

# Submittal Data Sheet

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



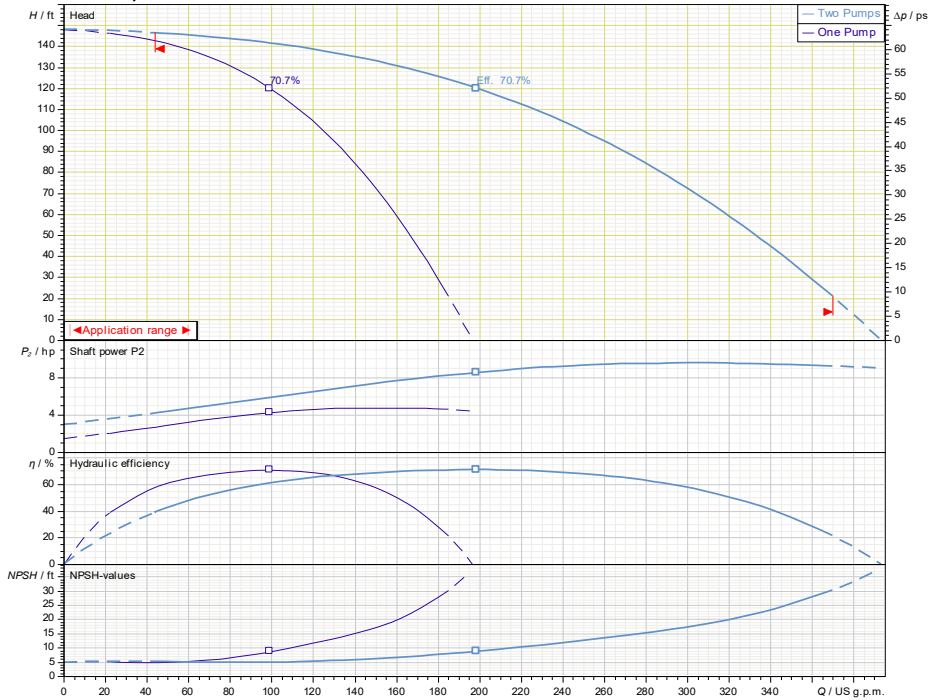
### CO-2 HELIX V110-02/2-1/5/VCE



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

CO-2 Helix 110-02/2



#### 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-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

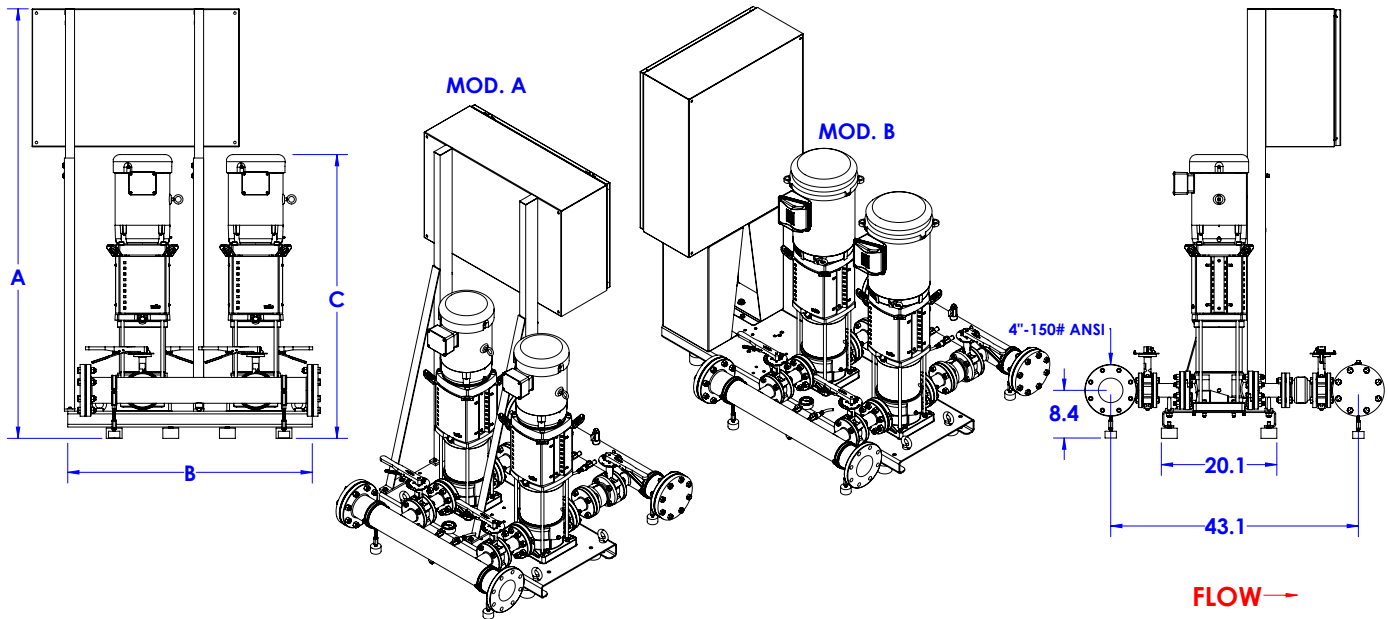
Approval Stamp

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

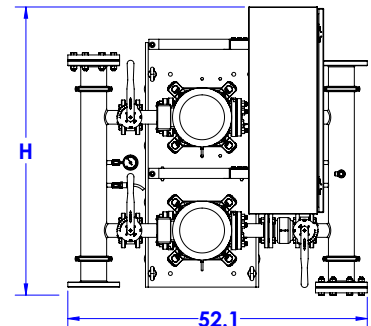


## CO-2 HELIX V110-02/2-1/5/VCE



Units: inches

CO-2 HELIX	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)
CO-2 HELIX V110-02-2-1/5/VCE	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	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	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
CO-2 HELIX V110-07/1-1/20/VCE	B	64.7	62.2	57.7	66.4	1590	A	74.7	42.5	57.7	50.1	1395	B	70.7	62.2	57.7	64.4	1498



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)	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Individual 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

