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Portable Chillers Temperature Control Units



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PORTABLE CHILLERS



# SMC Series 1/2 to 3-1/2 HP Portable Chiller

### SMC $\frac{1}{2}$ to $\frac{1}{2}$ HP Features:

- Environmentally safe HFC-134a
- Compact, serviceable cabinet with space-saving 20" x 26" footprint
- Hermetic reciprocating compressor
- Regenerative turbine horizontally-mounted pump
- Non-ferrous construction piping
- Tube-in-tube evaporator

### SMC 2 to 3<sup>1</sup>/<sub>2</sub> HP Features:

- R410a refrigerant
- Compact footprint
- Branch motor fusing
- Non-fused disconnet switch with single point power connection
- Energy efficient scroll compressor
- "Y" strainer on process water line to evaporator

# **GP Series 5-15 HP Portable Chiller**



- Environmentally friendly, R410a refrigerant
  Branch motor fusing
- "Y" strainer on process water line to evaporator
- Off-the-shelf modular controller is accurate to within +/- 1°F (+/- 0.6°C)
- Easy-to-read LCD display showing system operating status, Set Point and To-Process temperature; remote mount without special configuration
- Multiple screen, 20 character x 8 line display
- Stamped, stainless steel, horizontally mounted pump assures reliability
- Optional web access to controller allows remote diagnostic from qualified technician

# **GP Series 20-60 HP Portable Chiller**



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- Environmentally friendly, R410a refrigerant
- Branch motor fusing
- "Y" strainer on process water line to evaporator
- Off-the-shelf modular controller is accurate to within +/- 1°F (+/- 0.6°C)
- Easy-to-read LCD display showing system operating status, Set Point and To-Process temperature; remote mount without special configuration
- Multiple screen, 20 character x 8 line display
- Stamped, stainless steel, horizontally mounted pump assures reliability
- Optional web access to controller allows remote diagnostic from qualified technician









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**PORTABLE CHILLERS** 

### SMC Series 1/2 to 1-1/2 HP Portable Chiller

Model.	Comp., HP (kW)	Standard pump	Nominal chilled water, gpm (lpm)	Refrigerant	Process connection, in. NPT	Oper. weight, lbs. (kg)	Ship. weight, lbs. (kg)
SMC 050	0.5 (0.373)	1.5 gpm @ 24 psig (4.5 lpm @ 207 kPa)	1.2 (4.5)	HFC 134A	0.75	265 (121)	275 (125)
SMC 100	1 (0.746)	2.4 gpm @ 34 psig (9.0 lpm @ 234 kPa)	2.4 (9.0)	HFC 134A	0.75	325 (148)	335 (153)
SMC 150	1.5 (1.12)	3.6 gpm @ 24 psig (13.6 lpm @ 07 kPa)	3.6 (13.6)	HFC 134A	0.75	345 (157)	355 (162)

### SMC Series 2 and 3-1/2 HP Air Cooled/Water Cooled/Remote Air Cooled Portable Chiller

Model Com	Compressor	Evaporator Reser	Reservoir	oir Pump HP	Height, in. (mm)	Width, in. (mm)	Depth, in. (mm)	Weights, Ibs (kg)		
	Compressor		Kesel voli					PSA	PSW	PSR
SMC 2	Hermetic scroll	Stainless steel copper	6 gallons	1	PSA-49.66; PSW-	22	41.68	417	440	n/a
SMC 3.5		brazed plate	o guilons	I	28.31			440	392	n/a

#### GP Series 5-15 HP Air Cooled/Water Cooled/Remote Air Cooled Condensers — 60 Hz

Мос	del	20 (5TR)	30 (7.5TR)	40 (10TR)	50 (15TR)				
Compr	ressor		Hermetic scroll with	compressor staging					
Compresso	r HP (kW)	5 (3.7)	7.5 (5.6)	10 (7.5)	15 (11)				
Evapo	rator	Stainless steel brazed plate							
Reservoi	r, gal (l)	20	(76)	40 (	151)				
Pump H	P (kW)	1.5 (1.1)	2 (1.5)		3 (2.2)				
	GPAC	63 (1600)	81.5 (2070)	80.5 (2044)	99 (2515)				
Height (in, mm)	GPWC	60.5 (1537)	60.5 (1537)	60.5 (1537)	70 (2007)				
(,,	GPRC	00.3 (1537)	00.3 (1537)	00.3 (1537)	79 (2007)				
Depth (i	n, mm)	35	(889)	44 (1118)					
Width (i	n, mm)		35 (	889)					
	GPAC	520 (225)	700 (320)	740 (245)	050 (430)				
Weight Ibs (kg)	GPWC	520 (235)	700 (320)	760 (345)	950 (430)				
(Kg/	GPRC	550 (250)	730 (335)	790 (360)	980 (445)				

Note: Model names represent the nominal kW cooling capacity of each chiller model. (TR) represents tons of refrigeration.

