

Submittal Data Sheet

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

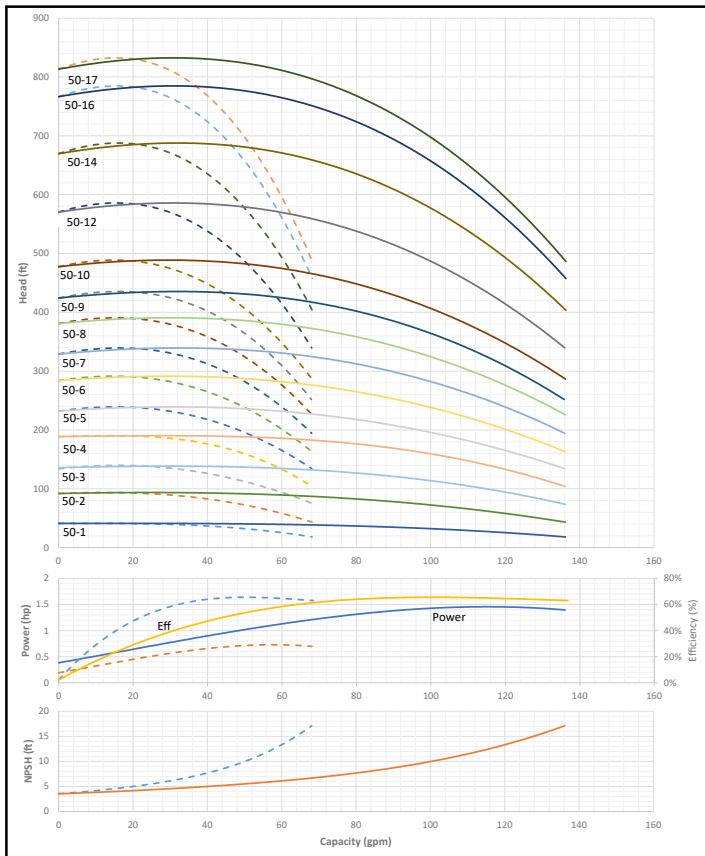


CO2 MVI-50



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

| Tag # | Model # | Flow | BOOST PSI | Min. Inlet PSI | HP/Pump | Phase | Voltage | RPM |
|-------|------------|------|-----------|----------------|---------|-------|---------|------|
| | CO2 MVI-50 | | | | | | | 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 |

Approval Stamp

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 |

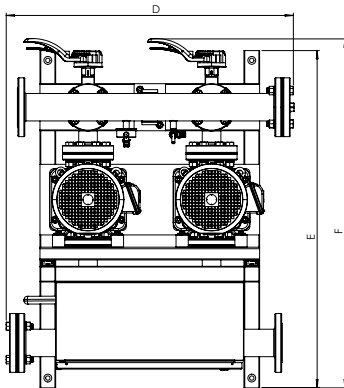
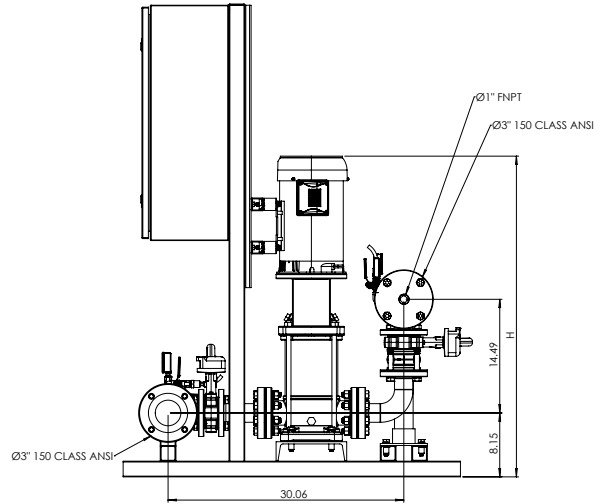
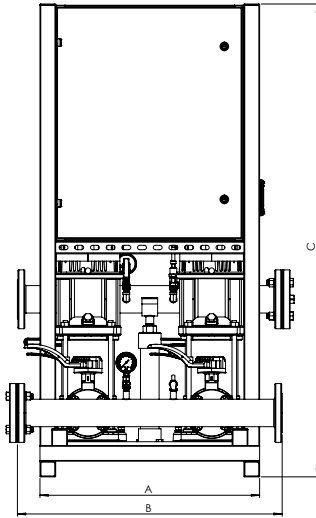
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Wilo-CO MVI - NSF 61/372 Pressure Boosting System



