) Evaporator 12/7°C and 0.0 m³/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016

General specifications

HE



RTAF HE - High Efficiency- Extra Low noise - AC

Eurovent performances (1)		090	105	125	145	155	175	190	205	245
Net cooling capacity (1) (2)	(kW)	333	385	453	534	578	632	690	751	824
Net EER (1) (2)		3.25	3.25	3.21	3.30	3.20	3.16	3.19	3.16	3.30
Eurovent Energy class - Cooling		A	A	A	A	A	A	A	A	A
Net ESEER (2)		3.89	3.84	3.95	4.06	4.01	4.02	3.96	3.98	4.12
SEER (3)		4.14	4.17	4.26	4.31	4.28	4.21	4.19	4.19	4.58
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	163	164	167	169	168	165	165	165	180
Sound power level	(dB(A))	90	90	90	90	90	90	91	91	97
Compressor										
Circuit 1		1	1	1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1	1	1
Refrigerant										
Type		R134a								
Charge Circuit 1	(kg)	43	42	45	48	50	60	62	66	66
Charge Circuit 2	(kg)	41	40	41	46	44	46	56	62	62
Dimensions & Weight										
Length	(mm)	5645	5645	5645	6770	6770	6770	7895	6770	7895
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg)	3710	3740	3920	4350	4615	4775	5225	5365	5445

Eurovent performances (1)		250	280	310	350	355	380	410	450
Net cooling capacity (1) (2)	(kW)	875	990	1106	1237	1189	1357	1459	1607
Net EER (1) (2)		3.20	3.25	3.23	3.24	3.22	3.23	3.13	3.12
Eurovent Energy class - Cooling		A	A	A	A	A	A	A	A
Net ESEER (2)		4.29	4.38	4.33	4.34	4.37	4.37	4.35	4.32
SEER (3)		4.41	4.68	4.56	4.88	4.86	4.89	4.87	4.97
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	173	184	179	192	191	193	192	196
Sound power level	(dB(A))	92	93	94	94	104	94	95	104
Compressor									
Circuit 1		2	2	2	2	2	2	2	2
Circuit 2		1	1	1	2	1	2	2	2
Refrigerant									
Type		R134a							
Charge Circuit 1	(kg)	108	104	112	102	112	103	107	107
Charge Circuit 2	(kg)	43	53	54	96	54	108	110	110
Dimensions & Weight									
Length	(mm)	9390	10135	11260	12385	11260	13510	13510	13510
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg)	6827	7278	7728	9109	7813	9314	9279	9399

(1) Evaporator 12/7°C and 0.0 m³K/kW, and condenser at 35°C
 (2) Net performances calculated as per EN 14511-2013.
 (3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016



RTAF HE - High Efficiency- Standard and Low Noise

Eurovent performances (1)		090	105	125*	145	155	175	190*	205	245
Net cooling capacity (1) (2)	(kW)	333	386	456	538	582	638	695	757	829
Net EER (1) (2)		3.17	3.19	3.18	3.26	3.18	3.15	3.17	3.16	3.30
Eurovent Energy class - Cooling		A	A	A	A	A	A	A	A	A
Net ESEER (2)		3.75	3.69	3.83	3.94	3.91	3.92	3.87	3.90	4.05
SEER (3)		3.83	3.98	4.09	4.19	4.18	4.11	4.09	4.12	4.50
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	150	156	161	165	164	161	161	162	177
Sound power level (standard noise)	(dB(A))	95	95	96	96	97	97	98	98	99
Sound power level (low noise)	(dB(A))	93	93	93	93	94	94	95	95	98
Compressor										
Circuit 1		1	1	1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1	1	1
Refrigerant										
Type		R134a								
Charge Circuit 1	(kg)	43	42	45	48	50	60	62	66	66
Charge Circuit 2	(kg)	41	40	41	46	44	46	56	62	62
Dimensions & Weight										
Length	(mm)	5645	5645	5645	6770	6770	6770	7895	6770	7895
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg)	3610	3640	3820	4230	4495	4655	5085	5225	5305

Eurovent performances (1)		250	280	310	350	355	380	410	450
Net cooling capacity (1) (2)	(kW)	883	998	1115	1248	1196	1369	1473	1619
Net EER (1) (2)		3.20	3.25	3.23	3.24	3.23	3.23	3.15	3.14
Eurovent Energy class - Cooling		A	A	A	A	A	A	A	A
Net ESEER (2)		4.18	4.25	4.21	4.17	4.25	4.21	4.21	4.20
SEER (3)		4.33	4.54	4.44	4.58	4.76	4.62	4.63	4.86
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	170	179	175	180	187	182	182	191
Sound power level (standard noise)	(dB(A))	99	100	101	101	105	102	102	105
Sound power level (low noise)	(dB(A))	96	97	98	98	104	98	99	104
Compressor									
Circuit 1		2	2	2	2	2	2	2	2
Circuit 2		1	1	1	2	1	2	2	2
Refrigerant									
Type		R134a							
Charge Circuit 1	(kg)	108	104	112	102	112	103	107	107
Charge Circuit 2	(kg)	43	53	54	96	54	108	110	110
Dimensions & Weight									
Length	(mm)	9390	10135	11260	12385	11260	13510	13510	13510
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg)	6687	7118	7548	8909	7633	9094	9039	9159

(1) Evaporator 12/7°C and 0.0 m³K/kW, and condenser at 35°C
 (2) Net performances calculated as per EN 14511-2013.
 (3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016
 * Not available for comfort applications for countries adopting the Ecodesign directive.

