

NECS 0202T÷0612T



Chiller, air source for outdoor installation

53,0 - 159 kW

Unit Description

Outdoor unit for the production of chilled water with hermetic rotary Scroll compressors, axial-flow fans, shell and tubes exchanger and thermostatic expansion valve. External panels in Peraluman and structure in aluminium sections. The range is equipped with two compressors on two independent refrigerant circuits.

Commands

W3000 Base / W3000SE Compact

The controller can be chosen as: - W3000 Base: keypad and LED display - W3000SE Compact: the keypad features an easy-to-use interface and a complete LCD display, allowing to consult and intervene on the unit by means of a multi-level menu, with selectable language setting. The diagnostics includes a complete alarm management, with the "black-box" and alarm logging functions for enhanced analysis of the unit operation. Compatibility with the remote keyboard managing up to 10 units. Availability of an internal real time clock for operation scheduling (4-day profiles with 10 hour belts). Common features: The regulation is based on the exclusive QuickMind algorithm, including self-adaptive control logics, beneficial in low water content systems. As alternatives the proportional- or proportional-integral regulations are also available. For multiple units systems, the regulation of the resources, via optional proprietary devices, can be implemented. Energy metering, for both consumption and capacity, can also be developed. Supervision can be easily developed via proprietary devices or the integration in third party systems by means of the most common protocols as ModBus, Bacnet, Bacnet-over-IP, Echelon LonWorks. The defrost adopts a proprietary self-adaptive logic, which features the monitoring of numerous operational parameters. This allows to reduce the number and duration of the defrost cycles, with a benefit for the overall energy efficiency.

Versions

B	base version
HT	high efficiency, high outdoor temperature version
LN	low noise version
SL	super-low noise version

Features

REFRIGERANT GAS R410A

The use of R410A has resulted in units offering better energy efficiency in full respect for the environment (ODP = 0)

SHELL AND TUBES EXCHANGER

The shell and tube exchanger allows to achieve the highest flexibility on the units installation, keeping the efficiency at the maximum level. For this reason, NECS represents the best choice for all the hydronic application on the residential, commercial and industrial markets.

INTEGRATED HYDRONIC MODULE

The built-in hydronic module already contains the main water circuit components; it is available with single or twin in-line, for achieving both low or high head.

MAXIMUM RELIABILITY

Unit with dual-circuit refrigerant section designed to ensure maximum efficiency at full load, ensuring continuity without interruption of operation in the event of temporary stop of one of the 2 circuits.

Main accessories

- Set-up for remote connectivity with ModBus/Echelon/Bacnet protocol cards
- Remote keyboard (distance to 200m and to 500m)
- LCD display keyboard type W3000Compact with multi-language user interface (refers to the shown picture)
- Soft starters
- Rubber anti-vibration mounting kit



NEW!

NECS / B

Models		0202T	0252T	0302T	0352T	0412T	0452T	0512T	0552T	0612T
COOLING										
Cooling capacity (1)	kW	53	58,1	76,0	86,8	96,9	112	127	145	159
Total power input (1)	kW	18,3	21,5	27,8	31,9	36,3	39,7	43,7	50,2	58,6
EER		2,90	2,70	2,73	2,72	2,67	2,67	2,90	2,89	2,71
ESEER		3,72	3,47	3,52	3,49	3,41	3,59	3,65	3,66	3,44
COMPRESSORS										
No. Compressors/No. Circuits	N.	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02
NOISE LEVELS										
Sound power (2)	dB(A)	85	85	85	86	86	86	87	87	87
Sound pressure (3)	dB(A)	53	53	53	54	54	54	55	55	55
SIZE										
A (4)	mm	1695	1695	2195	2195	2745	2745	3245	3245	3245
B (4)	mm	1120	1120	1120	1120	1120	1120	1120	1120	1120
H (4)	mm	1420	1420	1420	1420	1420	1420	1620	1620	1620
Operating weight (4)	kg	625	625	665	765	920	990	1135	1180	1155

Note:

- 1 Evaporator water (in/out) = 12/7°C; Condenser air (in) = 35°C.
- 2 Sound power on the basis of measurements made in compliance with ISO 9614 and Eurovent 8/1 for Eurovent certified units; in compliance with ISO 3744 for non-certified units.
- 3 Average sound pressure level, at 10m distance, unit in a free field on a reflective surface; non-binding value obtained from the sound power level.
- 4 Unit in standard configuration/execution, without optional accessories

