

Submittal Data Sheet

Wilo CO-Helix - NSF 61/372 Pressure Boosting System

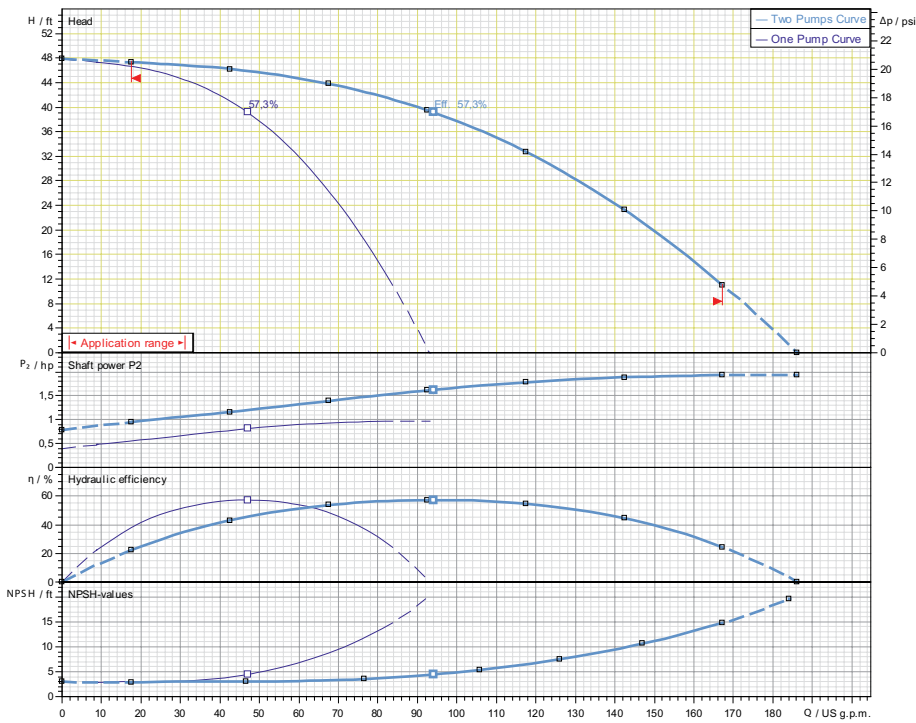


CO-2 HELIX V50-01-1/1/VCE



Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V50-01-1/1/VCE				1			3600



Applications

- Water Supply
- Agriculture
- Washing / Sprinkling Systems
- Pressure Boosting
- Cooling Circuits
- Condensate Return

Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	232 PSI

Technical Data - Panel

Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways for BacNET, LonWorks, and CANbus)
Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
Additional Ports	2.0 USB Port; Micro-SD Port

Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

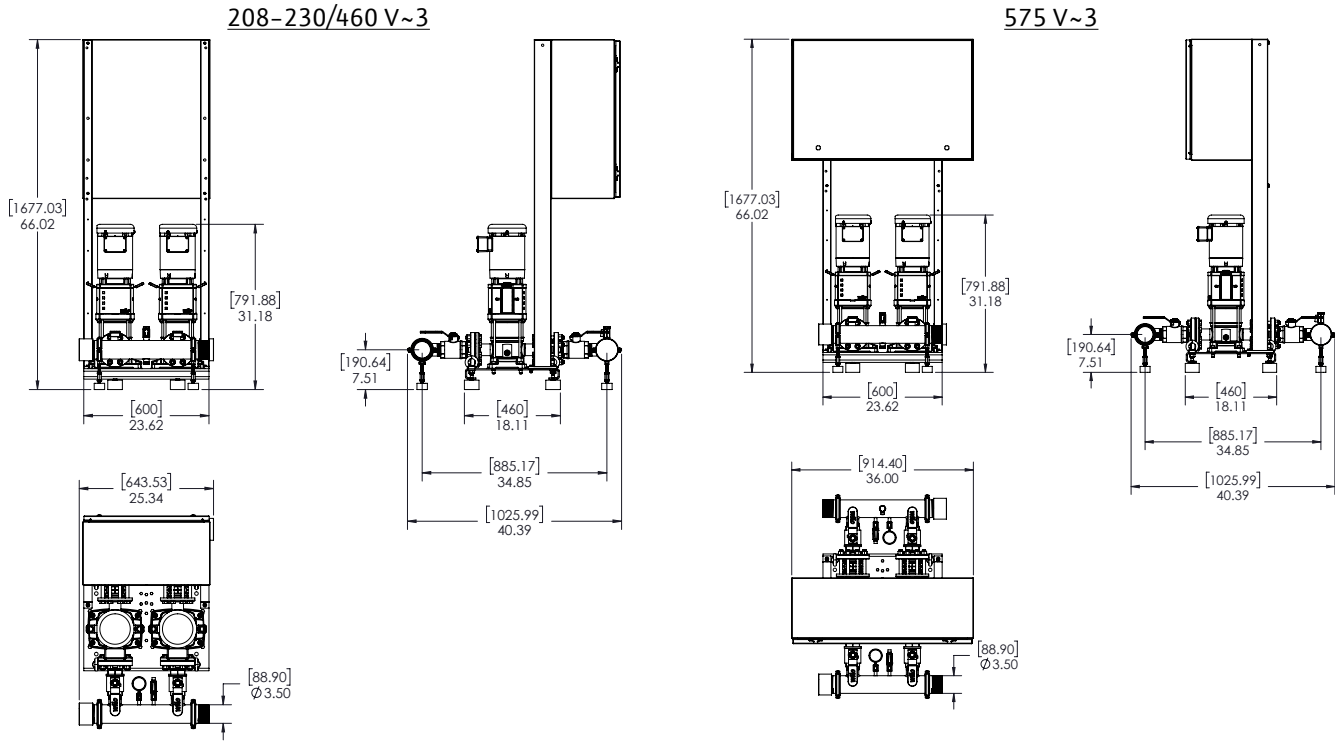
Approval Stamp

Submittal Data Sheet

Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V50-01-1/1/VCE



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

Dimensions and Weights

Model	Voltage (V)	Dimensions—inches								Individual Pump Weight	Package Weight
		H (in)	W (in)	L (in)	System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydrnumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)	Package Weight (lbs)
CO-2 HELIX V50-01-1/1/VCE	208-230/460 V	66	24-3/8	40-3/8	3" MNPT	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	87	500
	575 V	66	36	40-3/8							

TEFC Motor Data

Model	P2 (HP)	Phase (~)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)
CO-2 HELIX V50-01-1/1/VCE	1	3	208-230/460/575	3-2.8/1.4/1.1	232

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Wilco CO-Helix - NSF 61/372 Pressure Boosting System

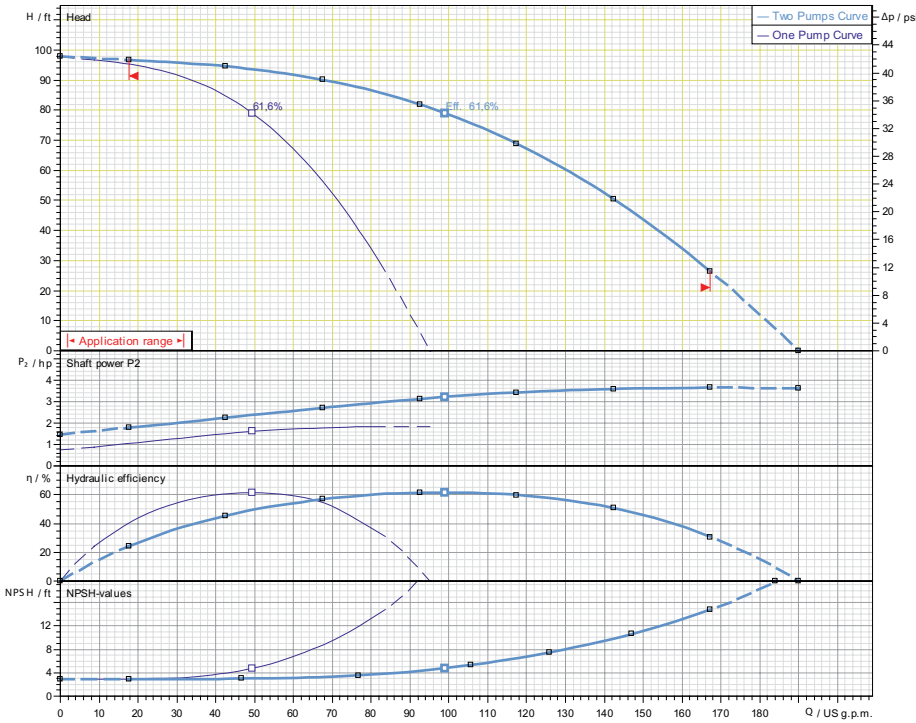


CO-2 HELIX V50-02-1/2/VCE



Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V50-02-1/2/VCE				2			3600



Applications

- Water Supply
- Agriculture
- Washing / Sprinkling Systems
- Pressure Boosting
- Cooling Circuits
- Condensate Return

Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	232 PSI

Technical Data - Panel

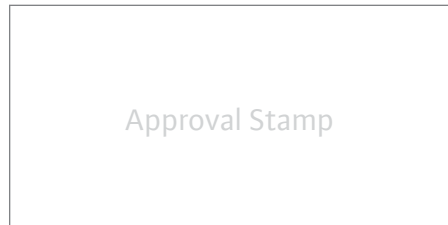
Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways for BacNET, LonWorks, and CANbus)
Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
Additional Ports	2.0 USB Port; Micro-SD Port

Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

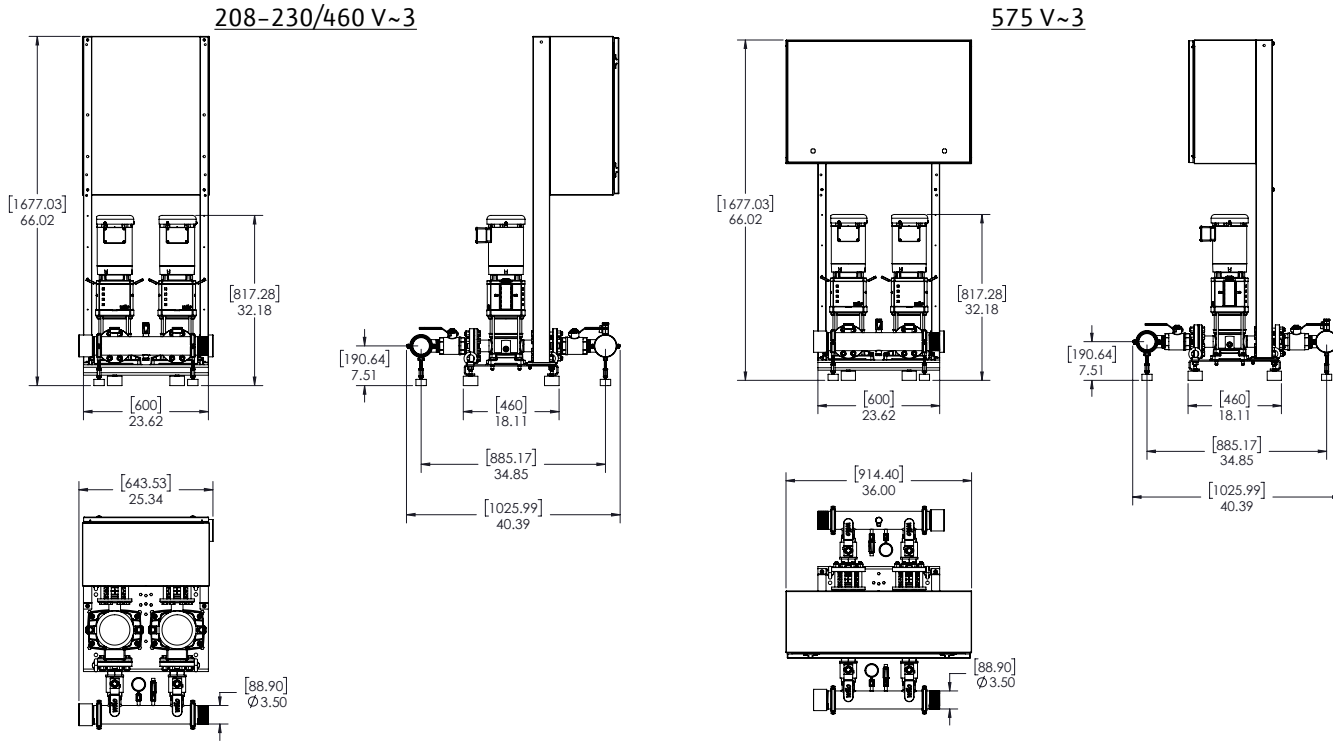


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Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V50-02-1/2/VCE



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

Dimensions and Weights

Model	Voltage (V)	Dimensions-inches								Individual Pump Weight	Package Weight
		H (in)	W (in)	L (in)	System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydrunumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)	Package Weight (lbs)
CO-2 HELIX V50-02-1/2/VCE	208-230/460 V	66	24-3/8	40-3/8	3" MNPT	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	93	512
	575 V	66	36	40-3/8							

TEFC Motor Data

Model	P2 (HP)	Phase (~)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)
CO-2 HELIX V50-02-1/2/VCE	2	3	208-230/460/575	5.3-5.0/2.5/2.0	232

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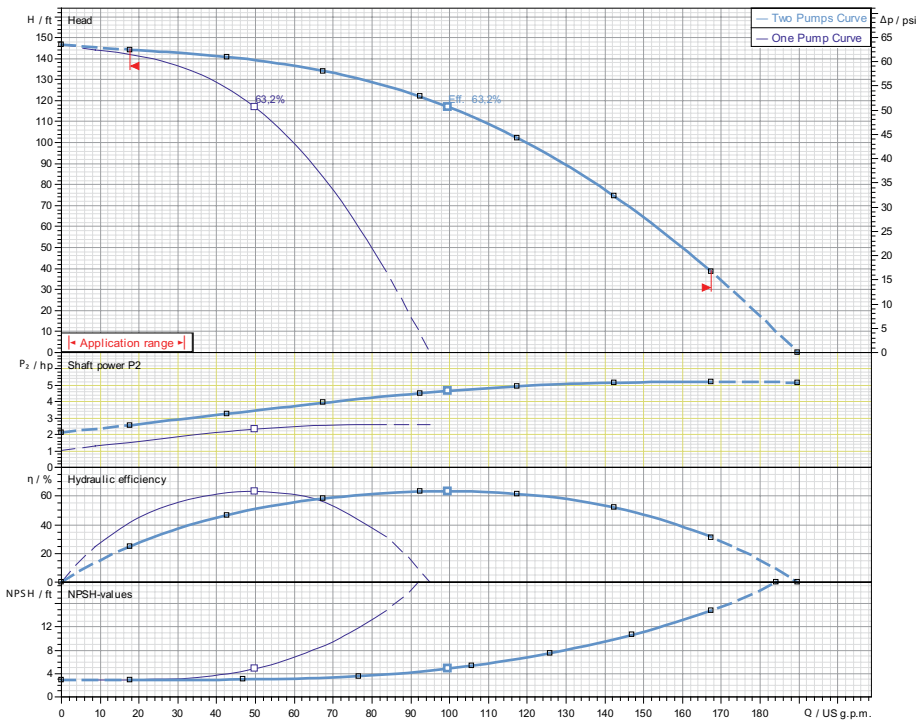


CO-2 HELIX V50-03-1/3/VCE



Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V50-03-1/3/VCE				3			3600



Applications

- Water Supply
- Agriculture
- Washing / Sprinkling Systems
- Pressure Boosting
- Cooling Circuits
- Condensate Return

Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	232 PSI

Technical Data - Panel

Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways for BacNET, LonWorks, and CANbus)
Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
Additional Ports	2.0 USB Port; Micro-SD Port

Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

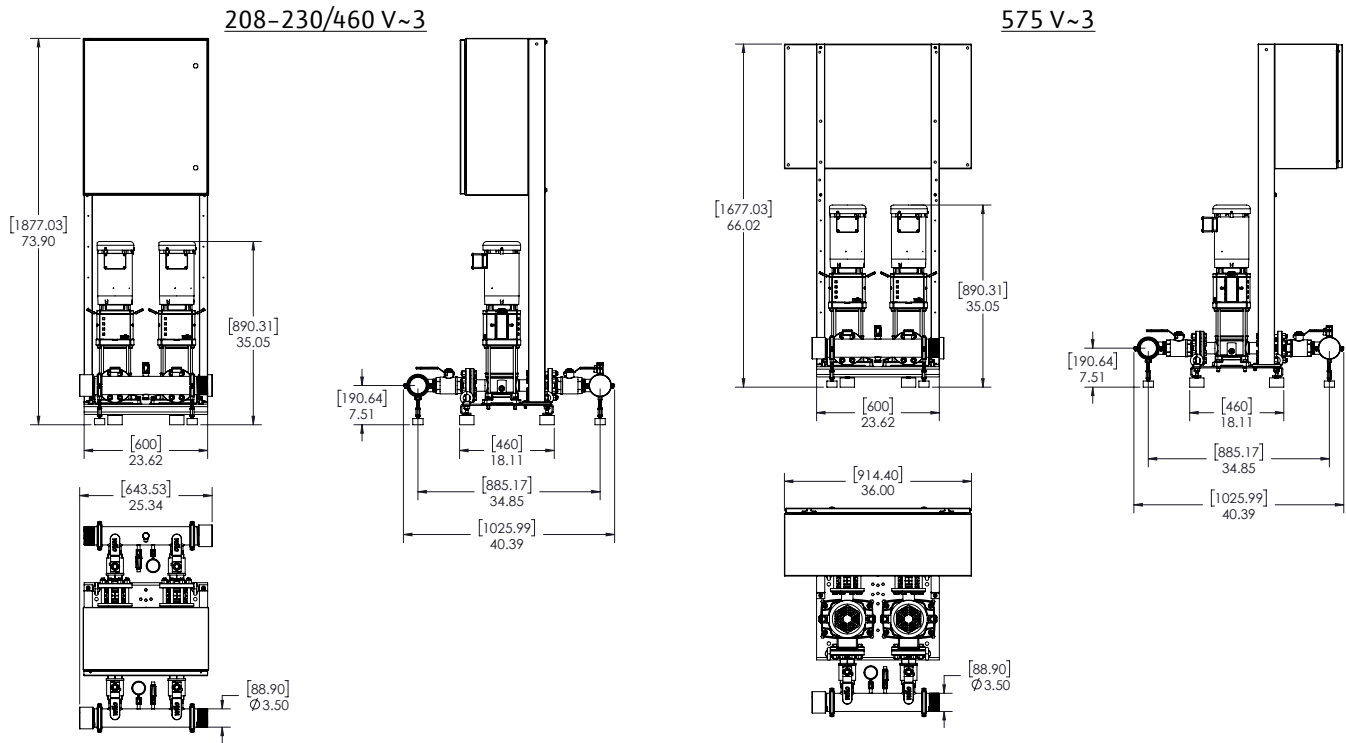
Approval Stamp

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CO-2 HELIX V50-03-1/3/VCE



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

Dimensions and Weights

Model	Voltage (V)	Dimensions—Inches				System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydrunumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight	Package Weight
		H (in)	W (in)	L (in)	Pump Weight (lbs)						Package Weight (lbs)	
CO-2 HELIX V50-03-1/3/VCE	208-230/460 V	73-7/8	24-3/8	40-3/8	3" MNPT	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	101	528	
	575 V	66	36	40-3/8								

