

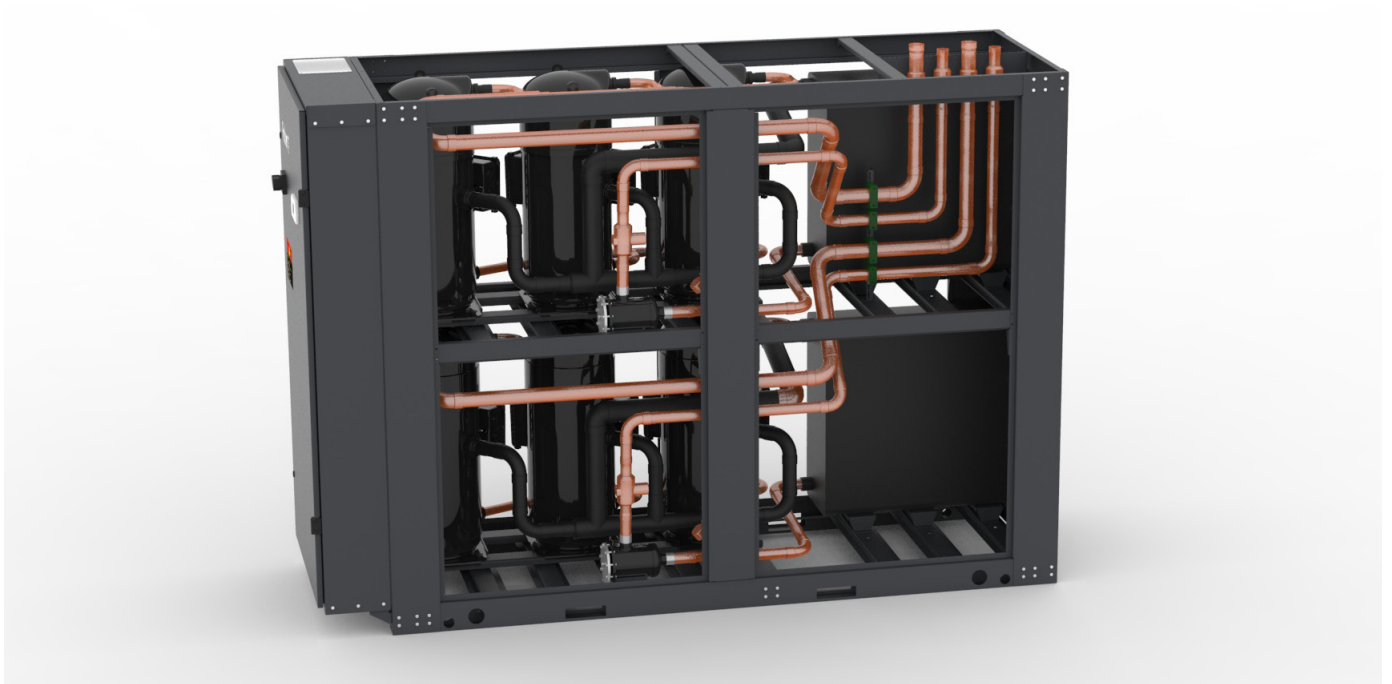


WaterPLUS
2020

Select watercooled scroll chiller...



... or remote condenser scroll chiller



and build up a chilled water station adding modules.

// High capacity on scroll compressors

Upto 1100 kW

New cooling capacity for scroll chillers. Based on new scroll compressors from the leading compressor manufacturer.

// Small footprint



1100 kW units:

WaterPLUS 360.6



DX Evaporator Screw Chiller



Flooded Evaporator Screw Chiller

Unit footprint is as small as possible. To make it easy to move the units to the installation site through standard doors.

// Easy movement



Factory packed units can be easily moved with hydraulic pallet jack. Size with wooden pack is only 880x1975mm, so the units fit standard doorways. For fast movement and location inside the buildings.

// Advanced control of the unit and external devices from chiller controller.

// Totally independent refrigerant circuits on 2 circuit units.

// High quality scroll compressors, heat exchangers and controllers.

// No exclusives: only components available on your market.

// Wide selection of options.

// Possibility to build up to chilled water station.

