



High-Efficiency Water Chillers

WELDING & METALFORMING • POLYMER PROCESSING • SCIENTIFIC • FOOD PROCESSING
• BREWERIES, WINERIES & DISTILLERIES • CHEMICAL & PHARMACEUTICAL •

HELP!

Most standard units are kept **IN STOCK**. Need it now?
We'll work with you. Email: ASAP@chillworx.com

STANDARD FEATURES

R-410A REFRIGERANT High-efficiency, bromine and chlorine free; zero ozone depletion potential

NON-FERROUS WATER CIRCUIT Copper and stainless steel components (water tank, pump, exchanger) resist corrosion

EFFICIENT COIL EVAPORATOR

Saves cooling energy costs throughout the life of the chiller. Uses copper tubes and aluminum fins inside tank to reduce ambient heat gain; process fluid flows in contact with finned surface, cooled by refrigerant

INDOOR/OUTDOOR UNIT Standard features include powder-coated steel case with IP44 protection against dust and water; extreme hot/cold weather adaptations optional

HERMETIC SCROLL COMPRESSORS Orbiting scrolls, mounted on anti-vibration dampers with protection against overheating, excessive currents and high exhaust temperatures

OPTIONS & ACCESSORIES

REMOTE CONTROL PANEL Dixell VICX 620 remote panel allows for full-function access in outdoor applications or centralized control/monitoring setups

CLOSED/PRESSURIZED AUTO-FILL TANK Automatic filling feature maintains fluid levels and allows for pressurized systems

OPEN/ATMOSPHERIC EXPANSION TANK A top-open tank that allows for easy manual refilling

GLYCOL AUTO-FILL KIT Maintains glycol levels in closed pressurized systems. Glycol is used in some systems as an anti-freezing tool and a corrosion inhibitor

PUMP UPGRADES P3 (43 psig) pump is standard; P5 (72 psig) available with Unit 015 and larger; P3+P3 and P5+P5, dual-pump setups with automatic switching, is also available in 201+

OTHER OPTIONS Soft Starter, Factory Fitted [available with models 381-802] RS485 Modbus, xWEB300D and xWEB300D + GPRS Supervisor Controls [015+] | Centrifugal Fans [031-161] | Condenser Coil Coating [015+] | Anti-Freezing Heaters for Outdoor or Low-Temperature Protection to 4°F [031+] | Electronic Expansion Valve [081-802]



CHILLWORX

POWERED BY



Tenacity Works and Chillworx represents MTA products throughout the USA:

Water- & Air-Chilled Coolers
Refrigeration & Dessicant Dryers
Aftercoolers & Centrifugal Separators
Condensate Drains
Oil/Water Separators
Cooling Systems

Contact us with requests for new systems or replacement parts

sales@chillworx.com

Air-Cooled Chiller Specifications

		M10	015	020	031	051	081	101	121	161
Cooling Capacity ^[1]	Tons	0.99	1.71	2.01	3.19	4.50	7.50	9.80	11.90	13.70
Tons Absorbed Power ^[1]	kW	1.61	2.38	2.65	4.28	6.14	10.00	11.50	14.40	17.70
EER	(Btu/hr)/W	7.39	8.62	9.12	8.96	8.83	8.94	10.22	9.97	9.32

COMPRESSOR										
Cooling Circuits	N°	1	1	1	1	1	1	1	1	1
Compressors per circuit	N°	1	1	1	1	1	1	1	1	1
Capacity Control	%	0/100								
Coolant		R404A								

ELECTRICAL POWER SUPPLY ^[2]										
Power	V/Ph/Hz	115-230/1/60								
Full load amperage	A	15.00	9.80	9.80	14.00	19.00	30.00	34	43.00	49.00
Auxiliary	V/Ph/Hz									

CONDENSERS										
Condenser number	N°		1	1	1	1	1	1	1	1
Ranks number	N°		2	4	2	4	4	4	5	5
Total frontal surface	ft ²		3.33	3.33	6.78	6.78	11.80	11.80	11.80	11.80

AXIAL FANS										
Fans number	N°	1	1	1	1	1	1	2	2	2
Total airflow	cfm	1395	2795	2470	4530	3590	5825	9945	9415	9415
Nominal power (each)	kW	0.186	0.45	0.45	0.76	0.76	1.03	1.03	1.03	1.03

