

Submittal Data Sheet

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



Submittal Data Sheet

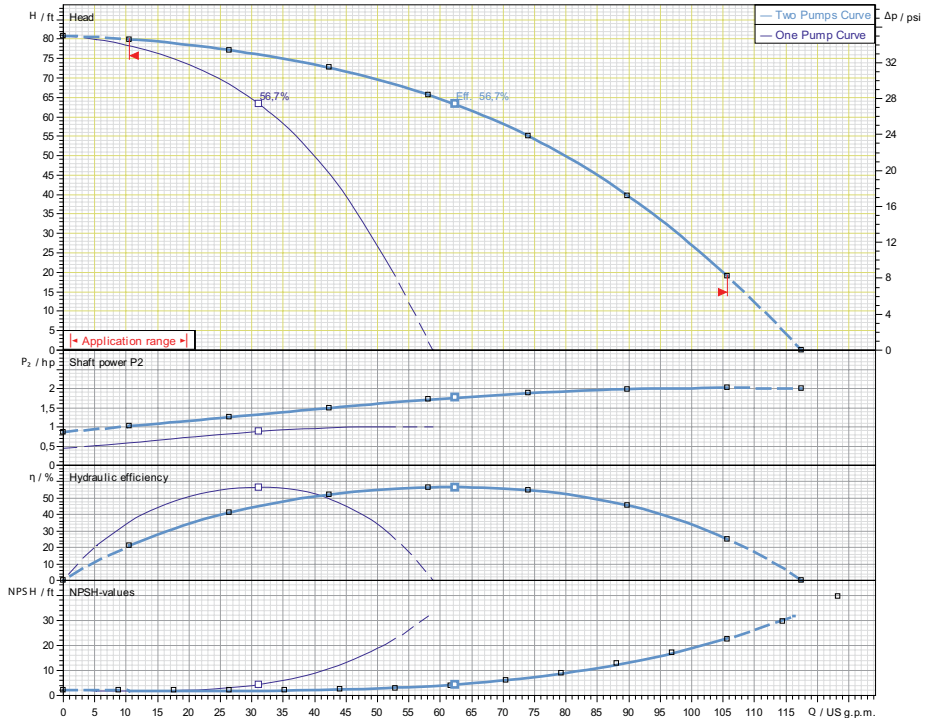
Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-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

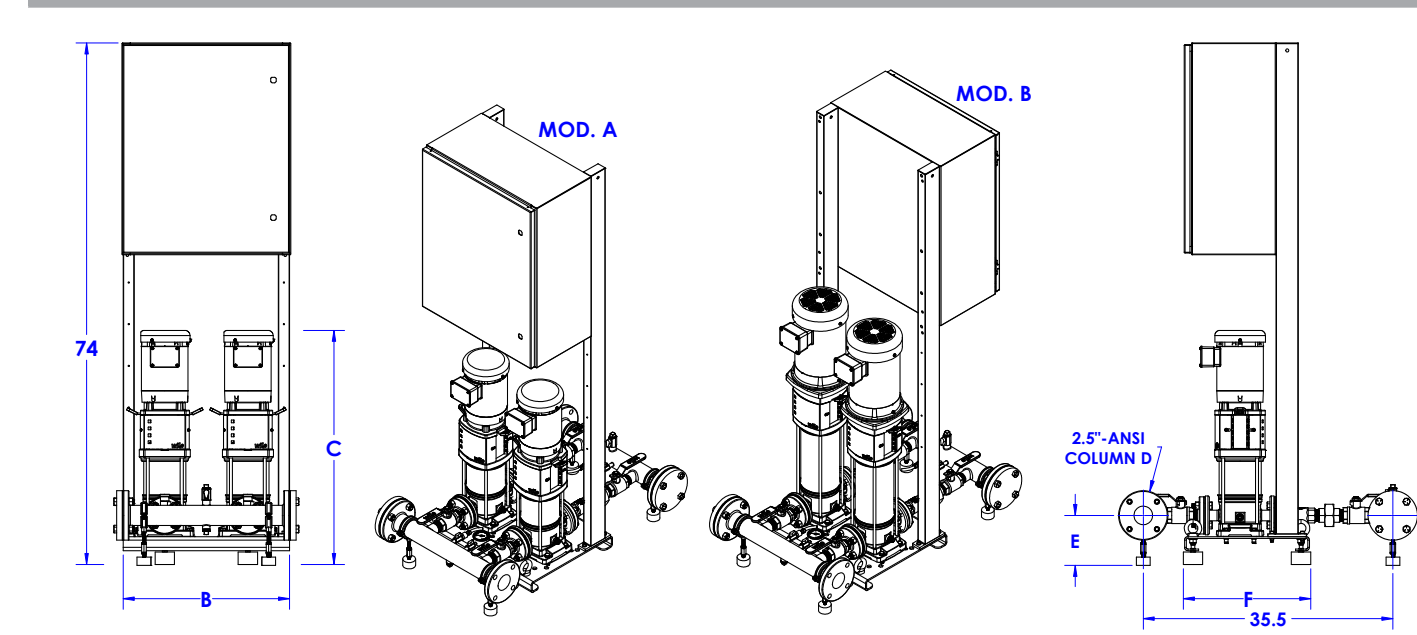


- ### Applications
- Water Supply
 - Agriculture
 - Washing / Sprinkling Systems
 - Pressure Boosting
 - Cooling Circuits
 - Condensate Return

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	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

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



CO-2 HELIX	208/230V ~1IN-3OUT						208/230V ~3						460V ~3						575 ~3									
	MOD	B	C	D	F	H	Wt. (lbs)	MOD	B	C	D	F	H	Wt. (lbs)	MOD	B	C	D	F	H	Wt. (lbs)	MOD	B	C	D	F	H	Wt. (lbs)
CO-2 HELIX V30-02-1/1/VCE	B	27.6	31.2	150#	20	36	528	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	497
CO-2 HELIX V30-03-1/1.5/VCE	B	27.6	32.2	150#	20	36	536	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	505
CO-2 HELIX V30-04-1/2/VCE	B	27.6	35.2	150#	20	36	617	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	513
CO-2 HELIX V30-05-1/3/VCE	B	27.6	38.1	150#	20	36	645	B	23.6	38.1	150#	18	26.3	525	B	23.6	38.1	150#	18	26.3	519	B	23.6	38.1	150#	18	26.3	541
CO-2 HELIX V30-06-1/3/VCE	B	27.6	39.1	150#	20	36	669	B	23.6	39.1	150#	18	26.3	535	B	23.6	39.1	150#	18	26.3	529	B	23.6	39.1	150#	18	26.3	551
CO-2 HELIX V30-07-1/5/VCE	B	27.6	44	150#	20	36	709	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	591
CO-2 HELIX V30-08-1/5/VCE	B	27.6	45	150#	20	36	715	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	597
CO-2 HELIX V30-09-1/5/VCE	B	27.6	47	150#	20	36	723	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	605
CO-2 HELIX V30-10-1/5/VCE	B	27.6	48	150#	20	36	729	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	614
CO-2 HELIX V30-11-1/5/VCE	B	27.6	51	150#	20	36	738	B	23.6	51	150#	18	26.8	604	B	23.6	51	150#	18	26.8	704	B	23.6	51	150#	18	26.8	620
CO-2 HELIX V30-12-1/7.5/VCE	B	27.6	56.5	150#	20	36	828	B	23.6	56.5	150#	20	36	751	B	23.6	56.5	150#	18	26.8	684	B	23.6	56.5	150#	18	26.8	700
CO-2 HELIX V30-14-1/7.5/VCE	B	27.6	59.5	300#	20	36	856	B	23.6	59.5	300#	20	36	778	B	23.6	59.5	300#	18	26.8	710	B	23.6	59.5	300#	18	26.8	726

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

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 - 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

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)

TEFC Motor Data

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)	
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

Approval Stamp

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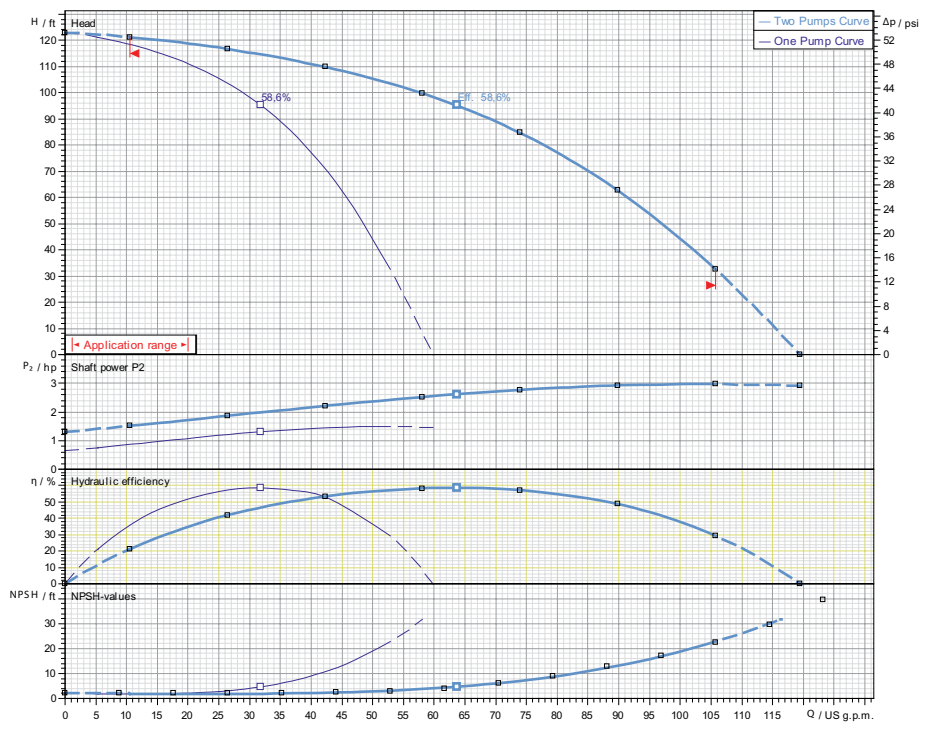
Wilo CO-Helix - NSF 61/372 Pressure Boosting System



