



Solar Thermal Product Listing

No./SRCC-16001

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CSI:

DIVISION: 22 00 00 – PLUMBING

Section: 22 35 00 – DOMESTIC WATER HEAT EXCHANGERS

Section: 22 10 00 - PLUMBING PIPING AND PUMPS

DIVISION: 23 00 00 – HEATING

Section: 23 56 16 – PACKAGED SOLAR HEATING EQUIPMENT

PRODUCT LISTING PROGRAM:

The ICC-SRCC Solar Thermal Listing Program is conducted in accordance with the *ICC-SRCC Rules for Solar Heating & Cooling Product Listing Reports*. The program also includes periodic factory inspections and surveillance of the manufacturer’s quality management system.

PRODUCTS:

PUMP STATIONS FOR SOLAR WATER HEATING SYSTEMS

LISTEE:

Heliodyne, Inc.
4910 Seaport Ave.
Richmond, CA 94804 USA

www.heliodyne.com
(510)-237-9614

COMPLIANCE WITH:

CODES

- ❖ 2021, 2018 Uniform Plumbing Code® (UPC)*
- ❖ 2020, 2015 Uniform Solar Energy Code® (USEC)*
- ❖ 2021, 2018 Int’l Plumbing Code (IPC)**
- ❖ 2021, 2018 Int’l Green Construction Code® (IgCC)**
- ❖ SRCC EM-1, Methodology for Determining Compliance with State and Federal Lead in Plumbing Laws for Solar Heating and Cooling Equipment, 10/28/2015. Shows compliance with:
 - Reduction of Lead in Drinking Water Act, California Health and Safety Code § 116875
 - Vermont Lead Reduction Law (Vermont Act 193)
 - Louisiana Reduction of Lead Act (Louisiana Act 362)
 - Maryland Lead-Free Materials Act (HB 372)
 - Reduction of Lead in Drinking Water Act (Section 1417 of the Federal Safe Drinking Water Act (SDWA))
 - NSF 372-2010, Drinking Water System Components – Lead Content**

STANDARDS & CRITERIA

- ❖ ICC 900/SRCC 300-2020, Solar Thermal Systems Standard
- ❖ IAPMO IGC 280-2010, Heat Exchange System*
- ❖ IAPMO PS 92-2010, Heat Exchanger and Indirect Water Heaters*

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**International Codes are copyrighted publications and trademarks of the International Code Council (ICC)

*** NSF Standards are copyrighted publications of NSF International.

Description:

Pump Stations for Solar Water Heating Systems consist of:

- Piping, fittings and valves
- Expansion tank
- Heat exchanger
- Controller and pump(s)

The Heliodyne HCOM pump station is a plug and play, closed loop, heat-transfer system and is designed to handle a specified maximum number of Heliodyne GOBI flat plate collectors. System features include pressure stagnation Protection (PSP) to maintain glycol integrity, variable speed pumps and internet connectivity for remote system monitoring. HCOM systems can be connected in parallel.

Models:

The solar heating and/or cooling products listed below have been evaluated by the Solar Rating & Certification Corporation™ (SRCC™), an ISO/IEC 17065 accredited and EPA recognized Certification Body, in accordance with the SRCC Solar Heating & Cooling Code and Standard Listing Program Operating Guidelines, and has been listed by the SRCC to the codes and standards above. This award of listing is subject to all terms and conditions of the SRCC Solar Heating & Cooling Code & Standard Listing Program Agreement and the documents incorporated therein by reference. Where solar collectors are listed, all sizes of the collector model are listed.