General specifications

SE



RTAF SE - Standard Efficiency - Extra Low noise - EC

Eurovent performances (1)		090	105	125	140	145	150*	155	170*	175	185*	190
Net cooling capacity (1) (2)	(kW)	329	379	444	510	527	547	569	586	621	661	681
Net EER (1) (2)		3.24	3.18	3.09	3.02	3.23	2.87	3.12	2.74	3.04	2.92	3.11
Eurovent Energy class - Cooling		A	A	B	B	A	C	A	C	B	B	A
Net ESEER (2)		4.12	4.04	4.06	3.93	4.08	3.84	4.00	3.68	4.04	3.79	4.02
SEER (3)		4.27	4.20	4.21	4.11	4.28	4.04	4.23	3.81	4.20	4.00	4.22
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	168	165	165	161	168	159	166	149	165	157	166
Sound power level	(dB(A))	88	89	89	89	89	90	90	90	90	91	91
Compressor												
Circuit 1		1	1	1	1	1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1	1	1	1	1
Refrigerant												
Type		R134a										
Charge Circuit 1	(kg)	41	40	42	42	45	44	47	54	57	56	59
Charge Circuit 2	(kg)	39	38	38	40	43	38	41	40	43	50	53
Dimensions & Weight												
Length	(mm)	4520	4520	4520	4520	5645	4520	5645	4520	5645	5645	6770
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2672	2672	2672	2672	2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg)	3510	3545	3720	3880	4220	4145	4485	4470	4645	4820	5110

Eurovent performances (1)		200*	205	245	250	280	310	350	355	380	410	450
Net cooling capacity (1) (2)	(kW)	714	739	816	869	984	1087	1207	1167	1338	1464	1607
Net EER (1) (2)		2.85	3.06	3.21	3.02	3.01	2.91	2.91	3.04	2.94	2.97	3.01
Eurovent Energy class - Cooling		C	B	A	B	B	B	B	B	B	B	B
Net ESEER (2)		3.74	3.96	4.12	4.31	4.39	4.29	4.37	4.36	4.40	4.44	4.37
SEER (3)		3.92	4.17	4.56	4.35	4.53	4.34	4.65	4.79	4.68	4.76	5.00
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	154	164	179	171	178	171	183	188	184	187	197
Sound power level	(dB(A))	91	91	97	93	94	94	94	103	95	95	103
Compressor												
Circuit 1		1	1	1	2	2	2	2	2	2	2	2
Circuit 2		1	1	1	1	1	1	2	1	2	2	2
Refrigerant												
Type		R134a										
Charge Circuit 1	(kg)	60	63	63	93	96	97	94	97	98	107	107
Charge Circuit 2	(kg)	56	59	59	45	49	52	91	52	100	104	104
Dimensions & Weight												
Length	(mm)	5645	6770	6770	8265	9390	9390	10135	9390	11260	12385	12385
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2672	2672	2672	2672	2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg)	4850	5140	5220	6647	7138	7283	8664	7368	8954	9229	9509

(1) Evaporator 12/7°C and 0.0 m³K/kW, and condenser at 35°C
 (2) Net performances calculated as per EN 14511-2013.
 (3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016
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RTAF SE - Standard Efficiency- Extra Low noise - AC

Eurovent performances (1)		090	105	125	140*	145	150*	155	170*	175	185*	190
Net cooling capacity (1) (2)	(kW)	327	376	439	503	522	539	563	576	613	652	674
Net EER (1) (2)		3.20	3.13	3.03	2.95	3.18	2.80	3.05	2.66	2.97	2.85	3.05
Eurovent Energy class - Cooling		A	A	B	B	A	C	B	D	B	C	B
Net ESEER (2)		3.91	3.89	3.92	3.87	3.96	3.77	3.88	3.60	3.96	3.72	3.92
SEER (3)		4.17	4.11	4.13	4.03	4.16	3.96	4.12	3.72	4.12	3.92	4.13
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	164	161	162	158	163	155	162	146	162	154	162
Sound power level	(dB(A))	88	88	89	89	89	90	90	90	90	91	91
Compressor												
Circuit 1		1	1	1	1	1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1	1	1	1	1
Refrigerant												
Type		R134a										
Charge Circuit 1	(kg)	41	40	42	42	45	44	47	54	57	56	59
Charge Circuit 2	(kg)	39	38	38	40	43	38	41	40	43	50	53
Dimensions & Weight												
Length	(mm)	4520	4520	4520	4520	5645	4520	5645	4520	5645	5645	6770
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg)	3410	3445	3620	3780	4100	4045	4365	4370	4525	4700	4970

Eurovent performances (1)		200*	205*	245	250	280	310	350	355	380	410	450
Net cooling capacity (1) (2)	(kW)	703	730	810	858	972	1072	1191	1155	1320	1445	1592
Net EER (1) (2)		2.77	3.00	3.13	2.95	2.94	2.84	2.82	2.95	2.87	2.89	2.92
Eurovent Energy class - Cooling		C	B	A	B	B	C	C	B	C	C	B
Net ESEER (2)		3.67	3.88	4.05	4.05	4.16	4.07	4.14	4.29	4.20	4.23	4.33
SEER (3)		3.84	4.09	4.47	4.22	4.32	4.24	4.46	4.61	4.52	4.58	4.83
Space cooling efficiency $\eta_{s.c}$ (3)	(%)	151	161	176	166	170	167	175	181	178	180	190
Sound power level	(dB(A))	91	91	97	93	94	94	95	104	95	96	104
Compressor												
Circuit 1		1	1	1	2	2	2	2	2	2	2	2
Circuit 2		1	1	1	1	1	1	2	1	2	2	2
Refrigerant												
Type		R134a										
Charge Circuit 1	(kg)	60	63	63	93	96	97	94	97	98	107	107
Charge Circuit 2	(kg)	56	59	59	45	49	52	91	52	100	104	104
Dimensions & Weight												
Length	(mm)	5645	6770	6770	8265	9390	9390	10135	9390	11260	12385	12385
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg)	4730	5000	5080	6507	6978	7103	8464	7188	8734	8989	9269

(1) Evaporator 12/7°C and 0.0 m³K/kW, and condenser at 35°C
 (2) Net performances calculated as per EN 14511-2013.
 (3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016
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RTAF SE - Standard Efficiency - Standard and Low Noise

Eurovent performances (1)		090	105	125*	140*	145*	150*	155*	170*	175*	185*	190*
Net cooling capacity (1) (2)	(kW)	329	378	443	509	527	546	568	585	620	660	681
Net EER (1) (2)		3.16	3.11	3.03	2.97	3.17	2.83	3.06	2.71	2.99	2.88	3.06
Eurovent Energy class - Cooling		A	A	B	B	A	C	B	C	B	C	B
Net ESEER (2)		3.79	3.80	3.85	3.83	3.87	3.74	3.80	3.60	3.91	3.69	3.86
SEER (3)		3.93	4.00	4.04	4.01	4.08	3.95	4.05	3.73	4.08	3.89	4.08
Space cooling efficiency η _{s.c} (3)	(%)	154	157	159	157	160	155	159	146	160	153	160
Sound power level (standard noise)	(dB(A))	95	95	95	96	96	96	96	97	97	97	97
Sound power level (low noise)	(dB(A))	92	92	92	93	93	93	93	94	94	94	94
Compressor												
Circuit 1		1	1	1	1	1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1	1	1	1	1
Refrigerant												
Type		R134a										
Charge Circuit 1	(kg)	41	40	42	42	45	44	47	54	57	56	59
Charge Circuit 2	(kg)	39	38	38	40	43	38	41	40	43	50	53
Dimensions & Weight												
Length	(mm)	4520	4520	4520	4520	5645	4520	5645	4520	5645	5645	6770
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg)	3310	3345	3520	3680	3980	3945	4245	4270	4405	4580	4830

