1900e series

Water Circulation Pumps & Circulators

1911ecm® & 1915ecm™ ECM High-Efficiency Pumps

The 1900e Series® are self-sensing, close coupled, mechanically sealed in-line pumps that exceed industry and efficiency standards with an advanced hydraulic design. They feature a high-efficiency volute, ECM motor and integrated frequency drive. Simple yet versatile control options include constant pressure, constant speed, proportional pressure, 0-10Vdc and parallel pump alternation. These standard features combined with the intuitive user interface allow for quick start-ups achieving optimum system efficiency and maximum comfort. These pumps are available in Ductile Iron for closed loop hydronic heating and cooling systems or Stainless Steel, NSF Commercial Hot Certified for DHW applications.

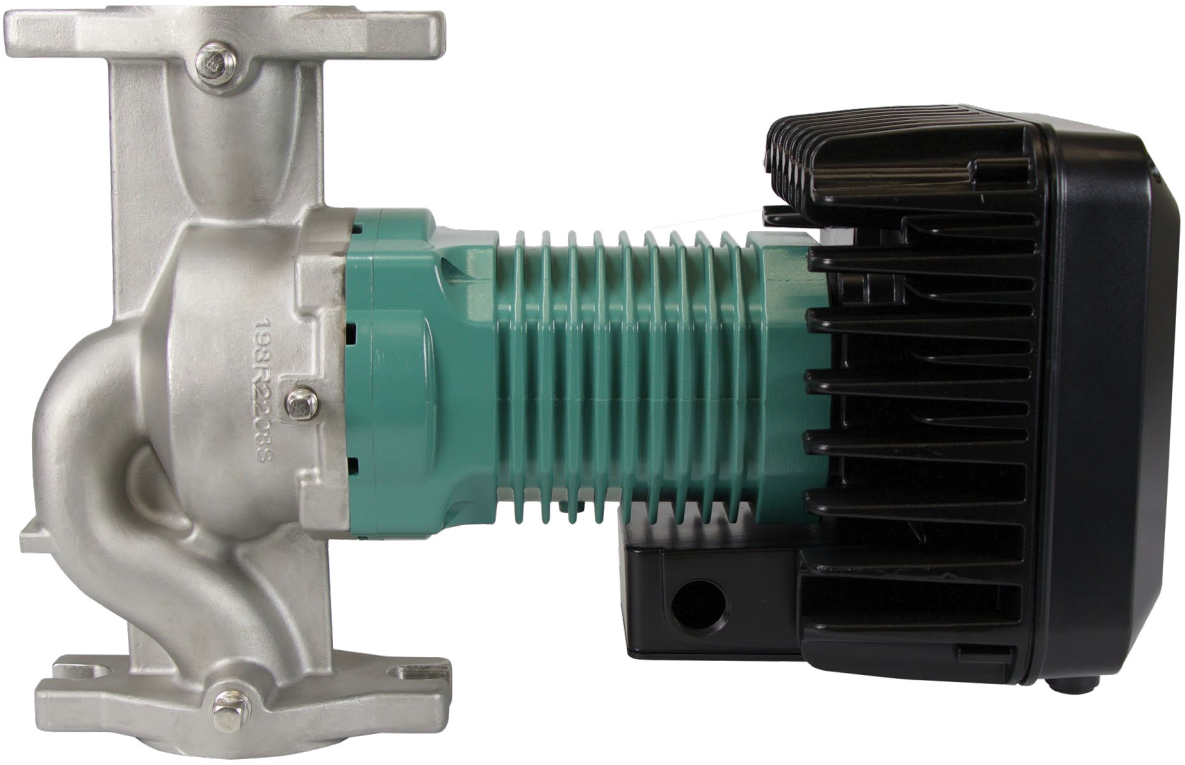
- Easy-to-program pump interface
- High-efficiency ECM motor uses up to 85% less electricity
- Constant speed, constant pressure, or proportional pressure modes
- BMS 0-10V
- 2-pump operation

Taco Comfort Solutions®
A Taco Family Company

Supersedes: 01/10/23

Effective Date: 06/03/24
Printed in USA

Features & Applications



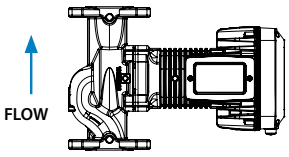
Durability & Convenience

- **1911ecm:**
  50' Shut-off head, 105 USGPM max. flow
- **1915ecm:**
  65' Shut-off head, 120 USGPM max. flow
- ECM brushless DC, high-efficiency, soft start, high starting torque motor
- Easy to program pump interface
- Self-sensing
- Multiple Operating Modes
  - 4 Constant Pressure
  - 3 Constant Speed
  - 1 Proportional Pressure
- LED Status Light
- Error Diagnostics
  - Locked Rotor
  - Over Current
  - Over & Under Voltage
  - Over Temperature
  - Communications Failure
  - Dry Run
- External Inputs/Outputs
  - 0-10Vdc external speed control
  - Remote enable
  - Overload relay output
  - Parallel pump control
- High quality mechanical seal
  - Carbon/Silicon-Carbide/EPDM for CI Model
  - Carbon/Silicon-Carbon/Viton for SS Model

