

Submittal Data Sheet
Wilco Helix NSF 61/372 Pressure Boosting System



CO-2 HELIX V110-02/2-1/5/VCE

Project:

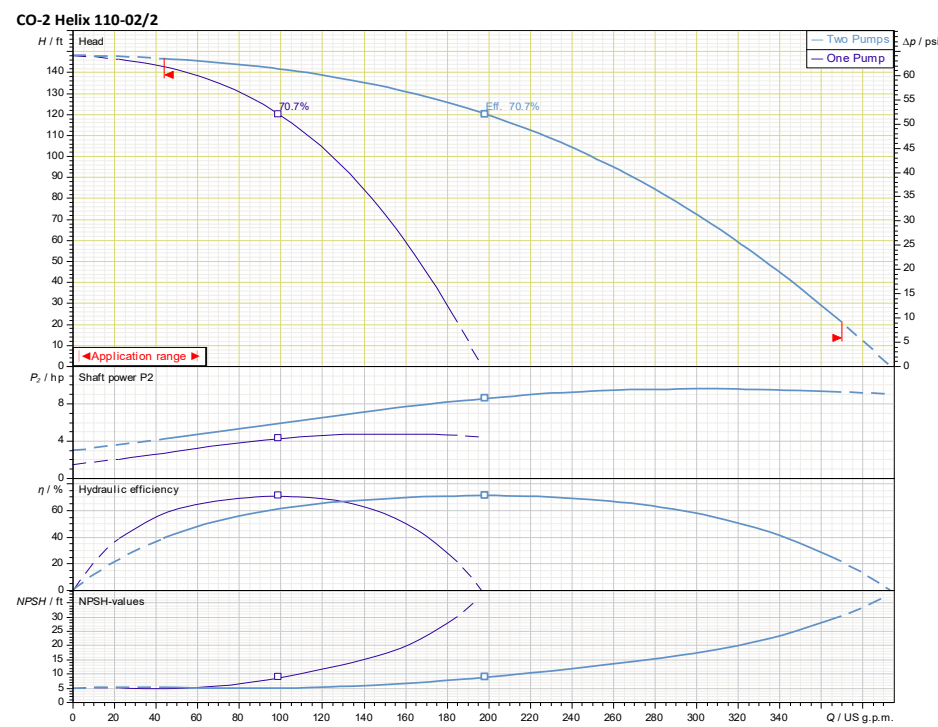
Engineer:

Contractor:

Submitted By:Date:

Approved By:Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V110-2/2-1/5/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	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-101

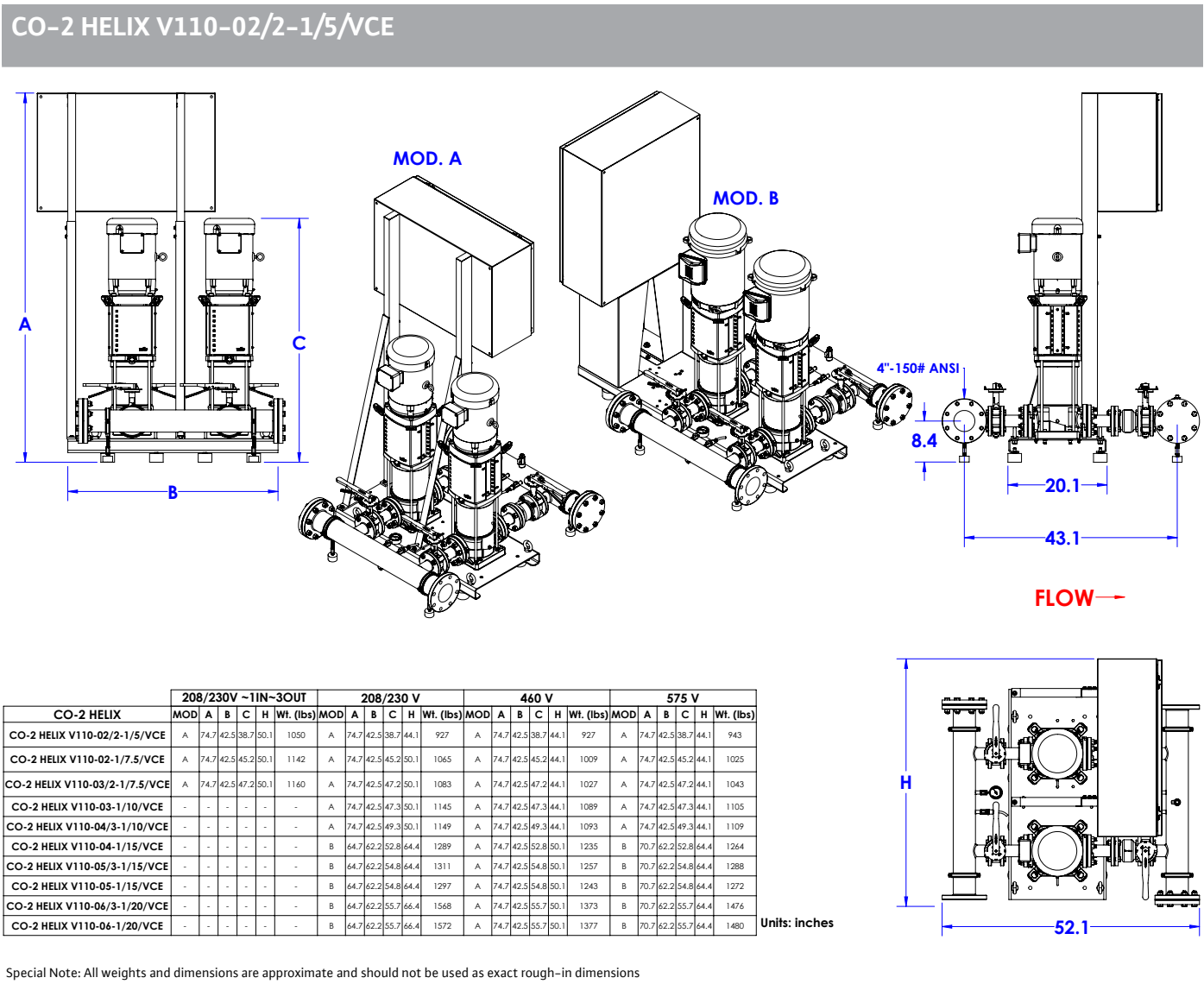
Technical Data – PLC	
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus 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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Submittal Data Sheet
Wilco Helix NSF 61/372 Pressure Boosting System



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

TEFC Motor Data						Dimensions				
	P2	Phase	Voltage	FLA (per pump)	Pmax	Dimensions-inches				Individual Pump Weight
Model	(HP)	(~)	(V)	(A)	(PSI)	Suction /Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)
CO-2 HELIX V110-02/1-1/5/VCE	5	3	208-230/460/575	13.1-11.8/5.9/4.72	200	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	193

WILCO USA LLC
+1 262 204-6600
www.wilo-usa.com
info@wilo-usa.com

WILCO Canada Inc.
+1 403 276-9456
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Wilco Helix NSF 61/372 Pressure Boosting System