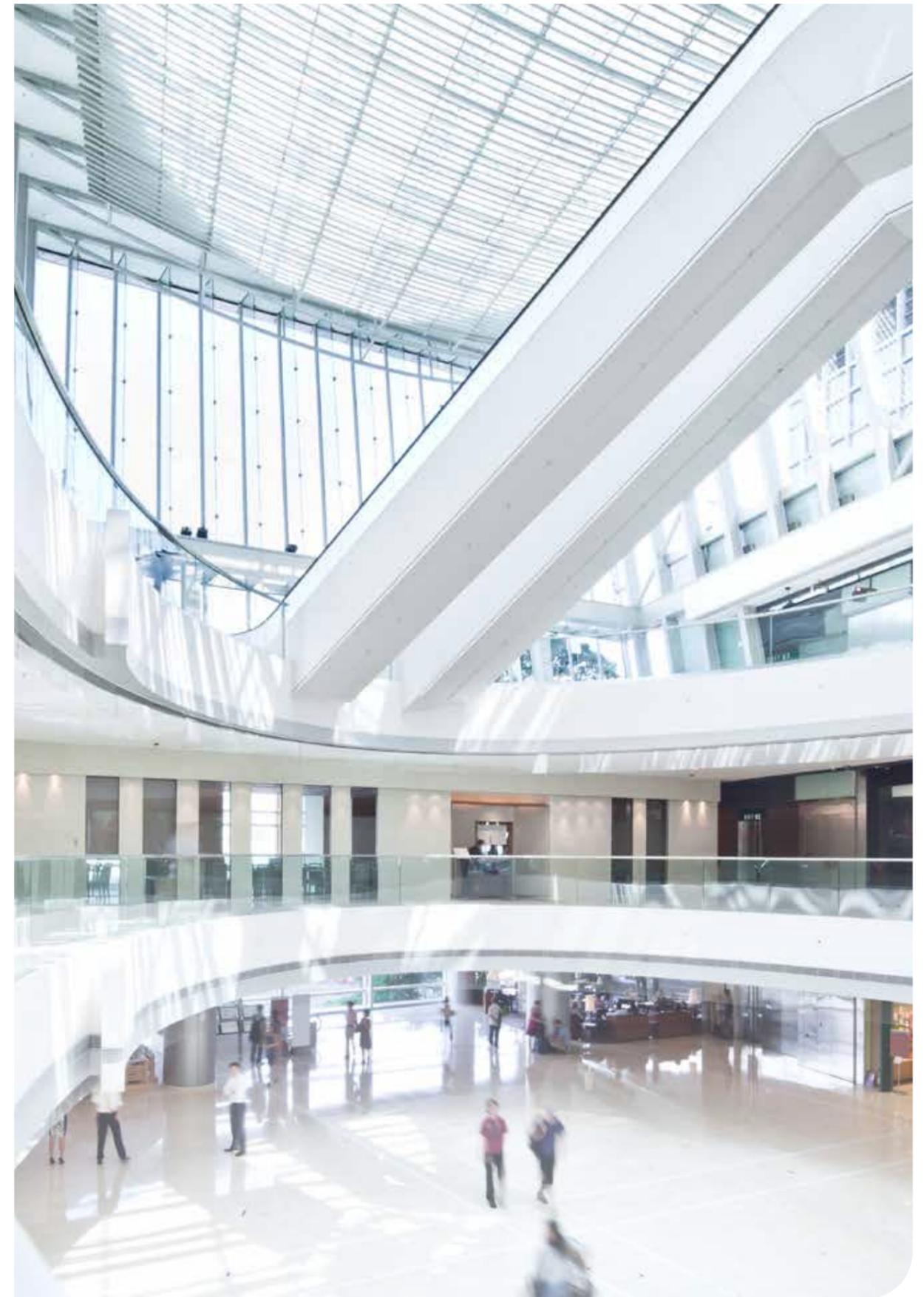
Eurovent performances (1)		200*	205*	245	250	280	310	350	355	380	410	450
Net cooling capacity (1) (2)	(kW)	713	738	816	868	983	1086	1206	1166	1337	1462	1606
Net EER (1) (2)		2.81	3.01	3.15	2.97	2.96	2.87	2.85	2.85	2.85	2.85	2.85
Eurovent Energy class - Cooling		C	B	A	B	B	C	C	C	C	C	C
Net ESEER (2)		3.65	3.84	4.01	3.97	4.05	4.01	4.03	4.19	4.09	4.10	4.21
SEER (3)		3.83	4.06	4.44	4.15	4.24	4.25	4.27	4.58	4.34	4.42	4.72
Space cooling efficiency η _{s.c} (3)	(%)	150	159	174	163	167	167	168	180	171	174	186
Sound power level (standard noise)	(dB(A))	97	97	99	99	100	101	101	105	101	102	105
Sound power level (low noise)	(dB(A))	94	94	98	96	97	98	98	104	98	99	104
Compressor												
Circuit 1		1	1	1	2	2	2	2	2	2	2	2
Circuit 2		1	1	1	1	1	1	2	1	2	2	2
Refrigerant												
Type		R134a										
Charge Circuit 1	(kg)	60	63	63	93	96	97	94	97	98	107	107
Charge Circuit 2	(kg)	56	59	59	45	49	52	91	52	100	104	104
Dimensions & Weight												
Length	(mm)	5645	6770	6770	8265	9390	9390	10135	9390	11260	12385	12385
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg)	4610	4860	4940	6367	6818	6923	8264	7008	8514	8749	9029

(1) Evaporator 12/7°C and 0.0 m³K/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) η_{s.c} / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016

* Not available for comfort applications for countries adopting the Ecodesign directive.



The Future of F-Gases

The fluorinated refrigerants phase-down, as defined in the new EU F-Gas Regulation, is a step-by-step approach where the quantities of HFCs expressed in CO₂ equivalent that are placed on the market are gradually reduced. As a result of the phase-down, HFC consumption will be reduced by 79% by 2030.