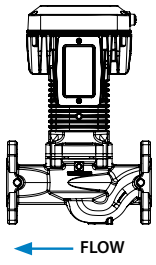
Intertek
4001998

Certified to NSF/ANSI/CAN 61 & 372
Stainless Steel Model

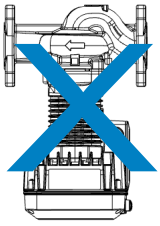
Preferred Installation Position



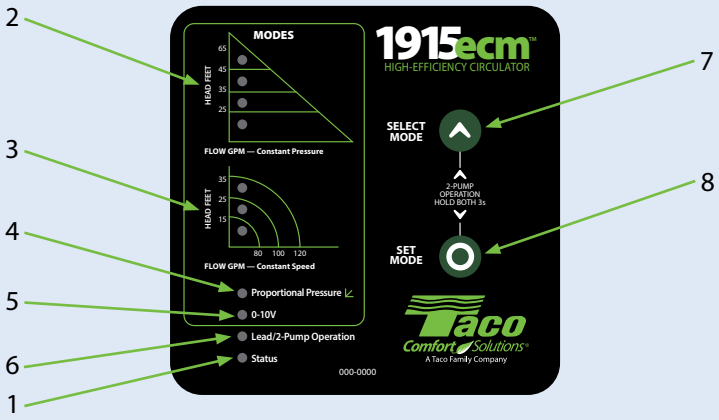
Acceptable Installation Position



UNAUTHORIZED Installation Position



Operation of the Pump



1. Status LED
2. Constant Pressure Mode Setting LED
3. Constant Speed Mode Setting LED
4. Proportional Pressure Mode LED
5. 0-10v Mode LED
6. 2 Pump Operation LED
7. [^] Select Mode Button
8. [O] Set Mode Button

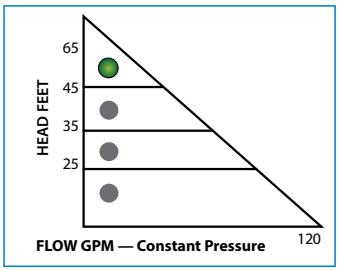
Two-Button User Interface Guide

- Factory default Constant Pressure Mode
- Mode Change – short press of Select Mode
  - Current mode LED flashes
  - Short press Select Mode scrolls to other modes
  - Short press Set Mode to accept selected mode

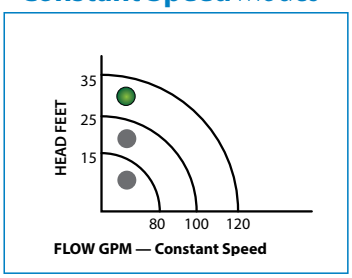
  NOTE: Pump returns to previous mode if Set Mode not pressed
- Confirm Mode
  - Short press of Set Mode
  - Selected mode LED on
- Button Lockout
  - Press & hold Set Mode for 10 seconds
  - Activates (or deactivates) Lockout
- 2-Pump Operation
  - Long press (3 sec) of both Select and Set Mode Buttons
  - Selects or de-selects lead/lag operation

1915ecm is shown for illustration purposes. The 1911ecm and 1915ecm interface both operate in the same manner.

