

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



CO-3 HELIX V110-02/2-1/5/VCE



Project:

Engineer:

Contractor:

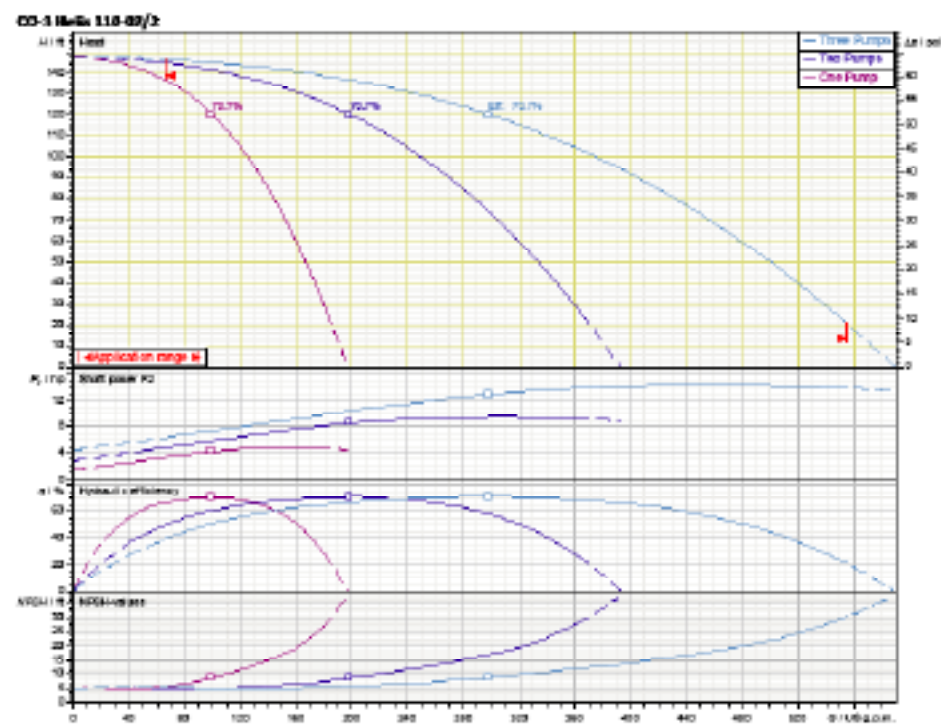
Submitted By:

Date:

Approved By:

Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-3 HELIX V110-2/2-1/5/VCE				5			3600



Technical Data - Operational Ranges	
Liquid Temp Range	-4°F to +180°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-101

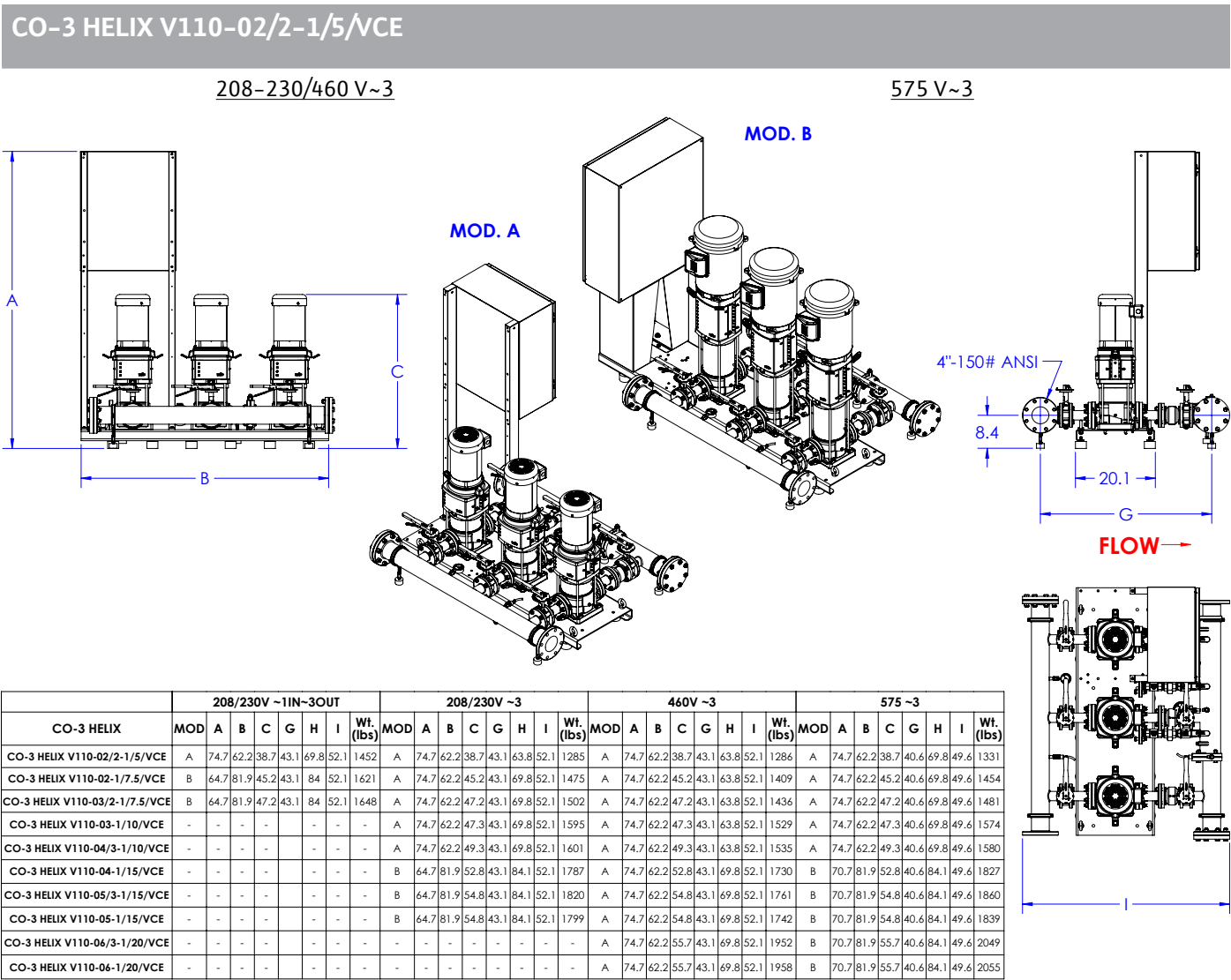
Technical Data - PLC	
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus 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

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
Suction/Discharge Manifolds	AISI304 Stainless Steel with Grooved System Connections
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

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

Dimensions and Weights											
Model	Voltage (V)	H (in)	W (in)	L (in)	Dimensions-inches					Individual Pump Weight	Package Weight
					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-3 HELIX V110-02/2-1/5/VCE	208-230/460 V	74-3/4	64-7/8	47-3/4	4"	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	193	1,168
	575 V	74-3/4	70-7/8	47-3/4	GROOVED						

TEFC Motor Data					
Model	P2	Phase	Voltage	FLA (per pump)	Pmax
	(HP)	(~)	(V)	(A)	(PSI)
CO-3 HELIX V110-02/1-1/5/VCE	5	3	208-230/460/575	13.1-11.8/5.9/4.72	232

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Submittal Data Sheet

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



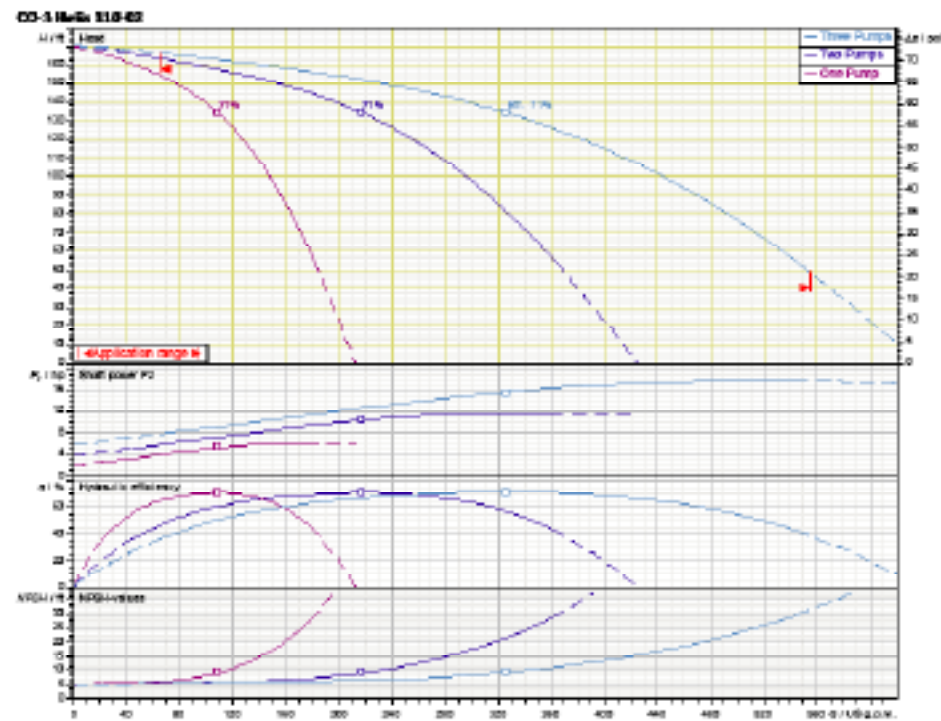
Submittal Data Sheet

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



CO-3 HELIX V110-02-1/7.5/VCE

		Project:						
		Engineer:						
		Contractor:						
		Submitted By:				Date:		
		Approved By:				Date:		
Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/pump	Phase	Voltage	RPM
	CO-3 HELIX V110-02-1/7.5/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
Suction/Discharge Manifolds	AISI304 Stainless Steel with Grooved System Connections
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 +180°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-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