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



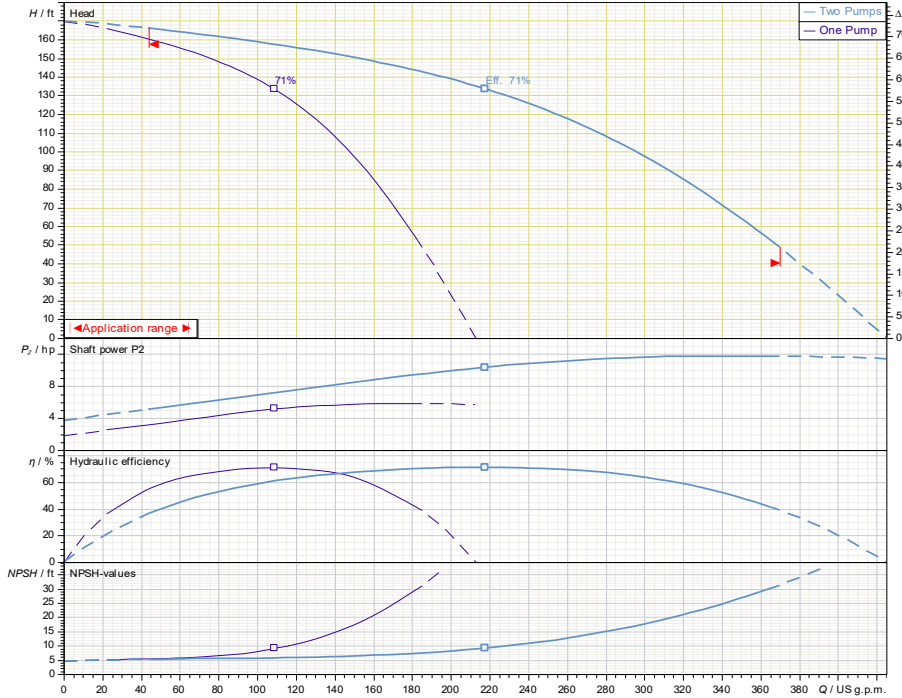
### CO-2 HELIX V110-02-1/7.5/VCE



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

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

CO-2 Helix 110-02



#### 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

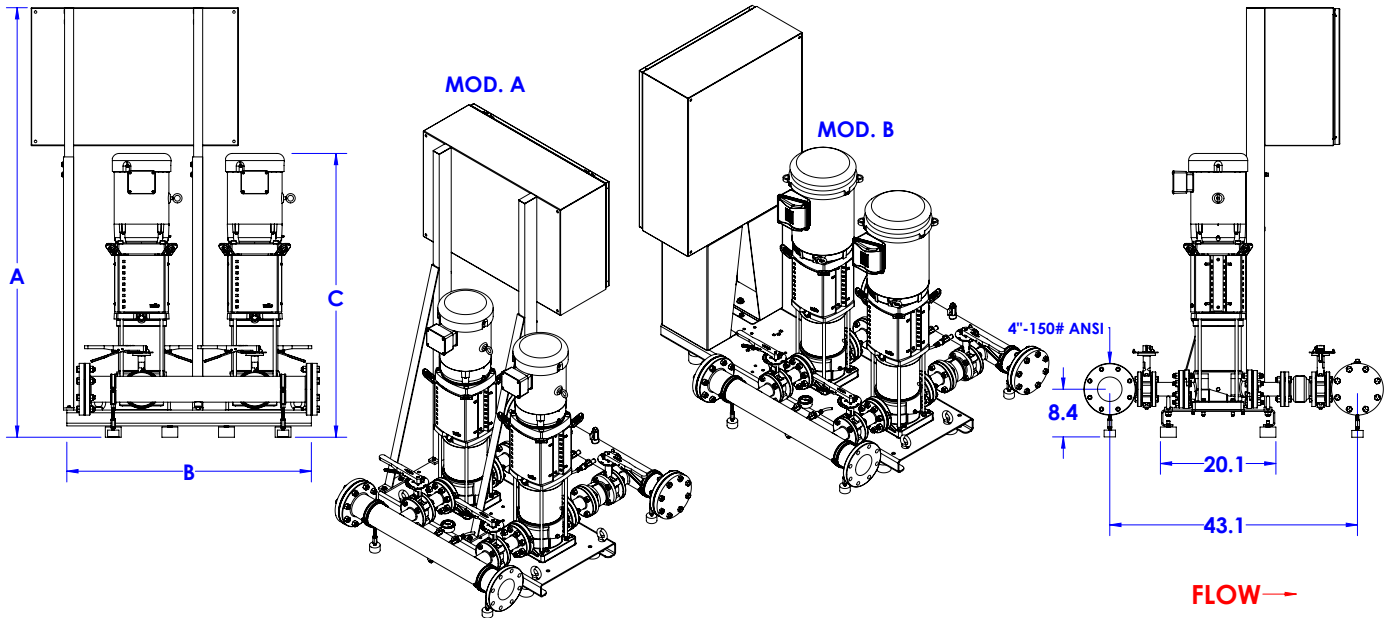
Approval Stamp

# Submittal Data Sheet

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

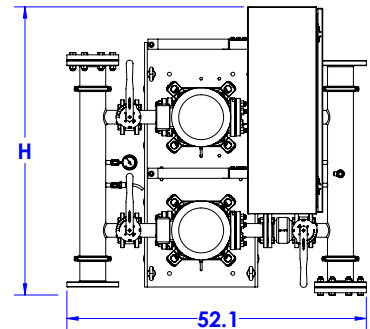


## CO-2 HELIX V110-02-1/7.5/VCE



Units: inches

CO-2 HELIX	208/230 V						460 V						575 V					
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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
CO-2 HELIX V110-07-1-1/20/VCE	B	64.7	62.2	57.7	66.4	1590	A	74.7	42.5	57.7	50.1	1395	B	70.7	62.2	57.7	64.4	1498



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

TEFC Motor Data						Dimension					Individual Pump Weight		
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)	Dimensions-inches			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	

# Submittal Data Sheet

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



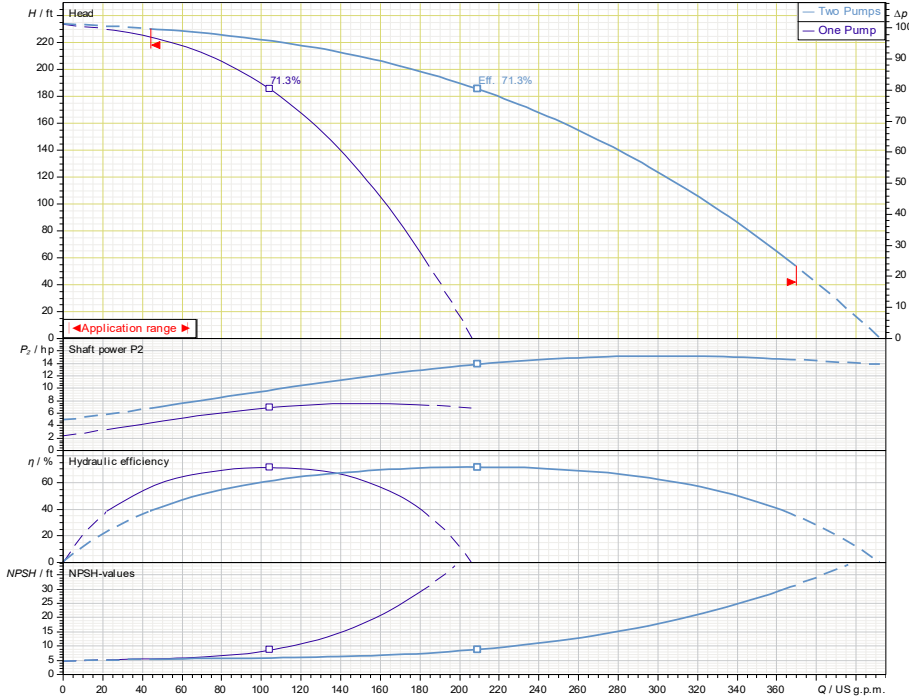
### CO-2 HELIX V110-03/2-1/7.5/VCE



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

CO-2 Helix 110-03/2



#### 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

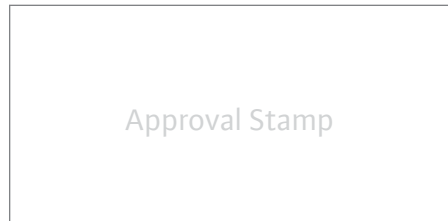
Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-101

#### 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

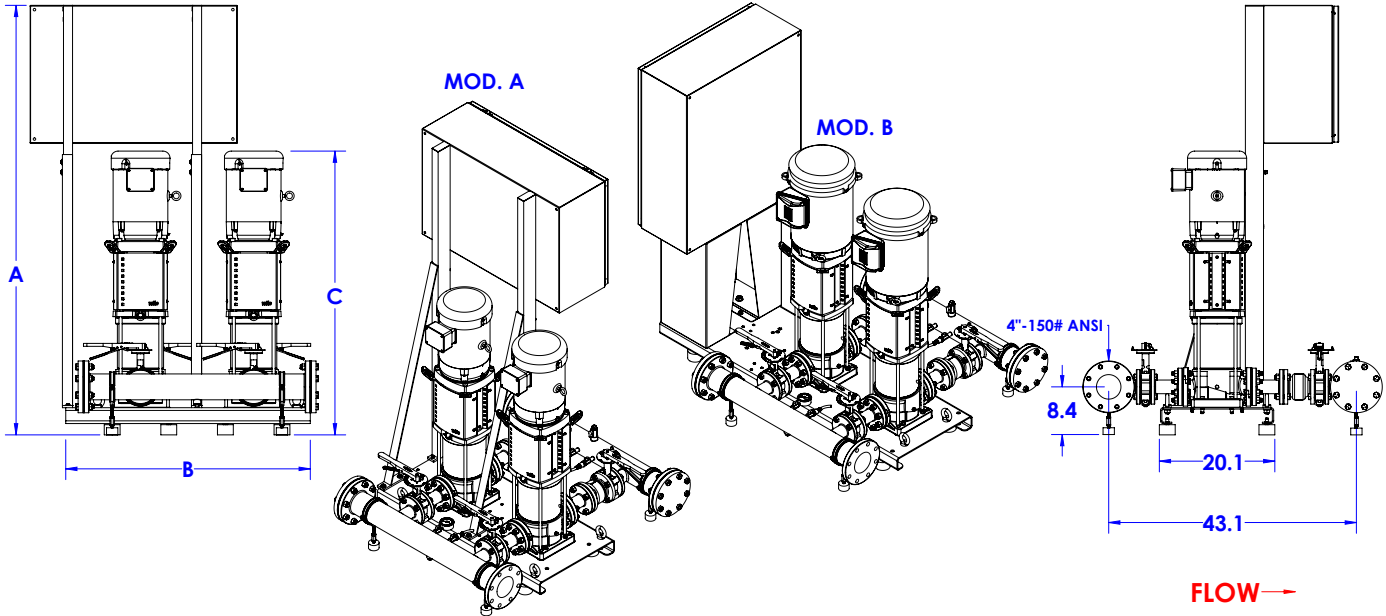


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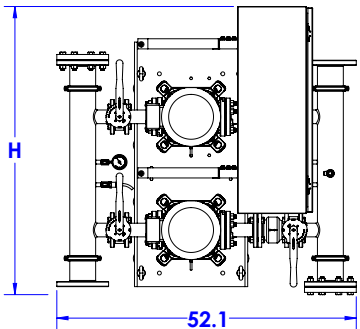