HYDRAULIC GROUP										
Water flow rate P3 ^[3]	gal/min	2.64/5.5	2.1/21.2	2.1/21.2	4.1/21.2	4.1/21.2	11.1/42.3	13.3/42.3	16.4/83.2	20.1/83.2
Head pressure P3 ^[4]	PSI	46.2/33.5	44.9/25.2	44.9/25.2	44.0/28.5	43.2/29.75	42.6/22.2	42.0/25.8	42.4/24.1	42.1/24.1
Nominal power P3	kW	0.33	0.75	0.75	0.75	0.75	0.90	0.90	1.85	1.85
Water flow rate P5 ^[3]	gal/min	–	2.1/26.4	2.1/26.4	4.1/26.4	5.8/26.4	11.1/66.1	13.3/66.1	16.4/66.1	20.1/66.1
Head pressure P5 ^[4]	PSI	–	85.6/44.8	85.6/44.8	84.1/50.5	82.5/49.2	86.8/50	86.1/56.8	84.9/56.8	83.3/56.8
Nominal power P5	kW	–	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0
Tank volume	gal	6.1	15.9	15.9	30.4	30.4	37.0	67.4	67.4	67.4
Max pressure	PSI	87	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
Water connections	NPT	1/2"	3/4"	3/4"	1"	1"	1-1/2"	1-1/2"	1-1/2"	1-1/2"

SOUND LEVELS										
Sound power	dB [A]		82.5	81.9	82.6	83.7	83.9	85.0	84.2	85.1
Sound pressure	dB [A]		54.5	53.9	54.6	55.7	55.9	57.0	56.2	57.1

DIMENSIONS AND WEIGHT										
Width	inch	22.6	22	22	26	26	30	30	30	30
Length	inch	25.7	50	50	52	52	73	73	73	73
Height	inch	31.7	31	31	55	55	57	57	57	57
Weight without pump	lbs.	170	423	434	686	736	1032	1382	1398	1433
Weight w/P3, Installed ^[6]	lbs.	249	452	463	714	765	1065	1414	1446	1482
Weight w/P5, Installed ^[6]	lbs.	–	459	470	721	772	1088	1439	1455	1490
Weight w/P3, Shipped ^[6]	lbs.	260	359	368	527	578	833	930	968	992

OPTIONS AVAILABLE										
Remote Control Panel		–								
Pressurized Auto Fill Kit		–								
Atmospheric Manual Fill Tank		–								
Low-Environmental Temp (4°F)			–							
Pressurized Glycol Filling Kit		–								
P5 Pump (72 psig)		–								
P3+P3, P5+P5 Double Pumps						–				
Anti-Freezing Heaters		–								
RS485, Modbus, xWEB300D		–								

[1] Rated with water inlet/outlet temperature at 55/45°F, external air temp at 95°F, 100% water. For capacity correction factors, see the bottom of the next page

[2] Protection from debris/water IP44 (models 015-020), IP54 (models 031-602)

[3] Minimum and maximum water flow pump

[4] Available head pressure at the minimum and maximum flow rates

[5] Also available in 230V; requires special order

[6] "Installed Weight" includes full water tank. "Shipped Weight" includes packaging/crate



CAUTION

Cooling below ambient temperatures may cause condensation on and damage to some cooled components.



CHILLWORX POWERED BY

	201	251	301	351	381	401	402	502	602	702	802
0	15.80	18.10	21.00	23.30	28.70	32.70	29.60	34.10	39.50	48.10	57.50
0	19.70	23.20	25.70	31.20	34.30	38.90	41.40	47.80	53.60	60.10	69.90
2	9.68	9.35	9.85	8.95	10.07	10.08	8.59	8.56	8.85	9.62	9.88

	1	1	1	1	1	1	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2
0/50/100						0/25/50/75/100					
R410A											

460Y / 266V / 3 phase / 60 Hz ⁽⁵⁾											
0	42.00	48.00	55.00	6.00	76.00	85.00	121.00	129.00	143.00	147.00	148.00
24/1/60; 230/1/60											

	1	1	1	1	1	1	1	1	1	2	2
	4	5	5	5	4	5	3	4	5	3	4
0	23.20	23.20	23.20	23.20	32.20	32.20	45.20	45.20	45.20	62.40	62.40

	2	2	3	3	2	2	2	2	2	3	3
5	11535	11415	15625	15625	25662	24367	25895	25070	24285	43967	42378
3	1.03	1.03	1.03	1.03	2.50	2.50	2.50	2.50	2.50	2.50	2.50

