

# Submittal Data Sheet

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

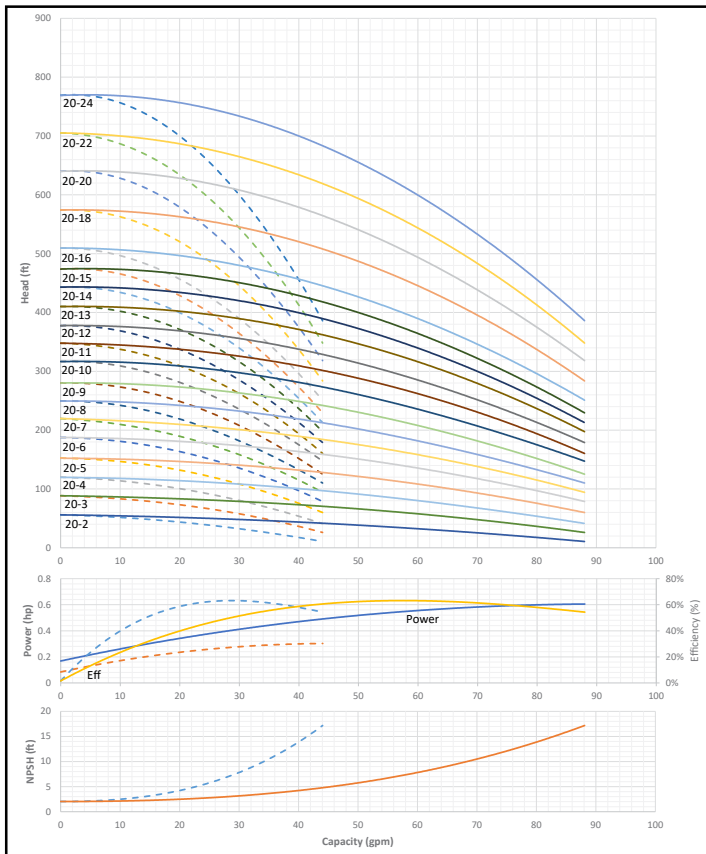


### CO2 MVI-20



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

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	CO2 MVI-20							3600



#### Applications

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

#### Materials of Construction

Volute	AISI 304 Stainless Steel with Cast Iron ANSI flanges
Impeller	AISI 304 Stainless Steel
Shaft	ANSI 431 Stainless Steel
Elastomers	EPDM
Manifold	AISI 304 Stainless Steel
Suction Isolation Valves	150# Cast Iron Wafer Butterfly, All Stainless Steel Wetted Components
Discharge Isolation Valve	150# Cast Iron Wafer Butterfly, All Stainless Steel Wetted Components or 300# 304SS Ball Valve
Check Valve	Wafer Style, 316 Stainless Steel internals, non-slam, plunger type with EPDM seal/ cast iron body
Mechanical Seal	Frame and Springs 304SS
Pressure Transducers	¼" MNPT, 316 Stainless Steel
Pressure Gauges	¼" MNPT, 304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System Base	Epoxy Coated A-500 Steel Tubing and A36 C-Channel/Plates

#### Motor Data

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

#### Technical Data – Operational Ranges

Liquid Temp Range	5°F to 248°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F

#### Technical Data – Panel

Voltage	208-230/460~3 or 575~3
Enclosure	NEMA 3R up to 20 HP NEMA 12 for 25 HP and above (NEMA 4 and 4X available upon request)
Standard	Meets UL 508A
Variable Frequency Drives	Danfoss FC-101: • 1 HP to 3 HP 208-230V~1 IN / 208-230V~3 OUT • 1 HP to 60 HP 208-230V~3 • 1 HP to 100 HP 460V~3 • 1 HP to 100 HP 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	4
Number of Analog Outputs	4
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