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
- 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	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

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Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	232 PSI

Technical Data - Panel

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

Technical Data - PLC

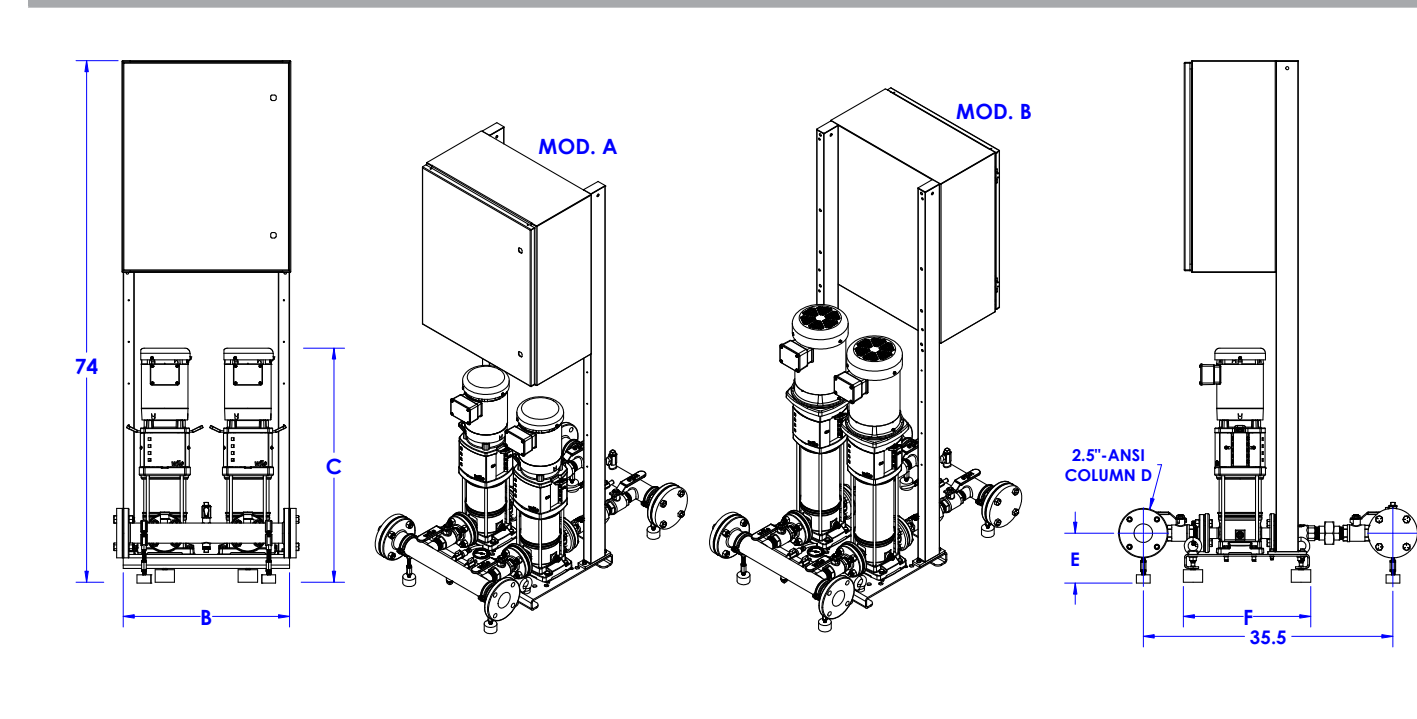
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways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

Motor Data

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

Approval Stamp

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



CO-2 HELIX	208/230V ~1IN-3OUT						208/230V ~3						460V ~3						575 ~3									
	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H				
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CO-2 HELIX V30-14-1/7.5/VCE	B	27.6	59.5	300#	20	36	856	B	23.6	59.5	300#	20	36	778	B	23.6	59.5	300#	18	26.8	710	B	23.6	59.5	300#	18	26.8	726

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

TEFC Motor Data

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	Hydrunumatic Tank Valve on Manifold (Plugged)	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	

Submittal Data Sheet

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



Submittal Data Sheet

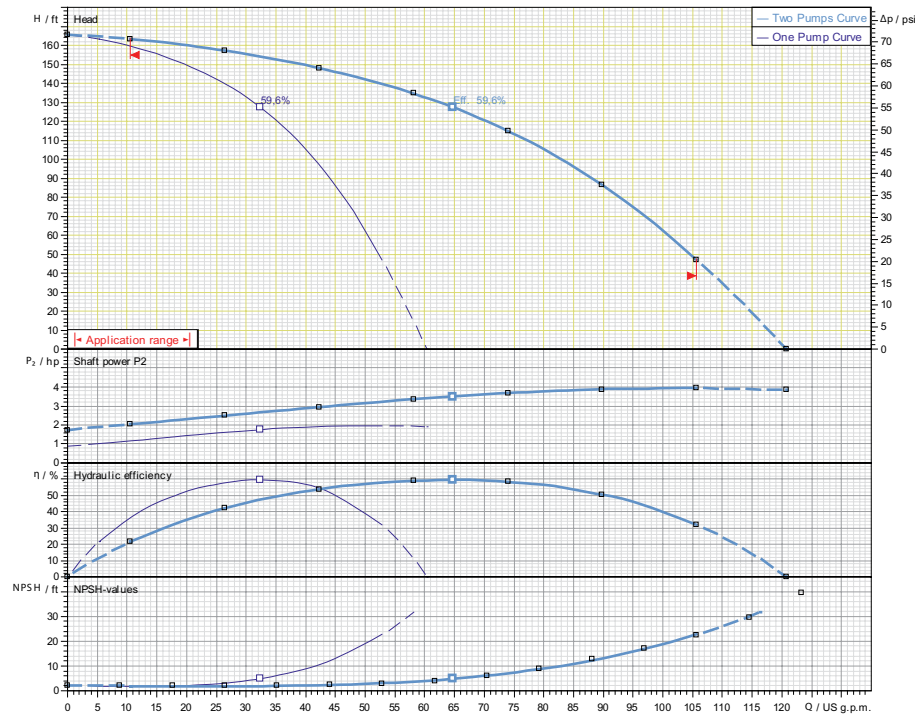
Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-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
- 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	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 +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-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

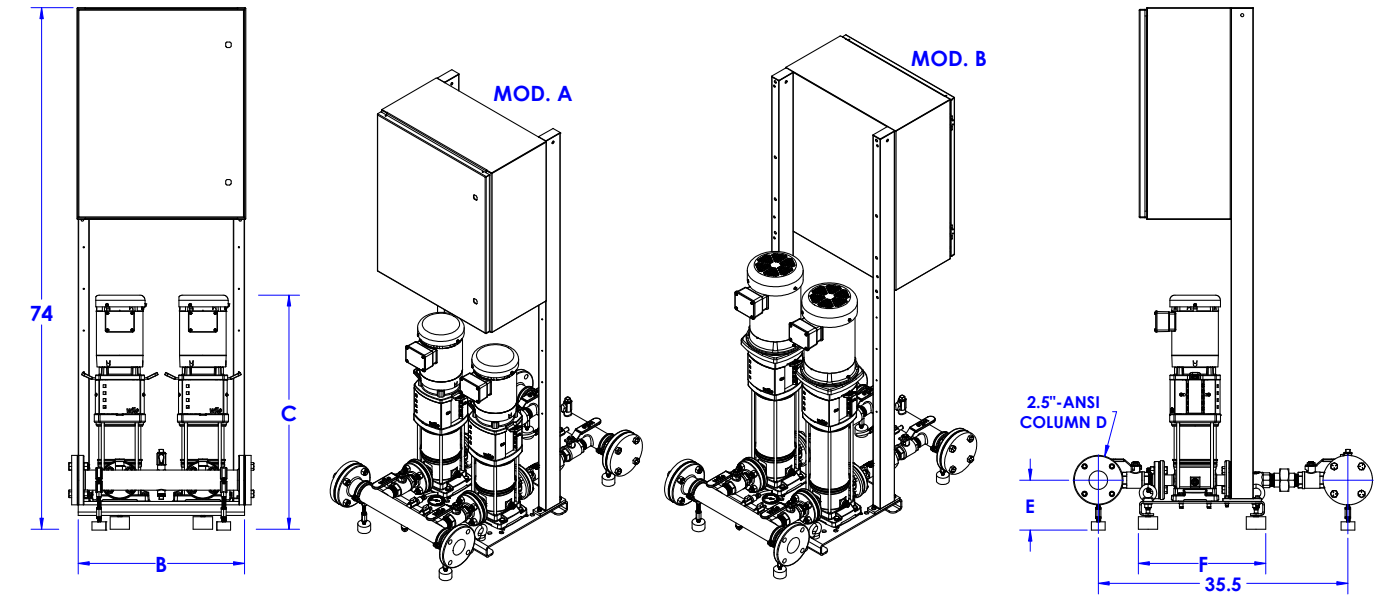
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways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

