

PORTABLE WATER CHILLERS

- Capacities From 1/4 - 40 Tons
- 20°F to 80°F Fluid Temperatures
- Non Ozone Depleting Refrigerant
- Indoor Units
- Air-Cooled and Water-Cooled

CG-A SERIES

Air-Cooled

CG-W SERIES

Water-Cooled



CG- 2W



CGD- 10A



CGD-10W



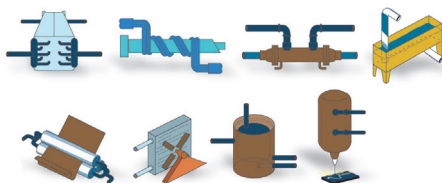
CF- 1A

TempTek GC Series Air-Cooled and Water-Cooled Portable Chillers are designed for processes requiring liquid temperatures from 20 - 80°F. Air and Water-Cooled units can be installed and operated easily, needing only a source of electrical power, water or water/glycol mixture, and a process load requirement to be cooled and controlled. Air-Cooled units are condensed by ambient air while Water-Cooled units require a secondary water source for condensing such as Tower water.

Temperature is achieved by using a microprocessor control instrument designed and manufactured exclusively for TempTek Chillers. The CG series control instrument maintains precise temperature control while protecting the system components. The control instrument is conveniently located - permitting instant diagnosis of chiller performance.

APPLICATIONS

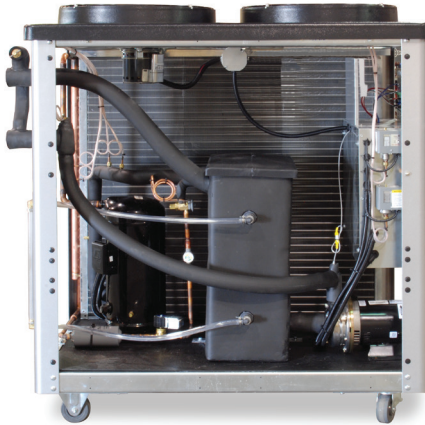
TempTek Portable Water Chillers can be used to circulate chilled water to a variety of process applications:



TEMPTEK®

AIR-COOLED : 1/4 - 30 TONS

WATER-COOLED : 2 - 40 TONS

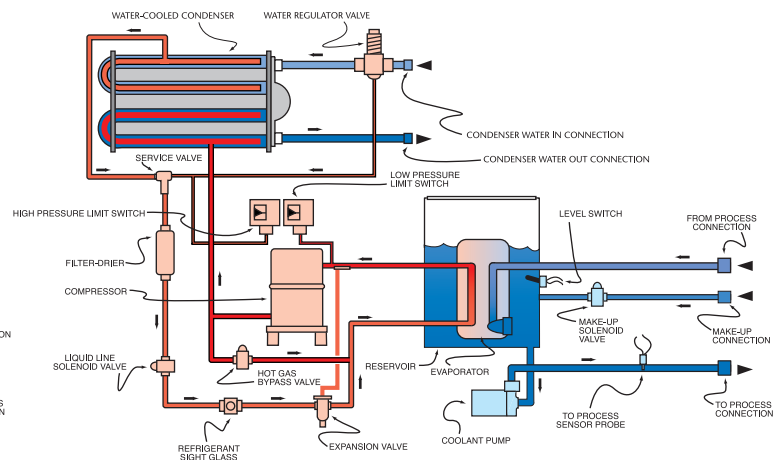
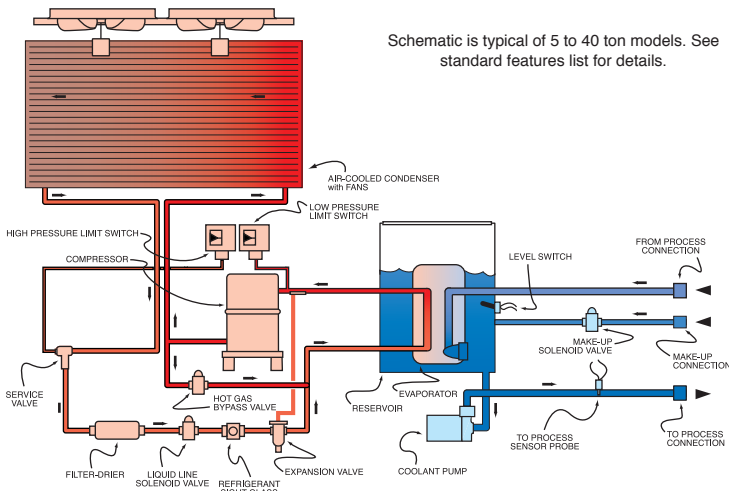


