

Submittal Data Sheet

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

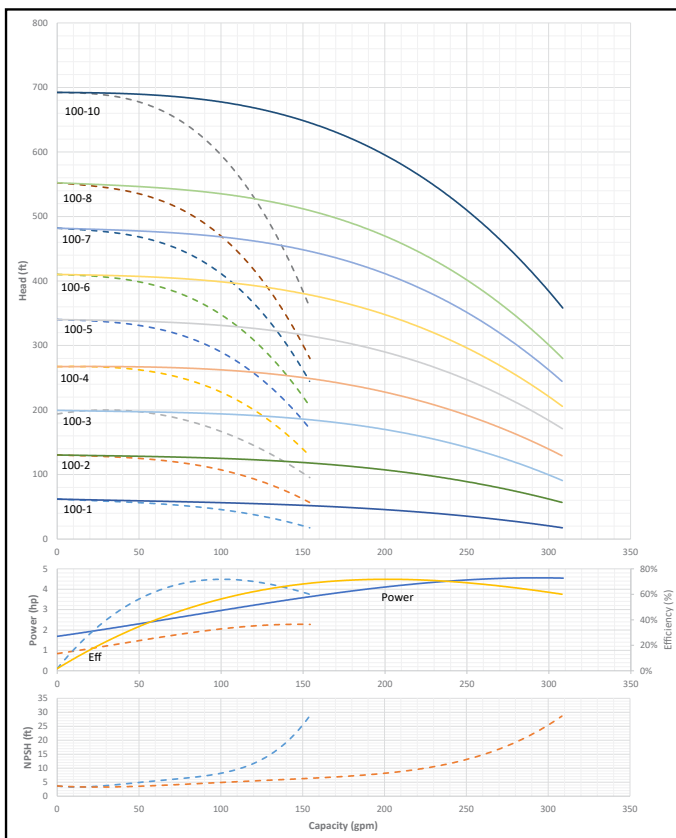


CO2 MVI-1SB-100



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

| Tag # | Model # | Flow | BOOST PSI | Min. Inlet PSI | HP/Pump | Phase | Voltage | RPM |
|-------|-----------------|------|-----------|----------------|---------|-------|---------|------|
| | CO2 MVI-1SB-100 | | | | | | | 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 |

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 |

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

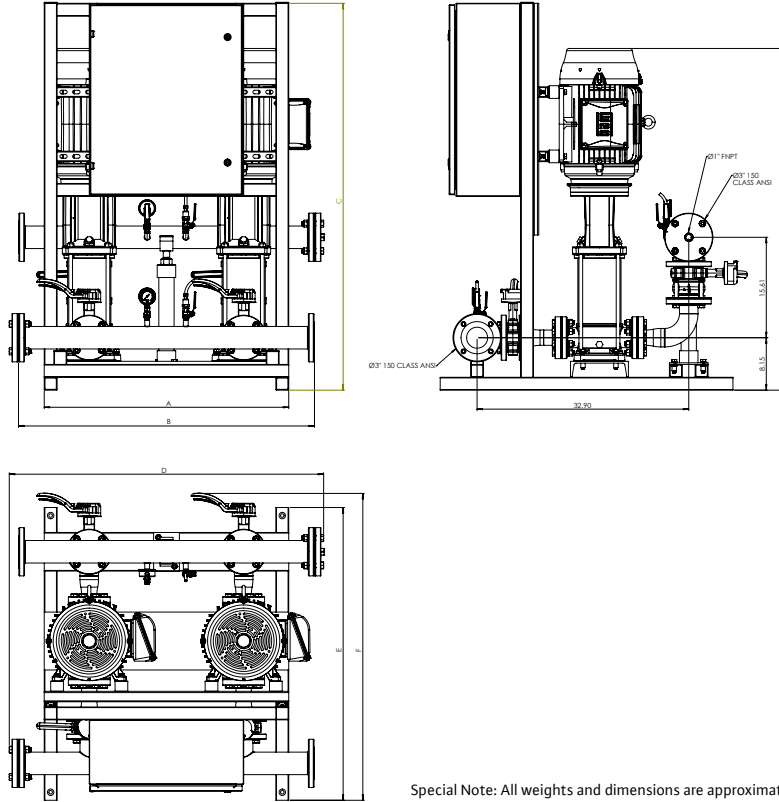
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Wilo-CO MVI - NSF 61/372 Pressure Boosting System