This is an unprecedented reduction and means that industry and users need to make, over time, the transition to refrigerants with a lower global warming potential.

Trane, recognized as a leading innovator in the HVAC industry, introduces this new lower GWP refrigerant in Sintesis and other products to be front running in the marketplace and to support your strong sustainability objectives.

Ingersoll Rand and Trane - providers of sustainable solutions.

HFC consumption



Baseline value (100%) is the annual average of total quantity of CO₂ equivalents placed on the EU market from 2009 to 2012.

An environmentally sustainable solution

EcoWise™

Sintesis™ chillers are part of the Ingersoll Rand EcoWise™ portfolio of products that are designed to lower their environmental impact with next-generation, low global warming potential (GWP) refrigerants and high-efficiency operation.

- **High efficiency operation** – To deliver lower operating costs, Sintesis chillers are optimized for both full- and part-load performance.
- **Low GWP refrigerant option** – Sintesis chillers are designed to operate with R-134a, DuPont™ Opteon® XP10 (R-513A) or Solstice® ze (R-1234ze).
- **Lower refrigerant charge** – The CHIL evaporator and microchannel condenser reduce the amount of refrigerant required by up to 40 percent compared to earlier designs, making it even easier to earn a point under the LEED® Energy and Atmosphere (EA) Credit for Enhanced Refrigerant Management.
- **Reduced risk of refrigerant leaks** – The microchannel design used in Sintesis chillers eliminates brazed U-bend connections and their potential for refrigerant leaks, helping maintain peak chiller efficiency and reliability.

What is GWP?

GWP is the global warming impact relative to the impact of the same quantity of carbon dioxide over a 100 year period.

Example:

CO₂: GWP = 1

R134a: GWP = 1430

R513A: GWP = 631 (55% below R134a)

R1234ze: GWP = <1

General specifications

HSE



RTAF HSE - High Seasonal Efficiency- Extra Low Noise -EC

Eurovent performances (1)		090	105	125	145	155	175	190	205
Net cooling capacity (1) (2)	(kW)	324	378	446	528	569	632	689	747
Net EER (1) (2)		3.17	3.06	2.97	3.05	2.94	2.92	2.96	2.92
Eurovent Energy class - Cooling		A	B	B	B	B	B	B	B
Net ESEER (2)		4.45	4.35	4.39	4.44	4.39	4.40	4.39	4.38
SEER (3)		4.58	4.54	4.55	4.72	4.67	4.65	4.72	4.71
Space cooling efficiency ηs.c (3)	(%)	180	179	179	186	184	183	186	185
Sound power level	(dB(A))	89	89	89	90	92	92	93	93
Compressor									
Circuit 1		1	1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1	1
Refrigerant									
Type		R513A							
Charge Circuit 1	(kg)	43	42	45	48	50	60	62	66
Charge Circuit 2	(kg)	41	40	41	46	44	46	56	62
Dimensions & Weight									
Length	(mm)	5645	5645	5645	6770	6770	6770	7895	7895
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2672	2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg)	3810	3845	4025	4455	4605	4930	5310	5510

Eurovent performances (1)		245	250	280	310	350	380	410	450
Net cooling capacity (1) (2)	(kW)	865	878	995	1112	1239	1365	1466	1603
Net EER (1) (2)		2.79	2.89	2.90	2.90	2.89	2.90	2.82	2.78
Eurovent Energy class - Cooling		C	C	B	B	C	B	C	C
Net ESEER (2)		4.17	4.34	4.39	4.41	4.49	4.51	4.53	4.39
SEER (3)		4.62	4.52	4.47	4.62	4.57	4.70	4.51	4.74
Space cooling efficiency ηs.c (3)	(%)	182	178	176	182	180	185	177	187
Sound power level	(dB(A))	102	95	96	97	97	97	97	103
Compressor									
Circuit 1		1	2	2	2	2	2	2	2
Circuit 2		1	1	1	1	2	2	2	2
Refrigerant									
Type		R513A							
Charge Circuit 1	(kg)	66	108	104	112	102	103	107	107
Charge Circuit 2	(kg)	62	43	53	54	96	108	110	110
Dimensions & Weight									
Length	(mm)	7895	9390	10135	11260	12385	13510	13510	13510
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2672	2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg)	5620	7067	7548	7998	9369	9574	9519	9955

(1) Evaporator 12/7°C and 0.0 m³/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) ηs,c / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016



RTAF HSE - High Seasonal Efficiency- Standard and Low Noise

Eurovent performances (1)		090	105	125	145	155	175	190	205
Net cooling capacity (1) (2)	(kW)	325	378	446	529	570	632	689	747
Net EER (1) (2)		3.18	3.07	2.98	3.07	2.97	2.92	2.97	2.93
Eurovent Energy class - Cooling		A	B	B	B	B	B	B	B
Net ESEER (2)		4.39	4.29	4.33	4.37	4.32	4.33	4.33	4.32
SEER (3)		4.53	4.49	4.50	4.67	4.62	4.58	4.66	4.65
Space cooling efficiency ηs.c (3)	(%)	178	177	177	184	182	180	183	183
Sound power level (standard noise)	(dB(A))	95	95	96	97	99	99	100	100
Sound power level (low noise)	(dB(A))	92	92	93	94	96	96	97	97
Compressor									
Circuit 1		1	1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1	1
Refrigerant									
Type		R513A							
Charge Circuit 1	(kg)	43	42	45	48	50	60	62	66
Charge Circuit 2	(kg)	41	40	41	46	44	46	56	62
Dimensions & Weight									
Length	(mm)	5645	5645	5645	6770	6770	6770	7895	7895
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg)	3710	3745	3925	4335	4485	4810	5170	5370

Eurovent performances (1)		245	250	280	310	350	380	410	450
Net cooling capacity (1) (2)	(kW)	866	878	996	1113	1240	1365	1467	1604
Net EER (1) (2)		2.81	2.9	2.92	2.91	2.9	2.91	2.83	2.74
Eurovent Energy class - Cooling		C	B	B	B	B	B	C	C
Net ESEER (2)		4.11	4.29	4.34	4.35	4.44	4.46	4.48	4.33
SEER (3)		4.56	4.47	4.42	4.56	4.52	4.65	4.46	4.68
Space cooling efficiency ηs.c (3)	(%)	179	176	174	179	178	183	175	184
Sound power level (standard noise)	(dB(A))	108	101	102	103	103	104	104	107
Sound power level (low noise)	(dB(A))	104	98	99	100	100	100	101	104
Compressor									
Circuit 1		1	2	2	2	2	2	2	2
Circuit 2		1	1	1	1	2	2	2	2
Refrigerant									
Type		R513A							
Charge Circuit 1	(kg)	66	108	104	112	102	103	107	107
Charge Circuit 2	(kg)	62	43	53	54	96	108	110	110
Dimensions & Weight									
Length	(mm)	7895	9390	10135	11260	12385	13510	13510	13510
Width	(mm)	2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg)	5480	6907	7368	7798	9149	9334	9279	9715