TEFC Motor Data

Model	P2 (HP)	Phase (~)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)
CO-2 HELIX V50-03-1/3/VCE	3	3	208-230/460/575	7.9-7.2/3.6/2.9	232

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Wilco CO-Helix - NSF 61/372 Pressure Boosting System

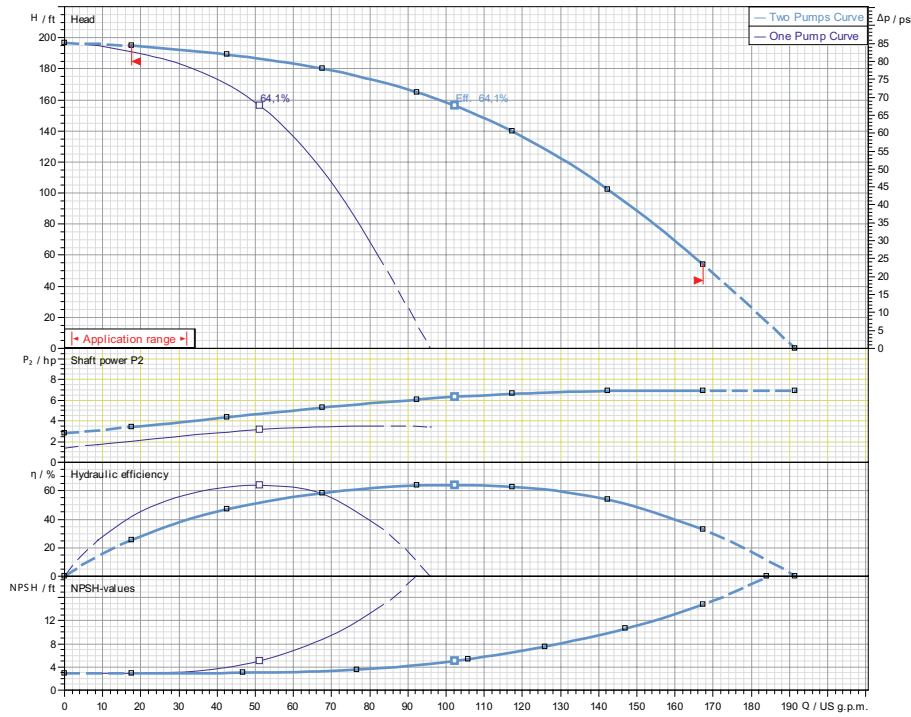


CO-2 HELIX V50-04-1/5/VCE



Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V50-04-1/5/VCE				5			3600



Applications

- Water Supply
- Pressure Boosting
- Agriculture
- Cooling Circuits
- Washing / Sprinkling Systems
- Condensate Return

Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	232 PSI

Technical Data - Panel

Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways for BacNET, LonWorks, and CANbus)
Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
Additional Ports	2.0 USB Port; Micro-SD Port

Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

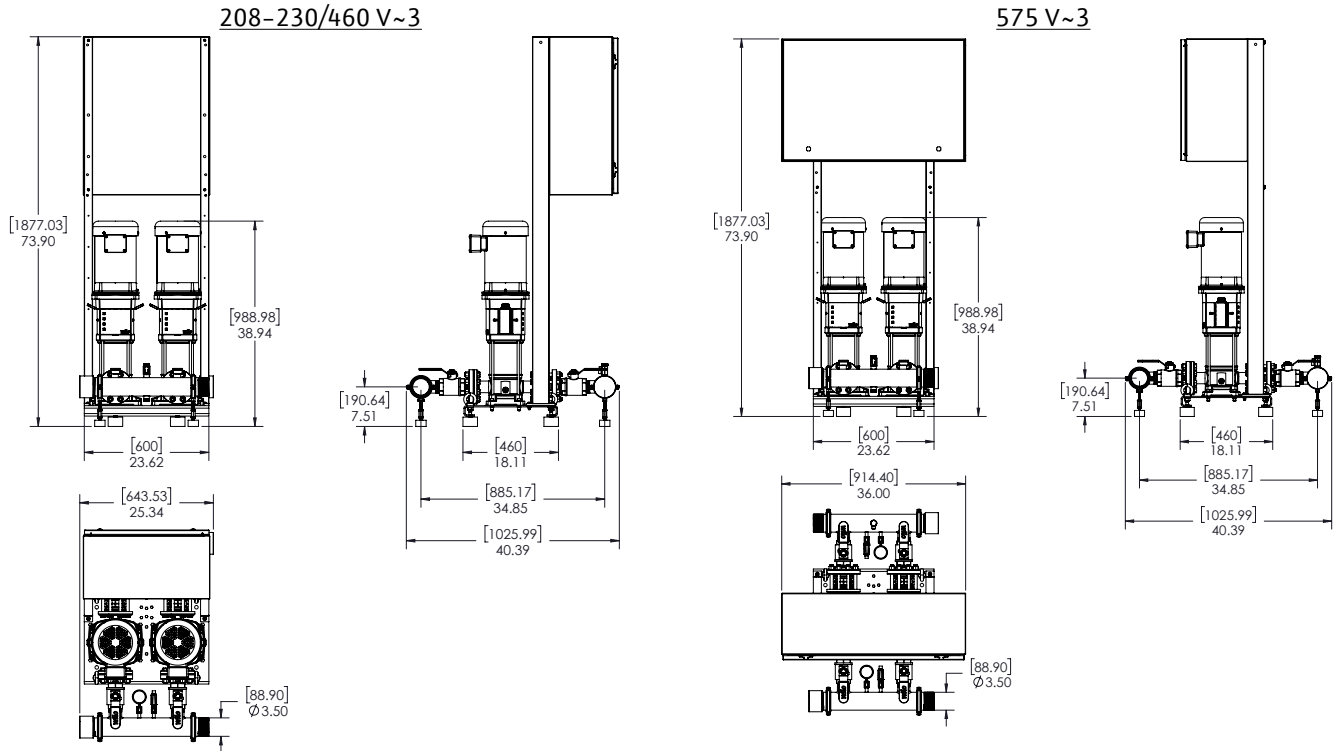
Approval Stamp

Submittal Data Sheet

Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V50-04-1/5/VCE



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

Dimensions and Weights

Model	Voltage (V)	Dimensions—Inches								Individual Pump Weight	Package Weight
		H (in)	W (in)	L (in)	System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)	Package Weight (lbs)
CO-2 HELIX V50-04-1/5/VCE	208-230/460 V	73-7/8	24-3/8	40-3/8	3" MNPT	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	133	592
	575 V	73-7/8	36	40-3/8							

TEFC Motor Data

Model	P2 (HP)	Phase (~)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)
CO-2 HELIX V50-04-1/5/VCE	5	3	208-230/460/575	12-11.8/5.9/4.7	232

Submittal Data Sheet

Wilco CO-Helix - NSF 61/372 Pressure Boosting System

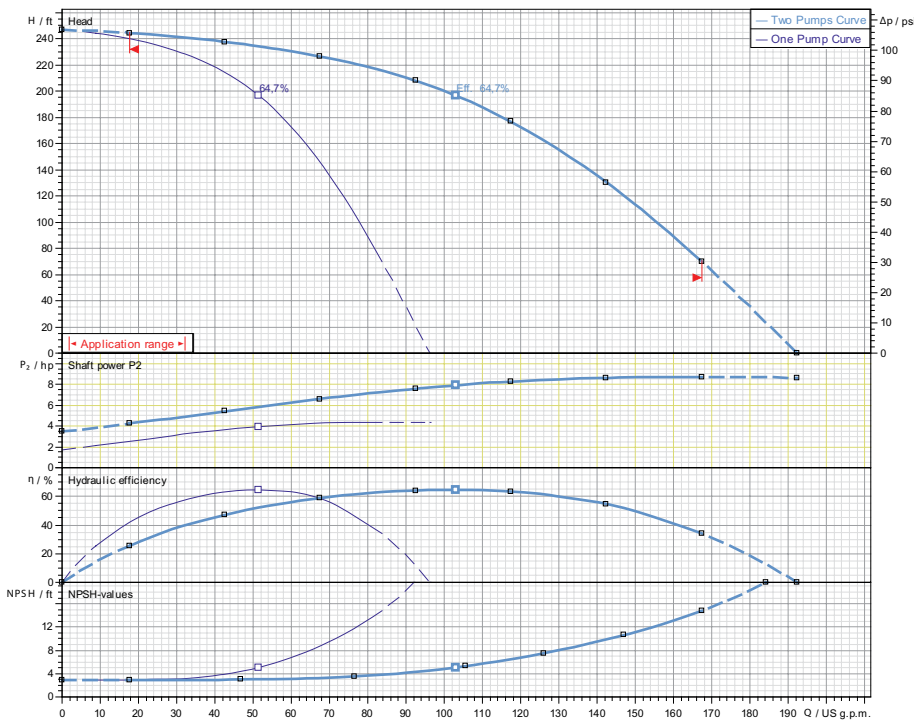


CO-2 HELIX V50-05-1/5/VCE



Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V50-05-1/5/VCE				5			3600



Applications

- Water Supply
- Pressure Boosting
- Agriculture
- Cooling Circuits
- Washing / Sprinkling Systems
- Condensate Return

Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	232 PSI

Technical Data - Panel

Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways for BacNET, LonWorks, and CANbus)
Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
Additional Ports	2.0 USB Port; Micro-SD Port

Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

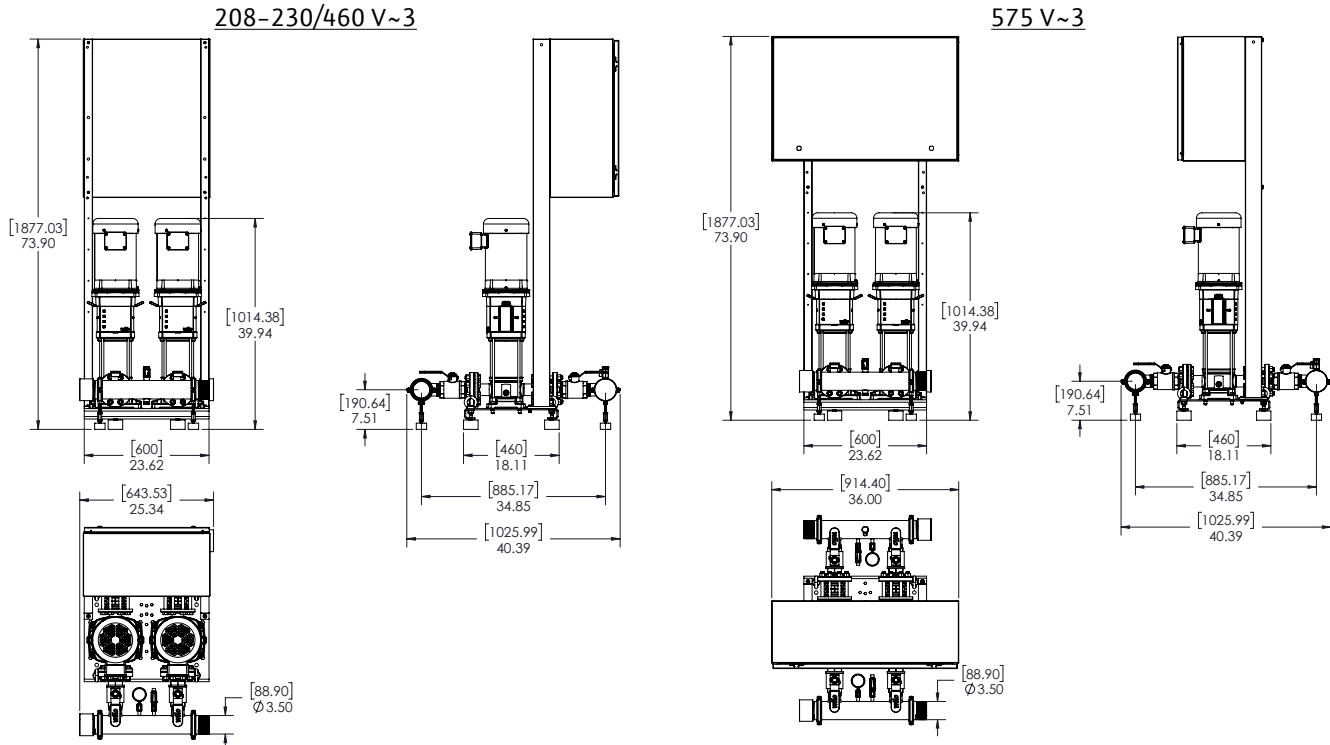
Approval Stamp

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Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V50-05-1/5/VCE



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

Dimensions and Weights

Model	Voltage (V)	Dimensions-inches				System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydrunumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight	Package Weight
		H (in)	W (in)	L (in)	Pump Weight (lbs)							
CO-2 HELIX V50-05-1/5/VCE	208-230/460 V	73-7/8	24-3/8	40-3/8	3" MNPT	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	142	610	
	575 V	73-7/8	36	40-3/8								

TEFC Motor Data

Model	P2 (HP)	Phase (~)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)
CO-2 HELIX V50-05-1/5/VCE	5	3	208-230/460/575	12-11.8/5.9/4.7	232

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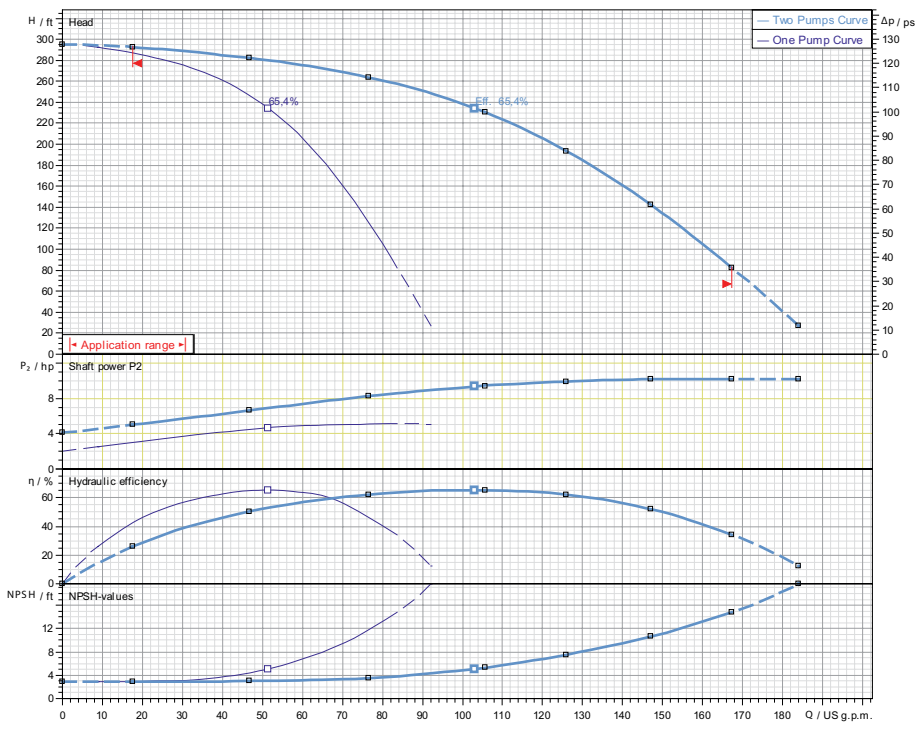


CO-2 HELIX V50-06-1/5/VCE



Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V50-06-1/5/VCE				5			3600



Applications

- Water Supply
- Pressure Boosting
- Agriculture
- Cooling Circuits
- Washing / Sprinkling Systems
- Condensate Return

Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	232 PSI

Technical Data - Panel

Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways for BacNET, LonWorks, and CANbus)
Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
Additional Ports	2.0 USB Port; Micro-SD Port

Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

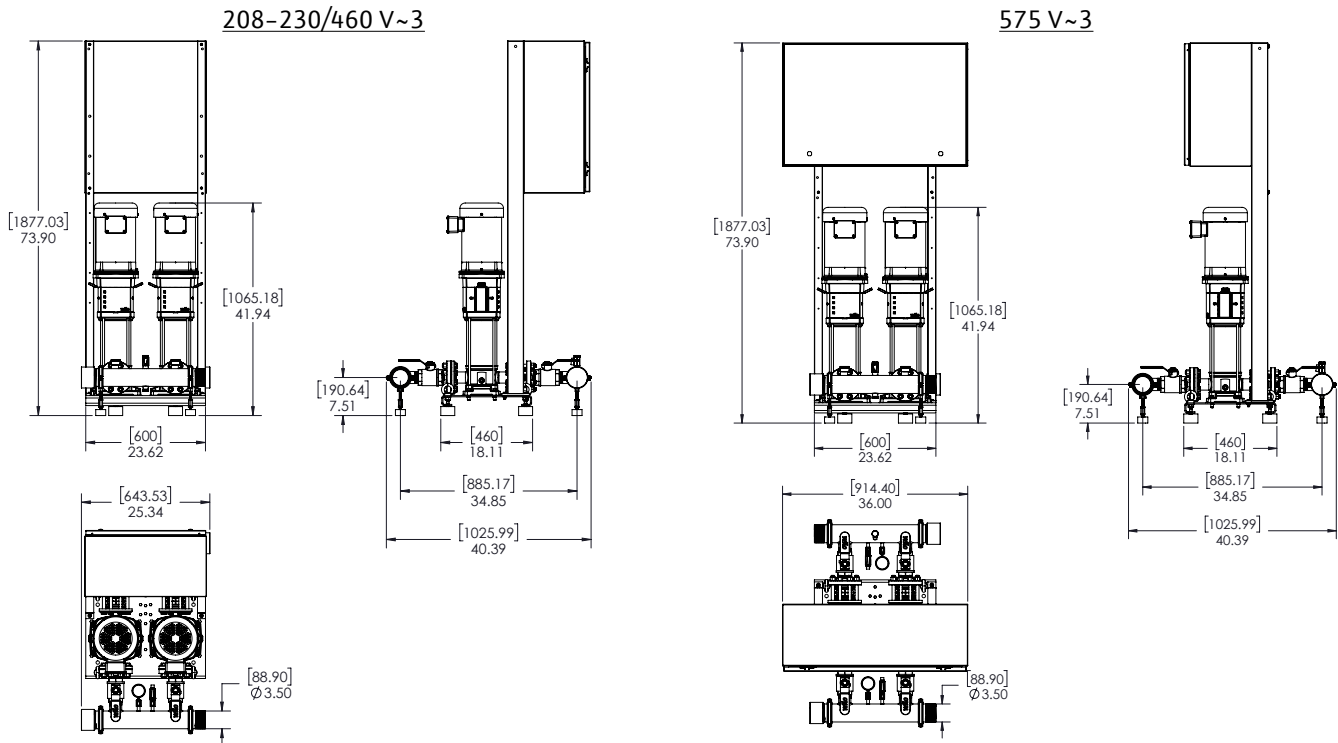
Approval Stamp

Submittal Data Sheet

Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V50-06-1/5/VCE



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

Dimensions and Weights

Model	Voltage (V)	Dimensions-inches								Individual Pump Weight	Package Weight
		H (in)	W (in)	L (in)	System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydrunumatic Tank Valve on Manifold (Plugged)		
CO-2 HELIX V50-06-1/5/VCE	208-230/460 V	73-7/8	24-3/8	40-3/8	3" MNPT	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	144	614
	575 V	73-7/8	36	40-3/8							

TEFC Motor Data

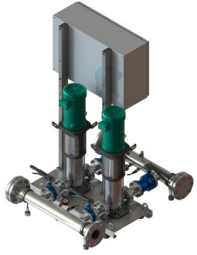
Model	P2 (HP)	Phase (~)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)
CO-2 HELIX V50-06-1/5/VCE	5	3	208-230/460/575	12-11.8/5.9/4.7	232

Submittal Data Sheet

Wilco CO-Helix - NSF 61/372 Pressure Boosting System

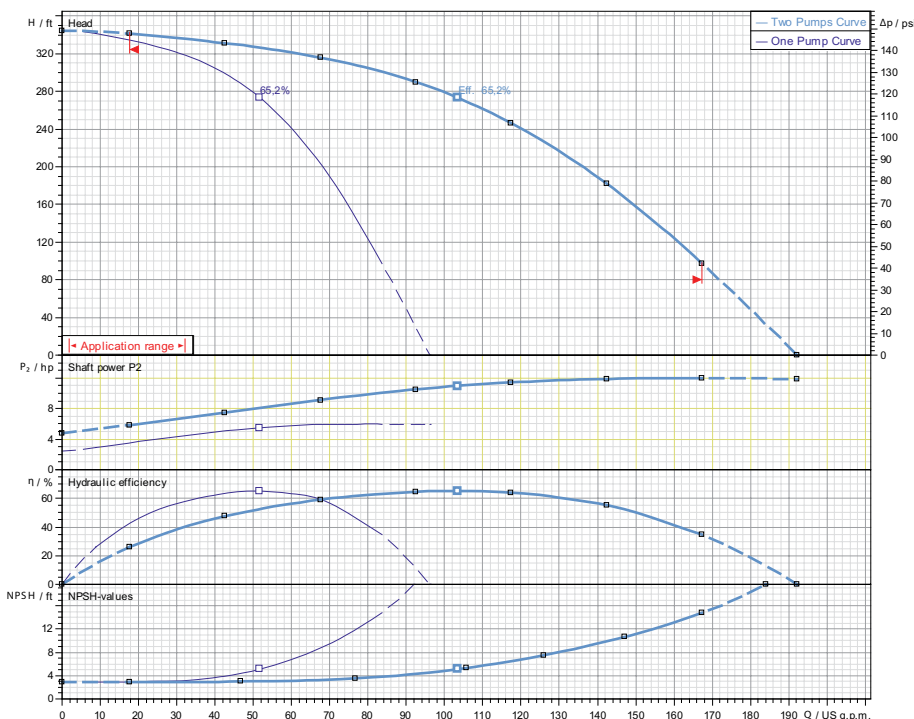


CO-2 HELIX V50-07-1/7.5/VCE



Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V50-07-1/7.5/VCE				7.5			3600



Applications

- Water Supply
- Pressure Boosting
- Agriculture
- Cooling Circuits
- Washing / Sprinkling Systems
- Condensate Return

Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	200 PSI

Technical Data - Panel

Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways for BacNET, LonWorks, and CANbus)
Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
Additional Ports	2.0 USB Port; Micro-SD Port

Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

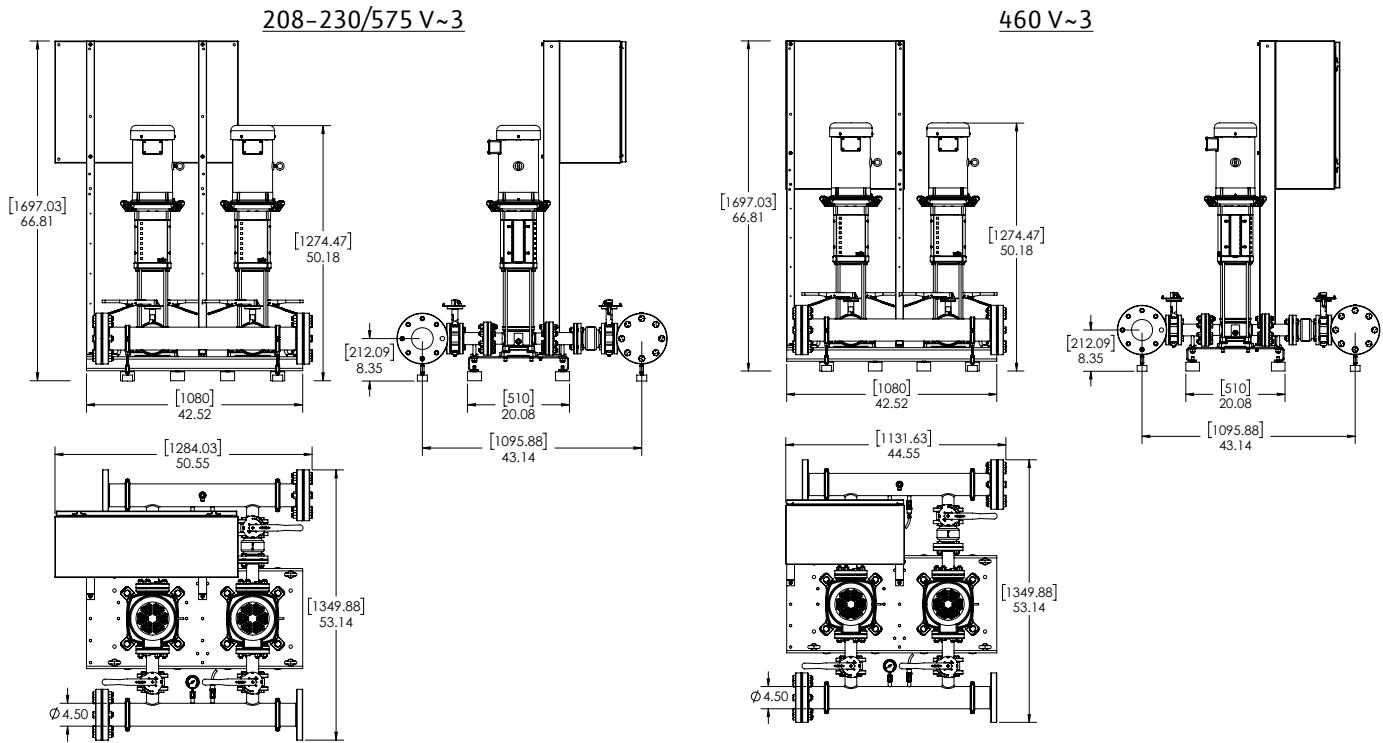
Approval Stamp

Submittal Data Sheet

Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V50-07-1/7.5/VCE



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

Dimensions and Weights

Model	Voltage (V)	Dimensions-inches								Individual Pump Weight	Package Weight
		H (in)	W (in)	L (in)	System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)	Package Weight (lbs)
CO-2 HELIX V50-07-1/7.5/VCE	208-230/575 V	66-4/5	50-5/9	53-1/7	4"-150#	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	199	1017
	460 V	66-4/5	44-5/9	53-1/7	ANSI						974