CO2 MVI-50

150# Discharge



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

CO2 MVI-50

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-50-1 | 3353043 | 0.75 | 208V-230V | ~1 IN/~3 OUT | 3" 150# | 232 | 24 | 28.75 | 60.13 | 31.6 | 42 | 43.49 | 29.5 | 457.15 | 2.5-2.26 | 12.2 | |
| CO2 MVI-50-2 | 3353044 | 1.5 | 208V-230V | ~1 IN/~3 OUT | 3" 150# | 232 | 24 | 28.75 | 60.13 | 31.6 | 42 | 43.49 | 30.62 | 482.55 | 4.13-3.74 | 31.4 | |
| CO2 MVI-50-3 | 3353045 | 3 | 208V-230V | ~1 IN/~3 OUT | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 35.21 | 640.06 | 8.12-7.34 | 14.6 | |
| CO2 MVI-50-4 | 3353046 | 3 | 208V-230V | ~1 IN/~3 OUT | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 36.41 | 646.06 | 8.12-7.34 | 7.8 | |
| CO2 MVI-50-1 | 3353215 | 0.75 | 208V-230V | ~3 | 3" 150# | 232 | 24 | 28.75 | 60.13 | 31.6 | 42 | 43.49 | 29.5 | 554.38 | 2.5-2.26 | 6.6 | |
| CO2 MVI-50-2 | 3353216 | 1.5 | 208V-230V | ~3 | 3" 150# | 232 | 24 | 28.75 | 60.13 | 31.6 | 42 | 43.49 | 30.62 | 581.98 | 4.13-3.74 | 14.6 | |
| CO2 MVI-50-3 | 3353217 | 3 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 35.21 | 745.68 | 8.12-7.34 | 14.6 | |
| CO2 MVI-50-4 | 3353218 | 3 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 36.41 | 751.68 | 8.12-7.34 | 7.8 | |
| CO2 MVI-50-5 | 3353219 | 5 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 39.17 | 786.08 | 13.1-11.8 | 8 | |
| CO2 MVI-50-6 | 3353220 | 5 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 40.35 | 790.08 | 13.1-11.8 | 31.4 | |
| CO2 MVI-50-7 | 3353221 | 5 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 40.89 | 794.08 | 13.1-11.8 | 31.4 | |
| CO2 MVI-50-8 | 3353222 | 7.5 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 44.95 | 938.28 | 19.2-17.3 | 43-37 | |
| CO2 MVI-50-9 | 3353223 | 7.5 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 46.13 | 942.28 | 19.2-17.3 | 43-37 | |
| CO2 MVI-50-10 | 3353224 | 7.5 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 47.31 | 946.28 | 19.2-17.3 | 43-37 | |
| CO2 MVI-50-1 | 3353704 | 0.75 | 460V | ~3 | 3" 150# | 232 | 24 | 28.75 | 60.13 | 31.6 | 42 | 43.49 | 29.5 | 457.15 | 1.13 | 4.6 | |
| CO2 MVI-50-2 | 3353705 | 1.5 | 460V | ~3 | 3" 150# | 232 | 24 | 28.75 | 60.13 | 31.6 | 42 | 43.49 | 30.62 | 482.55 | 1.87 | 7.8 | |