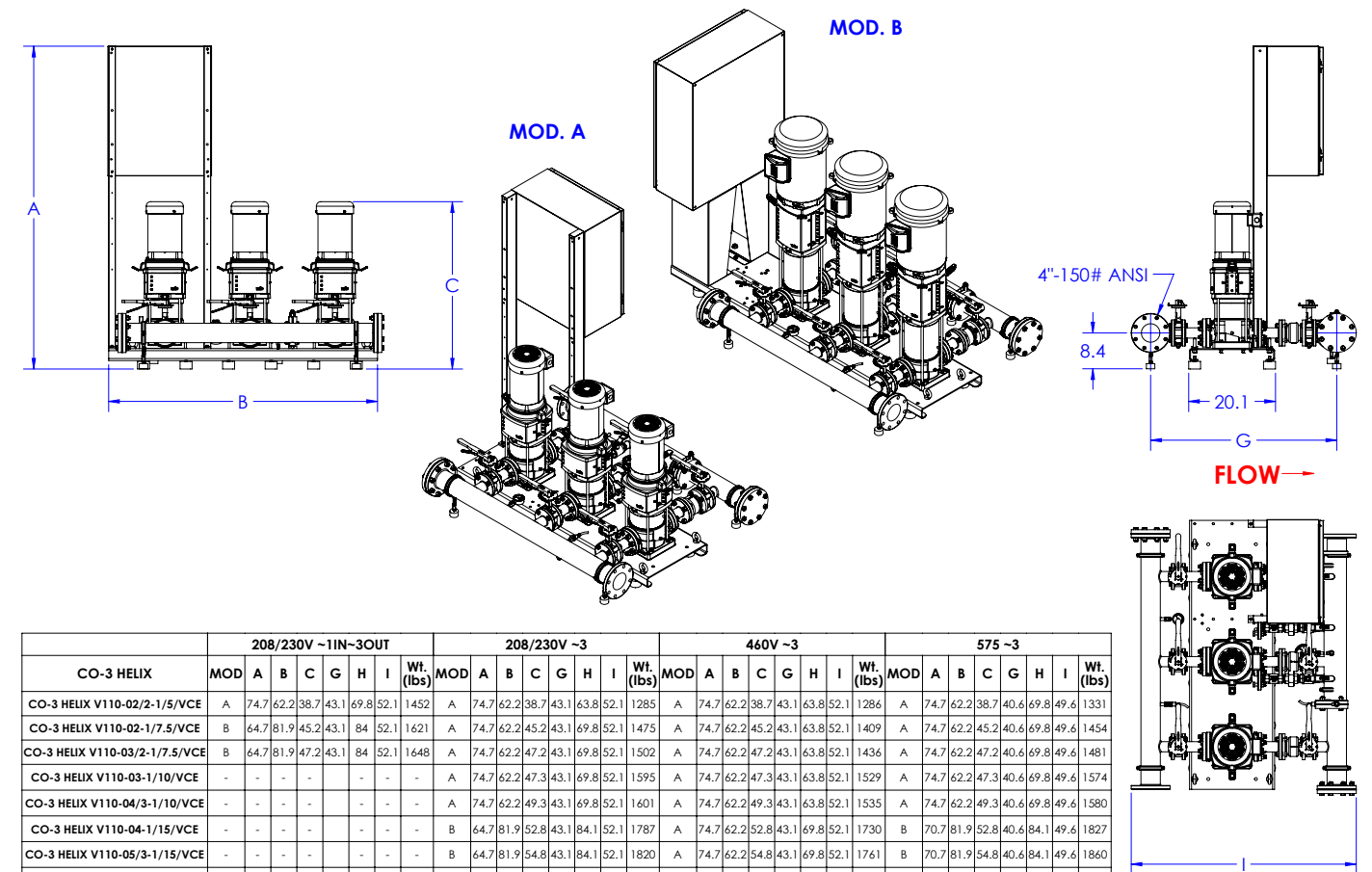
Power Supply	208-230~3 or 460~3 or 575~3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

Approval Stamp

CO-3 HELIX V110-02-1/7.5/VCE

208-230/575 V~3

460 V~3



	208/230V ~11N-3OUT								208/230V ~3								460V ~3								575 ~3							
CO-3 HELIX	MOD	A	B	C	G	H	I	Wt. (lbs)	MOD	A	B	C	G	H	I	Wt. (lbs)	MOD	A	B	C	G	H	I	Wt. (lbs)	MOD	A	B	C	G	H	I	Wt. (lbs)
CO-3 HELIX V110-02/-2-1/5/VCE	A	74.7	62.2	38.7	43.1	69.8	52.1	1452	A	74.7	62.2	38.7	43.1	63.8	52.1	1285	A	74.7	62.2	38.7	43.1	63.8	52.1	1286	A	74.7	62.2	38.7	40.6	69.8	49.6	1331
CO-3 HELIX V110-02/-1/7.5/VCE	B	64.7	81.9	45.2	43.1	84	52.1	1621	A	74.7	62.2	45.2	43.1	69.8	52.1	1475	A	74.7	62.2	45.2	43.1	63.8	52.1	1409	A	74.7	62.2	45.2	40.6	69.8	49.6	1454
CO-3 HELIX V110-03/-2-1/7.5/VCE	B	64.7	81.9	47.2	43.1	84	52.1	1648	A	74.7	62.2	47.2	43.1	69.8	52.1	1502	A	74.7	62.2	47.2	43.1	63.8	52.1	1436	A	74.7	62.2	47.2	40.6	69.8	49.6	1481
CO-3 HELIX V110-03/-1/10/VCE	-	-	-	-	-	-	-	-	A	74.7	62.2	47.3	43.1	69.8	52.1	1595	A	74.7	62.2	47.3	43.1	63.8	52.1	1529	A	74.7	62.2	47.3	40.6	69.8	49.6	1574
CO-3 HELIX V110-04/-3-1/10/VCE	-	-	-	-	-	-	-	-	A	74.7	62.2	49.3	43.1	69.8	52.1	1601	A	74.7	62.2	49.3	43.1	63.8	52.1	1535	A	74.7	62.2	49.3	40.6	69.8	49.6	1580
CO-3 HELIX V110-04/-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	52.8	43.1	84.1	52.1	1787	A	74.7	62.2	52.8	43.1	69.8	52.1	1730	B	70.7	81.9	52.8	40.6	84.1	49.6	1827
CO-3 HELIX V110-05/-3-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	54.8	43.1	84.1	52.1	1820	A	74.7	62.2	54.8	43.1	69.8	52.1	1761	B	70.7	81.9	54.8	40.6	84.1	49.6	1860
CO-3 HELIX V110-05/-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	54.8	43.1	84.1	52.1	1799	A	74.7	62.2	54.8	43.1	69.8	52.1	1742	B	70.7	81.9	54.8	40.6	84.1	49.6	1839
CO-3 HELIX V110-06/-3-1/20/VCE	-	-	-	-	-	-	-	-	A	74.7	62.2	55.7	43.1	69.8	52.1	1952	B	70.7	81.9	55.7	40.6	84.1	49.6	2049								
CO-3 HELIX V110-06/-1/20/VCE	-	-	-	-	-	-	-	-	A	74.7	62.2	55.7	43.1	69.8	52.1	1958	B	70.7	81.9	55.7	40.6	84.1	49.6	2055								

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

Dimensions and Weights

Dimensions—inches										Individual Pump Weight	Package Weight
Model	Voltage (V)	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-3 HELIX V110-02-1/7.5/VCE	208-230/575 V	74-3/4	70-7/8	47-3/4	4"	2"	1/4"	1/4"	3/4" MNPT x 3/4" FNPT	293	1,301
	460 V	74-3/4	64-7/8	47-3/4	GROOVED		FNPT	FNPT			

TEFC Motor Data

	P2	Phase	Voltage	FLA (per pump)	Pmax
Model	(HP)	(~)	(V)	(A)	(PSI)
CO-3 HELIX V110-02-1/7.5/VCE	7.5	3	208-230/460/575	19.2-17.3/8.7/7	232

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CO-3 HELIX V110-03/2-1/7.5/VCE



Project:

Engineer:

Contractor:

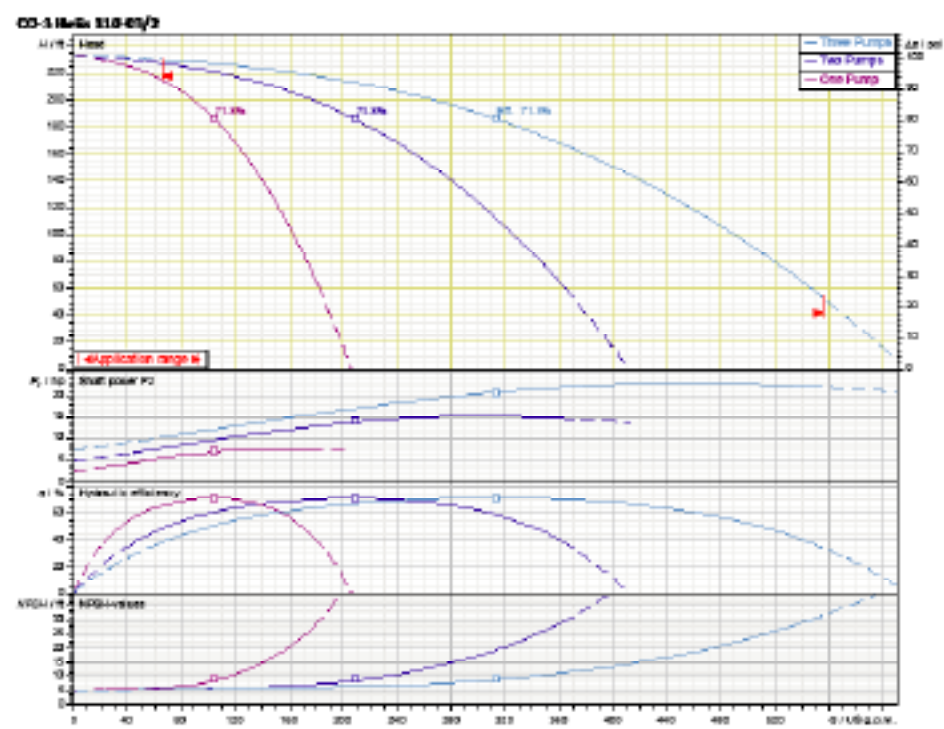
Submitted By:

Date:

Approved By:

Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-3 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
Suction/Discharge Manifolds	AISI304 Stainless Steel with Grooved System Connections
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 +180°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