### GP Series 20-60 HP Air Cooled/Water Cooled/Remote Air Cooled Condensers — 60 Hz

Мос	del	70 (20TR)	90 (25TR)	105 (30TR)	140 (40TR)	175 (50TR)	210 (60TR)				
Compr	essor	Hermetic scroll with compressor staging									
Compresso	r HP (kW)	20 (15)	25 (18.7)	30 (22.4)	40 (30.0)	50 (37.3)	60 (45.0)				
Evapo	rator	Stainless steel brazed plate									
Reservoi	r, gal (l)		70 (265)			140 (530)					
Pump H	P (kW)		5 (3.7)								
	GPAC	82 (2	2083)		100 (2540)						
Height (in, mm)	GPWC	70 (2007)									
(,)	GPRC	79 (2007)									
	GPAC				105 (	140 (3556)					
Depth (in, mm)	GPWC		70 (1778)		105 (2667)						
(,)	GPRC				105 (2007)						
Width (i	n, mm)			44	(1118)						
	GPAC	1420 (645)	1520 (690)	1900 (864)	2280 (1035)	2850 (1295)	3800 (1725)				
Weight Ibs (kg)	GPWC	1410 (640)	1510 (686)	1880 (855)	2210 (1005)	2790 (1268)	3630 (1650)				
100 (Kg/	GPRC	1420 (645)	1520 (690)	1900 (864)	2280 (1035)	2850 (1295)	3800 (1725)				

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Note: Model names represent the nominal kW cooling capacity of each chiller model. (TR) represents tons of refrigeration.

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## TEMPERATURE CONTROL UNITS



# Micro Series 1/2 and 3/4 HP Temperature Control Unit

Each Micro Series Temperature Control Unit delivers huge performance in a compact package. Available with heater configurations in 3kW, 6kW, or 9kW, these units provide consistent and reliable heating, just the kind of innovation you expect from the leader in temperature control.

- Stainless steel pumps available in 1/2 hp and 3/4 hp with 15 gpm (57 lpm) to 20 gpm (76 lpm) capacities
- An off-the-shelf 1/16th DIN processor-based PID fuzzy logic controller accurate to within +/-1°F
- Operating temperature range of 32°F(0°C) to 250°F (121°C)
- Small footprint and compact size at 23" (58cm) x 17.5" (44cm)



### SEU Series 3/4 to 7-1/2 HP Temperature Control Unit

The SEU Series Water Temperature Control Unit meets all of your temperature control needs. Standard features include vertically mounted Incoloy immersion heaters, bronze-fitted centrifugal pumps from 3/4 hp to 7-1/2 hp, solenoid valves up to 3/4" NPT, branch circuit fusing, and automatic vent sequence.

- Off-the-shelf microprocessor based PID temperature controller with Process and Setpoint LED readouts
- Graphic control panel with indicator and warning lights
- Compact cabinet
- Branch fusing
- Independent high temperature safety thermostat



# Royal Series 3/4 to 10 HP Temperature Control Unit

Compact units are available in 9kW, 12kW, 18kW, or 24kW configurations. Upright units are available in 9kW, 12kW, 18kW, 36kW, or 48kW configurations. These units provide consistent and reliable heating where city, tower, or chilled water is too cold for direct process use. To minimize energy consumption, a half heat/full heat feature is incorporated into the control circuit.

