



# Recirculating Chillers

Precision Temperature Control

## Inside:

Reference Chart  
for  
**AIR COOLED**  
models



## Series **HRSH**

- High capacity models
- Inverter controlled motors save energy



## 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



## Series **HRR**

- Refrigeration circuit for higher capacity
- Rack mounting for space savings



## Floor Mounted

Model Number	Rated Cooling Capacity <sup>1</sup>	Rated Pump Flow <sup>2</sup>	Rated Pump Capacity	Set Point Range	Power Supply <sup>3</sup>	International Standard		Sound Level	Dimensions			Dry Weight
	kw	lpm	MPa	°C	Input Voltage (VAC, phase, Hz)	CE	UL	dB(A)	mm			kg
									W	D	H	
HRS012-AN-10	1.3	7	0.18	5-40 ±0.1	115, 1, 60	•	•	55	377	500	615	40
HRS012-AN-10-T	1.0	10	0.42	5-40 ±0.1	115, 1, 60	•	•	55	377	500	615	44
HRS012-AN-20	1.3	7	0.18	5-40 ±0.1	200-230, 1, 50/60	•	•	61	377	500	615	43
HRS012-AN-20-T	1.0	14	0.40	5-40 ±0.1	200-230, 1, 50/60	•	•	61	377	500	615	49
HRS018-AN-10	1.7	7	0.18	5-40 ±0.1	115, 1, 60	•	•	55	377	500	615	40
HRS018-AN-10-T	1.4	10	0.42	5-40 ±0.1	115, 1, 60	•	•	55	377	500	615	44
HRS018-AN-20	1.9	7	0.18	5-40 ±0.1	200-230, 1, 50/60	•	•	61	377	500	615	43
HRS018-AN-20-T	1.6	14	0.40	5-40 ±0.1	200-230, 1, 50/60	•	•	61	377	500	615	49
HRS024-AN-20	2.4	7	0.18	5-40 ±0.1	200-230, 1, 50/60	•	•	61	377	500	615	43
HRS024-AN-20-T	2.1	14	0.40	5-40 ±0.1	200-230, 1, 50/60	•	•	61	377	500	615	49
HRS030-AN-20	3.2	7	0.18	5-40 ±0.1	200-230, 1, 50/60	•	•	65	377	500	660	47
HRS030-AN-20-T	2.9	14	0.40	5-40 ±0.1	200-230, 1, 50/60	•	•	65	377	500	660	53
HRS040-AN-20	4.2	7	0.18	5-40 ±0.1	200-230, 1, 50/60	•	•	68	377	592	676	53
HRS040-AN-20-T	4.2	28	0.23	5-40 ±0.1	200-230, 1, 50/60	•	•	68	377	592	676	53
HRS050-AN-20	5.1	28	0.32	5-40 ±0.1	200-230, 1, 50/60	•	•	68	377	592	976	69
HRS060-AN-20	5.9	28	0.29	5-40 ±0.1	200-230, 1, 50/60	•	•	68	377	592	976	73
HRS090-AN-20	9.0	45	0.5	5-35 ±0.5	200-230, 3, 60			73	377	970	1080	136
HRS090-AN-40	9.0	45	0.5	5-35 ±0.5	380-415, 3, 50/60	•		75	377	970	1080	136
HRSH090-AN-20	9.5	45	0.5	5-40 ±0.1	200-230, 3, 60	•	•	66	377	970	1080	130
HRSH090-AN-40	9.5	45	0.5	5-40 ±0.1	380-415, 3, 50/60	•	•	66	377	970	1080	130
HRS100-AN-20	9.5	56	0.5	5-35 ±1.0	200-230, 3, 60			70	954	616	1434	171
HRS100-AN-40	9.5	56	0.5	5-35 ±1.0	380-415, 3, 50/60	•		70	954	616	1434	171
HRSH100-AN-20	10.5	45	0.43	5-35 ±0.1	200-230, 3, 60	•	•	68	954	715	1420	180
HRSH100-AN-40	10.5	45	0.43	5-35 ±0.1	380-415, 3, 50/60	•	•	68	954	715	1420	180
HRS150-AN-20	14.5	56	0.5	5-35 ±1.0	200-230, 3, 60			70	954	616	1434	177
HRS150-AN-40	14.5	56	0.5	5-35 ±1.0	380-415, 3, 50/60	•		72	954	616	1434	177
HRSH150-AN-20	15.7	45	0.45	5-35 ±0.1	200-230, 3, 60	•	•	68	954	715	1420	215
HRSH150-AN-40	15.7	45	0.45	5-35 ±0.1	380-415, 3, 50/60	•	•	68	954	715	1420	215
HRS200-AN-46	20.5	45	0.45	5-35 ±1.0	460, 3, 60		•	75	954	752	1420	214
HRSH200-AN-20	20.5	45	0.45	5-35 ±0.1	200-230, 3, 60	•	•	68	954	715	1420	215
HRSH200-AN-40	20.5	45	0.45	5-35 ±0.1	380-415, 3, 50/60	•	•	68	954	715	1420	215
HRSH250-AN-20	25.0	125	0.5	5-35 ±0.1	200-230, 3, 60	•	•	68	1035	850	1720	280
HRSH250-AN-40	25.0	125	0.5	5-35 ±0.1	380-415, 3, 50/60	•	•	68	1035	850	1720	280
HRSH300-AN-20	28.0	125	0.5	5-35 ±0.1	200-230, 3, 60	•	•	71	1035	850	1720	280
HRSH300-AN-40	28.0	125	0.5	5-35 ±0.1	380-415, 3, 50/60	•	•	71	1035	850	1720	280

