

**AEC**Material Handling | **Process Cooling** | Temperature Control | Size Reduction

GPL Packaged Chillers

Low GWP Refrigerant Option



Technical Specifications

The GPL Packaged Chillers include all of the major chiller system components in one versatile and compact package with a to-process fluid temperature range of 20°F to 80°F (-6.7°C to 26.7°C). Available in models from 5 to 60 tons, the GPL products offer air-cooled and water-cooled designs to meet the needs of various manufacturing processes. The GPL chillers are extremely efficient while still meeting the demands of the most nimble manufacturing facilities. The broad range of available options allows each facility to tailor a solution to meet the unique needs of their particular operation.

Available Refrigerant Options for GPL Packaged Chillers

R-410A **Traditional****R-454B** **Low GWP (Global Warming Potential)**

Models

Tons	Air Cooled	Water Cooled
5	GPL05A	GPL05W
7.5	GPL07A	GPL07W
10	GPL10A	GPL10W
15	GPL15A	GPL15W
20	GPL20A	GPL20W
25	GPL25A	GPL25W
30	GPL30A	GPL30W
40	GPL40A	GPL40W
50	GPL50A	GPL50W
60	GPL60A	GPL60W

Features

New & Improved

- Two Refrigerant options – R-410A or R-454B (Low GWP)
- Color touch screen for operators
- Better access to components allows for faster maintenance
- Lower height for larger models improves transportation of units
- General fault Audible/Visual alarm now included standard
- Frame and panel design
- Advanced controller with built-in faults and alarm displays
- Multiple communications options including Ethernet/IP (A-B)
- A2L leak detector for added safety with R-454B refrigerant
- Electrical enclosure relocated for easy access from outside unit
- Process piping above the frame base to prevent forklift damage

Standard Features

Mechanical

- Scroll compressors
- Evaporator – stainless steel copper-brazed plate
- Condenser (Air) – micro-channel
- Condenser (Water, 5-15 Ton) – tube-in-tube
- Condenser (Water, 20-60 Ton) – shell-and-tube
- Y-strainer (5-15 Ton)
- Evaporator inlet strainer (20-60 Ton)
- Structural steel frame and panels
- Hot gas bypass capacity control
- Thermal expansion valve
- Internal manual fluid bypass valve
- Swivel casters (5-30 Ton)
- Mounting channels (40-60 Ton)

Refrigeration

- R-410A or R-454B
- High and low refrigerant pressure sensors
- High pressure spring actuated relief valve
- Multiple refrigeration access ports
- Fans – motors w/VFD control in NEMA 1 enclosure (air-cooled)
- Filter dryer and sight glass (refrigerant)
- Fully insulated process water piping

