

# Submittal Data Sheet

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

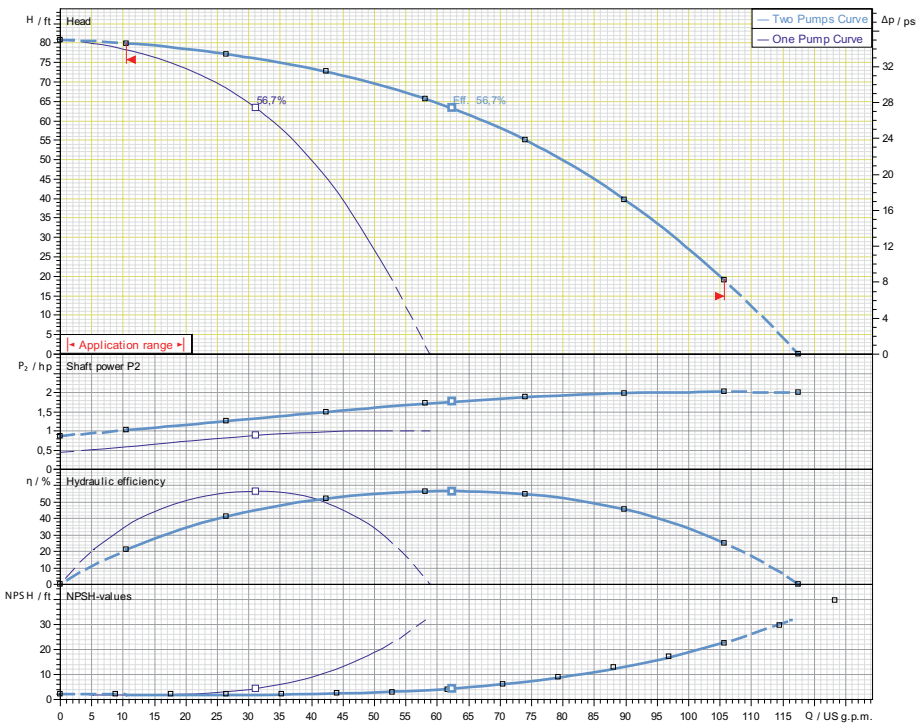


### CO-2 HELIX V30-02-1/1/VCE



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

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V30-02-1/1/VCE				1			3600



#### Applications

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

#### Materials of Construction

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

#### Technical Data - Operational Ranges

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

#### Technical Data - Panel

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

#### Technical Data - PLC

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

#### Motor Data

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

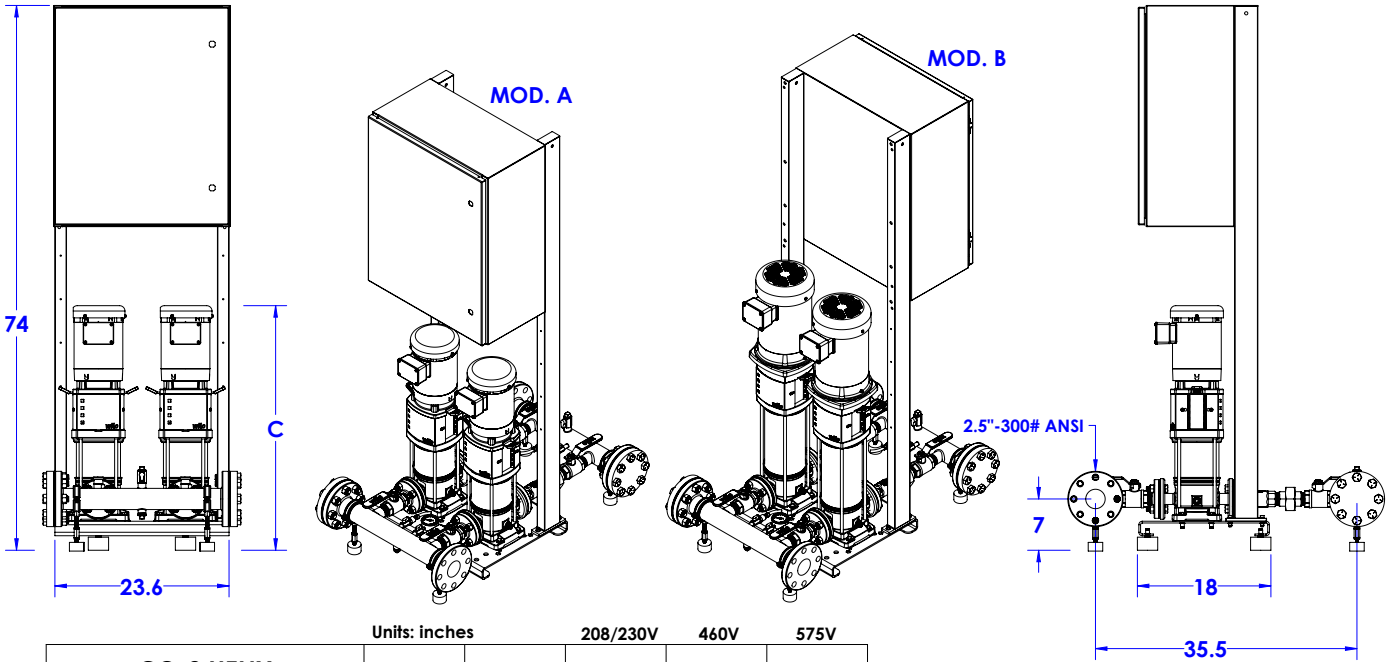
Approval Stamp

# Submittal Data Sheet

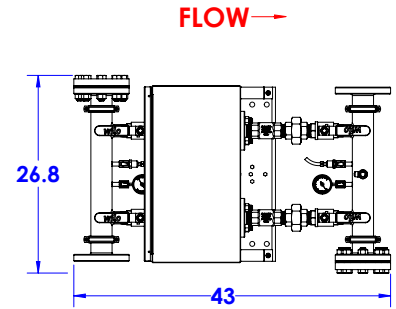
Wilo CO-Helix - NSF 61/372 Pressure Boosting System



## CO-2 HELIX V30-02-1/1/VCE



CO-2 HELIX	MOD.	C	Units: inches		
			208/230V	460V	575V
CO-2 HELIX V30-02-1/1/VCE	A	31.2	491	491	514
CO-2 HELIX V30-03-1/1.5/VCE	A	33.2	501	501	522
CO-2 HELIX V30-04-1/2/VCE	A	35.2	509	509	530
CO-2 HELIX V30-05-1/3/VCE	B	38.1	543	537	558
CO-2 HELIX V30-06-1/3/VCE	B	39.1	553	547	568
CO-2 HELIX V30-07-1/5/VCE	B	43.9	593	593	608
CO-2 HELIX V30-08-1/5/VCE	B	44.9	599	599	614
CO-2 HELIX V30-09-1/5/VCE	B	46.9	607	607	622
CO-2 HELIX V30-10-1/5/VCE	B	47.9	613	613	628
CO-2 HELIX V30-11-1/5/VCE	B	50.9	619	619	634



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	Hydrunomatic Tank Valve on Manifold (Plugged)	Individual Pump Weight (lbs)
CO-2 HELIX V30-02-1/1/VCE	1	3	208-230/460/575	3-2.8/1.4/1.1	232	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	70

# Submittal Data Sheet

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

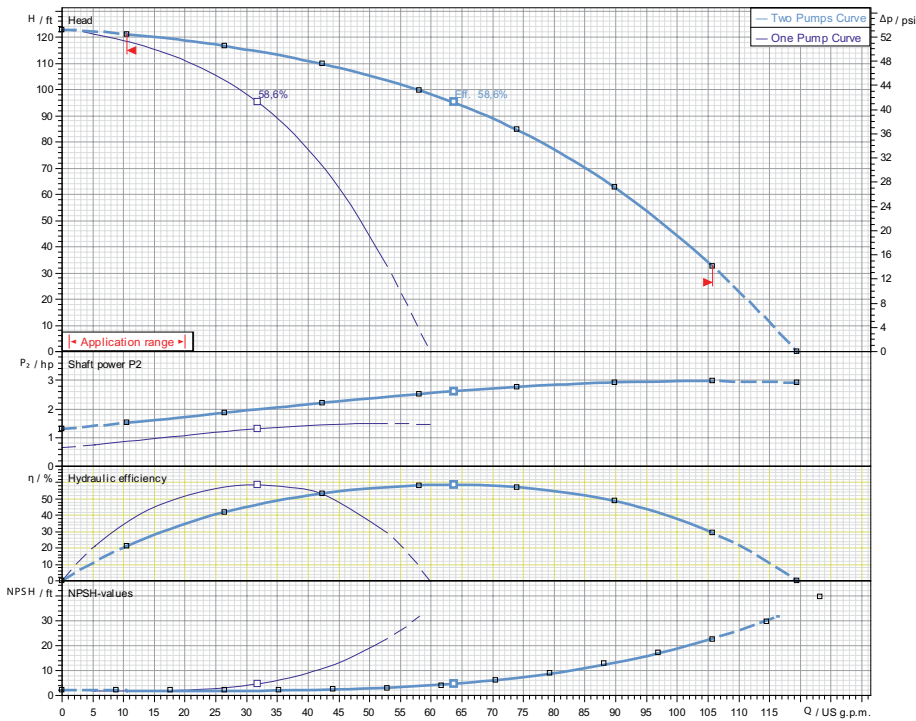


### CO-2 HELIX V30-03-1/1.5/VCE



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 V30-03-1/1.5/VCE				1.5			3600



