

# Submittal Data Sheet Wilo CO-Helix – Pressure Boosting System

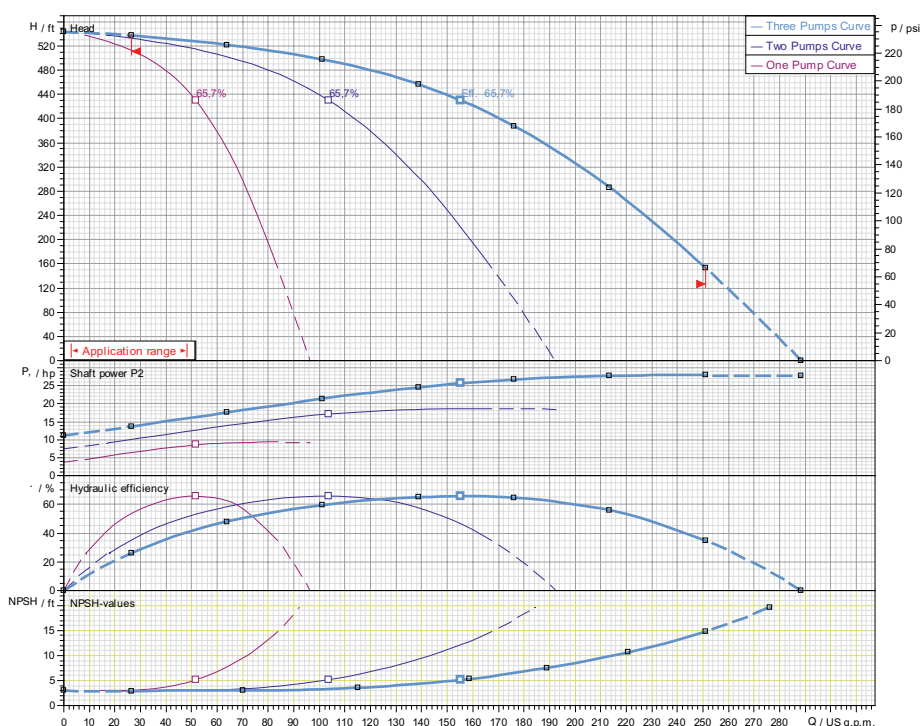


## CO-3 HELIX V50-11-1/10/VCE



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

| Tag # | Model #                    | Flow | Set PSI | Min. Inlet PSI | HP/Pump | Phase | Voltage | RPM |
|-------|----------------------------|------|---------|----------------|---------|-------|---------|-----|
|       | CO-3 HELIX V50-11-1/10/VCE |      |         |                |         |       |         |     |



| 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                 |
| Suction/Discharge Manifolds | AISI304 Stainless Steel                         |
| Check Valves                | 316 Stainless Steel, Non-slam, with EPDM seal   |
| Mechanical Seal             | Sleeve AISI316L / Spring Clips AISI304          |
| 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)<br>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

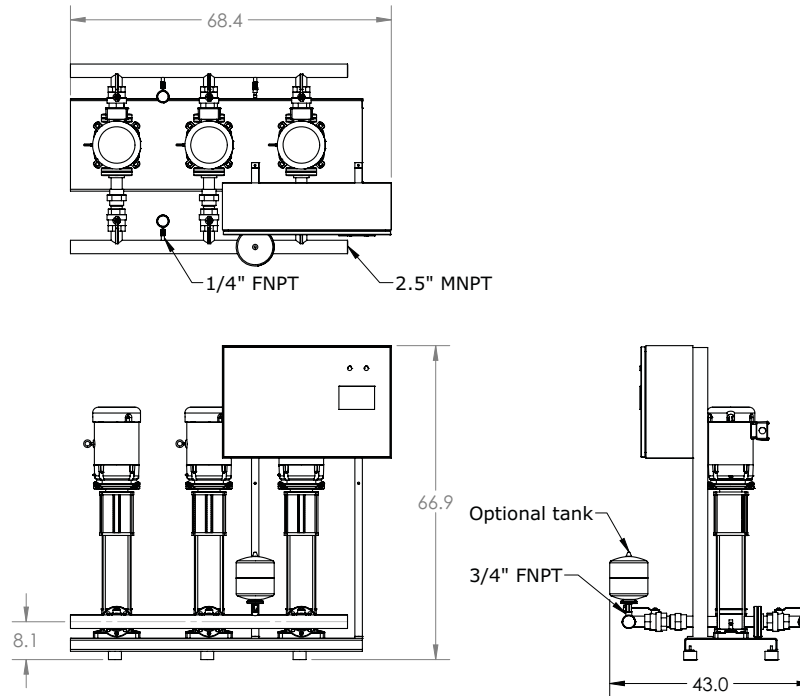
# Submittal Data Sheet

## Wilo CO-Helix – Pressure Boosting System



### CO-3 HELIX V50-11-1/10/VCE

208-230/460/575 V~3



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

### Dimensions and Weights

| Model                      | Voltage (V)       | H (in) | W (in) | L (in) | Dimensions-inches  |  |                |                     |   |  | Individual Pump Weight | Package Weight       |
|----------------------------|-------------------|--------|--------|--------|--------------------|--|----------------|---------------------|---|--|------------------------|----------------------|
|                            |                   |        |        |        | Header Flange Size | Suction / Discharge Pump Size (300 Class ANSI) | Gauge Tap Size | Transducer Tap Size | Hydronumatic Tank Fitting (Without Tank Option) | Hydronumatic Tank Fitting (With Tank Option) | Pump Weight (lbs)      | Package Weight (lbs) |
| CO-3 HELIX V50-11-1/10/VCE | 208-230/460/575 V | 66.9   | 68.4   | 43     | 2.5" MNPT          | 2"   | 1/4" FNPT      | 1/4" FNPT           | 3/4" MNPT x 3/4" FNPT                           | 3/4" MNPT x 3/4" FBSPT                       | 258                    | 1182                 |

### TEFC Motor Data

| Model                      | P2   | Phase | Voltage         | FLA (per pump)     | Pmax  |
|----------------------------|------|-------|-----------------|--------------------|-------|
|                            | (HP) | (~)   | (V)             | (A)                | (PSI) |
| CO-3 HELIX V50-11-1/10/VCE | 10   | 3     | 208-230/460/575 | 24.8-24.2/12.1/9.5 | 232   |