AIR-COOLED

Air-Cooled chillers utilize plant ambient air to extract heat from the refrigeration circuit. Fan or blowers move the plant air across generously sized finned condenser coils to permit full rated capacity at design conditions.

WATER-COOLED

Water-Cooled chillers utilize a secondary plant water source such as cooling tower or city water to extract heat from the refrigeration circuit. These units operate independently of plant ambient air temperature to provide full rated capacity even during the hottest weather. And, water-cooled chillers won't add extra heat to your building.



COMPONENTS

Phone: 317-887-6352 Web: www.Temptek.com

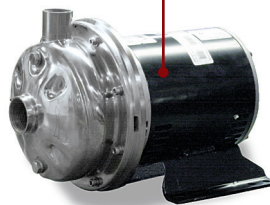


HIGHLY EFFICIENT EVAPORATORS...

High efficiency stainless steel brazed plate evaporators are used in 2 - 40 ton models. Copper tube-in-tube evaporators are used in 1/4 to 1-1/2 ton models. Non-ferrous construction prevents rusting.

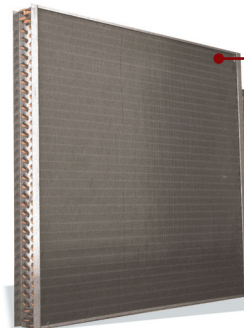
HIGH PERFORMANCE COOLANT PUMPS...

Brass positive displacement pumps are used in 1/4 - 1-1/2 ton models. Centrifugal pumps are used in 2 - 40 ton models. All pumps are selected to provide turbulent flow to promote efficient heat transfer.



RUGGED COMPRESSORS...

Reliable scroll and reciprocating compressors provide long life and energy efficient operation.



AIR-COOLED CONDENSER...

Finned tube condensers are used in all models. Propeller fans are standard in 1/4 - 20 ton models. Centrifugal blowers that allow air ducting are standard in 25 - 30 ton models and optional in 5 - 20 ton models.

WATER-COOLED CONDENSER... Shell and tube condensers with water regulator valves are used in 15 - 40 ton water-cooled models. 1 - 10 ton models use tube-in-tube condensers.



LIFETIME WATER RESERVOIR... All chillers include a non-rusting vented water reservoir sized to support the flow rate of the chillers. The reservoir helps provide a stable water temperature under varying load conditions.



REFRIGERANT COMPONENTS...

All refrigerant components are selected for historic reliability and performance. Components include high & low pressure limit switches, freezestat, expansion valve, relief valve, filter dryer and sight glass/moisture indicator.

STANDARD FEATURES

CONSTRUCTION:

- 1/4 to 2 ton Air-Cooled Models & 1 to 3 ton Water-Cooled Models
 - Galvanized steel frame and enclosure panels
- 3 to 30 ton Air-Cooled models & 5 to 40 ton Water-Cooled models
 - Powder coated steel upright frame member
 - Galvanized steel cross frame members
 - Powder coated lift-off enclosure panels
 - Lift-off molded front panel
- All Models:
 - Casters for portability

REFRIGERANT CIRCUIT:

- Compressors:
 - Hermetic reciprocating in 1/4 to 1½ ton models
 - Hermetic scroll in 2 to 40 ton models
- Air-Cooled Condensers
 - Finned tube
 - Fan generated air flow in 1/4 to 20 ton models
 - Blower generated air flow in 25 to 30 ton models
- Water-Cooled Condensers
 - Tube in tube in 1 to 10 ton models
 - Shell and tube in 15 to 40 ton models
 - Water regulating valve in all models