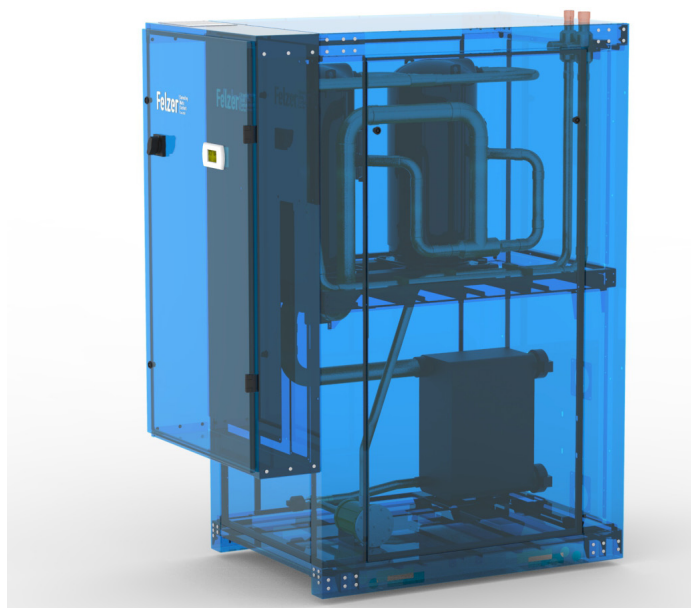
Product range



// Watercooled chillers

	50.2	55.2	60.2	70.2	80.2	90.3	100.2	110.4	120.2	120.4	140.3
Watercooled chillers capacities. User water 12/7°C, condenser water 30/35°C											
Cooling capacity, kW	147	166	196	221	245	290	311	332	375	393	433
Power input, kW	33	38	41	47	53	61	65	75	79	83	91
EER	4,49	4,40	4,76	4,67	4,60	4,74	4,78	4,40	4,73	4,76	4,77
Remote condenser chillers capacities. User water 12/7°C, condensing temperature 45°C											
Cooling capacity, kW	139	158	184	207	230	269	287	315	347	367	400
Power input, kW	36	41	46	52	59	69	74	82	90	92	104
EER	3,85	3,84	3,98	3,94	3,91	3,90	3,87	3,84	3,87	3,98	3,87
Product data											
Number of compressors	2	2	2	2	2	3	2	4	2	4	3
Number of circuits	1	1	1	1	1	1	1	2	1	2	1
Sound power, dBA	88	88	88	90	92	90	92	91	92	91	94
Sound pressure, dBA	71	71	71	73	75	73	75	74	75	74	77
Sound power, dBA (with LN option)	81	81	81	83	85	83	85	84	85	84	87
Sound pressure, dBA (with LN option)	64	64	64	66	68	66	68	67	68	67	70
Length, m	1,51	1,51	1,51	1,51	1,51	2,01	1,51	2,01	1,51	2,01	2,01
Width, m	0,88	0,88	0,88	0,88	0,88	0,88	0,88	0,88	0,88	0,88	0,88
Height, m	1,95	1,95	1,95	1,95	1,95	1,95	1,95	1,95	1,95	1,95	1,95
Weight, kg	715	745	770	820	840	1150	1051	1315	1123	1484	1428

// Remote condenser chillers



	140.4	160.3	160.4	180.3	180.6	200.4	240.4	280.6	300.5	320.6	360.6
Watercooled chillers capacities. User water 12/7°C, condenser water 30/35°C											
Cooling capacity, kW	441	494	489	558	580	621	749	866	932	988	1116
Power input, kW	95	105	106	119	122	130	158	182	198	210	238
EER	4,67	4,70	4,60	4,69	4,74	4,78	4,73	4,77	4,71	4,70	4,69
Remote condenser chillers capacities. User water 12/7°C, condensing temperature 45°C											
Cooling capacity, kW	414	459	460	518	539	574	695	800	866	917	1036
Power input, kW	105	119	118	134	138	148	179	207	224	238	269
EER	3,94	3,85	3,91	3,85	3,90	3,87	3,87	3,87	3,86	3,85	3,85
Product data											
Number of compressors	4	3	4	3	6	4	4	6	5	6	6
Number of circuits	2	1	2	1	2	2	2	2	2	2	2
Sound power, dBA	93	94	95	94	93	95	95	97	96	97	97
Sound pressure, dBA	76	77	78	77	75	78	78	79	78	79	79
Sound power, dBA (with LN option)	86	87	88	87	86	88	88	90	89	90	90
Sound pressure, dBA (with LN option)	69	70	71	70	68	71	71	72	71	72	72
Lenght, m	2,01	2,76	2,01	2,01	2,76	2,76	2,76	2,76	71	72	72
Width, m	0,88	0,88	0,88	0,88	0,88	0,88	0,88	0,88	0,88	0,88	0,88
Height, m	1,95	1,95	1,95	1,95	1,95	1,95	1,95	1,95	1,95	1,95	1,95
Weight, kg	1518	1500	1551	1572	2146	2030	2174	2760	2647	2904	3048