Approval Stamp

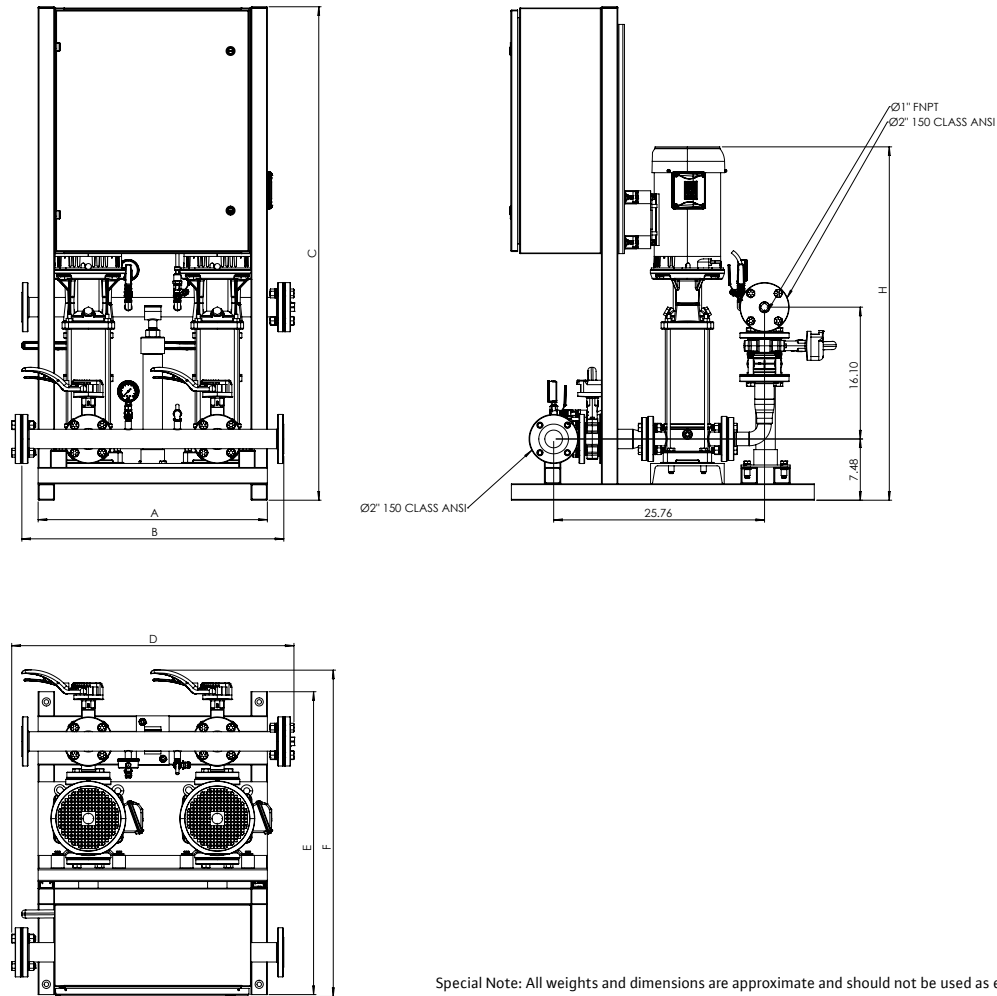
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## Wilo-CO MVI - NSF 61/372 Pressure Boosting System