CO-2 HELIX V110-02-1/7.5/VCE

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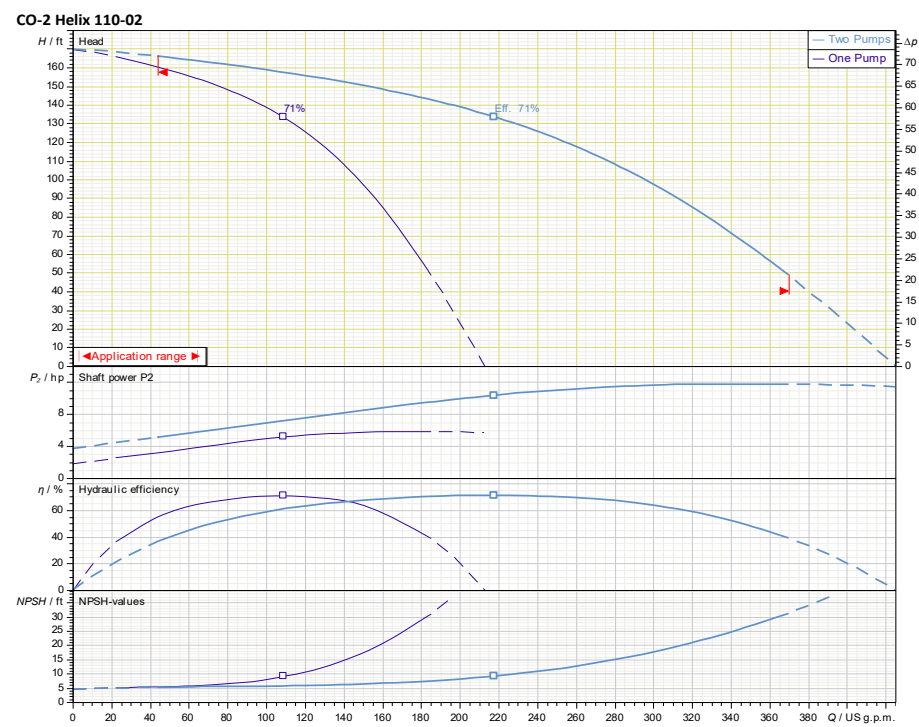
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Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V110-02-1/7.5/VCE				7.5			3600



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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-101

Technical Data – PLC	
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
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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)
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CO-2 HELIX V110-02-1/7.5/VCE

MOD. A

MOD. B

4"-150# ANSI

FLOW →

CO-2 HELIX	208/230V ~1IN-3OUT					208/230 V					460 V					575 V								
	MOD	A	B	C	H	MOD	A	B	C	H	MOD	A	B	C	H	MOD	A	B	C	H				
CO-2 HELIX V110-02-2/1/5/VCE	A	74.7	42.5	38.7	50.1	1050	A	74.7	42.5	38.7	44.1	927	A	74.7	42.5	38.7	44.1	943						
CO-2 HELIX V110-02-1/7.5/VCE	A	74.7	42.5	45.2	50.1	1142	A	74.7	42.5	45.2	50.1	1065	A	74.7	42.5	45.2	44.1	1009	A	74.7	42.5	45.2	44.1	1025
CO-2 HELIX V110-03-2/1/5/VCE	A	74.7	42.5	47.2	50.1	1160	A	74.7	42.5	47.2	50.1	1083	A	74.7	42.5	47.2	44.1	1027	A	74.7	42.5	47.2	44.1	1043
CO-2 HELIX V110-03-1/10/VCE	-	-	-	-	-	-	A	74.7	42.5	47.3	50.1	1145	A	74.7	42.5	47.3	44.1	1089	A	74.7	42.5	47.3	44.1	1105
CO-2 HELIX V110-04-3-1/10/VCE	-	-	-	-	-	-	A	74.7	42.5	49.3	50.1	1149	A	74.7	42.5	49.3	44.1	1093	A	74.7	42.5	49.3	44.1	1109
CO-2 HELIX V110-04-1/15/VCE	-	-	-	-	-	-	B	64.7	62.2	52.8	64.4	1289	A	74.7	42.5	52.8	50.1	1235	B	70.7	62.2	52.8	64.4	1264
CO-2 HELIX V110-05-3-1/15/VCE	-	-	-	-	-	-	B	64.7	62.2	54.8	64.4	1311	A	74.7	42.5	54.8	50.1	1257	B	70.7	62.2	54.8	64.4	1288
CO-2 HELIX V110-05-1/15/VCE	-	-	-	-	-	-	B	64.7	62.2	54.8	64.4	1297	A	74.7	42.5	54.8	50.1	1243	B	70.7	62.2	54.8	64.4	1272
CO-2 HELIX V110-06-3-1/20/VCE	-	-	-	-	-	-	B	64.7	62.2	55.7	66.4	1568	A	74.7	42.5	55.7	50.1	1373	B	70.7	62.2	55.7	64.4	1476
CO-2 HELIX V110-06-1/20/VCE	-	-	-	-	-	-	B	64.7	62.2	55.7	66.4	1572	A	74.7	42.5	55.7	50.1	1377	B	70.7	62.2	55.7	64.4	1480

Units: inches

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

TEFC Motor Data						Dimension				
	P2	Phase	Voltage	FLA (per pump)	Pmax					Individual Pump Weight
Model	(HP)	(~)	(V)	(A)	(PSI)	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)
CO-2 HELIX V110-02-1/10/VCE	7.5	3	208-230/460/575	19.2-17.3/8.7/7	200	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	293

WILCO USA LLC
+1 262 204-6600
www.wilo-usa.com
info@wilo-usa.com

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+1 403 276-9456
www.wilo-canada.com
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Wilco CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V110-03/2-1/7.5/VCE



Project:

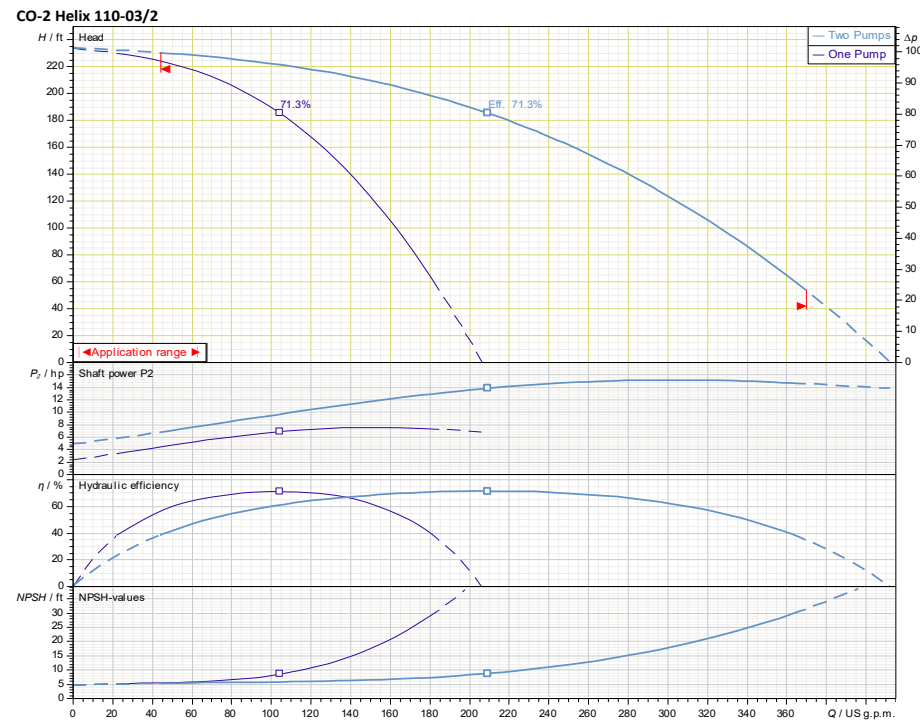
Engineer:

Contractor:

Submitted By:
Date:

Approved By:
Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V110-03/2-1/7.5/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