3.2	21.8/83.2	25.5/83.2	29.2/105.7	33.9/105.7	39.5/220.1	43.9/220.1	42.3/211.3	49.7/211.3	56.4/211.3	69.2/220.1	81.3/220.1
5.0	42.2/29.4	41.9/29.4	59.5/23.2	58.1/22.4	54.4/31.9	54.3/31.9	48.7/17.7	48.9/17.7	48.9/17.7	62.9/40.8	61.8/40.8
5	1.85	1.85	2.20	2.20	4.00	4.00	4.00	4.00	4.00	5.50	5.50
6.1	21.8/132.1	25.5/132.1	29.2/132.1	33.9/132.1	39.5/220.1	43.9/220.1	42.3/211.3	49.7/211.3	56.4/211.3	69.2/378.6	81.3/378.6
7.5	72.9/20.4	72.2/20.4	71.4/20.6	70.2/19.4	84.0/56.2	83.8/56.2	79.4/39.5	78.8/39.5	78.3/39.5	70.2/43.5	70.0/43.5
	4.0	4.0	4.0	4.0	7.5	7.5	7.5	7.5	7.5	11.0	11.0
4	92.5	92.5	92.5	92.5	108.0	108.0	132.1	132.1	132.1	179.0	179.0
0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
"	2"	2"	2"	2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"	3"

	87.2	87.1	88.6	88.3	91.0	93.2	92.5	92.6	92.3	92.4	93.6
	59.2	59.1	60.6	60.3	63.0	65.2	64.5	64.6	64.3	64.4	65.6

	34	34	34	34	45	45	49	49	49	49	49
	89	89	89	89	110	110	130	130	130	139	139
	81	81	81	81	82	82	85	85	85	85	85
3	2042	2225	2260	2284	3003	3191	3646	3754	3834	4879	4923
2	2090	2273	2346	2370	3104	3291	3750	3858	3937	4998	5043
0	2161	2344	2379	2403	3140	3328	3821	3929	4008	5048	5092
2	1477	1660	1733	1757	2504	2692	3181	3289	3322	4191	4081

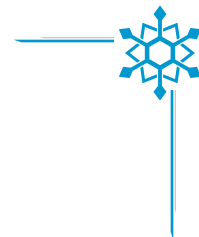
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CORRECTION FACTOR: WATER OUTLET TEMPERATURE										
Outlet Temp ≠45°F	30	35	40	45	50	55	60	65	68	86
Factor	0.681	0.787	0.909	1	1.095	1.194	1.271	1.271	1.271	1.271

CORRECTION FACTOR: EVAPORATOR TEMPERATURE CHANGE							
Evaporator Δ≠10°F	7.2	8	10	12	14	16	18
Factor	0.988	0.994	1	1.007	1.013	1.018	1.026

CORRECTION FACTOR: ETHYLENE GLYCOL SOLUTIONS					
% Mix Ethylene Glycol	0	10	20	30	50
Factor	1	0.990	0.980	0.970	0.930

CORRECTION FACTOR: EXTERNAL AIR TEMPERATURE								
External Temp ≠95°F	70	75	80	85	90	95	100	105
Factor	1.176	1.143	1.109	1.074	1.038	1	0.961	0.921



Chiller Sizing Worksheet

GENERAL

APPLICATION CATEGORY/TYPE

GEOGRAPHIC SITE LOCATION

INDOOR OR OUTDOOR INSTALLATION?

AMBIENT TEMPERATURE

MINIMUM AND MAXIMUM (F° OR C°)

FLUID TO BE COOLED (% MIX, TYPE OF GLYCOL IF ANY)

FLOW RATE (GPM) REQUIRED

HEAT LOAD (BTU/HR)

TONS

INLET AND OUTLET TEMPERATURES (F° OR C°)

VOLTAGE/HZ AVAILABLE OR REQUIRED

NOTES



Fill out as much of this form as you can and send it to sales@chillworx.com

CRAFT BREWING

FERMENTER TOTAL SIZE

QUANTITY AND SIZE EACH

NO. OF BARRELS IN ACTIVE FERMENTATION

NO. OF BARRELS CRASHING AT ONCE

HOURS TO COLD CRASH

NO. OF BARRELS AT CONDITIONING TEMPS

CHILLER CONTROL SYSTEM (IF KNOWN)

PIPE MATERIAL AND DIAMETERS

INTENDED GLYCOL RATIO

GLYCOL FILL METHOD (AUTO/MANUAL)

WE SUPPORT
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