Submittal Data Sheet

Wilco-CO MVI - NSF 61/372 Pressure Boosting System



| CO2 MVI-50 150# Discharge | | | | | | | | | | | | | | | 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-50-3 | 3353706 | 3 | 460V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 35.21 | 640.06 | 3.67 | 10.6 |
| CO2 MVI-50-4 | 3353707 | 3 | 460V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 36.41 | 646.06 | 3.67 | 10.6 |
| CO2 MVI-50-5 | 3353708 | 5 | 460V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 39.17 | 680.46 | 5.9 | 17.4 |
| CO2 MVI-50-6 | 3353709 | 5 | 460V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 40.35 | 684.46 | 5.9 | 17.4 |
| CO2 MVI-50-7 | 3353710 | 5 | 460V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 40.89 | 688.46 | 5.9 | 17.4 |
| CO2 MVI-50-8 | 3353711 | 7.5 | 460V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 44.95 | 811.06 | 8.67 | 34.2 |
| CO2 MVI-50-9 | 3353712 | 7.5 | 460V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 46.13 | 815.06 | 8.67 | 34.2 |
| CO2 MVI-50-10 | 3353713 | 7.5 | 460V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 47.31 | 819.06 | 8.67 | 34.2 |
| CO2 MVI-50-1 | 3354193 | 0.75 | 575V | ~3 | 3" 150# | 232 | 24 | 28.75 | 60.13 | 31.6 | 42 | 43.49 | 29.5 | 457.15 | 0.904 | 8 |
| CO2 MVI-50-2 | 3354194 | 1.5 | 575V | ~3 | 3" 150# | 232 | 24 | 28.75 | 60.13 | 31.6 | 42 | 43.49 | 30.62 | 482.55 | 1.5 | 8 |
| CO2 MVI-50-3 | 3354195 | 3 | 575V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 35.21 | 640.46 | 2.9 | 8 |
| CO2 MVI-50-4 | 3354196 | 3 | 575V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 36.41 | 646.46 | 2.9 | 8 |
| CO2 MVI-50-5 | 3354197 | 5 | 575V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 39.17 | 680.66 | 4.72 | 12.2 |
| CO2 MVI-50-6 | 3354198 | 5 | 575V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 40.35 | 684.66 | 4.72 | 12.2 |
| CO2 MVI-50-7 | 3354199 | 5 | 575V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 40.89 | 688.66 | 4.72 | 12.2 |
| CO2 MVI-50-8 | 3354200 | 7.5 | 575V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 44.95 | 815.06 | 6.94 | 17.6 |
| CO2 MVI-50-9 | 3354201 | 7.5 | 575V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 46.13 | 819.06 | 6.94 | 17.6 |
| CO2 MVI-50-10 | 3354202 | 7.5 | 575V | ~3 | 3" 150# | 232 | 28 | 33.75 | 60.13 | 36.6 | 43 | 44.49 | 47.31 | 823.06 | 6.94 | 17.6 |

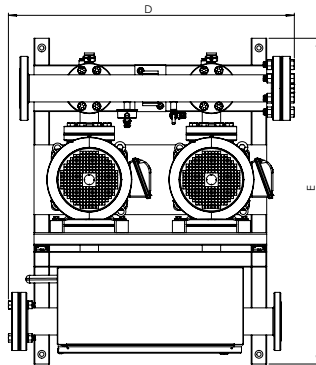
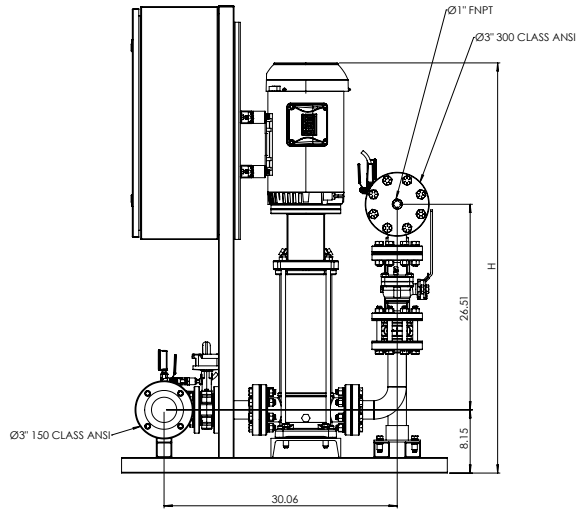
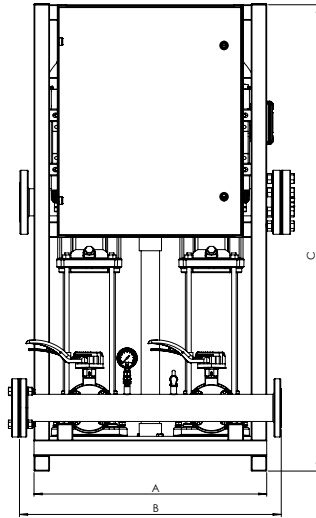
Submittal Data Sheet