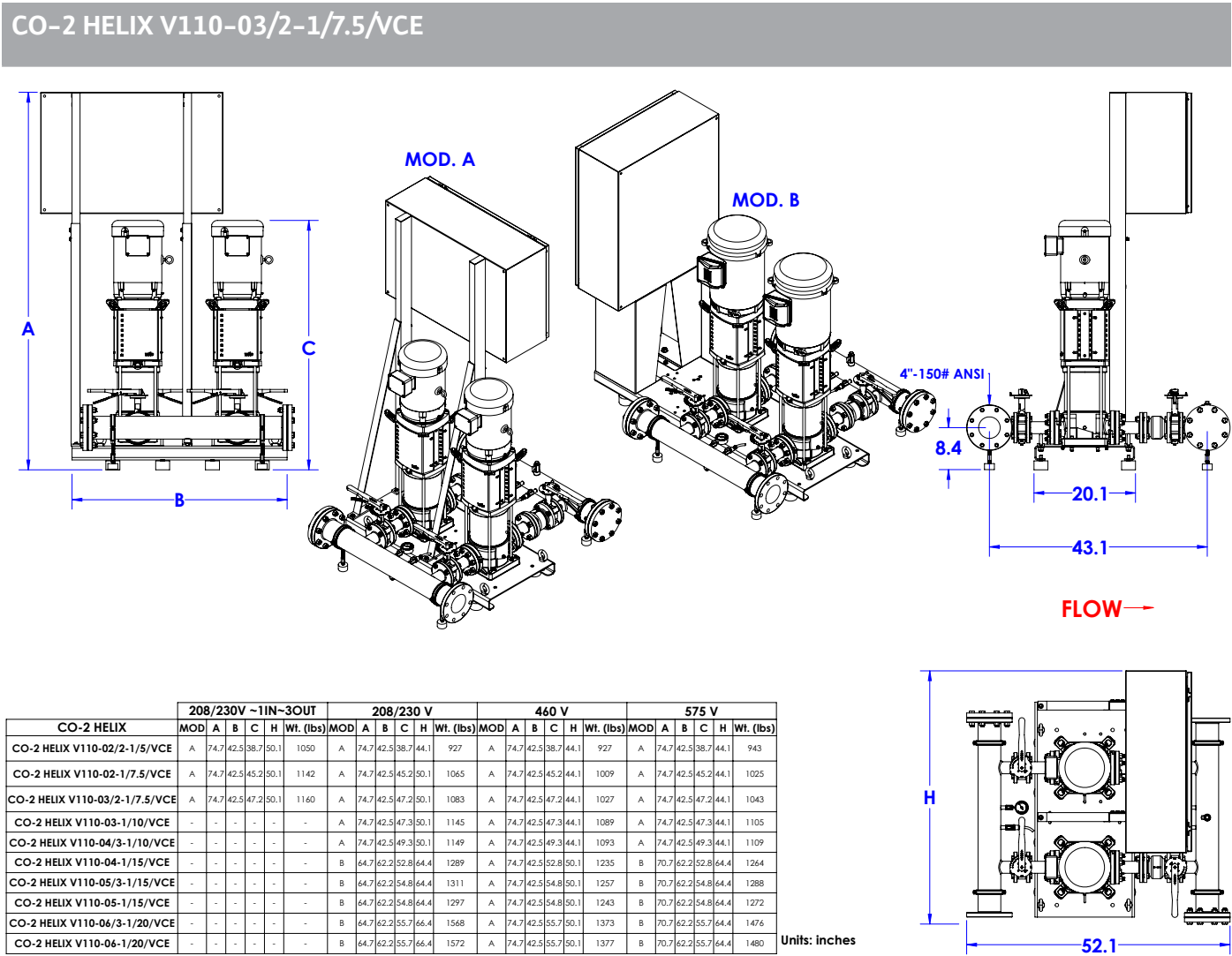
Technical Data - Panel	
Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-101

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



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

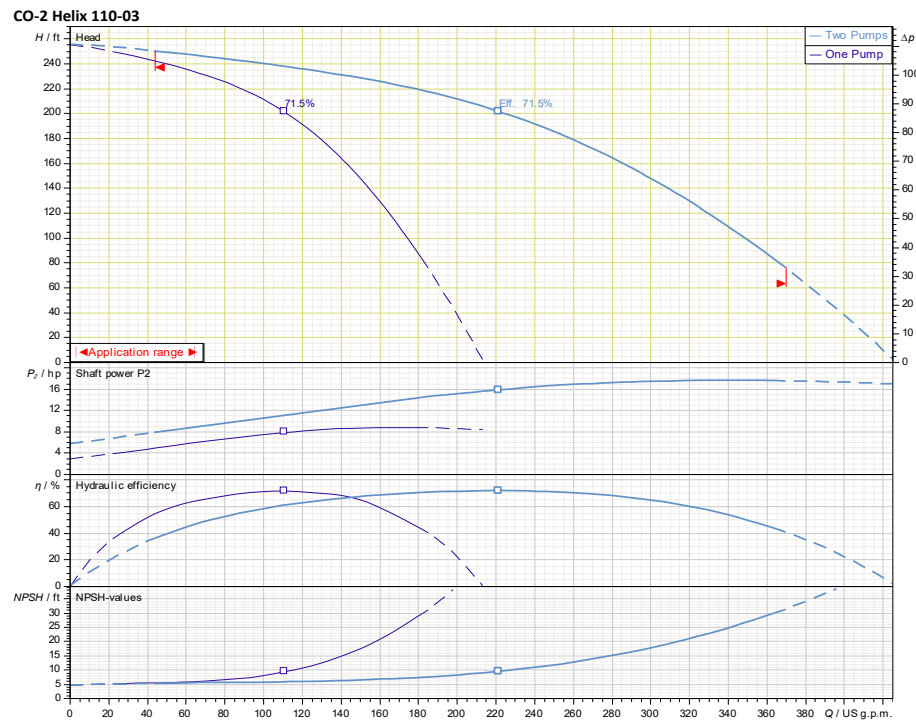
TEFC Motor Data						Dimension				
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)	Dimensions-inches				Individual Pump Weight
						Suction /Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)
CO-2 HELIX V110-03/2-1/7.5/VCE	7.5	3	208-230/460/575	19.2-17.3/8.7/7	200	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	293

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



CO-2 HELIX V110-03-1/10/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 V110-03-1/10/VCE				10			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
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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–101

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

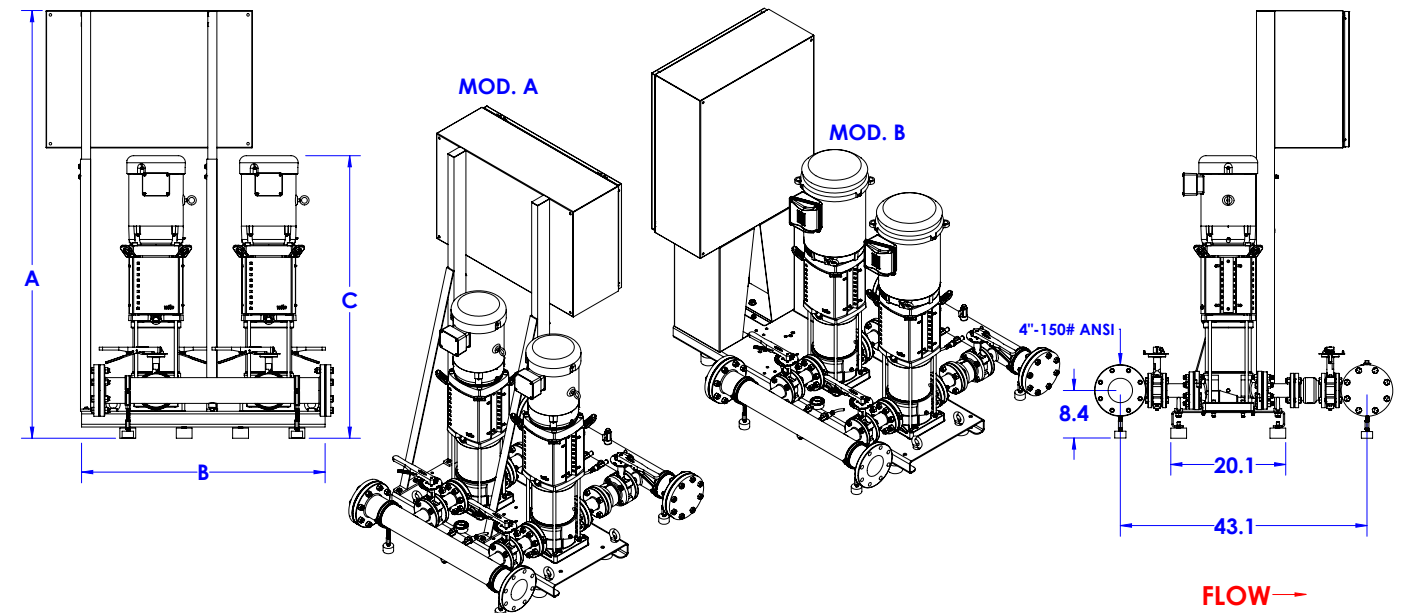
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Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
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Approval Stamp

