Teal W FC/NG

Water cooled freecooling chiller 39÷634 kW

Bullet points

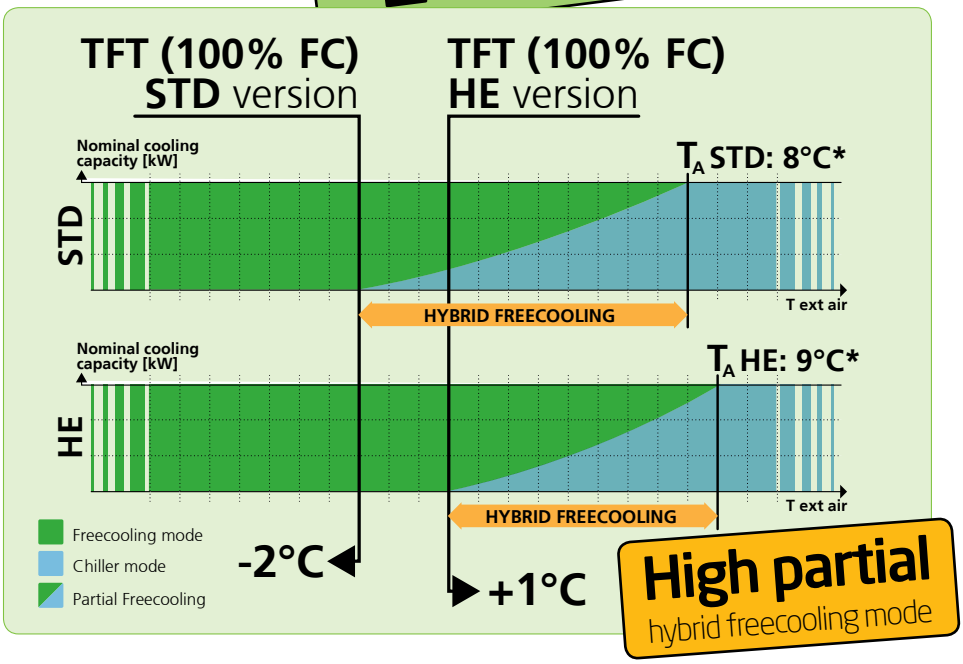
- Plug and play indoor freecooling unit
- Hybrid freecooling: capability, in the mid seasons, to operate in mixed mode freecoling/chiller
- Full completely integrated control for managing chiller, freecooling system and remote air cooled exchanger
- High efficiency in summer mode
- Two levels of freecooling efficiency and payback time
- Designed for easy indoor installation
- Glycol free on user side
- Wide capacity range

HYBRID FREE COOLING

external temperature +1°C 100% FC

Teal W FC / NG combines all the advantages of high efficiency water-cooled chiller (Teal W range) with the hybrid free-cooling integrated system

- **Hybrid free Cooling**
  Unit performs full nominal capacity with compressors operating at part load with reduced power consumption.
- **100% Free Cooling** (Winter)
  Unit performs full nominal capacity only using Dry Cooler fans and with compressors OFF.

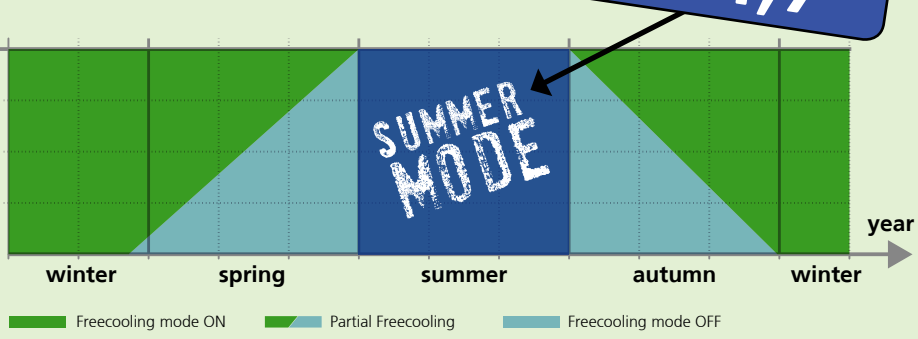


NOT ONLY FREECOOLING

High efficiency in summer mode

average EER 4,7*

Thanks to high performance of the chiller side, **Teal W FC/NG** ensures high efficiency of the plant during all the year. The product adapts and optimises itself to the seasons, providing a high return all year round.