#### Applications

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

#### Materials of Construction

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

#### Technical Data - Operational Ranges

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

#### Technical Data - Panel

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

#### Technical Data - PLC

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

#### Motor Data

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

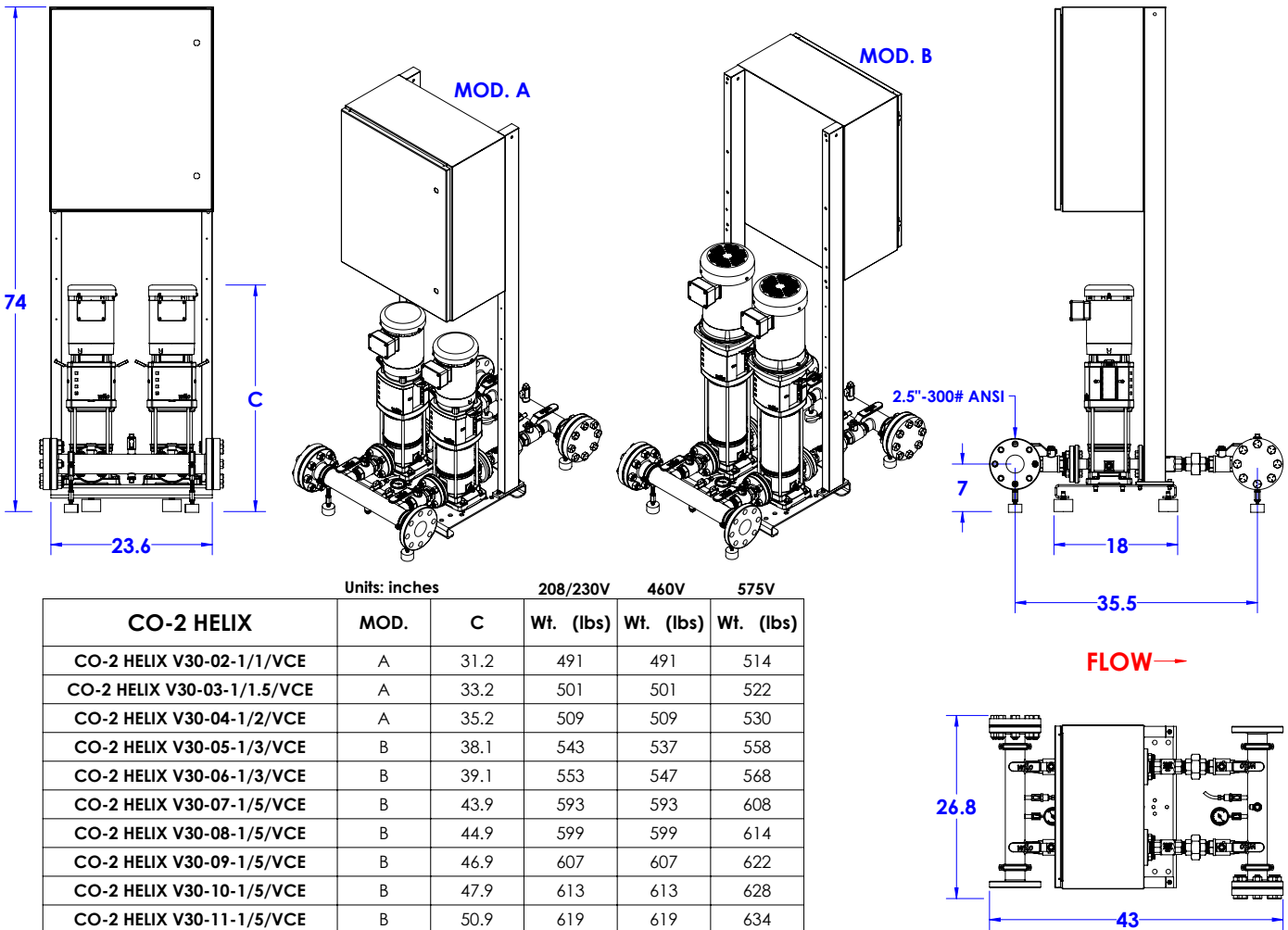


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Wilo CO-Helix - NSF 61/372 Pressure Boosting System



## CO-2 HELIX V30-03-1/1.5/VCE



CO-2 HELIX	MOD.	C	Units: inches		
			208/230V	460V	575V
CO-2 HELIX V30-02-1/1/VCE	A	31.2	491	491	514
CO-2 HELIX V30-03-1/1.5/VCE	A	33.2	501	501	522
CO-2 HELIX V30-04-1/2/VCE	A	35.2	509	509	530
CO-2 HELIX V30-05-1/3/VCE	B	38.1	543	537	558
CO-2 HELIX V30-06-1/3/VCE	B	39.1	553	547	568
CO-2 HELIX V30-07-1/5/VCE	B	43.9	593	593	608
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CO-2 HELIX V30-10-1/5/VCE	B	47.9	613	613	628
CO-2 HELIX V30-11-1/5/VCE	B	50.9	619	619	634

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 V30-03-1/1.5/VCE	1.5	3	208-230/460/575	4-3.8/1.9/1.5	232	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	85