## CO-2 HELIX V110-03/2-1/7.5/VCE



Units: inches

CO-2 HELIX	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)
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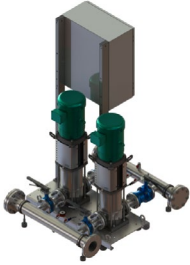
TEFC Motor Data						Dimension				
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydrunomatic Tank Valve on Manifold (Plugged)	Individual Pump Weight (lbs)
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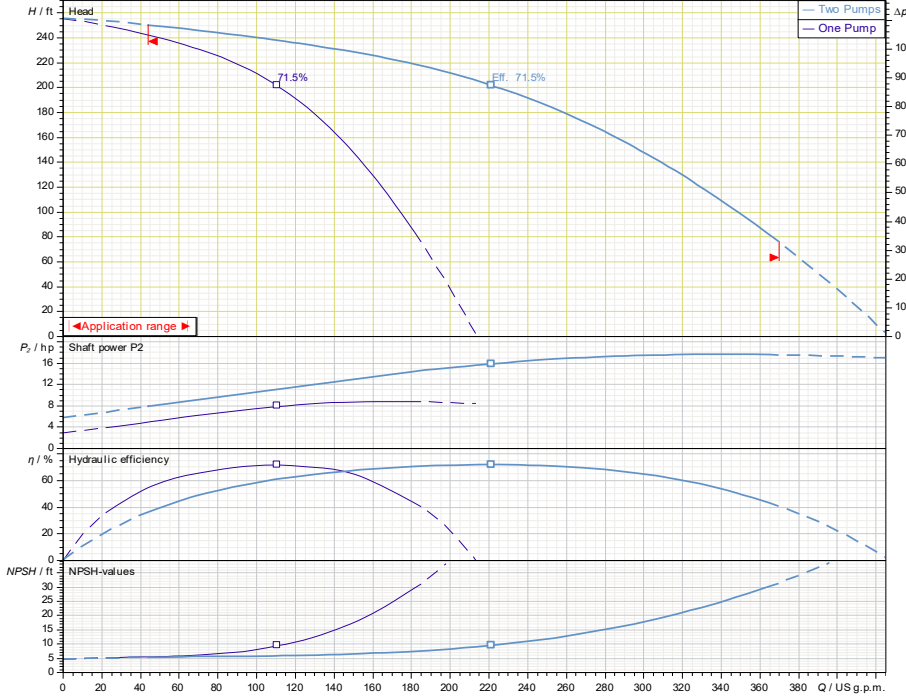
### CO-2 HELIX V110-03-1/10/VCE



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

CO-2 Helix 110-03



#### 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
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System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

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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
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Motor Efficiency	Nema Premium Efficiency (IE3) - Meets NEMA 12-12 Rule
Enclosure Construction	Rolled Steel / Cast Iron
Motor Protection Index	IP54
Insulation Class	F

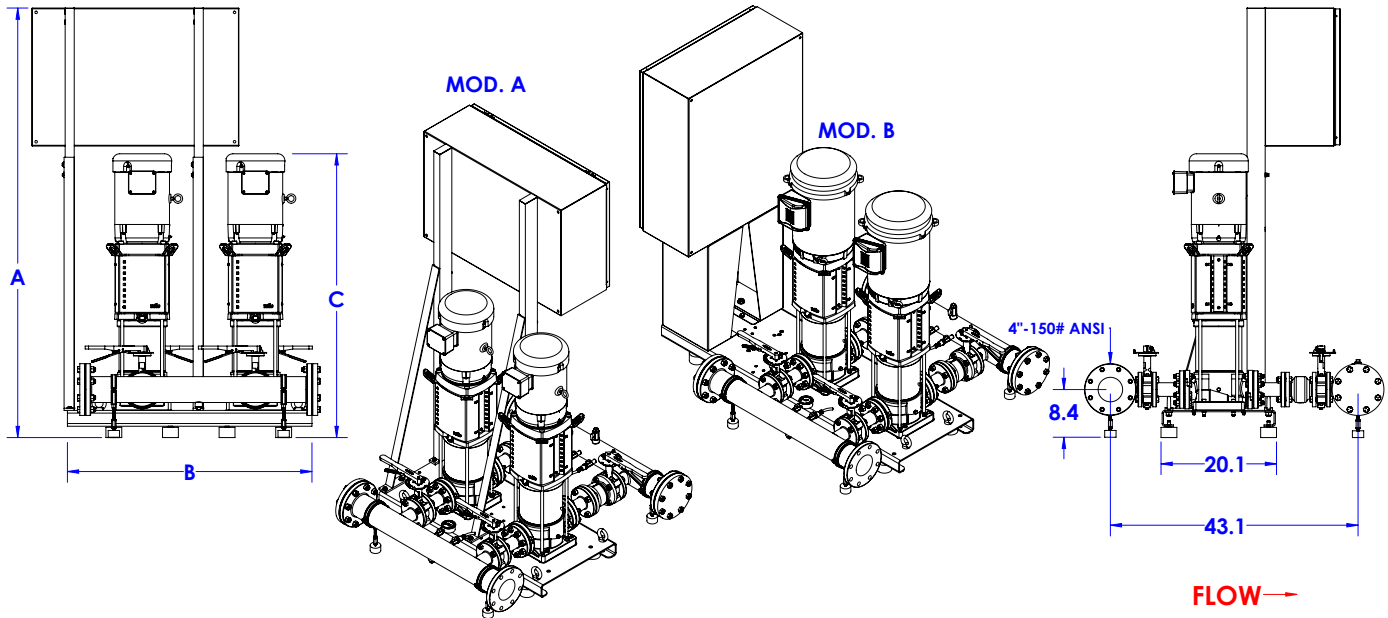
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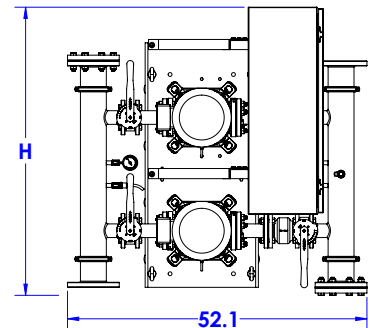


## CO-2 HELIX V110-03-1/10/VCE



Units: inches

CO-2 HELIX	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)
CO-2 HELIX V110-02-2-1/5/VCE	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	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	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
CO-2 HELIX V110-07-1-1/20/VCE	B	64.7	62.2	57.7	66.4	1590	A	74.7	42.5	57.7	50.1	1395	B	70.7	62.2	57.7	64.4	1498



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	Hydrunomatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)
CO-2 HELIX V110-03-1/10/VCE	10	3	208-230/460/575	25.4-23/11.5/9.2	200	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	293