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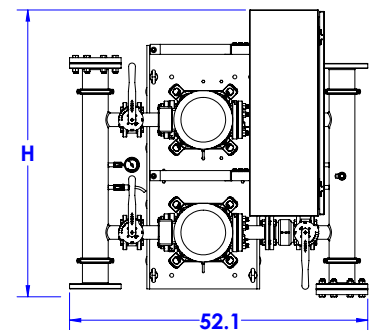
CO-2 HELIX V110-03-1/10/VCE



	208/230V ~11N-3OUT						208/230 V						460 V						575 V					
CO-2 HELIX	MOD	A	B	C	H	Wt. (lbs)	MOD	A	B	C	H	Wt. (lbs)	MOD	A	B	C	H	Wt. (lbs)	MOD	A	B	C	H	Wt. (lbs)
CO-2 HELIX V110-02-2/1.5/VCE	A	74.7	42.5	38.7	50.1	1050	A	74.7	42.5	38.7	44.1	927	A	74.7	42.5	38.7	44.1	927	A	74.7	42.5	38.7	44.1	943
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WILO USA LLC +1 262 204-6600
www.wilo-usa.com
info@wilo-usa.com

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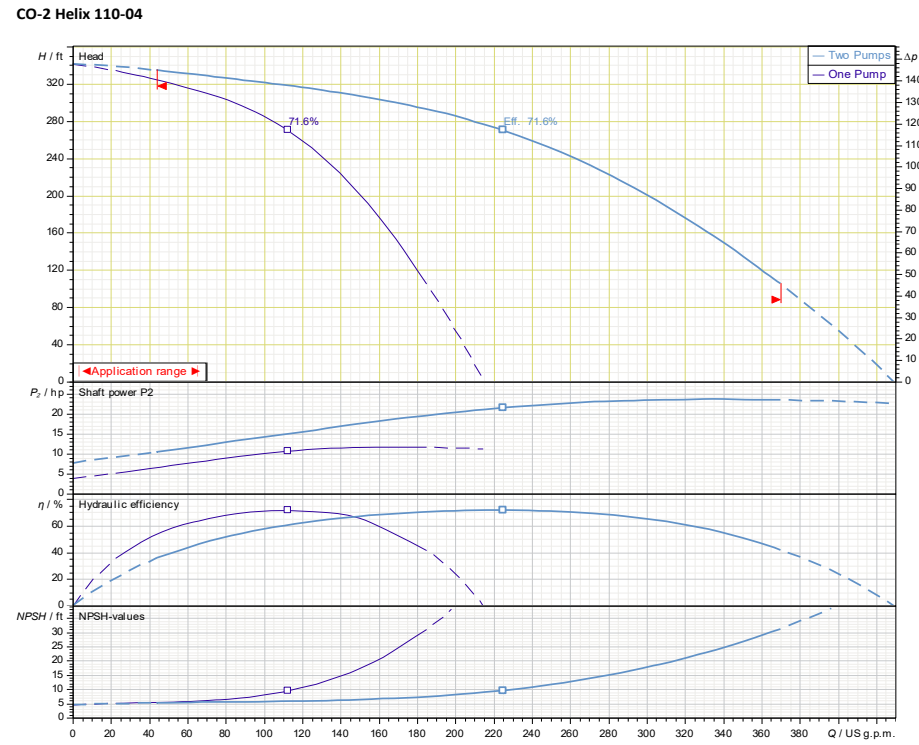
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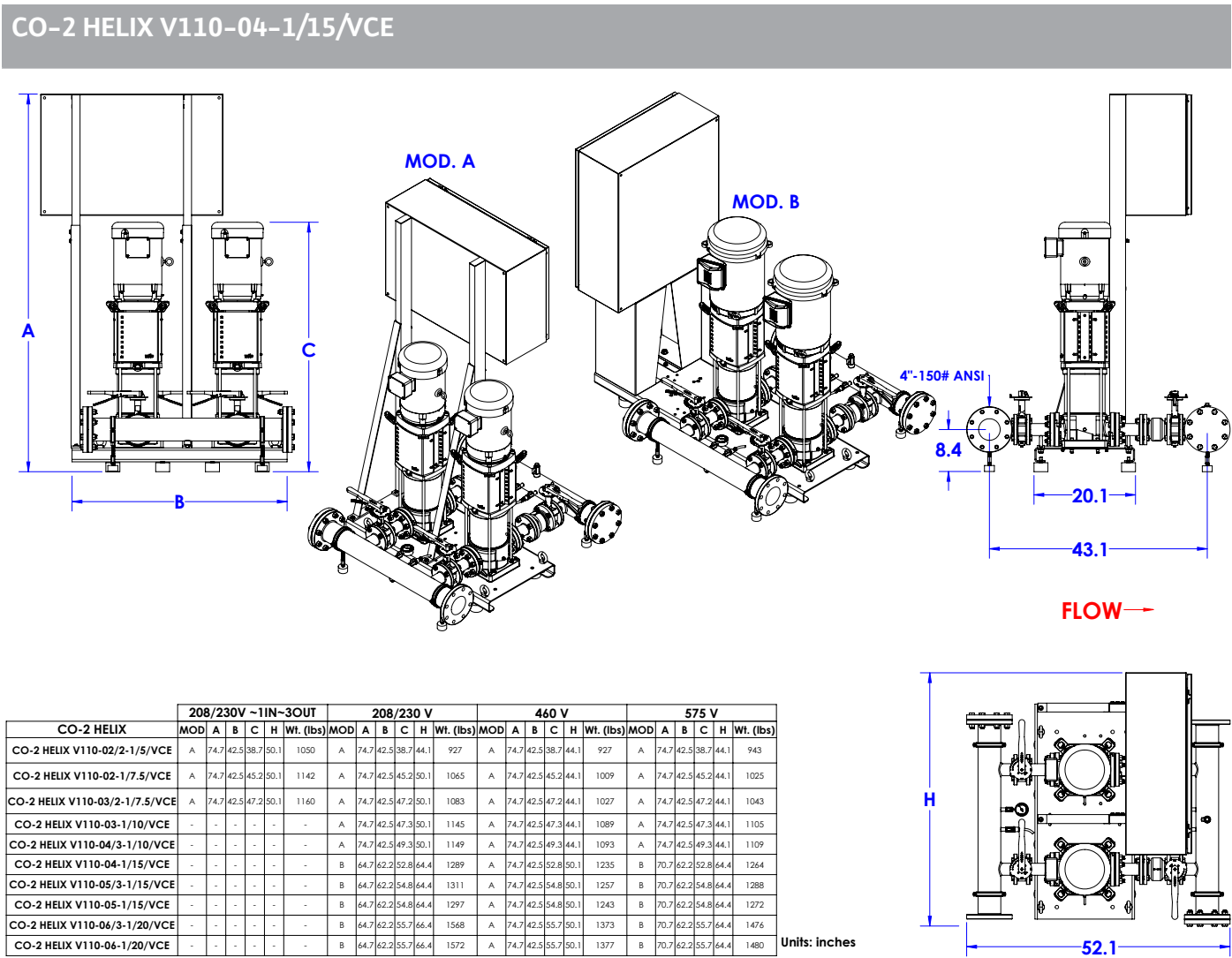
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Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

TEFC Motor Data						Dimensions				
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)	Dimensions-inches				Individual Pump Weight (lbs)
						Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	
CO-2 HELIX V110-04-1/15/VCE	15	3	208-230/460/575	38.5-34.8/17.4/13.8	200	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	321