Chilled water stations



Plug-and-Play factory solution

- // Control all the system from chiller controller using advanced and proven algorithms
- // Buy all the system components in cabinet build modules with factory warranty
- // Just connect modules and start
- // Decrease your installation and operation costs
- // Make all your system on factory

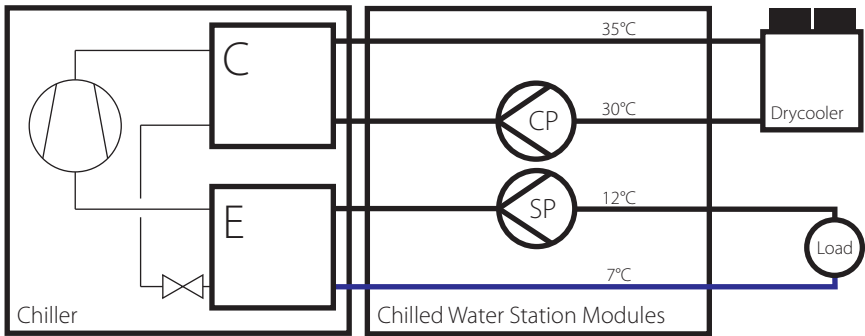
// Layout



Modules can be placed close to each other or separately in the same or different rooms.

You can add VWF or Flow-through tank with upto 6 pumps, freecooling system and condensing pressure control in upto 3 modules (tank will be supplied separately for 240.4+ sizes). See product data and selection soft for details.

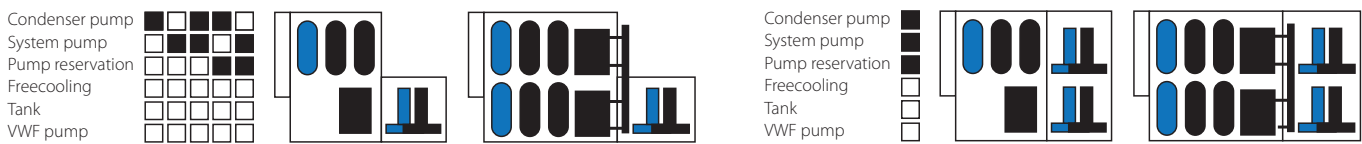
// Condenser & System pumps



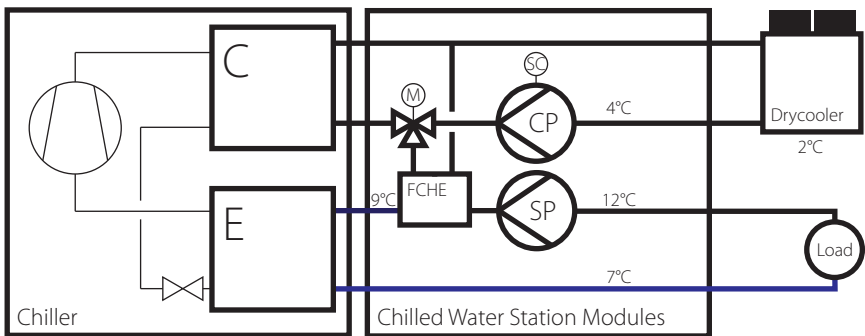
Condenser and system pumps from leading suppliers. Choose high or low pressure or special pump.
SPL - Low pressure system pump
SPH - High pressure system pump
CPL - Low pressure condenser pump
CPH - High pressure condenser pump

Available options:

// Reservation (x2) - all pumps have 100% reservation. Working hours equalisation. Second pump is started if the first is in alarm.
// Inverter condenser pumps (CPLI, CPHI) - Condensing pressure control with variable flowrate or speed limitation for energy efficient operation.
// Inverter system pumps (SPLI, SPHI) - Differential pressure control with variable flowrate or speed limitation for energy efficient operation.