- Filter-drier
- Liquid line solenoid valve
- Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Microprocessor controlled hot gas bypass capacity control system in 2 to 40 ton models
- Evaporators
 - Copper tube-in-tube in 1/4 to 1½ ton models
 - Stainless Steel Brazed Plate in 2 - 40 ton models

COOLANT CIRCUIT:

- Coolant pump
 - Brass positive displacement pump in 1/4 to 1-1/2 ton models
 - High flow stainless steel centrifugal pump in 2 to 30 tons models (up to 5 HP)
 - High flow cast iron centrifugal pump on the 40 ton model (above 5 HP)
- Large capacity insulated non-ferrous reservoir
- Standard NPT process fittings
- Automatic low flow bypass circuit

LIMIT DEVICES:

- High refrigerant pressure
- Low refrigerant pressure

- Refrigerant pressure relief valve
- Process pump motor overload
- Instrument control circuit fuse

ELECTRICAL:

- Process pump motor starter
- Compressor motor
- Fused transformer
- Power entry terminal block

WARRANTY:

- 1 Year covering parts and labor

Standard unit features listed. Customized models may include other or different features.

AVAILABLE OPTIONS

ALARM OPTIONS:

- Audible alarm
- Visual / audible alarm beacon

ELECTRICAL:

- E-Stop
- Branch circuit fusing
- UL508A Electrical Enclosures panel

COOLANT CIRCUIT OPTIONS:

- Overhead piping kit - prevents tank overflow when overhead piping is used
- No tank for reverse flow applications
- Process line shut-off valves
- Larger process pumps

REFRIGERANT CIRCUIT:

- Centrifugal blower generated air flow for air-cooled condensers in 5 to 20 ton models
- Low temperature models to 0°F leaving water temperature
- Tandem scroll compressors
- Condenser screen guard / air filter

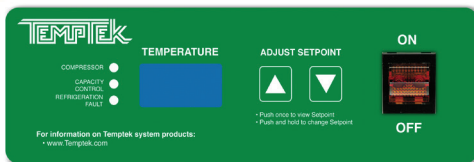
WARRANTIES:

- Extended compressor warranty

CONTROL INSTRUMENTS

Microprocessor instruments control and monitor all aspects of the chiller operation to assure accurate control and dependable operation. The controls are designed to support the specific and unique requirements of process cooling in an industrial environment.

For chillers from 1/4 to 1-1/2 tons :



For chillers from 2 to 40 tons :



For chillers from 1/4 to 1-1/2 tons:

- Accurate control
- Large & Bright LED temperature display
- Digital Setpoint selection with soft touch keys
- Illuminated Chiller On / Off switch
- Compressor On light
- Basic diagnostics : Refrigeration Fault light
- Capacity control light

For chillers from 2 to 40 tons:

- Graphical LCD Display
- Intuitive Navigation Six Menus Deep
- Primary Display of To Process Temperature, Setpoint and Outputs
- Setpoint Selection via Main Display or Menu
- Controls Hot Gas Bypass or Digital Scroll Compressor for Capacity Control
- Soft Key Buttons for Intuitive Navigation
- Soft Key Buttons for Power On and Off
- Plain Language Error Reporting
- Machine Status Indication via Outputs Display
- Capacity Control Indication via Outputs Display
- Digital Refrigerant Pressure Display
- Digital Water Pressure Display
- Alarm Output with Audible Signal
- Industry 4.0 Ready ... Modbus RTU or SPI Communication Included
- Modbus TCP Communication Optional
- High Water Temperature Shut Down Feature