Choose from Four **Constant Pressure** Modes



Choose from Three **Constant Speed** Modes



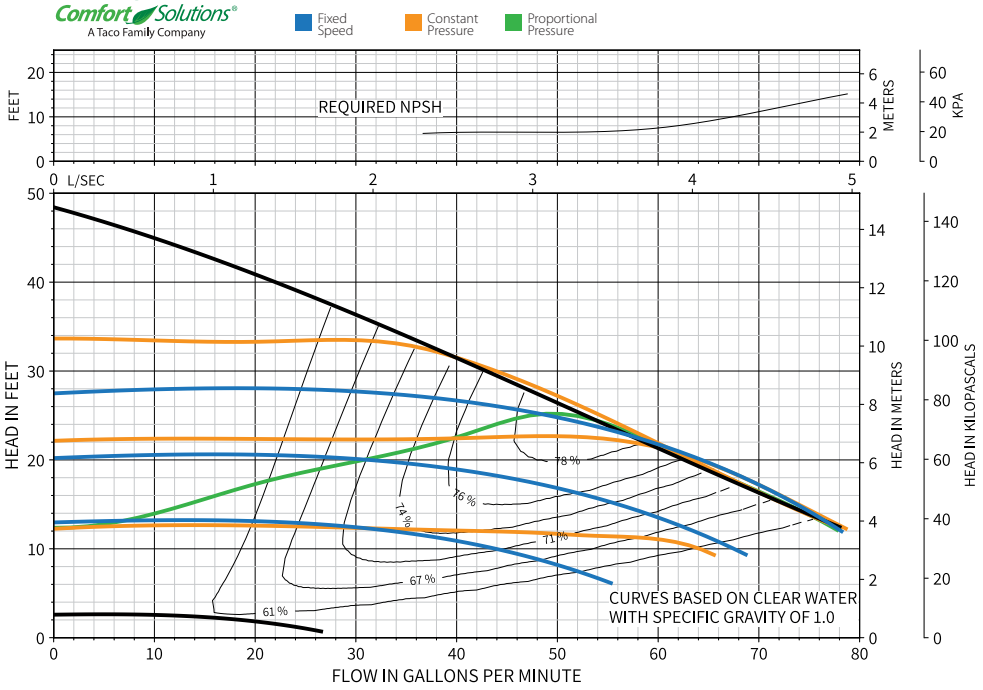
Choose **Proportional Pressure** or **0-10V**