Motor Data

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

Approval Stamp

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



CO-2 HELIX	208/230V ~1IN-3OUT						208/230V ~3						460V ~3						575 ~3									
	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H				
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TEFC Motor Data

Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)	Dimensions-inches					Individual Pump Weight (lbs)
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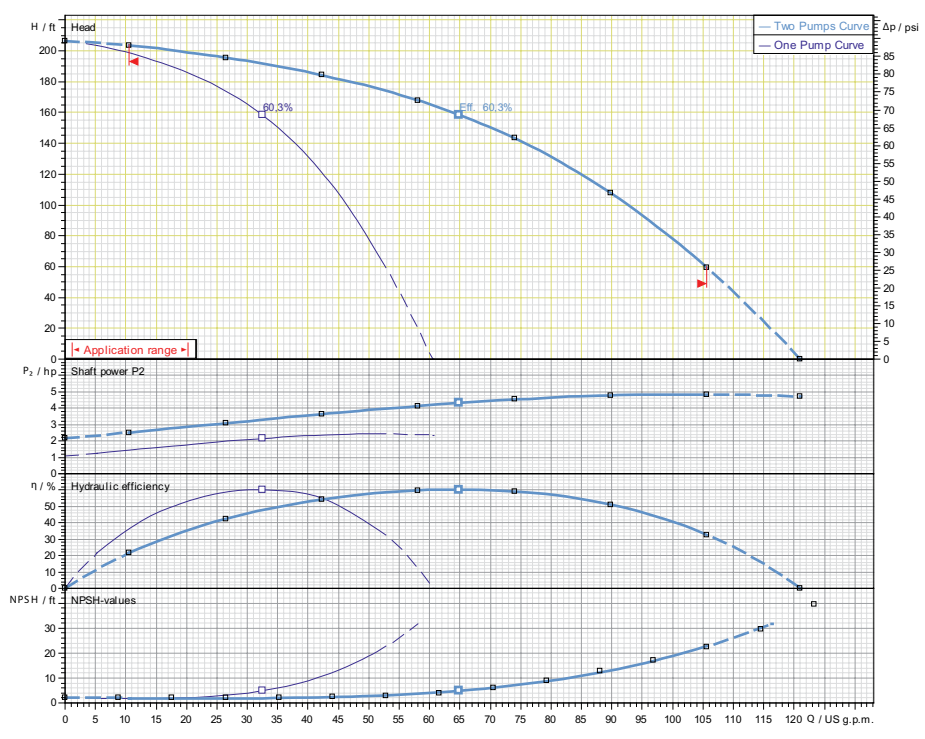
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CO-2 HELIX V30-05-1/3/VCE

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	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
 - Agriculture
 - Washing / Sprinkling Systems
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 - 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	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

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

Technical Data - PLC

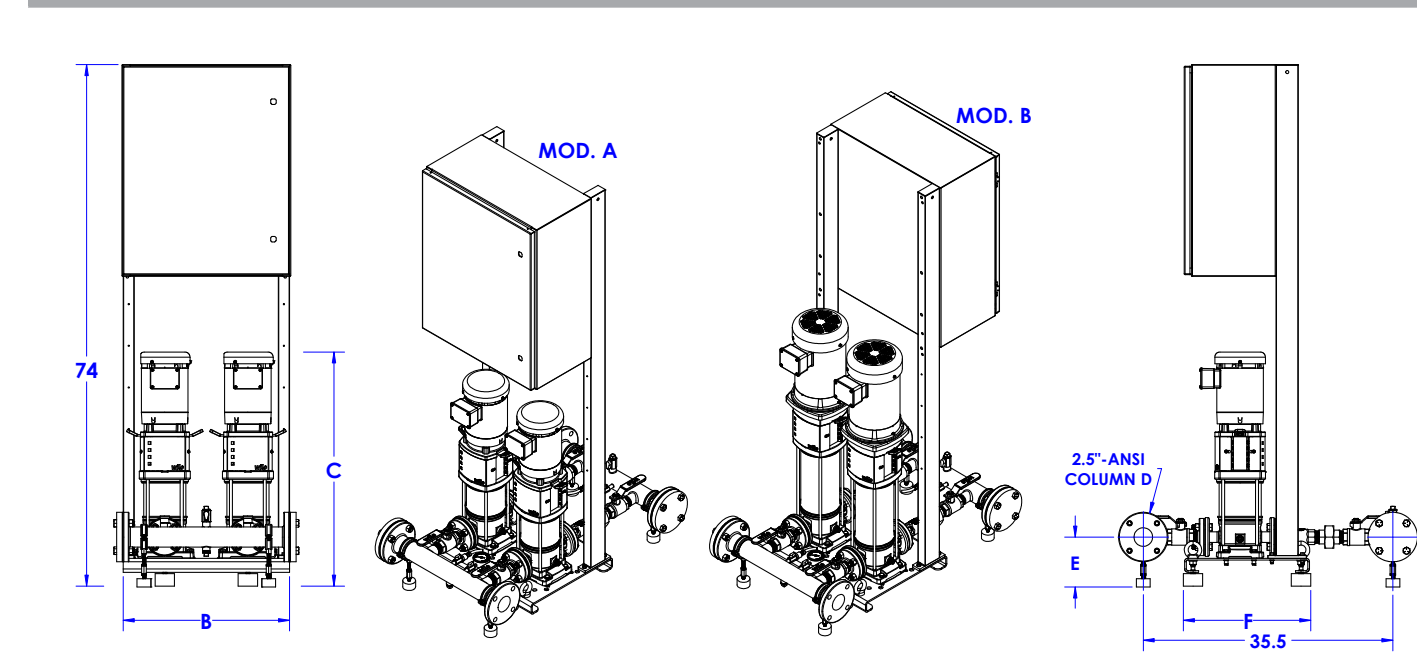
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways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

Motor Data

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

Approval Stamp

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



CO-2 HELIX	208/230V ~1IN-3OUT						208/230V ~3						460V ~3						575 ~3											
	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H
CO-2 HELIX V30-02-1/1/VCE	B	27.6	31.2	150#	20	36	528	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	497		
CO-2 HELIX V30-03-1/1.5/VCE	B	27.6	32.2	150#	20	36	536	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	505		
CO-2 HELIX V30-04-1/2/VCE	B	27.6	35.2	150#	20	36	617	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	513		
CO-2 HELIX V30-05-1/3/VCE	B	27.6	38.1	150#	20	36	645	B	23.6	38.1	150#	18	26.3	525	B	23.6	38.1	150#	18	26.3	519	B	23.6	38.1	150#	18	26.3	541		
CO-2 HELIX V30-06-1/3/VCE	B	27.6	39.1	150#	20	36	669	B	23.6	39.1	150#	18	26.3	535	B	23.6	39.1	150#	18	26.3	529	B	23.6	39.1	150#	18	26.3	551		
CO-2 HELIX V30-07-1/5/VCE	B	27.6	44	150#	20	36	709	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	591		
CO-2 HELIX V30-08-1/5/VCE	B	27.6	45	150#	20	36	715	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	597		
CO-2 HELIX V30-09-1/5/VCE	B	27.6	47	150#	20	36	723	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	605		
CO-2 HELIX V30-10-1/5/VCE	B	27.6	48	150#	20	36	729	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	614		
CO-2 HELIX V30-11-1/5/VCE	B	27.6	51	150#	20	36	738	B	23.6	51	150#	18	26.8	604	B	23.6	51	150#	18	26.8	704	B	23.6	51	150#	18	26.8	620		
CO-2 HELIX V30-12-1/7.5/VCE	B	27.6	56.5	150#	20	36	828	B	23.6	56.5	150#	20	36	751	B	23.6	56.5	150#	18	26.8	684	B	23.6	56.5	150#	18	26.8	700		
CO-2 HELIX V30-14-1/7.5/VCE	B	27.6	59.5	300#	20	36	856	B	23.6	59.5	300#	20	36	778	B	23.6	59.5	300#	18	26.8	710	B	23.6	59.5	300#	18	26.8	726		

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

Model	TEFC Motor Data					Dimensions					Individual Pump Weight
	P2	Phase	Voltage	FLA (per pump)	Pmax	Dimensions-inches					
	(HP)	(-)	(V)	(A)	(PSI)	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydrunomatic 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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Submittal Data Sheet