- Rugged all-cast design minimizes connection points to increase water circuit integrity
- $\bullet$  An off-the-shelf, DIN-style, auto-tuning PID fuzzy logic controller accurate to within +/-1°F
- High-flow pumps with 30 gpm to 120gpm capacities
- 2010 Compact: 13"W X 27"D X 28 3/8"H
- 2012 Upright: 13"W X 27"D X 48"H





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TEMPERATURE CONTROL UNITS

### **Micro Series Temperature Control Unit**

Pump, HP (kW)	Flow, gpm (lpm)	Pressure, psig (bar)	FLA, 3 kW @ 460/3/60	FLA, 6 kW @ 460/3/60	FLA, 9 kW @ 460/3/60	Height, in. (cm)	Width, in. (cm)	Depth, in. (cm)	Ship. weight, Ibs. (kg)
0.5 (0.37)	15 (57)	20 (138)	5.3	8.5	12.3	17.5 (44)	9.5 (24)	23 (58)	110 (50)
0.75 (0.56)	20 (76)	23 (159)	5.7	8.9	12.7	17.5 (44)	9.5 (24)	23 (58)	110 (50)

### **SEU Series Temperature Control Unit**

Pump, HP (kW)	Flow, gpm (lpm)	Pressure, psig (bar)	FLA, 9 kW @ 460/3/60	FLA, 12 kW @ 460/3/60	Height, in. (mm)	Width, in. (mm)	Depth, in. (mm)	Ship. weight, lbs. (kg)
0.75 (0.56)	30 (114)	25 (1.7)	12.7	16.5	25 (635)	12.25 (311)	26 (660)	210 (95)
1 (0.75)	35 (132)	30 (2.0)	13.1	16.9	25 (635)	12.25 (311)	26 (660)	210 (95)
2 (1.49)	50 (189)	30 (2.0)	14.7	18.5	25 (635)	12.25 (311)	26 (660)	210 (95)
3 (2.24)	60 (227)	40 (2.7)	16.1	19.9	25 (635)	12.25 (311)	26 (660)	210 (95)
5 (3.73)	75 (284)	50 (3.4)	18.9	22.7	25 (635)	12.25 (311)	26 (660)	240 (109)
7.5 (5.6)	90 (341)	50 (3.4)	22.3	26.1	25 (635)	12.25 (311)	26 (660)	240 (109)

## **Royal Series Temperature Control Unit**

Style	Pump, hp (kW)	Flow, gpm (lpm)	Pressure, psig (kPa)	FLA, 9 kW @ 460/3/60	Height, in. (cm)	Width, in. (cm)	Depth, in. (cm)	Ship. weight, Ibs. (kg)
	0.75 (0.56)	30 (113.6)	25 (172.4)	12.7	28.75 (73)	13 (33)	28 (71.1)	210 (96)
	1 (0.75)	35 (132.5)	30 (206.9)	13.1	28.75 (73)	13 (33)	28 (71.1)	210 (96)
Comparet	2 (1.5)	50 (189.3)	30 (206.9)	14.7	28.75 (73)	13 (33)	28 (71.1)	210 (96)
Compact	3 (2.24)	60 (227.1)	35 (241.3)	16.1	28.75 (73)	13 (33)	28 (71.1)	210 (96)
	5 ( 3.73)	90 (340.7)	50 (344.8)	18.9	28.75 (73)	13 (33)	28 (71.1)	240 (109)
	7.5 (5.6)	120 (454.2)	50 (344.8)	22.3	28.75 (73)	13 (33)	28 (71.1)	240 (109)
	0.75 (0.56)	30 (113.6)	25 (172.4)	12.7	48 (122)	13 (33)	28 (71.1)	210 (96)
	1 (0.75)	35 (132.5)	30 (206.9)	13.1	48 (122)	13 (33)	28 (71.1)	210 (96)
	2 (1.5)	50 (189.3)	30 (206.9)	14.7	48 (122)	13 (33)	28 (71.1)	210 (96)
Upright	3 (2.24)	60 (227.1)	35 (241.3)	16.1	48 (122)	13 (33)	28 (71.1)	210 (96)
	5 ( 3.73)	75 (283.9)	50 (344.8)	18.9	48 (122)	13 (33)	28 (71.1)	240 (109)
	7.5 (5.6)	75 (283.9)	50 (344.8)	22.3	48 (122)	13 (33)	28 (71.1)	240 (109)
	10 (7.46)	90 (340.7)	55 (379.2)	25.3	48 (122)	13 (33)	28 (71.1)	270 (123)



The M2B+ controller includes a 4 line x 20 character LCD display and fuzzy logic for higher accuracy and better repeatability.



The 1/16 DIN controller offers a user-friendly control panel that features a highly accurate non-proprietary controller with operating status and alarm indicating lights.

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## TEMPERATURE CONTROL UNITS



## 6010 Hot Oil Temperature Control Unit

Compact in size, but big in performance, 6010 oil temperature control units provide accurate process temperature control wherever you want it—not wherever it fits. This versatile unit's controls and connections are optimally located for ease of use and hookup.

