

Drive efficiency and sustainability with eco chillers

Uniflair Water Cooled Chillers
BCWC series 300-1700kW



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Schneider
Electric

Make your data center sustainable

300–1700 kW Uniflair Water Cooled Chiller range with oil-free centrifugal compressors, EcoDesign TIER II and F-gas ready

High efficiency at partial load

- The optimal combination of oil-free centrifugal compressors, single refrigerant circuit, and flooded evaporator allows for improved efficiency at partial load, minimizing annual energy for consumption

Minimum impact on the environment with alternative refrigerants

- Flexible in refrigerant choice to be ready for any worldwide regulation and directive
- Units designed to be compliant with EcoDesign (minimum value of seasonal energy efficiency guaranteed) and CE marked
- Low GWP refrigerants included in the offer to be in line with F-gas regulation that progressively moves current refrigerant to a phase down

High water temperature design

- Designed to operate up to 12 °C delta T between evaporator water inlet and outlet, to improve system efficiency, and reduce pumps power consumption and pumps and piping sizes
- Chilled water temperature can be stretched up to 20 °C to increase cooling capacity up to 2 MW and comply with latest data center design standards

Reduced impact on electrical infrastructure and on the hydraulic system

- Design based on the most efficient compressor technology available in the market (OpEx reduction)
- Extension of system water temperature range, up to 32/20 °C, to minimize pumps power consumption (OpEx reduction)
- Extension of system water temperature range, up to 32/20 °C, to reduce pumps and piping size (CapEx reduction)
- Low starting current due to inverter technology on compressors (CapEx reduction)



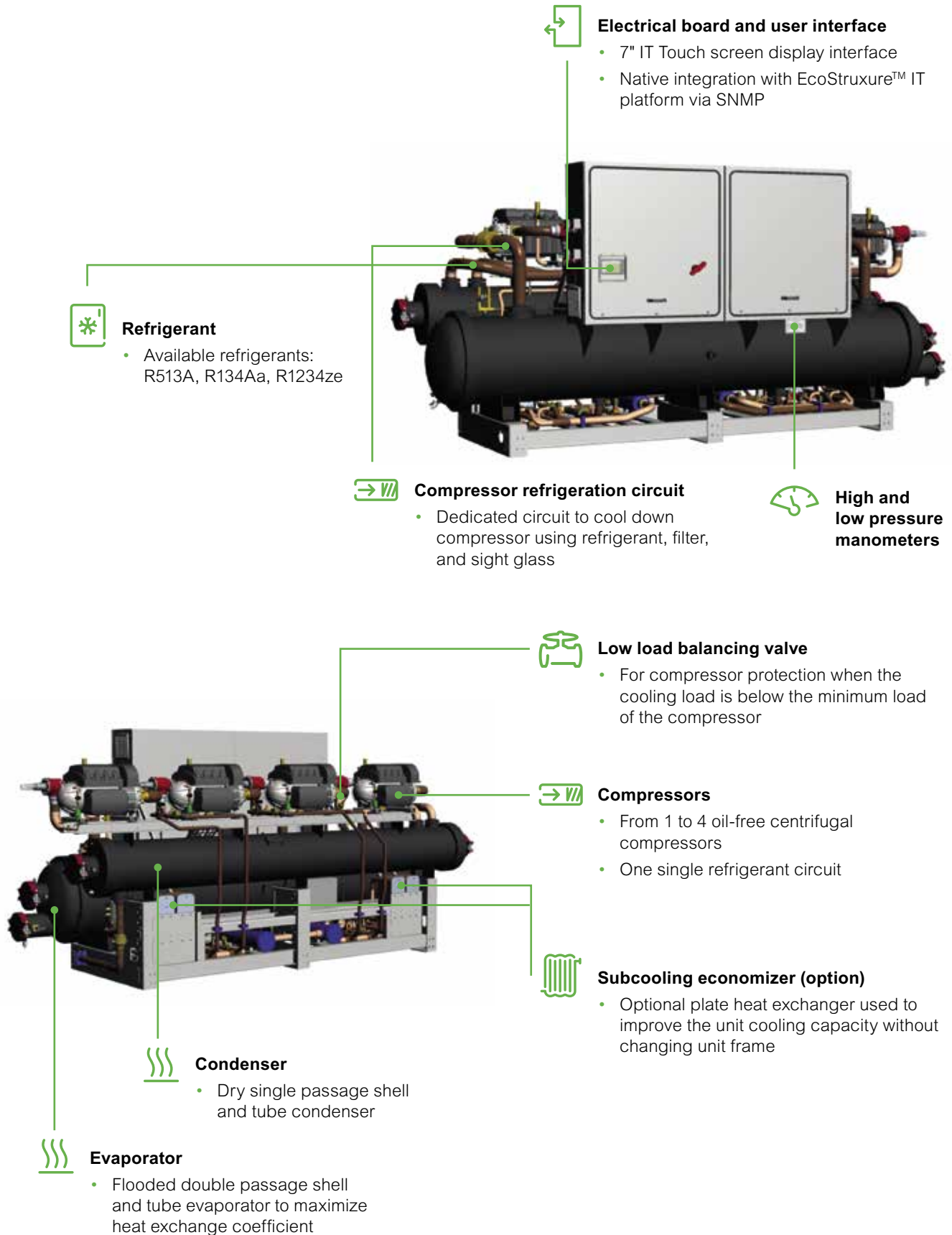
Schneider Electric participates in the Eurovent certification programmes for Chillers.

