

Adsorption Chiller

InvenSor HTC 18 plus

Compact solution with integrated hydraulic unit for efficient thermal cooling at high outside temperatures

The adsorption chiller InvenSor HTC 18 plus can be used efficiently with dry coolers at outside temperatures of up to 40°C. All HTC machines reach their optimal capacity at driving temperatures from 85°C. For operation at lower driving temperatures, the InvenSor LTC 10 plus is available.

18 kW cooling capacity – compact design

The nominal capacity of the HTC 18 plus is 18 kW. The compact design allows for space saving set-up. For an easy installation, all hydraulic connections are accessible on the top of the machine. The unit is optimized for transport by pallet jack.

Easy operation and setting – prepared for heat pump operation

The target water temperatures in the chilled water circuit, the driving circuit return flow and the recooling circuit are easily adjustable on the touch display. The heat pump mode is already installed and can easily be activated.

Maintenance-free cold water production by ActiVac

ActiVac is an InvenSor development for optimizing the operating pressure in the adsorber. Pressure control, otherwise needed in sorption chillers, becomes obsolete.



HTC 18 plus: Hydraulic unit integrated

The HTC 18 plus is integrated with all basic components for thermal cooling. It includes a complete hydraulic unit with three electronically regulated high-efficiency pumps, so that all necessary water circuit pipes for heat supply, cold distribution and recooling can be connected directly to the chiller.

HTC 18 plus-FC: Hydraulic unit & free cooling function integrated

The free cooling function allows for even more energy savings: If the outside air temperature is cold enough, it can be used directly for climatization and no driving heat is necessary to operate the chiller.

Dimensions of the machine

Length	1,100 mm
Height	1,370 mm
Width	750 mm
Weight HTC 18 plus	420 kg
Weight HTC 18 plus-FC	425 kg

Position of the connectors

from the ground	1,400 mm
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Nominal widths

Drive (2x)	G 1 1/4"
Chilling (2x)	G 1 1/2"
Recooling (2x)	G 1 1/2"

General technical specifications

Cooling capacity range	kW RT (ton.ref.) BTU/h x1000	6-22 1.7-6.3 20-75
COP maximum		0.55
Max. overpressure	bar	4
Electrical connection	V~ Hz A	230 50/60 max. 8.5
Electrical power consumption Ø incl. pumps	W	495

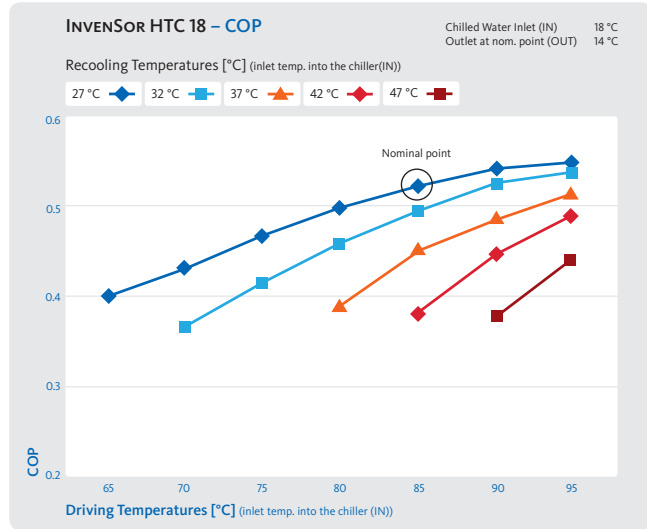
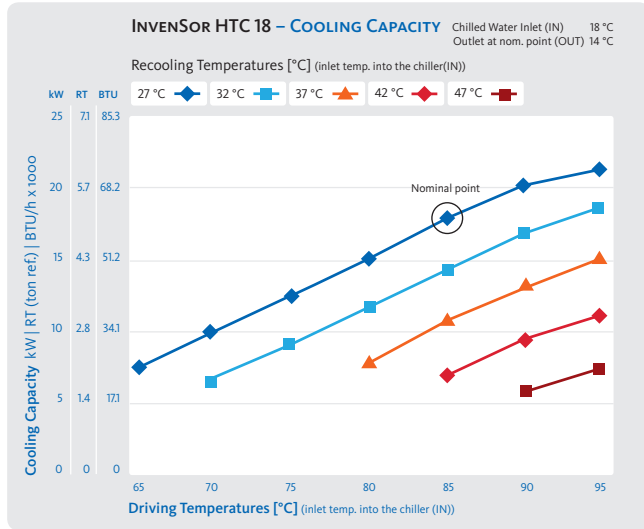
Specifications at nominal conditions