CO2 MVI-1SB-100

150# Discharge



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

CO2 MVI-1SB-100

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-1SB-100-1 | 3354742 | 3 | 208V-230V | ~1 IN / ~3 OUT | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 35.25 | 670.33 | 8.12-7.34 | 31.4 | |
| CO2 MVI-1SB-100-1 | 3354789 | 3 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 35.25 | 775.96 | 8.12-7.34 | 20.2 | |
| CO2 MVI-1SB-100-2 | 3354790 | 5 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 36.84 | 808.36 | 13.1-11.8 | 31.4 | |
| CO2 MVI-1SB-100-3 | 3354791 | 7.5 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 40.85 | 952.56 | 19.2-17.3 | 43-37 | |
| CO2 MVI-1SB-100-4 | 3354792 | 10 | 208V-230V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 44.18 | 885.33 | 25.4-23 | 57.6-49 | |
| CO2 MVI-1SB-100-5 | 3354793 | 15 | 208V-230V | ~3 | 3" 150# | 232 | 38 | 46 | 60.13 | 48.85 | 45.5 | 48.3 | 51.34 | 1333.56 | 38.5-34.8 | 83-77.4 | |
| CO2 MVI-1SB-100-6 | 3354794 | 15 | 208V-230V | ~3 | 3" 150# | 232 | 38 | 46 | 60.13 | 48.85 | 45.5 | 48.3 | 53.11 | 1339.56 | 38.5-34.8 | 83-77.4 | |
| CO2 MVI-1SB-100-7 | 3354795 | 20 | 208V-230V | ~3 | 3" 150# | 232 | 42 | 46 | 70.13 | 48.85 | 45.5 | 50.28 | 54.89 | 1303.89 | 50.2-45.4 | 106.4 | |
| CO2 MVI-1SB-100-1 | 3355079 | 3 | 460V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 35.25 | 670.33 | 3.67 | 10.6 | |
| CO2 MVI-1SB-100-2 | 3355080 | 5 | 460V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 36.84 | 702.73 | 5.9 | 17.4 | |
| CO2 MVI-1SB-100-3 | 3355081 | 7.5 | 460V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 40.85 | 825.33 | 8.67 | 34.2 | |
| CO2 MVI-1SB-100-4 | 3355082 | 10 | 460V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 44.18 | 885.33 | 11.5 | 29 | |
| CO2 MVI-1SB-100-5 | 3355083 | 15 | 460V | ~3 | 3" 150# | 232 | 38 | 46 | 60.13 | 48.85 | 45.5 | 47.69 | 51.34 | 1256.57 | 17.4 | 37.8 | |
| CO2 MVI-1SB-100-6 | 3355084 | 15 | 460V | ~3 | 3" 150# | 232 | 38 | 46 | 60.13 | 48.85 | 45.5 | 47.69 | 53.11 | 1262.57 | 17.4 | 37.8 | |
| CO2 MVI-1SB-100-7 | 3355085 | 20 | 460V | ~3 | 3" 150# | 232 | 38 | 46 | 60.13 | 48.85 | 45.5 | 47.69 | 54.89 | 1283.29 | 22.7 | 50.4 | |
| CO2 MVI-1SB-100-1 | 3355369 | 3 | 575V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 35.25 | 670.73 | 2.9 | 8 | |
| CO2 MVI-1SB-100-2 | 3355370 | 5 | 575V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 36.84 | 702.93 | 4.72 | 12.2 | |
| CO2 MVI-1SB-100-3 | 3355371 | 7.5 | 575V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 40.85 | 829.33 | 6.94 | 17.6 | |
| CO2 MVI-1SB-100-4 | 3355372 | 10 | 575V | ~3 | 3" 150# | 232 | 28 | 32.75 | 60.13 | 35.6 | 45.5 | 47.44 | 44.18 | 893.33 | 9.2 | 23.8 | |
| CO2 MVI-1SB-100-5 | 3355373 | 15 | 575V | ~3 | 3" 150# | 232 | 38 | 46 | 60.13 | 48.85 | 45.5 | 47.69 | 51.34 | 1245.56 | 13.8 | 32.4 | |
| CO2 MVI-1SB-100-6 | 3355374 | 15 | 575V | ~3 | 3" 150# | 232 | 38 | 46 | 60.13 | 48.85 | 45.5 | 47.69 | 53.11 | 1251.56 | 13.8 | 32.4 | |
| CO2 MVI-1SB-100-7 | 3355375 | 20 | 575V | ~3 | 3" 150# | 232 | 38 | 46 | 60.13 | 48.85 | 45.5 | 47.69 | 54.89 | 1273.56 | 18.2 | 43.8 | |