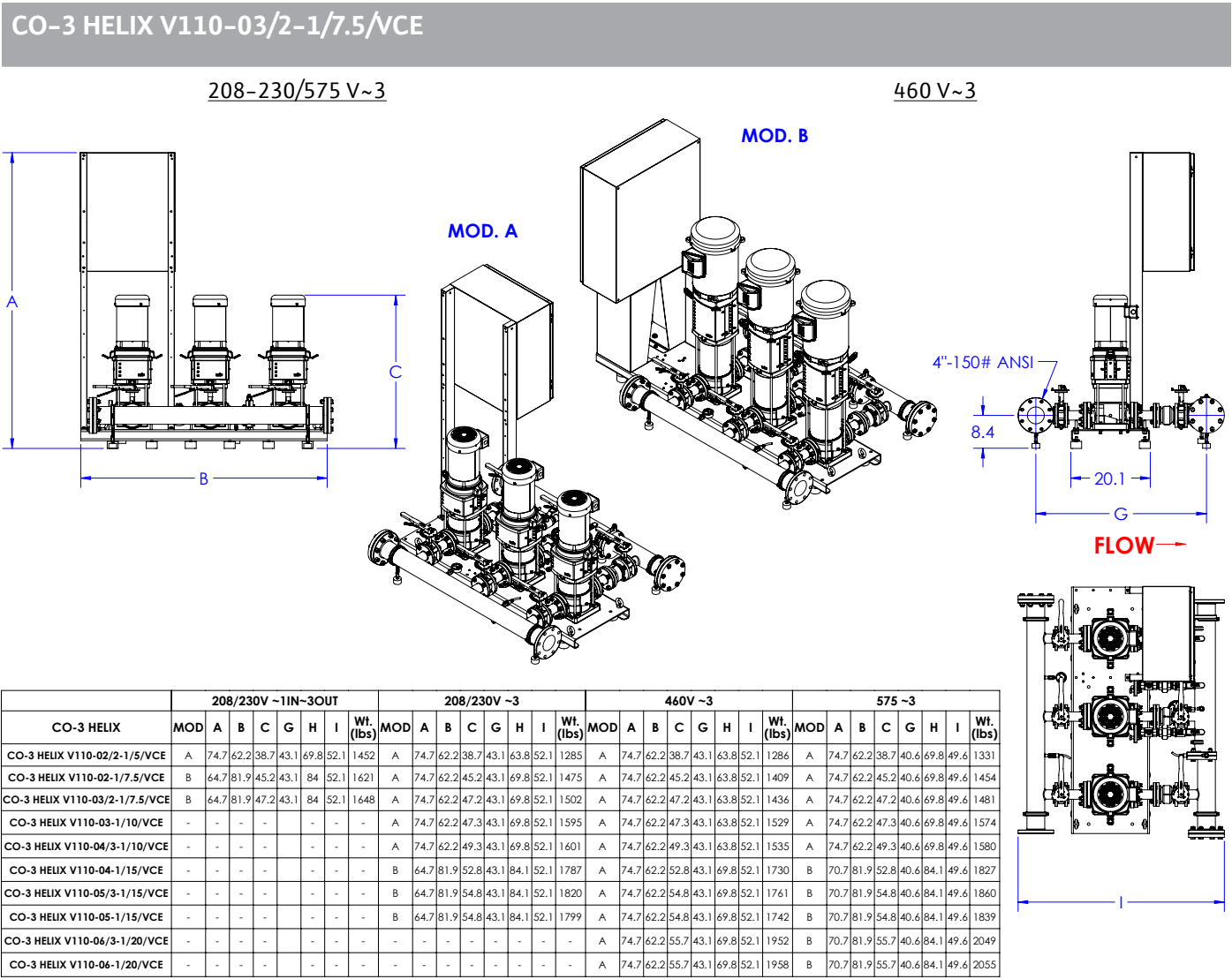
Technical Data - Panel	
Power Supply	208-230/460~3 or 575~3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-101

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

Dimensions and Weights											
Dimensions-inches										Individual Pump Weight	Package Weight
Model	Voltage (V)	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-3 HELIX V110-03/2-1/7.5/VCE	208-230/575 V	74-3/4	70-7/8	47-3/4	4"	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	293	1,328
	460 V	74-3/4	64-7/8	47-3/4	GROOVED						

TEFC Motor Data					
	P2	Phase	Voltage	FLA (per pump)	Pmax
Model	(HP)	(~)	(V)	(A)	(PSI)
CO-3 HELIX V110-03/2-1/7.5/VCE	7.5	3	208-230/460/575	19.2-17.3/8.7/7	232
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Wilco CO-Helix - NSF 61/372 Pressure Boosting System



CO-3 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-3 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
Suction/Discharge Manifolds	AISI304 Stainless Steel with Grooved System Connections
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 +180°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-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
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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

Signature

Date

WILCO_SUB_CO-3-HELIX_REV.3_0319

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

CO-3 HELIX V110-03-1/10/VCE

208-230/575 V~3

460 V~3

MOD. A

MOD. B

4"-150# ANSI

8.4

20.1

G

FLOW

CO-3 HELIX	208/230V ~1IN~3OUT										208/230V ~3										460V ~3										575 ~3									
	MOD	A	B	C	G	H	I	Wt. (lbs)			MOD	A	B	C	G	H	I	Wt. (lbs)			MOD	A	B	C	G	H	I	Wt. (lbs)			MOD	A	B	C	G	H	I	Wt. (lbs)		
CO-3 HELIX V110-02-2-1/5/VCE	A	74.7	62.2	38.7	43.1	69.8	52.1	1452			A	74.7	62.2	38.7	43.1	63.8	52.1	1285			A	74.7	62.2	38.7	43.1	63.8	52.1	1286			A	74.7	62.2	38.7	40.6	69.8	49.6	1331		
CO-3 HELIX V110-02-1/7.5/VCE	B	64.7	81.9	45.2	43.1	84	52.1	1621			A	74.7	62.2	45.2	43.1	69.8	52.1	1475			A	74.7	62.2	45.2	43.1	63.8	52.1	1409			A	74.7	62.2	45.2	40.6	69.8	49.6	1454		
CO-3 HELIX V110-03-2-1/7.5/VCE	B	64.7	81.9	47.2	43.1	84	52.1	1648			A	74.7	62.2	47.2	43.1	69.8	52.1	1502			A	74.7	62.2	47.2	43.1	63.8	52.1	1436			A	74.7	62.2	47.2	40.6	69.8	49.6	1481		
CO-3 HELIX V110-03-1/10/VCE	-	-	-	-	-	-	-	-			A	74.7	62.2	47.3	43.1	69.8	52.1	1595			A	74.7	62.2	47.3	43.1	63.8	52.1	1529			A	74.7	62.2	47.3	40.6	69.8	49.6	1574		
CO-3 HELIX V110-04-3-1/10/VCE	-	-	-	-	-	-	-	-			A	74.7	62.2	49.3	43.1	69.8	52.1	1601			A	74.7	62.2	49.3	43.1	63.8	52.1	1535			A	74.7	62.2	49.3	40.6	69.8	49.6	1580		
CO-3 HELIX V110-04-1/15/VCE	-	-	-	-	-	-	-	-			B	64.7	81.9	52.8	43.1	84.1	52.1	1787			A	74.7	62.2	52.8	43.1	69.8	52.1	1730			B	70.7	81.9	52.8	40.6	84.1	49.6	1827		
CO-3 HELIX V110-05-3-1/15/VCE	-	-	-	-	-	-	-	-			B	64.7	81.9	54.8	43.1	84.1	52.1	1820			A	74.7	62.2	54.8	43.1	69.8	52.1	1761			B	70.7	81.9	54.8	40.6	84.1	49.6	1860		
CO-3 HELIX V110-05-1/15/VCE	-	-	-	-	-	-	-	-			B	64.7	81.9	54.8	43.1	84.1	52.1	1799			A	74.7	62.2	54.8	43.1	69.8	52.1	1742			B	70.7	81.9	54.8	40.6	84.1	49.6	1839		
CO-3 HELIX V110-06-3-1/20/VCE	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-			A	74.7	62.2	55.7	43.1	69.8	52.1	1952			B	70.7	81.9	55.7	40.6	84.1	49.6	2049		
CO-3 HELIX V110-06-1/20/VCE	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-			A	74.7	62.2	55.7	43.1	69.8	52.1	1958			B	70.7	81.9	55.7	40.6	84.1	49.6	2055		

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

Dimensions and Weights												Individual Pump Weight		Package Weight	
Model	Voltage (V)	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-3 HELIX V110-03-1/10/VCE	208-230/575 V	74~3/4	70~7/8	47~3/4	4"	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	293	1,416				
	460 V	74~3/4	64~7/8	47~3/4	GROOVED										

TEFC Motor Data				
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)
CO-3 HELIX V110-03-1/10/VCE	10	3	208-230/460/575	25.4-23/11.5/9.2
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-3 HELIX V110-04/3-1/10/VCE



Project:

Engineer:

Contractor:

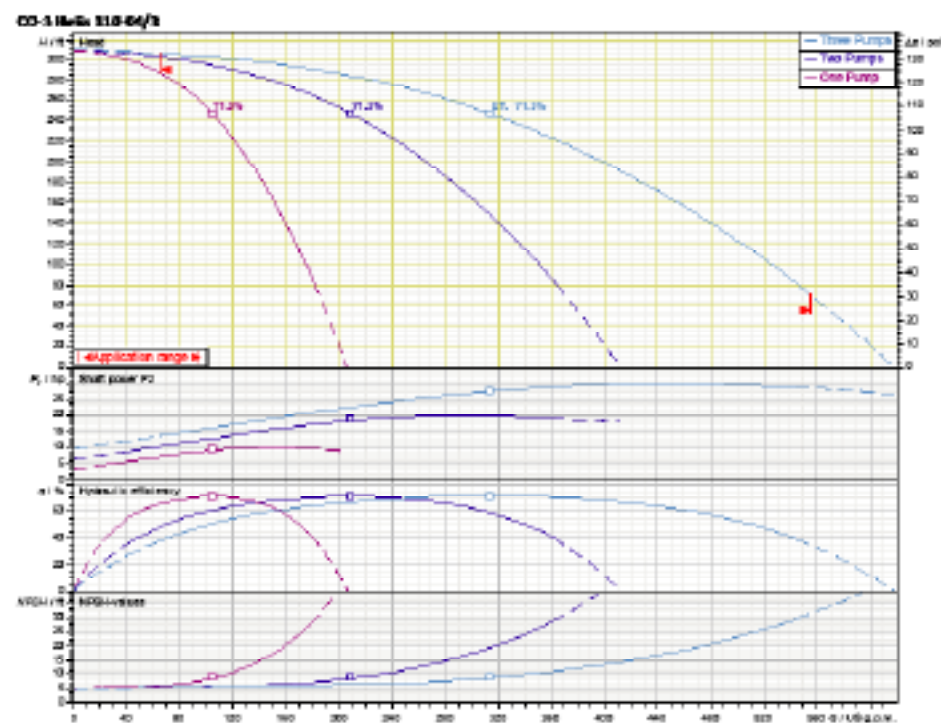
Submitted By:

Date:

Approved By:

Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-3 HELIX V110-04/3-1/10/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
Suction/Discharge Manifolds	AISI304 Stainless Steel with Grooved System Connections
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 +180°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

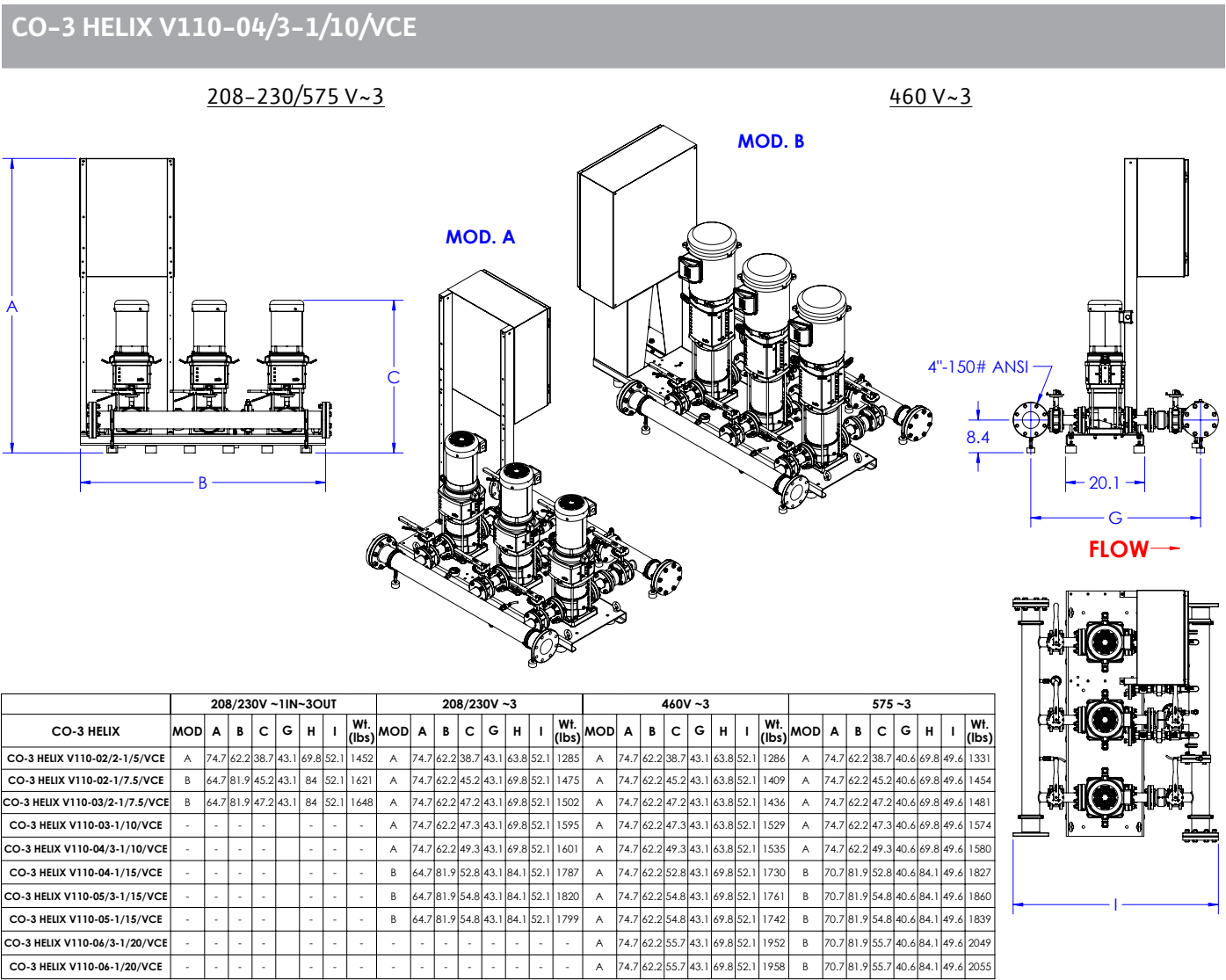
Technical Data - Panel	
Power Supply	208-230/460~3 or 575~3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-101

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 ~11N-3OUT										208/230V ~3										460V ~3										575 ~3									
CO-3 HELIX	MOD	A	B	C	G	H	I	Wt. (lbs)			MOD	A	B	C	G	H	I	Wt. (lbs)			MOD	A	B	C	G	H	I	Wt. (lbs)			MOD	A	B	C	G	H	I	Wt. (lbs)		
CO-3 HELIX V110-02/2-1/5/VCE	A	74.7	62.2	38.7	43.1	69.8	52.1	1452			A	74.7	62.2	38.7	43.1	63.8	52.1	1285			A	74.7	62.2	38.7	43.1	63.8	52.1	1286			A	74.7	62.2	38.7	40.6	69.8	49.6	1331		
CO-3 HELIX V110-02-1/7.5/VCE	B	64.7	81.9	45.2	43.1	84	52.1	1621			A	74.7	62.2	45.2	43.1	69.8	52.1	1475			A	74.7	62.2	45.2	43.1	63.8	52.1	1409			A	74.7	62.2	45.2	40.6	69.8	49.6	1454		
CO-3 HELIX V110-03/2-1/7.5/VCE	B	64.7	81.9	47.2	43.1	84	52.1	1648			A	74.7	62.2	47.2	43.1	69.8	52.1	1502			A	74.7	62.2	47.2	43.1	63.8	52.1	1436			A	74.7	62.2	47.2	40.6	69.8	49.6	1481		
CO-3 HELIX V110-03-1/10/VCE	-	-	-	-	-	-	-	-			A	74.7	62.2	47.3	43.1	69.8	52.1	1595			A	74.7	62.2	47.3	43.1	63.8	52.1	1529			A	74.7	62.2	47.3	40.6	69.8	49.6	1574		
CO-3 HELIX V110-04/3-1/10/VCE	-	-	-	-	-	-	-	-			A	74.7	62.2	49.3	43.1	69.8	52.1	1601			A	74.7	62.2	49.3	43.1	63.8	52.1	1535			A	74.7	62.2	49.3	40.6	69.8	49.6	1580		
CO-3 HELIX V110-04-1/15/VCE	-	-	-	-	-	-	-	-			B	64.7	81.9	52.8	43.1	84.1	52.1	1787			A	74.7	62.2	52.8	43.1	69.8	52.1	1730			B	70.7	81.9	52.8	40.6	84.1	49.6	1827		
CO-3 HELIX V110-05/3-1/15/VCE	-	-	-	-	-	-	-	-			B	64.7	81.9	54.8	43.1	84.1	52.1	1820			A	74.7	62.2	54.8	43.1	69.8	52.1	1761			B	70.7	81.9	54.8	40.6	84.1	49.6	1860		
CO-3 HELIX V110-05-1/15/VCE	-	-	-	-	-	-	-	-			B	64.7	81.9	54.8	43.1	84.1	52.1	1799			A	74.7	62.2	54.8	43.1	69.8	52.1	1742			B	70.7	81.9	54.8	40.6	84.1	49.6	1839		
CO-3 HELIX V110-06/3-1/20/VCE	-	-	-	-	-	-	-	-			A	74.7	62.2	55.7	43.1	69.8	52.1	1952			B	70.7	81.9	55.7	40.6	84.1	49.6	2049												
CO-3 HELIX V110-06-1/20/VCE	-	-	-	-	-	-	-	-			A	74.7	62.2	55.7	43.1	69.8	52.1	1958			B	70.7	81.9	55.7	40.6	84.1	49.6	2055												

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

Dimensions and Weights											
Dimensions-inches										Individual Pump Weight	Package Weight
Model	Voltage (V)	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-3 HELIX V110-04/3-1/10/VCE	208-230/575 V	74-3/4	70-7/8	47-3/4	4"	2"	1/4"	1/4"	3/4" MNPT x 3/4" FNPT	304	1,422
	460 V	74-3/4	64-7/8	47-3/4	GROOVED		FNPT	FNPT			

TEFC Motor Data				
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)
	Pmax (PSI)			
CO-3 HELIX V110-04/3-1/10/VCE	10	3	208-230/460/575	25.4-23/11.5/9.2
WILCO USA LLC		+1 262 204-6600 www.wilo-usa.com info@wilo-usa.com		WILCO 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-3 HELIX V110-04-1/15/VCE



Project:

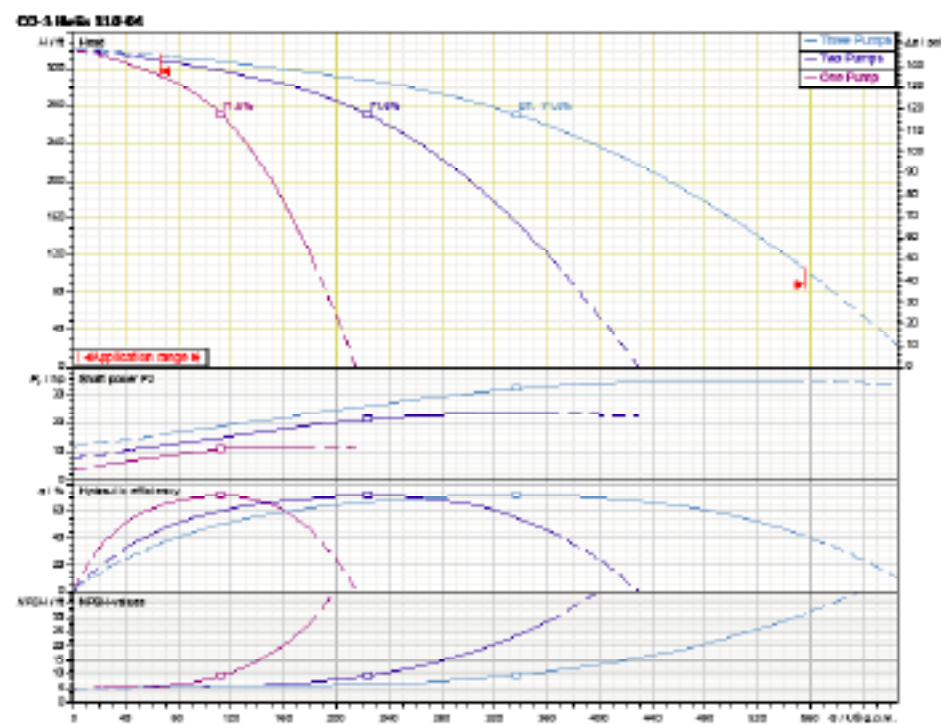
Engineer:

