

Supplemental Installation Information for APC Chillers

This document contains reference information needed to connect APC equipment to APC chillers.

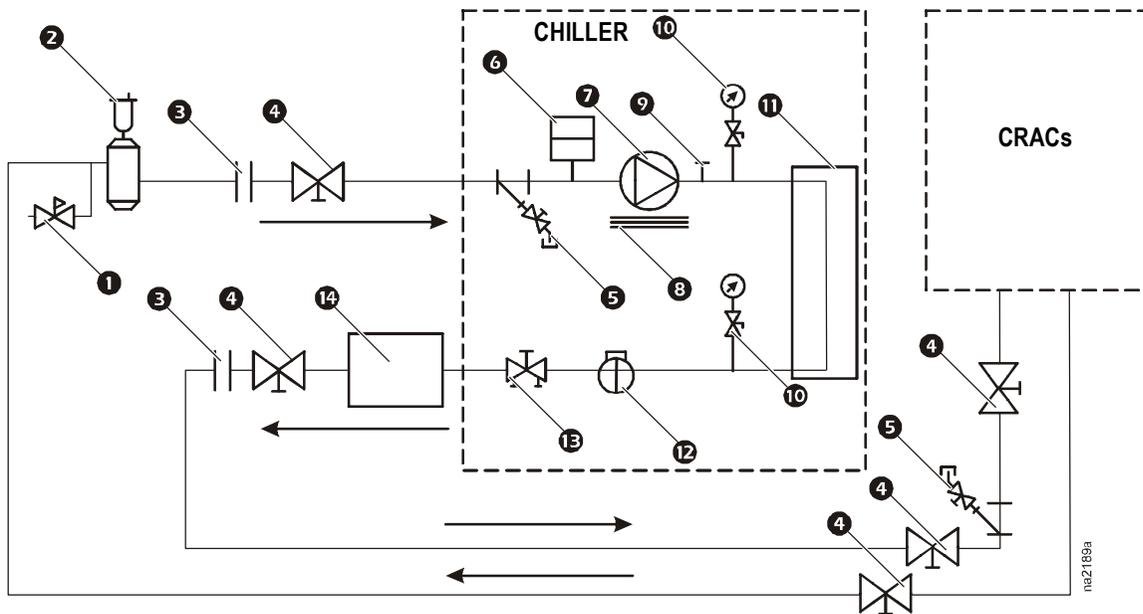


All water and electrical connections must be performed by a qualified contractor in accordance with local and national codes.

Model Cross Reference Information

APC MODEL NUMBER	CARRIER MODEL NUMBER
ACCH050	30RAN015
ACCH084	30RAN025
ACCH120	30RAN035
ACCH167	30RAN050

Typical Piping — Single Chiller



Components inside dashed lines are included with the chiller and CRACs. All other items (valves, piping, etc.) are customer-supplied.