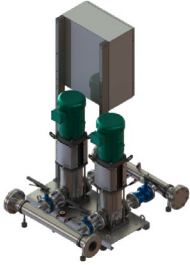


# Submittal Data Sheet

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



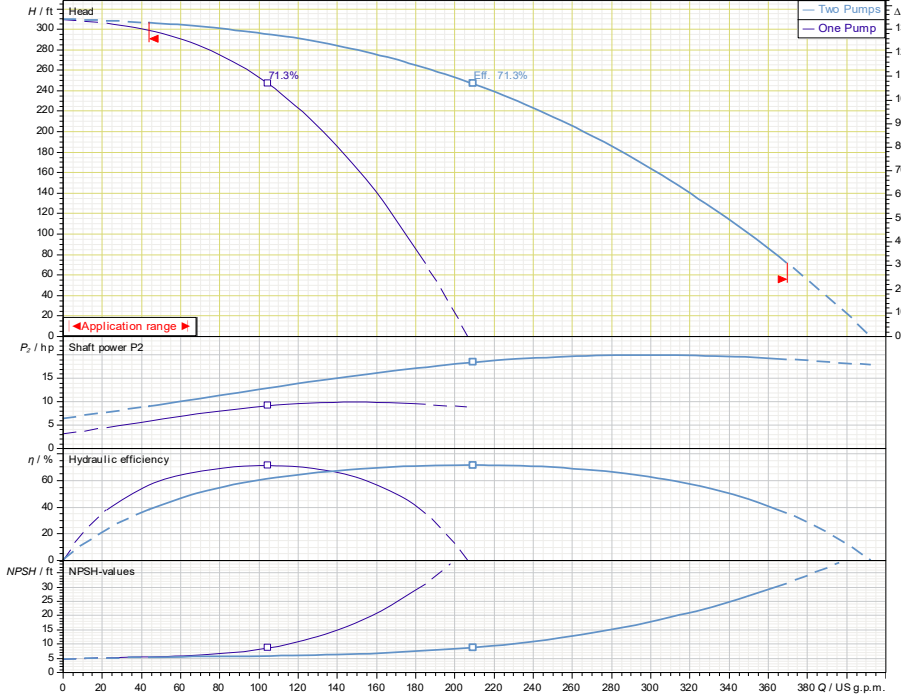
### CO-2 HELIX V110-04/3-1/10/VCE



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

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V110-04/3-1/10/VCE				10			3600

CO-2 Helix 110-04/3



#### 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

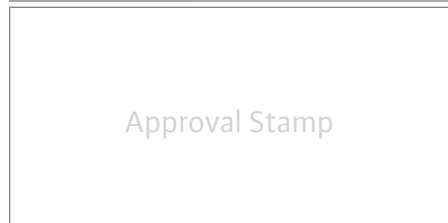
Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-101

#### 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

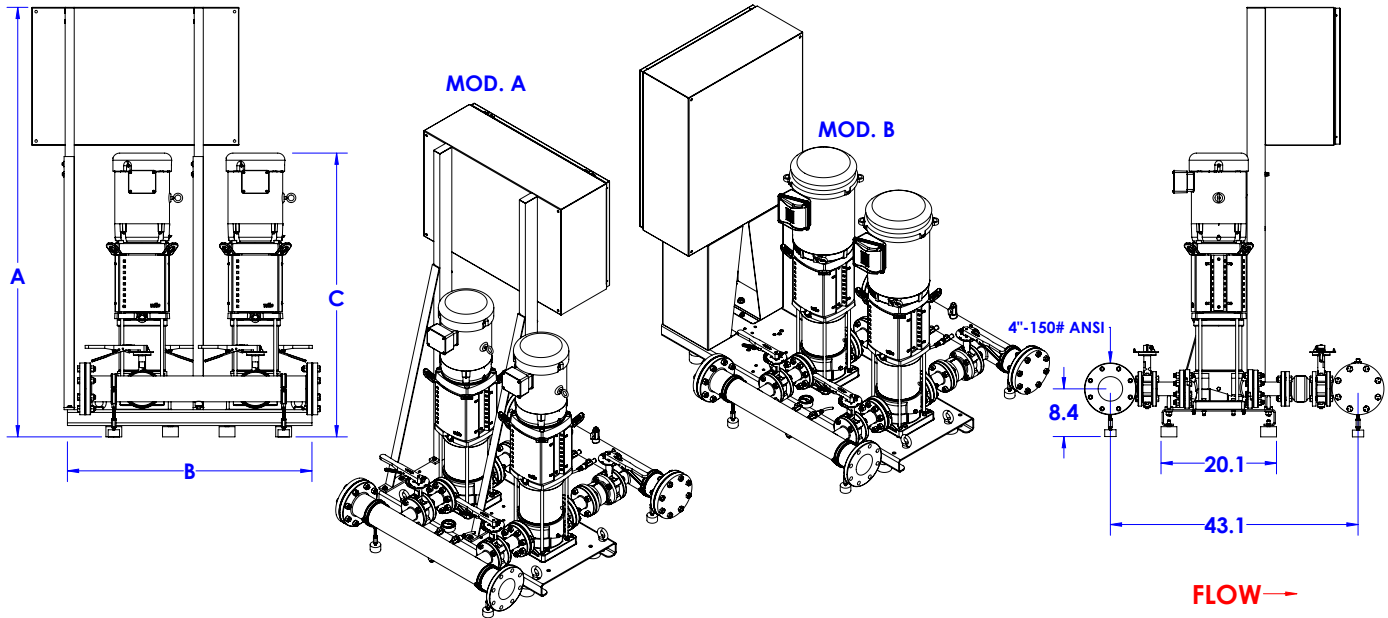


# Submittal Data Sheet

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

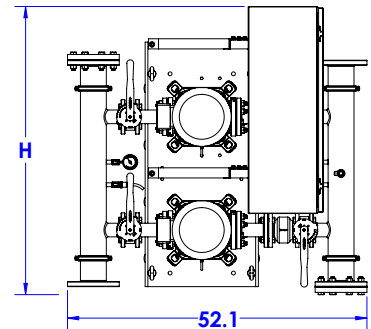


## CO-2 HELIX V110-04/3-1/10/VCE



Units: inches

CO-2 HELIX	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)
CO-2 HELIX V110-02-2-1/5/VCE	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	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	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
CO-2 HELIX V110-07/1-1/20/VCE	B	64.7	62.2	57.7	66.4	1590	A	74.7	42.5	57.7	50.1	1395	B	70.7	62.2	57.7	64.4	1498



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

### TEFC Motor Data

### Dimensions

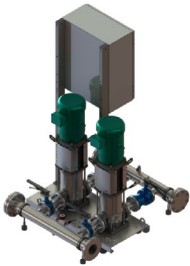
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)	Dimensions-inches	Gauge Tap Size	Transducer Tap Size	Hydrunomatic Tank Valve on Manifold (Plugged)	Individual Pump Weight (lbs)
CO-2 HELIX V110-04/3-1/10/VCE	10	3	208-230/460/575	25.4-23/11.5/9.2	200	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	304

# Submittal Data Sheet

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



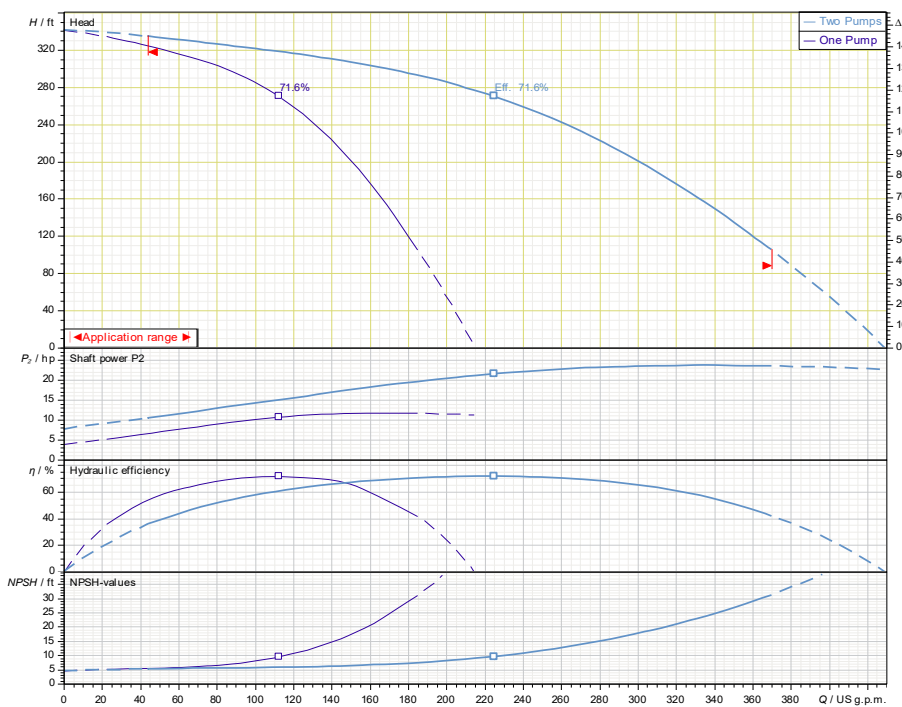
### CO-2 HELIX V110-04-1/15/VCE



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

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V110-04-1/15/VCE				15			3600