- Proportional Pressure
- 0-10V

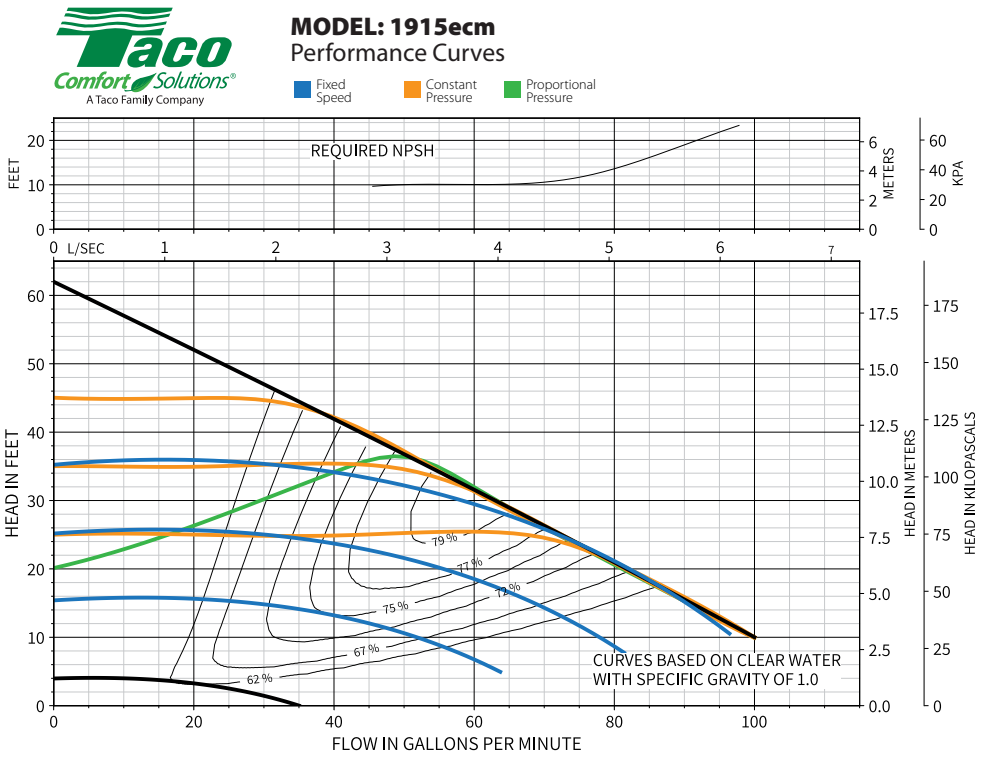
Choose **Lead/2-Pump** Operation

- Lead/2-Pump Operation
- Status

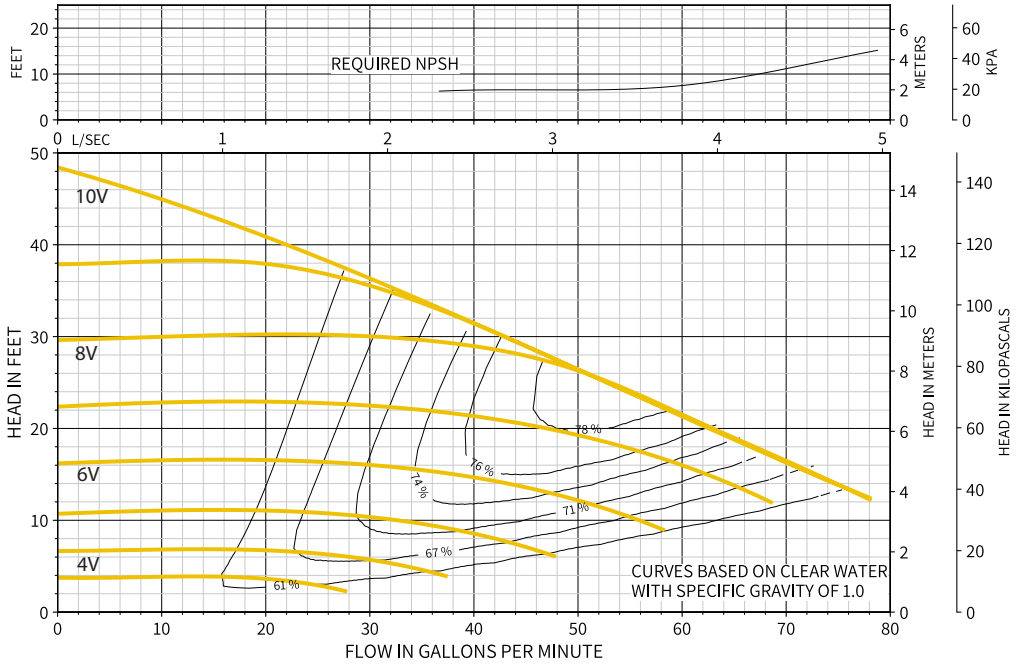
MODEL: 1911ecm
Performance Curves



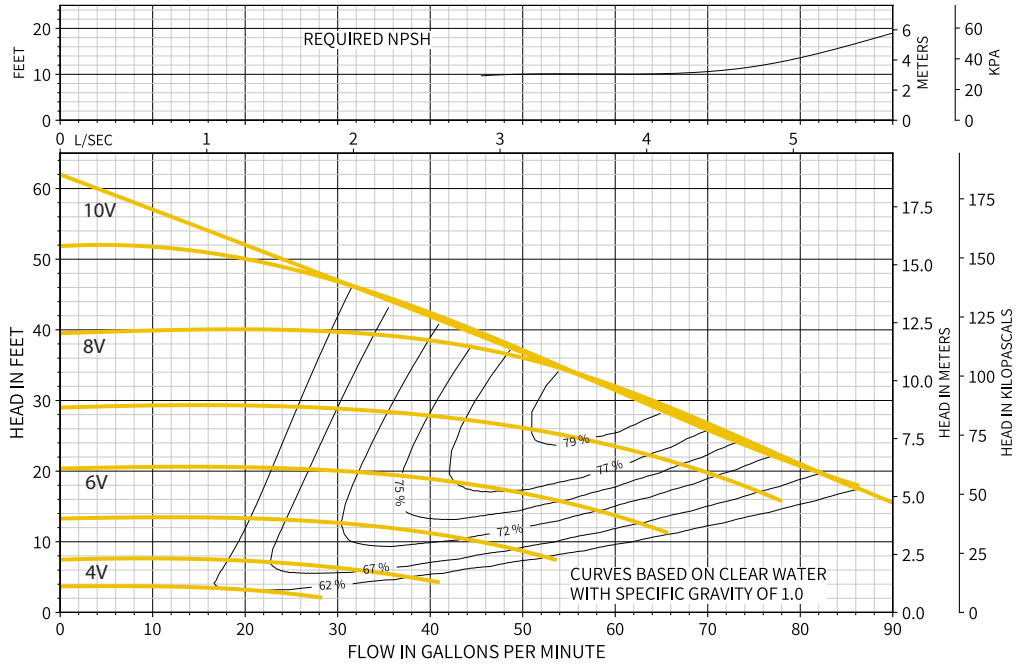
MODEL: 1915ecm
Performance Curves



MODEL: 1911ecm
0-10V Performance Curves



MODEL: 1915ecm
0-10V Performance Curves



Submittal Data Information
1900e Series — 1911ecm & 1915ecm

Specifications

- Max. Shut-off Head:
  1911ecm: .....50 feet
  1915ecm: .....65 feet
- Max. Flow:
  1911ecm:.....105 USGPM
  1915ecm: .....120 USGPM
- Max. Operating Pressure:.....175 PSI (12 bar)
- Water Temperature Range: .....36 to 230˚F (2 to 110˚C)
- Ambient Temperature Range: .....32 to 104˚F (0 to 40˚C)
- Ambient Humidity: .....Less than 95% RH (Indoor Use Only)