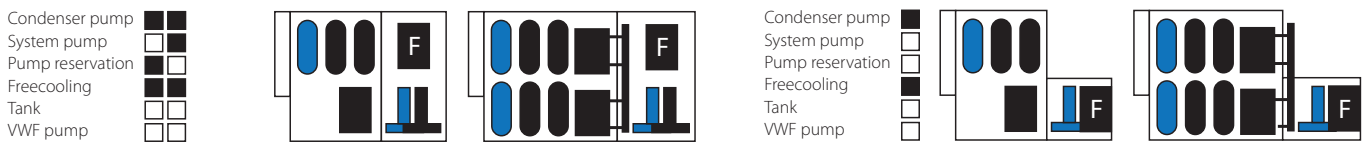


// Freecooling system



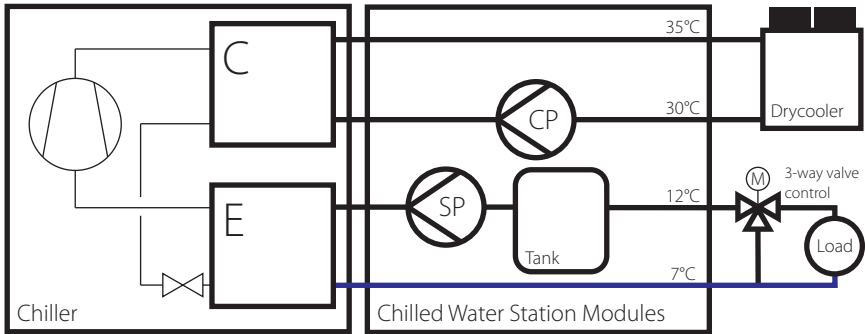
If ambient temperature is lower then system return water temperature the unit will start chilling condenser brine in the drycooler. After this return water will be chilled by brine for free. Compressors will work less time and thus reduce electrical consumption. Unit will work all year around even in th lowest ambient temperatures.

This option is available only with inverter condenser pump option.
The drycooler fans speed shall be controlled from the chiller controller.



Chilled water stations

// Flow-through system tank

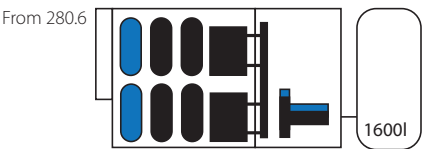
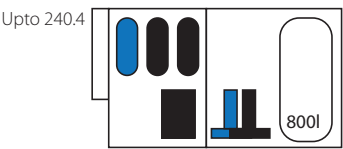


You can add Flow-through insulated system tank to Felzer chilled water station.

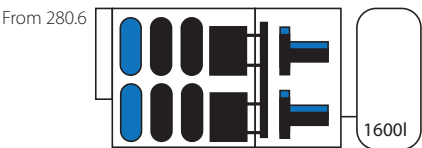
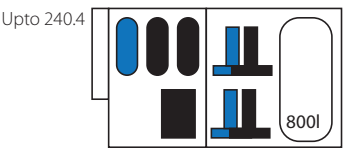
This option suits sytems with 3-way valves control for heat loads (fancoils, AHU coolers, etc.). For 2-way valve control choose VWF tank option.

This option is available only with system pump option.

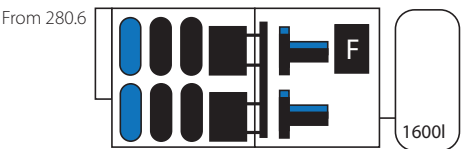
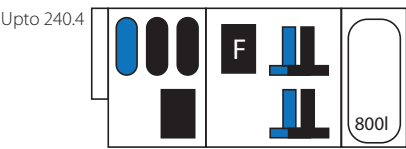
- Condenser pump
- System pump
- Pump reservation
- Freecooling
- Tank
- VWF pump



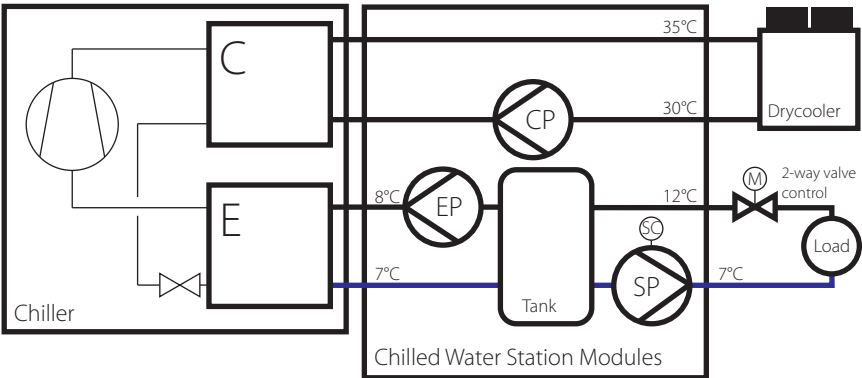
- Condenser pump
- System pump
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- Tank
- VWF pump