CO-2 Helix 110-04



#### 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

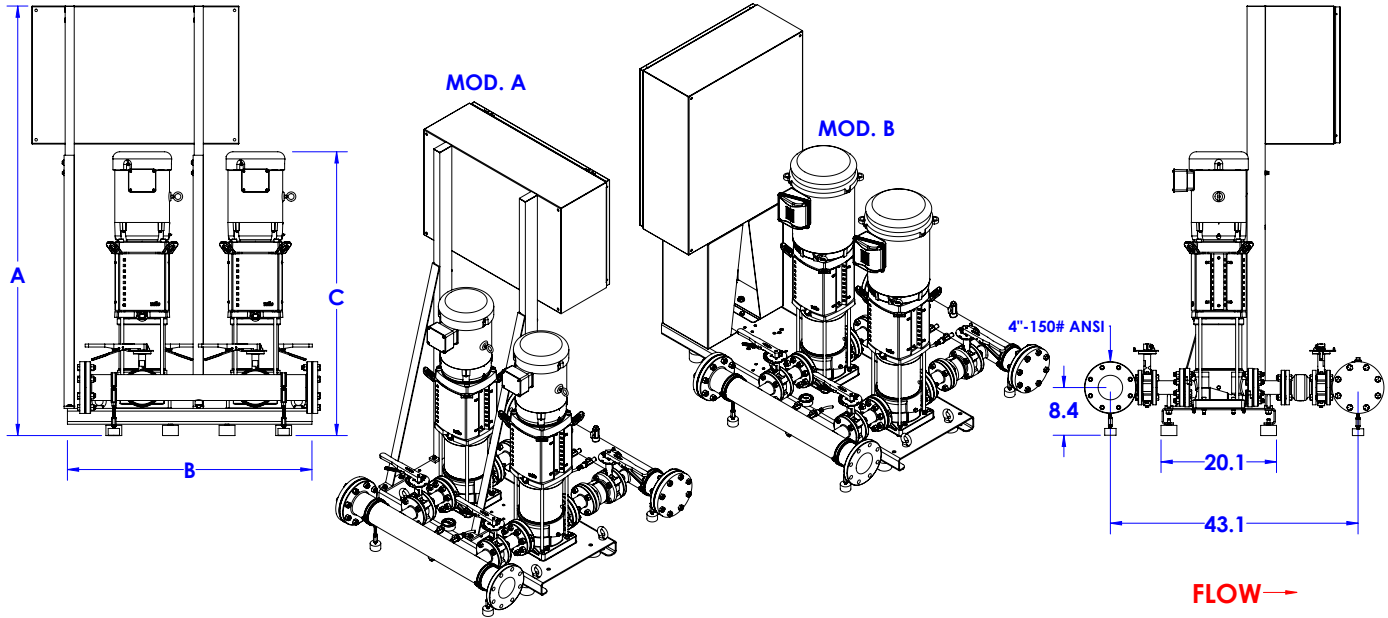
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# Submittal Data Sheet

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

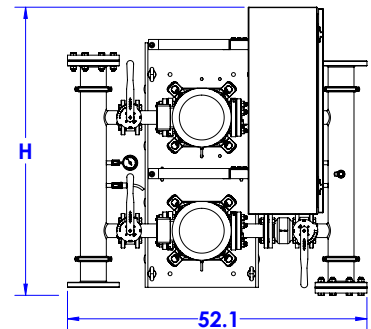


## CO-2 HELIX V110-04-1/15/VCE



Units: inches

CO-2 HELIX	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)
CO-2 HELIX V110-02-2-1/5/VCE	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	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	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
CO-2 HELIX V110-07-1-1/20/VCE	B	64.7	62.2	57.7	66.4	1590	A	74.7	42.5	57.7	50.1	1395	B	70.7	62.2	57.7	64.4	1498



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)	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight (lbs)
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

# Submittal Data Sheet

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



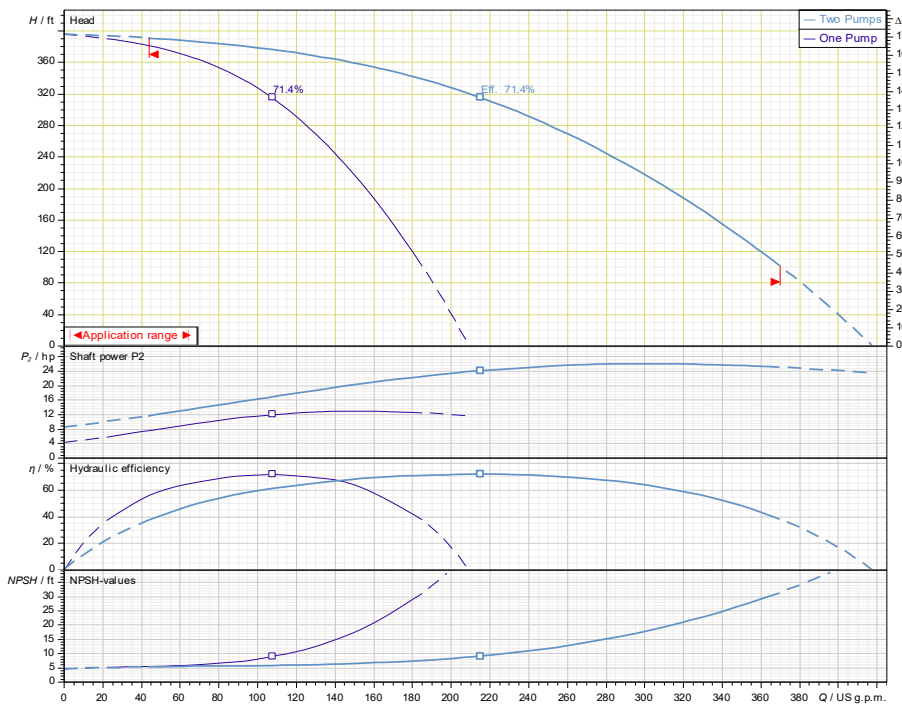
### CO-2 HELIX V110-05/3-1/15/VCE



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

CO-2 Helix 110-05/3



#### 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

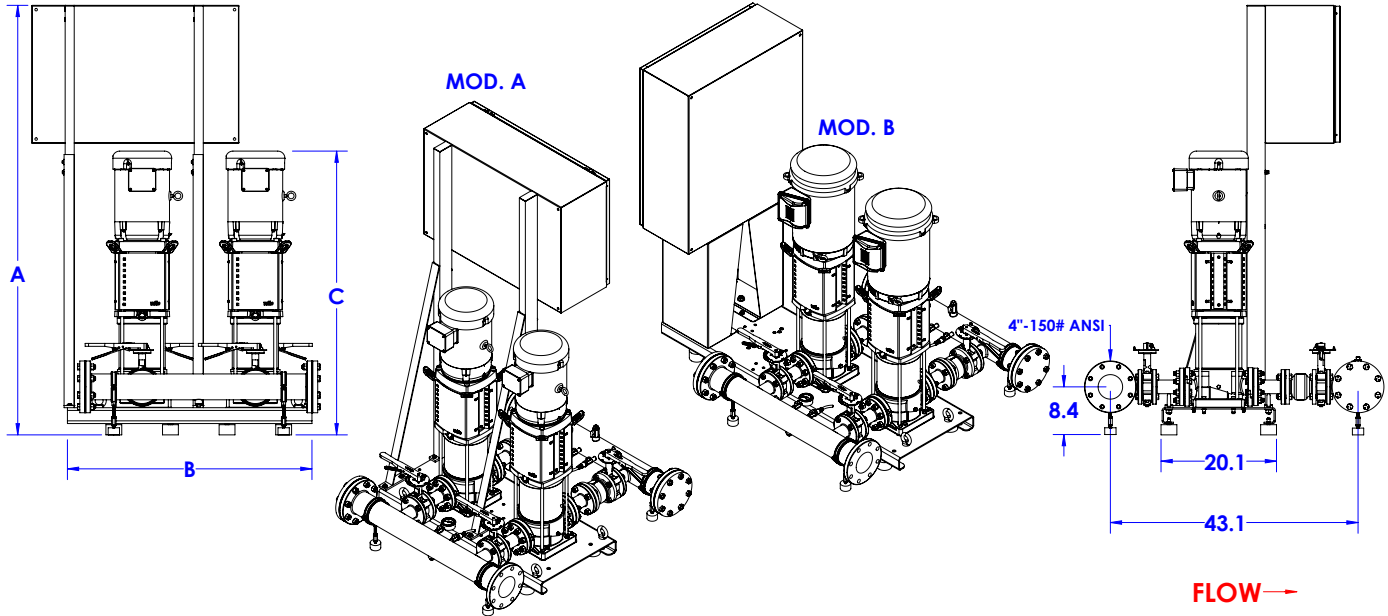
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# Submittal Data Sheet

