

# Odyssey™ air-cooled chillers and heat pumps

Models CGA-CXA-VGA-VXA, 20-65 kW



# AIR-COOLED CHILLERS AND HEAT PUMPS

Trane's CGA-CXA-VGA-VXA range of Odyssey™ chillers and heat pumps is ideal for light commercial applications to air condition areas of 150 to 700 m² - such as banks, schools, offices, shops and hotels. Many of these buildings contain more than three or four zones requiring air-conditioning and the range particularly suits applications where only one outdoor installation is allowed.

Building occupants appreciate not only the comfortable air temperature that Trane chilled water systems can provide, but also the quiet work environment that they preserve.

#### Reliability and efficiency

**1 Scroll compressors** have acquired an indisputable notoriety in today's market due to their unmatched efficiency and reliability.

**Brazed plate heat exchangers** are designed to guarantee the highest energy efficiencies and the widest operating temperature ranges, meaning users fully benefit from a **year-round operation**.

- CXA/VXA units can operate in heating mode down to -15°C.
- CGA/VGA units can operate in cooling mode down to -10°C ambient temperature and can deliver chilled water down to -12°C.
- 2 The **integrated hydraulic module** on VGA/VXA units is comprised of a pump, a buffer tank, expansion vessel and balancing valve. On sizes 150-240 the hydraulic module also includes a water strainer.

- 3 Low ambient dual speed fan allows operation down to -10°C.
- 4 Optional **black epoxy coating** to protect condenser fins (available as standard in certain regions).

Units are equipped with an integrated flow switch and evaporator antifreeze protection.

#### Safe and simplified installation

Maintenance tasks are simplified and installations are made safer, easier and faster, due to several well-designed features incorporated in the chillers.

Units are **compact** and have a reduced footprint, facilitating handling and installation on the job site.

- 5 The large side panels allow direct access to the main components of the refrigeration circuit. Installation requires only electrical connections to the factory-supplied disconnect switch, and hydraulic connections (VGA/VXA only) to be completed.
- 6 Disconnect switch

#### Reliable controls ensuring performance, simplicity and safety

Units are equipped with **a versatile controller** specifically designed for chillers and heat pumps. This controls the **return water temperature** as it monitors numerous **operating and security parameters**, such as evaporator freeze protection, high and low pressure and fan speed (low ambient temperature option). The controller quarantees **optimised power consumption** thanks to the following features:

- anti-short cycling
- staggered compressor operation
- defrost cycle in heating mode (CXA/VXA only)

The user interface will allow the user to interact very simply and quickly with the system.

The display indicates:

- current return water temperature
- operating status
- fault codes



## FACTORY-MOUNTED OPTIONS

- Black epoxy coating
- High and low pressure gauges

### LOOSE ACCESSORIES FOR ON-SITE MOUNTING

- Pump starters
- Remote control module

#### Odyssey<sup>™</sup> range description

CGA: Cooling-only chiller

VGA: Cooling-only chiller with integrated hydraulic module

CXA: Heat pump

VXA: Heat pump with integrated hydraulic module

General data CGA/CXA							
Eurovent Performances (1) / R407C		075	100	120	150	200	240
Main power supply	(V/Ph/Hz)	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
Cooling capacity (CGA / CXA)	(kW)	19.2 / 19.8	25.4 / 23.2	31.8 / 31.4	36.7 / 38.8	51.8 / 51.8	63.6 / 64.2
Efficiency ratio in cooling EER (CGA / CXA)		2.57 / 2.41	2.56 / 2.38	2.38 / 2.19	2.51 / 2.48	2.66 / 2.60	2.28 / 2.35
Seasonal efficiency ratio in cooling ESEER (CGA / CXA)		3.03 / 2.88	3.04 / 2.85	2.78 / 2.59	3.06 / 3.05	3.31 / 3.24	2.78 / 2.89
Heating capacity CXA	(kW)	19.0	25.4	31.3	38.1	50.9	62.5
Efficiency ratio in heating COP		2.62	2.61	2.55	2.62	2.61	2.57
Number of circuits/compressors		1	1	1	2	2	2
Water connections type		ISO R7 Male					
Water connections diameter	(inch)	1″1/4	1″1/4	1″1/4	1″1/2	1″1/2	1″1/2
Height	(mm)	1230	1230	1230	1230	1230	1230
Length	(mm)	1061	1061	1261	2200	2200	2200
Width	(mm)	952	952	1052	1050	1050	1050
Shipping weight CGA	(kg)	215	230	246	429	459	490
Shipping weight CXA	(kg)	221	236	252	441	471	503
Sound power level	(dB(A))	76	78	82	78	80	85

General data VGA/VXA							
Eurovent Performances (1) / R407C		075	100	120	150	200	240
Main power supply	(V/Ph/Hz)	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
Cooling capacity (VGA / VXA)	(kW)	19.6 / 20.3	26.0 / 23.8	32.3 / 31.9	37.6/ 39.8	52.9 / 52.9	64.7 / 65.4
Efficiency ratio in cooling EER (VGA / VXA)		2.59 / 2.45	2.61 / 2.43	2.42 / 2.24	2.50 / 2.46	2.66 / 2.61	2.29/ 2.36
Seasonal efficiency ratio in cooling ESEER (VGA / VXA)		3.07 / 2.91	3.09 / 2.90	2.84 / 2.64	3.06 / 3.05	3.31 / 3.24	2.78 / 2.89
Heating capacity VXA	(kW)	19	25.5	31.5	38.1	51.1	63.0
Efficiency ratio in heating COP	(kW)	2.73	2.69	2.62	2.73	2.70	2.64
Number of circuits/compressors		1	1	1	2	2	2
Water connections type		ISO R7 Male					
Water connections diameter	(inch)	1″1/2	1″1/2	1″1/2	1″1/2	1″1/2	1″1/2
Expansion tank volume	(1)	35	35	35	35	35	35
Pressure available in cooling VGA/VXA	(kPa)	135	110	82	180	160	120
Pressure available in heating VXA	(kPa)	125	80	65	181	158	124
Pump power input	(kW)	0.55	0.55	0.55	1.1	1.1	1.1
Shipping weight VGA	(kg)	399	414	430	690	720	750
Shipping weight VXA	(kg)	419	434	450	710	740	770
Height	(mm)	1732	1732	1732	1732	1732	1732
Length	(mm)	1061	1061	1261	2200	2200	2200
Width	(mm)	952	952	1052	1050	1050	1050
Sound power level	(dB(A))	76	78	82	78	80	85

(1) At Eurovent Conditions according to EN 14-511



Units are certified by an independent and external laboratory. Eurovent certification means the assurance of accurate performance data and common comparison criteria.





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