### CO2 MVI-20

#### 150# Discharge



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

### CO2 MVI-20

															TEFC Motor Data (Per Motor)	
															Motor FLA (per pump)	System FLA
															Dimensions - Inches (in)	
Model	Article	HP	Voltage	Phase	System Header Size (ANSI)	Pmax (PSI)	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	H (in)	System Weight (Lbs)	(A)	
CO2 MVI-20-2	3353034	0.75	208V-230V	-1 IN / -3 OUT	2" 150#	363	24	28	60.13	30.47	37	38.63	26.01	454.53	2.5-2.26	12.2
CO2 MVI-20-3	3353035	1	208V-230V	-1 IN / -3 OUT	2" 150#	363	24	28	60.13	30.47	37	38.63	26.71	459.53	3.32-3	12.2
CO2 MVI-20-4	3353036	1	208V-230V	-1 IN / -3 OUT	2" 150#	363	24	28	60.13	30.47	37	38.63	29.68	485.93	3.32-3	12.2
CO2 MVI-20-5	3353037	1.5	208V-230V	-1 IN / -3 OUT	2" 150#	363	24	28	60.13	30.47	37	38.63	30.78	487.93	4.13-3.74	31.4
CO2 MVI-20-6	3353038	2	208V-230V	-1 IN / -3 OUT	2" 150#	363	24	28	60.13	30.47	37	38.63	32.71	501.93	5.46-4.94	31.4
CO2 MVI-20-7	3353039	2	208V-230V	-1 IN / -3 OUT	2" 150#	363	24	28	60.13	30.47	37	38.63	33.81	503.93	5.46-4.94	31.4
CO2 MVI-20-8	3353040	3	208V-230V	-1 IN / -3 OUT	2" 150#	363	28	32	60.13	34.47	37	39.86	37.38	624.44	8.12-7.34	31.4
CO2 MVI-20-9	3353041	3	208V-230V	-1 IN / -3 OUT	2" 150#	363	28	32	60.13	34.47	37	39.86	38.38	628.44	8.12-7.34	31.4
CO2 MVI-20-10	3353042	3	208V-230V	-1 IN / -3 OUT	2" 150#	363	28	32	60.13	34.47	37	39.86	39.48	630.44	8.12-7.34	31.4
CO2 MVI-20-2	3353196	0.75	208V-230V	-3	2" 150#	363	24	28	60.13	30.47	37	38.63	26.01	452.33	2.5-2.26	6.6
CO2 MVI-20-3	3353197	1	208V-230V	-3	2" 150#	363	24	28	60.13	30.47	37	38.63	26.71	457.33	3.32-3	6.6
CO2 MVI-20-4	3353198	1	208V-230V	-3	2" 150#	363	24	28	60.13	30.47	37	38.63	29.68	485.93	3.32-3	6.6
CO2 MVI-20-5	3353199	1.5	208V-230V	-3	2" 150#	363	24	28	60.13	30.47	37	38.63	30.78	487.93	4.13-3.74	14.6
CO2 MVI-20-6	3353200	2	208V-230V	-3	2" 150#	363	24	28	60.13	30.47	37	38.63	32.71	501.93	5.46-4.94	14.6
CO2 MVI-20-7	3353201	2	208V-230V	-3	2" 150#	363	24	28	60.13	30.47	37	38.63	33.81	503.93	5.46-4.94	14.6
CO2 MVI-20-8	3353202	3	208V-230V	-3	2" 150#	363	28	32	60.13	34.47	37	39.86	37.38	624.44	8.12-7.34	20.2

