WTG–QUANTOR GMBH

WTG-Quantor brands

QUANTOR KREYER

Water Re-Cooler

QUANTOR

WINE BEER CIDER DISTILLATES



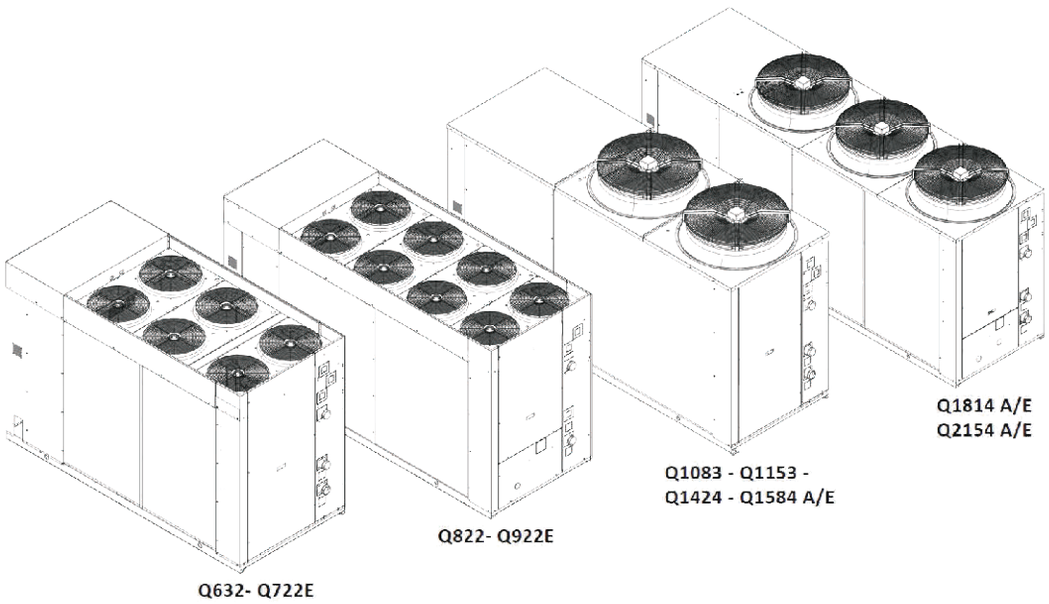
LIQUID CHILLERS / HEAT PUMPS

QUANTOR is an air-cooled cooling-units series, which was developed specifically for the beverages industry. This water-cooler is a solution which is made-to-measure for manufacturers of wine, beer, CSD and other drinks who need to cool (or also heat), or control the temperature of the medium during the manufacture process. The QUANTOR units are solid long-life base units characterized by their modularity, in offering many features to the user's choice.

The units are designated to be placed outdoors for operation between environment temperatures from -10°C to +42°C. The rated cold-water temperature is between -10°C and +18°C, (warm water up to +55°C). Model-sizes are available in capacities from around 60 to 1000 kW.

The QUANTOR units cover the complete bandwidth of process steps and utility possibilities in Beer-Brewing, general drinks-industry and Winemaking: Cold maceration, cold-settling, fermentation control, wine-stabilization, brew mash-cooling to stop the enzymes activity, cooling for lager storage and conditioning, fast cooling of mixed-drinks and syrup in heat-exchangers. (Glycol-water temperature down to -10°C possible). The Reversible-Heating units can warm-up cold-stored wine before bottling. Room temperating by cooling or heating the air is also possible with additional fan-equipment.

MODELS



STANDARD FEATURES

- Stable construction from galvanised sheet metal with premium Polyester powder-coating with anti vibration mounts
- Hermetic Scroll compressors of the latest models
- Increased operation safety – units with double cooling circuits (Q632 – Q2154). Larger models have more cooling circuits.
- Gradual activation of the compressors allows higher efficiency by partial-load operation, and significantly positive values of the European seasonal energy efficiency ratio EER
- Latest generation micro-processor control with supervision of all the relevant parameters
- Compressor encapsulated in noise-reduction compartment
- Stainless steel evaporator with integrated frost-protection heating element
- High efficiency (EER till 4,15 and COP till 3,38)[1,2] and low power consumption
- Low noise level
- Environmentally friendly refrigerant R 410A
- In the model sizes Q632 to Q922 the fan-motors are equipped with frequency-converter in standard
- Water filter and Victaulic connections included with the units
- Wide range model series: Unit available in cooling from 63kW to 1040kW[1] en froid, and in heating from 59kW to 1050kW².