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



Submittal Data Sheet

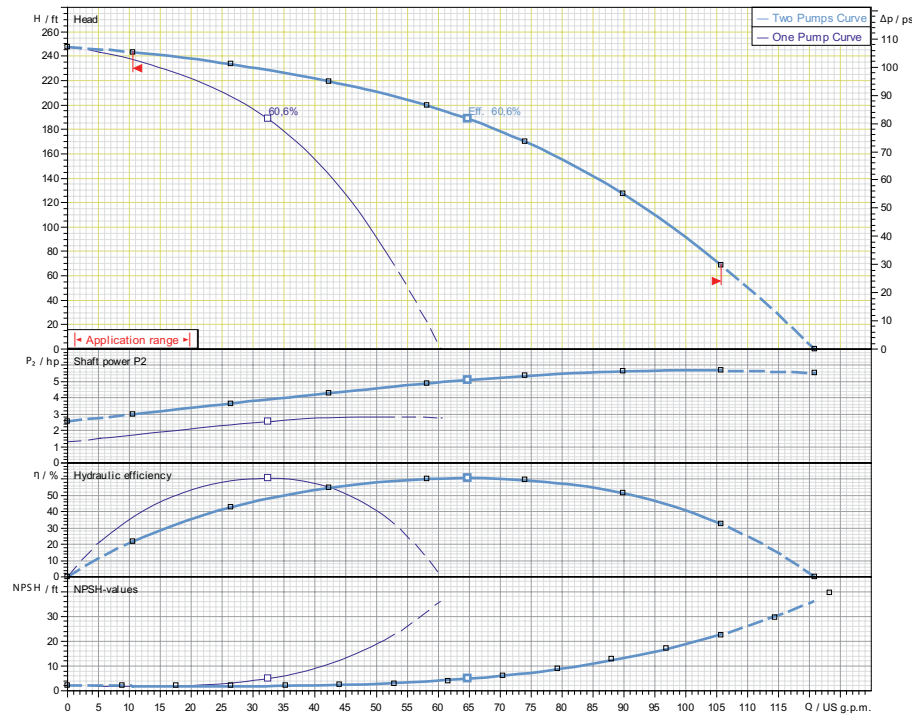
Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-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
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 +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-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

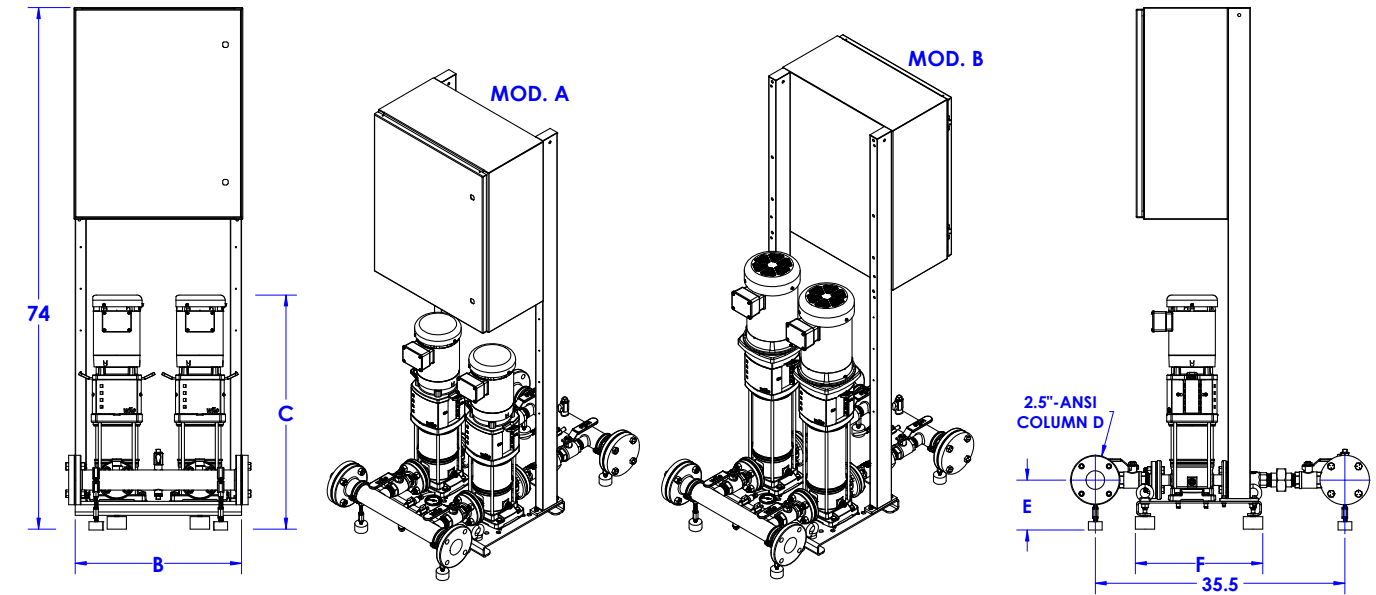
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways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

Motor Data

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

Approval Stamp

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



CO-2 HELIX	208/230V ~1IN-3OUT					208/230V ~3					460V ~3					575 ~3					
	MOD	B	C	D	F	H	Wt. (lbs)	MOD	B	C	D	F	H	Wt. (lbs)	MOD	B	C	D	F	H	Wt. (lbs)
CO-2 HELIX V30-02-1/1/VCE	B	27.6	31.2	150#	20	36	528	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	497
CO-2 HELIX V30-03-1/1.5/VCE	B	27.6	32.2	150#	20	36	536	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	505
CO-2 HELIX V30-04-1/2/VCE	B	27.6	35.2	150#	20	36	617	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	513
CO-2 HELIX V30-05-1/3/VCE	B	27.6	38.1	150#	20	36	645	B	23.6	38.1	150#	18	26.3	525	B	23.6	38.1	150#	18	26.3	541
CO-2 HELIX V30-06-1/3/VCE	B	27.6	39.1	150#	20	36	669	B	23.6	39.1	150#	18	26.3	535	B	23.6	39.1	150#	18	26.3	551
CO-2 HELIX V30-07-1/5/VCE	B	27.6	44	150#	20	36	709	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	591
CO-2 HELIX V30-08-1/5/VCE	B	27.6	45	150#	20	36	715	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	597
CO-2 HELIX V30-09-1/5/VCE	B	27.6	47	150#	20	36	723	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	605
CO-2 HELIX V30-10-1/5/VCE	B	27.6	48	150#	20	36	729	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	614
CO-2 HELIX V30-11-1/5/VCE	B	27.6	51	150#	20	36	738	B	23.6	51	150#	18	26.8	604	B	23.6	51	150#	18	26.8	620
CO-2 HELIX V30-12-1/7.5/VCE	B	27.6	56.5	150#	20	36	828	B	23.6	56.5	150#	20	36	751	B	23.6	56.5	150#	18	26.8	700
CO-2 HELIX V30-14-1/7.5/VCE	B	27.6	59.5	300#	20	36	856	B	23.6	59.5	300#	20	36	778	B	23.6	59.5	300#	18	26.8	726

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

TEFC Motor Data

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)	
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

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Submittal Data Sheet

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



Submittal Data Sheet

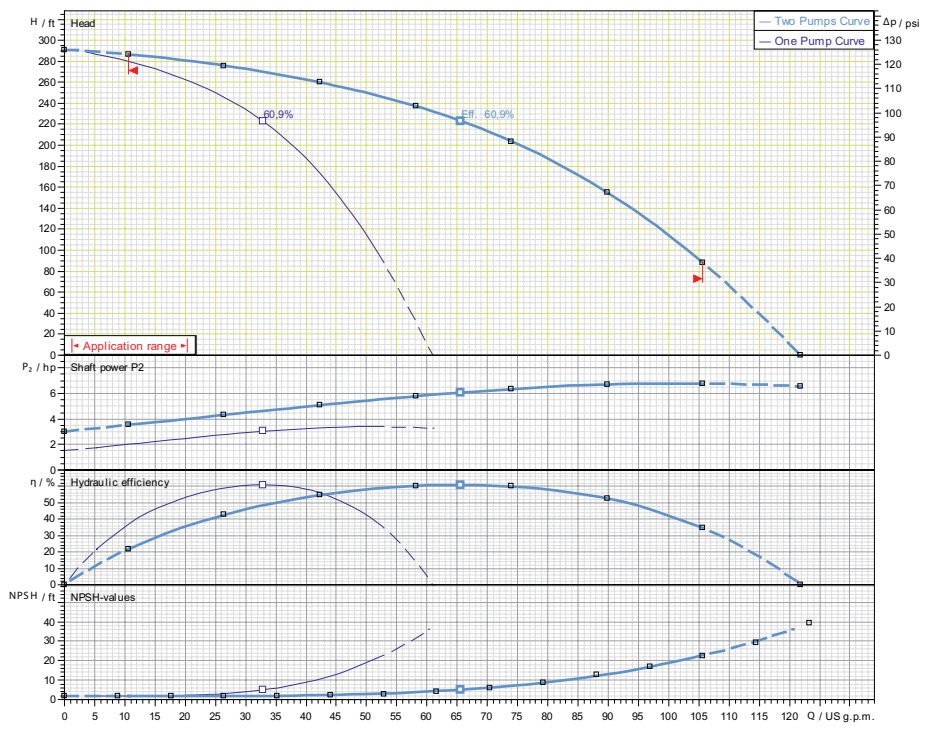
Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-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
- 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	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 +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-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