TEFC Motor Data

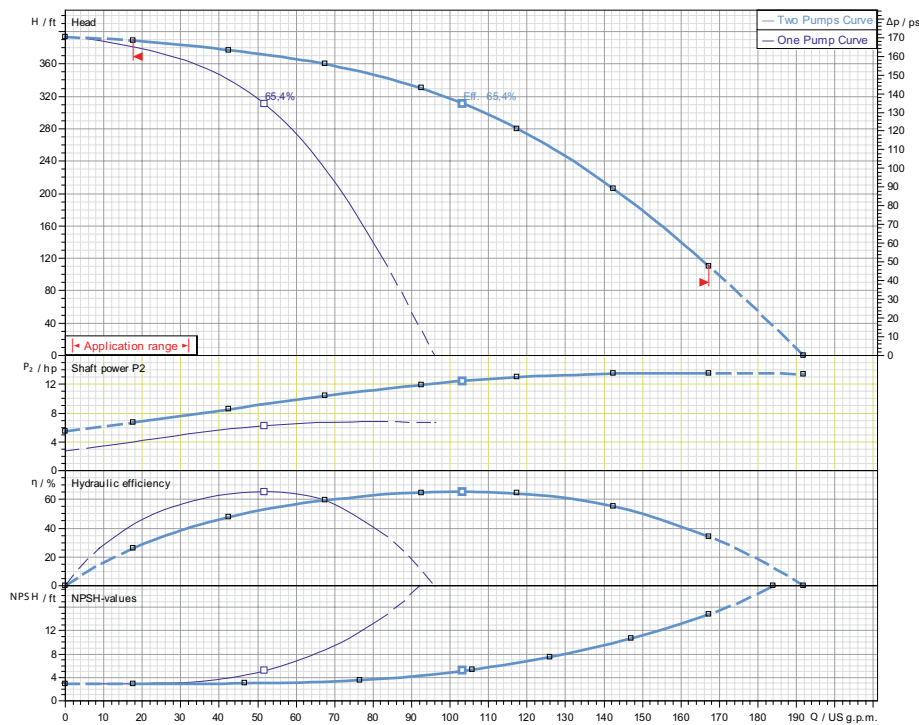
Model	P2 (HP)	Phase (~)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)
CO-2 HELIX V50-07-1/7.5/VCE	7.5	3	208-230/460/575	17.2-16.2/8.1/6.8	200

Submittal Data Sheet

Wilco CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V50-08-1/7.5/VCE								
		Project:						
		Engineer:						
		Contractor:						
		Submitted By:				Date:		
		Approved By:				Date:		
Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V50-08-1/7.5/VCE							3600



Applications

- Water Supply
- Pressure Boosting
- Agriculture
- Cooling Circuits
- Washing / Sprinkling Systems
- Condensate Return

Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	200 PSI

Technical Data - Panel

Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways for BacNET, LonWorks, and CANbus)
Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
Additional Ports	2.0 USB Port; Micro-SD Port

Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

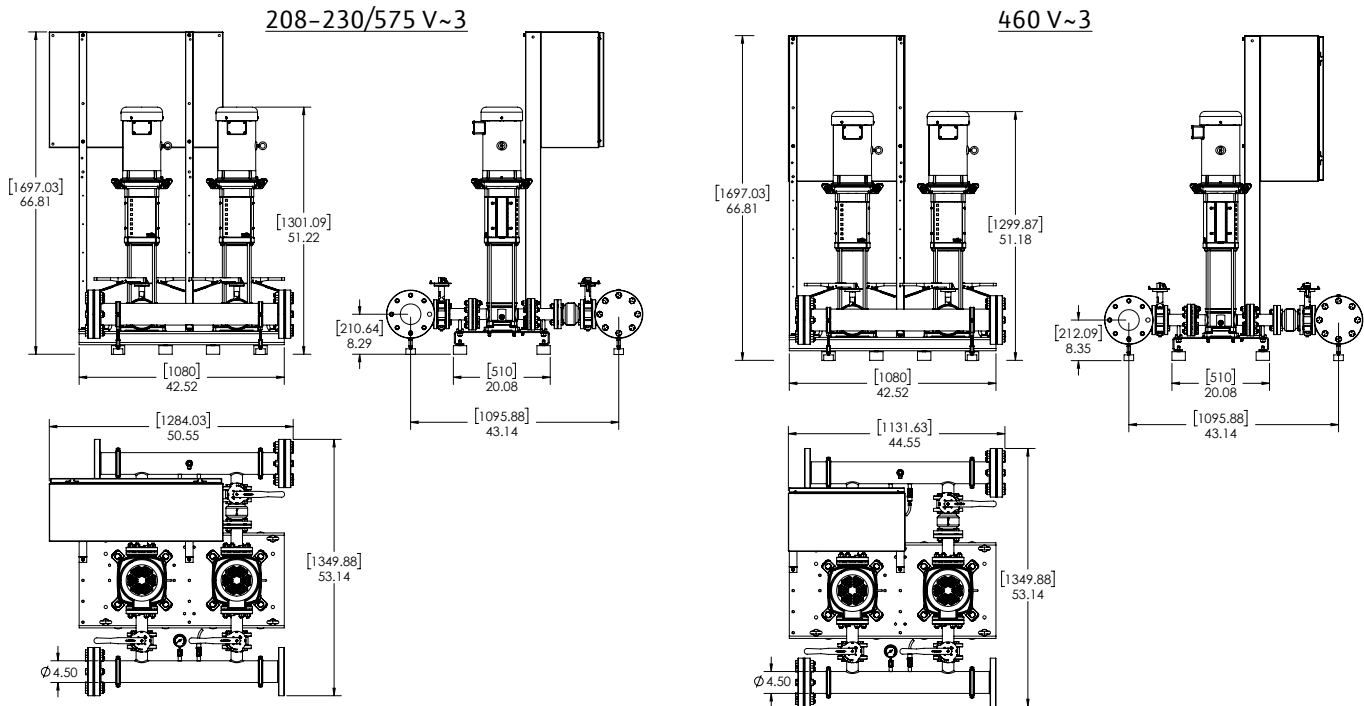
Approval Stamp

Submittal Data Sheet

Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V50-08-1/7.5/VCE



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

Dimensions and Weights

Model	Voltage (V)	Dimensions-inches				System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydrumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight Pump Weight (lbs)	Package Weight Package Weight (lbs)
		H (in)	W (in)	L (in)								
CO-2 HELIX V50-08-1/7.5/VCE	208-230/575 V	66-4/5	50-5/9	53-1/7	4"-150# ANSI	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	223	1021	
	460 V	66-4/5	44-5/9	53-1/7							978	

TEFC Motor Data

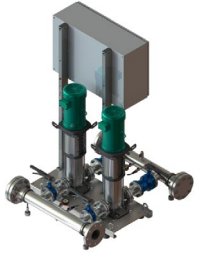
Model	P2 (HP)	Phase (~)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)
CO-2 HELIX V50-08-1/7.5/VCE	7.5	3	208-230/460/575	17.2-16.2/8.1/6.8	200

Submittal Data Sheet

Wilco CO-Helix - NSF 61/372 Pressure Boosting System

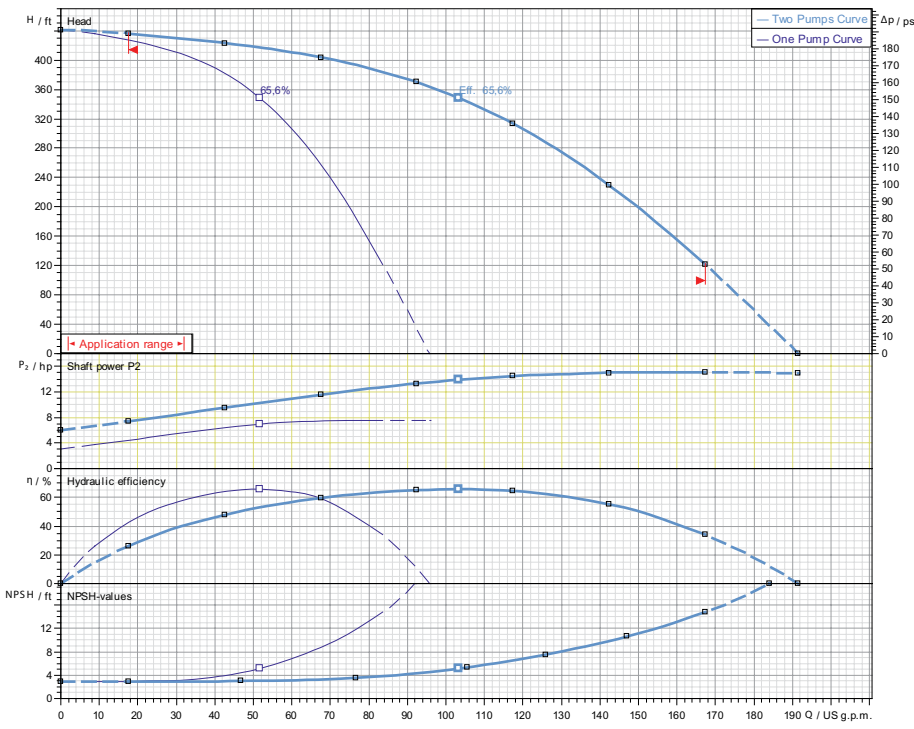


CO-2 HELIX V50-09-1/7.5/VCE



Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V50-09-1/7.5/VCE				7.5			3600