- Off-the-shelf auto-tune microprocessor-based PID temperature controller with process and set value LED readout
- 2-gallon (8-liter) reservoir
- Check valve on water supply
- IEC contactors
- Compact cabinet with removable panels
- Branch fusing
- 1.5 sq. ft. heat exchanger



### 2016M Midsize Hot Oil Temperature Control Unit

The 2016M Series Hot Oil Temperature Control Unit provides highly accurate control for production applications requiring a continuous supply of high temperature controlled fluids.

- Single or dual zone (2TCO) models available
- 6 kW heater [maximum operating temp of 400°F (204°C)]
- Microprocessor controller with fuzzy logic
- System status graphic display
- Dual stage immersion heater(s) with IEC contactors
- 550°F (288°C) maximum operating temperature
- Branch circuit protection

# 2016U Hot Oil Temperature Control Unit

The 2016U Series is designed for easy maintenance and immediate hook-up to process. A rugged cabinet with removable panels provides easy access to all components.

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- 550°F (288°C) maximum operating temperature
- Branch fusing
- Non-fused lockable rotary disconnect
- Independent safety thermostat with safety connector
- Y-strainer on From Process line
- Pressure-activated bypass valve
- To Process pressure gauge
- Dual stage immersion heater with IEC contactors







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TEMPERATURE CONTROL UNITS

### 6010 Series Temperature Control Unit

Model	Pump, hp (kW) Flow, gpm (lpm)		Pressure, psi (kPa, bars)	Dimensions, in. (mm)	Ship Weights, lbs. (kg)	
				Height 27 (705)		
M2B-6010-D	0.75 (0.56)	6 (22.7)	50 (344.8, 3.45)	Width 13 (330)	265 (120)	
				Depth 31 (787)	1	

### 2016M Series Temperature Control Unit

Model	Model Pump, hp (kW)		Height, in. (cm)	Width, in. (cm)	Depth, in. (cm)	Ship. weight, lbs. (kg)
2016M-1	1 (0.746)	18 (68.1)	46 (117)	18.25 (46)	42 (107)	600 (273)
2016M-1.5	1.5 (1.119)	18 (68.1)	46 (117)	18.25 (46)	42 (107)	600 (273)
2016M-2	2 (1.492)	24 (90.8)	46 (117)	18.25 (46)	42 (107)	600 (273)
2026M-1 (2 zone)	1 (0.746)	18 (68.1)	46 (117)	36.5 (93)	42 (107)	1200 (546)
2026M-1.5 (2 zone)	1.5 (1.119)	18 (68.1)	46 (117)	36.5 (93)	42 (107)	600 (273)
2026M-2 (2 zone)	2 (1.492)	24 (90.8)	46 (117)	36.5 (93)	42 (107)	600 (273)

## 2016U Series Temperature Control Unit

	Model		20	16U-xx		2026U-xx				
	Model		1.5 hp	2 hp	3 hp	1 hp	1.5 hp	2 hp	3 hp	
Reservoir Capacit	Reservoir Capacity (gal)				17 gallons e	ach zone		-		
	HP (kW)	1 (0.75)	1.5 (1.1)	2 (1.5)	3 (2.2)	1 (0.75)	1.5 (1.1)	2 (1.5)	3 (2.2)	
	Flow, gpm (lpm)	18	(68)	24 (91)	50 (227)	18	(68)	24 (91)	50 (227)	
TEFC Pump	Pressure, psig (bar)	30 (2.0)	50 (3.4)	30/50 (2.0/5.4)	50 (5.4)	30 2.0)	50 (3.4)	30/50 (2.0/5.4)	50 (5.4)	
	Connection Size, in.	1"			1.5"	ן"			1.5"	
	Height, in.				62 (1,575)					
Dimensions	Width, in.		24 (610)				48 (1,220)			
Dimensions	Depth, in.				34 (864) ≤ 44 (1,118) >	864) ≤ 24 kW ,118) > 24 kW				
Shipping	≤ 24 kW		700 (318)		850 (386)	1400 (635)			1700 (771)	
Wt, lbs. (kg)	> 24 kW		950 (431)		1050 (476)	1900 (862)			2100 (953)	



The M2B+ controller includes a 4 line x 20 character LCD display and fuzzy logic for higher accuracy and better repeatability.



The 1/16 DIN controller offers a user-friendly control panel that features a highly accurate non-proprietary controller with operating status and alarm indicating lights.

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