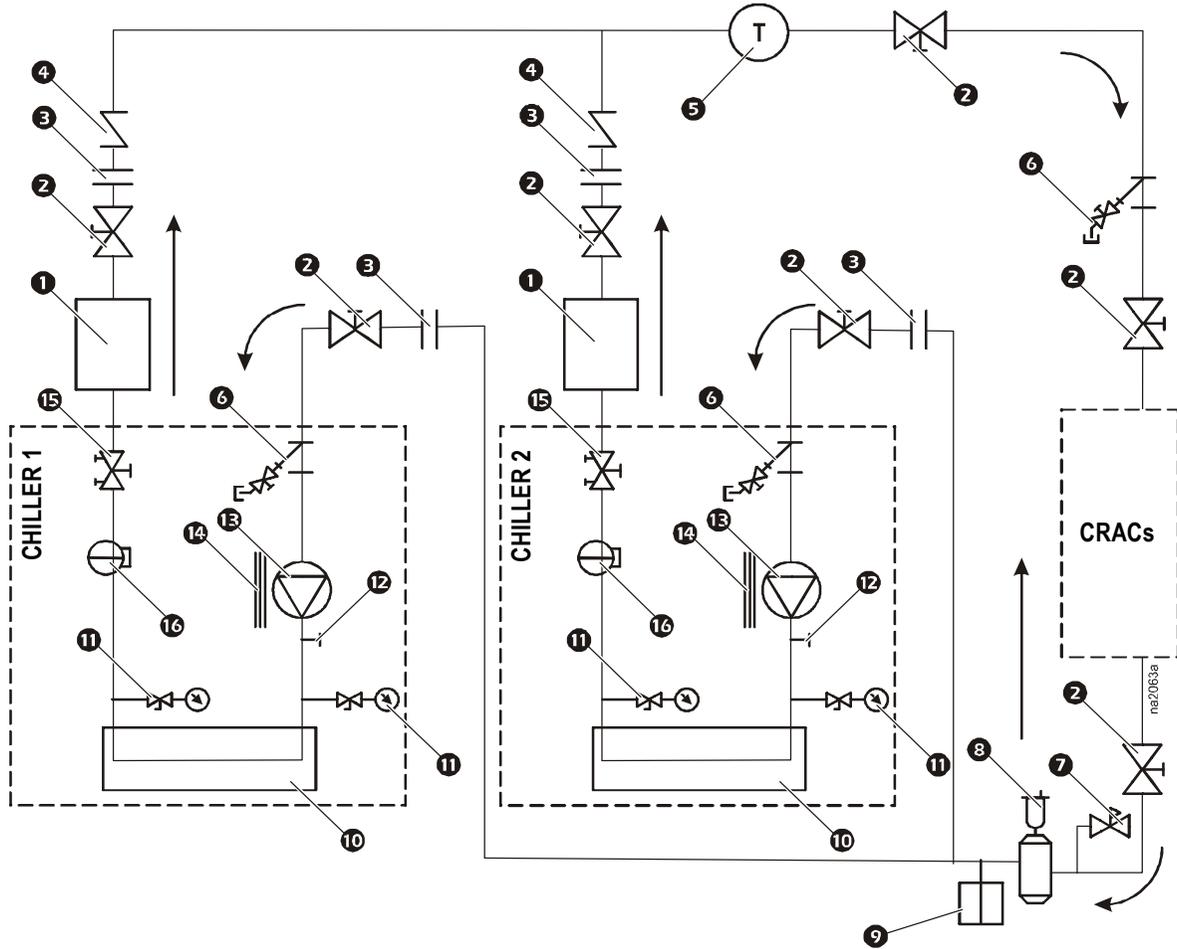
Note

- | | | | |
|---|------------------------------|---|---------------------------|
| ① | Pressure reducing/fill valve | ⑧ | Electric heater |
| ② | Air separator and vent* | ⑨ | Air vent connection port |
| ③ | Flex connections | ⑩ | Pressure gauges/petcocks |
| ④ | Isolation valves | ⑪ | Heat exchanger |
| ⑤ | Strainer/blow-down valve | ⑫ | Flow switch |
| ⑥ | Expansion tank | ⑬ | Balance valve/drain plug |
| ⑦ | Dual pump | ⑭ | Storage tank — optional** |

* Install at the highest point in the system.

**To provide the coldest possible water to the load, install the optional storage tank on the leaving side of the chiller

Typical Piping — Redundant Chillers



Components inside dashed lines are included with the chillers and CRACs. All other items (valves, piping, etc.) are customer-supplied.

Note

- | | |
|--------------------------------------|----------------------------|
| ① Storage tank — optional* | ⑨ Expansion tank**** |
| ② Isolation valves | ⑩ Heat exchanger |
| ③ Flex connections | ⑪ Pressure gauges/petcocks |
| ④ Check valves | ⑫ Air vent connection port |
| ⑤ Chilled water temperature sensor** | ⑬ Dual pump |
| ⑥ Strainer/blow-down valve | ⑭ Electric heater |
| ⑦ Pressure reducing/fill valve | ⑮ Balance valve/drain plug |
| ⑧ Air separator and vent*** | ⑯ Flow switch |

* To provide the coldest possible water to the load, install the optional storage tank on the leaving side of the chiller

** Chilled water temperature sensor should be wired to both chillers.

*** Install at the highest point in the system.

**** When applied in redundant chillers, disconnect the expansion tank and install a single expansion tank in the common header.