Applications

- Water Supply
- Agriculture
- Washing / Sprinkling Systems
- Pressure Boosting
- Cooling Circuits
- Condensate Return

Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	200 PSI

Technical Data - Panel

Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways for BacNET, LonWorks, and CANbus)
Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
Additional Ports	2.0 USB Port; Micro-SD Port

Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

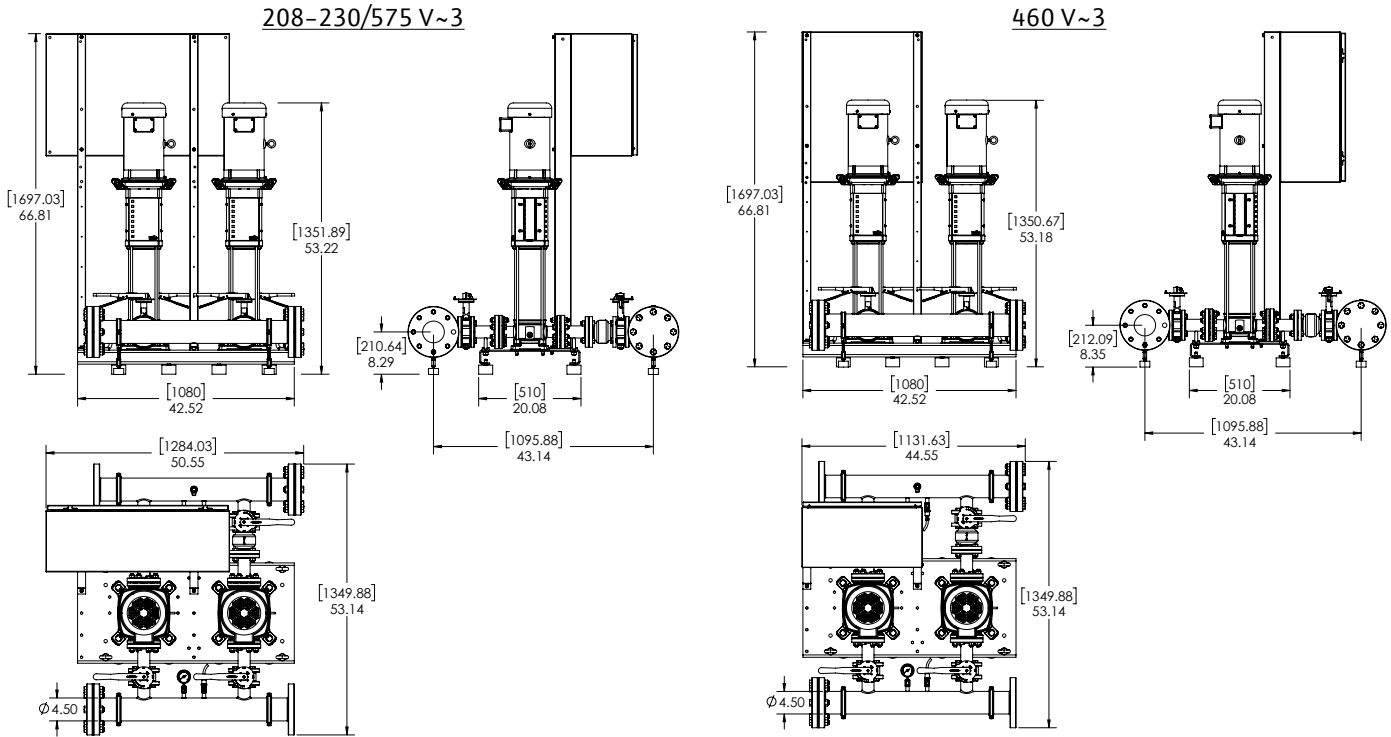
Approval Stamp

Submittal Data Sheet

Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V50-09-1/7.5/VCE



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

Dimensions and Weights

Model	Voltage (V)	H (in)	W (in)	L (in)	Dimensions-inches				Hydronumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight	Package Weight
					System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size		Pump Weight (lbs)	Package Weight (lbs)
CO-2 HELIX V50-09-1/7.5/VCE	208-230/575 V	66-4/5	50-5/9	53-1/7	4"-150#	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	226	1029
	460 V	66-4/5	44-5/9	53-1/7	ANSI						986

TEFC Motor Data

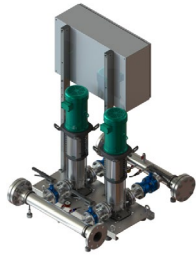
Model	P2 (HP)	Phase (~)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)
CO-2 HELIX V50-09-1/7.5/VCE	7.5	3	208-230/460/575	17.2-16.2/8.1/6.8	200

Submittal Data Sheet

Wilco CO-Helix - NSF 61/372 Pressure Boosting System

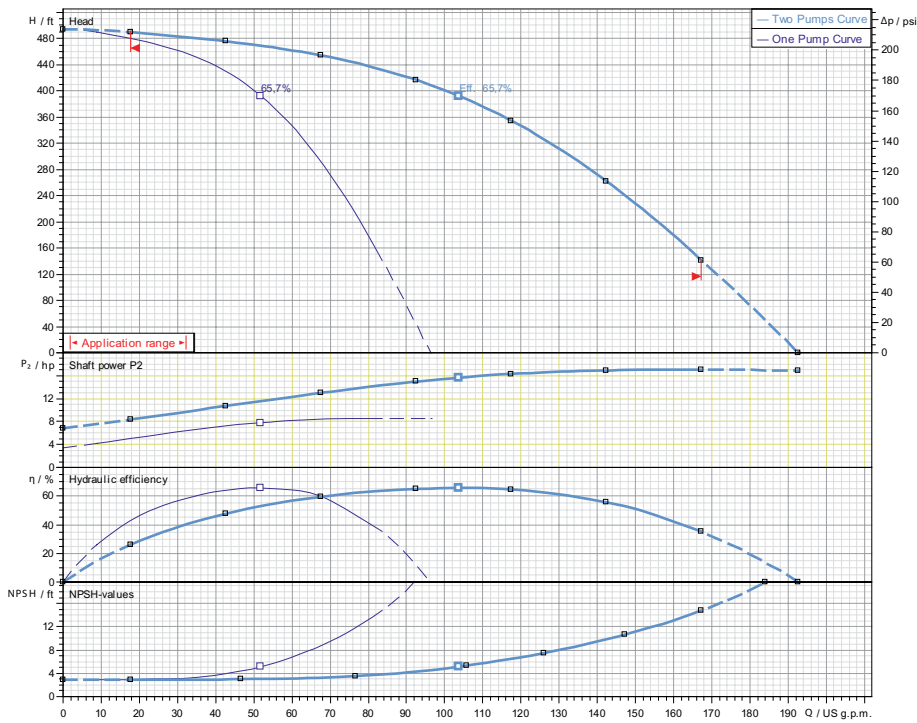


CO-2 HELIX V50-10-1/10/VCE



Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V50-10-1/10/VCE				10			3600



Applications

- Water Supply
- Agriculture
- Washing / Sprinkling Systems
- Pressure Boosting
- Cooling Circuits
- Condensate Return

Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	250 PSI

Technical Data - Panel

Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-230/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways for BacNET, LonWorks, and CANbus)
Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
Additional Ports	2.0 USB Port; Micro-SD Port

Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

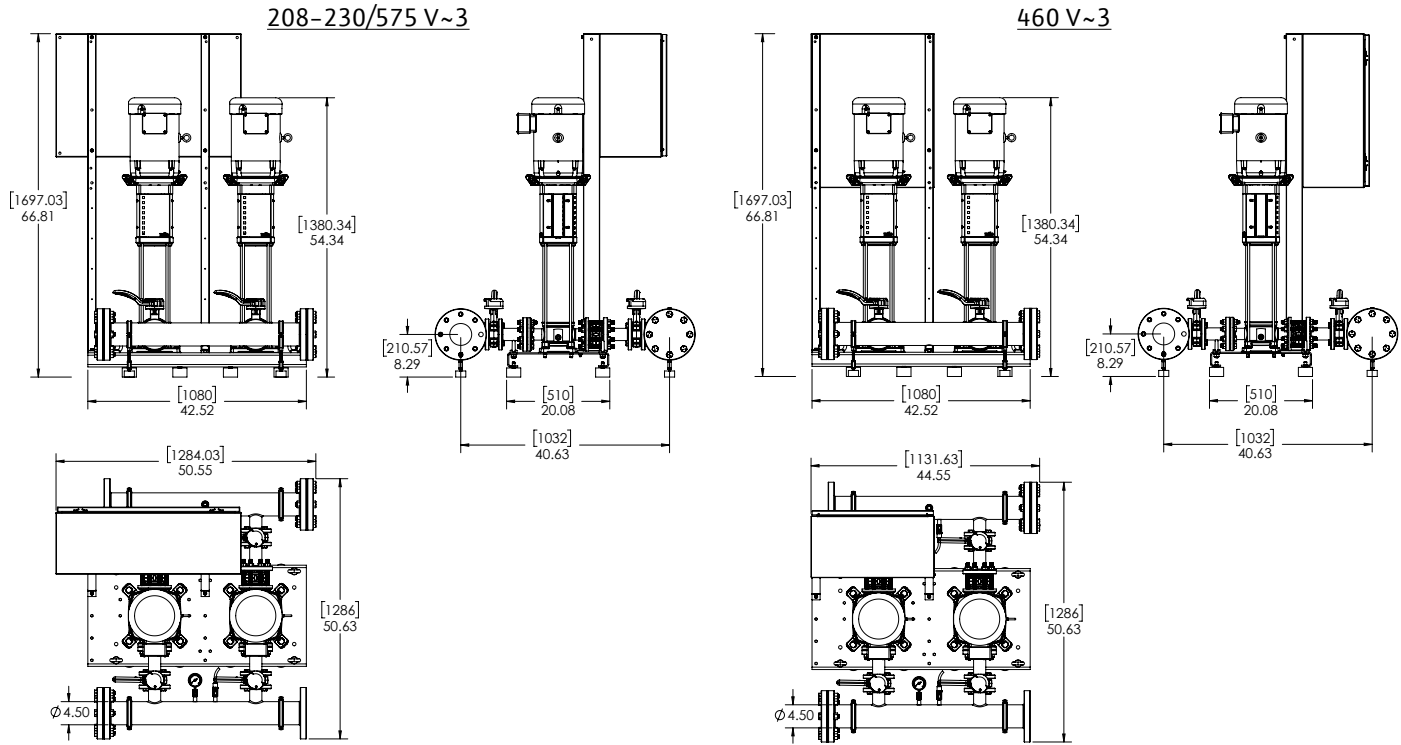
Approval Stamp

Submittal Data Sheet

Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V50-10-1/10/VCE



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

Dimensions and Weights

Model	Voltage (V)	Dimensions—Inches								Individual Pump Weight	Package Weight
		H (in)	W (in)	L (in)	System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydrumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)	Package Weight (lbs)
CO-2 HELIX V50-10-1/10/VCE	208-230/575 V	66-4/5	50-5/9	50-5/8	4"-150#	2"	1/4"	1/4"	3/4" MNPT x 3/4" FNPT	226	1077
	460 V	66-4/5	44-5/9	50-5/8	ANSI		FNPT	FNPT			1035

TEFC Motor Data

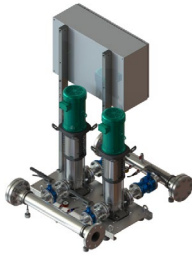
Model	P2 (HP)	Phase (~)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)
CO-2 HELIX V50-10-1/10/VCE	10	3	208-230/460/575	24.8-24.2/12.1/9.5	250

Submittal Data Sheet

Wilo CO-Helix - NSF 61/372 Pressure Boosting System

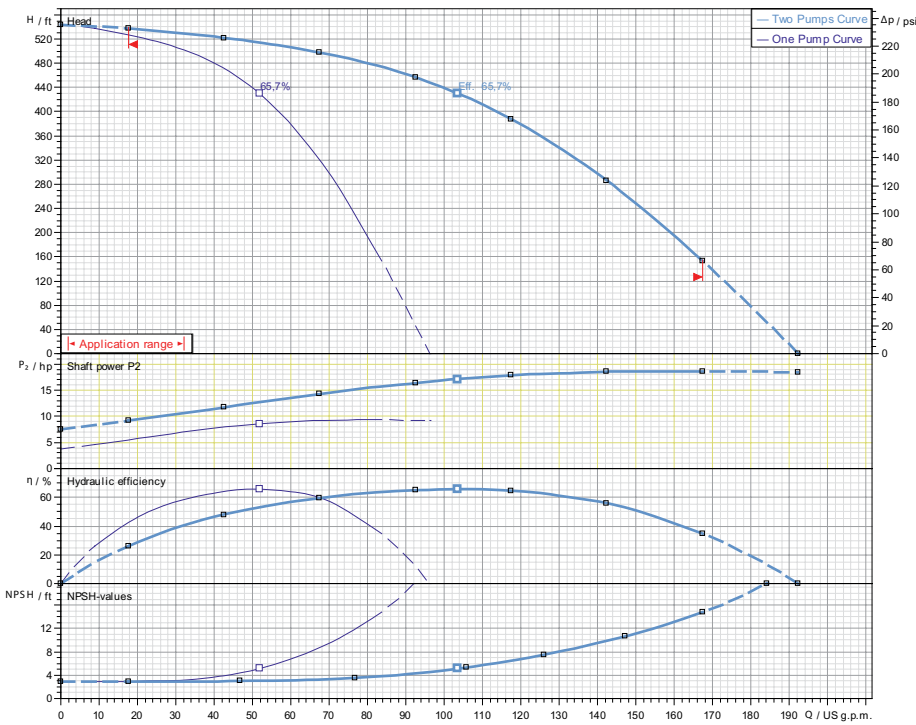


CO-2 HELIX V50-11-1/10/VCE



Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V50-11-1/10/VCE				10			3600



Applications

- Water Supply
- Agriculture
- Washing / Sprinkling Systems
- Pressure Boosting
- Cooling Circuits
- Condensate Return

Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Gauges	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	250 PSI

Technical Data - Panel

Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways for BacNET, LonWorks, and CANbus)
Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
Additional Ports	2.0 USB Port; Micro-SD Port

Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

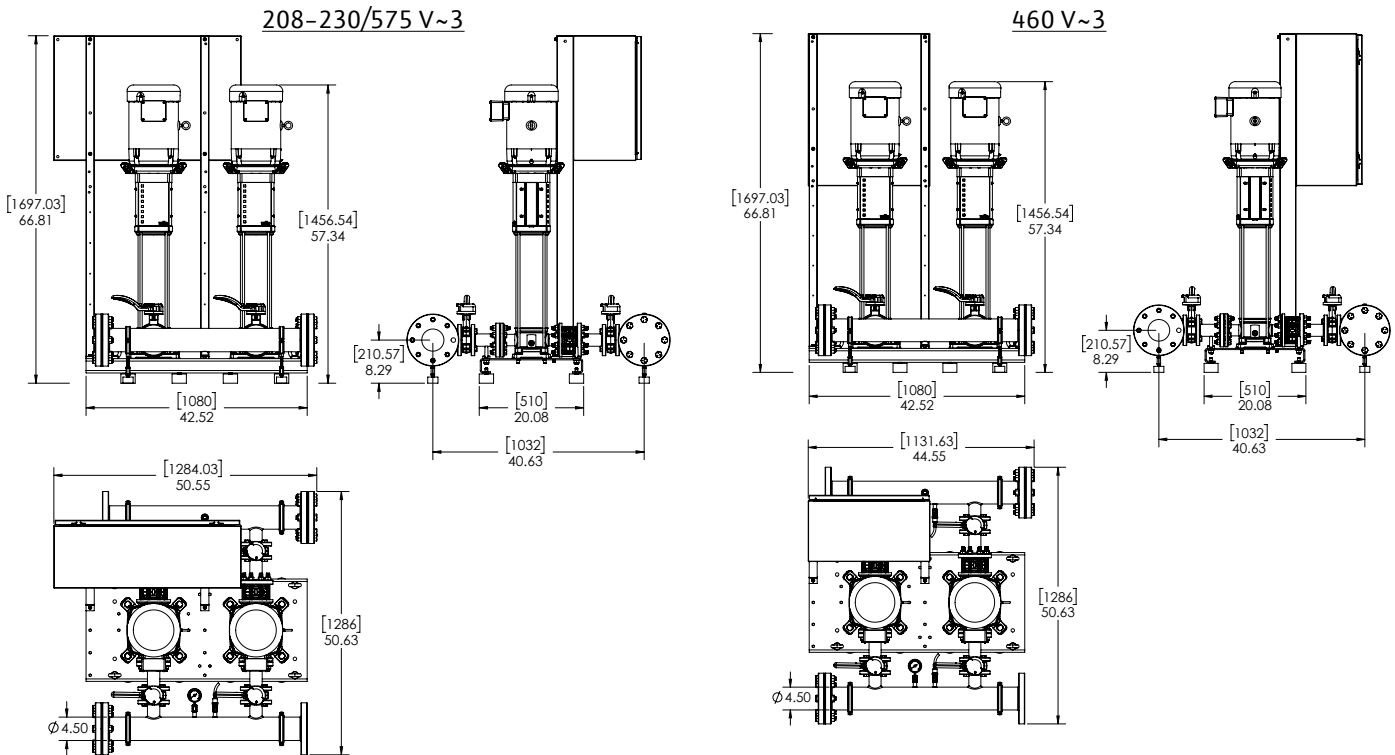
Approval Stamp

Submittal Data Sheet

Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V50-11-1/10/VCE



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

Dimensions and Weights

Model	Voltage (V)	H (in)	W (in)	L (in)	System Header Size	Dimensions-inches				Hydrumnatic Tank Valve on Manifold (Plugged)	Individual Pump Weight	Package Weight
						Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Pump Weight (lbs)			
CO-2 HELIX V50-11-1/10/VCE	208-230/575 V	66-4/5	50-5/9	50-5/8	4"-150#	2"	1/4"	1/4"	3/4" MNPT x 3/4" FNPT	258	1087	
	460 V	66-4/5	44-5/9	50-5/8	ANSI		1/4" FNPT	1/4" FNPT	3/4" FNPT	1045		

TEFC Motor Data

Model	P2 (HP)	Phase (~)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)
CO-2 HELIX V50-11-1/10/VCE	10	3	208-230/460/575	24.8-24.2/12.1/9.5	250