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

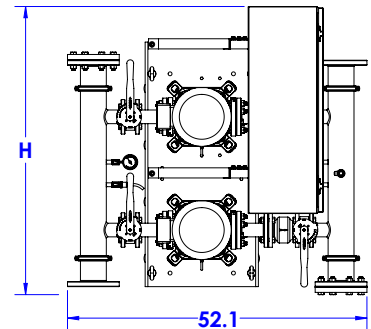


## CO-2 HELIX V110-05/3-1/15/VCE



Units: inches

CO-2 HELIX	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)
CO-2 HELIX V110-02-2-1/5/VCE	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	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	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
CO-2 HELIX V110-07-1-1/20/VCE	B	64.7	62.2	57.7	66.4	1590	A	74.7	42.5	57.7	50.1	1395	B	70.7	62.2	57.7	64.4	1498



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)	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydraulic Tank Valve on Manifold (Plugged)	Individual 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

# Submittal Data Sheet

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



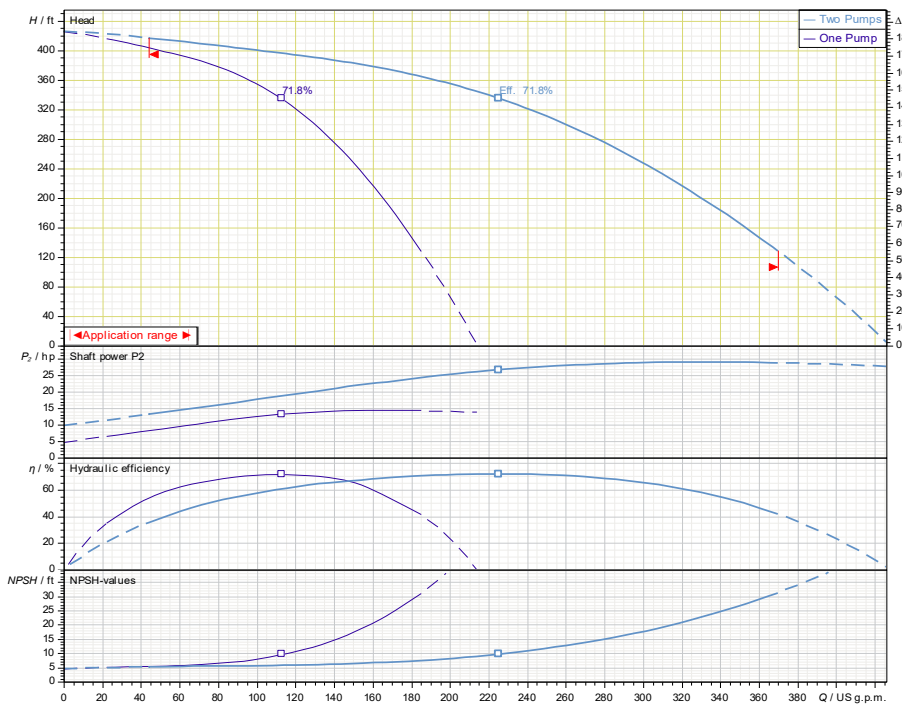
### CO-2 HELIX V110-05-1/15/VCE



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

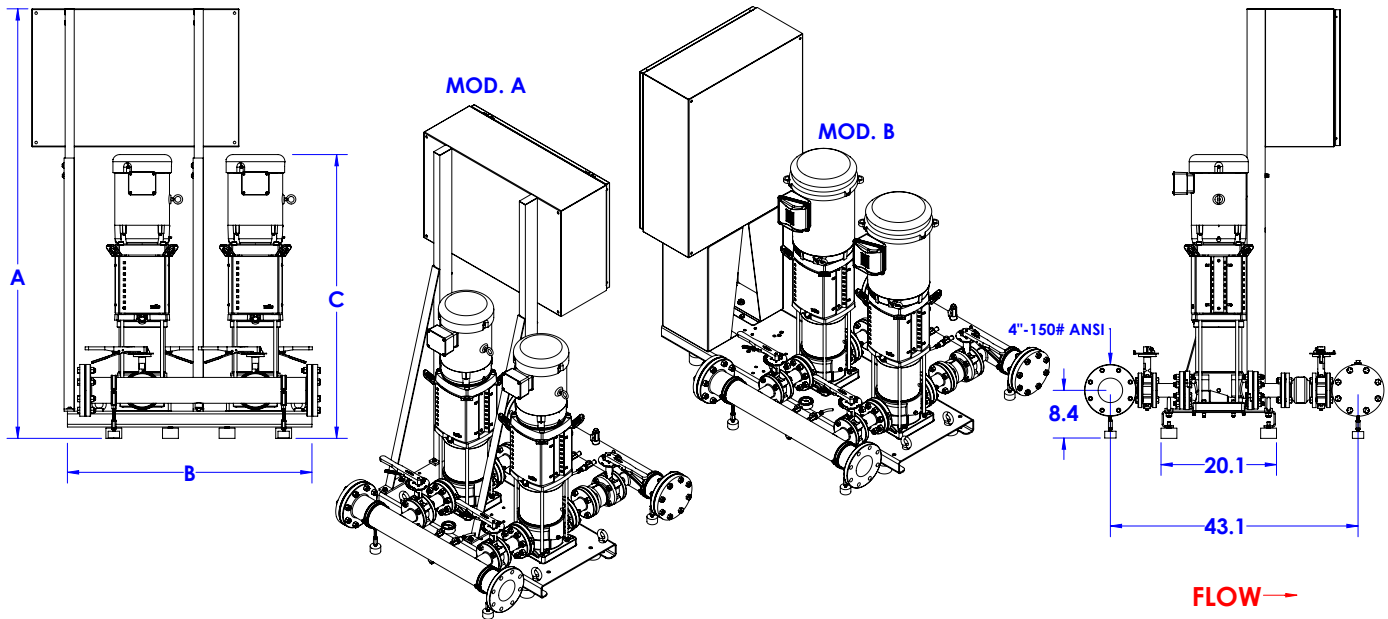
Approval Stamp

# Submittal Data Sheet

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

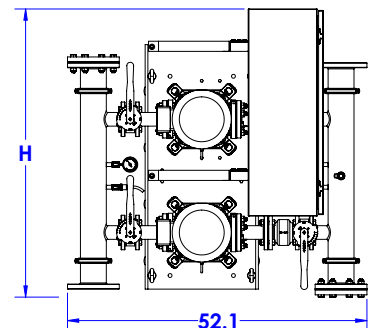


## CO-2 HELIX V110-05-1/15/VCE



Units: inches

CO-2 HELIX	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)
CO-2 HELIX V110-02-2-1/5/VCE	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	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	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
CO-2 HELIX V110-07-1-1/20/VCE	B	64.7	62.2	57.7	66.4	1590	A	74.7	42.5	57.7	50.1	1395	B	70.7	62.2	57.7	64.4	1498



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)	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