# Submittal Data Sheet

## Wilo-CO MVI - NSF 61/372 Pressure Boosting System



CO2 MVI-20 150# Discharge																TEFC Motor Data (Per Motor)	
Model	Article	HP	Voltage	Phase	System Header Size (ANSI)	Pmax (PSI)	Dimensions - Inches (in)								System Weight (Lbs)	Motor FLA (per pump)	System FLA
							A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	H (in)	(A)			
CO2 MVI-20-9	3353203	3	208V-230V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	38.38	628.44	8.12-7.34	20.2	
CO2 MVI-20-10	3353204	3	208V-230V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	39.48	630.44	8.12-7.34	20.2	
CO2 MVI-20-11	3353205	5	208V-230V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	42.06	662.84	13.1-11.8	31.4	
CO2 MVI-20-12	3353206	5	208V-230V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	43.16	664.84	13.1-11.8	31.4	
CO2 MVI-20-13	3353207	5	208V-230V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	44.26	666.84	13.1-11.8	31.4	
CO2 MVI-20-14	3353208	5	208V-230V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	45.26	668.84	13.1-11.8	31.4	
CO2 MVI-20-15	3353209	5	208V-230V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	46.36	672.84	13.1-11.8	31.4	
CO2 MVI-20-16	3353210	5	208V-230V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	47.46	674.84	13.1-11.8	31.4	
CO2 MVI-20-2	3353685	0.75	460V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	26.01	452.33	1.13	4.6	
CO2 MVI-20-3	3353686	1	460V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	26.71	457.33	1.5	4.6	
CO2 MVI-20-4	3353687	1	460V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	29.68	485.93	1.5	4.6	
CO2 MVI-20-5	3353688	1.5	460V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	30.78	487.93	1.87	7.8	
CO2 MVI-20-6	3353689	2	460V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	32.71	501.93	2.47	7.8	
CO2 MVI-20-7	3353690	2	460V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	33.81	503.93	2.47	7.8	
CO2 MVI-20-8	3353691	3	460V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	37.38	618.24	3.67	10.6	
CO2 MVI-20-9	3353692	3	460V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	38.38	622.24	3.67	10.6	
CO2 MVI-20-10	3353693	3	460V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	39.48	624.24	3.67	10.6	
CO2 MVI-20-11	3353694	5	460V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	42.06	662.84	5.9	17.4	
CO2 MVI-20-12	3353695	5	460V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	43.16	664.84	5.9	17.4	
CO2 MVI-20-13	3353696	5	460V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	44.26	666.84	5.9	17.4	
CO2 MVI-20-14	3353697	5	460V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	45.26	668.84	5.9	17.4	
CO2 MVI-20-15	3353698	5	460V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	46.36	672.84	5.9	17.4	
CO2 MVI-20-16	3353699	5	460V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	47.46	674.84	5.9	17.4	
CO2 MVI-20-2	3354174	0.75	575V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	26.01	476.73	0.904	8	
CO2 MVI-20-3	3354175	1	575V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	26.71	481.73	1.2	8	
CO2 MVI-20-4	3354176	1	575V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	29.68	508.13	1.2	8	
CO2 MVI-20-5	3354177	1.5	575V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	30.78	510.13	1.5	8	
CO2 MVI-20-6	3354178	2	575V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	32.67	524.13	1.98	8	
CO2 MVI-20-7	3354179	2	575V	~3	2" 150#	363	24	28	60.13	30.47	37	38.63	33.77	526.13	1.98	8	
CO2 MVI-20-8	3354180	3	575V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	37.38	640.84	2.9	8	
CO2 MVI-20-9	3354181	3	575V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	38.38	644.84	2.9	8	
CO2 MVI-20-10	3354182	3	575V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	39.48	646.84	2.9	8	
CO2 MVI-20-11	3354183	5	575V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	42.06	679.04	4.72	12.2	
CO2 MVI-20-12	3354184	5	575V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	43.16	681.04	4.72	12.2	
CO2 MVI-20-13	3354185	5	575V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	44.26	683.04	4.72	12.2	
CO2 MVI-20-14	3354186	5	575V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	45.26	685.04	4.72	12.2	
CO2 MVI-20-15	3354187	5	575V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	46.36	689.04	4.72	12.2	
CO2 MVI-20-16	3354188	5	575V	~3	2" 150#	363	28	32	60.13	34.47	37	39.86	47.46	691.04	4.72	12.2	