(1) Evaporator 12/7°C and 0.0 m³/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) ηs,c / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016

General specifications

HSS



RTAF HSS - High Seasonal Short - Extra Low Noise -EC

Eurovent performances (1)	090	105	125	145	155	175	190	205
Net cooling capacity (1) (2)	(kW) 325	374	438	524	564	612	673	726
Net EER (1) (2)	3.03	2.93	2.80	2.93	2.83	2.74	2.83	2.76
Eurovent Energy class - Cooling	B	B	C	B	C	C	C	C
Net ESEER (2)	4.32	4.23	4.25	4.32	4.25	4.29	4.31	4.28
SEER (3)	4.47	4.41	4.40	4.61	4.54	4.50	4.60	4.57
Space cooling efficiency $\eta_{s.c}$ (3)	(%) 176	173	173	181	179	177	181	180
Sound power level	(dB(A)) 89	90	90	90	91	91	92	92
Compressor								
Circuit 1	1	1	1	1	1	1	1	1
Circuit 2	1	1	1	1	1	1	1	1
Refrigerant								
Type	R513A							
Charge Circuit 1	(kg) 41	40	42	45	47	57	59	63
Charge Circuit 2	(kg) 39	38	38	43	41	43	53	59
Dimensions & Weight								
Length	(mm) 4520	4520	4520	5645	5645	5645	6770	6770
Width	(mm) 2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2672	2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg) 3515	3545	3725	4205	4470	4735	5220	5255

Eurovent performances (1)	245	250	280	310	350	380	410
Net cooling capacity (1) (2)	(kW) 817	861	974	1069	1194	1322	1441
Net EER (1) (2)	2.65	2.77	2.76	2.65	2.66	2.71	2.72
Eurovent Energy class - Cooling	D	C	C	D	D	C	C
Net ESEER (2)	4.10	4.26	4.32	4.27	4.39	4.42	4.48
SEER (3)	4.53	4.46	4.42	4.50	4.35	4.55	4.46
Space cooling efficiency $\eta_{s.c}$ (3)	(%) 178	175	174	177	171	179	175
Sound power level	(dB(A)) 98	94	95	95	95	96	96
Compressor							
Circuit 1	1	2	2	2	2	2	2
Circuit 2	1	1	1	1	2	2	2
Refrigerant							
Type	R513A						
Charge Circuit 1	(kg) 63	93	96	97	94	98	107
Charge Circuit 2	(kg) 59	45	49	52	91	100	104
Dimensions & Weight							
Length	(mm) 6770	8265	9390	9390	10135	11260	12385
Width	(mm) 2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg) 5365	6727	7228	7358	8704	8974	9229

(1) Evaporator 12/7°C and 0.0 m³/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016



RTAF HSS - High Seasonal Short - Standard and Low Noise

Eurovent performances (1)	090	105	125	145	155	175	190	205
Net cooling capacity (1) (2)	(kW) 325	374	439	524	564	613	673	726
Net EER (1) (2)	2.99	2.89	2.77	2.90	2.80	2.71	2.80	2.74
Eurovent Energy class - Cooling	B	C	C	B	C	C	C	C
Net ESEER (2)	4.26	4.17	4.19	4.26	4.19	4.23	4.25	4.22
SEER (3)	4.42	4.36	4.35	4.55	4.49	4.44	4.54	4.51
Space cooling efficiency $\eta_{s.c}$ (3)	(%) 174	171	171	179	177	175	179	177
Sound power level (standard noise)	(dB(A)) 96	96	96	97	97	98	98	98
Sound power level (low noise)	(dB(A)) 93	93	93	94	94	95	95	95
Compressor								
Circuit 1	1	1	1	1	1	1	1	1
Circuit 2	1	1	1	1	1	1	1	1
Refrigerant								
Type	R513A							
Charge Circuit 1	(kg) 41	40	42	45	47	57	59	63
Charge Circuit 2	(kg) 39	38	38	43	41	43	53	59
Dimensions & Weight								
Length	(mm) 4520	4520	4520	5645	5645	5645	6770	6770
Width	(mm) 2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2526	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg) 3415	3445	3625	4085	4350	4615	5080	5115

Eurovent performances (1)	245	250	280	310	350	380	410
Net cooling capacity (1) (2)	(kW) 817	861	974	1069	1194	1323	1442
Net EER (1) (2)	2.63	2.74	2.74	2.63	2.64	2.69	2.70
Eurovent Energy class - Cooling	D	C	C	D	D	D	D
Net ESEER (2)	4.05	4.21	4.27	4.22	4.34	4.37	4.43
SEER (3)	4.47	4.41	4.37	4.44	4.30	4.50	4.41
Space cooling efficiency $\eta_{s.c}$ (3)	(%) 176	173	172	175	169	177	173
Sound power level (standard noise)	(dB(A)) 105	100	101	102	102	102	103
Sound power level (low noise)	(dB(A)) 102	97	98	99	99	99	100
Compressor							
Circuit 1	1	2	2	2	2	2	2
Circuit 2	1	1	1	1	2	2	2
Refrigerant							
Type	R513A						
Charge Circuit 1	(kg) 63	93	96	97	94	98	107
Charge Circuit 2	(kg) 59	45	49	52	91	100	104
Dimensions & Weight							
Length	(mm) 6770	8265	9390	9390	10135	11260	12385
Width	(mm) 2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg) 5225	6587	7068	7178	8504	8754	8989

(1) Evaporator 12/7°C and 0.0 m³/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016