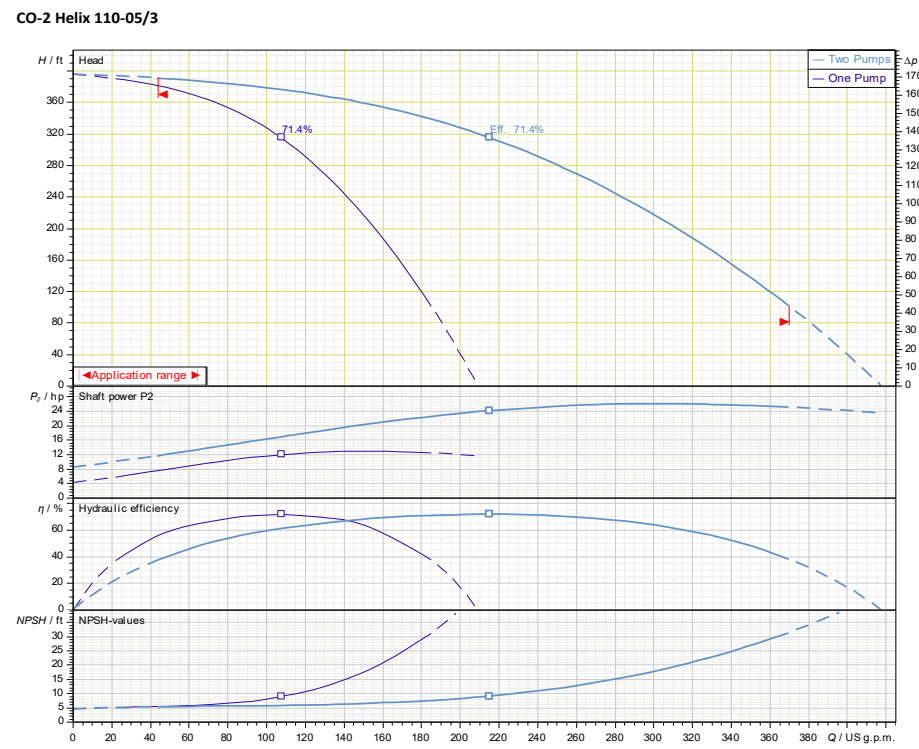
WILO USA LLC
+1 262 204-6600
www.wilo-usa.com
info@wilo-usa.com

WILO Canada Inc.
+1 403 276-9456
www.wilo-canada.com
info@wilo-canada.com

Submittal Data Sheet
Wilco CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V110-05/3-1/15/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 V110-05/3-1/15/VCE				15			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

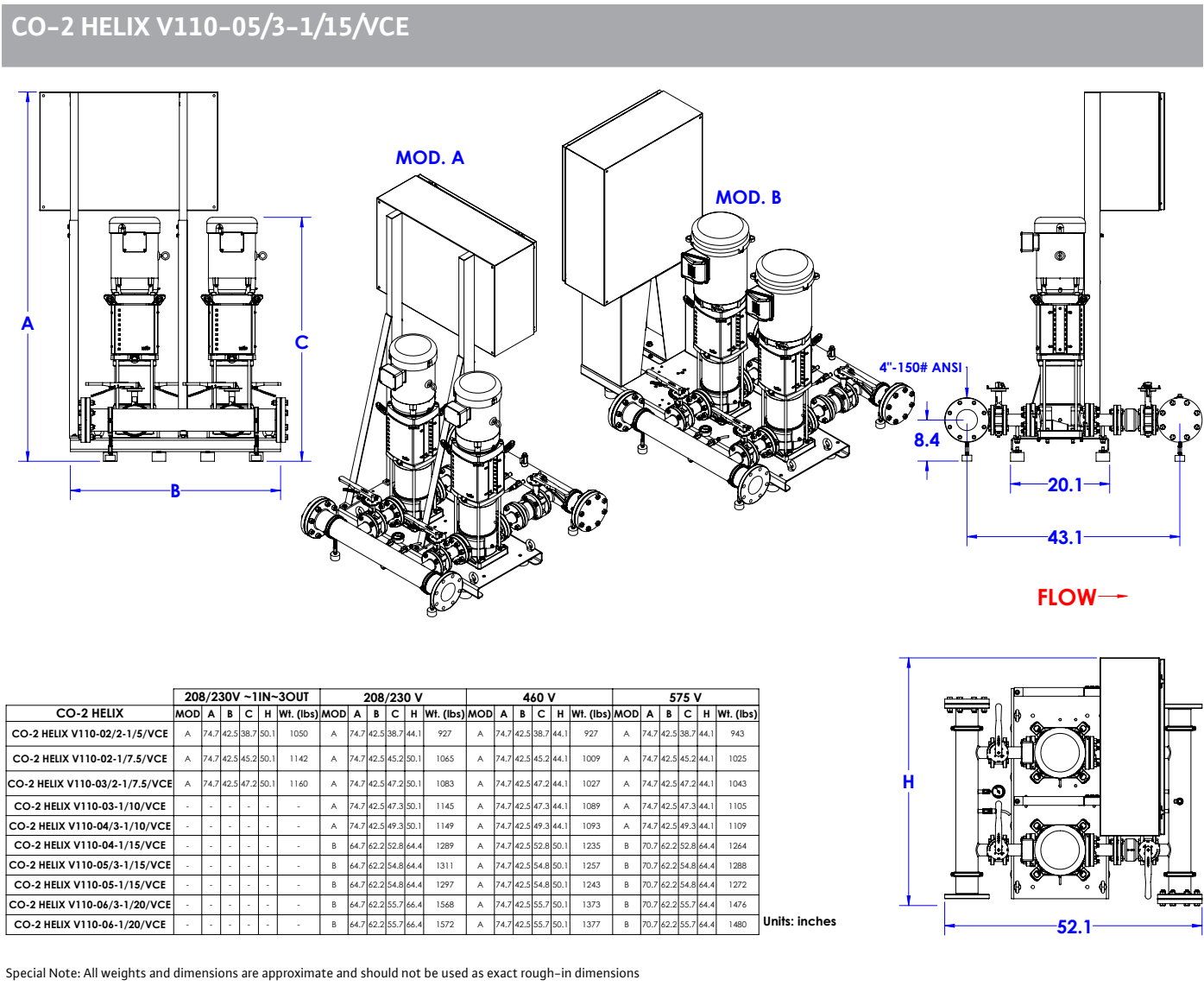
Technical Data - Panel	
Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-101

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



TEFC Motor Data						Dimensions				
Model	(HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)	Dimensions-inches				Individual Pump Weight
						Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)
CO-2 HELIX V110-05/3-1/15/VCE	15	3	208-230/460/575	38.5-34.8/17.4/13.8	200	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	332