Contractor:

Submitted By:
Date:

Approved By:
Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-3 HELIX V110-04-1/15/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
Suction/Discharge Manifolds	AISI304 Stainless Steel with Grooved System Connections
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 +180°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-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

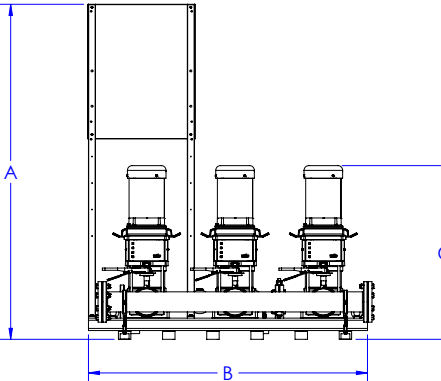
Submittal Data Sheet
Wilco CO-Helix - NSF 61/372 Pressure Boosting System

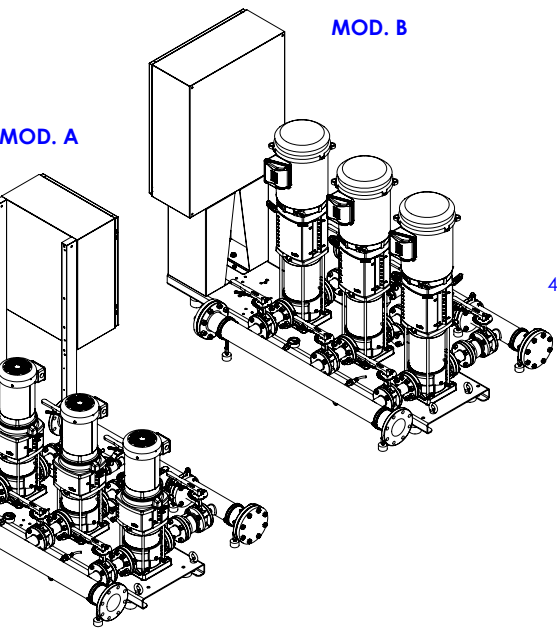


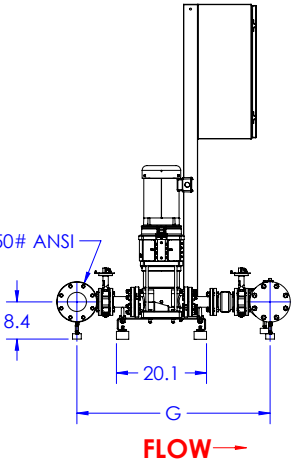
CO-3 HELIX V110-04-1/15/VCE

208-230/575 V~3

460 V~3







CO-3 HELIX	208/230V ~11N-3OUT										208/230V ~3										460V ~3										575 ~3									
	MOD	A	B	C	G	H	I	Wt. (lbs)			MOD	A	B	C	G	H	I	Wt. (lbs)			MOD	A	B	C	G	H	I	Wt. (lbs)			MOD	A	B	C	G	H	I	Wt. (lbs)		
CO-3 HELIX V110-02-2-1/5/VCE	A	74.7	62.2	38.7	43.1	69.8	52.1	1452			A	74.7	62.2	38.7	43.1	63.8	52.1	1285			A	74.7	62.2	38.7	43.1	63.8	52.1	1286			A	74.7	62.2	38.7	40.6	69.8	49.6	1331		
CO-3 HELIX V110-02-1/7.5/VCE	B	64.7	81.9	45.2	43.1	84	52.1	1621			A	74.7	62.2	45.2	43.1	69.8	52.1	1475			A	74.7	62.2	45.2	43.1	63.8	52.1	1409			A	74.7	62.2	45.2	40.6	69.8	49.6	1454		
CO-3 HELIX V110-03-2-1/7.5/VCE	B	64.7	81.9	47.2	43.1	84	52.1	1648			A	74.7	62.2	47.2	43.1	69.8	52.1	1502			A	74.7	62.2	47.2	43.1	63.8	52.1	1436			A	74.7	62.2	47.2	40.6	69.8	49.6	1481		
CO-3 HELIX V110-03-1/10/VCE	-	-	-	-	-	-	-	-			A	74.7	62.2	47.3	43.1	69.8	52.1	1595			A	74.7	62.2	47.3	43.1	63.8	52.1	1529			A	74.7	62.2	47.3	40.6	69.8	49.6	1574		
CO-3 HELIX V110-04-3-1/10/VCE	-	-	-	-	-	-	-	-			A	74.7	62.2	49.3	43.1	69.8	52.1	1601			A	74.7	62.2	49.3	43.1	63.8	52.1	1535			A	74.7	62.2	49.3	40.6	69.8	49.6	1580		
CO-3 HELIX V110-04-1/15/VCE	-	-	-	-	-	-	-	-			B	64.7	81.9	52.8	43.1	84.1	52.1	1787			A	74.7	62.2	52.8	43.1	69.8	52.1	1730			B	70.7	81.9	52.8	40.6	84.1	49.6	1827		
CO-3 HELIX V110-05-3-1/15/VCE	-	-	-	-	-	-	-	-			B	64.7	81.9	54.8	43.1	84.1	52.1	1820			A	74.7	62.2	54.8	43.1	69.8	52.1	1761			B	70.7	81.9	54.8	40.6	84.1	49.6	1860		
CO-3 HELIX V110-05-1/15/VCE	-	-	-	-	-	-	-	-			B	64.7	81.9	54.8	43.1	84.1	52.1	1799			A	74.7	62.2	54.8	43.1	69.8	52.1	1742			B	70.7	81.9	54.8	40.6	84.1	49.6	1839		
CO-3 HELIX V110-06-3-1/20/VCE	-	-	-	-	-	-	-	-			A	74.7	62.2	55.7	43.1	69.8	52.1	1952			B	70.7	81.9	55.7	40.6	84.1	49.6	2049												
CO-3 HELIX V110-06-1/20/VCE	-	-	-	-	-	-	-	-			A	74.7	62.2	55.7	43.1	69.8	52.1	1958			B	70.7	81.9	55.7	40.6	84.1	49.6	2055												

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	Suction / Discharge Pump Size (300 Class ANSI)	Dimensions-inches			Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight	Package Weight
							Pump Weight (lbs)	Package Weight (lbs)						
CO-3 HELIX V110-04-1/15/VCE	208-230/575 V	64-3/4	85-1/4	47-3/4	4"	2"	321	1,645						
	460 V	74-3/4	70-7/8	47-3/4	GROOVED									

TEFC Motor Data

Model	P2		Phase		Voltage		FLA (per pump)		Pmax
	(HP)		(-)		(V)		(A)		
CO-3 HELIX V110-04-1/15/VCE	15		3		208-230/460/575		38.5-34.8/17.4/13.8		232

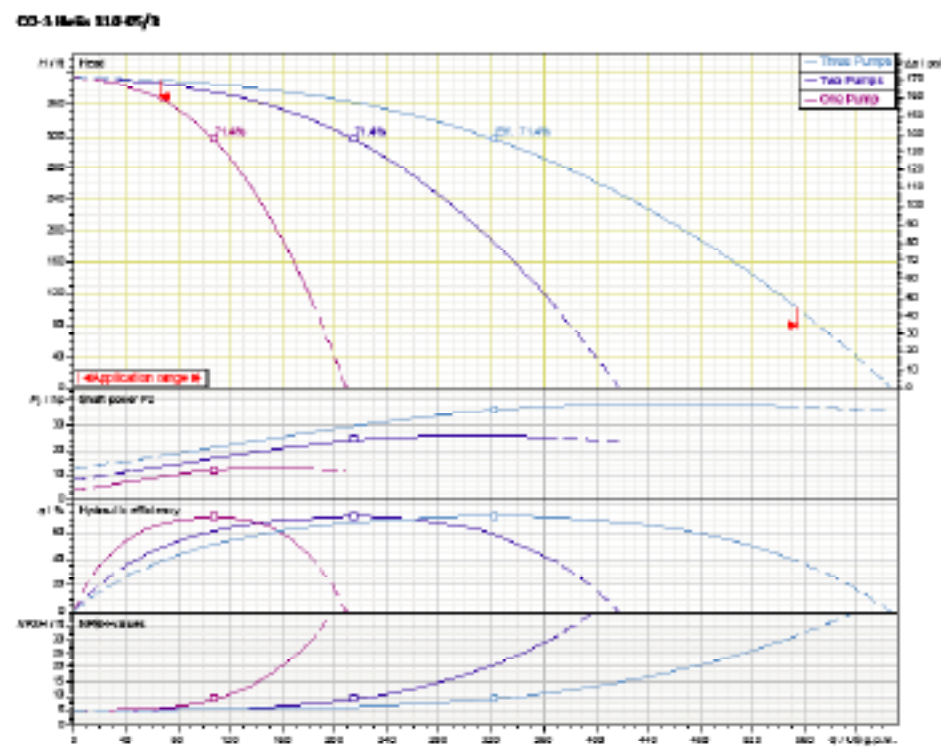
WILO USA LLC +1 262 204-6600 www.wilo-usa.com info@wilo-usa.com

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-3 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-3 HELIX V110-05/3-1/15/VCE				15			3600



Technical Data - Operational Ranges	
Liquid Temp Range	-4°F to +180°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-101