# Submittal Data Sheet

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



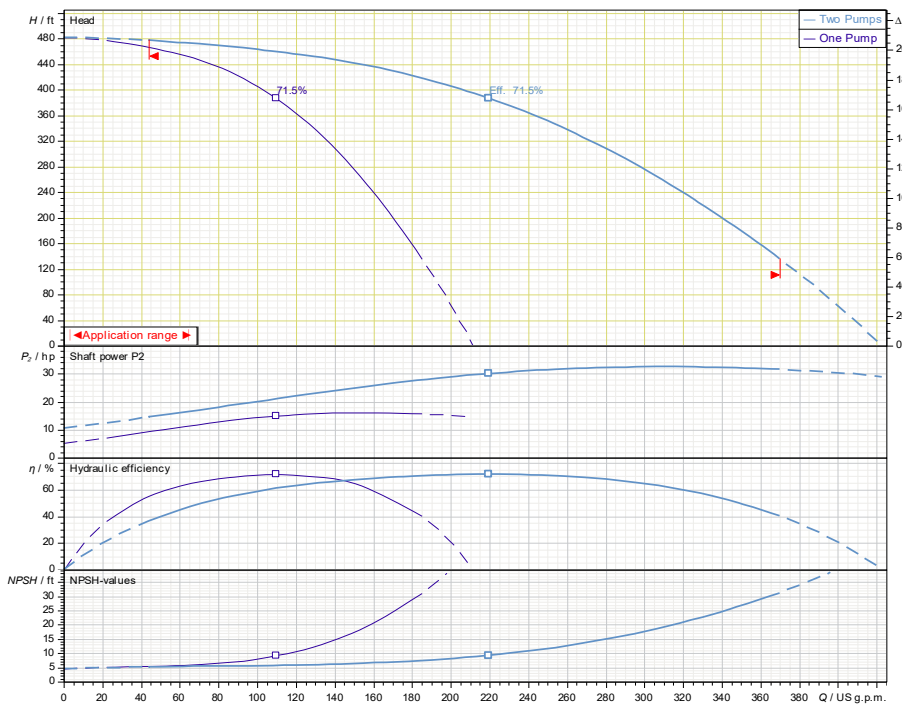
### CO-2 HELIX V110-06/3-1/20/VCE



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

CO-2 Helix 110-06/3



#### 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

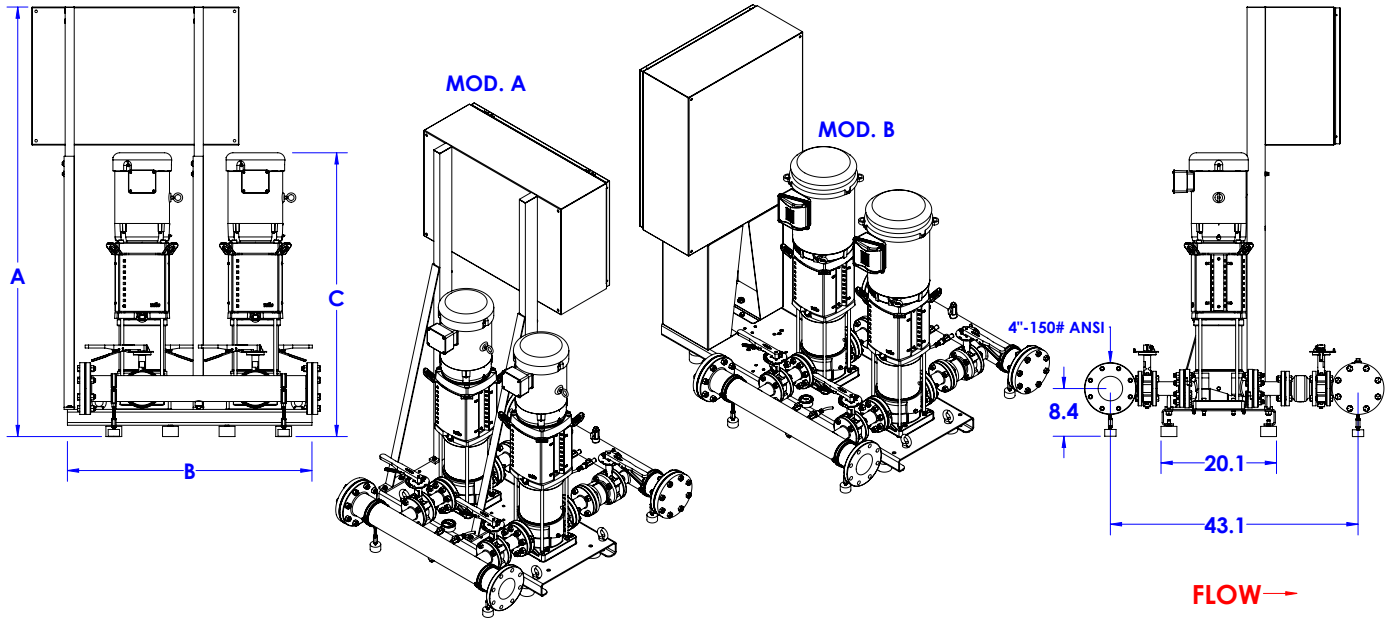
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# Submittal Data Sheet

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

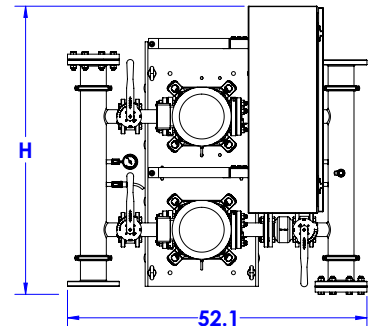


## CO-2 HELIX V110-06/3-1/20/VCE



Units: inches

CO-2 HELIX	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)
CO-2 HELIX V110-02-2-1/5/VCE	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	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	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
CO-2 HELIX V110-07-1-1/20/VCE	B	64.7	62.2	57.7	66.4	1590	A	74.7	42.5	57.7	50.1	1395	B	70.7	62.2	57.7	64.4	1498



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

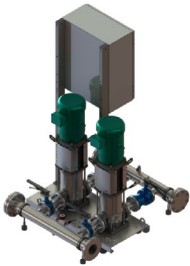
TEFC Motor Data						Dimensions					Individual Pump Weight
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydrumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)	
CO-2 HELIX V110-06/3-1/20/VCE	20	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 CO-Helix - NSF 61/372 Pressure Boosting System