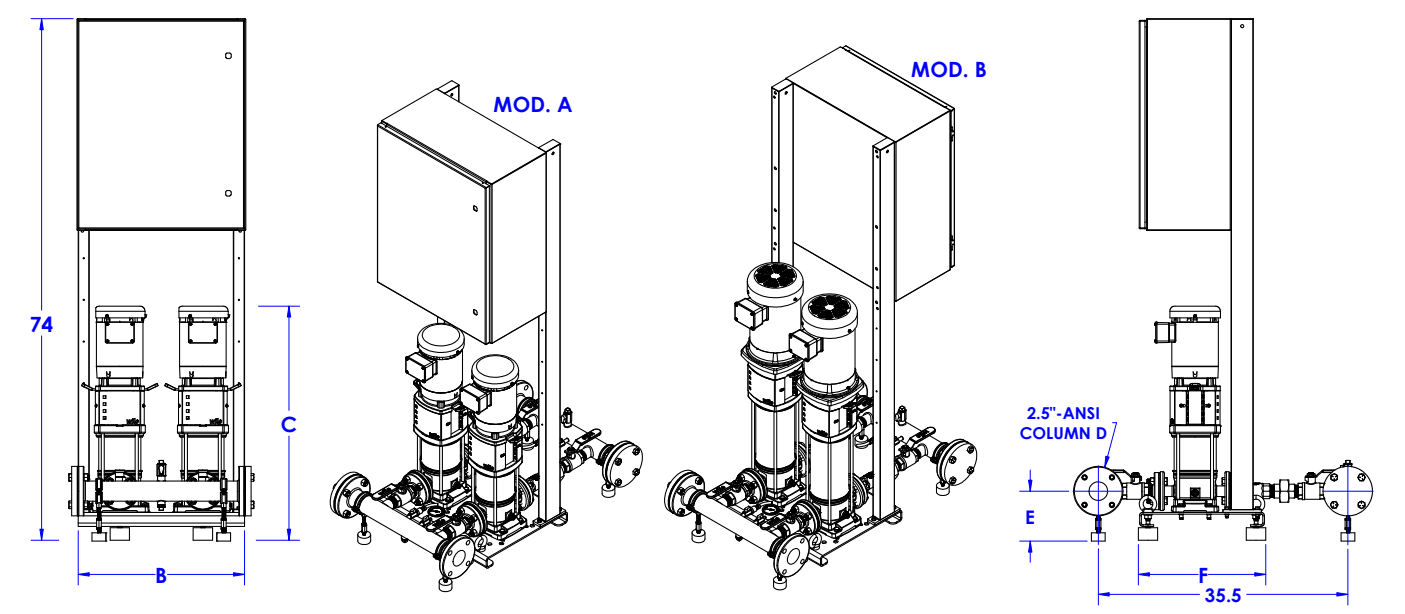
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways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

Motor Data

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

Approval Stamp

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



CO-2 HELIX	208/230V ~1IN-3OUT						208/230V ~3						460V ~3						575 ~3												
	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H							
CO-2 HELIX V30-02-1/1/VCE	B	27.6	31.2	150#	20	36	A	23.6	31.2	150#	18	26.3	A	23.6	31.2	150#	18	26.3	A	23.6	31.2	150#	18	26.3	A	23.6	31.2	150#	18	26.3	497
CO-2 HELIX V30-03-1/1.5/VCE	B	27.6	32.2	150#	20	36	A	23.6	32.2	150#	18	26.3	A	23.6	32.2	150#	18	26.3	A	23.6	32.2	150#	18	26.3	A	23.6	32.2	150#	18	26.3	505
CO-2 HELIX V30-04-1/2/VCE	B	27.6	35.2	150#	20	36	A	23.6	35.2	150#	18	26.3	A	23.6	35.2	150#	18	26.3	A	23.6	35.2	150#	18	26.3	A	23.6	35.2	150#	18	26.3	513
CO-2 HELIX V30-05-1/3/VCE	B	27.6	38.1	150#	20	36	B	23.6	38.1	150#	18	26.3	B	23.6	38.1	150#	18	26.3	B	23.6	38.1	150#	18	26.3	B	23.6	38.1	150#	18	26.3	541
CO-2 HELIX V30-06-1/3/VCE	B	27.6	39.1	150#	20	36	B	23.6	39.1	150#	18	26.3	B	23.6	39.1	150#	18	26.3	B	23.6	39.1	150#	18	26.3	B	23.6	39.1	150#	18	26.3	551
CO-2 HELIX V30-07-1/5/VCE	B	27.6	44	150#	20	36	B	23.6	44	150#	18	26.3	B	23.6	44	150#	18	26.3	B	23.6	44	150#	18	26.3	B	23.6	44	150#	18	26.3	591
CO-2 HELIX V30-08-1/5/VCE	B	27.6	45	150#	20	36	B	23.6	45	150#	18	26.3	B	23.6	45	150#	18	26.3	B	23.6	45	150#	18	26.3	B	23.6	45	150#	18	26.3	597
CO-2 HELIX V30-09-1/5/VCE	B	27.6	47	150#	20	36	B	23.6	47	150#	18	26.3	B	23.6	47	150#	18	26.3	B	23.6	47	150#	18	26.3	B	23.6	47	150#	18	26.3	605
CO-2 HELIX V30-10-1/5/VCE	B	27.6	48	150#	20	36	B	23.6	48	150#	18	26.3	B	23.6	48	150#	18	26.3	B	23.6	48	150#	18	26.3	B	23.6	48	150#	18	26.3	614
CO-2 HELIX V30-11-1/5/VCE	B	27.6	51	150#	20	36	B	23.6	51	150#	18	26.8	B	23.6	51	150#	18	26.8	B	23.6	51	150#	18	26.8	B	23.6	51	150#	18	26.8	620
CO-2 HELIX V30-12-1/7.5/VCE	B	27.6	56.5	150#	20	36	B	23.6	56.5	150#	20	36	B	23.6	56.5	150#	18	26.8	B	23.6	56.5	150#	18	26.8	B	23.6	56.5	150#	18	26.8	700
CO-2 HELIX V30-14-1/7.5/VCE	B	27.6	59.5	300#	20	36	B	23.6	59.5	300#	20	36	B	23.6	59.5	300#	18	26.8	B	23.6	59.5	300#	18	26.8	B	23.6	59.5	300#	18	26.8	726

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

TEFC Motor Data	Dimensions										
	P2	Phase	Voltage	FLA (per pump)	Pmax	Dimensions-inches					Individual Pump Weight
	Model	(HP)	(-)	(V)	(A)	(PSI)	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)
CO-2 HELIX 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

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



Submittal Data Sheet

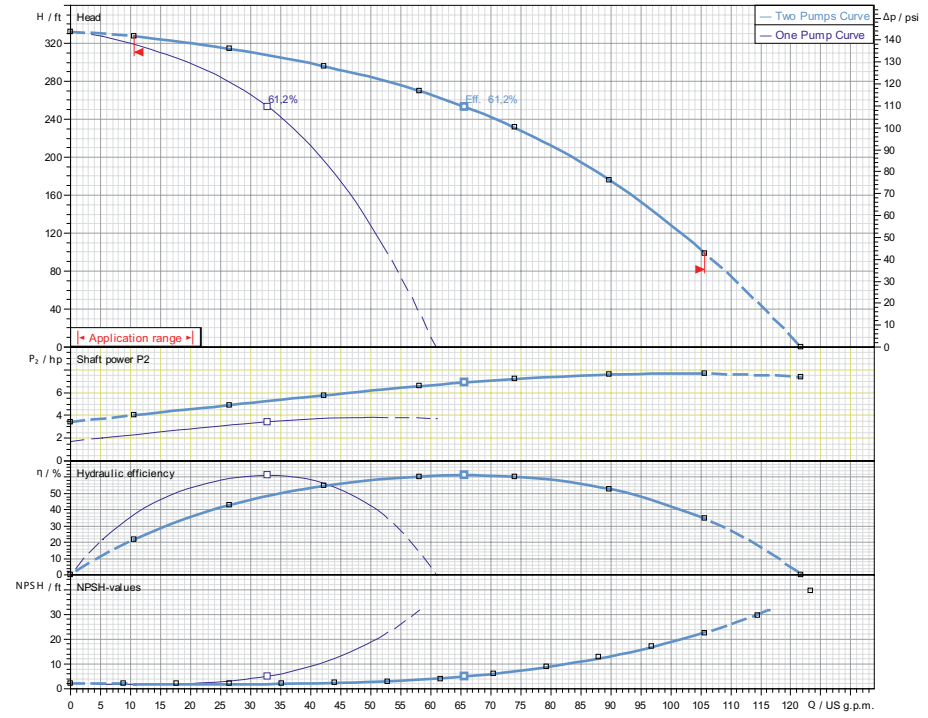
Wilo CO-Helix - NSF 61/372 Pressure Boosting System



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
 - 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	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 +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-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