Check ongoing validity of certificate:

www.eurovent-certification.com

* models so marked are not Eurovent certified

System architecture



Water cooled chiller range

	BCWC0301A	BCWC0602A	BCWC0903A	BCWC1203A	BCWC1604A*
	315 kW ¹ 366 kW ²	630 kW ¹ 776 kW ²	950 kW ¹ 1153 kW ²	1330 kW ¹ 1565 kW ²	1780 kW ¹ 1987 kW ²
	BCWC0301A	BCWC0602A	BCWC0903A	BCWC1203A	BCWC1604A*
	315 kW ¹ 363 kW ²	635 kW ¹ 769 kW ²	955 kW ¹ 1142 kW ²	1340 kW ¹ 1560 kW ²	1790 kW ¹ 1976 kW ²
	BCWC0301A	BCWC0602A	BCWC0903A	BCWC1204A	
	315 kW ¹ 362 kW ²	640 kW ¹ 767 kW ²	960 kW ¹ 1146 kW ²	1290 kW ¹ 1449 kW ²	

¹ Maximum cooling capacity calculated at 7/12 °C evaporator water temperatures, 0% glycol, 30/35 °C condenser water temperatures; units equipped without subcooling economizer option

² Data refers to nominal conditions: Inlet/outlet evaporator temp. 20/30 °C, 0% ethylene glycol (evaporator), Inlet/outlet condenser temp. 30/35 °C, 0% ethylene glycol (condenser)



Technical data



Performances with R513A refrigerant

Model BCWC	0301A	0602A	0903A	1203A	1604A*
Cooling capacity kW ¹	271.4	543.4	818.3	1167.8	1551
Cooling capacity kW ²	366	776	1153	1565	1987
Power consumption kW	50.7	103.9	155.4	221.8	282.9
EER ¹	5.35	5.23	5.27	5.27	5.48
EER ²	7.93	7.30	7.41	8.39	9.17
SEER LT	315.9	326.5	332.8	324.8	323.8
SEPR HT	9.7	10.0	9.9	10.4	9.5

¹ Data refers to nominal conditions: Inlet/outlet evaporator temp. 7/12 °C, 0% ethylene glycol (evaporator), Inlet/outlet condenser temp. 30/35 °C, 0% ethylene glycol (condenser)

² Data refers to nominal conditions: Inlet/outlet evaporator temp. 20/30 °C, 0% ethylene glycol (evaporator), Inlet/outlet condenser temp. 30/35 °C, 0% ethylene glycol (condenser)