HPAK 016-00X	16 Double Wall U-Tube, Heat Exchanger and Pumping Station
HPAK 024-00X	24 Double Wall U-Tube, Heat Exchanger and Pumping Station
HPAK 032-00X	32 Double Wall U-Tube, Heat Exchanger and Pumping Station
HPAK 048-00X	48 Double Wall U-Tube, Heat Exchanger and Pumping Station

“X” represents “0” or “1” to indicate the type of pump controller (basic or advanced versions)

HCOM 120 00X	Pump Station for 8-16 collectors, single or double wall heat exchanger
HCOM 180 00X	Pump Station for 16-24 collectors, single or double wall heat exchanger
HCOM 275 00X	Pump Station for 24-32 collectors, single or double wall heat exchanger
HCOM 550 00X	Pump Station for 32-64 collectors, single or double wall heat exchanger
HCOM 825 00X	Pump Station for 64-96 collectors, single or double wall heat exchanger

“X” represents “0” for single wall or “1” for double wall heat exchanger (models DW1020 or LC110DW)

The products listed above have been evaluated by the Solar Rating & Certification Corporation (ICC-SRCC™), an ISO/IEC 17065 accredited and EPA-recognized Certification Body, in accordance with the *ICC-SRCC Rules for Solar Heating & Cooling Product Listing Reports* and has been listed by the ICC-SRCC to the codes and standards above. This award of listing is subject to all terms and conditions of the *ICC-SRCC Rules for Solar Heating & Cooling Product Listing Reports*, and the documents incorporated therein by reference.

* Current certifications to the ICC-SRCC OG-100 and OG-300 programs are available at <http://www.solar-rating.org/directory>

INSTALLATION:

Solar thermal collectors must be installed in accordance with the manufacturer's published installation instruction, the applicable code(s) add this listing. Where differences exist, the instructions in this listing must govern.

Where the product requires periodic examination, adjustment, service and or maintenance it must be easily and safely in accordance with the codes in force at the installation site.

Collectors and supports shall be installed in such a manner that water flowing off the collector will not damage the building or cause premature erosion of the roof. Collectors shall be installed in such a manner as to minimize the accumulation of debris. Ground-mounted collectors shall be at least 6" above ground level.

Structural supports shall be selected and installed in such a manner that thermal expansion of the collector and piping will not cause damage to the collector, structural frame or building. Neither wind loading (including uplift) nor the additional weight of filled collectors shall exceed the live or dead load ratings of the building, roof, roof anchorage, foundation or soil. Collector supports shall not impose undue stresses on the collectors. The design load shall be as specified by the codes in force at the installation site and shall include an additional load due to snow accumulation for applicable locations.

CONDITIONS OF LISTING:

1. Devices and components shall be installed and used in accordance with the manufacturer's published installation instructions and the applicable code(s) and standard(s).
2. Systems shall be sized in accordance with the demand, manufacturer's requirement, and local codes.
3. System components requiring access for maintenance and inspection shall be installed to provide required access in accordance with manufacturer's instructions and local codes.
4. Solar thermal collectors shall be installed in accordance with the requirements of ISPSA Section 316.6, and 2606.12 of the 2018-IBC (and Section 3139B.1 of the CBC in CA), IgCC Section 607.3
5. Solar thermal collectors shall only be used with water per manufacturer's requirements.
6. Each installation must be pressure-tested for leaks in the presence of the code official or code official's designated representative.
7. Penetrations through fire-resistance-rated walls and roof decks shall comply with Section 712 of the 2018 IBC and Section 714 of the 2021 IBC.
8. Solar thermal components shall use approved mounting hardware in compliance with the manufacturer's installation instructions and the requirements set forth by the Authority Having Jurisdiction.
9. Solar thermal collectors shall be installed to prevent water intrusion into roof assemblies in accordance with the requirements of Section 1503.2 of the IBC.
10. Devices and components are manufactured by Heliodyne, Inc under a quality control program with surveillance inspection every two years conducted in accordance with the requirements of ICC-SRCC.

IDENTIFICATION:

Models listed above are eligible to display the following listing marks as governed by the *ICC-SRCC Rules for Mark and Certificate Use*. Each device or component shall also be permanently marked with the following information as required by the codes and standards listed above.



1. Manufacturer's name and model number.
2. Maximum operating pressure.
3. Compatible heat transfer fluids.

Listings are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the listing or a recommendation for its use. There is no warranty by the Solar Rating and Certification Corporation, express or implied as to any finding or other matter in this listing, or as to any product covered by the listing. This document must be reproduced in its entirety.

Shawn Martin

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