WATER TEMPERATURE RANGE

from -10°C to +18°C (warm water up to +55°C)

AMBIENT TEMPERATURE RANGE

from -10°C to +42°C

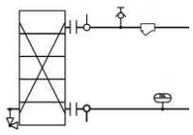
SUITABLE FOR INDUSTRIES

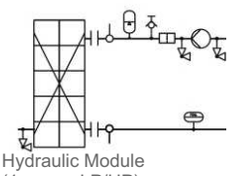
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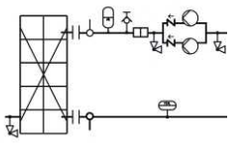
AVAILABLE OPTIONS

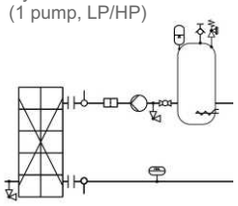
- Hydraulic Module (Pump, filtre, expansion vessel and safety components)
- Hydronic Module Basic (stainless steel buffer tank, pump, expansion vessel and safety components)
- Hydronic Module PLUS (stainless steel buffer tank as hydraulic flow-adaptation, pump, expansion vessel and safety components). (No by-pass valve needed with this option)
- Epoxy coating on the condenser
- Fans with frequency converter
- Fans with stronger air-thrust
- Heat recovery
- Remote control and / or Internet interface
- By models from Q1083, additional noise-reduction is possible. The lowest water temperature is then limited to +4°C.
- Soft-start for compressors
- Power Factor Correction (Cos Phi)
- Second pump.

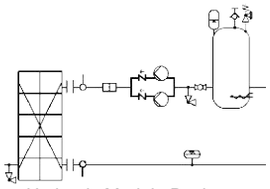
HYDRAULIC OPTIONS

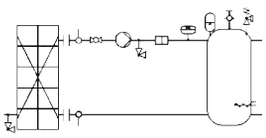

Base version (without additional features)


Hydraulic Module (1 pump, LP/HP)


Hydraulic Module (2 pumps, LP/HP)


Hydronic Module Basic (1 pump, LP/HP)


Hydronic Module Basic (2 pumps, LP/HP)


Hydronic Module PLUS

TECHNICAL DATA

All QUANTOR units are equipped with:
- Scroll Compressor
- Electric connection 400V/3PhN/50Hz - varying voltage levels on request
- Axial fan

	QUANTOR		Q632	Q722	Q822	Q922	Q1083	Q1153	Q1424	Q1584	Q1814	Q2154
CHILLERS	Cooling capacity[1]	kW	63,0	71,9	82,0	91,9	108,5	115,1	142,8	158,2	180,2	215,3
	Input power[1]	kW	15,3	17,6	19,8	22,8	27,4	31,0	36,4	40,5	47,6	56,7
	EER[1]	W/W	4,12	4,08	4,15	4,03	3,96	3,71	3,92	3,91	3,79	3,80
	ESEER	W/W	3,75	3,72	3,80	3,68	3,68	3,45	4,07	4,04	3,93	3,91
	Water flow rate[1]	l/h	10.900	12.430	14.150	15.870	18.740	19.890	24.670	27.350	31.170	37.290

	QUANTOR-R		Q632R	Q722R	Q822R	Q922R	Q1083R	Q1153R	Q1424R	Q1584R	Q1814R	Q2154R
HEAT PUMPS	Cooling capacity[1]	kW	58,8	68,7	76,5	85,4	104,2	110,8	135,2	152,9	166,1	199,1
	Input power[1]	kW	16,1	18,0	20,7	23,9	27,4	30,3	37,0	43,1	46,3	57,3
	Heating capacity[2]	kW	59,3	69,4	76,3	86,4	103,5	110,6	135,7	152,8	172,0	205,4
	Input power[2]	kW	17,6	20,7	22,8	26,2	31,7	34,4	40,8	45,7	53,1	62,7
	EER[1]	W/W	3,65	3,81	3,70	3,57	3,80	3,65	3,66	3,55	3,58	3,48
	COP[2]	W/W	3,38	3,36	3,34	3,30	3,26	3,22	3,33	3,34	3,24	3,28
	ESEER	W/W	3,85	3,77	3,85	3,73	3,71	3,48	4,13	4,09	3,98	3,98
	Water flow rate[1]	l/h	10.140	11.860	13.200	14.730	17.980	19.130	23.330	26.390	28.690	34.430

CHILLERS HEAT PUMPS	Compressors	n°	2	2	2	2	3	3	4	4	4	4
	Circuits	n°	2	2	2	2	2	2	2	2	2	2
	Fans	n°	6	6	8	8	2	2	2	2	3	3
	Sound power[1,3]	dB(A)	74	74	75	76	82	82	82	83	85	85
	Hydraulic connections	Ø	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½	3"
	Height	mm	1.606	1.606	1.606	1.606	1.875	1.875	1.875	1.875	1.875	1.975
	Width	mm	1.100	1.100	1.100	1.100	1.100	1.100	1.100	1.100	1.100	1.500
	Depth	mm	2.450	2.950	2.950	2.950	3.010	3.010	3.010	3.010	4.010	4.350
	Weight (when empty)[4]	kg	686	751	761	767	955	959	1.142	1.155	1.323	1.663
	Buffer tank capacity[5]	l	300	300	300	300	500	500	500	500	500	700

1 Nominal cooling capacities based on 28°C and liquid inlet/outlet temperature 12/7°C
2 Nominal heating capacities based on 7°C and liquid inlet/outlet temperature 40/45°C
3 The value of sound power is measured in accordance with standard 9614-2
4 Unit total weight may vary according to chosen options
5 Tank volume by Hydronic-versions

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