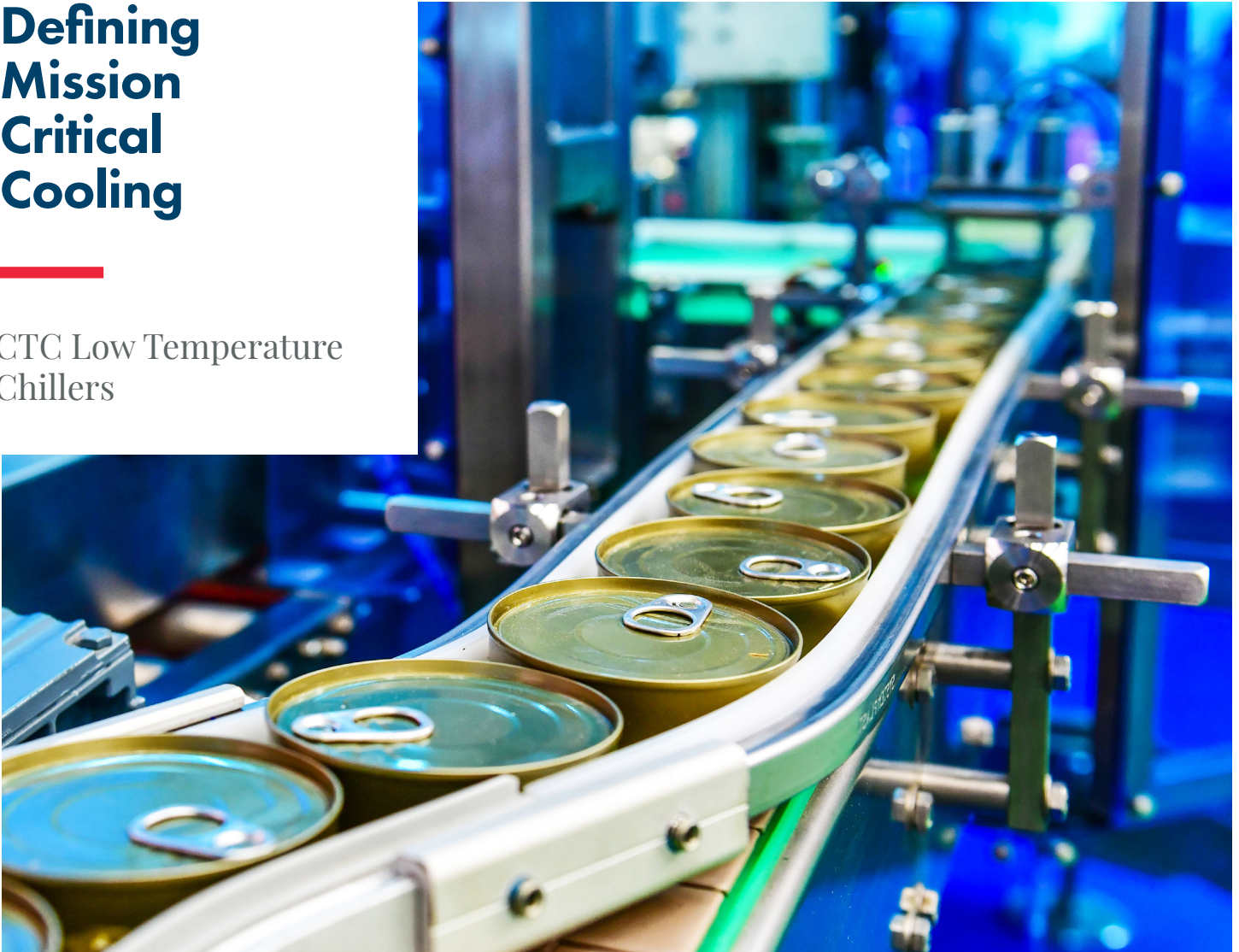


Defining Mission Critical Cooling

CTC Low Temperature Chillers



Motivair CTC Low Temperature chillers are designed to cool process fluids between +32F and -25F.

Each product is engineered and manufactured with industrial grade components to operate under the most demanding conditions at customer specified design points.

Capacities from 5 – 300 Tons.

FEATURES

- Customized options allow equipment to meet specified design criteria ensuring reliable option and lowest total cost of ownership
- Industrial grade components designed for low temperature refrigeration systems
- Multiple refrigerant options
- Air-Cooled or Water-Cooled condenser options
- Centurion Monitoring System provides optional 24x7 global remote monitoring and support