Electrical

- 460/3/60
- NEMA 12 electrical control enclosure
- Non-fused disconnect switch

Warranty

- 2 year Parts
- 1 year Factory Labor
- 3 year Controller
- 1 year Compressor

Available Options

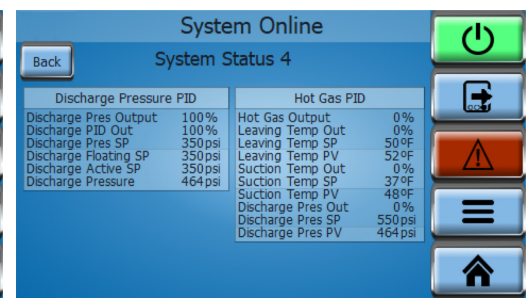
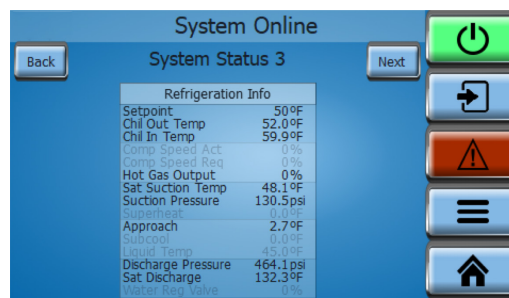
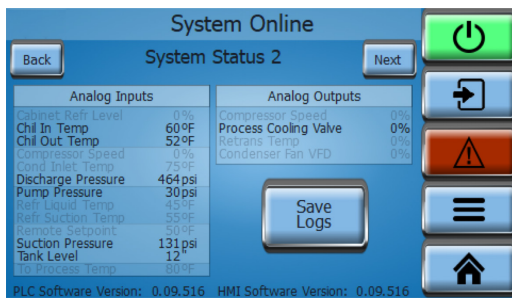
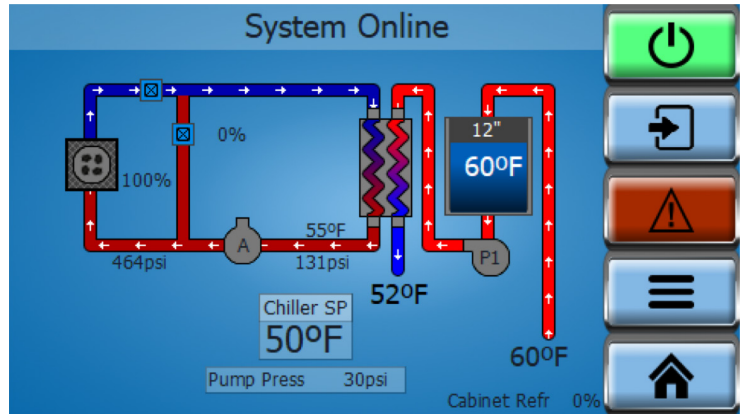
- Automatic water make-up valve (water only, not glycol)
- Process water side stream filter (50 microns) w/monitoring flow meter
- 0.3 in. WC high pressure fans¹
- Stainless steel (304) reservoir
- Mounting feet (5 to 30 Tons)
- External manual bypass
- cULus Listed Control Panel Serialized Label
- Ontario electrical code (Hydro)
- Sensor package – entering condenser, refrigerant suction, and refrigerant liquid temperatures
- Less reservoir tank and pump
- Electrofin condenser coating (Air cooled models only)
- Alternate voltages
- Various pump sizes and types
- 4 year compressor parts warranty
- Phase Monitor
- MiVue® – Digital Solutions Platform
- Communications options
 - Modbus RS485
 - Modbus TCP/IP
 - Profibus DP
 - BACnet RS485
 - BACnet IP
 - Ethernet – standard
 - Ethernet/IP (A-B)
- Outdoor applications
- Higher altitudes (3301-6600 ft and 6601-8700 ft)
- Special Wet Paint Colors

¹ Air cooled models only. Provides an additional 0.3" WC static pressure on fan discharge. High pressure fans are necessary and must be included in chiller installations where the existing air is to be exhausted through ductwork.

Controls

Standard Features

- Color Touch Screen HMI
- Advanced microprocessor controller
 - Control the chiller based on temperature sensors
 - From process - To process
 - Monitor the chiller
 - Set-point and key parameters
 - Multiple Online/Offline System Status screens
 - Web server for remote monitoring