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



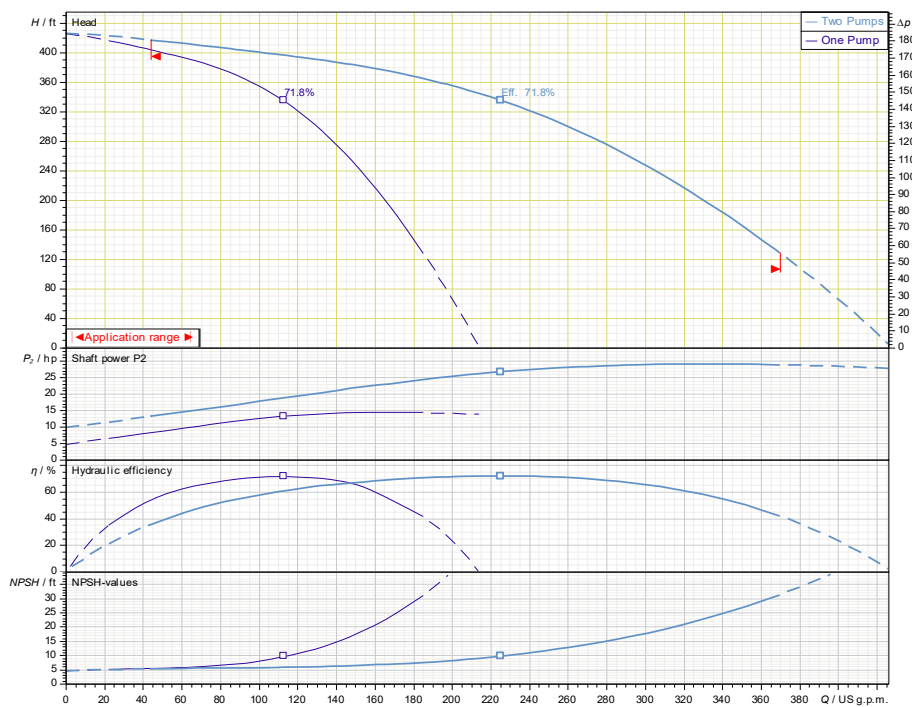
CO-2 HELIX V110-05-1/15/VCE



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 V110-05-1/15/VCE				15			3600

CO-2 Helix 110-05



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-101

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

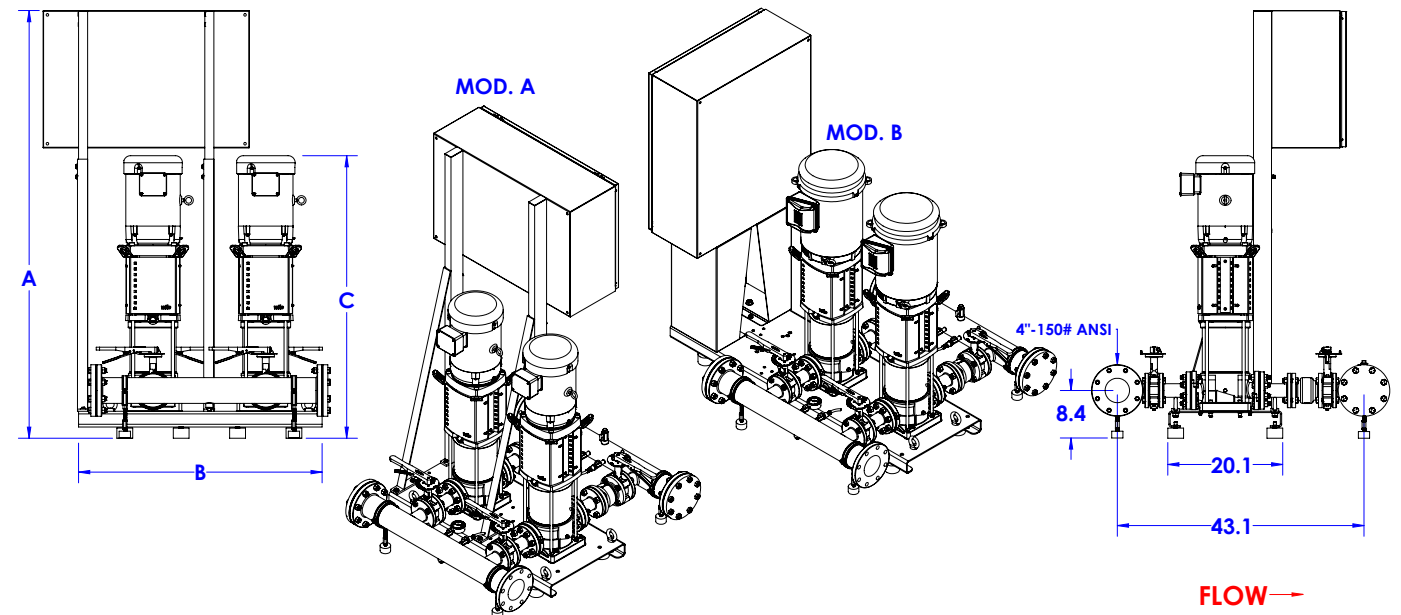
Power Supply	208-230-3 or 460-3 or 575-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

Approval Stamp

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

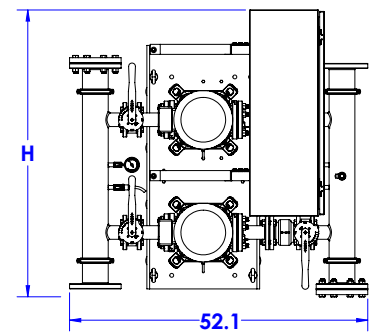


CO-2 HELIX V110-05-1/15/VCE



CO-2 HELIX	208/230V ~1IN-3OUT						208/230 V						460 V						575 V					
	MOD	A	B	C	H	Wt. (lbs.)	MOD	A	B	C	H	Wt. (lbs.)	MOD	A	B	C	H	Wt. (lbs.)	MOD	A	B	C	H	Wt. (lbs.)
CO-2 HELIX V110-02/2-1/5/VCE	A	74.7	42.5	38.7	50.1	1050	A	74.7	42.5	38.7	44.1	927	A	74.7	42.5	38.7	44.1	927	A	74.7	42.5	38.7	44.1	941
CO-2 HELIX V110-02/2-1/7.5/VCE	A	74.7	42.5	45.2	50.1	1142	A	74.7	42.5	45.2	50.1	1065	A	74.7	42.5	45.2	44.1	1009	A	74.7	42.5	45.2	44.1	1025
CO-2 HELIX V110-03/2-1/7.5/VCE	A	74.7	42.5	47.2	50.1	1160	A	74.7	42.5	47.2	50.1	1083	A	74.7	42.5	47.2	44.1	1027	A	74.7	42.5	47.2	44.1	1043
CO-2 HELIX V110-03-1/10/VCE	-	-	-	-	-	-	A	74.7	42.5	47.3	50.1	1145	A	74.7	42.5	47.3	44.1	1089	A	74.7	42.5	47.3	44.1	1105
CO-2 HELIX V110-04/3-1/10/VCE	-	-	-	-	-	-	A	74.7	42.5	49.3	50.1	1149	A	74.7	42.5	49.3	44.1	1093	A	74.7	42.5	49.3	44.1	1109
CO-2 HELIX V110-04-1/15/VCE	-	-	-	-	-	-	B	64.7	62.2	52.8	64.4	1289	A	74.7	42.5	52.8	50.1	1235	B	70.7	62.2	52.8	64.4	1264
CO-2 HELIX V110-05/3-1/15/VCE	-	-	-	-	-	-	B	64.7	62.2	54.8	64.4	1311	A	74.7	42.5	54.8	50.1	1257	B	70.7	62.2	54.8	64.4	1288
CO-2 HELIX V110-05-1/15/VCE	-	-	-	-	-	-	B	64.7	62.2	54.8	64.4	1297	A	74.7	42.5	54.8	50.1	1243	B	70.7	62.2	54.8	64.4	1272
CO-2 HELIX V110-06/3-1/20/VCE	-	-	-	-	-	-	B	64.7	62.2	55.7	66.4	1568	A	74.7	42.5	55.7	50.1	1373	B	70.7	62.2	55.7	64.4	1476
CO-2 HELIX V110-06-1/20/VCE	-	-	-	-	-	-	B	64.7	62.2	55.7	66.4	1572	A	74.7	42.5	55.7	50.1	1377	B	70.7	62.2	55.7	64.4	1480

Units: inches



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

TEFC Motor Data

	P2	Phase	Voltage	FLA (per pump)	Pmax	Dimensions-inches				Individual Pump Weight
Model	(HP)	(~)	(V)	(A)	(PSI)	Suction /Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)
CO-2 HELIX V110-05-1/15/VCE	15	3	208-230/460/575	38.5-34.8/17.4/13.8	200	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	325