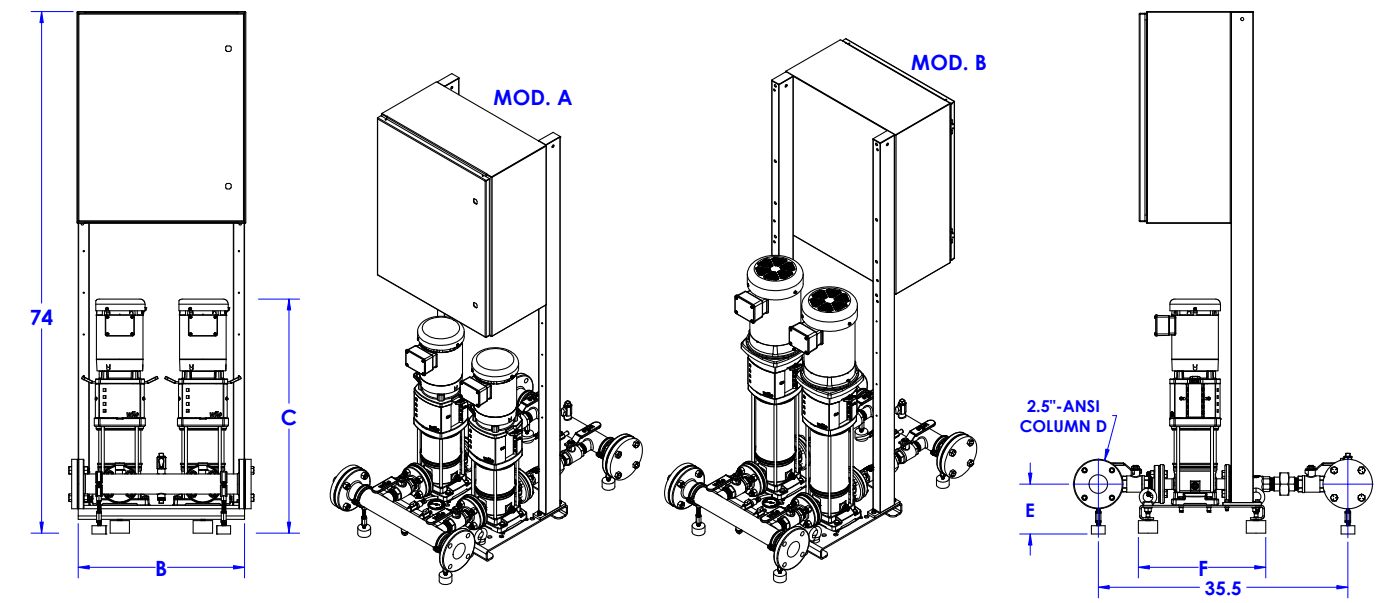
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
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Onboard Communications	Modbus 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
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-2 HELIX V30-08-1/5/VCE



CO-2 HELIX	208/230V ~1IN-3OUT						208/230V ~3						460V ~3						575 ~3											
	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H
CO-2 HELIX V30-02-1/1/VCE	B	27.6	31.2	150#	20	36	528	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	497		
CO-2 HELIX V30-03-1/1.5/VCE	B	27.6	32.2	150#	20	36	536	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	505		
CO-2 HELIX V30-04-1/2/VCE	B	27.6	35.2	150#	20	36	617	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	513		
CO-2 HELIX V30-05-1/3/VCE	B	27.6	38.1	150#	20	36	645	B	23.6	38.1	150#	18	26.3	525	B	23.6	38.1	150#	18	26.3	519	B	23.6	38.1	150#	18	26.3	541		
CO-2 HELIX V30-06-1/3/VCE	B	27.6	39.1	150#	20	36	669	B	23.6	39.1	150#	18	26.3	535	B	23.6	39.1	150#	18	26.3	529	B	23.6	39.1	150#	18	26.3	551		
CO-2 HELIX V30-07-1/5/VCE	B	27.6	44	150#	20	36	709	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	591		
CO-2 HELIX V30-08-1/5/VCE	B	27.6	45	150#	20	36	715	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	597		
CO-2 HELIX V30-09-1/5/VCE	B	27.6	47	150#	20	36	723	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	605		
CO-2 HELIX V30-10-1/5/VCE	B	27.6	48	150#	20	36	729	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	614		
CO-2 HELIX V30-11-1/5/VCE	B	27.6	51	150#	20	36	738	B	23.6	51	150#	18	26.8	604	B	23.6	51	150#	18	26.8	704	B	23.6	51	150#	18	26.8	620		
CO-2 HELIX V30-12-1/7.5/VCE	B	27.6	56.5	150#	20	36	828	B	23.6	56.5	150#	20	36	751	B	23.6	56.5	150#	18	26.8	684	B	23.6	56.5	150#	18	26.8	700		
CO-2 HELIX V30-14-1/7.5/VCE	B	27.6	59.5	300#	20	36	856	B	23.6	59.5	300#	20	36	778	B	23.6	59.5	300#	18	26.8	710	B	23.6	59.5	300#	18	26.8	726		

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

TEFC Motor Data

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)	
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

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



Submittal Data Sheet

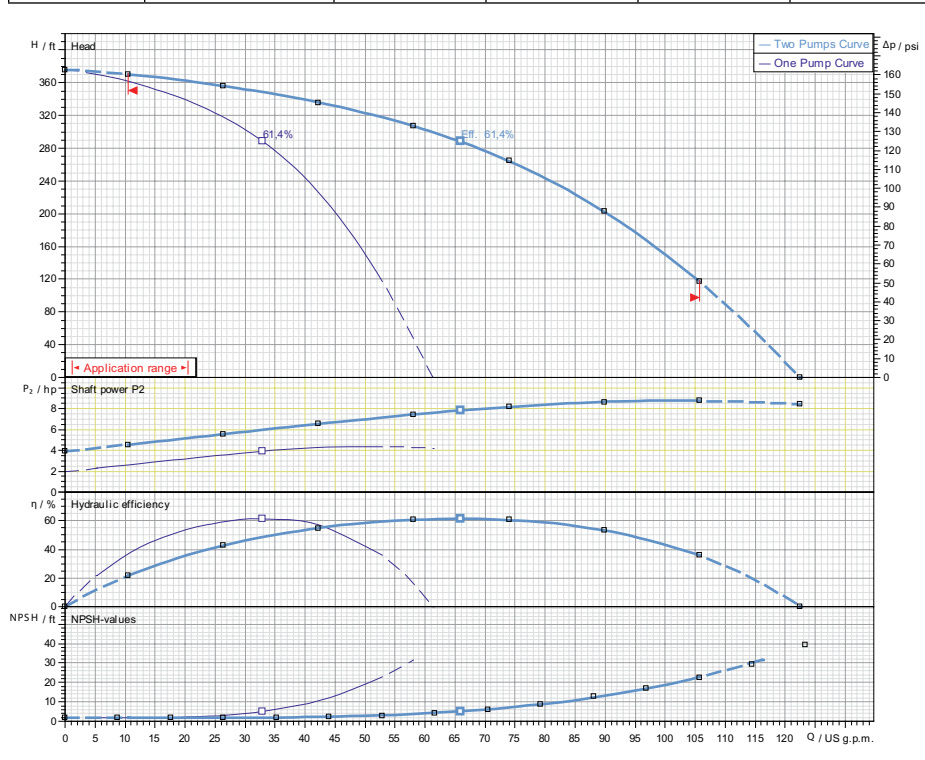
Wilo CO-Helix - NSF 61/372 Pressure Boosting System



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 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 +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-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

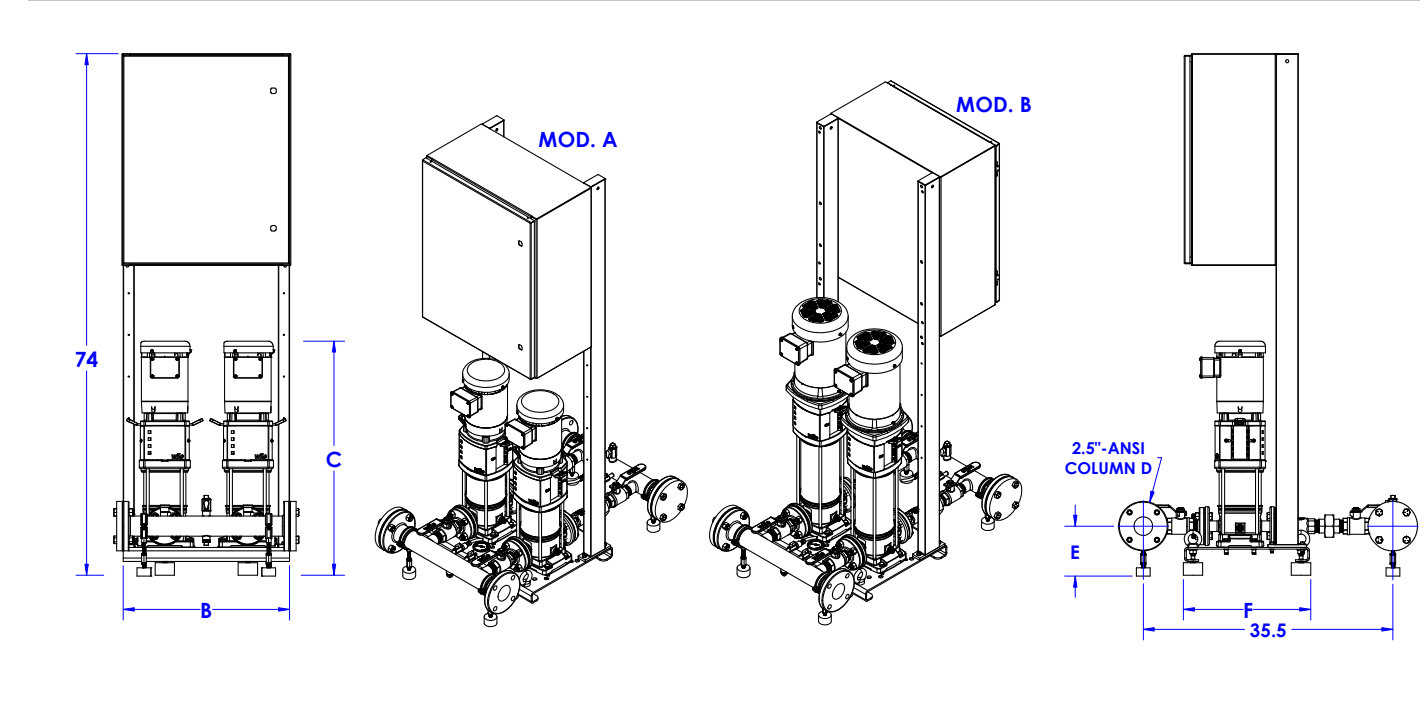
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways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