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



CO2 MVI-50

300# Discharge



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

CO2 MVI-50

TEFC Motor Data (Per Motor)

| Model | Article | HP | Voltage | Phase | System Header Size (ANSI) | Pmax (PSI) | Dimensions - Inches (In) | | | | | | | | System Weight (Lbs) | TEFC Motor Data (Per Motor) | |
|---------------|---------|----|-----------|-------|---------------------------|------------|--------------------------|--------|--------|--------|--------|--------|--------|----------------------|---------------------|-----------------------------|--|
| | | | | | | | A (in) | B (in) | C (in) | D (in) | E (in) | F (in) | H (in) | Motor FLA (per pump) | | System FLA | |
| CO2 MVI-50-12 | 3353225 | 10 | 208V-230V | ~3 | 3" 300# | 363 | 30 | 33.75 | 60.13 | 36.86 | 42 | 51.22 | 0 | 947.17 | 25.4-23 | 57.6-49 | |
| CO2 MVI-50-14 | 3353226 | 10 | 208V-230V | ~3 | 3" 300# | 363 | 30 | 33.75 | 60.13 | 36.86 | 42 | 52.89 | 0 | 957.17 | 25.4-23 | 57.6-49 | |
| CO2 MVI-50-16 | 3353227 | 15 | 208V-230V | ~3 | 3" 300# | 363 | 38 | 40.75 | 65.13 | 44.1 | 43 | 44.1 | 61.55 | 1404.86 | 38.5-34.8 | 83-77.4 | |
| CO2 MVI-50-17 | 3353228 | 15 | 208V-230V | ~3 | 3" 300# | 363 | 38 | 40.75 | 65.13 | 44.1 | 43 | 44.1 | 62.54 | 1410.86 | 38.5-34.8 | 83-77.4 | |
| CO2 MVI-50-12 | 3353714 | 10 | 460V | ~3 | 3" 300# | 363 | 30 | 33.75 | 60.13 | 36.86 | 42 | 51.22 | 0 | 947.17 | 11.5 | 29 | |
| CO2 MVI-50-14 | 3353715 | 10 | 460V | ~3 | 3" 300# | 363 | 30 | 33.75 | 60.13 | 36.86 | 42 | 52.89 | 0 | 957.17 | 11.5 | 29 | |
| CO2 MVI-50-16 | 3353716 | 15 | 460V | ~3 | 3" 300# | 363 | 37 | 40.75 | 60.13 | 43.86 | 43 | 43 | 61.34 | 1320.55 | 17.4 | 37.8 | |
| CO2 MVI-50-17 | 3353717 | 15 | 460V | ~3 | 3" 300# | 363 | 37 | 40.75 | 60.13 | 43.86 | 43 | 43 | 62.54 | 1326.55 | 17.4 | 37.8 | |
| CO2 MVI-50-12 | 3354203 | 10 | 575V | ~3 | 3" 300# | 363 | 30 | 33.75 | 60.13 | 36.86 | 42 | 51.22 | 0 | 955.17 | 9.2 | 23.8 | |
| CO2 MVI-50-14 | 3354204 | 10 | 575V | ~3 | 3" 300# | 363 | 30 | 33.75 | 60.13 | 36.86 | 42 | 52.89 | 0 | 965.17 | 9.2 | 23.8 | |
| CO2 MVI-50-16 | 3354205 | 15 | 575V | ~3 | 3" 300# | 363 | 38 | 40.75 | 65.13 | 44.1 | 43 | 44.1 | 61.55 | 1316.86 | 13.8 | 32.4 | |
| CO2 MVI-50-17 | 3354206 | 15 | 575V | ~3 | 3" 300# | 363 | 38 | 40.75 | 65.13 | 44.1 | 43 | 44.1 | 62.54 | 1322.86 | 13.8 | 32.4 | |