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

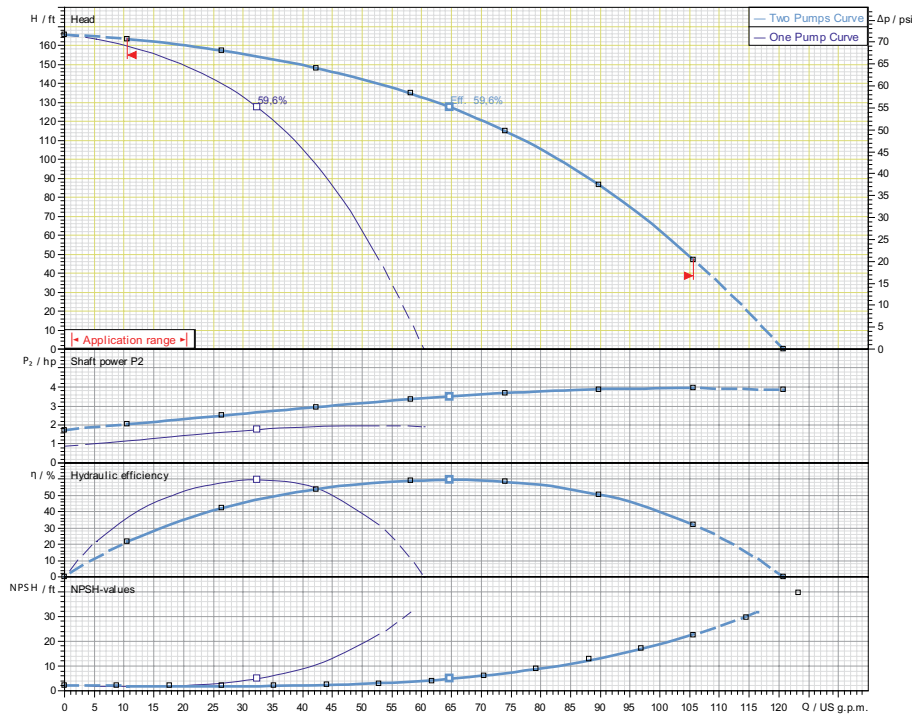


### CO-2 HELIX V30-04-1/2/VCE



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

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V30-04-1/2/VCE				2			3600



#### Applications

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

#### Materials of Construction

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

#### Technical Data - Operational Ranges

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

#### Technical Data - Panel

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

#### Technical Data - PLC

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

#### Motor Data

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

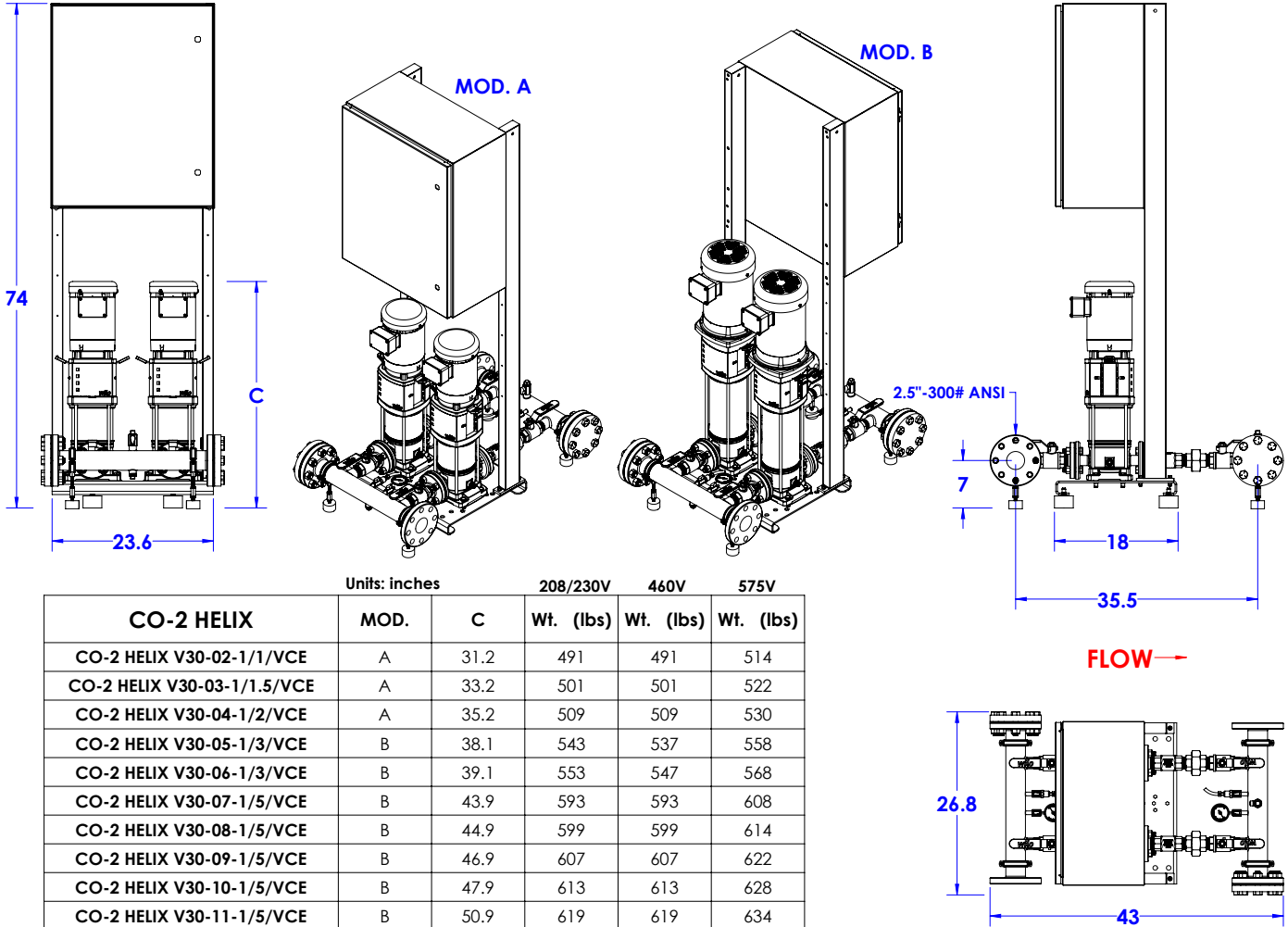
Approval Stamp

# Submittal Data Sheet

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## CO-2 HELIX V30-04-1/2/VCE



CO-2 HELIX	MOD.	C	Units: inches		
			208/230V	460V	575V
CO-2 HELIX V30-02-1/1/VCE	A	31.2	491	491	514
CO-2 HELIX V30-03-1/1.5/VCE	A	33.2	501	501	522
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CO-2 HELIX V30-05-1/3/VCE	B	38.1	543	537	558
CO-2 HELIX V30-06-1/3/VCE	B	39.1	553	547	568
CO-2 HELIX V30-07-1/5/VCE	B	43.9	593	593	608
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CO-2 HELIX V30-11-1/5/VCE	B	50.9	619	619	634

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	Hydronumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight (lbs)
CO-2 HELIX V30-04-1/2/VCE	2	3	208-230/460/575	5.3-5.0/2.5/2.0	232	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	91

# Submittal Data Sheet

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

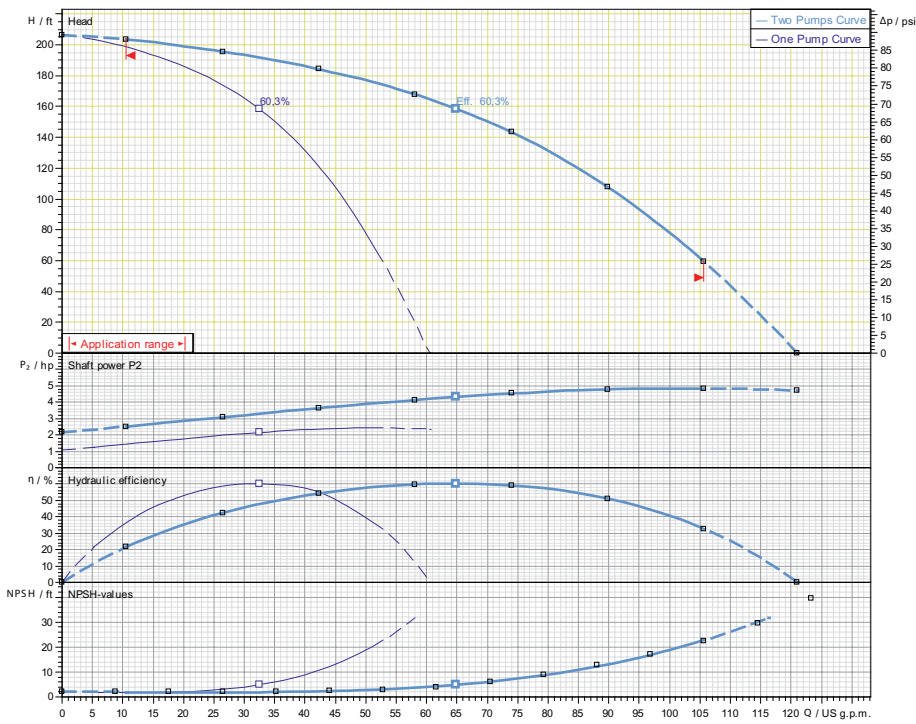


### CO-2 HELIX V30-05-1/3/VCE



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

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V30-05-1/3/VCE				3			3600



#### Applications

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

#### Materials of Construction

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

#### Technical Data - Operational Ranges

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

#### Technical Data - Panel

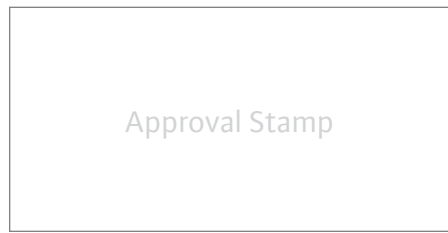
Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-230/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

#### Technical Data - PLC

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

#### Motor Data

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

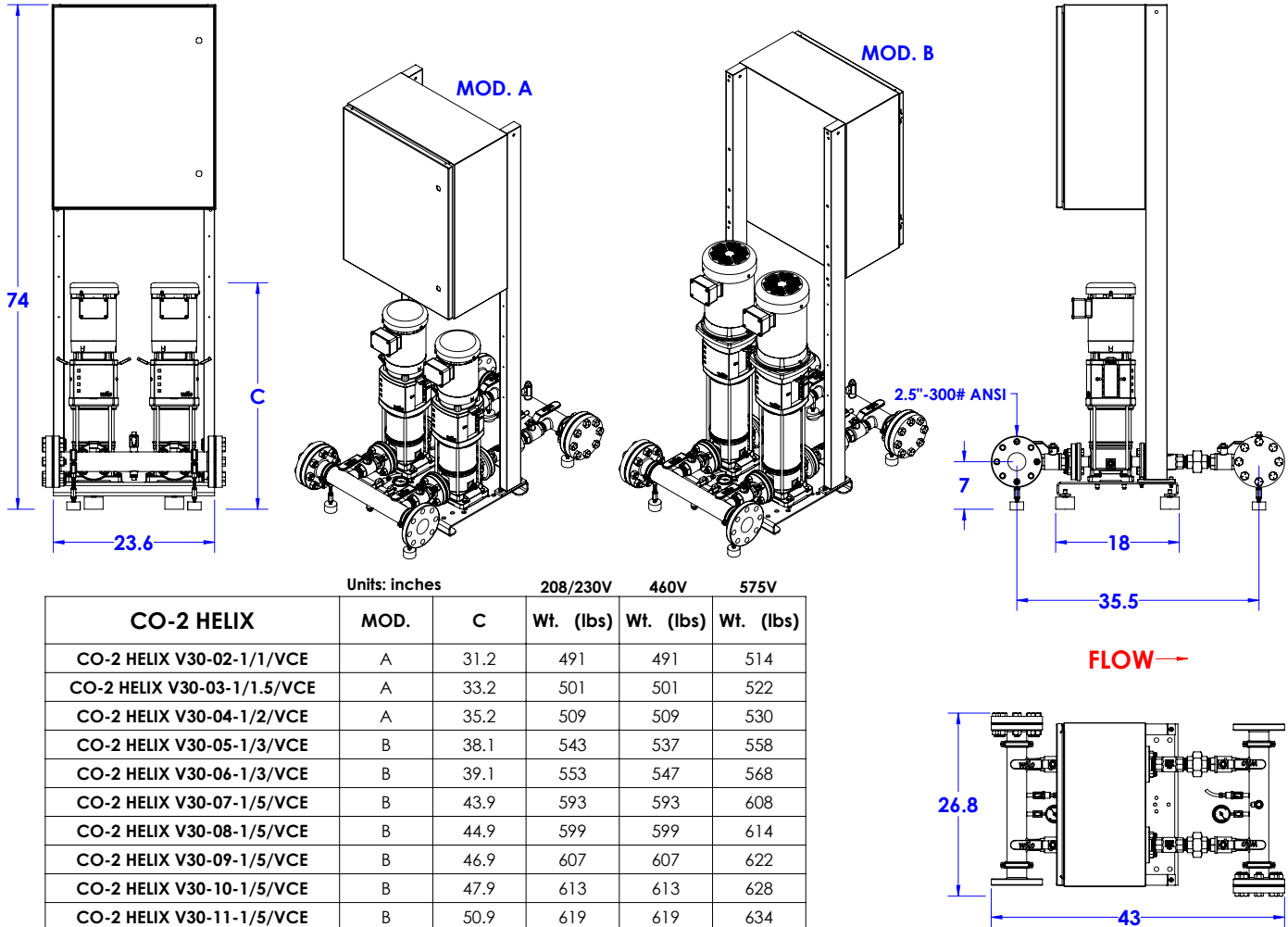


# Submittal Data Sheet

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



## CO-2 HELIX V30-05-1/3/VCE



CO-2 HELIX	Units: inches		208/230V	460V	575V
	MOD.	C	Wt. (lbs)	Wt. (lbs)	Wt. (lbs)
CO-2 HELIX V30-02-1/1/VCE	A	31.2	491	491	514
CO-2 HELIX V30-03-1/1.5/VCE	A	33.2	501	501	522
CO-2 HELIX V30-04-1/2/VCE	A	35.2	509	509	530
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CO-2 HELIX V30-11-1/5/VCE	B	50.9	619	619	634