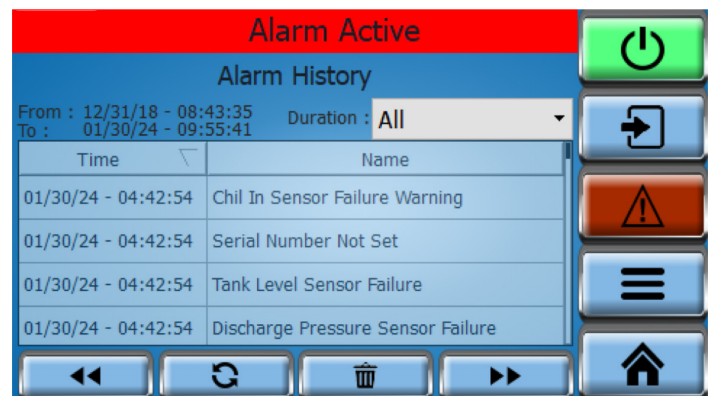
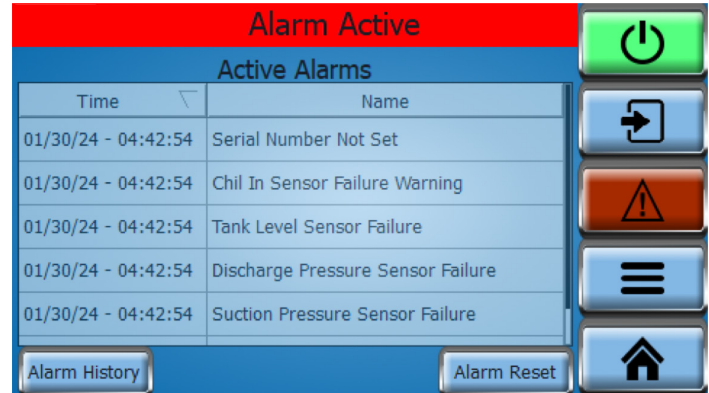
Alarms

- General fault Audible / Visual Alarm¹
- Dry contact for general fault alarm
- A2L leak detector

¹ Alarm is 103 dB audible and red fault light. Alarm conditions include high & low water temperature, low water flow, and high & low refrigerant pressure.

Control Monitors

- Active Alarms and Alarm History
- Built-in clock for time and date stamped alarms
- Multiple Faults built-in including:
 - No flow
 - Tank Level – Low and High
 - Temperature – Low and High
 - Suction – Low and High
 - Discharge – Low and High
 - Compressor
 - Fan Overload or VFD
 - Pump Overload



Specifications

GPL (Air-Cooled Circuits, 60 hz)

Model Number	Cooling Capacity 410A ¹ 60 hz Tons (kw)	Cooling Capacity 454B ¹ 60 hz Tons (kw)	Power ²	Dimensions in Inches (CM)			
			FLA	Height	Width	Depth	Shipping Wt. ³ Lbs (Kg)
GPL05A	5.5 (19)	5.2 (18)	12.1	77 (196)	43 (109)	43 (109)	550 (250)
GPL07A	7.3 (26)	7.0 (25)	18.6	77 (196)	43 (109)	43 (109)	725 (329)
GPL10A	10.5 (37)	10.1 (36)	22.4	87 (221)	47 (119)	54 (137)	775 (352)
GPL15A	14.6 (51)	14.1 (50)	30.6	87 (221)	47 (119)	54 (137)	975 (442)
GPL20A	20.8 (73)	20.0 (70)	48.0	87 (221)	47 (119)	94 (239)	1700 (771)
GPL25A	26.2 (92)	25.4 (89)	52.7	87 (221)	47 (119)	94 (239)	1775 (805)
GPL30A	29.6 (104)	28.5 (100)	59.1	87 (221)	47 (119)	94 (239)	2000 (907)
GPL40A	41.2 (145)	39.1 (138)	76.1	84 (213)	47 (119)	135 (343)	2650 (1202)
GPL50A	47.9 (169)	45.9 (161)	88.9	84 (213)	47 (119)	135 (343)	2900 (1315)
GPL60A	61.4 (216)	59.0 (208)	113.1	88 (224)	50 (127)	175 (445)	3350 (1520)

1.) Net Cooling Capacity Available @50F LWT and 95°F ambient air temperature with standard pump (60 hz)

2.) Full load amperage (FLA) @460/3/60 with standard pump

3.) Shipping weight estimated, actual weight determined at time of shipment

GPL (Water-Cooled Circuits, 60 hz)