- 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



### 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



# Rack Mounted

Model Number	Rated Cooling Capacity <sup>1</sup>	Rated Pump Flow <sup>2</sup>	Rated Pump Capacity	Set Point Range	Power Supply <sup>3</sup>	International Standard		Sound Level	Dimensions			Dry Weight
	kw	lpm	MPa	°C	Input Voltage (VAC, phase, Hz)	CE	UL	dB(A)	W	mm D	H	kg
HECR002-A5N	0.2	3 max	0.09 max	10 - 60 ± (0.01 to 0.03)	100-240, 1, 50/60	•	•	49	484	300	176	14
HECR002-A5N-P	0.2	4 max	0.12 max	10 - 60 ± (0.01 to 0.03)	100-240, 1, 50/60	•	•	49	484	300	176	14
HECR004-A5N	0.4	3 max	0.14 max	10 - 60 ± (0.01 to 0.03)	100-240, 1, 50/60	•	•	55	484	400	176	18
HECR004-A5N-P	0.4	6 max	0.30 max	10 - 60 ± (0.01 to 0.03)	100-240, 1, 50/60	•	•	55	484	400	176	18
HECR006-A5N	0.5	4 max	0.15 max	10 - 60 ± (0.01 to 0.03)	100-240, 1, 50/60	•	•	55	484	400	176	21
HECR006-A5N-P	0.5	6 max	0.30 max	10 - 60 ± (0.01 to 0.03)	100-240, 1, 50/60	•	•	55	484	400	176	21
HECR008-A5N	0.8	5 max	0.14 max	10 - 60 ± (0.01 to 0.03)	100-240, 1, 50/60	•	•	54	484	400	267	31
HECR008-A5N-P	0.8	7 max	0.30 max	10 - 60 ± (0.01 to 0.03)	100-240, 1, 50/60	•	•	54	484	400	267	31
HECR010-A2N	1.0	5 max	0.14 max	10 - 60 ± (0.01 to 0.03)	200-240, 1, 50/60	•	•	54	484	400	267	33
HECR010-A2N-P	1.0	7 max	0.30 max	10 - 60 ± (0.01 to 0.03)	200-240, 1, 50/60	•	•	54	484	400	267	33
HRR012-AN-20	1.2	7	0.18	10 - 35 ±0.1	200-230, 1, 50/60	•	•	60	483	630	310	40
HRR012-AN-20-T	0.9	14	0.4	10 - 35 ±0.1	200-230, 1, 50/60	•	•	60	483	630	310	40
HRR018-AN-20	1.8	7	0.18	10 - 35 ±0.1	200-230, 1, 50/60	•	•	60	483	630	310	40
HRR018-AN-20-T	1.5	14	0.4	10 - 35 ±0.1	200-230, 1, 50/60	•	•	60	483	630	310	40
HRR024-AN-20	2.4	7	0.18	10 - 35 ±0.1	200-230, 1, 50/60	•	•	64	483	636	399	46
HRR024-AN-20-T	2.1	14	0.4	10 - 35 ±0.1	200-230, 1, 50/60	•	•	64	483	636	399	46
HRR030-AN-20	3.0	7	0.18	10 - 35 ±0.1	200-230, 1, 50/60	•	•	64	483	636	399	46
HRR030-AN-20-T	2.7	14	0.4	10 - 35 ±0.1	200-230, 1, 50/60	•	•	64	483	636	399	46

