

REMOTE CONDENSER CHILLERS

CG-ARC SERIES

Air-Cooled Unit with Remote Condenser

- 5 - 40 Tons of Capacity
- 20°F - 80°F Fluid Temperatures
- Indoor Chiller Unit with Outdoor Remote Air-Cooled Condenser
- R410A Non Ozone Depleting Refrigerant
- Steel Frame & Lift-Off Cabinetry
- Stainless Steel Brazed Plate Evaporator



CF-ARC indoor unit



Typical Remote Air-Cooled Condenser
(Not shown to scale)

CG Control Instrument



TEMPERATURE RANGE

- 20° - 80°F

CONSTRUCTION (Interior Unit):

- Powder coated steel upright frame members
- Galvanized steel cross frame members
- Powder coated lift-off enclosure panels
- Lift-off molded front panel

REFRIGERANT CIRCUIT:

- Compressors:
 - Hermetic scroll
- Air-Cooled Condensers
 - Remote, located outdoors
 - Finned tube
 - Fan generated air flow
 - Ambient control to -20°F
- Filter-drier
- Liquid line solenoid valve
- Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Microprocessor controlled hot gas by-pass capacity control system
- Stainless Steel Brazed Plate evaporator
- Liquid receiver
- Oil separator

WARRANTY:

- 1 Year covering parts and labor

PRESSURE GAUGES:

- Refrigerant high pressure
- Refrigerant low pressure
- Coolant pressure gauge

ELECTRICAL:

- Process pump motor starter
- Compressor motor
- Fused transformer
- Power entry terminal block
- 5 kA RMS SSCR

COOLANT CIRCUIT:

- Coolant pump
 - High flow stainless steel centrifugal pump in 5 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
- Reservoir level sight tube
- Automatic water make-up system
- Standard NPT process fittings

LIMIT DEVICES:

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

CG Chiller Control Instrument

- Graphical LCD Display
- Intuitive Navigation Six Menus Deep
- Main Screen Display of To Process Temperature, Setpoint and Output
- Setpoint Selection via Main Display or Setpoints 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

MODEL ¹ CG-		5A-RC	7.5A-RC	10A-RC	15A-RC	20A-RC	25A-RC	30A-RC	40A-RC
CAPACITY ^{@ 50°F LWT}	Tons ²	4.9	7.1	9.8	14.5	18.5	23.1	30	36.7
	KW ²	17.2	24.9	34.4	50.9	64.9	81	105.3	128.8
COMPRESSOR	Type	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Tandem Scroll
REFRIGERANT		410A	410A	410A	410A	410A	410A	410A	410A
PROCESS PUMP	HP	2	2	2	3	3	5	5	7½
	GPM	12	19	26	36	48	60	72	92
	PSI	52	48	47	55	43	59	57	61
	Type ³	C	C	C	C	C	C	C	C
	Construction ⁴	SS	SS	SS	SS	SS	SS	SS	C
WATER CONNECTION	Process (to/from)	1¼	1¼	1¼	2	2	2	2	2½
SIZES	Make-Up	½	½	½	½	½	½	½	½
FULL LOAD ⁵	230 volt	28	40	48	70	76	106	134	158
AMPERAGE	460 volt	14	20	24	35	38	53	67	79
	@ 3ø / 60 Hz 575 volt	12	16	20	28	31	43	57	64
TANK CAPACITY (gallons)	Holding	25	25	25	65	65	65	65	65
	Tank Lid	S	S	S	S	S	S	S	S
	Auto Make Up	S	S	S	S	S	S	S	S
DIMENSIONS ⁷ (inches)	Height	40-1/4	40-1/4	40-1/4	57	57	57	57	57
	Width	35	35	35	34	34	34	34	34
	Depth	56-1/2	56-1/2	56-1/2	80	80	80	80	80
WEIGHT (pounds)	Shipping ⁶	550	600	625	1,500	1,900	2,100	2,200	2,500

REMOTE AIR-COOLED CONDENSER

CONNECTIONS	Liquid & Hot Gas	1½ & 15/8	1½ & 15/8	1½ & 15/8	1¾ & 2 1/8	15/8 & 2 1/8	15/8 & 2 5/8	2 1/8 & 2 5/8	2 1/8 & 2 5/8
AIR FLOW	Fan Quantity	1	1	1	2	2	3	3	3
FULL LOAD ⁵	230 Volts	3.6	3.6	3.6	12.4	12.4	18.6	18.6	24.8
AMPERAGE	460 Volt	1.3	1.3	1.3	6.2	6.2	9.3	9.3	12.4
	@ 3ø / 60 Hz 575 Volt	1.0	1.0	1.0	5.0	5.0	7.5	7.5	9.9
DIMENSIONS ⁷ (inches)	Height	54	54	54	54	54	54	54	54
	Width	45	45	45	45	45	45	45	45
	Depth	58	58	58	112.5	112.5	167.5	167.5	167.5
WEIGHT (pounds)	Shipping ⁶	400	400	400	680	740	1,050	1,150	1,200
FACTORY ID		012	014	017	025	032	041	050	056

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. Consult factory for capacity at other conditions. The minimum recommended operating temperature when no glycol is used is 48°F. 3. C = centrifugal. 4. SS = stainless steel. C = cast iron. 5. Full load amps are higher than run load amps and must be used for sizing disconnects and supply wiring. 6. Approximate unit weight crated for shipment. 7. Selection of certain options may change dimensions, weight and amps required. Confirm with factory before starting construction.

Options

COOLANT CIRCUIT:

- Overhead piping kit - prevents tank overflow when overhead piping is used
- No tank for reverse flow applications
- Low flow bypass circuit - manual or automatic
- Process line shut-off valves
- Larger process pump

ELECTRICAL:

- Branch circuit fusing
- UL rated electrical enclosures

REFRIGERANT CIRCUIT:

- Flooded head pressure control for extreme environments

ALARMS:

- Audible alarm
- Visual / audible alarm beacon

WARRANTIES:

- Extended compressor warranty

Model Designator for CGD-ARC Chillers

CGD-10A-RC

CG Series

Tons of Capacity

Condenser Type

A: Air-Cooled

Condenser Locations

RC: Remote

For More Information ... call SWHC 214-340-7500

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