General specifications

XE



RTAF XE - Extra Efficiency- Extra Low Noise -EC

Eurovent performances (1)	090	105	125	145	155	175	190
Net cooling capacity (1) (2)	(kW) 321	379	445	525	568	632	689
Net EER (1) (2)	3.15	3.16	3.10	3.19	3.08	3.05	3.09
Eurovent Energy class - Cooling	A	A	A	A	B	B	B
Net ESEER (2)	4.32	4.04	4.07	4.12	4.04	4.02	3.99
SEER (3)	4.30	4.21	4.22	4.32	4.27	4.18	4.19
Space cooling efficiency ηs.c (3)	(%) 169	165	166	170	168	164	165
Sound power level	(dB(A)) 89	89	89	90	91	91	92
Compressor							
Circuit 1	1	1	1	1	1	1	1
Circuit 2	1	1	1	1	1	1	1
Refrigerant							
Type	R513A						
Charge Circuit 1	(kg) 43	42	45	48	50	60	62
Charge Circuit 2	(kg) 41	40	41	46	44	46	56
Dimensions & Weight							
Length	(mm) 5645	5645	5645	6770	6770	6770	7895
Width	(mm) 2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg) 3710	3740	3920	4350	4615	4775	5225

Eurovent performances (1)	205*	250	280	310	350	380	410
Net cooling capacity (1) (2)	(kW) 750	878	995	1116	1240	1366	1472
Net EER (1) (2)	3.05	2.99	3.00	2.99	2.97	2.98	2.90
Eurovent Energy class - Cooling	B	B	B	B	B	B	B
Net ESEER (2)	3.96	4.25	4.33	4.32	4.36	4.40	4.36
SEER (3)	4.14	4.29	4.44	4.37	4.66	4.69	4.70
Space cooling efficiency ηs.c (3)	(%) 163	169	175	172	183	185	185
Sound power level	(dB(A)) 92	94	95	96	96	96	96
Compressor							
Circuit 1	1	2	2	2	2	2	2
Circuit 2	1	1	1	1	2	2	2
Refrigerant							
Type	R513A						
Charge Circuit 1	(kg) 66	108	104	112	102	103	107
Charge Circuit 2	(kg) 62	43	53	54	96	108	110
Dimensions & Weight							
Length	(mm) 7895	9390	10135	11260	12385	13510	13510
Width	(mm) 2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2672	2672	2672	2672	2672	2672	2672
Operating weight	(kg) 5365	6827	7278	7728	9109	9314	9279

(1) Evaporator 12/7°C and 0.0 m³K/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) ηs,c / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016

* Not available for comfort applications for countries adopting the Ecodesign directive.



RTAF XE - Extra Efficiency- Standard and Low Noise

Eurovent performances (1)	090	105	125	145	155	175	190	205*
Net cooling capacity (1) (2)	(kW) 321	380	446	526	569	632	689	750
Net EER (1) (2)	3.12	3.13	3.07	3.16	3.06	3.02	3.05	3.02
Eurovent Energy class - Cooling	A	A	B	A	B	B	B	B
Net ESEER (2)	4.25	3.99	4.02	4.07	4.00	3.97	3.94	3.91
SEER (3)	4.25	4.15	4.17	4.27	4.22	4.13	4.14	4.09
Space cooling efficiency ηs.c (3)	(%) 167	163	164	168	166	162	163	161
Sound power level (standard noise)	(dB(A)) 95	95	96	97	98	98	99	99
Sound power level (low noise)	(dB(A)) 92	92	93	94	95	95	96	96
Compressor								
Circuit 1	1	1	1	1	1	1	1	1
Circuit 2	1	1	1	1	1	1	1	1
Refrigerant								
Type	R513A							
Charge Circuit 1	(kg) 43	42	45	48	50	60	62	66
Charge Circuit 2	(kg) 41	40	41	46	44	46	56	62
Dimensions & Weight								
Length	(mm) 5645	5645	5645	6770	6770	6770	7895	7895
Width	(mm) 2200	2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2526	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg) 3610	3640	3820	4230	4495	4655	5085	5225

Eurovent performances (1)	250	280	310	350	380	410	415
Net cooling capacity (1) (2)	(kW) 878	996	1116	1241	1366	1472	1495
Net EER (1) (2)	2.96	2.97	2.96	2.94	2.95	2.87	3.02
Eurovent Energy class - Cooling	B	B	B	B	B	C	B
Net ESEER (2)	4.20	4.24	4.25	4.31	4.34	4.30	4.41
SEER (3)	4.25	4.38	4.32	4.61	4.63	4.64	4.91
Space cooling efficiency ηs.c (3)	(%) 167	172	170	181	182	183	193
Sound power level (standard noise)	(dB(A)) 100	101	102	102	103	103	104
Sound power level (low noise)	(dB(A)) 97	98	99	99	99	100	101
Compressor							
Circuit 1	2	2	2	2	2	2	2
Circuit 2	1	1	1	2	2	2	2
Refrigerant							
Type	R513A						
Charge Circuit 1	(kg) 108	104	112	102	103	107	107
Charge Circuit 2	(kg) 43	53	54	96	108	110	110
Dimensions & Weight							
Length	(mm) 9390	10135	11260	12385	13510	13510	13510
Width	(mm) 2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg) 6687	7118	7548	8909	9094	9039	9039

(1) Evaporator 12/7°C and 0.0 m³K/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) ηs,c / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016

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General specifications

HE



RTAF HE - High Efficiency- Standard and Low Noise

Eurovent performances (1)	090*	105	125*	145*	155*	175*	190*
Net cooling capacity (1) (2)	(kW) 326	383	452	532	576	631	689
Net EER (1) (2)	2.96	3.04	3.03	3.11	3.04	2.99	3.02
Eurovent Energy class - Cooling	B	B	B	A	B	B	B
Net ESEER (2)	3.66	3.60	3.72	3.83	3.79	3.80	3.75
SEER (3)	3.75	3.87	3.96	4.06	4.05	3.97	3.96
Space cooling efficiency $\eta_{s.c}$ (3)	(%) 147	152	155	159	159	156	155
Sound power level (standard noise)	(dB(A)) 96	96	97	97	98	98	99
Sound power level (low noise)	(dB(A)) 94	94	94	94	95	95	96
Compressor							
Circuit 1	1	1	1	1	1	1	1
Circuit 2	1	1	1	1	1	1	1
Refrigerant							
Type	R513A						
Charge Circuit 1	(kg) 43	42	45	48	50	60	62
Charge Circuit 2	(kg) 41	40	41	46	44	46	56
Dimensions & Weight							
Length	(mm) 5645	5645	5645	6770	6770	6770	7895
Width	(mm) 2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg) 3610	3640	3820	4230	4495	4655	5085