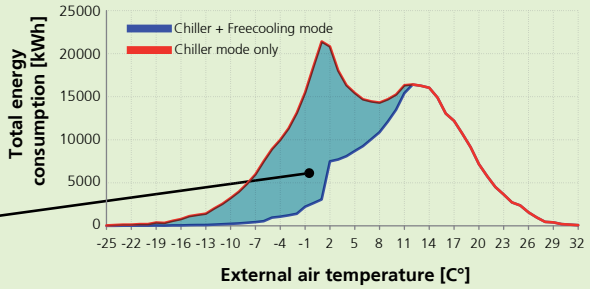


TEAL W FC/NG HE 26.4

Example for Stockholm

Energy saving= 41%

Low bills
Low carbon emission



Here are a number illustrating the energy savings for Stockholm, in terms of energy consumption, achieved using TETRIS W FC/NG HE, in comparison to a water cooled standard unit, assuming that the cooling need is constant throughout the year.

* Evaporator inlet-outlet water temperature 15-10°C; condenser inlet-outlet water temperature 30-35°C (e.g. 30%)

FULL INTEGRATED CONTROL SYSTEM

Advanced built-in control to manage the 3-way modulating valve, inverter driven pump on the source side and the fan speed adjuster of the dry cooler.
No need additional cost for controls integration.

INVERTER DRIVEN PUMP ON SOURCE SIDE

Inverter driven pump on source side as standard:

- Reduced energy consumption
- Greater control of condensing temperature in partial freecooling.

EASY INSTALLATION

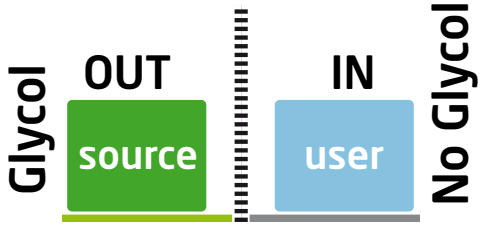
Teal W FC / NG provides a lot pof options and pumping configurations to suit every requirements.
The footprint is designed for indoor installation (max width below 900 mm). The structure provides also the division in two section for sizes long over 5 meters to allow an easy movement in interior spaces. This means:

- **Less design time**
- **Quicker and less cost for installation team**
- **Few connections**

GLYCOL FREE

Thanks to the built-in **decoupling heat exchanger** Teal W FC/NG is Glycol free on user side. This means:

- more efficiency on user side with only water
- the plant doesn't need to be monitored (ethylene glycol is poisonous for humans)



Unit Size		3.2	4.2	5.2	6.2	7.2	8.2	9.2	10.2	12.2	13.2	15.2	17.2	19.2	20.2	24.2	27.2
Cooling																	
Nominal cooling capacity (1),(6)	kW	39	45	52	57	66	74	85	103	117	135	150	166	188	206	229	258
EER (1)		4,69	4,66	4,74	4,77	4,72	4,73	4,78	4,79	4,78	4,79	4,82	4,79	4,76	4,67	4,66	4,69
EER (EN 14511-3:2011) (1),(6)		4,10	4,01	4,14	4,18	4,20	4,09	4,17	4,23	4,31	4,26	4,29	4,23	4,24	4,17	4,26	4,23
Basic unit size and weights																	
Lenght	mm	1633	1633	1633	1633	1633	1633	1633	1633	3300	3300	3300	3300	3300	3300	3300	3300
Width	mm	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800
Height	mm	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880

Unit Size		30.3	34.3	40.3	18.4	20.4	24.4	26.4	30.4	34.4	38.4	40.4	48.4	54.4	56.6	60.6
Cooling																
Nominal cooling capacity (1),(6)	kW	328	370	414	169	204	233	263	297	331	377	423	468	527	563	634
EER (1)		4,81	4,84	4,86	4,74	4,72	4,77	4,77	4,78	4,75	4,72	4,73	4,62	4,70	4,73	4,73
EER (EN 14511-3:2011) (1),(6)		4,37	4,35	4,36	4,22	4,33	4,34	4,23	4,39	4,23	4,29	4,23	4,28	4,29	4,28	4,28
Basic unit size and weights																
Lenght	mm	4505	4505	4505	3685	3685	4502	4502	4502	4502		2820 + 2930			3320 + 2930	
Width	mm	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880
Height	mm	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880

(1) Evaporator inlet-outlet water temperature 15-10°C; Condenser inlet-outlet water temperature 30-35°C (e.g.30%)
(6) Values conform to EN 14511-3:2011
This board reports the feature data of the base and standard versions; for details, refer to the specific documentation.

Audi Centre
Berlin - Germany
2 water cooled chiller
Supply -> 250 kW