Motor Data

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

Approval Stamp

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



CO-2 HELIX	208/230V ~1IN-3OUT						208/230V ~3						460V ~3						575 ~3									
	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H				
CO-2 HELIX V30-02-1/1/VCE	B	27.6	31.2	150#	20	36	528	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	497
CO-2 HELIX V30-03-1/1.5/VCE	B	27.6	32.2	150#	20	36	536	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	505
CO-2 HELIX V30-04-1/2/VCE	B	27.6	35.2	150#	20	36	617	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	513
CO-2 HELIX V30-05-1/3/VCE	B	27.6	38.1	150#	20	36	645	B	23.6	38.1	150#	18	26.3	525	B	23.6	38.1	150#	18	26.3	519	B	23.6	38.1	150#	18	26.3	541
CO-2 HELIX V30-06-1/3/VCE	B	27.6	39.1	150#	20	36	669	B	23.6	39.1	150#	18	26.3	535	B	23.6	39.1	150#	18	26.3	529	B	23.6	39.1	150#	18	26.3	551
CO-2 HELIX V30-07-1/5/VCE	B	27.6	44	150#	20	36	709	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	591
CO-2 HELIX V30-08-1/5/VCE	B	27.6	45	150#	20	36	715	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	597
CO-2 HELIX V30-09-1/5/VCE	B	27.6	47	150#	20	36	723	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	605
CO-2 HELIX V30-10-1/5/VCE	B	27.6	48	150#	20	36	729	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	614
CO-2 HELIX V30-11-1/5/VCE	B	27.6	51	150#	20	36	738	B	23.6	51	150#	18	26.8	604	B	23.6	51	150#	18	26.8	704	B	23.6	51	150#	18	26.8	620
CO-2 HELIX V30-12-1/7.5/VCE	B	27.6	56.5	150#	20	36	828	B	23.6	56.5	150#	20	36	751	B	23.6	56.5	150#	18	26.8	684	B	23.6	56.5	150#	18	26.8	700
CO-2 HELIX V30-14-1/7.5/VCE	B	27.6	59.5	300#	20	36	856	B	23.6	59.5	300#	20	36	778	B	23.6	59.5	300#	18	26.8	710	B	23.6	59.5	300#	18	26.8	726

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

TEFC Motor Data

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 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	

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Submittal Data Sheet

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



Submittal Data Sheet

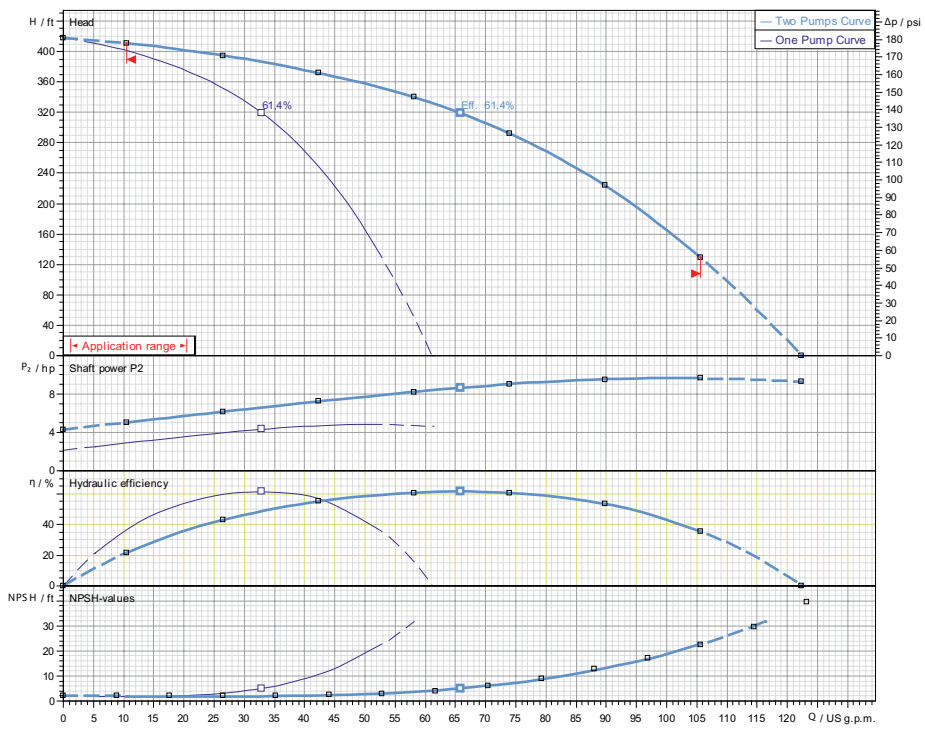
Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-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	

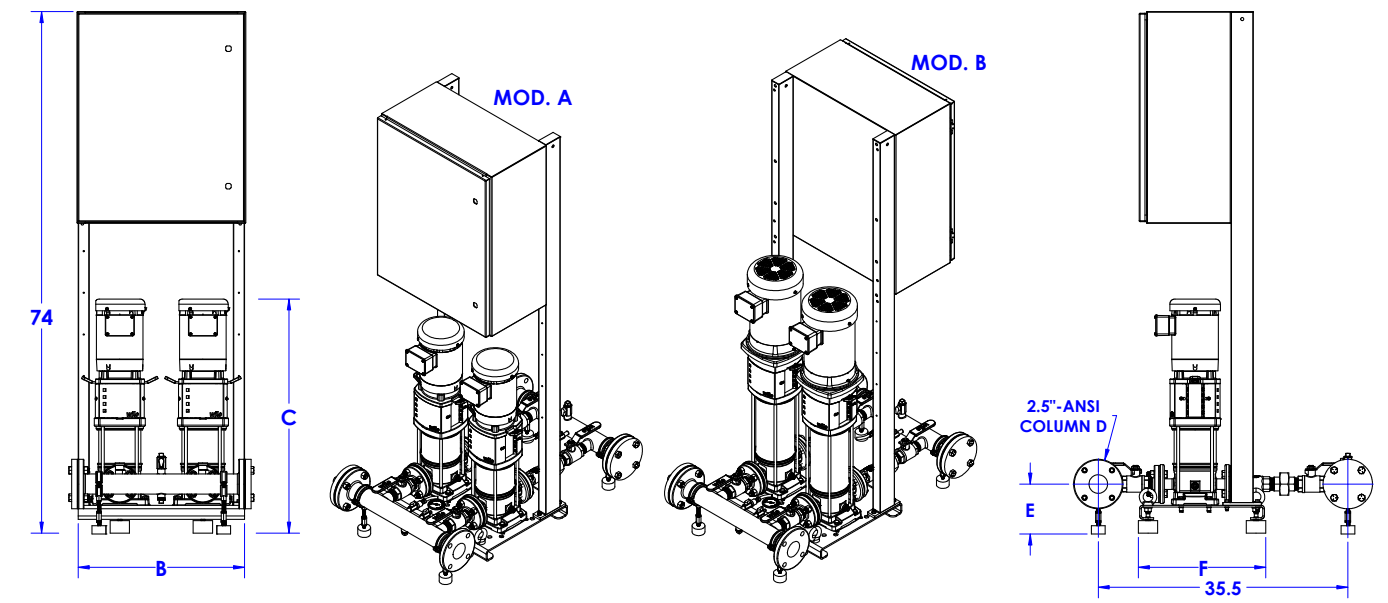


- ### Applications
- Water Supply
 - Agriculture
 - Washing / Sprinkling Systems
 - Pressure Boosting
 - Cooling Circuits
 - Condensate Return

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	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

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



CO-2 HELIX	208/230V ~1IN-3OUT					208/230V ~3					460V ~3					575 ~3												
	MOD	B	C	D	F	H	Wt. (lbs)	MOD	B	C	D	F	H	Wt. (lbs)	MOD	B	C	D	F	H	Wt. (lbs)	MOD	B	C	D	F	H	Wt. (lbs)
CO-2 HELIX V30-02-1/1/VCE	B	27.6	31.2	150#	20	36	528	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	497
CO-2 HELIX V30-03-1/1.5/VCE	B	27.6	32.2	150#	20	36	536	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	505
CO-2 HELIX V30-04-1/2/VCE	B	27.6	35.2	150#	20	36	617	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	513
CO-2 HELIX V30-05-1/3/VCE	B	27.6	38.1	150#	20	36	645	B	23.6	38.1	150#	18	26.3	525	B	23.6	38.1	150#	18	26.3	519	B	23.6	38.1	150#	18	26.3	541
CO-2 HELIX V30-06-1/3/VCE	B	27.6	39.1	150#	20	36	669	B	23.6	39.1	150#	18	26.3	535	B	23.6	39.1	150#	18	26.3	529	B	23.6	39.1	150#	18	26.3	551
CO-2 HELIX V30-07-1/5/VCE	B	27.6	44	150#	20	36	709	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	591
CO-2 HELIX V30-08-1/5/VCE	B	27.6	45	150#	20	36	715	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	597
CO-2 HELIX V30-09-1/5/VCE	B	27.6	47	150#	20	36	723	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	605
CO-2 HELIX V30-10-1/5/VCE	B	27.6	48	150#	20	36	729	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	614
CO-2 HELIX V30-11-1/5/VCE	B	27.6	51	150#	20	36	738	B	23.6	51	150#	18	26.8	604	B	23.6	51	150#	18	26.8	704	B	23.6	51	150#	18	26.8	620
CO-2 HELIX V30-12-1/7.5/VCE	B	27.6	56.5	150#	20	36	828	B	23.6	56.5	150#	20	36	751	B	23.6	56.5	150#	18	26.8	684	B	23.6	56.5	150#	18	26.8	700
CO-2 HELIX V30-14-1/7.5/VCE	B	27.6	59.5	300#	20	36	856	B	23.6	59.5	300#	20	36	778	B	23.6	59.5	300#	18	26.8	710	B	23.6	59.5	300#	18	26.8	726