		Chilling circuit	Recooling circuit	Drive circuit
COP		0.52		
Capacity	kW RT (ton.ref.) BTU/h x1000	18 5.1 61.4	52.6 15 179.5	34.6 9.8 118.1
Temperatures chiller inlet (IN)	°C	18	27	85
Temperatures chiller outlet (OUT)	°C	14	34.5	76.5
Temperature ranges	°C	9-25	20-47	75-100
Volume flows	l/h	3,900	6,000	3,600
Available external pressure head	mbar	400	400	300

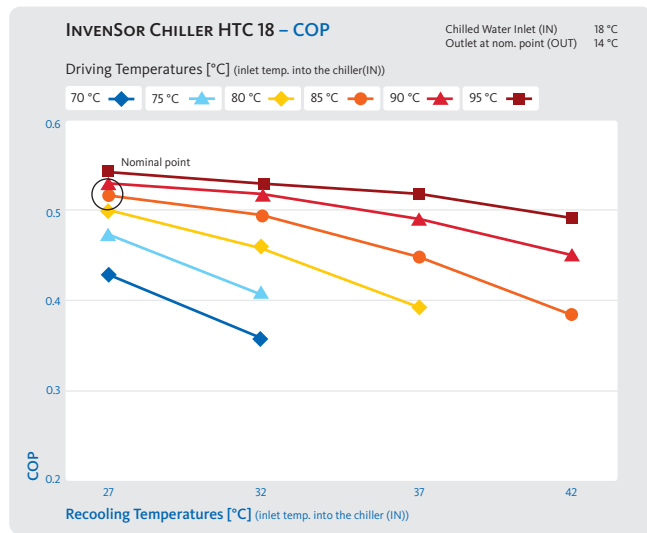
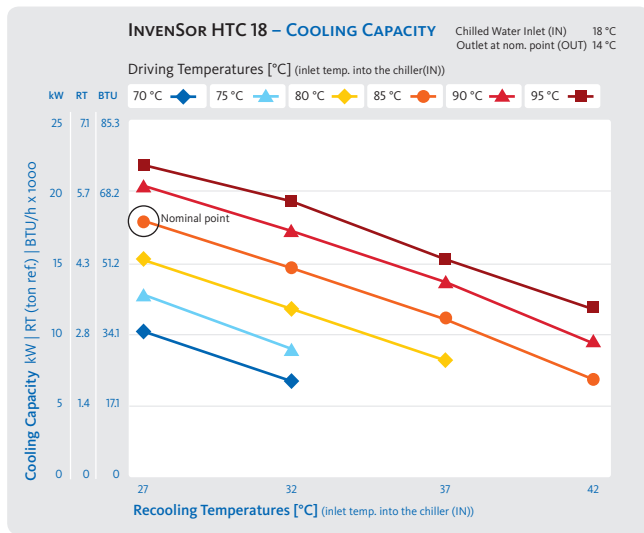
All specifications apply for operation with water in hydraulic circuits

Technical specifications at different conditions

Capacity and COP at different temperatures of recooling and driving energy



Capacity and COP at different temperatures of driving energy and recooling



Capacity and COP at different temperatures of driving energy and chilled water

