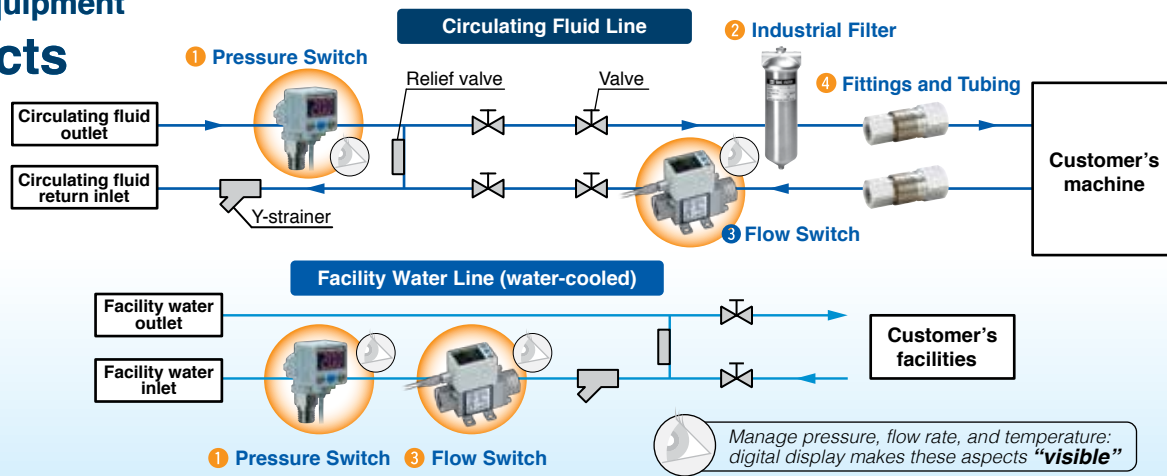
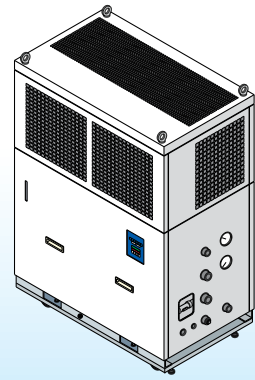


Temperature Control Equipment Related Products



1 Pressure Switch: Monitors pressure of the circulating fluid and facility water. Refer to Best Pneumatics No. 6 for details.

2-Color Display High-Precision Digital Pressure Switch ISE80

- Stainless diaphragm
- IP65
- VCR®, Swagelok® compatible fittings can be selected.

Pressure Sensor for General Fluid PSE56□ Pressure Sensor Controller PSE200, 300

- Wetted parts: Stainless steel 316L
- IP65
- VCR®, Swagelok® compatible fittings can be selected.

2 Industrial Filter: Filters the circulating fluid and facility water. Refer to Best Pneumatics No. 7 for details.

Quick Change Filter FQ1

- Port size: Rc1/2, 3/4, 1
- Filtration flow rate: Max. 30 L/min
- No tools required
- Takes only 60 seconds for element replacement.

Industrial Filter/Vessel Series FGD

- Port size: Rc3/8, 1/2, 3/4
- Filtration flow rate: Max. 60 L/min

High-Precision Filter for Fluid FGH

- Port size: Rc3/8 to 1
- Filtration flow rate: Max. 30 L/min
- HEPO II element, Membrane element

3 Flow Switch: Monitors the flow rate and temperature of the circulating fluid and facility water. Refer to Best Pneumatics No. 6 for details.

Digital Flow Switch for Water PF3W

Integrated with temperature sensor

- Set flow rate range (L/min)
 - 0.5 to 4
 - 2 to 16
 - 5 to 40
 - 10 to 100
- Three-color display, two-screen display
- IP65 compliant
- Grease-free

Digital Flow Switch for Deionized Water and Chemicals PF2D 4-Channel Flow Monitor PF2□200

- Set flow rate range (L/min)
 - 0.4 to 4
 - 1.8 to 20
 - 4.0 to 40
- Material
 - Body sensor: New PFA
 - Tube: Super PFA

4 Fittings and Tubing Refer to Best Pneumatics No. 6 for details.

S Coupler KK

- Applicable tube O.D.: ø3.2 to ø16
- Port size: M5 to 25A (3/4)