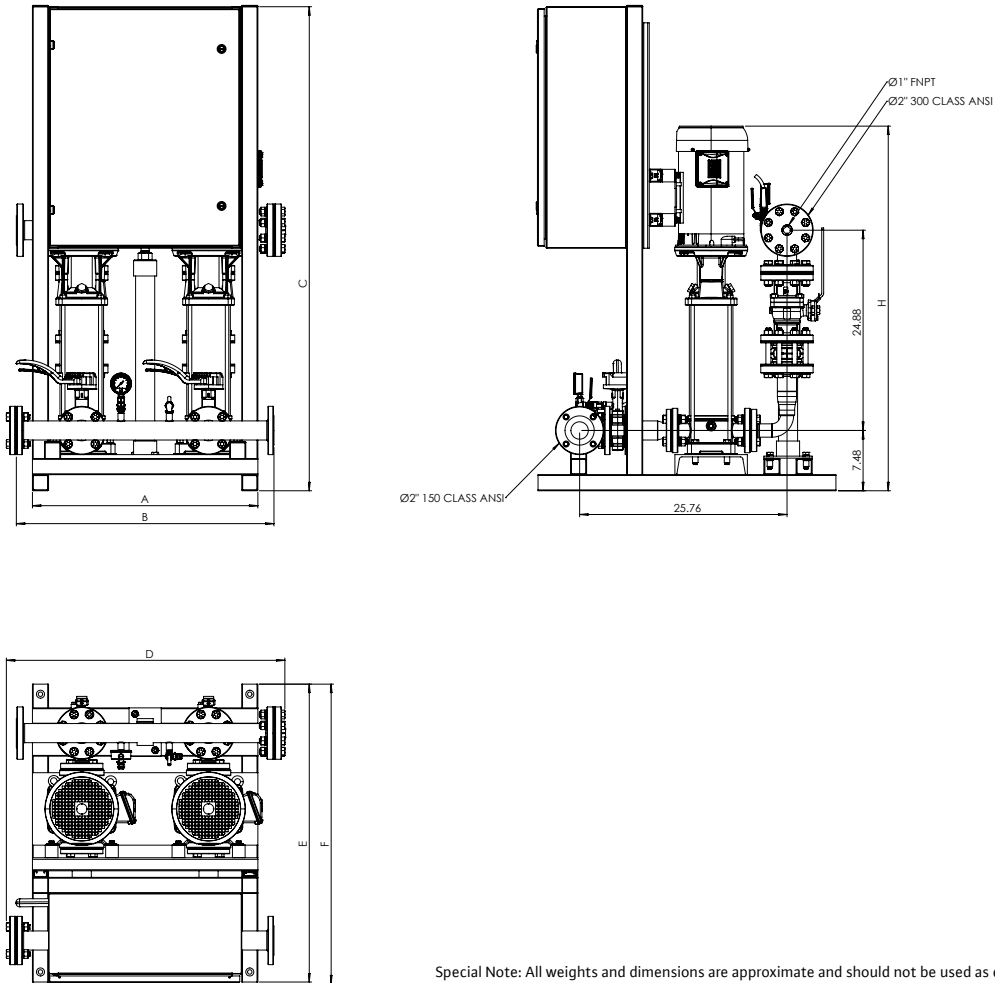
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## Wilo-CO MVI - NSF 61/372 Pressure Boosting System



### CO2 MVI-20

#### 300# Discharge



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

### CO2 MVI-20

#### TEFC Motor Data (Per Motor)

Model	Article	HP	Voltage	Phase	System Header Size (ANSI)	Pmax (PSI)	Dimensions - Inches (in)								System Weight (Lbs)	Motor FLA (per pump)	System FLA
							A	B	C	D	E	F	H	(A)			
CO2 MVI-20-18	3353211	7.5	208V-230V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	51.85	867.86	19.2-17.3	43-37	
CO2 MVI-20-20	3353212	7.5	208V-230V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	53.95	873.86	19.2-17.3	43-37	
CO2 MVI-20-22	3353213	7.5	208V-230V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	56.05	877.86	19.2-17.3	43-37	
CO2 MVI-20-24	3353214	7.5	208V-230V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	58.15	881.86	19.2-17.3	43-37	
CO2 MVI-20-18	3353700	7.5	460V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	51.85	846.26	8.67	34.2	
CO2 MVI-20-20	3353701	7.5	460V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	53.95	852.26	8.67	34.2	
CO2 MVI-20-22	3353702	7.5	460V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	56.05	856.26	8.67	34.2	
CO2 MVI-20-24	3353703	7.5	460V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	58.15	860.26	8.67	34.2	
CO2 MVI-20-18	3354189	7.5	575V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	51.85	866.26	6.94	17.6	
CO2 MVI-20-20	3354190	7.5	575V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	53.95	872.26	6.94	17.6	
CO2 MVI-20-22	3354191	7.5	575V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	56.05	876.26	6.94	17.6	
CO2 MVI-20-24	3354192	7.5	575V	~3	2" 300#	363	28	32	60.13	34.59	37	38.23	58.15	880.26	6.94	17.6	