MPC/MPC-FC SPECIFICATIONS

AIR COOLED CHILLERS WITH SCROLL COMPRESSORS		MPC-A	0200	0300	0500	0800	1000	1200	1500	2200	3000	3500	4000	5000	6000	7200	8000	8500	9000				
Cooling Capacity *	Tons		2.2	3.0	4.2	5.7	8.9	11.3	13.3	17.8	22.6	26.6	30.0	35.7	44.5	50.2	67.1	81.5	95.7				
Elevation	FT		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Refrigerant	Type		R-410A																				
Number of Compressors	Qty		1	1	1	1	1	1	1	2	2	2	2	4	4	4	4	4	4				
Refrigerant Circuits	Qty		1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2				
Compressor Running Current	A		4.3	5.5	8.3	12.1	14.8	18.5	23.8	14.85	18.5	23.8	26.3	14.85	18.825	25.7	28.625	37.275	42.075				
Compressor Locked Rotor Amprage	A		35	46	62	95	125	150	179	125	150	179	225	125	150	179	225	272	310				
Max Absorbed working current per Compressor	A		8	11	15.2	23	28	35	41	28	35	41	47.5	28	35	41	47.5	65.4	85				
Evaporator Flow Rate	GPM		5	7	10	14	21	27	32	43	59	64	72	86	107	121	161	196	230				
Minimum Fluid Flow Rate	GPM		5	5	5	13	13	26	26	26	42	42	29	70	70	132	132	159	159				
Maximum Fluid Flow Rate	GPM		19	19	19	29	29	70	70	70	70	101	101	141	141	203	247	282	365				
Maximum Pump Absorbed Power	kW		0.75	0.75	0.75	1.1	1.1	2.2	2.2	2.2	3	3	3	4	4	5.5	5.5	7.5	11				
Maximum Pumps Absorbed Current	A		1.6	1.7	1.7	2.4	2.4	4.3	4.3	4.3	5.85	5.85	5.85	7.7	7.7	10	10	13.2	20				
Integrated Pump External Pressure	PSI		38.11	38.16	36.92	37.68	33.51	36.74	36.53	34.95	34.77	31.94	29.81	34.05	31.76	34.05	35.65	43.39	51.51				
Integrated Tank Volume	GAL		13	13	13	30	50	50	50	100	100	100	100	100	100	100	130	130	130				
Number of Condenser Coils	Qty		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
Condenser Fan(s)	Qty		1	1	1	1	2	2	2	2	2	2	2	3	3	3	5	5	6				
Total Absorbed Power	kW		1.05	1.05	1.05	1.42	2.1	2.84	2.1	4.36	4.36	4.36	4.36	6.54	6.54	6.54	10.9	10.9	13.08				
Absorbed Current	A		1.57	1.57	1.57	2.54	3.14	5.08	3.14	7.6	7.6	7.6	7.6	11.4	11.4	11.4	19	19	22.8				
NOISE DATA			Distance measured in an open field at 33 Feet from Condenser																				
Sound Pressure Level at 32.8'	dBA		53.4	53.6	53.8	60.0	57.4	63.2	58.7	60.4	60.7	61.4	63.0	62.5	62.8	63.8	67.5	69.6	69.4				
ELECTRICAL DATA			Includes Integrated Pump																				
Nominal Power	kW		4.56	5.3	7.45	10.62	12.84	17.29	18.65	25.84	31.86	36.06	41.31	49.1	60.74	75.24	94.2	121.2	140.08				
Maximum Absorbed current (FLA) based on compressor MCC	A		11.27	14.27	18.47	27.94	33.54	44.38	48.44	67.9	83.45	95.45	101.95	131.1	159.1	185.4	219	293.8	343.6				
Electrical	V/PH/Hz		460/3/60																				
Full Load Current (FLA)	A		7.5	8.8	11.6	17.0	20.3	27.9	31.2	41.6	50.5	61.1	66.1	78.5	94.4	124.2	143.5	181.3	211.1				
Min Circuit Ampacity (MCA)	A		8.5	10.1	13.6	20.1	24.0	32.5	37.2	45.3	55.1	67.0	72.6	82.2	99.1	130.6	150.7	190.6	221.6				
Max Overcurrent Protection (MOP)	A		12.8	15.6	21.9	32.2	38.8	51.0	61.0	60.2	73.6	90.8	98.9	97.1	117.9	156.3	179.3	227.9	263.7				
Sound Pressure Level at 32.8' (Low Noise)	dBA		53.1	53.2	53.2	59.8	56.6	62.9	57.5	59.6	59.7	60.0	60.8	61.4	61.6	62.2	64.9	66.3	66.8				
EQUIPMENT DIMENSIONS & WEIGHTS																							
Length	IN		32.3	32.3	32.3	39.8	63.4	63.4	63.4	87.4	87.4	87.4	87.4	132.1	171.5	171.5	211	211	250				
Width	IN		24.2	24.2	24.2	28.3	33.9	33.9	33.9	43.3	43.3	43.3	43.3	43.5	43.5	43.5	43.5	43.5	43.5				
Height	IN		53.5	53.5	53.5	62.2	60.6	60.6	60.6	82.7	82.7	82.7	82.7	85.8	85.8	85.8	85.8	85.8	85.8				
In & Out Connection Size	IN		1"	1"	1"	1"	1.5"	1.5"	1.5"	2"	2"	2"	2"	2.5"	2.5"	2.5"	5"	5"	5"				
Estimated Shipping Weight	LBS		386	397	408	573	860	882	948	1,786	1,830	1,885	2,050	3,417	4,631	4,851	5,292	6,020	6,758				