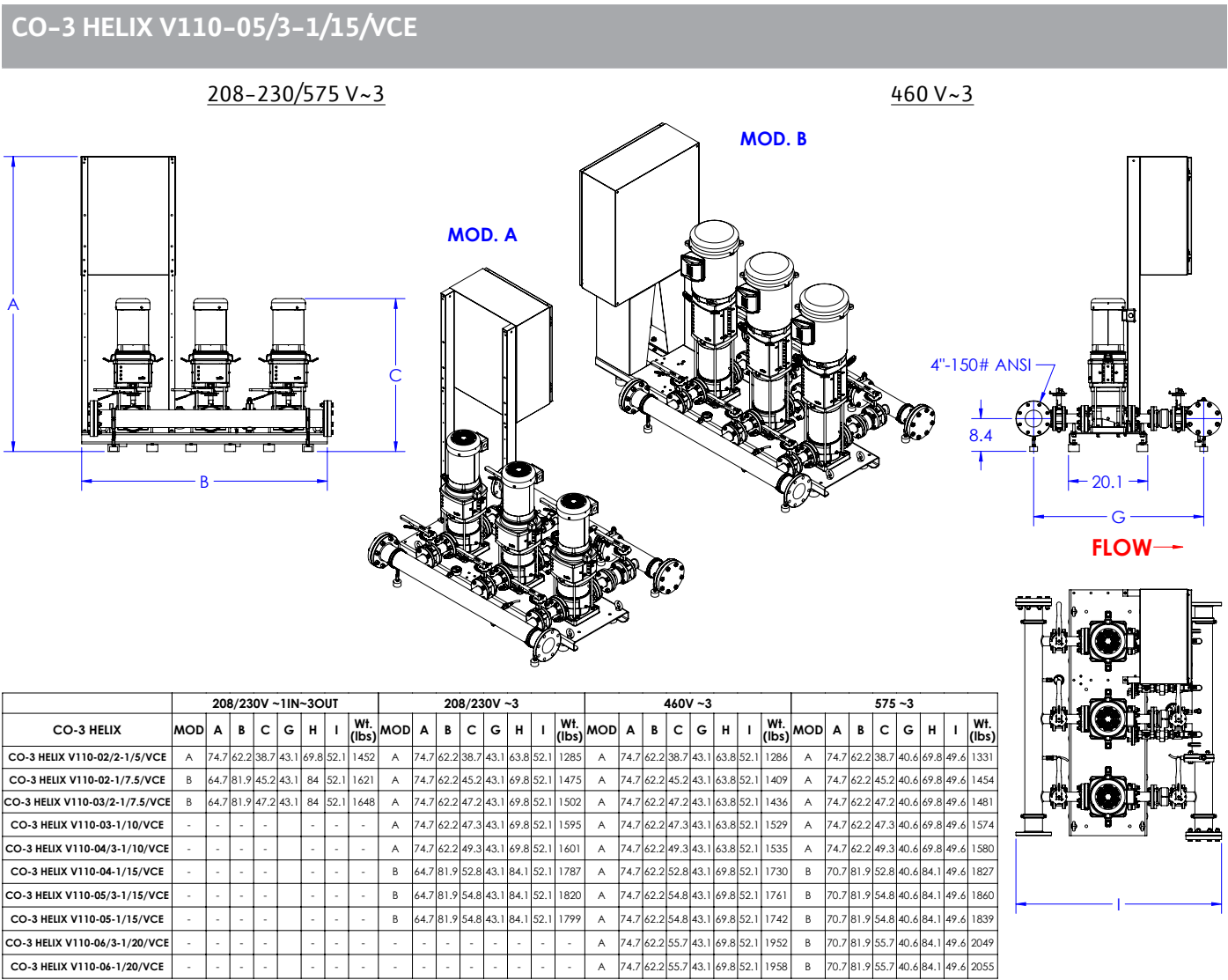
Technical Data - PLC	
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus 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

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
Suction/Discharge Manifolds	AISI304 Stainless Steel with Grooved System Connections
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

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								208/230V ~3								460V ~3								575 ~3							
CO-3 HELIX	MOD	A	B	C	G	H	I	Wt. (lbs.)	MOD	A	B	C	G	H	I	Wt. (lbs.)	MOD	A	B	C	G	H	I	Wt. (lbs.)	MOD	A	B	C	G	H	I	Wt. (lbs.)
CO-3 HELIX V110-02-2-1/5/VCE	A	74.7	62.2	38.7	43.1	69.8	52.1	1452	A	74.7	62.2	38.7	43.1	63.8	52.1	1285	A	74.7	62.2	38.7	43.1	63.8	52.1	1286	A	74.7	62.2	38.7	40.6	69.8	49.6	1331
CO-3 HELIX V110-02-1/7.5/VCE	B	64.7	81.9	45.2	43.1	84	52.1	1621	A	74.7	62.2	45.2	43.1	69.8	52.1	1475	A	74.7	62.2	45.2	43.1	63.8	52.1	1409	A	74.7	62.2	45.2	40.6	69.8	49.6	1454
CO-3 HELIX V110-03/2-1/7.5/VCE	B	64.7	81.9	47.2	43.1	84	52.1	1648	A	74.7	62.2	47.2	43.1	69.8	52.1	1502	A	74.7	62.2	47.2	43.1	63.8	52.1	1436	A	74.7	62.2	47.2	40.6	69.8	49.6	1481
CO-3 HELIX V110-03-1/10/VCE	-	-	-	-	-	-	-	-	A	74.7	62.2	47.3	43.1	69.8	52.1	1595	A	74.7	62.2	47.3	43.1	63.8	52.1	1529	A	74.7	62.2	47.3	40.6	69.8	49.6	1574
CO-3 HELIX V110-04/3-1/10/VCE	-	-	-	-	-	-	-	-	A	74.7	62.2	49.3	43.1	69.8	52.1	1601	A	74.7	62.2	49.3	43.1	63.8	52.1	1535	A	74.7	62.2	49.3	40.6	69.8	49.6	1580
CO-3 HELIX V110-04-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	52.8	43.1	84.1	52.1	1787	A	74.7	62.2	52.8	43.1	69.8	52.1	1730	B	70.7	81.9	52.8	40.6	84.1	49.6	1827
CO-3 HELIX V110-05/3-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	54.8	43.1	84.1	52.1	1820	A	74.7	62.2	54.8	43.1	69.8	52.1	1761	B	70.7	81.9	54.8	40.6	84.1	49.6	1860
CO-3 HELIX V110-05-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	54.8	43.1	84.1	52.1	1799	A	74.7	62.2	54.8	43.1	69.8	52.1	1742	B	70.7	81.9	54.8	40.6	84.1	49.6	1839
CO-3 HELIX V110-06/3-1/20/VCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	74.7	62.2	55.7	43.1	69.8	52.1	1952	B	70.7	81.9	55.7	40.6	84.1	49.6	2049
CO-3 HELIX V110-06-1/20/VCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	74.7	62.2	55.7	43.1	69.8	52.1	1958	B	70.7	81.9	55.7	40.6	84.1	49.6	2055

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

Dimensions and Weights												Individual Pump Weight		Package Weight	
Model	Voltage (V)	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-3 HELIX V110-05/3-1/15/VCE	208-230/575 V	64-3/4	85-1/4	47-3/4	4" GROOVED	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	332	1,679				
	460 V	74-3/4	70-7/8	47-3/4											

TEFC Motor Data				
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)
CO-3 HELIX V110-05/3-1/15/VCE	15	3	208-230/460/575	38.5-34.8/17.4/13.8

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



CO-3 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-3 HELIX V110-05-1/15/VCE				15			3600

Technical Data - Operational Ranges	
Liquid Temp Range	-4°F to +180°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-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

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
Suction/Discharge Manifolds	AISI304 Stainless Steel with Grooved System Connections
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

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

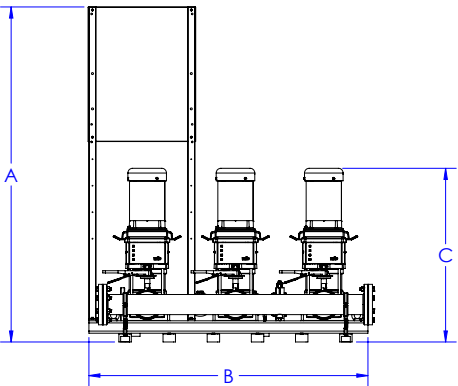
Approval Stamp

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

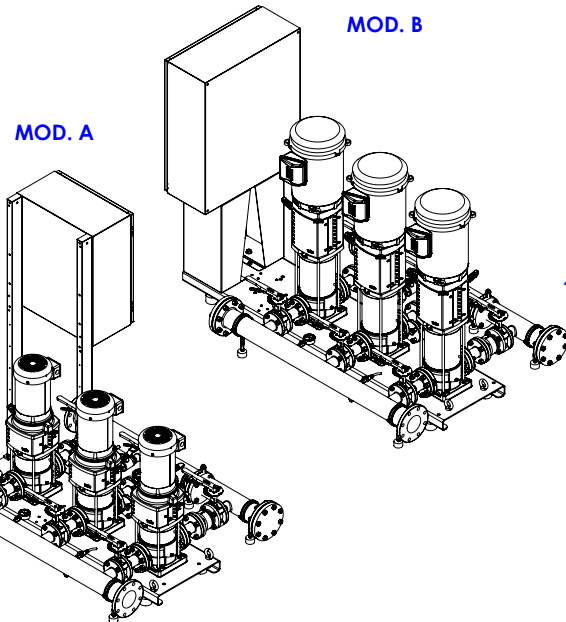
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208-230/575 V~3