- Condenser pump
- System pump
- Pump reservation
- Freecooling
- Tank
- VWF pump



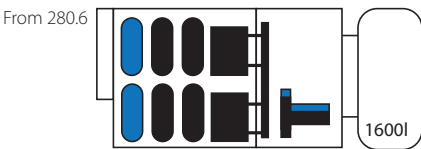
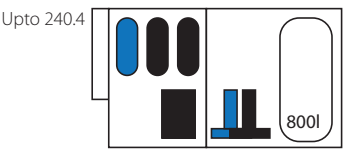
// Variable-water flow VWF tank



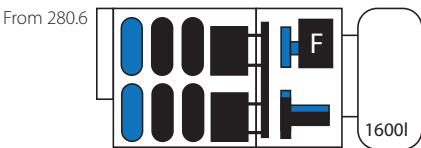
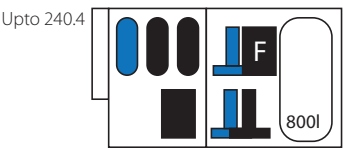
VWF system includes hydronic separator 4-connection tank and evaporator very low pressure and power pump. Evaporator pump works all the time to assure required flowrate on evaporator.

VWF system allows to use inverter system pump (may be optionally included or external) with 0-100% variable flowrate. Thus to design all the system with 2-way valves, to decrease energy consumption and installation costs.

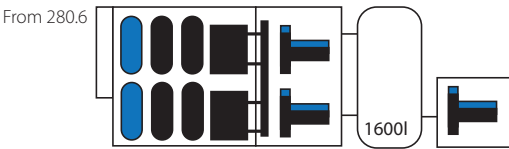
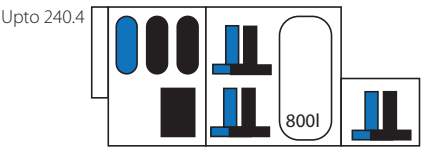
Condenser pump
System pump
Pump reservation
Freecooling
Tank
VWF pump



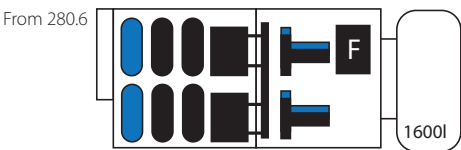
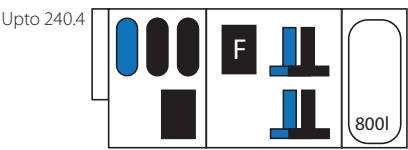
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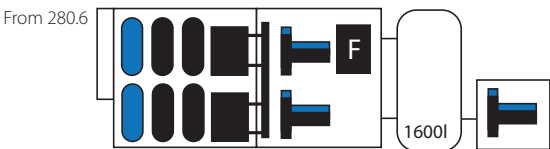
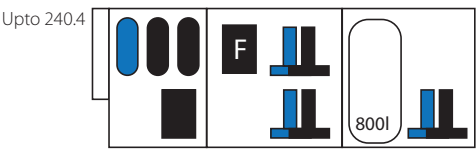
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Options

// Low noise panels (LN)



Decrease noise level with optional low noise enclosure panels with sound insulation.



// Collectors for 2 circuit units



2 circuit units have totally independent refrigerant circuits. You can collect water from 2 evaporators / 2 condensers by your installation site piping. Or you can order factory build collectors for evaporators and condensers.

Collectors are included in all the hydraulic kits.

// Low ambient temperature control

-35°C

CPW option for water cooled chillers - 3 way valve for condensing pressure control. Installed between condenser pump and drycooler If condenser pump is included in the unit.

BP option for remote condenser chiller. Down to -35°C ambient temperature. Condenser bypass and liquid receiver for flooded condenser operation in the unit. EC fans condenser (controlled from the unit) with vertical blow or wind baffles is recommended for stable operation.

// Touchscreen monitor (TS) for more userfriendly operation.

// Soft starters for compressors (SS) will reduce starting current.

// High and low pressure gauges (GM) to see the pressure values on refrigerant manometers.

// Ball valves for compressors (BV) and solenoid valve on liquid line (SV) for easy service and more stable operation.

// Phase control relay (FR) // BACnet (BN) // LONworks (LW) // Remote display (RD).



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