Model Number	Cooling Capacity 410A ¹ 60 hz Tons (kw)	Cooling Capacity 454B ¹ 60 hz Tons (kw)	Power ²	Dimensions in Inches (CM)			
			FLA	Height	Width	Depth	Shipping Wt. ³ Lbs (Kg)
GPL05W	5.8 (20)	5.4 (19)	11.0	74 (188)	43 (109)	43 (109)	550 (250)
GPL07W	8.6 (30)	8.2 (29)	16.5	74 (188)	43 (109)	43 (109)	725 (329)
GPL10W	11.5 (40)	10.9 (38)	20.3	85 (216)	47 (119)	54 (137)	775 (352)
GPL15W	17.1 (60)	16.1 (57)	27.2	85 (216)	47 (119)	54 (137)	975 (442)
GPL20W	23.0 (81)	21.8 (77)	41.2	86 (224)	47 (119)	95 (241)	1725 (782)
GPL25W	29.7 (105)	28.2 (99)	45.9	86 (224)	47 (119)	95 (241)	1875 (851)
GPL30W	34.2 (120)	32.0 (113)	52.3	86 (224)	47 (119)	95 (241)	2125 (964)
GPL40W	46.0 (162)	42.7 (150)	65.9	83 (211)	47 (119)	135 (343)	2400 (1089)
GPL50W	55.1 (194)	51.7 (182)	78.7	83 (211)	47 (119)	135 (343)	2475 (1123)
GPL60W	70.8 (249)	65.8 (231)	99.5	83 (211)	47 (119)	135 (343)	2625 (1191)

1.) Net Cooling Capacity Available @50F LWT and 85°F entering condenser water temperature with standard pump (60 hz)

2.) Full load amperage (FLA) @460/3/60 with standard pump

3.) Shipping weight estimated, actual weight determined at time of shipment

VOLTAGE BY TON SIZE

(STD = Standard, OPT = Option Available)

TONS	5	7.5	10	15	20	25	30	40	50	60
460/3/60	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
208/3/60	OPT	OPT	OPT	OPT						
230/3/60	OPT	OPT	OPT	OPT						
400/3/50	OPT	OPT	OPT	OPT						
575/3/60			OPT	OPT	OPT	OPT	OPT			

PUMP BY TON SIZE

(460/3/60) - (STD = Standard, OPT = Option Available)

TONS	5	7.5	10	15	20	25	30	40	50	60
1.5 hp	STD									
1.5 hp TEFC	OPT									
2 hp	OPT	STD	STD							
2 hp TEFC	OPT	OPT	OPT							
3 hp	OPT	OPT	OPT	STD						
3 hp TEFC	OPT	OPT	OPT	OPT						
5 hp			OPT	OPT	STD	STD	STD	STD	STD	STD
5 hp TEFC			OPT	OPT	OPT	OPT	OPT	OPT	OPT	OPT
5.5 hp TEFC	OPT	OPT								
7.5 hp			OPT	OPT	OPT	OPT	OPT	OPT	OPT	OPT
7.5 hp TEFC			OPT	OPT	OPT	OPT	OPT	OPT	OPT	OPT
10 hp			OPT	OPT	OPT	OPT	OPT	OPT	OPT	OPT
10 hp TEFC			OPT	OPT	OPT	OPT	OPT	OPT	OPT	OPT
15 hp					OPT	OPT	OPT	OPT	OPT	OPT
15 hp TEFC					OPT	OPT	OPT	OPT	OPT	OPT

NOTE: 208, 230, 400, and 575 voltage options use the same size hp pump as 460 voltage standard.

REFRIGERANT OPTIONS FOR ALL TON SIZES

REFRIGERANT	Global Warming Potential (GWP) Measure	RATINGS
R-410A	2088	A1 (Non-Flammable / Non-Toxic)
R-454B*	466	A2L (Slightly Flammable / Non-Toxic)

*Reference Safety Data Sheet from Chemours - Opteon™ XL41 (R-454B Refrigerant.)