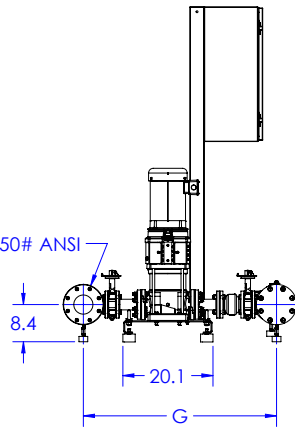
460 V~3



MOD. A



MOD. B



4'-150# ANSI

8.4

20.1

G

FLOW

CO-3 HELIX	208/230V ~1IN~3OUT							208/230V ~3							460V ~3							575 ~3										
	MOD	A	B	C	G	H	I	Wt. (lbs)	MOD	A	B	C	G	H	I	Wt. (lbs)	MOD	A	B	C	G	H	I	Wt. (lbs)	MOD	A	B	C	G	H	I	Wt. (lbs)
CO-3 HELIX V110-02-2-1/5/VCE	A	74.7	62.2	38.7	43.1	69.8	52.1	1452	A	74.7	62.2	38.7	43.1	63.8	52.1	1285	A	74.7	62.2	38.7	43.1	63.8	52.1	1286	A	74.7	62.2	38.7	40.6	69.8	49.6	1331
CO-3 HELIX V110-02-1/7.5/VCE	B	64.7	81.9	45.2	43.1	84	52.1	1621	A	74.7	62.2	45.2	43.1	69.8	52.1	1475	A	74.7	62.2	45.2	43.1	63.8	52.1	1409	A	74.7	62.2	45.2	40.6	69.8	49.6	1454
CO-3 HELIX V110-03-2-1/7.5/VCE	B	64.7	81.9	47.2	43.1	84	52.1	1648	A	74.7	62.2	47.2	43.1	69.8	52.1	1502	A	74.7	62.2	47.2	43.1	63.8	52.1	1436	A	74.7	62.2	47.2	40.6	69.8	49.6	1481
CO-3 HELIX V110-03-1/10/VCE	-	-	-	-	-	-	-	-	A	74.7	62.2	47.3	43.1	69.8	52.1	1595	A	74.7	62.2	47.3	43.1	63.8	52.1	1529	A	74.7	62.2	47.3	40.6	69.8	49.6	1574
CO-3 HELIX V110-04-3-1/10/VCE	-	-	-	-	-	-	-	-	A	74.7	62.2	49.3	43.1	69.8	52.1	1601	A	74.7	62.2	49.3	43.1	63.8	52.1	1535	A	74.7	62.2	49.3	40.6	69.8	49.6	1580
CO-3 HELIX V110-04-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	52.8	43.1	84.1	52.1	1787	A	74.7	62.2	52.8	43.1	69.8	52.1	1730	B	70.7	81.9	52.8	40.6	84.1	49.6	1827
CO-3 HELIX V110-05-3-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	54.8	43.1	84.1	52.1	1820	A	74.7	62.2	54.8	43.1	69.8	52.1	1761	B	70.7	81.9	54.8	40.6	84.1	49.6	1860
CO-3 HELIX V110-05-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	54.8	43.1	84.1	52.1	1799	A	74.7	62.2	54.8	43.1	69.8	52.1	1742	B	70.7	81.9	54.8	40.6	84.1	49.6	1839
CO-3 HELIX V110-06-3-1/20/VCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	74.7	62.2	55.7	43.1	69.8	52.1	1952	B	70.7	81.9	55.7	40.6	84.1	49.6	2049
CO-3 HELIX V110-06-1/20/VCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	74.7	62.2	55.7	43.1	69.8	52.1	1958	B	70.7	81.9	55.7	40.6	84.1	49.6	2055

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

Dimensions and Weights											Individual Pump Weight		Package Weight	
Model	Voltage (V)	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)	Pump Weight (lbs)		Package Weight (lbs)	
CO-3 HELIX V110-05-1/15/VCE	208-230/575 V	64~3/4	85~1/4	47~3/4	4"	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	325	325		1,657	
	460 V	74~3/4	70~7/8	47~3/4	GROOVED									

TEFC Motor Data				
Model	P2	Phase	Voltage	FLA (per pump)
	(HP)	(~)	(V)	(A)
CO-3 HELIX V110-05-1/15/VCE	15	3	208-230/460/575	38.5-34.8/17.4/13.8
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				
Pmax (PSI)				
232				

WILO_SUB_CO-3-HELIX_REV.3_0319

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



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



Project:

Engineer:

Contractor:

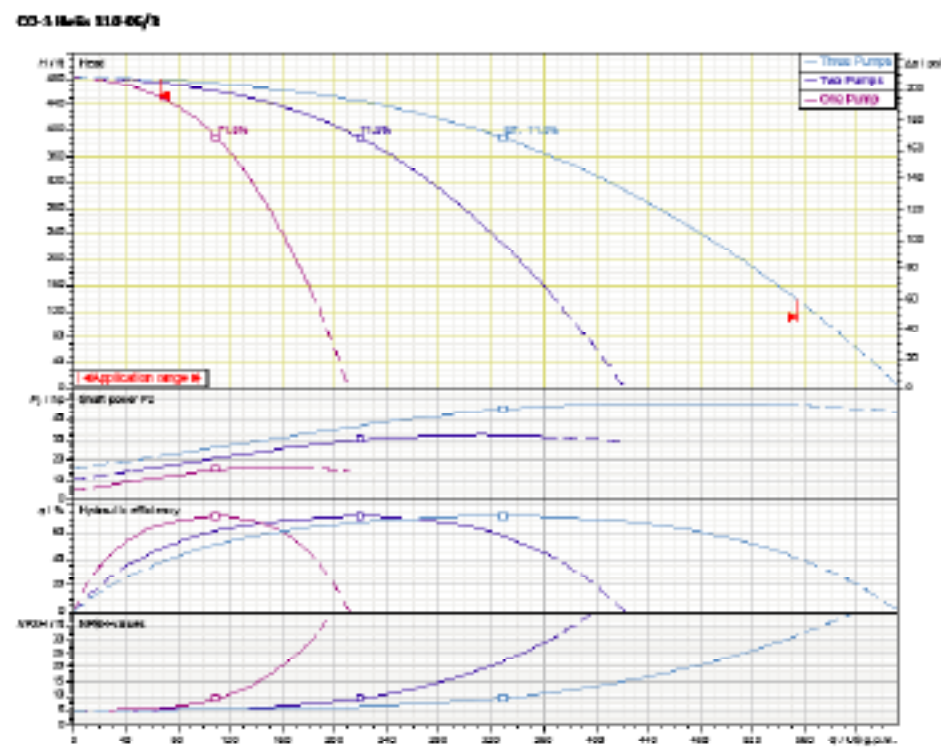
Submitted By:

Date:

Approved By:

Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-3 HELIX V110-06/3-1/20/VCE				20			3600



Technical Data - Operational Ranges	
Liquid Temp Range	-4°F to +180°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	363 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

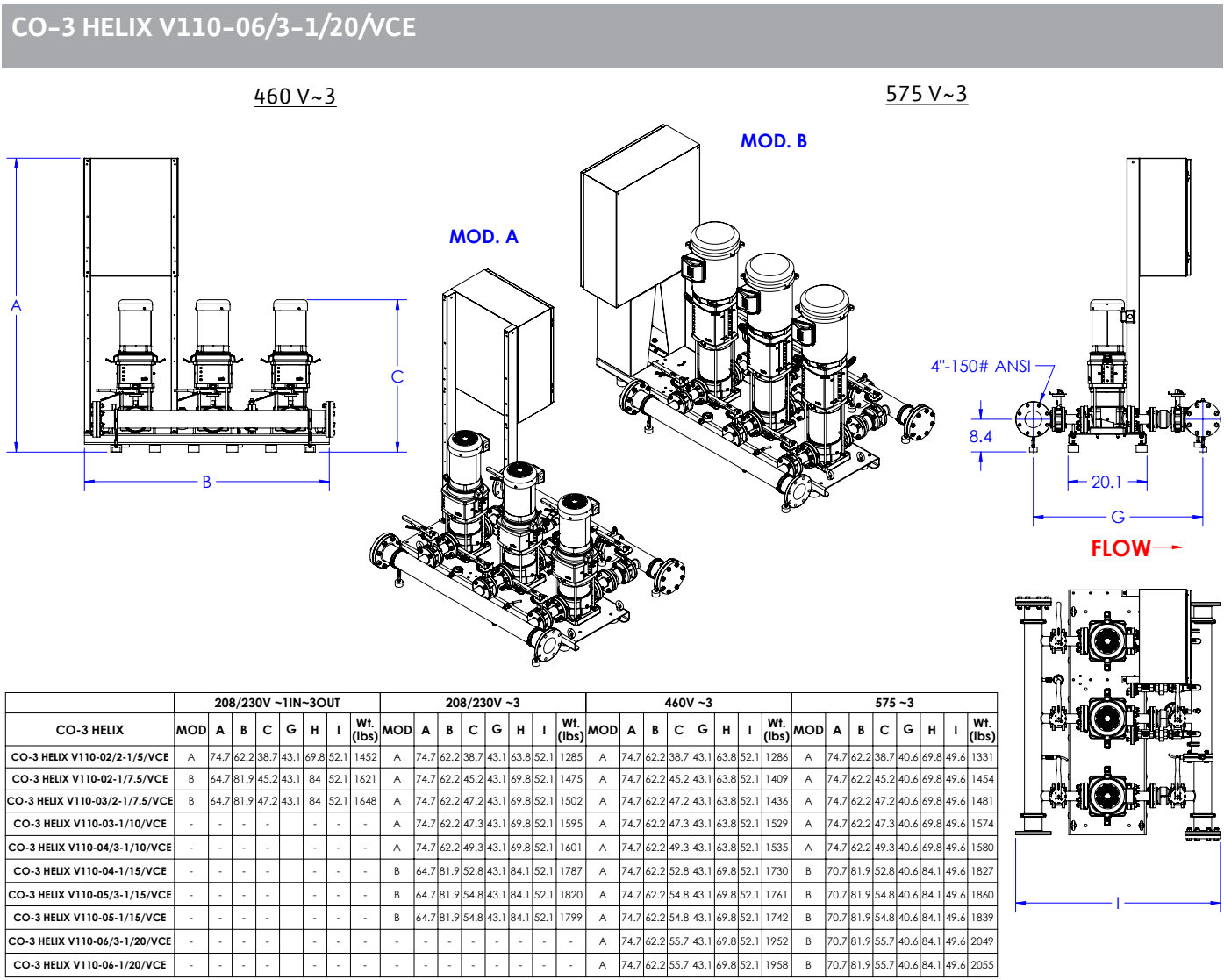
Technical Data - PLC	
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus 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

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
Suction/Discharge Manifolds	AISI304 Stainless Steel with Grooved System Connections
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