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 V30-05-1/3/VCE	3	3	208-230/460/575	7.9-7.2/3.6/2.9	232	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	99



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

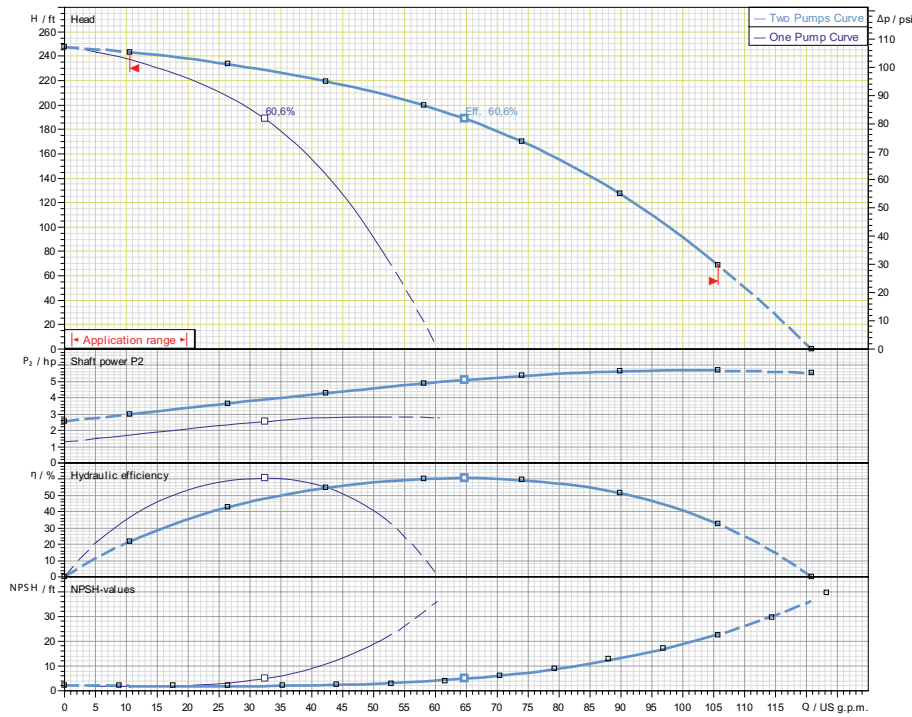


### CO-2 HELIX V30-06-1/3/VCE



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

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO-2 HELIX V30-06-1/3/VCE				3			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
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Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
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#### Technical Data - Panel

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

#### Technical Data - PLC

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Number of Analog Inputs	9
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Ethernet Port	RJ45 port capable of transmitting data 10/100Mbps
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#### Motor Data

Power Supply	208-230-3 or 460-3 or 575-3
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Insulation Class	F

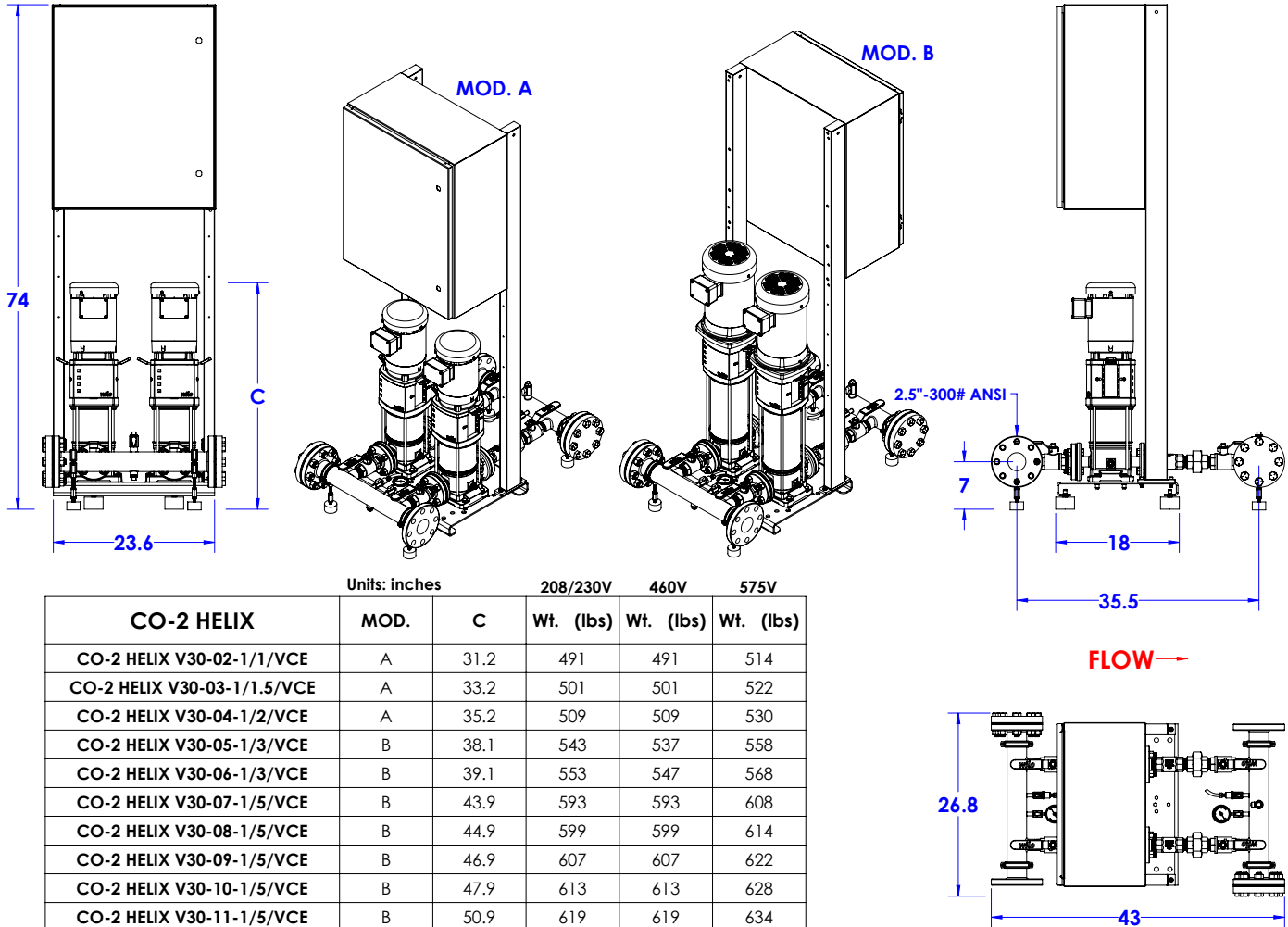
Approval Stamp

# Submittal Data Sheet

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



## CO-2 HELIX V30-06-1/3/VCE



CO-2 HELIX	Units: inches		208/230V	460V	575V
	MOD.	C	Wt. (lbs)	Wt. (lbs)	Wt. (lbs)
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TEFC Motor Data						Dimensions				
Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)	Dimensions-inches			Hydronumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight (lbs)
						Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size		Pump Weight (lbs)
CO-2 HELIX V30-06-1/3/VCE	3	3	208-230/460/575	7.9-7.2/3.6/2.9	232	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	101