PERFORMANCE DATA

GPL

TONS	5	7.5	10	15	20	25	30	40	50	60
Compressor hp (kW)	5 (3.7)	7.5 (6.0)	10 (7.5)	15 (11.2)	20 (14.9)	25 (18.6)	30 (22.4)	20 (29.8)	50 (37.3)	60 (44.7)
Reservoir Gal (liter)	21 (79)	21 (79)	38 (144)	38 (144)	61 (231)	61 (231)	61 (231)	124 (469)	124 (469)	124 (469)
Pump hp	1.5	2	2	3	5	5	5	5	5	5
Pressure¹ PSI (bar)	37 (2.6)	47 (3.2)	42 (2.9)	48 (3.3)	44 (3.0)	20 (2.8)	36 (2.5)	43 (3.0)	40 (2.8)	36 (2.5)
Flow² gpm (lpm)	12 (45)	18 (68)	24 (91)	36 (136)	48 (182)	60 (227)	72 (273)	96 (363)	120 (454)	144 (545)

1.) Pump Process Pressure

2.) Process Water Flow

AIR-COOLED GPL - Cooling Capacity, 50 hz

TONS	5	7.5	10	15	20	25	30	40	50	60
410A 50hz¹ Tons (kW)	4.5 (16)	5.9 (21)	8.5 (30)	11.9 (42)	17.0 (60)	21.5 (76)	24.1 (85)	23.7 (83)	39.2 (138)	50.3 (177)
454B 50hz¹ Tons (kW)	4.2 (15)	5.6 (20)	8.2 (29)	11.5 (40)	16.3 (57)	20.8 (73)	23.2 (82)	32.1 (113)	37.7 (133)	48.7 (171)

1.) Net cooling capacity available @50F LWT and 95°F ambient air temp with standard pump (50hz)

AIR-COOLED GPL - Power, 50 hz

TONS	5	7.5	10	15	20	25	30	40	50	60
FLA¹	12.9	20.0	23.8	33.1	52.1	56.7	63.1	81.1	93.9	119.0

1.) Full Load Amperage (FLA) @ 400/3/50 with standard pump

PERFORMANCE DATA

WATER-COOLED GPL - Cooling Capacity, 50 hz

TONS	5	7.5	10	15	20	25	30	40	50	60
410A 50hz¹	4.7	7.1	9.5	14.1	19.0	24.7	28.3	38.1	45.7	58.4
Tons (kW)	(17)	(25)	(33)	(50)	(67)	(87)	(100)	(134)	(161)	(205)
454B 50hz¹	4.4	6.7	9.1	13.3	18.1	23.7	26.7	35.8	43.1	55.0
Tons (kW)	(16)	(24)	(32)	(47)	(64)	(83)	(94)	(126)	(152)	(193)

1.) Net cooling capacity available @50F LWT and 85°F entering condenser water with standard pump (50hz)

WATER-COOLED GPL - Power, 50 hz

TONS	5	7.5	10	15	20	25	30	40	50	60
FLA¹	11.6	17.7	21.5	28.8	43.5	48.1	54.5	68.2	81.0	101.8

1.) Full Load Amperage (FLA) @ 400/3/50 with standard pump

WATER-COOLED GPL - Condenser Flow

TONS	5	7.5	10	15	20	25	30	40	50	60
Flow 60hz¹										
410A	16	25	33	49	67	86	99	133	160	205
gpm (lpm)	(60)	(96)	(125)	(187)	(252)	(326)	(374)	(504)	(604)	(777)
Flow 50hz¹										
410A	13	21	28	41	55	72	82	110	132	169
gpm (lpm)	(49)	(78)	(105)	(154)	(209)	(271)	(309)	(417)	(501)	(639)
Flow 60hz¹										
454B	17	24	31	46	63	82	92	124	150	191
gpm (lpm)	(64)	(89)	(119)	(175)	(238)	(310)	(349)	(470)	(566)	(723)
Flow 50hz¹										
454B	14	20	26	38	52	68	77	104	125	158
gpm (lpm)	(52)	(74)	(99)	(145)	(198)	(258)	(291)	(392)	(472)	(597)

1.) Cooling water condenser flow, 10°F delta

Product Diagrams



**GPL05A
GPL07A**



**GPL10A
GPL15A**



**GPL20A
GPL25A
GPL30A**



**GPL40A
GPL50A**



GPL60A