Standards, Protection and Flange Type

Insulation Class H (180˚C)

Enclosure: Type 2 (IP44) Totally Enclosed

Integrated Motor Protection (electronically protected)

Continuous Duty

UL778, 1004-1, 508C

CAN/CSA22.2 #108, #100, #107.1

EMC (89/366EEC): EN 61000

Stainless Steel Version:
NSF/ANSI/CAN 61 & 372 Commercial Hot

Flange Type: 2 Bolt, Commercial Oval

Intertek 4001998

Certified to NSF/ANSI/CAN 61 & 372

Stainless Steel Model

Materials of Construction

Casing: .....**HVAC Model:** Cataphoresis Coated Ductile Iron

DHW Model: Stainless Steel

Impeller:.....PPS

Shaft: .....Stainless Steel

Bearing:.....Sealed Ball Bearing

Mechanical Seal:.....**HVAC Model:** Carbon-SiCarbide-EPT

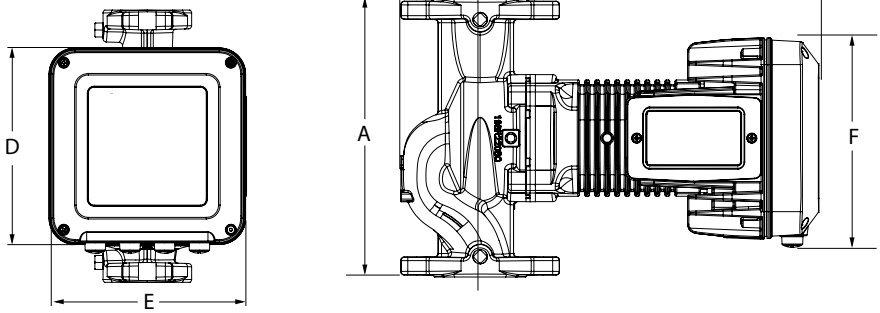
DHW Model: Carbon-SiCarbide-Viton

Operating Modes

- Constant Pressure Control (Δp-c)
- Proportional Pressure Control (AUTO)
- Constant Speed
- 0-10Vdc
- 2-Pump Alternation

Applications

Ductile Iron Model: Closed loop, pressurized Heating and Chilled Water HVAC Systems
Stainless Steel Model: Potable water systems (DHW recirculation, pressure boosting)



Pump Dimensions & Weights

Model Number Part Number	Casing	Flange Size	A	B	C	D	F	Wt./lbs. [kg]
		Inches [mm]						
1911ecm-F VR50105-HD1-FC2A01	Ductile Iron	1-1/2 [38]	10.4 [264]	15.6 [397]	12.7 [322]	7.5 [190.5]	7.8 [199]	32 [14.51]
1911ecm-SF VR50105-CD1-FS2A01	Stainless Steel							
1915ecm-F VR65120-HB2-FC2A01	Ductile Iron							
1915ecm-SF VR65120-CB2-FS2A01	Stainless Steel							

Electrical Specifications

	1911ecm	1915ecm
Pump Ratings (1 phase)	100-240V, 47-63Hz	200-240V, 47-63Hz
Power Consumption (HP)	0.027-0.60 HP	0.027-0.87 HP
Power Consumption (W)	20-425W	20-650W
Rated Current (1 phase)	0.25-4.4A	0.25-3.3A
Relay Output:	30 VDC Max. Load up to 2A	30 VDC Max. Load up to 2A
	24VAC Max. Load up to 3A	24VAC Max. Load up to 3A
Analog I/O:	Input Voltage: 0-10V, 10mA, 15 VDC Max	Input Voltage: 0-10V, 10mA
	Output Voltage: 0-10V, 10mA	Output Voltage: 0-10V, 10mA

Minimum static inlet pressure to avoid cavitation at fluid temperatures

Fluid Temperatures	1911ecm PSI / bar	1915ecm PSI / bar
112˚F (50˚C)	5.6 / 0.4	5.1 / 0.4
176˚F (80˚C)	11.0 / 0.8	10.4 / 1.08
230˚F (110˚C)	24.8 / 1.7	23.7 / 1.7

Taco Comfort Solutions®
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