# Submittal Data Sheet

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

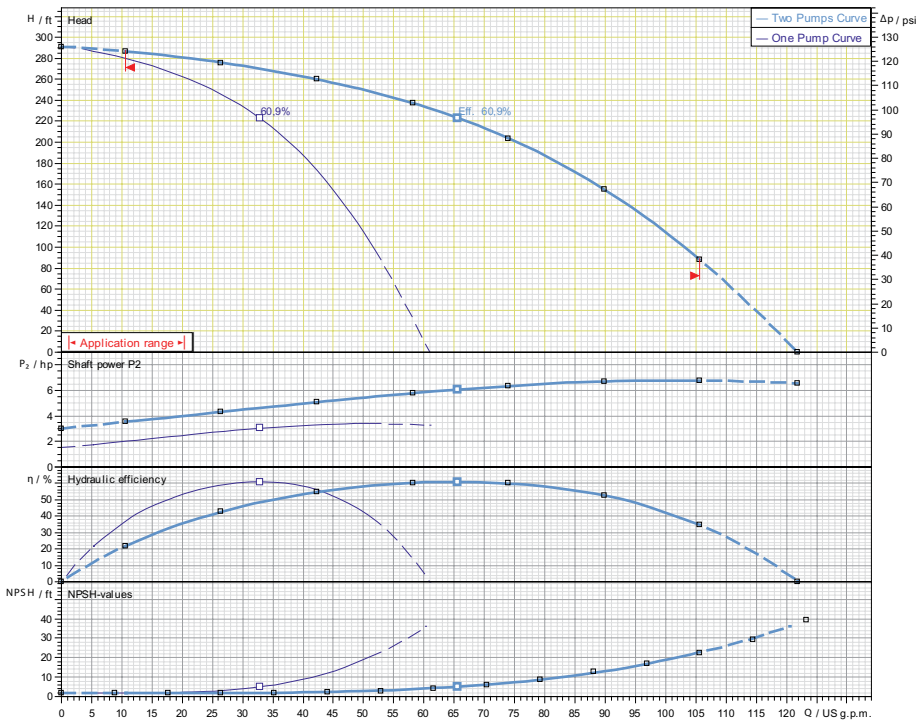


### CO-2 HELIX V30-07-1/5/VCE



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 V30-07-1/5/VCE				5			3600



#### Applications

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

#### Materials of Construction

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

#### Technical Data - Operational Ranges

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

#### Technical Data - Panel

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

#### Technical Data - PLC

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

#### Motor Data

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

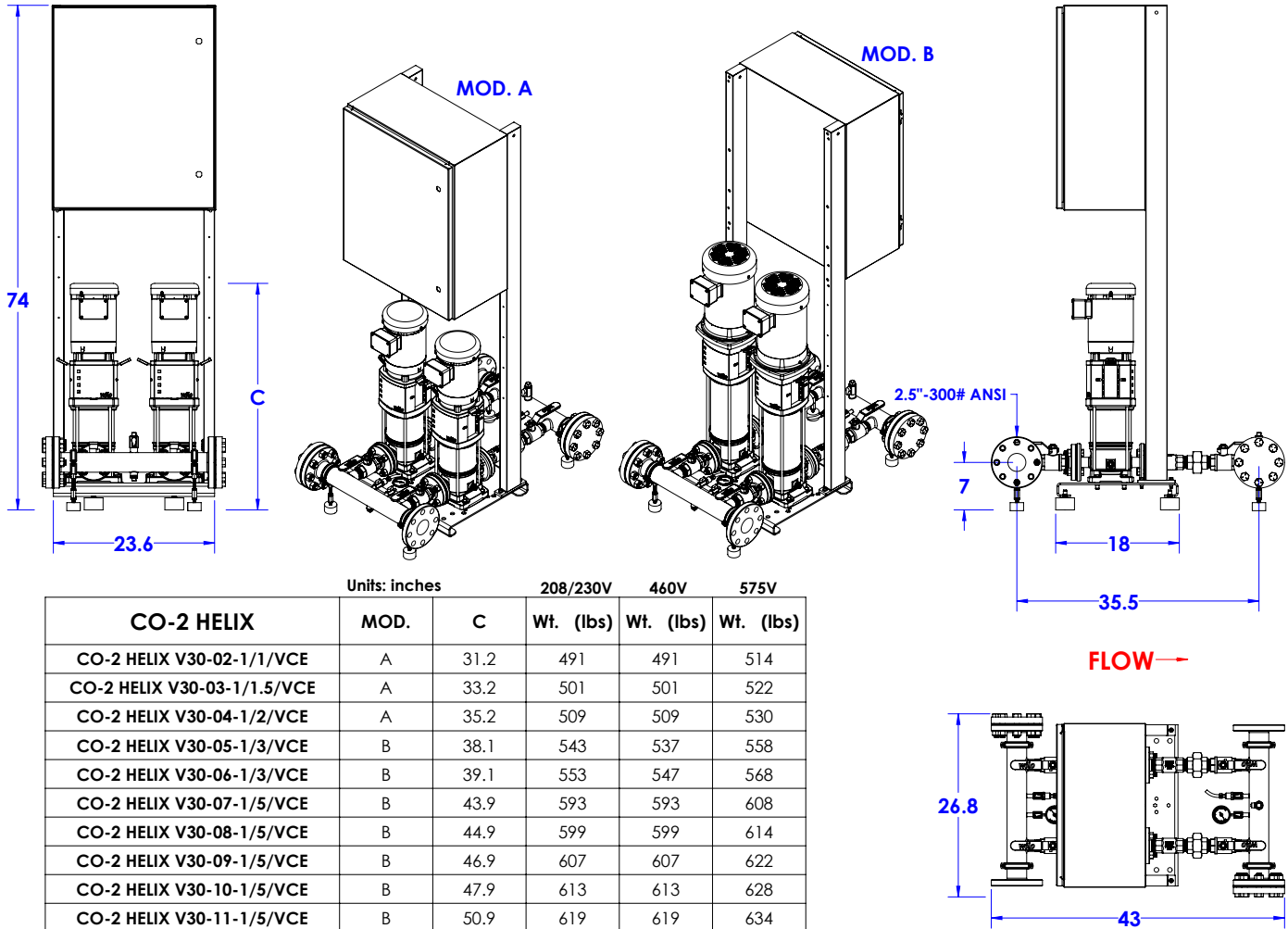


# Submittal Data Sheet

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



## CO-2 HELIX V30-07-1/5/VCE



CO-2 HELIX	Units: inches		208/230V	460V	575V
	MOD.	C	Wt. (lbs)	Wt. (lbs)	Wt. (lbs)
CO-2 HELIX V30-02-1/1/VCE	A	31.2	491	491	514
CO-2 HELIX V30-03-1/1.5/VCE	A	33.2	501	501	522
CO-2 HELIX V30-04-1/2/VCE	A	35.2	509	509	530
CO-2 HELIX V30-05-1/3/VCE	B	38.1	543	537	558
CO-2 HELIX V30-06-1/3/VCE	B	39.1	553	547	568
CO-2 HELIX V30-07-1/5/VCE	B	43.9	593	593	608
CO-2 HELIX V30-08-1/5/VCE	B	44.9	599	599	614
CO-2 HELIX V30-09-1/5/VCE	B	46.9	607	607	622
CO-2 HELIX V30-10-1/5/VCE	B	47.9	613	613	628
CO-2 HELIX V30-11-1/5/VCE	B	50.9	619	619	634

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 V30-07-1/5/VCE	5	3	208-230/460/575	12-11.8/5.9/4.7	232	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	133