SPECIFICATIONS : Air-Cooled

MODEL CF-		.25A	.33A	.5A	.75A	1A	1.5A	2A	3A	4A	5A	7.5A	10A	15AF	15AB	20AF	20AB	25A	30A
CAPACITY @ 50°F LWT	Tons ²	.29	.39	.50	.75	1	1.5	2	2.9	4	4.9	7.2	9.8	14.5	14.5	18.5	18.5	23.1	30
	KW ²	1	1.36	1.75	2.53	3.5	4.73	7.0	10.8	14.0	17.2	25.3	34.4	50.9	50.9	65.0	65.0	81.0	105.3
COMPRESSOR	HP	.25	.33	.50	.75	1	1.5	2	3	4	5	7½	10	15	15	20	20	25	30
	Type ³	R	R	R	R	R	R	SC	SC	SC	SC	SC	SC	SC	SC	SC	SC	SC	SC
REFRIGERANT		134A	134A	134A	134A	134A	134A	410A	410A	410A	410A	410A	410A	410A	410A	410A	410A	410A	410A
PROCESS PUMP	HP	⅓	⅓	⅓	⅓	½	½	¾	¾	¾	2	2	2	3	3	3	3	5	5
	GPM	.7	.9	1.2	1.8	2.4	3.6	4.8	7.2	9.6	12	18	24	36	36	48	48	60	72
	PSI	60	60	60	60	60	60	32	30	30	52	50	48	55	55	50	50	59	57
	Type ⁴	P	P	P	P	P	P	C	C	C	C	C	C	C	C	C	C	C	C
	Construction ⁵	B	B	B	B	B	B	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
CONNECTION	Process (to/from)	½	½	½	½	½	½	¾	1	1¼	1¼	1¼	1¼	2	2	2	2	2	2
SIZES	Make-Up	--	--	--	--	--	--	--	--	--	½	½	½	½	½	½	½	½	½
AIR-COOLED	Type ⁶	F	F	F	F	F	F	F	F	F	F	F	F	F	B	F	B	B	B
CONDENSER	CFM x 1000	.25	.33	.45	.65	.71	1.1	2	3	5	5	10	10	15	15	20	20	20	30
	S.P. ⁷	--	--	--	--	--	--	--	--	--	--	--	--	--	1.35	--	1.35	1.35	1.35
	Ambient ⁸	90	90	90	90	90	90	95	95	95	95	95	95	95	95	95	95	95	95
FULL LOAD ⁹	115/1/60	13	15	17	21	29	--	--	--	--	--	--	--	--	--	--	--	--	--
AMPERAGE	230/1/60	--	--	9	11	15	20	--	--	--	--	--	--	--	--	--	--	--	--
	230 volt	--	--	--	--	--	--	17	20	24	34	48	56	80	87	92	103	148	184
	460 volt	--	--	--	--	--	--	8.5	10	12	17	24	28	40	44	46	51.5	74	92
	575 volt	--	--	--	--	--	--	--	--	--	14	19	23	32	31	37	42	60	74
TANK CAPACITY (gallons)	Holding	4	4	4	4	4	4	7½	7½	25	25	25	25	65	65	65	65	65	65
	Tank Lid ¹⁰	S	S	S	S	S	S	O	O	S	S	S	S	S	S	S	S	s	S
	Auto Make Up ¹⁰	O	O	O	O	O	O	O	O	O	S	S	S	S	S	S	S	s	S
DIMENSIONS (inches)	Height	33	33	33	37	37	37	30	43	60	60	60	60	66	96	66	96	96	96
	Width	18	18	18	19	19	19	37	34	34	34	34	34	59	58	59	58	58	58
	Depth	24	24	24	25	25	25	24	40	40	40	56	56	58	70	58	70	70	70
WEIGHTS (pounds)	Shipping ¹¹	220	220	220	265	345	350	415	600	800	800	1,100	1,100	1,600	2,300	1,700	2,600	3,200	3,400

Notes

1. Since product innovation and improvement is our constant goal, all features and specifications are subject to change without notice or liability. Selection of certain optional features may change listed specifications.
2. Tons or Kilowatts capacity at 12,000 Btu/hr/ton @ 50°F LWT, 95°F ambient and 115°F condensing. Capacity multipliers are 50°F - 1.00; 40°F -.80; 30°F -.60; 20°F - .40. The minimum recommended operating temperature when no glycol is used is 48°F.
3. R = hermetic reciprocating. SC = hermetic scroll.
4. P = positive displacement. C = centrifugal.
5. B = brass. SS = stainless steel. C = cast iron.
6. F = fan. B = blower.
7. Static pressure in inches of water.
8. Design ambient conditions. Loss of capacity and/or difficulty operating will occur at higher ambient.
9. Full load amps are higher than run load amps and must be used for sizing disconnects and supply wiring.
10. S = standard. O = optional.
11. Approximate unit weight crated for shipment.