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

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-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

TEFC Motor Data

Model	P2 (HP)	Phase (-)	Voltage (V)	FLA (per pump) (A)	Pmax (PSI)	Dimensions - inches				Individual Pump Weight (lbs)
						Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronumatic Tank Valve on Manifold (Plugged)	
CO-2 HELIX 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

Approval Stamp

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Submittal Data Sheet

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



Submittal Data Sheet

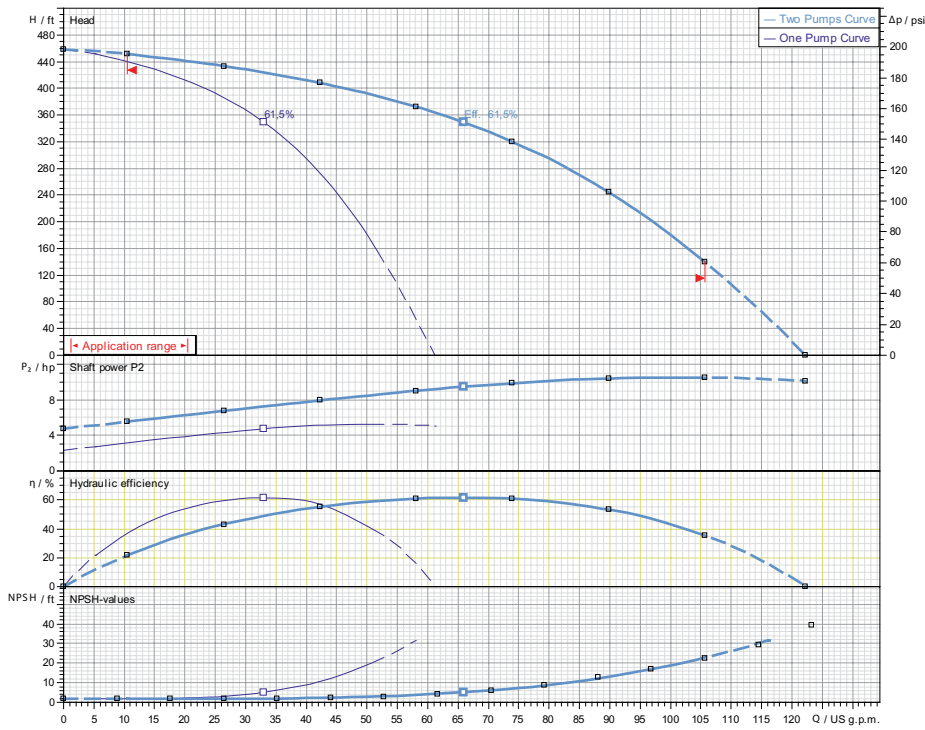
Wilo CO-Helix - NSF 61/372 Pressure Boosting System



CO-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
- 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	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 +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-51 (1-10 HP for 208-23/460v-3) Danfoss FC-101 (1-10 HP for 575v-3)

Technical Data - PLC

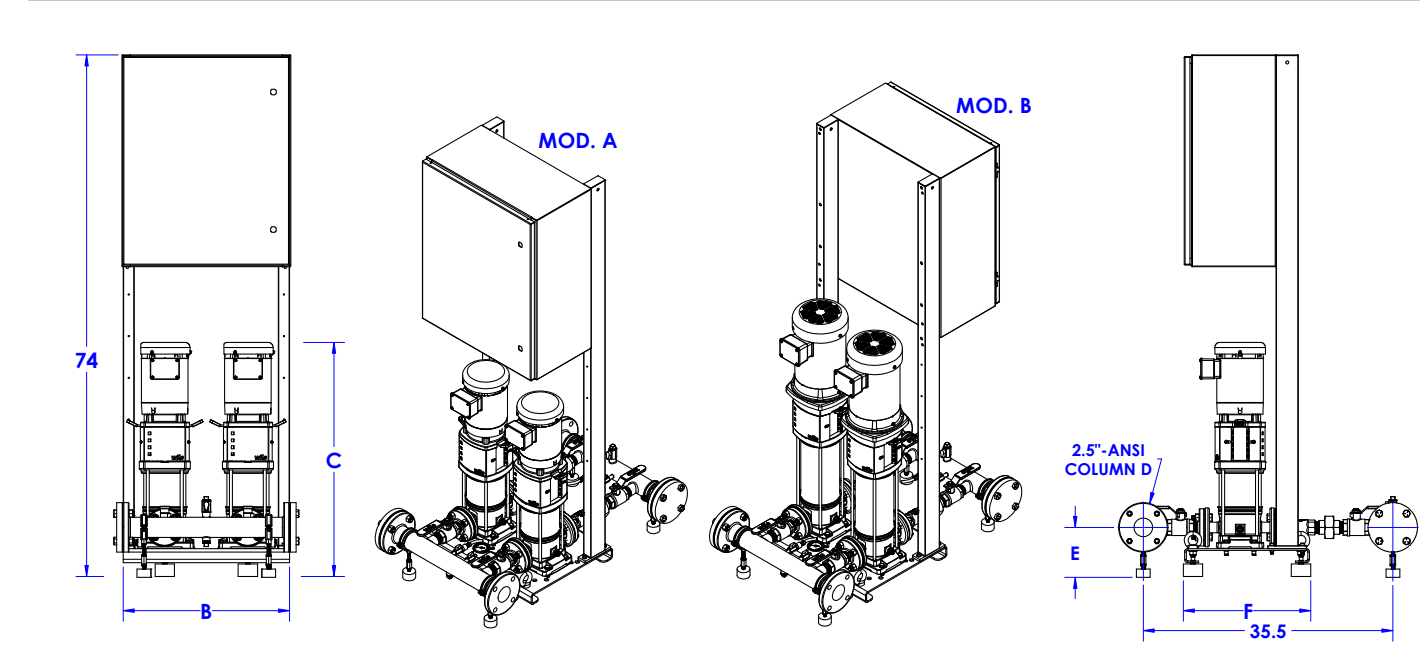
User Interface	7" Diagonal Color LCD Touchscreen
Display Resolution	800 x 480 Pixels
Supply Voltage	24VDC
Max. Current Consumption	320mA@24V
Number of Analog Inputs	9
Number of Analog Outputs	2
Number of Digital Inputs	18
Number of Digital Outputs	17
Onboard Communications	Modbus Protocol (Optional Gateways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

Motor Data

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

Approval Stamp

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



CO-2 HELIX	208/230V ~1IN-3OUT						208/230V ~3						460V ~3						575 ~3									
	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H	MOD	B	C	D	F	H				
CO-2 HELIX V30-02-1/1/VCE	B	27.6	31.2	150#	20	36	528	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	472	A	23.6	31.2	150#	18	26.3	497
CO-2 HELIX V30-03-1/1.5/VCE	B	27.6	32.2	150#	20	36	536	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	483	A	23.6	32.2	150#	18	26.3	505
CO-2 HELIX V30-04-1/2/VCE	B	27.6	35.2	150#	20	36	617	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	491	A	23.6	35.2	150#	18	26.3	513
CO-2 HELIX V30-05-1/3/VCE	B	27.6	38.1	150#	20	36	645	B	23.6	38.1	150#	18	26.3	525	B	23.6	38.1	150#	18	26.3	519	B	23.6	38.1	150#	18	26.3	541
CO-2 HELIX V30-06-1/3/VCE	B	27.6	39.1	150#	20	36	669	B	23.6	39.1	150#	18	26.3	535	B	23.6	39.1	150#	18	26.3	529	B	23.6	39.1	150#	18	26.3	551
CO-2 HELIX V30-07-1/5/VCE	B	27.6	44	150#	20	36	709	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	575	B	23.6	44	150#	18	26.3	591
CO-2 HELIX V30-08-1/5/VCE	B	27.6	45	150#	20	36	715	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	581	B	23.6	45	150#	18	26.3	597
CO-2 HELIX V30-09-1/5/VCE	B	27.6	47	150#	20	36	723	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	589	B	23.6	47	150#	18	26.3	605
CO-2 HELIX V30-10-1/5/VCE	B	27.6	48	150#	20	36	729	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	595	B	23.6	48	150#	18	26.3	614
CO-2 HELIX V30-11-1/5/VCE	B	27.6	51	150#	20	36	738	B	23.6	51	150#	18	26.8	604	B	23.6	51	150#	18	26.8	704	B	23.6	51	150#	18	26.8	620
CO-2 HELIX V30-12-1/7.5/VCE	B	27.6	56.5	150#	20	36	828	B	23.6	56.5	150#	20	36	751	B	23.6	56.5	150#	18	26.8	684	B	23.6	56.5	150#	18	26.8	700
CO-2 HELIX V30-14-1/7.5/VCE	B	27.6	59.5	300#	20	36	856	B	23.6	59.5	300#	20	36	778	B	23.6	59.5	300#	18	26.8	710	B	23.6	59.5	300#	18	26.8	726

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

TEFC Motor Data

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 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	