# Submittal Data Sheet

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

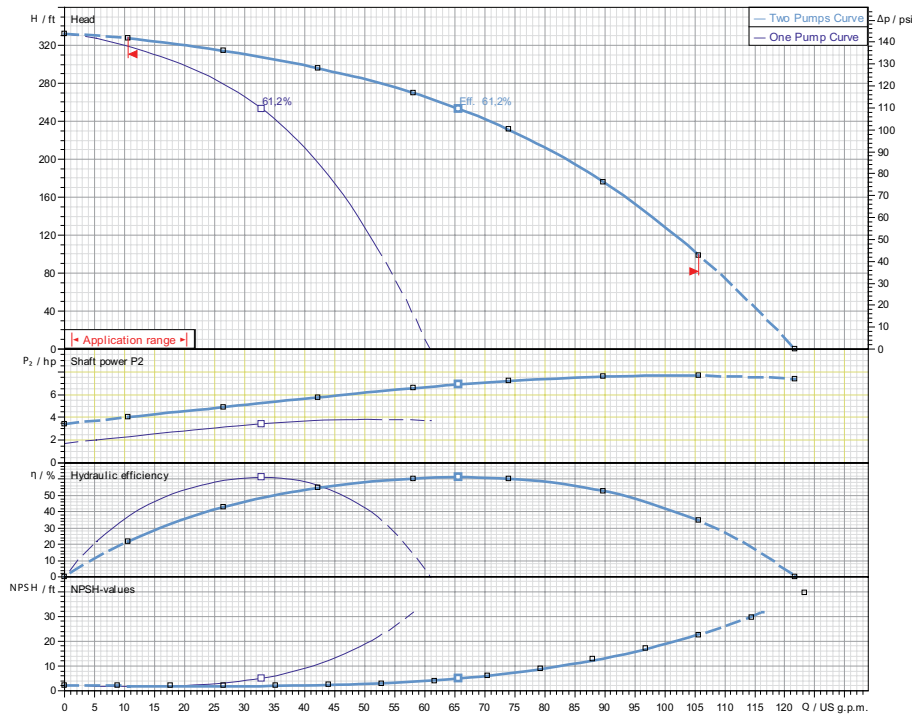


### CO-2 HELIX V30-08-1/5/VCE



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 V30-08-1/5/VCE				5			3600



#### Applications

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

#### Materials of Construction

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

#### Technical Data - Operational Ranges

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

#### Technical Data - Panel

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

#### Technical Data - PLC

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

#### Motor Data

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

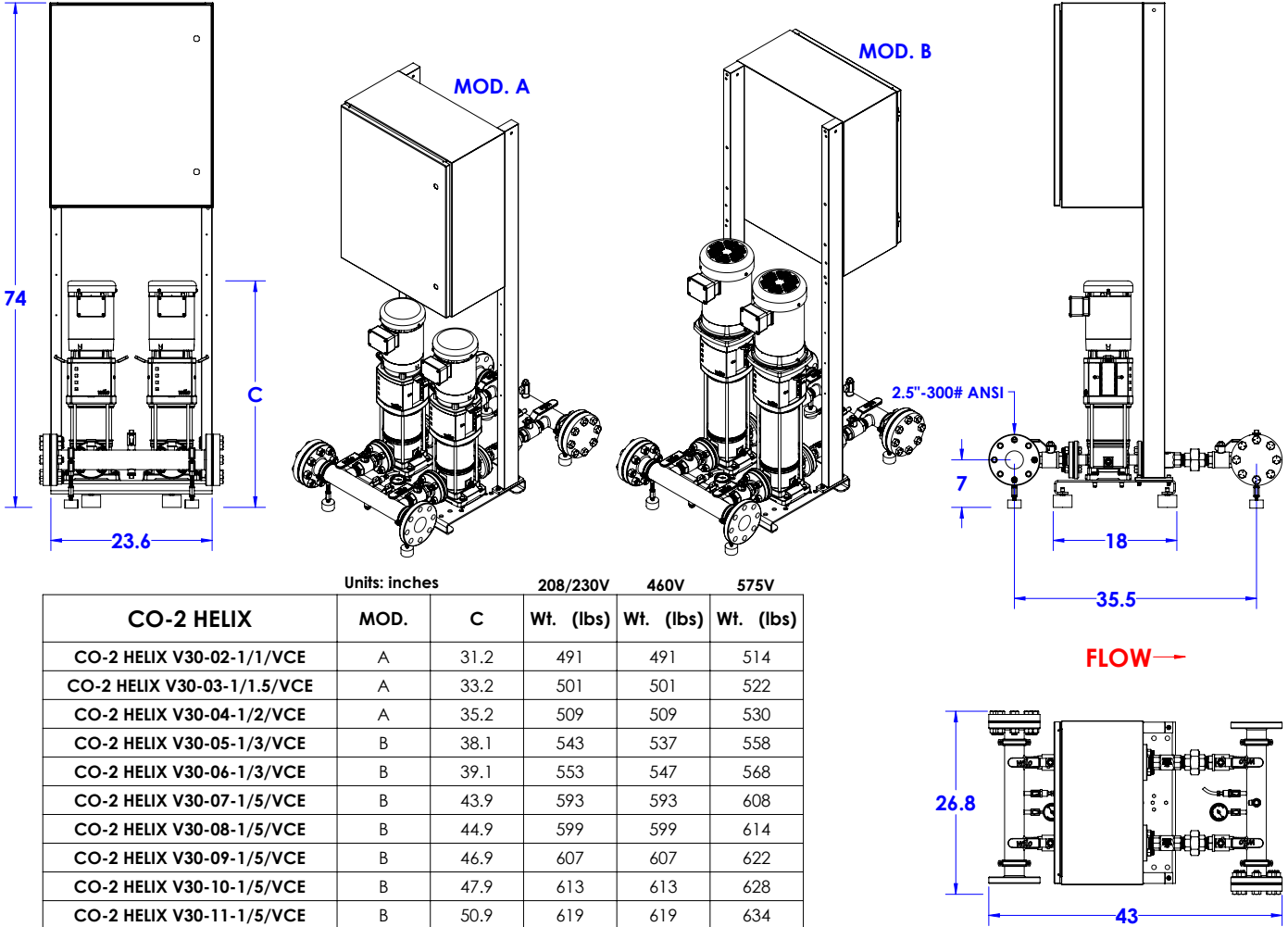
Approval Stamp

# Submittal Data Sheet

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



## CO-2 HELIX V30-08-1/5/VCE



CO-2 HELIX	Units: inches		208/230V	460V	575V
	MOD.	C	Wt. (lbs)	Wt. (lbs)	Wt. (lbs)
CO-2 HELIX V30-02-1/1/VCE	A	31.2	491	491	514
CO-2 HELIX V30-03-1/1.5/VCE	A	33.2	501	501	522
CO-2 HELIX V30-04-1/2/VCE	A	35.2	509	509	530
CO-2 HELIX V30-05-1/3/VCE	B	38.1	543	537	558
CO-2 HELIX V30-06-1/3/VCE	B	39.1	553	547	568
CO-2 HELIX V30-07-1/5/VCE	B	43.9	593	593	608
CO-2 HELIX V30-08-1/5/VCE	B	44.9	599	599	614
CO-2 HELIX V30-09-1/5/VCE	B	46.9	607	607	622
CO-2 HELIX V30-10-1/5/VCE	B	47.9	613	613	628
CO-2 HELIX V30-11-1/5/VCE	B	50.9	619	619	634

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 V30-08-1/5/VCE	5	3	208-230/460/575	12-11.8/5.9/4.7	232	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	142

# Submittal Data Sheet

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

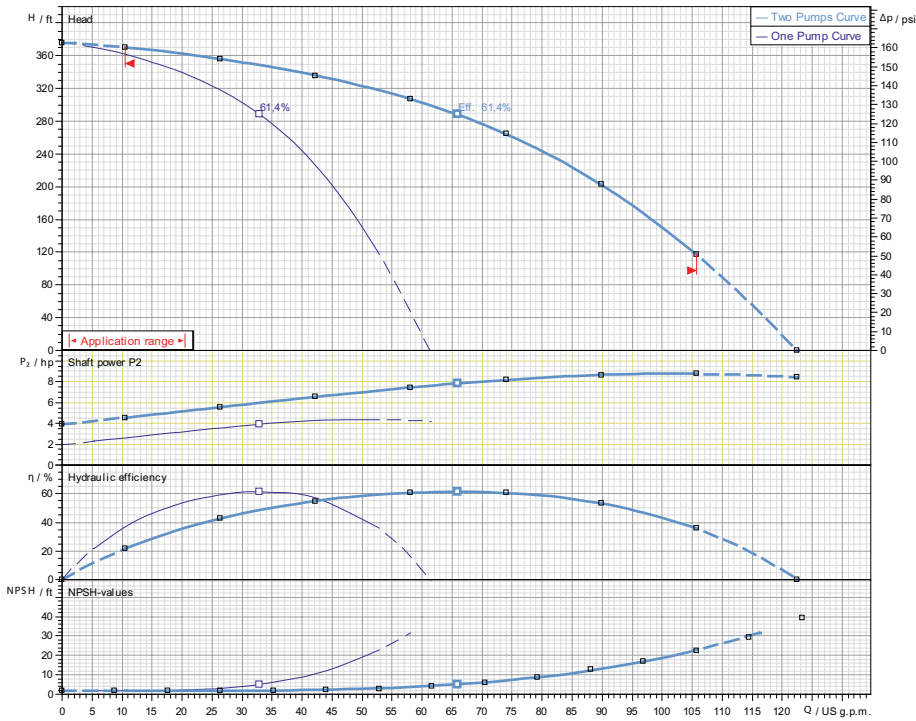


### CO-2 HELIX V30-09-1/5/VCE



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 V30-09-1/5/VCE				5		3600	



#### Applications

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

#### Materials of Construction

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

#### Technical Data - Operational Ranges

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

#### Technical Data - Panel

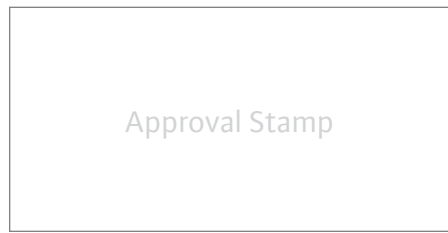
Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