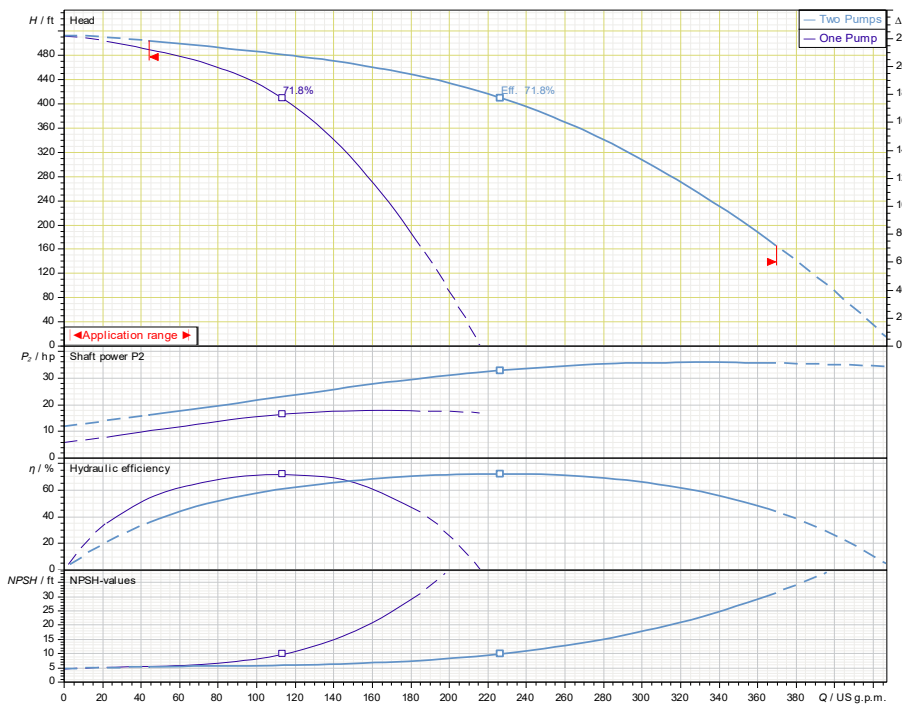
### CO-2 HELIX V110-06-1/20/VCE



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

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

CO-2 Helix 110-06



#### 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

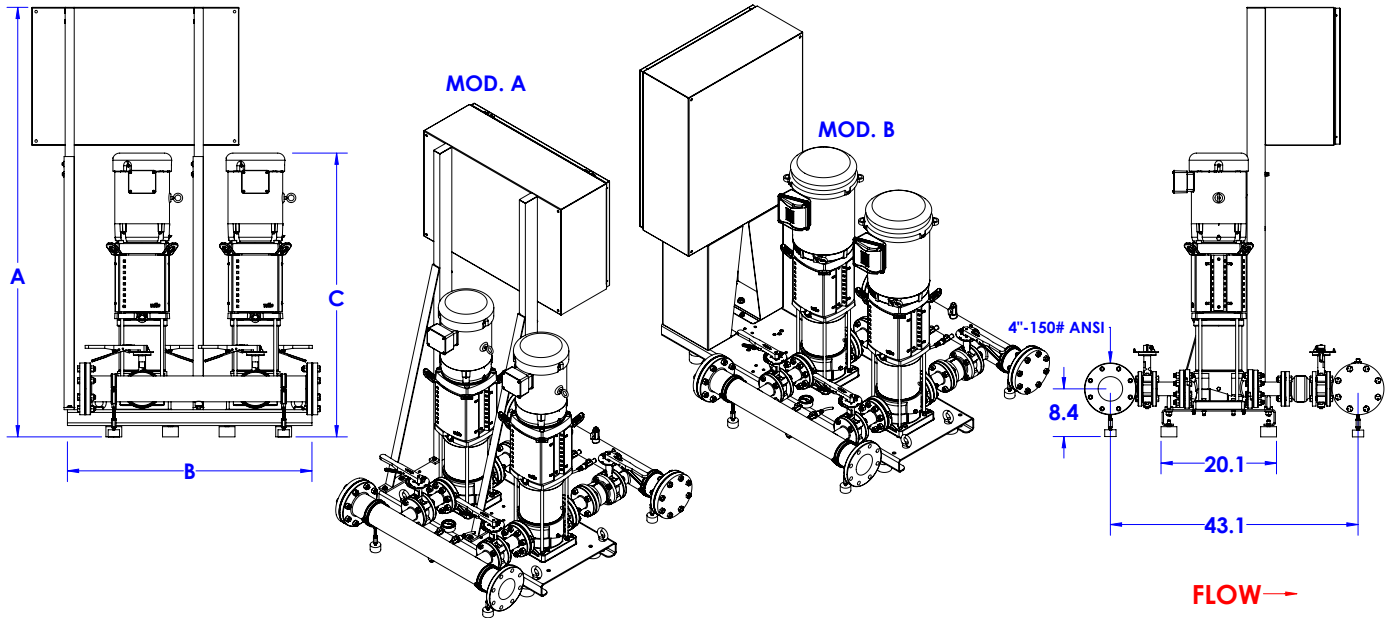
Approval Stamp

# Submittal Data Sheet

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

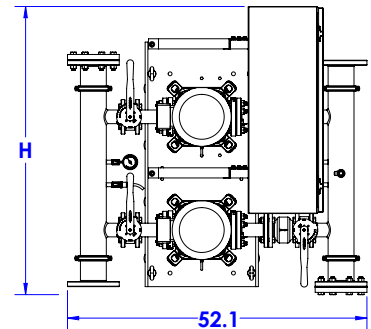


## CO-2 HELIX V110-06-1/20/VCE



Units: inches

CO-2 HELIX	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)
CO-2 HELIX V110-02-2-1/5/VCE	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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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
CO-2 HELIX V110-07-1-1/20/VCE	B	64.7	62.2	57.7	66.4	1590	A	74.7	42.5	57.7	50.1	1395	B	70.7	62.2	57.7	64.4	1498



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)	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydrunamic Tank Valve on Manifold (Plugged)	Individual 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

# Submittal Data Sheet

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



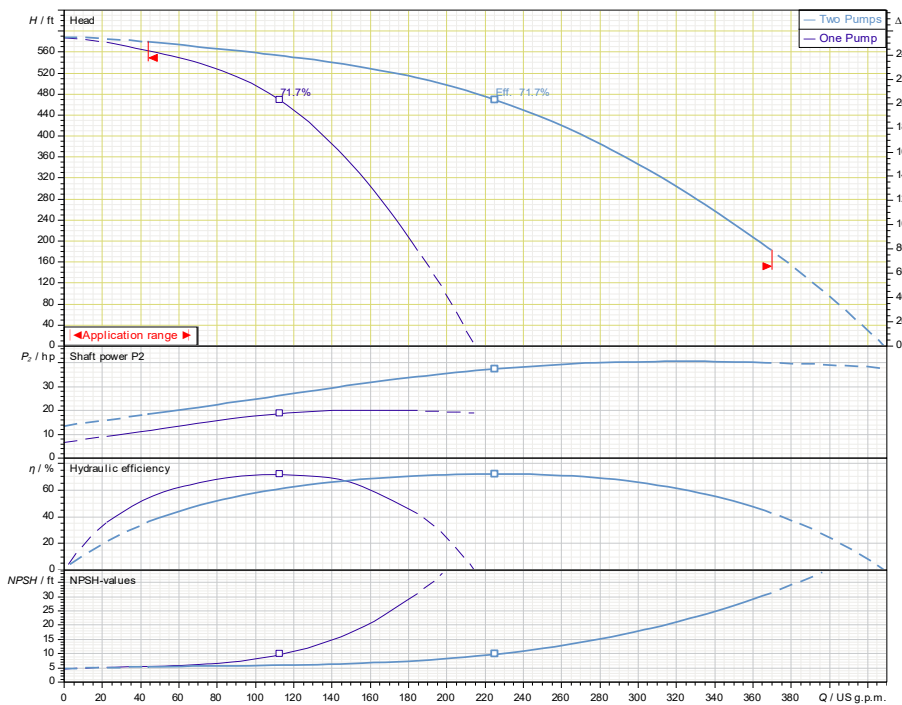
### CO-2 HELIX V110-07/1-1/20/VCE



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 V110-07/1-1/20/VCE				20			3600

CO-2 Helix 110-07/1



#### 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	255 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

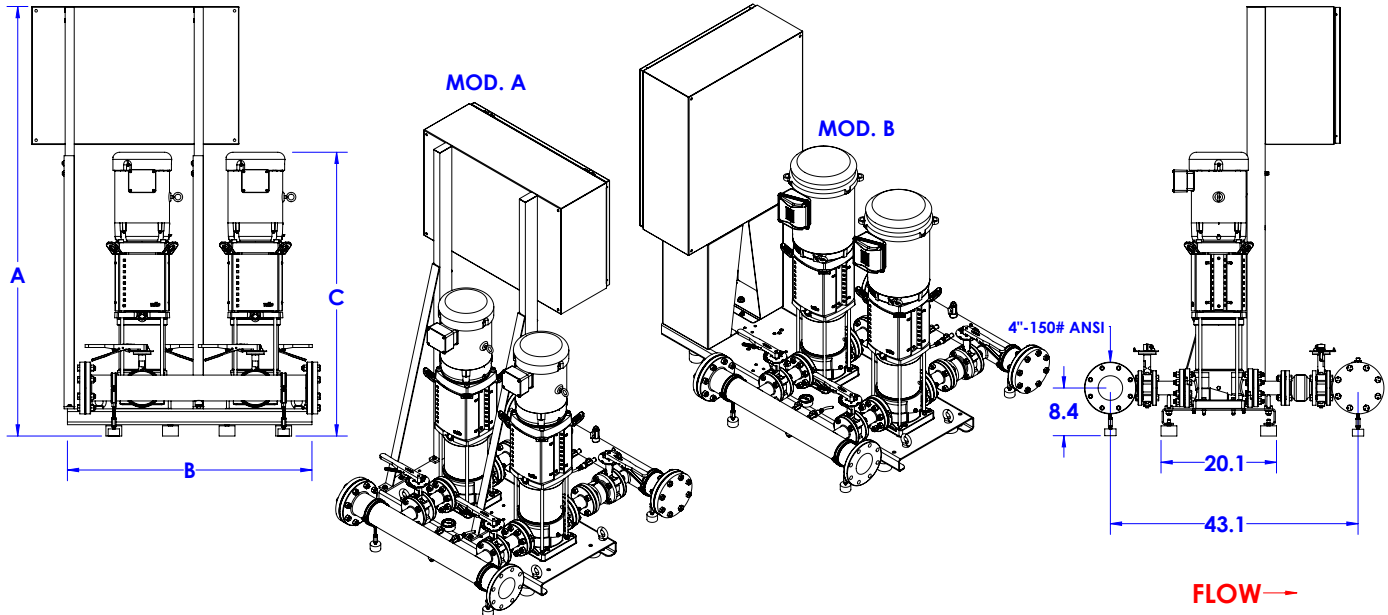
Approval Stamp

# Submittal Data Sheet

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

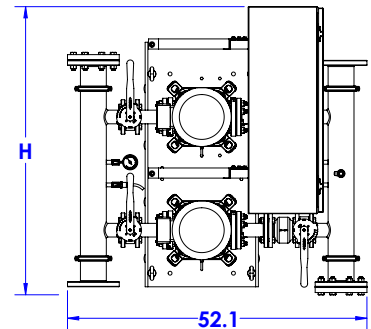


## CO-2 HELIX V110-07/1-1/20/VCE



Units: inches

CO-2 HELIX	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)
CO-2 HELIX V110-02-2-1/5/VCE	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	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	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
CO-2 HELIX V110-07/1-1/20/VCE	B	64.7	62.2	57.7	66.4	1590	A	74.7	42.5	57.7	50.1	1395	B	70.7	62.2	57.7	64.4	1498



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

TEFC Motor Data						Dimensions					Individual Pump Weight
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)	Pmax (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 V110-07/1-1/20/VCE	20	3	208-230/460/575	50-46/23/18.2	255	2"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	375	