S Coupler/Stainless Steel KKA (Stainless Steel 304)

- Port size: 6A to 50A (1/8 to 1 1/2)

Metal One-touch Fittings KQB2

- Applicable tube O.D.: ø3.2 to ø16

Fluoropolymer Fittings LQ

- Applicable tube O.D.: ø3 to ø25

Stainless Steel 316 One-touch Fittings KQG2

- Applicable tube O.D.: ø3.2 to ø16

Tubing T□

Series	Material	O.D.
T	Nylon	ø4 to ø16
TU	Polyurethane	ø4 to ø16
TH	FEP (fluoropolymer)	ø4 to ø12
TD	Modified PTFE (soft fluoropolymer)	ø4 to ø12
TL	Super PFA	ø4 to ø19

Stainless Steel 316 Insert Fittings KFG2

- Applicable tube O.D.: ø4 to ø16

RECIRCULATING CHILLERS

Precision Temperature Control

Inside:
Reference Chart for
AIR COOLED
models



Series HRSH

- High capacity models
- Inverter controlled motors save power



Series HECR

- Solid state Peltier for high stability
- Rack mounting for space savings



Series HRS

- Compact and capable
- Suitable for a wide variety of industrial and technology applications



SMC Corporation of America
10100 SMC Blvd., Noblesville, IN 46060
www.smcusa.com
SMC Pneumatics (Canada) Ltd.
www.smc Pneumatics.ca

(800) SMC.SMC1 (762-7621)
e-mail: sales@smcusa.com
For International inquires: www.smcworld.com