WILO USA LLC +1 262 204-6600
www.wilo-usa.com
info@wilo-usa.com

WILO Canada Inc. +1 403 276-9456
www.wilo-canada.com
info@wilo-canada.com

Submittal Data Sheet
Wilco CO-Helix - NSF 61/372 Pressure Boosting System



CO-2 HELIX V110-06/3-1/20/VCE



Project:

Engineer:

Contractor:

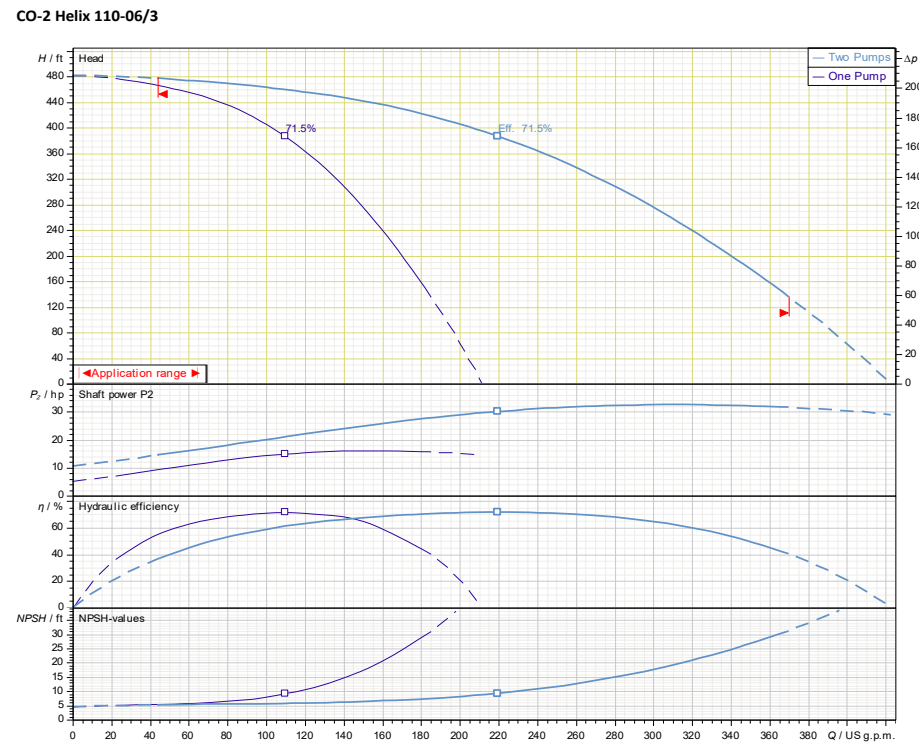
Submitted By:

Date:

Approved By:

Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V110-06/3-1/20/VCE				20			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	250 PSI

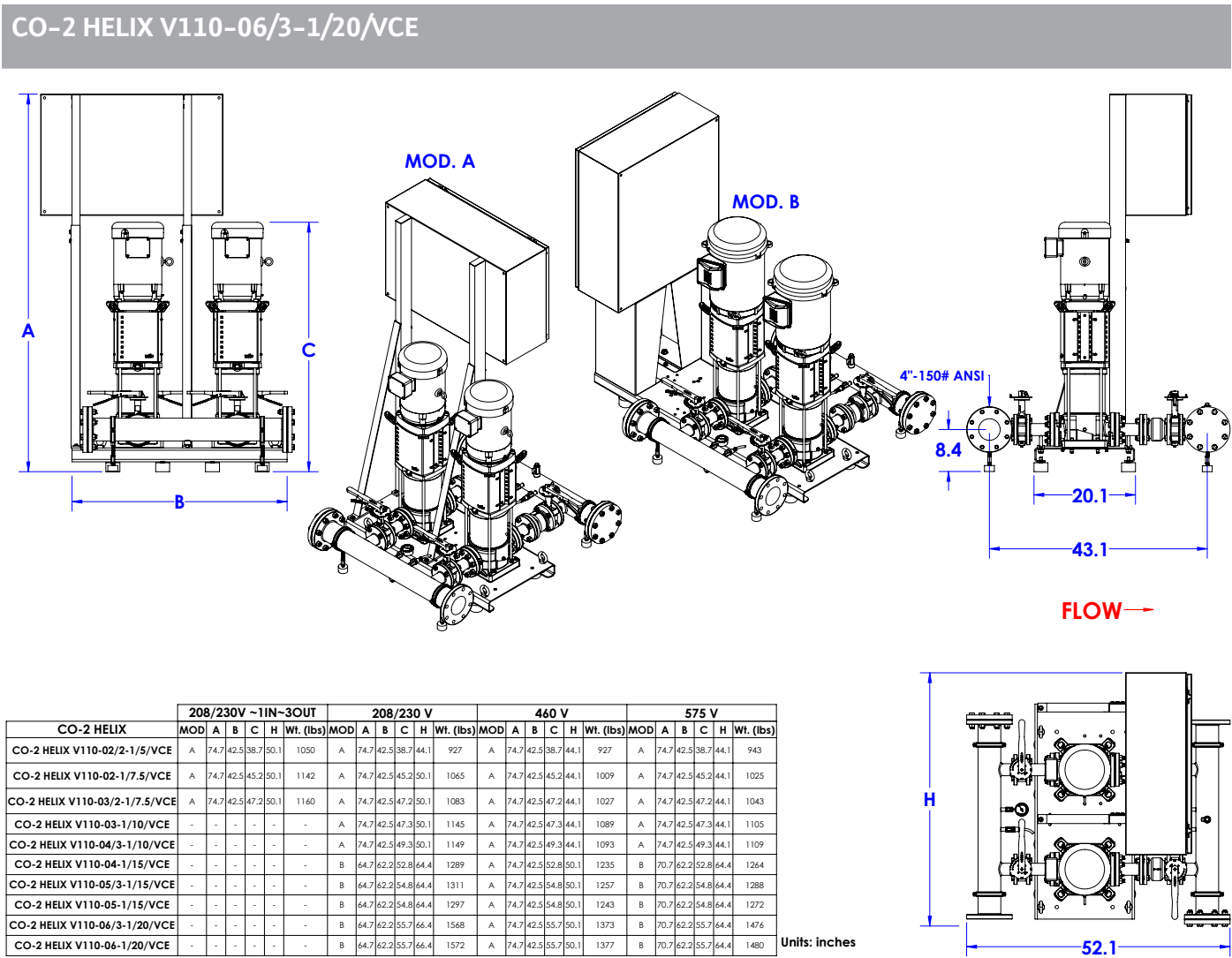
Technical Data - Panel	
Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-101

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



	208/230V ~1IN-3OUT						208/230 V						460 V						575 V					
	MOD	A	B	C	H	Wt. (lbs)	MOD	A	B	C	H	Wt. (lbs)	MOD	A	B	C	H	Wt. (lbs)	MOD	A	B	C	H	Wt. (lbs)
CO-2 HELIX V110-02/2-1/5/VCE	A	74.7	42.5	38.7	50.1	1050	A	74.7	42.5	38.7	44.1	927	A	74.7	42.5	38.7	44.1	927	A	74.7	42.5	38.7	44.1	943
CO-2 HELIX V110-02-1/7.5/VCE	A	74.7	42.5	45.2	50.1	1142	A	74.7	42.5	45.2	50.1	1065	A	74.7	42.5	45.2	44.1	1009	A	74.7	42.5	45.2	44.1	1025
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CO-2 HELIX V110-03-1/10/VCE	-	-	-	-	-	-	A	74.7	42.5	47.3	50.1	1145	A	74.7	42.5	47.3	44.1	1089	A	74.7	42.5	47.3	44.1	1105
CO-2 HELIX V110-04/3-1/10/VCE	-	-	-	-	-	-	A	74.7	42.5	49.3	50.1	1149	A	74.7	42.5	49.3	44.1	1093	A	74.7	42.5	49.3	44.1	1109
CO-2 HELIX V110-04-1/15/VCE	-	-	-	-	-	-	B	64.7	62.2	52.8	64.4	1289	A	74.7	42.5	52.8	50.1	1235	B	70.7	62.2	52.8	64.4	1264
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Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