NECS / HT

Models		0202T	0252T	0302T	0352T	0412T	0452T	0512T
COOLING								
Cooling capacity (1)	kW	55	61,6	80,6	91,4	104	116	130
Total power input (1)	kW	17,3	20,3	25,9	30,5	33,7	38,6	42,2
EER		3,18	3,03	3,11	3	3,09	3	3,08
ESEER		4,07	3,91	3,93	3,76	3,87	3,76	3,86
COMPRESSORS								
No. Compressors/No. Circuits	N.	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02
NOISE LEVELS								
Sound power (2)	dB(A)	85	86	86	87	87	87	87
Sound pressure (3)	dB(A)	53	54	54	55	55	55	55
SIZE								
A (4)	mm	2195	2745	2745	3245	3245	3245	3245
B (4)	mm	1120	1120	1120	1120	1120	1120	1120
H (4)	mm	1420	1420	1420	1620	1620	1620	1620
Operating weight (4)	kg	650	700	750	915	1050	1075	1115

Note:

- 1 Evaporator water (in/out) = 12/7°C; Condenser air (in) = 35°C.
- 2 Sound power on the basis of measurements made in compliance with ISO 9614 and Eurovent 8/1 for Eurovent certified units; in compliance with ISO 3744 for non-certified units.
- 3 Average sound pressure level, at 10m distance, unit in a free field on a reflective surface; non-binding value obtained from the sound power level.
- 4 Unit in standard configuration/execution, without optional accessories

NECS / LN

Models		0202T	0252T	0302T	0352T	0412T	0452T	0512T	0552T	0612T
COOLING										
Cooling capacity (1)	kW	50,7	57,6	74,2	84,4	96,4	109	122	0	0
Total power input (1)	kW	18,9	21,2	28,6	33,7	37,1	41,4	45,9	53,1	62,4
EER		2,68	2,72	2,59	2,50	2,60	2,63	2,66	0	0
ESEER		3,50	3,51	3,37	3,22	3,33	3,36	3,38	3,34	3,11
COMPRESSORS										
No. Compressors/No. Circuits	N.	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02
NOISE LEVELS										
Sound power (2)	dB(A)	80	80	81	83	83	83	84	84	84
Sound pressure (3)	dB(A)	48	48	49	51	51	51	52	52	52
SIZE										
A (4)	mm	2195	2195	2745	2745	2745	2745	3245	3245	3245
B (4)	mm	1120	1120	1120	1120	1120	1120	1120	1120	1120
H (4)	mm	1420	1420	1420	1620	1620	1620	1620	1620	1620
Operating weight (4)	kg	625	650	715	840	965	1025	1135	1180	1155

Note:

- 1 Evaporator water (in/out) = 12/7°C; Condenser air (in) = 35°C.
- 2 Sound power on the basis of measurements made in compliance with ISO 9614 and Eurovent 8/1 for Eurovent certified units; in compliance with ISO 3744 for non-certified units.
- 3 Average sound pressure level, at 10m distance, unit in a free field on a reflective surface; non-binding value obtained from the sound power level.
- 4 Unit in standard configuration/execution, without optional accessories

NECS / SL

Models		0202T	0252T	0302T	0352T	0412T	0452T	0512T
COOLING								
Cooling capacity (1)	kW	47,8	55,5	69,9	85,4	96,8	106	118
Total power input (1)	kW	20,3	22,6	30,9	33,6	37,3	43,2	48,1
EER		2,35	2,46	2,26	2,54	2,60	2,46	2,44
ESEER								
COMPRESSORS								
No. Compressors/No. Circuits	N.	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02	02 / 02
NOISE LEVELS								
Sound power (2)	dB(A)	77	78	78	81	81	81	82
Sound pressure (3)	dB(A)	45	46	46	49	49	49	50
SIZE								
A (4)	mm	2195	2745	2745	3245	3245	3245	3245
B (4)	mm	1120	1120	1120	1120	1120	1120	1120
H (4)	mm	1420	1420	1420	1620	1620	1620	1620
Operating weight (4)	kg	650	700	750	915	1050	1075	1115

Note:

- 1 Evaporator water (in/out) = 12/7°C; Condenser air (in) = 35°C.
- 2 Sound power on the basis of measurements made in compliance with ISO 9614 and Eurovent 8/1 for Eurovent certified units; in compliance with ISO 3744 for non-certified units.
- 3 Average sound pressure level, at 10m distance, unit in a free field on a reflective surface; non-binding value obtained from the sound power level.
- 4 Unit in standard configuration/execution, without optional accessories

Minimum clearance required

		0202T-0512T
Switchboard side	mm	0
Switchboard opposite side	mm	0
Condensation coil side	mm	0