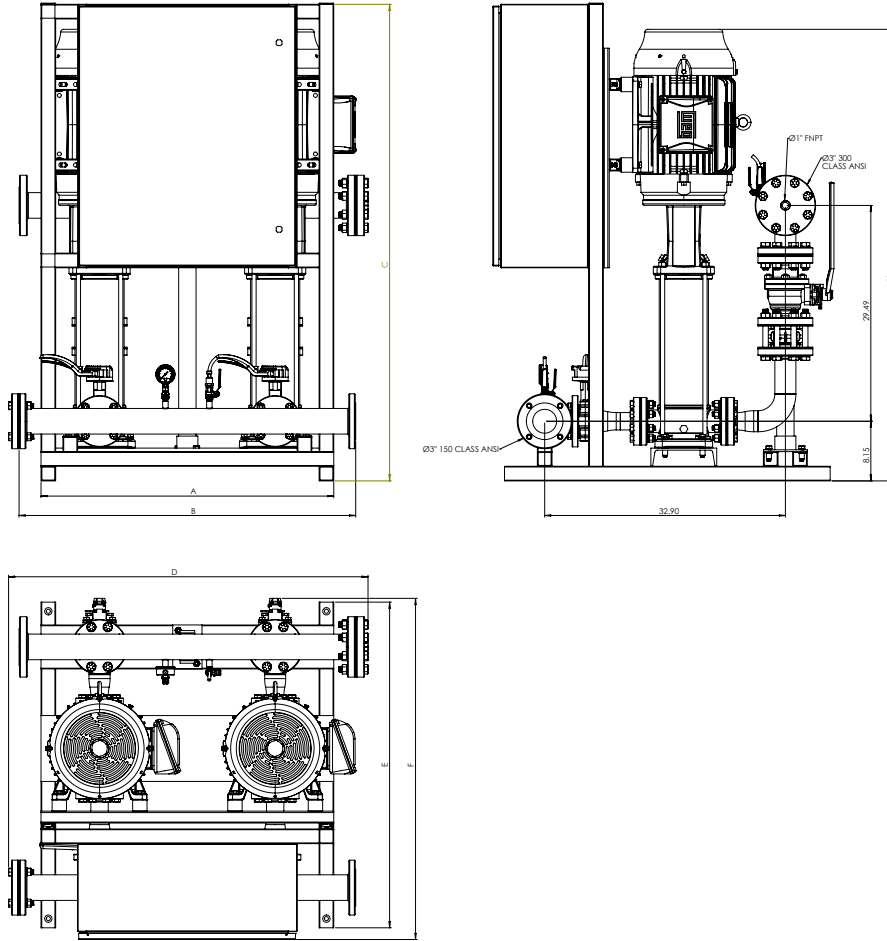
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Wilo-CO MVI - NSF 61/372 Pressure Boosting System



CO2 MVI-1SB-100

300# Discharge



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

CO2 MVI-1SB-100

| 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-1SB-100-8 | 3354796 | 20 | 208V-230V | ~3 | 3" 300# | 363 | 42 | 46 | 70.13 | 49.11 | 44.5 | 47.85 | 56.66 | 1404.17 | 50.2-45.4 | 106.4 | |
| CO2 MVI-1SB-100-10 | 3354797 | 25 | 208V-230V | ~3 | 3" 300# | 363 | 42 | 46 | 70.13 | 49.11 | 44.5 | 48.6 | 61.75 | 1558.5 | 63.0-57.6 | 131 | |
| CO2 MVI-1SB-100-8 | 3355086 | 20 | 460V | ~3 | 3" 300# | 363 | 40 | 46 | 65.13 | 49.11 | 44.5 | 45.86 | 56.66 | 1389.25 | 22.7 | 50.4 | |
| CO2 MVI-1SB-100-10 | 3355087 | 25 | 460V | ~3 | 3" 300# | 363 | 40 | 46 | 65.13 | 49.11 | 44.5 | 46.61 | 61.71 | 1624.07 | 28.8 | 59.6 | |
| CO2 MVI-1SB-100-8 | 3355376 | 20 | 575V | ~3 | 3" 300# | 363 | 40 | 46 | 65.13 | 49.11 | 44.5 | 45.86 | 56.66 | 1382.72 | 18.2 | 43.8 | |
| CO2 MVI-1SB-100-10 | 3355377 | 25 | 575V | ~3 | 3" 300# | 363 | 42 | 46 | 70.13 | 49.11 | 44.5 | 48.6 | 61.75 | 1544.5 | 23 | 52.4 | |