MPC-W- WATER COOLED (OPTION)	MPC-W	0200	0300	0500	0800	1000	1200	1500	2200	3000	3500	4000	5000	6000	7200	8000	8500	9000					
**Cooling Capacity - Water Cooled (Tons)	BTU/Hr.		28,746	38,586	53,895	73,169	115,022	145,972	171,451	230,081	291,943	342,938	386,626	460,163	573,717	647,988	864,962	1,051,355	1,234,811				
Condenser Fluid Flow	GPM		6	8	11	16	25	32	38	51	71	77	88	105	133	151	203	249	295				
Full Load Current (FLA)	A		5.9	7.2	10.0	14.5	17.2	22.8	28.1	34.0	42.9	53.5	58.5	67.1	83.0	112.8	124.5	162.3	188.3				
Min Circuit Ampacity (MCA)	A		7.0	8.6	12.1	17.5	20.9	27.4	34.1	37.7	47.5	59.4	65.0	70.8	87.7	119.2	131.7	171.6	198.8				
Max Overcurrent Protection (MOP)	A		11.3	14.1	20.4	29.6	35.7	45.9	57.9	52.6	66.0	83.2	91.3	85.7	106.5	144.9	160.3	208.9	240.9				
Estimated Shipping Weight	LBS		361	372	383	548	835	857	923	1,761	1,805	1,860	2,025	3,392	4,605	3,480	4,605	3,613	4,825				
			Molivaiv reserves the right to make changes to product specifications without notice.																				
FREE COOLING CHILLERS WITH SCROLL COMPRESSORS		MPC-FC	1000	1200	1500	2200	3000	3500	4000	5000	6000	7200	8000	8500	9000								
Cooling Capacity	Tons		8.6	10.9	13.0	17.1	21.7	25.7	29.2	34.3	44.0	52.5	63.8	77.3	88.9								
100% Free Cooling Ambient	°F		32	34	33	33	33	34	33	33	32	30	31	28	21								
Refrigerant	Type		R-410A																				
Number of Compressors	Qty		1	1	1	2	2	2	2	4	4	4	4	4	4								
Refrigerant Circuits	Qty		1	1	1	1	1	1	1	2	2	2	2	2	2								
Evaporator Flow Rate	GPM		21	26	31	41	52	62	70	83	106	126	153	186	214								
PSI Drops (Evap+Valves+Piping)	PSID		5.71	5.72	5.96	6.30	6.65	7.00	6.88	7.82	9.45	10.96	5.83	5.83	6.07								
F.C. PSI Drop (F.C.+Evap+Valve+Piping)	PSID		11.31	9.11	9.81	9.92	11.43	12.96	12.14	14.47	14.47	17.16	11.08	12.84	11.67								
Integrated Pump External Pressure	PSI		27.52	32.71	31.68	30.70	41.46	36.58	39.33	36.20	38.51	40.32	40.32	36.28	46.37								
Integrated Tank Volume	Gallons		50	50	50	100	100	100	100	130	130	130	130	130	130								
Condenser Fan(s)	Qty		2	2	2	2	2	3	3	4	5	5	6	6	6								
NOISE DATA			Distance measured in an open field at 33 Feet from Condenser																				
Sound Pressure Level at 32.8'	dBA		61.2	60	60.4	60.4	60.8	62.5	63.8	63.3	64.3	64.9	67.7	69.8	69.4								
ELECTRICAL DATA			Includes Integrated Pump																				
Electrical	V/PH/Hz		460/3/60																				
Full Load Current (FLA)	A		23.2	32.0	37.0	43.7	55.7	69.7	73.9	86.5	111.8	131.4	156.4	193.2	224.8								
Min. Circuit Ampacity (MCA)	A		27.1	37.0	43.3	47.7	60.8	76.0	80.8	90.5	116.8	137.6	163.9	203.0	236.2								
Max. Overcurrent Protection (MOP)	A		42.9	57.1	68.4	63.6	81.0	101.3	108.2	106.4	136.7	162.4	194.0	242.3	281.7								
EQUIPMENT DIMENSIONS & WEIGHTS																							
Length	IN		63.4	87.4	87.4	132.1	132.1	132.1	171.5	171.5	210.6	210.6	250.0	250.0	250.0								
Width	IN		33.9	43.3	43.3	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5								
Height	IN		60.6	82.7	82.7	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8								
In & Out Connection Size	IN		1.5"	1.5"	1.5"	2"	2"	2"	2"	2.5"	2.5"	2.5"	5"	5"	5"								
Estimated Shipping Weight	LBS		1,323	1,676	1,764	3,208	3,241	3,329	4,630	4,850	5,335	5,445	6,162	6,603	7,154								
			Molivaiv reserves the right to make changes to product specifications without notice.																				

* Air Cooled Capacity Rated @ 44°F LWT / 54°F EWT / 95°F Ambient / 100% Water. ** Water Cooled Capacity Rated @ 44°F LWT / 54°F EWT / 85°F ECWT

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