SMC Recirculating Chillers Quick Reference

Model Number	Rated Cooling Capacity ¹			Pump Capacity ²		Max Pressure		Set Point Range		Temperature Stability		Power Requirement ³		Sound Level dB(A)	Dimensions						Dry Weight	
	kw	Tons	BTU/hour	GPM	lpm	MPa	PSI	°C	F	°C	°F	Input Voltage (VAC, phase, Hz)	Rated Power (kVA)		mm			inches			kg	lbs
															W	D	H	W	D	H		
HECR002-A5N	0.2	0.1	683	0.8	3.0	N/A	N/A	10 - 60	50 - 140	+/-0.01 - 0.03	+/-0.02 - 0.05	100-240, 1, 50/60	0.44	49	484	300	176	19.1	11.8	6.9	14	31
HECR004-A5N	0.4	0.1	1,366	0.8	3.0	N/A	N/A	10 - 60	50 - 140	+/-0.01 - 0.03	+/-0.02 - 0.05	100-240, 1, 50/60	0.9	60	484	350	176	19.1	13.8	6.9	17	37
HECR008-A5N	0.8	0.2	2,732	1.3	4.9	N/A	N/A	10 - 60	50 - 140	+/-0.01 - 0.03	+/-0.02 - 0.05	100-240, 1, 50/60	1	65	484	400	267	19.1	15.7	10.5	31	68
HECR010-A2N	1.0	0.3	3,414	1.3	4.9	N/A	N/A	10 - 60	50 - 140	+/-0.01 - 0.03	+/-0.02 - 0.05	200-240, 1, 50/60	1.6	65	484	400	267	19.1	15.7	10.5	33	73
HRS012-AN-20-T	1.0	0.3	3,414	4.0	15.2	0.69	99	5 - 40	41 - 104	+/-0.1	+/-0.18	200-230, 1, 50/60	1	61	377	500	615	14.8	19.7	24.2	49	108
HRS012-AN-20	1.3	0.4	4,439	7.0	26.6	0.19	27	5 - 40	41 - 104	+/-0.1	+/-0.18	200-230, 1, 50/60	1	61	377	500	615	14.8	19.7	24.2	43	95
HRS012-AN-10-T	1.0	0.3	3,414	3.2	12.2	0.54	78	5 - 40	41 - 104	+/-0.1	+/-0.18	100, 1, 50/60; 115, 1, 60	0.8	55	377	500	615	14.8	19.7	24.2	44	97
HRS012-AN-10	1.3	0.4	4,439	7.0	26.6	0.19	27	5 - 40	41 - 104	+/-0.1	+/-0.18	100, 1, 50/60; 115, 1, 60	0.8	55	377	500	615	14.8	19.7	24.2	40	88
HRS018-AN-20-T	1.6	0.4	5,463	4.0	15.2	0.69	99	5 - 40	41 - 104	+/-0.1	+/-0.18	200-230, 1, 50/60	1	61	377	500	615	14.8	19.7	24.2	49	108
HRS018-AN-20	1.9	0.5	6,487	7.0	26.6	0.19	27	5 - 40	41 - 104	+/-0.1	+/-0.18	200-230, 1, 50/60	1	61	377	500	615	14.8	19.7	24.2	43	95
HRS018-AN-10-T	1.6	0.4	5,463	3.2	12.2	0.54	78	5 - 40	41 - 104	+/-0.1	+/-0.18	100, 1, 50/60; 115, 1, 60	0.8	55	377	500	615	14.8	19.7	24.2	44	97
HRS018-AN-10	1.9	0.5	6,487	7.0	26.6	0.19	27	5 - 40	41 - 104	+/-0.1	+/-0.18	100, 1, 50/60; 115, 1, 60	0.8	55	377	500	615	14.8	19.7	24.2	40	88
HRS024-AN-20-T	2.1	0.6	7,170	4.0	15.2	0.69	99	5 - 40	41 - 104	+/-0.1	+/-0.18	200-230, 1, 50/60	1.2	61	377	500	615	14.8	19.7	24.2	49	108
HRS024-AN-20	2.4	0.7	8,195	7.0	26.6	0.19	27	5 - 40	41 - 104	+/-0.1	+/-0.18	200-230, 1, 50/60	1.2	61	377	500	615	14.8	19.7	24.2	43	95
HRS030-AN-20-T	2.9	0.8	9,902	4.0	15.2	0.69	99	5 - 40	41 - 104	+/-0.1	+/-0.18	200-230, 1, 50/60	1.2	65	377	500	660	14.8	19.7	26.0	53	117
HRS030-AN-20	3.2	0.9	10,926	7.0	26.6	0.19	27	5 - 40	41 - 104	+/-0.1	+/-0.18	200-230, 1, 50/60	1.2	65	377	500	660	14.8	19.7	26.0	47	103
HRS050-AN-20	5.1	1.4	17,413	6.5	24.7	0.49	71	5 - 40	41 - 104	+/-0.1	+/-0.18	200-230, 1, 50/60	2.2	68	377	592	976	14.8	23.3	38.4	69	152
HRS060-AN-20	5.9	1.7	20,145	6.5	24.7	0.49	71	5 - 40	41 - 104	+/-0.1	+/-0.18	200-230, 1, 50/60	2.3	68	377	592	976	14.8	23.3	38.4	73	161
HRSH090-AN-20	9.5	2.7	32,437	15.0	57.0	0.49	71	5 - 40	41 - 104	+/-0.1	+/-0.18	200, 3, 50; 200-230, 3, 60	5.2	66	377	970	1080	14.8	38.2	42.5	130	286
HRSH090-AN-40	9.5	2.7	32,437	15.0	57.0	0.49	71	5 - 40	41 - 104	+/-0.1	+/-0.18	380-415, 3, 50/60	5.6	66	377	970	1080	14.8	38.2	42.5	130	286