TEFC Motor Data						Dimensions				
Model	P2	Phase	Voltage	FLA (per pump)	Pmax	Dimensions-inches				
	(HP)	(~)	(V)	(A)	(PSI)	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight
CO-2 HELIX V110-06/3-1/20/VCE	20	3	208-230/460/575	50-46/23/18.2	250	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	375

Submittal Data Sheet
Wilco Helix NSF 61/372 Pressure Boosting System



CO-2 HELIX V110-06-1/20/VCE

Project:

Engineer:

Contractor:

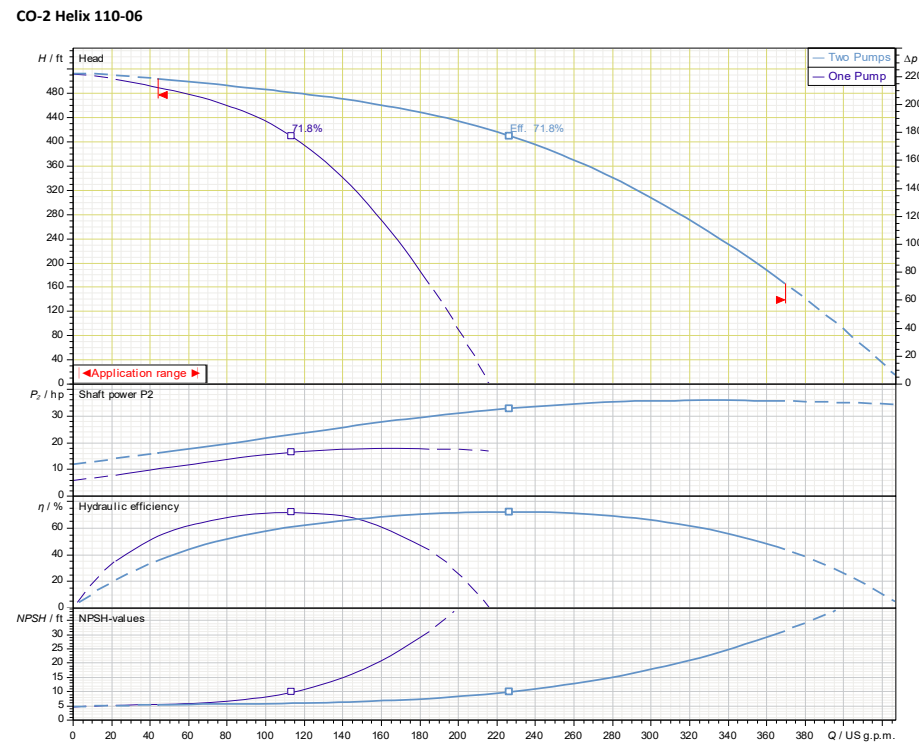
Submitted By:

Approved By:

Date:

Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V110-06-1/20/VCE				20			3600



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

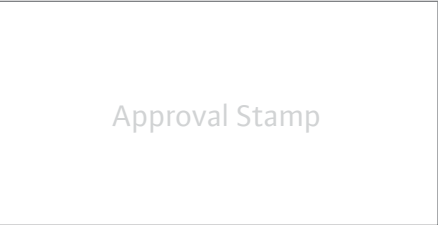
Materials of Construction	
Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
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Check Valves	Wafer Style, 316 Stainless Steel internals, Non-slam, Plunger-type with EPDM seal/ Cast Iron Body
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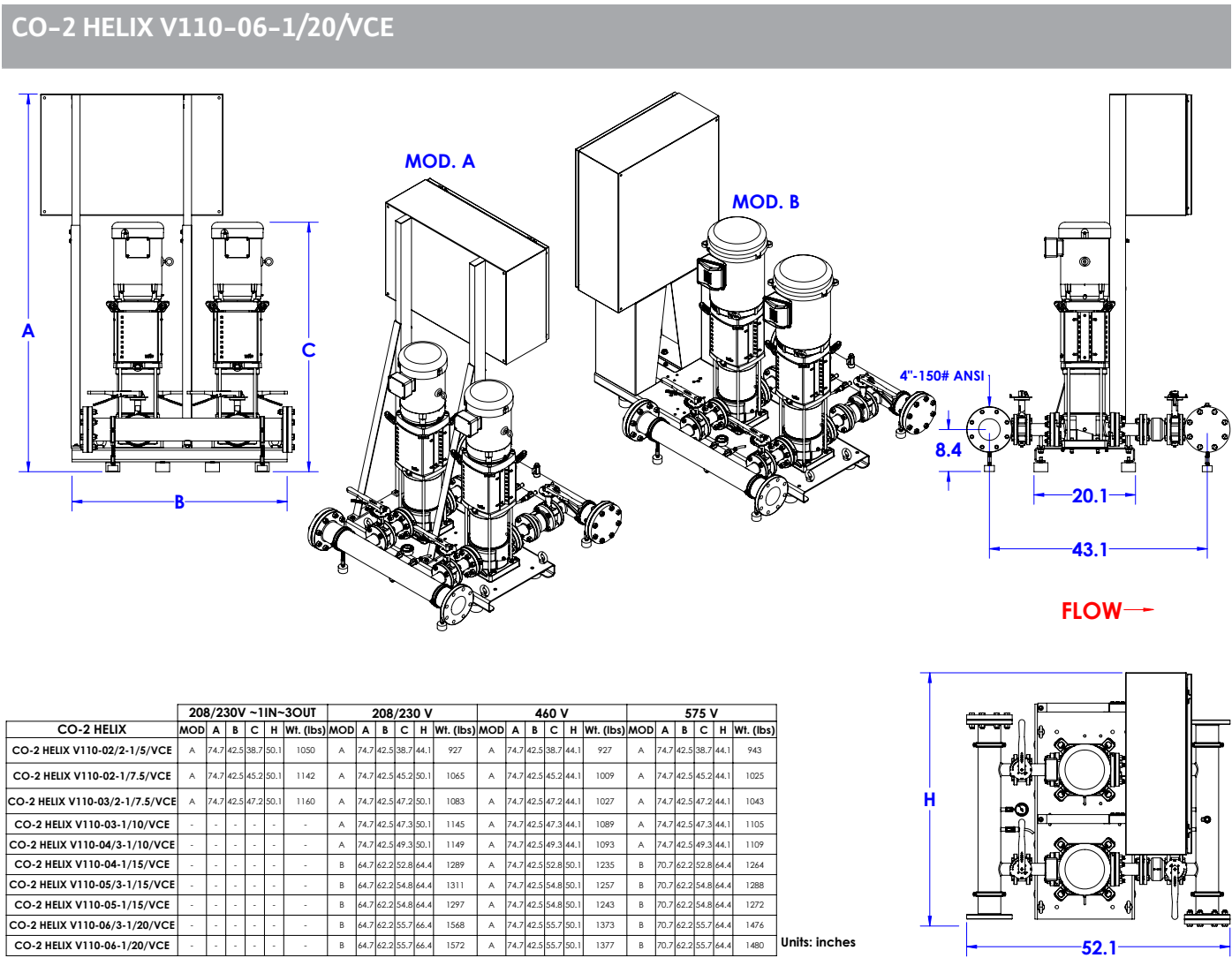
Technical Data – Panel	
Power Supply	208-230/460~3 or 575~3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-101

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



Submittal Data Sheet
Wilco Helix NSF 61/372 Pressure Boosting System



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

TEFC Motor Data						Dimensions				
	P2	Phase	Voltage	FLA (per pump)	Pmax	Dimensions--inches				Individual Pump Weight
Model	(HP)	(~)	(V)	(A)	(PSI)	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)
CO-2 HELIX V110-06-1/20/VCE	20	3	208-230/460/575	50-46/23/18.2	250	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	375

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