

ARMSTRONG



DESIGN ENVELOPE

COMPASS
high-efficiency
wet-rotor circulators

NSF-372* | COMPLIES WITH
EEI ≤ 0.22

SOLUTION OUTLINE

FILE NO: 10.19
DATE: FEBRUARY 2014

SUPERSEDES: 10.19
DATE: JULY 2013



our choice of circulator has a surprisingly large effect on your building project.

The right circulator will generate energy savings for years. Advanced variable speed technology increases circulator efficiency; even though the circulator and motor are small, the energy savings can add up. Homeowners will appreciate the reduced operating costs and reduced carbon footprint.

For contractors, a well-designed circulator is easy to install and will reduce or eliminate customer complaints. For wholesalers and contractors, a circulator that covers a broad range of operating requirements makes the selection process easier, leaving more time for serving customers.

Inventory costs are also important. The right choice of circulator lets you serve more customers and installations with only one model. Keeping fewer circulator models on your shelf, or in your trucks, cuts your inventory investment and your operating costs.

ENERGY SAVINGS

UP TO 70%



Easy access for wiring the terminal block

FOR DETAILS ON

- Design Envelope selections
- Demand-based variable speed operation
- Sensorless technology

[please see the Design Envelope solution outline](#)

(FILE NO. 100.11)



kWh

DESIGN ENVELOPE

Design Envelope is a revolutionary technology pioneered by Armstrong that offers simplified circulator selection, lowest installed cost, expanded application flexibility and optimized energy efficiency. Armstrong Design Envelope technology, previously offered in Armstrong pumps from one horsepower to 450 hp, is now available in Armstrong circulators. Design Envelope technology augments the value of Armstrong circulators through increased operating range and sensorless, demand-based control.

KEY BENEFITS

Responding to the need for a better circulator, Armstrong offers COMPASS, an advanced solution that benefits everyone involved in a heating system project. By selecting the right circulator, wholesalers, homeowners, and contractors can all come out ahead.

COMPASS circulators incorporate advanced functionality to assist with your construction and service projects and improve the long-term enjoyment of the building spaces you help create.

Easy sizing and selection of the COMPASS circulator simplifies your job as a wholesaler or contractor and reduces your inventory requirements.

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In the field, the front mounted terminal block reduces installation time.

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The COMPASS “auto” algorithm intelligently adapts to system demand, so you get the right setup every time and your customers enjoy comfortable room temperatures.

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Ultimately, COMPASS circulators provide reliable performance, backed by a two-year warranty, with noticeable reductions in energy consumption and operating costs.

KEY FEATURES



Broad operating range, producing up to 20 feet of head and 20 USgpm flow

Design Envelope technology providing sensorless demand-based control

Efficient ECM motor technology and intelligent variable speed operation

Easy to read display

Eight different modes of operation providing versatility to cover the performance of a wide range of fixed speed circulators

Large wiring chamber and front-mounted terminal block

PERFORMANCE

POWER RANGE	5W-45W
MAX FLOW RATE	20 USgpm
MAX HEAD PRESSURE	20 ft
MODEL	CAST IRON: COMPASS 20-20CI ITEM NO: 180203-606 *STAINLESS STEEL: COMPASS 20-20SS ITEM NO: 180203-607

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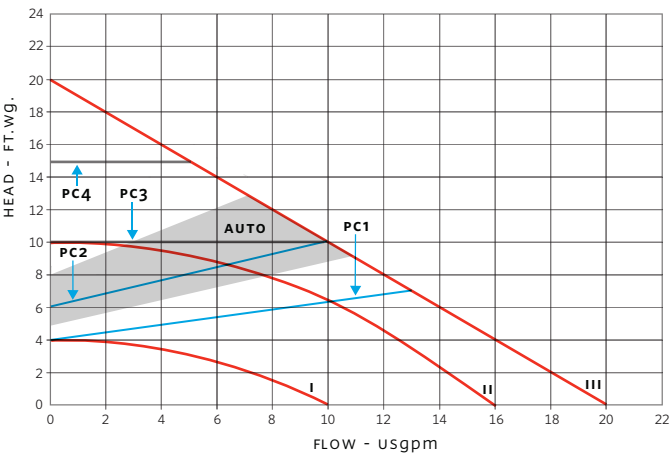
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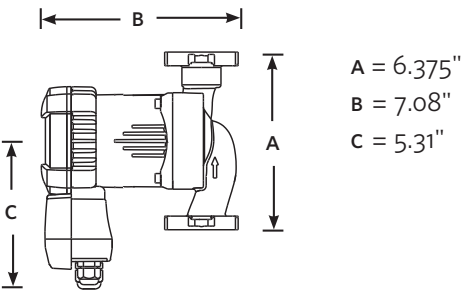
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COMPASS PERFORMANCE CURVES



EIGHT MODE OPTIONS

- AUTO Circulator adapts to system demand over time.
- PC1 Lowest proportional-pressure curve
- PC2 Highest proportional-pressure curve
- PC3 Lowest constant-pressure curve
- PC4 Highest constant pressure curve
- III Highest constant speed
- II Medium constant speed
- I Lowest constant speed



For more information, contact
your Armstrong representative
or visit us at:
[armstrongfluidtechnology.com/
ContactUs](http://armstrongfluidtechnology.com/ContactUs)