HRS100-AN-20	9.5	2.7	32,437	14.0	53.2	0.49	71	5 - 35	41 - 95	+/-1.0	+/-1.8	200, 3, 50; 200-230, 3, 60	5.3	70	954	616	1434	37.6	24.3	56.5	171	376
HRS100-AN-40	9.5	2.7	32,437	14.0	53.2	0.49	71	5 - 35	41 - 95	+/-1.0	+/-1.8	380-415, 3, 50/60	5.3	70	954	616	1434	37.6	24.3	56.5	171	376
HRSH100-AN-20	10.5	2.9	35,851	22.0	83.6	0.49	71	5 - 35	41 - 95	+/-0.1	+/-0.18	200, 3, 50; 200-230, 3, 60	4.9	68	954	715	1420	37.6	28.1	55.9	180	396
HRSH100-AN-40	10.5	2.9	35,851	22.0	83.6	0.49	71	5 - 35	41 - 95	+/-0.1	+/-0.18	380-415, 3, 50/60	5.1	68	954	715	1420	37.6	28.1	55.9	180	396
HRS150-AN-20	14.5	4.1	49,509	14.0	53.2	0.49	71	5 - 35	41 - 95	+/-1.0	+/-1.8	200, 3, 50; 200-230, 3, 60	6.7	70	954	616	1434	37.6	24.3	56.5	177	389
HRS150-AN-40	14.5	4.1	49,509	14.0	53.2	0.49	71	5 - 35	41 - 95	+/-1.0	+/-1.8	380-415, 3, 50/60	6.6	72	954	616	1434	37.6	24.3	56.5	177	389
HRSH150-AN-20	15.7	4.4	53,606	26.0	98.8	0.49	71	5 - 35	41 - 95	+/-0.1	+/-0.18	200, 3, 50; 200-230, 3, 60	6	68	954	715	1420	37.6	28.1	55.9	215	473
HRSH150-AN-40	15.7	4.4	53,606	26.0	98.8	0.49	71	5 - 35	41 - 95	+/-0.1	+/-0.18	380-415, 3, 50/60	6.4	68	954	715	1420	37.6	28.1	55.9	215	473
HRSH200-AN-20	20.5	5.7	69,995	26.0	98.8	0.49	71	5 - 35	41 - 95	+/-0.1	+/-0.18	200, 3, 50; 200-230, 3, 60	8.7	68	954	715	1420	37.6	28.1	55.9	215	473
HRSH200-AN-40	20.5	5.7	69,995	26.0	98.8	0.49	71	5 - 35	41 - 95	+/-0.1	+/-0.18	380-415, 3, 50/60	8.9	68	954	715	1420	37.6	28.1	55.9	215	473
HRSH250-AN-20	25.0	7.0	85,360	42.0	159.6	0.78	113	5 - 35	41 - 95	+/-0.1	+/-0.18	200, 3, 50; 200-230, 3, 60	11.6	68	1035	850	1720	40.7	33.5	67.7	280	616
HRSH250-AN-40	25.0	7.0	85,360	42.0	159.6	0.78	113	5 - 35	41 - 95	+/-0.1	+/-0.18	380-415, 3, 50/60	11.1	68	1035	850	1720	40.7	33.5	67.7	280	616
HRSH300-AN-20	28.0	7.8	95,603	42.0	159.6	0.78	113	5 - 35	41 - 95	+/-0.1	+/-0.18	200, 3, 50; 200-230, 3, 60	12.2	71	1035	850	1720	40.7	33.5	67.7	280	616
HRSH300-AN-40	28.0	7.8	95,603	42.0	159.6	0.78	113	5 - 35	41 - 95	+/-0.1	+/-0.18	380-415, 3, 50/60	12.3	71	1035	850	1720	40.7	33.5	67.7	280	616

Notes: ① HRS cooling capacity at 20°C SP, 25°C ambient, 60 Hz; HRSH cooling capacity at 20°C SP, 32°C ambient, 60 Hz ② For HRS012/018/024/030 with turbine pump and all other models, flow rate at 50 psi (0.35 Mpa) 60 Hz For HRS012/018/024/030 with magnetically coupled pump, flow rate at 26 psi (0.18 Mpa) 60 Hz ③ +/- 10% allowable voltage fluctuation

HRS General Use Compact Chiller

- PID control
- Heating function
- Tool-less filter maintenance
- 35 alarm functions
- Analog I/O and RS232C/RS485 serial communication
- R407C or R410A refrigerant
- UL standards, CE Marking



HECR Rack Mount Peltier Chiller

- PID control
- Heating function
- 14 alarm functions
- Analog I/O and RS232C/RS485 serial communication
- Refrigerant free
- UL standards, CE Marking



HRSH High Efficiency Inverter Chiller

- PID control
- Heating function
- Maintenance free immersion pump
- IPX4 outdoor/splash proof rated
- 42 alarm functions
- Analog I/O and RS232C/RS485 serial communication
- R410A refrigerant
- UL standards, CE Marking



For more information: www.smcusa.com/tempcontrol