Performances with R513A refrigerant with subcooling economizer

Model BCWC	0301A	0602A	0903A	1203A	1604A*
Cooling capacity kW	286.9	576.9	867.5	1239.9	1642.1
Power consumption kW	52.6	108.1	161.6	231	293.9
EER	5.5	5.34	5.37	5.37	5.59
SEER LT	316.2	325.9	329.6	318.8	317.3
SEPR HT	8.6	9.3	9.0	9.6	9.3

Dimensions

Model BCWC	0301A	0602A	0903A	1203A	1604A*
Length mm	2602	3662	3914	3859	4995
Depth mm	1225	1370	1487	1668	1673
Height mm	2040	2045	2100	2268	2330



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Technical data



Performances with R134a refrigerant

Model BCWC	0301A	0602A	0903A	1203A	1604A*
Cooling capacity kW ¹	273	548.5	826.1	1179.2	1565.9
Cooling capacity kW ²	363	769	1142	1560	1976
Power consumption kW	50.6	104.4	156.1	223.1	284
EER ¹	5.40	5.25	5.29	5.29	5.51
EER ²	8.20	7.52	7.65	8.59	9.42
SEER LT	318.6	322.9	333.8	325.8	324.2
SEPR HT	10.0	9.5	10.1	10.2	9.3

¹ Data refers to nominal conditions: Inlet/outlet evaporator temp. 7/12 °C, 0% ethylene glycol (evaporator), Inlet/outlet condenser temp. 30/35 °C, 0% ethylene glycol (condenser)

² Data refers to nominal conditions: Inlet/outlet evaporator temp. 20/30 °C, 0% ethylene glycol (evaporator), Inlet/outlet condenser temp. 30/35 °C, 0% ethylene glycol (condenser)

Performances with R134a refrigerant with subcooling economizer

Model BCWC	0301A	0602A	0903A	1203A	1604A*
Cooling capacity kW	289	581.9	874.9	1250.9	1654
Power consumption kW	52.7	108.6	162.2	231.8	294.4
EER	5.48	5.36	5.39	5.40	5.62
SEER LT	316.9	326.8	330.3	323.1	317.8
SEPR HT	8.6	9.6	9.3	8.9	9.3

Dimensions

Model BCWC	0301A	0602A	0903A	1203A	1604A*
Length mm	2602	3662	3914	3859	4995
Depth mm	1225	1370	1487	1668	1673
Height mm	2040	2045	2100	2268	2330



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Performances with R1234ze refrigerant

Model BCWC	0301A	0602A	0903A	1204A
Cooling capacity kW ¹	277.5	556.6	834.4	1121.3
Cooling capacity kW ²	362	767	1146	1449
Power consumption kW	49	101.2	150.3	195
EER ¹	5.66	5.50	5.55	5.75
EER ²	9.69	8.89	9.00	9.88
SEER LT	317.5	332.4	340.4	337.3
SEPR HT	11.3	10.2	10.6	9.7

¹ Data refers to nominal conditions: Inlet/outlet evaporator temp. 7/12 °C, 0% ethylene glycol (evaporator), Inlet/outlet condenser temp. 30/35 °C, 0% ethylene glycol (condenser)

² Data refers to nominal conditions: Inlet/outlet evaporator temp. 20/30 °C, 0% ethylene glycol (evaporator), Inlet/outlet condenser temp. 30/35 °C, 0% ethylene glycol (condenser)

Performances with R1234ze refrigerant with subcooling economizer

Model BCWC	0301A	0602A	0903A	1204A
Cooling capacity kW	293.9	597.7	889.6	1191.8
Power consumption kW	50.7	106.4	156.7	203
EER	5.80	5.62	5.68	5.87
SEER LT	308.3	332.5	334.0	329.5
SEPR HT	9.3	9.6	9.5	9.8

Dimensions

Model BCWC	0301A	0602A	0903A	1204A
Length mm	2602	3662	3914	4995
Depth mm	1225	1370	1487	1673
Height mm	2040	2045	2100	2330



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