#### Technical Data - PLC

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

#### Motor Data

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

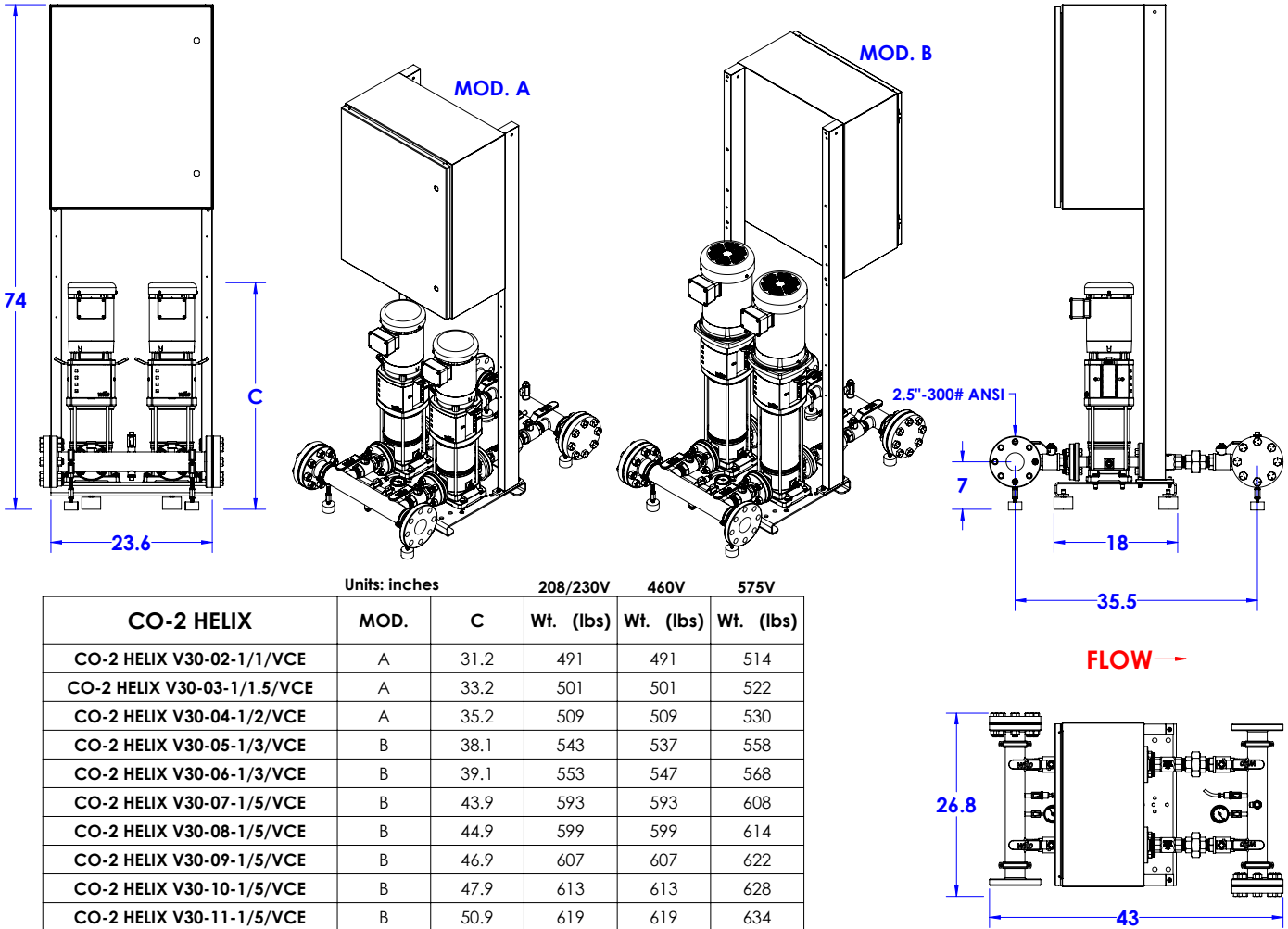


# Submittal Data Sheet

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



## CO-2 HELIX V30-09-1/5/VCE



CO-2 HELIX	Units: inches		208/230V	460V	575V
	MOD.	C	Wt. (lbs)	Wt. (lbs)	Wt. (lbs)
CO-2 HELIX V30-02-1/1/VCE	A	31.2	491	491	514
CO-2 HELIX V30-03-1/1.5/VCE	A	33.2	501	501	522
CO-2 HELIX V30-04-1/2/VCE	A	35.2	509	509	530
CO-2 HELIX V30-05-1/3/VCE	B	38.1	543	537	558
CO-2 HELIX V30-06-1/3/VCE	B	39.1	553	547	568
CO-2 HELIX V30-07-1/5/VCE	B	43.9	593	593	608
CO-2 HELIX V30-08-1/5/VCE	B	44.9	599	599	614
CO-2 HELIX V30-09-1/5/VCE	B	46.9	607	607	622
CO-2 HELIX V30-10-1/5/VCE	B	47.9	613	613	628
CO-2 HELIX V30-11-1/5/VCE	B	50.9	619	619	634

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	Hydrumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)
CO-2 HELIX V30-09-1/5/VCE	5	3	208-230/460/575	12-11.8/5.9/4.7	232	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	144



# Submittal Data Sheet

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

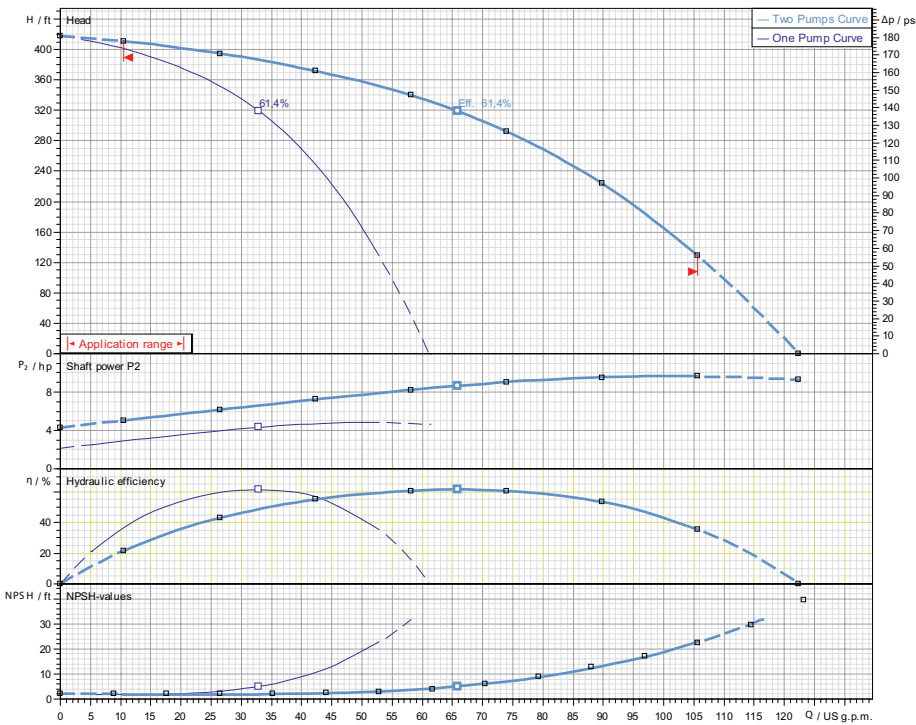


### CO-2 HELIX V30-10-1/5/VCE



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 V30-10-1/5/VCE				5		3600	



#### Applications

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

#### Materials of Construction

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

#### Technical Data - Operational Ranges

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

#### Technical Data - Panel

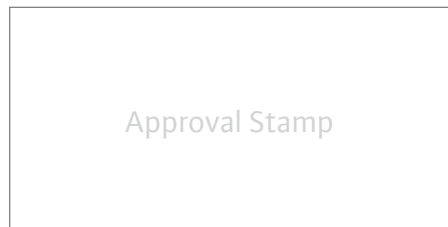
Power Supply	208-230/460-3 or 575-3
Enclosure	NEMA 12 (3R Available Upon Request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-51 (1-10 HP for 208-230/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