Notes: ① HECR cooling capacity at 20°C SP, 25°C ambient, 3 L/min (002 to 006) or 4 L/min (008, 010); HRR capacity at rated flow  
 ② +/- 10% allowable voltage fluctuation

## 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

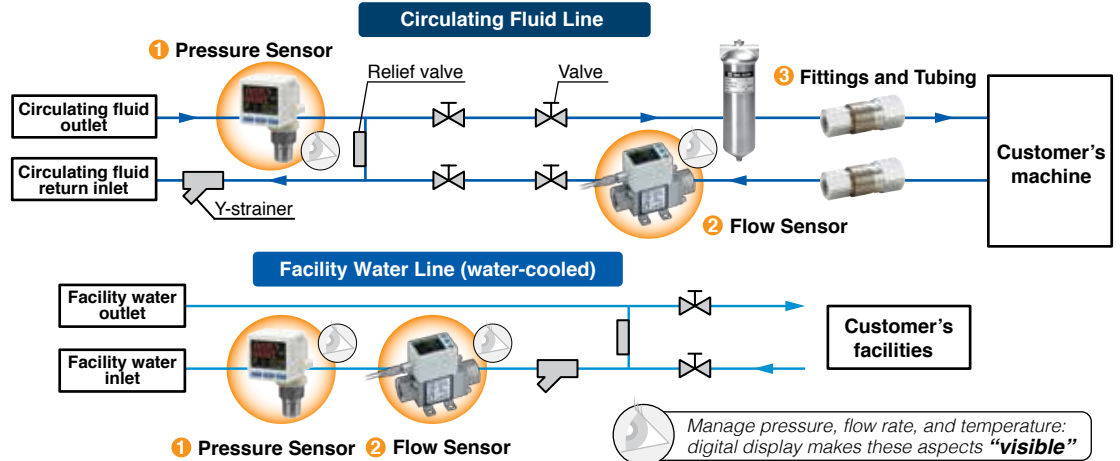


## HRR High Efficiency Inverter Chiller

- PID control
- Heating function
- Analog I/O and RS232C/RS485 serial communication
- R410A refrigerant
- UL standards, CE marking



For more information: [www.smcusa.com/products/chillers](http://www.smcusa.com/products/chillers)



**1 Pressure Sensor: Monitors pressure of the circulating fluid and facility water** [www.smcusa.com/tempcontrol](http://www.smcusa.com/tempcontrol)



3-Screen Display  
High-Precision Digital  
Pressure Sensor **ISE20C**

- Stainless steel wetted parts
- IP65 Enclosure
- Rear or bottom ported



Remote Pressure Sensor for Liquids **PSE570**  
Pressure Sensor Monitor **PSE300AC**

- Sensor wetted parts: Stainless steel 316L
- Sensor and monitor: IP65
- Sensor and monitor: M12 connections
- Monitor: 3-screen, 3-color display



**2 Flow Sensor: Monitors the flow rate and temperature of the circulating fluid and facility water** [www.smcusa.com/tempcontrol](http://www.smcusa.com/tempcontrol)



Digital Flow Sensor 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 Sensor 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



**3 Fittings and Tubing** [www.smcusa.com/tempcontrol](http://www.smcusa.com/tempcontrol)

S Coupler **KK**



S Coupler/Stainless Steel **KKA**  
(Stainless Steel 304)



Metal One-touch Fittings **KQB2**



Fluoropolymer Fittings **LQ**



Stainless Steel 316  
One-touch Fittings **KQG2**



Tubing **T□**



Stainless Steel 316  
Insert Fittings **KFG2**



Series		Material
Metric	Inch	
<b>T</b>	<b>TIA</b>	Nylon
<b>TU</b>	<b>TIUB</b>	Polyurethane
<b>TH</b>	<b>TIH</b>	FEP (fluoropolymer)
<b>TD</b>	<b>TID</b>	Modified PTFE (soft fluoropolymer)
<b>TL</b>	<b>TIL</b>	Super PFA
<b>TLM</b>	<b>TILM</b>	PFA

XP-RRD-2.5M

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