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 ~11N~3OUT								208/230V ~3								460V ~3								575 ~3							
CO-3 HELIX	MOD	A	B	C	G	H	I	Wt.(lbs)	MOD	A	B	C	G	H	I	Wt.(lbs)	MOD	A	B	C	G	H	I	Wt.(lbs)	MOD	A	B	C	G	H	I	Wt.(lbs)
CO-3 HELIX V110-02/2-1/5/VCE	A	74.7	62.2	38.7	43.1	69.8	52.1	1452	A	74.7	62.2	38.7	43.1	63.8	52.1	1285	A	74.7	62.2	38.7	43.1	63.8	52.1	1286	A	74.7	62.2	38.7	40.6	69.8	49.6	1331
CO-3 HELIX V110-02-1/7.5/VCE	B	64.7	81.9	45.2	43.1	84	52.1	1621	A	74.7	62.2	45.2	43.1	69.8	52.1	1475	A	74.7	62.2	45.2	43.1	63.8	52.1	1409	A	74.7	62.2	45.2	40.6	69.8	49.6	1454
CO-3 HELIX V110-03/2-1/7.5/VCE	B	64.7	81.9	47.2	43.1	84	52.1	1648	A	74.7	62.2	47.2	43.1	69.8	52.1	1502	A	74.7	62.2	47.2	43.1	63.8	52.1	1436	A	74.7	62.2	47.2	40.6	69.8	49.6	1481
CO-3 HELIX V110-03-1/10/VCE	-	-	-	-	-	-	-	-	A	74.7	62.2	47.3	43.1	69.8	52.1	1595	A	74.7	62.2	47.3	43.1	63.8	52.1	1529	A	74.7	62.2	47.3	40.6	69.8	49.6	1574
CO-3 HELIX V110-04/3-1/10/VCE	-	-	-	-	-	-	-	-	A	74.7	62.2	49.3	43.1	69.8	52.1	1601	A	74.7	62.2	49.3	43.1	63.8	52.1	1535	A	74.7	62.2	49.3	40.6	69.8	49.6	1580
CO-3 HELIX V110-04-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	52.8	43.1	84.1	52.1	1787	A	74.7	62.2	52.8	43.1	69.8	52.1	1730	B	70.7	81.9	52.8	40.6	84.1	49.6	1827
CO-3 HELIX V110-05/3-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	54.8	43.1	84.1	52.1	1820	A	74.7	62.2	54.8	43.1	69.8	52.1	1761	B	70.7	81.9	54.8	40.6	84.1	49.6	1860
CO-3 HELIX V110-05-1/15/VCE	-	-	-	-	-	-	-	-	B	64.7	81.9	54.8	43.1	84.1	52.1	1799	A	74.7	62.2	54.8	43.1	69.8	52.1	1742	B	70.7	81.9	54.8	40.6	84.1	49.6	1839
CO-3 HELIX V110-06/3-1/20/VCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	74.7	62.2	55.7	43.1	69.8	52.1	1952	B	70.7	81.9	55.7	40.6	84.1	49.6	2049
CO-3 HELIX V110-06-1/20/VCE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	74.7	62.2	55.7	43.1	69.8	52.1	1958	B	70.7	81.9	55.7	40.6	84.1	49.6	2055

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

Dimensions and Weights												Individual Pump Weight		Package Weight	
Model	Voltage (V)	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-3 HELIX V110-06/3-1/20/VCE	460 V	74~3/4	70~7/8	47~3/4	4"	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	375	1,929				
	575 V	70~3/4	85~1/4	47~3/4	GROOVED										

TEFC Motor Data				
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)
				Pmax (PSI)
CO-3 HELIX V110-06/3-1/20/VCE	20	3	460/575	22.7/18.2
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-3 HELIX V110-06-1/20/VCE



Project:

Engineer:

Contractor:

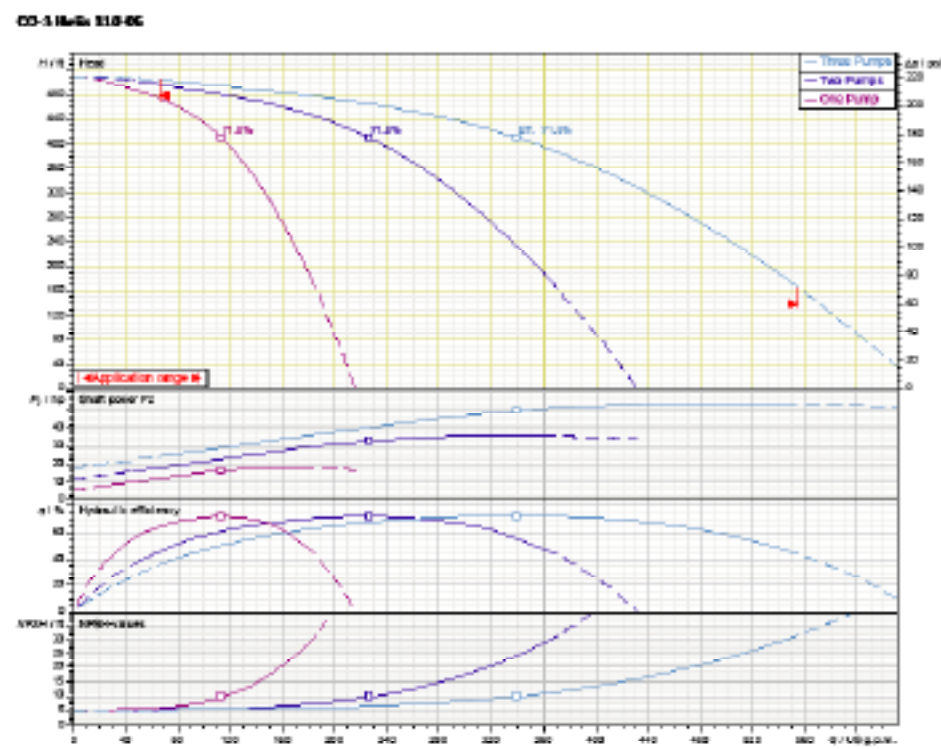
Submitted By:

Date:

Approved By:

Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-3 HELIX V110-06-1/20/VCE				20			3600



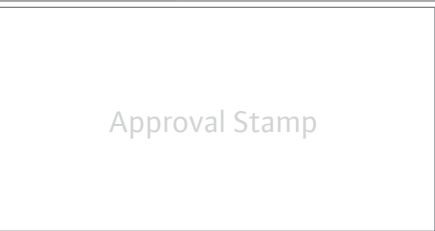
Technical Data - Operational Ranges	
Liquid Temp Range	-4°F to +180°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	363 PSI

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

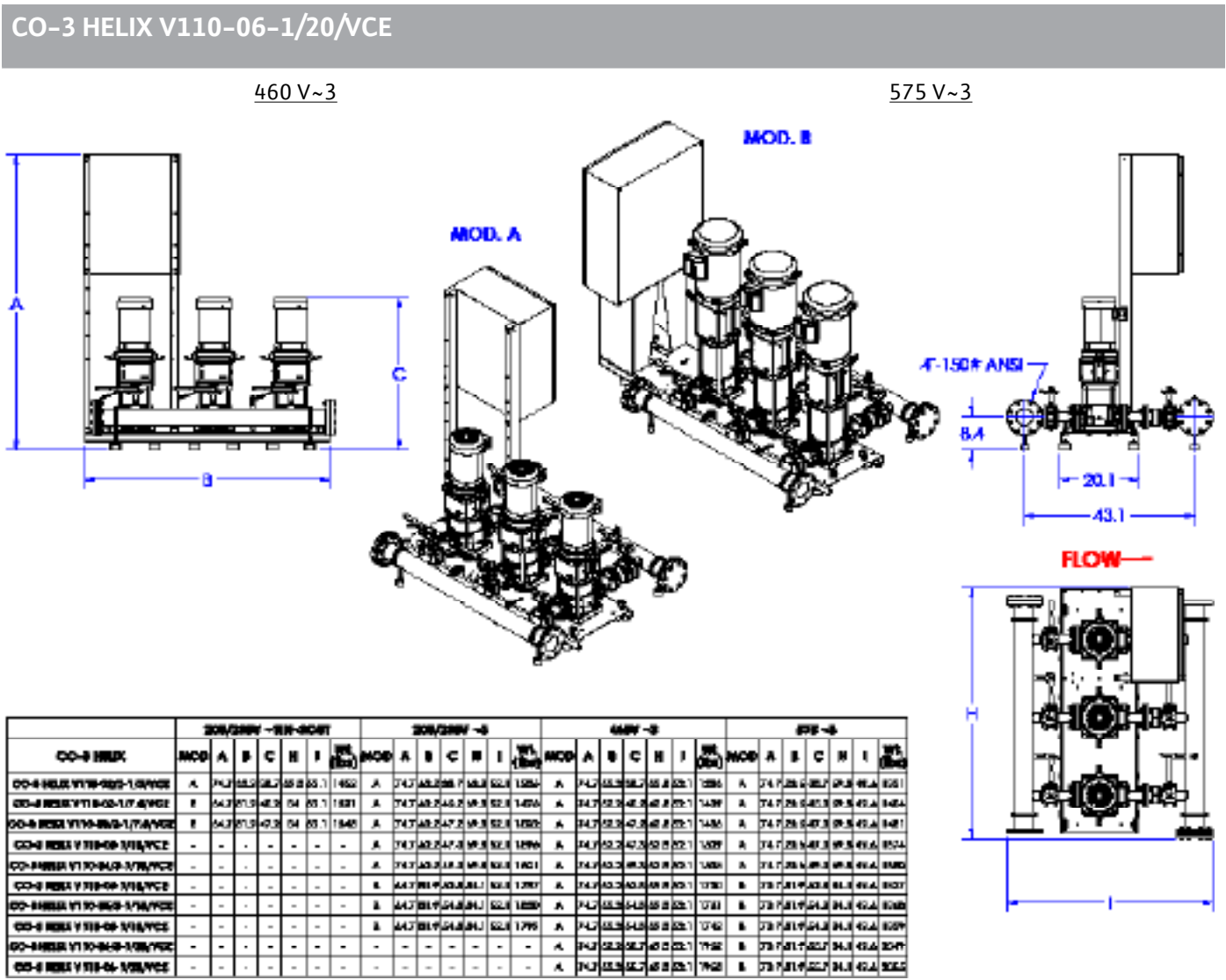
Technical Data - PLC	
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus 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

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
Suction/Discharge Manifolds	AISI304 Stainless Steel with Grooved System Connections
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

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 CO-Helix - NSF 61/372 Pressure Boosting System



Dimensions and Weights											
Model	Voltage (V)	H (in)	W (in)	L (in)	System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Dimensions-inches			Individual Pump Weight	Package Weight
							Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)		
CO-3 HELIX V110-06-1/20/VCE	460 V	74-3/4	70-7/8	47-3/4	4" GROOVED	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	375	1,935
	575 V	70-3/4	85-1/4	47-3/4							

TEFC Motor Data					
P2		Phase	Voltage	FLA (per pump)	Pmax
Model	(HP)	(-)	(V)	(A)	(PSI)
CO-3 HELIX V110-06-1/20/VCE	20	3	460/575	22.7/18.2	363
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			