#### Technical Data - PLC

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

#### Motor Data

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

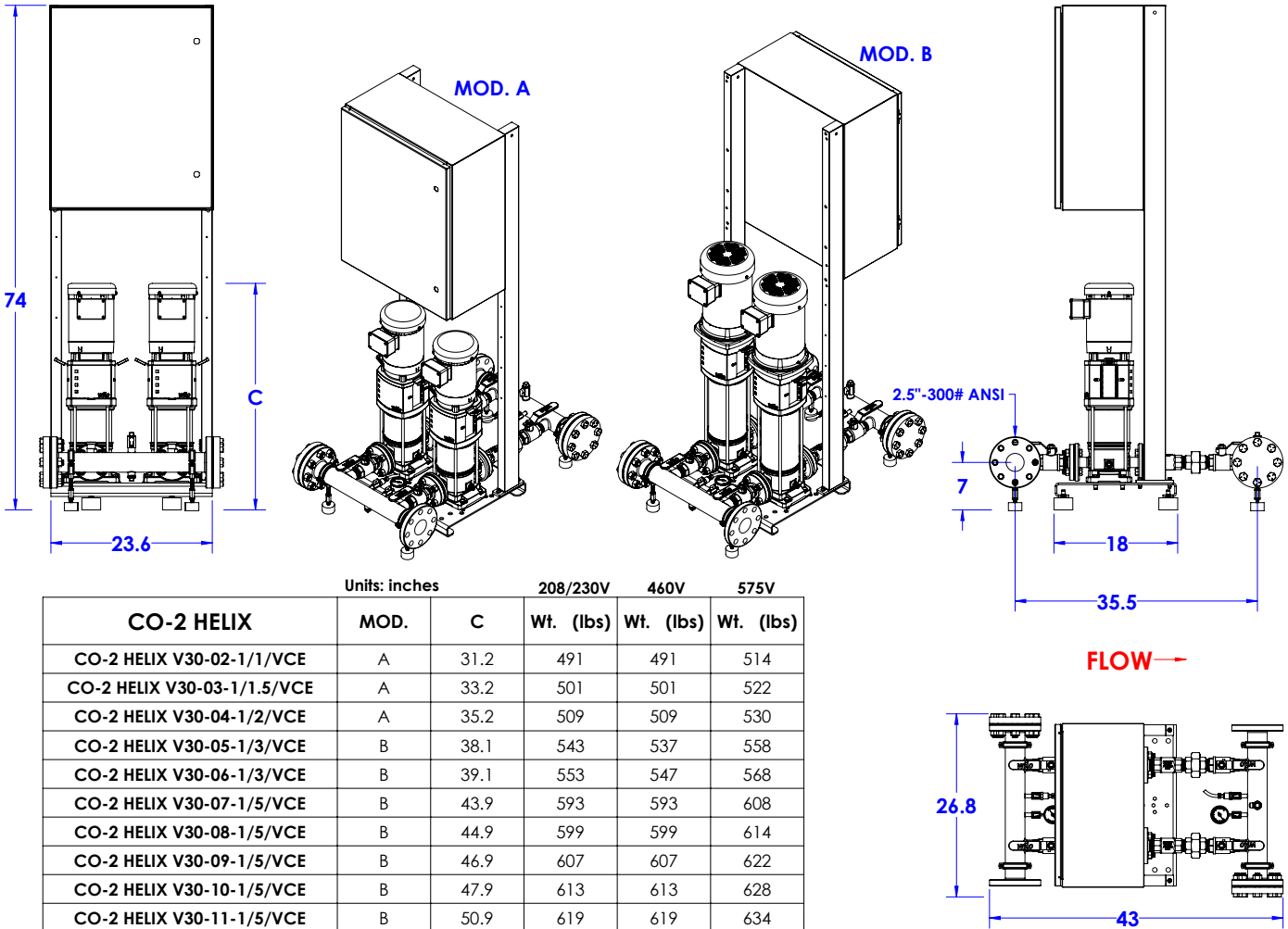


# Submittal Data Sheet

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



## CO-2 HELIX V30-10-1/5/VCE



CO-2 HELIX	MOD.	C	Units: inches		
			208/230V	460V	575V
CO-2 HELIX V30-02-1/1/VCE	A	31.2	491	491	514
CO-2 HELIX V30-03-1/1.5/VCE	A	33.2	501	501	522
CO-2 HELIX V30-04-1/2/VCE	A	35.2	509	509	530
CO-2 HELIX V30-05-1/3/VCE	B	38.1	543	537	558
CO-2 HELIX V30-06-1/3/VCE	B	39.1	553	547	568
CO-2 HELIX V30-07-1/5/VCE	B	43.9	593	593	608
CO-2 HELIX V30-08-1/5/VCE	B	44.9	599	599	614
CO-2 HELIX V30-09-1/5/VCE	B	46.9	607	607	622
CO-2 HELIX V30-10-1/5/VCE	B	47.9	613	613	628
CO-2 HELIX V30-11-1/5/VCE	B	50.9	619	619	634

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	Hydrumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight (lbs)
						Suction / Discharge Pump Size (300 Class ANSI)				Pump Weight (lbs)
CO-2 HELIX V30-10-1/5/VCE	5	3	208-230/460/575	12-11.8/5.9/4.7	232	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	146

# Submission Data Sheet

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

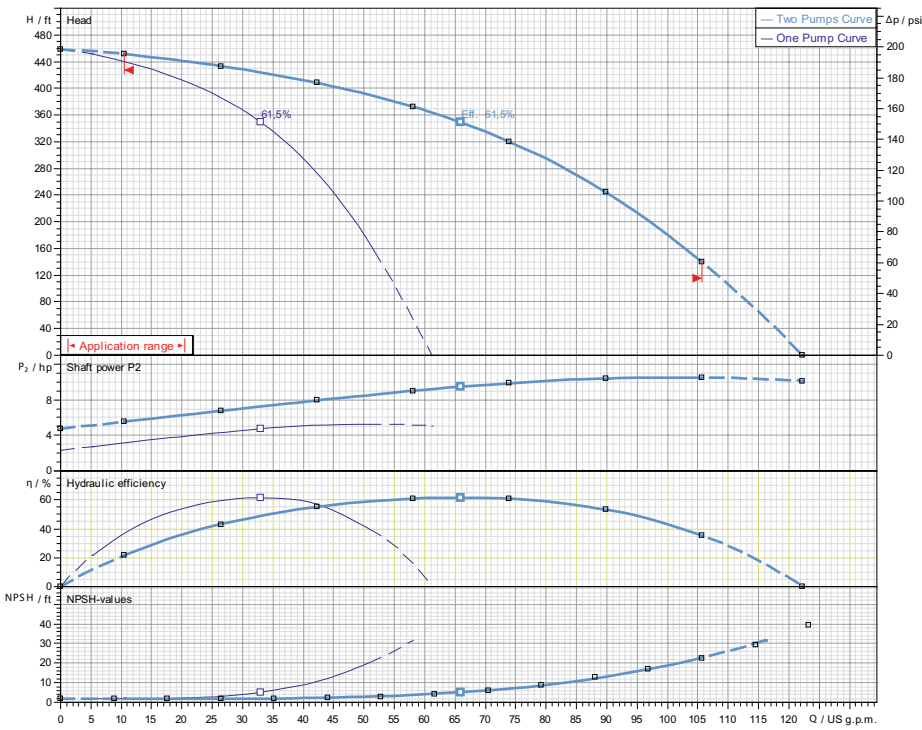


### CO-2 HELIX V30-11-1/5/VCE



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 V30-11-1/5/VCE				5			3600



#### Applications

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

#### Materials of Construction

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

#### Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	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-51 (1-10 HP for 208-230/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

#### Technical Data - PLC

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

#### Motor Data

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

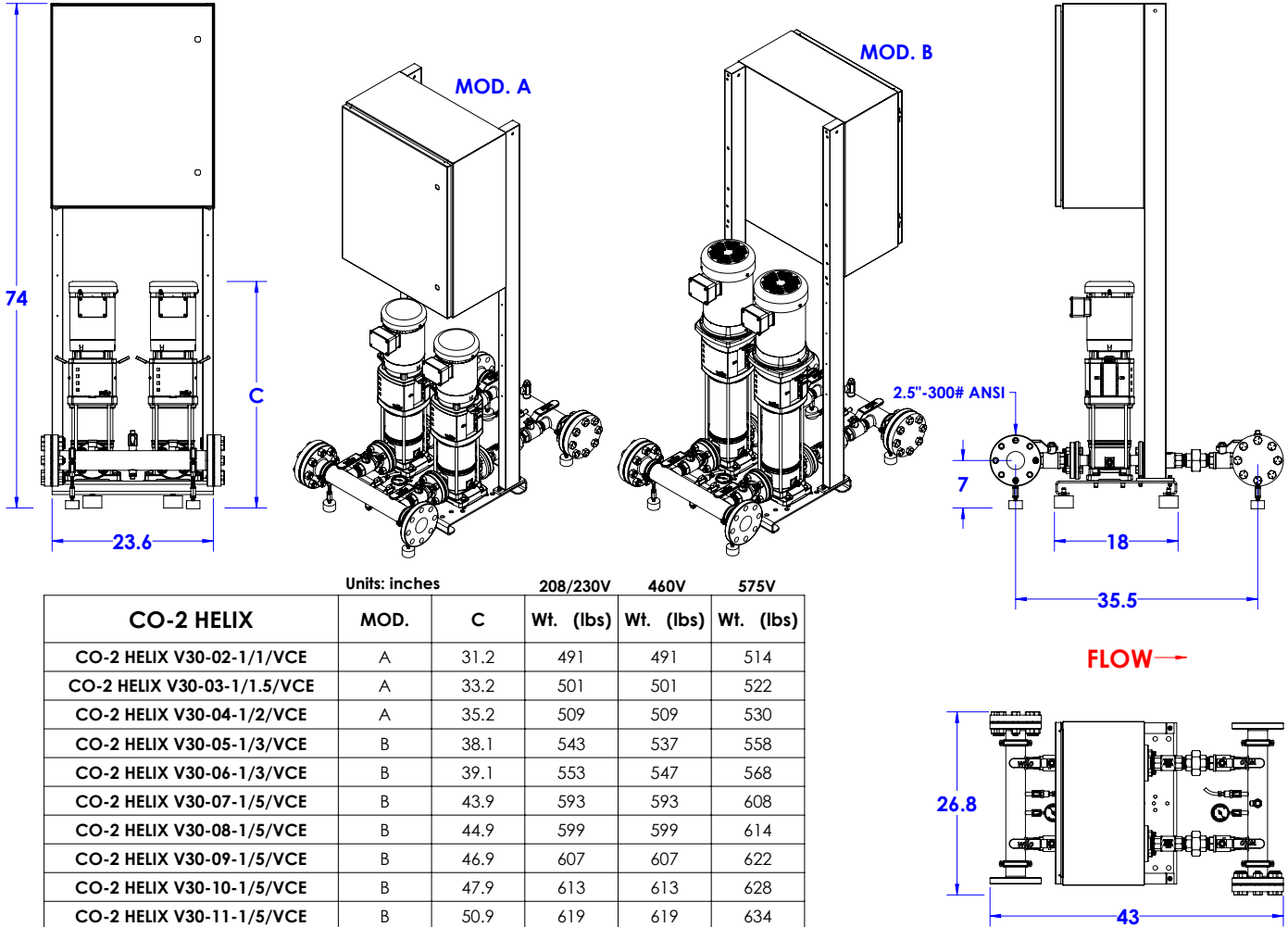
Approval Stamp

# Submittal Data Sheet

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



## CO-2 HELIX V30-11-1/5/VCE



CO-2 HELIX	MOD.	C	Units: inches		
			208/230V	460V	575V
CO-2 HELIX V30-02-1/1/VCE	A	31.2	491	491	514
CO-2 HELIX V30-03-1/1.5/VCE	A	33.2	501	501	522
CO-2 HELIX V30-04-1/2/VCE	A	35.2	509	509	530
CO-2 HELIX V30-05-1/3/VCE	B	38.1	543	537	558
CO-2 HELIX V30-06-1/3/VCE	B	39.1	553	547	568
CO-2 HELIX V30-07-1/5/VCE	B	43.9	593	593	608
CO-2 HELIX V30-08-1/5/VCE	B	44.9	599	599	614
CO-2 HELIX V30-09-1/5/VCE	B	46.9	607	607	622
CO-2 HELIX V30-10-1/5/VCE	B	47.9	613	613	628
CO-2 HELIX V30-11-1/5/VCE	B	50.9	619	619	634

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	Hydrumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight (lbs)
CO-2 HELIX V30-11-1/5/VCE	5	3	208-230/460/575	12-11.8/5.9/4.7	363	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	149