Eurovent performances (1)	205*	250*	280	310*	350	380	410
Net cooling capacity (1) (2)	(kW) 749	877	994	1115	1240	1365	1470
Net EER (1) (2)	2.99	2.93	2.94	2.94	2.92	2.92	2.85
Eurovent Energy class - Cooling	B	B	B	B	B	B	C
Net ESEER (2)	3.78	3.85	3.93	3.89	3.93	3.98	4.00
SEER (3)	3.98	4.02	4.13	4.10	4.23	4.25	4.32
Space cooling efficiency $\eta_{s.c}$ (3)	(%) 156	158	162	161	166	167	170
Sound power level (standard noise)	(dB(A)) 99	100	101	102	102	103	103
Sound power level (low noise)	(dB(A)) 96	97	98	99	99	99	100
Compressor							
Circuit 1	1	2	2	2	2	2	2
Circuit 2	1	1	1	1	2	2	2
Refrigerant							
Type	R513A						
Charge Circuit 1	(kg) 66	108	104	112	102	103	107
Charge Circuit 2	(kg) 62	43	53	54	96	108	110
Dimensions & Weight							
Length	(mm) 7895	9390	10135	11260	12385	13510	13510
Width	(mm) 2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2526	2526	2526	2526	2526	2526	2526
Operating weight	(kg) 5225	6687	7118	7548	8909	9094	9039

(1) Evaporator 12/7°C and 0.0 m³K/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016

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General specifications

SE



RTAF SE - Standard Efficiency- Extra Low Noise -EC

Eurovent performances (1)	090	105	125*	145	155*	175*	190*
Net cooling capacity (1) (2)	(kW) 321	375	439	522	564	615	675
Net EER (1) (2)	3.01	3.02	2.93	3.07	2.96	2.87	2.96
Eurovent Energy class - Cooling	B	B	B	B	B	C	B
Net ESEER (2)	4.20	3.93	3.92	3.96	3.87	3.90	3.89
SEER (3)	4.20	4.08	4.06	4.13	4.08	4.04	4.08
Space cooling efficiency $\eta_{s.c}$ (3)	(%) 165	160	159	162	160	159	160
Sound power level	(dB(A)) 89	90	90	90	91	91	92
Compressor							
Circuit 1	1	1	1	1	1	1	1
Circuit 2	1	1	1	1	1	1	1
Refrigerant							
Type	R513A						
Charge Circuit 1	(kg) 41	40	42	45	47	57	59
Charge Circuit 2	(kg) 39	38	38	43	41	43	53
Dimensions & Weight							
Length	(mm) 4520	4520	4520	5645	5645	5645	6770
Width	(mm) 2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2672	2672	2672	2672	2672	2672	2672
Operating weight (standard noise)	(kg) 3410	3445	3620	4100	4365	4525	4970

Eurovent performances (1)	205*	250	280	310	350	380	410
Net cooling capacity (1) (2)	(kW) 731	861	975	1075	1197	1325	1448
Net EER (1) (2)	2.89	2.87	2.85	2.74	2.74	2.78	2.79
Eurovent Energy class - Cooling	C	C	C	C	C	C	C
Net ESEER (2)	3.83	4.17	4.27	4.19	4.25	4.27	4.32
SEER (3)	4.01	4.19	4.27	4.18	4.48	4.53	4.60
Space cooling efficiency $\eta_{s.c}$ (3)	(%) 157	165	168	164	176	178	181
Sound power level	(dB(A)) 92	94	95	95	95	96	96
Compressor							
Circuit 1	1	2	2	2	2	2	2
Circuit 2	1	1	1	1	2	2	2
Refrigerant							
Type	R513A						
Charge Circuit 1	(kg) 63	93	96	97	94	98	107
Charge Circuit 2	(kg) 59	45	49	52	91	100	104
Dimensions & Weight							
Length	(mm) 6770	8265	9390	9390	10135	11260	12385
Width	(mm) 2200	2200	2200	2200	2200	2200	2200
Height	(mm) 2672	2672	2672	2672	2672	2672	2672
Operating weight (standard noise)	(kg) 5000	6527	6998	7123	8484	8754	8989

(1) Evaporator 12/7°C and 0.0 m³K/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) $\eta_{s.c}$ / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016

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RTAF SE - Standard Efficiency- Standard and Low Noise

Eurovent performances (1)		090	105	125*	145*	155*	175*	190*
Net cooling capacity (1) (2)	(kW)	321	374	439	522	563	614	675
Net EER (1) (2)		2.94	2.96	2.88	3.01	2.91	2.83	2.91
Eurovent Energy class - Cooling		B	B	C	B	B	C	B
Net ESEER (2)		3.84	3.70	3.73	3.75	3.68	3.78	3.74
SEER (3)		3.85	3.88	3.89	3.94	3.91	3.92	3.95
Space cooling efficiency η _{s.c} (3)	(%)	151	152	153	155	153	154	155
Sound power level (standard noise)	(dB(A))	96	96	96	97	97	98	98
Sound power level (low noise)	(dB(A))	93	93	93	94	94	95	95
Compressor								
Circuit 1		1	1	1	1	1	1	1
Circuit 2		1	1	1	1	1	1	1
Refrigerant								
Type		R513A						
Charge Circuit 1	(kg)	41	40	42	45	47	57	59
Charge Circuit 2	(kg)	39	38	38	43	41	43	53
Dimensions & Weight								
Length	(mm)	4520	4520	4520	5645	5645	5645	6770
Width	(mm)	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg)	3310	3345	3520	3980	4245	4405	4830