Model Designator for CG Series Portable Chillers

CG-4A

Series Name Condenser Type
 A: Air-Cooled
 W: Water-Cooled

Tons of Capacity



Since 1989 ... PRICE & PERFORMANCE for the LONG TERM !

SPECIFICATIONS : Water-Cooled

MODEL CF-		1W	2W	3W	5W	7.5W	10W	15W	20W	25W	30W	40W
CAPACITY @ 50°F LWT	Tons ²	1	2	3	5.1	7.6	10.5	15	20	25	30	40
	KW ²	3.5	7.0	10.5	17.9	26.7	36.8	52.6	70.2	87.7	105.3	140.4
COMPRESSOR	HP	1	2	3	5	7½	10	15	10(2)	13(2)	15(2)	20(2)
	Type ³	R	SC	SC	SC	SC	SC	SC	SC	SC	SC	SC
REFRIGERANT		134A	410A	410A	410A	410A	410A	407C	407C	407C	407C	407C
PROCESS PUMP	HP	½	¾	¾	2	2	2	3	3	5	5	7½
	GPM	2.4	4.8	7.2	12	19	26	36	48	60	72	92
	PSI	60	32	30	52	48	47	55	50	59	57	61
	Type ⁴	P	C	C	C	C	C	C	C	C	C	C
	Construction ⁵	B	SS	SS	SS	SS	SS	SS	SS	SS	SS	C
CONNECTION	Process (to/from)	½	¾	¾	1¼	1¼	1¼	2	2	2	2	2½
SIZES	Condenser	½	½	¾	¾	¾	1	1¼	1¼	1½	1½	2½
	Make-Up	--	--	--	½	½	½	½	½	½	½	½
WATER-COOLED	City ⁶	1.5	3	6	8	14	17	23	32	39	45	60
CONDENSER	Tower ⁷	3	6	9	15	28	43	45	63	78	90	120
FULL LOAD ⁸	115/1/60	22	--	--	--	--	--	--	--	--	--	--
AMPERAGE	230/1/60	11	--	--	--	--	--	--	--	--	--	--
	230 volt	15	16	18	30	40	48	68.4	78	106	134	178
	460 volt	8	8	9	15	20	24	34.2	39	53	67	89
	575 volt	--	7	8	12	16	20	27.5	32	43	54	72
TANK CAPACITY (gallons)	Holding	4	7½	7½	25	25	25	65	65	65	65	65
	Tank Lid ⁹	S	O	O	S	S	S	S	S	S	S	S
	Auto Make Up ⁹	O	O	O	S	S	S	S	S	S	S	S
DIMENSIONS (inches)	Height	33	30	30	40	56	56	57	57	57	57	57
	Width	18	37	37	32	32	32	34	34	34	34	34
	Depth	24	24	24	40	40	40	80	80	80	80	80
WEIGHTS (pounds)	Shipping ¹⁰	270	445	470	655	740	760	1,500	1,900	2,100	2,200	2,500

Notes

1. Since product innovation and improvement is our constant goal, all features and specifications are subject to change without notice or liability. Selection of certain optional features may change listed specifications.
2. Tons or Kilowatts capacity at 12,000 Btu/hr/ton @ 50°F LWT, 85°F condensing water and 105°F condensing. Capacity multipliers are 50°F - 1.00; 40°F -.80; 30°F -.60; 20°F -.40. The minimum recommended operating temperature when no glycol is used is 48°F.
3. R = hermetic reciprocating. SC = hermetic scroll.
4. P = positive displacement. C = centrifugal.
5. B = brass. SS = stainless steel. C = cast iron.
6. City water requirements based on 60°F water supply at 20 PSI differential with a clean condenser.
7. Tower water requirements based on 85°F water supply at 20 PSI differential with a clean condenser.
8. Full load amps are higher than run load amps and must be used for sizing disconnects and supply wiring.
9. S = standard. O = optional.
10. Approximate unit weight crated for shipment.

Model Designator for CG Series Portable Chillers

CG-4W

Series Name | Condenser Type
 A: Air-Cooled
 W: Water-Cooled

Tons of Capacity

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TEMPTEK