Dual Power Feature (Optional)

The optional dual power feature provides a separate power connection point for the pumps and controls. If the circuit is connected to an Uninterruptible Power Supply (UPS), the power connection keeps the pumps running to recirculate cooling water in the event of a power failure.

Upon loss of power, all compressors and fans shut down. At the same time, the dual-power relay closes, putting the unit in heat mode, allowing the controller to keep the pumps running and also removes any call for cooling.

On power restoration, the dual power relay opens. The unit returns to cooling mode and stages up compressors as required.

See the electrical schematics included in this packet containing electrical data on the power feeds for the pumps and chiller.

Power Requirements

APC Model No	Main Power Supply								Dual Power Supply for Pumps and Controls							Pump LRA	
	Volts AC	PH	Hz	Max Volts	Min Volts	MCA	MOCP	FLA	Volts AC	PH	Hz	Max Volts	Min Volts	MCA	MOCP		FLA
ACCH050G-AKA-D03S	460	3	60	506	414	37.3	60	33.3									
ACCH084G-AKA-D03S	460	3	60	506	414	54.0	70	50.9									
ACCH120G-AKA-D05S	460	3	60	506	414	79.5	100	75.5									
ACCH167G-AKA-D05S	460	3	60	506	414	101.8	110	98.7									
ACCH050G-ADA-D03S	460	3	60	506	414	33.6	50	29.6	460	3	60	506	414	15.0	15	5.7	28.5
ACCH084G-ADA-D03S	460	3	60	506	414	50.3	70	47.2	460	3	60	506	414	15.0	15	5.7	28.5
ACCH120G-ADA-D05S	460	3	60	506	414	73.2	90	69.2	460	3	60	506	414	15.0	15	8.3	65.0
ACCH167G-ADA-D05S	460	3	60	506	414	95.5	110	92.4	460	3	60	506	414	15.0	15	8.3	65.0
ACCH050G-ABA-D03S	208/ 230	3	60	253	187	77.5	125	69.3									
ACCH084G-ABA-D03S	208/ 230	3	60	253	187	110.6	150	104.4									
ACCH120G-ABA-D05S	208/ 230	3	60	253	187	167.3	200	159.1									
ACCH167G-ABA-D05S	208/ 230	3	60	253	187	208.6	225	198.3									
ACCH050G-AAA-D03S	208/ 230	3	60	253	187	69.3	110	59.1	208/230	3	60	253	187	15.0	15	10.2	60.0
ACCH084G-AAA-D03S	208/ 230	3	60	253	187	102.4	125	94.2	208/230	3	60	253	187	15.0	15	10.2	60.0
ACCH120G-AAA-D05S	208/ 230	3	60	253	187	153.4	200	143.2	208/230	3	60	253	187	17.4	30	15.9	138.8
ACCH167G-AAA-D05S	208/ 230	3	60	253	187	194.6	225	186.4	208/230	3	60	253	187	17.4	30	15.9	138.8

APC Worldwide Customer Support

Customer support for this or any other APC product is available at no charge in any of the following ways:

- Visit the APC Web site to access documents in the APC Knowledge Base and to submit customer support requests.
 - **www.apc.com** (Corporate Headquarters)
Connect to localized APC Web sites for specific countries, each of which provides customer support information.
 - **www.apc.com/support/**
Global support searching APC Knowledge Base and using e-support.
- Contact an APC Customer Support center by telephone or e-mail.
 - Regional centers:

Direct InfraStruXure Customer Support Line	(1)(877)537-0607 (toll free)
APC headquarters U.S., Canada	(1)(800)800-4272 (toll free)
Latin America	(1)(401)789-5735 (USA)
Europe, Middle East, Africa	(353)(91)702000 (Ireland)
Japan	(0) 3 5434-2021
Australia, New Zealand, South Pacific area	(61) (2) 9955 9366 (Australia)

- Local, country-specific centers: go to **www.apc.com/support/contact** for contact information.

Contact the APC representative or other distributor from whom you purchased your APC product for information on how to obtain local customer support.

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