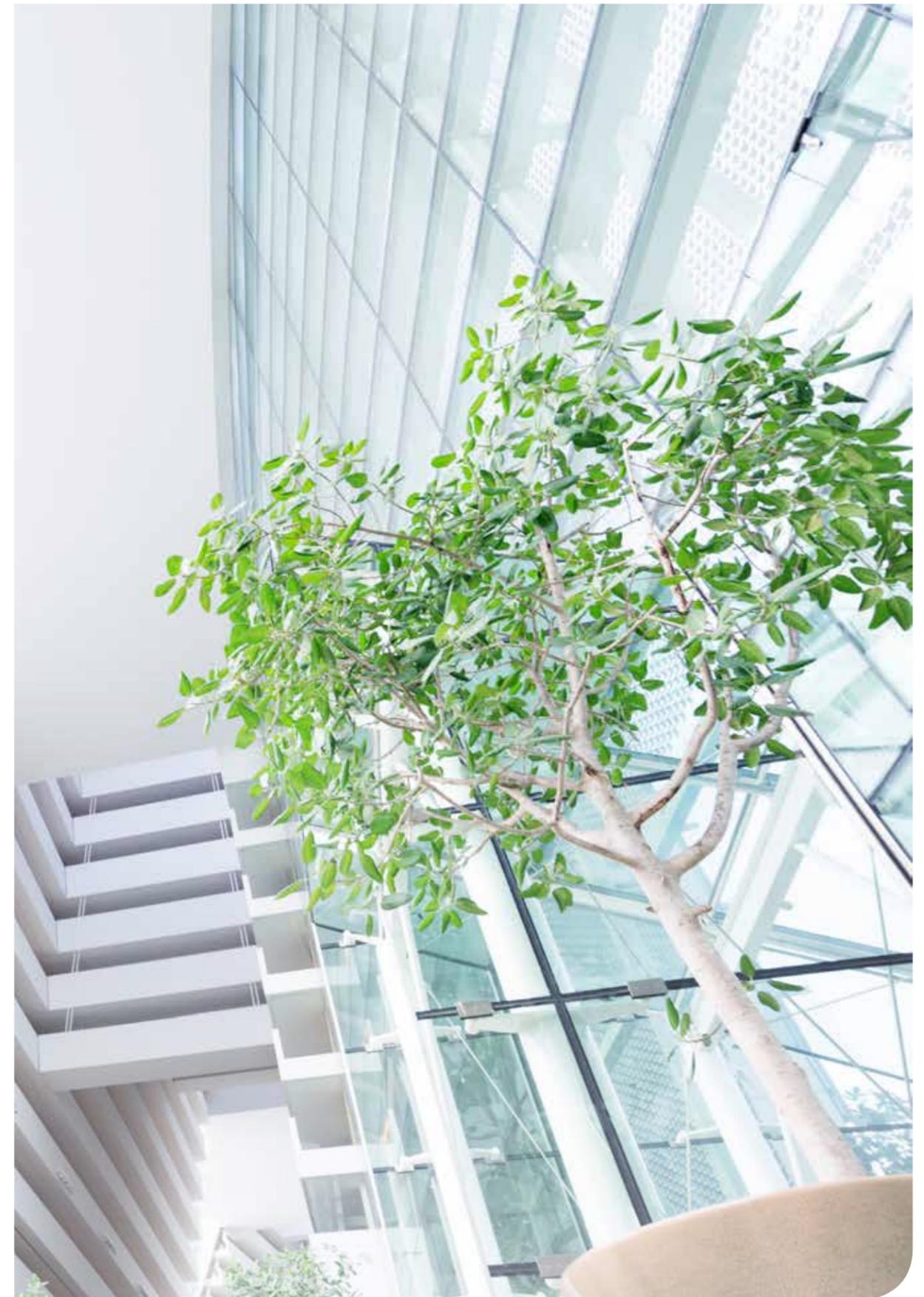
Eurovent performances (1)		205*	250*	280	310	350	380	410
Net cooling capacity (1) (2)	(kW)	730	860	974	1074	1195	1323	1446
Net EER (1) (2)		2.85	2.82	2.81	2.70	2.70	2.74	2.75
Eurovent Energy class - Cooling		C	C	C	C	C	C	C
Net ESEER (2)		3.72	3.85	3.95	3.85	3.95	3.98	4.00
SEER (3)		3.91	4.03	4.11	4.11	4.19	4.21	4.29
Space cooling efficiency η _{s.c} (3)	(%)	153	158	161	161	165	165	169
Sound power level (standard noise)	(dB(A))	98	100	101	102	102	102	103
Sound power level (low noise)	(dB(A))	95	97	98	99	99	99	100
Compressor								
Circuit 1		1	2	2	2	2	2	2
Circuit 2		1	1	1	1	2	2	2
Refrigerant								
Type		R513A						
Charge Circuit 1	(kg)	63	93	96	97	94	98	107
Charge Circuit 2	(kg)	59	45	49	52	91	100	104
Dimensions & Weight								
Length	(mm)	6770	8265	9390	9390	10135	11260	12385
Width	(mm)	2200	2200	2200	2200	2200	2200	2200
Height	(mm)	2526	2526	2526	2526	2526	2526	2526
Operating weight (standard noise)	(kg)	4860	6367	6818	6923	8264	8514	8749

(1) Evaporator 12/7°C and 0.0 m³K/kW, and condenser at 35°C

(2) Net performances calculated as per EN 14511-2013.

(3) η_{s.c} / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity - COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016

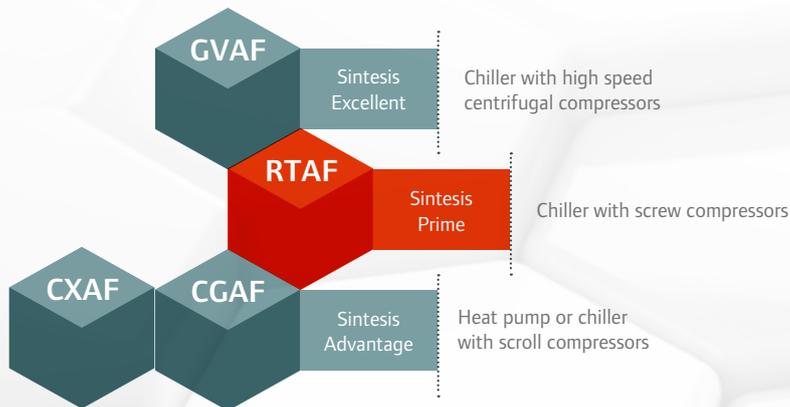
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Family of air-cooled chillers and heat pumps

The Sintesis™ Prime model RTAF belongs to the Trane Sintesis™ air-cooled chiller and heat pump portfolio representing industry leading performance and flexibility. Always striving for a perfect fit, not only to your building and application requirements but also to your sustainability and budget targets.



The Trane Sintesis Prime range:

- Unit sizes providing cooling capacities from 300 - 2090 kW
- Five efficiency versions
- Three levels of sound attenuation
- 3 refrigerant alternatives
 - Standard leaving water temperature range from +5°C up to +20°C
 - Low leaving water temperature range from +5°C down to -12°C with Glycol
 - Standard ambient option: from -10°C to 46°C
 - High ambient option: right up to 55°C
 - Low ambient option: right down to -18°C.

Factory-mounted options:

- Hydraulic kit with dual pumps
- Smart flow control
- Partial heat recovery
- Total heat recovery
- Free-cooling



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