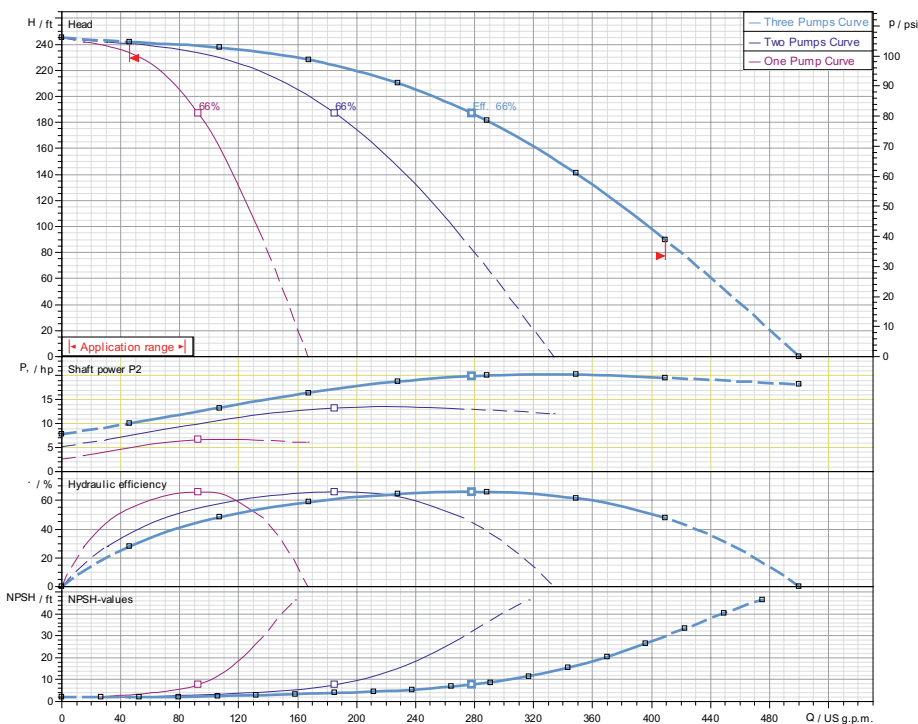


# 



### CO-3 HELIX V80-04-1/7.5/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 V80-04-1/7.5/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                                                     |

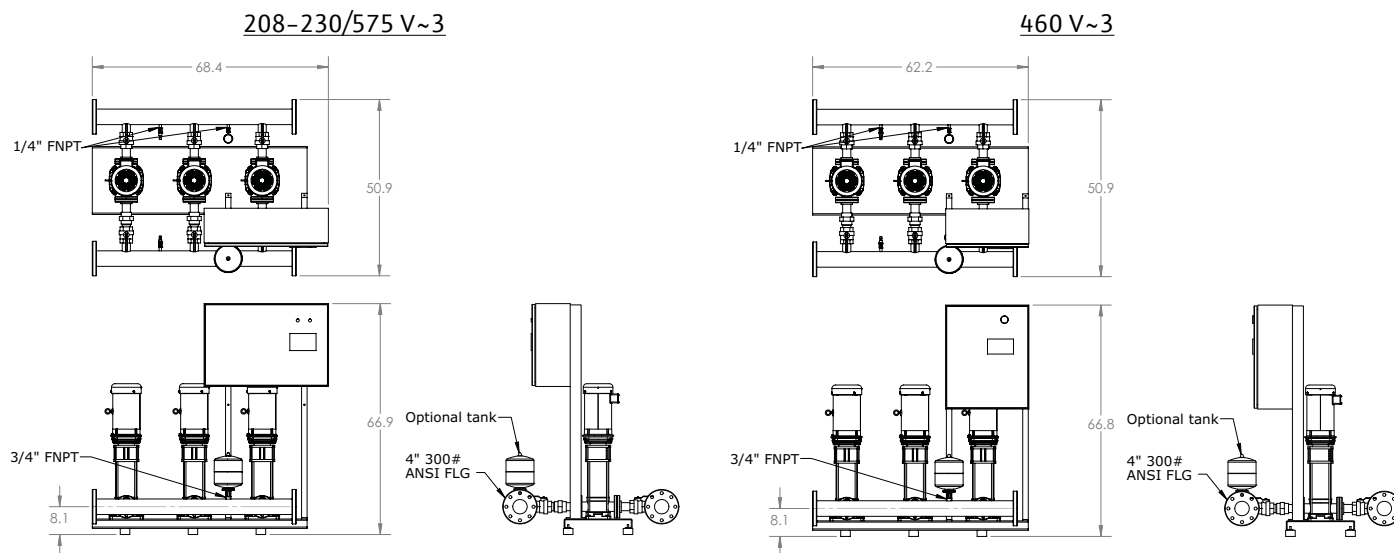
Approval Stamp

# Submittal Data Sheet

## Wilo CO-Helix – Pressure Boosting System



### CO-3 HELIX V80-04-1/7.5/VCE



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

#### Dimensions and Weights

| Dimensions-inches           |               |        |        |        |                     |                                                |                |                     |                                                 |                                              |  | Individual Pump Weight | Package Weight       |
|-----------------------------|---------------|--------|--------|--------|---------------------|------------------------------------------------|----------------|---------------------|-------------------------------------------------|----------------------------------------------|--|------------------------|----------------------|
| Model                       | Voltage (V)   | H (in) | W (in) | L (in) | 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 V80-04-1/7.5/VCE | 208-230/575 V | 66.9   | 68.4   | 50.9   | 4" - 300 Class ANSI | 2"                                             | 1/4" FNPT      | 1/4" FNPT           | 3/4" MNPT x 3/4" FNPT                           | 3/4" MNPT x 3/4" FBSPT                       |  | 133                    | 883                  |
|                             | 460 V         | 66.8   | 62.2   | 50.9   |                     |                                                |                |                     |                                                 |                                              |  |                        |                      |

#### TEFC Motor Data

| Model                       | P2 (HP) | Phase (~) | Voltage (V)     | FLA (per pump) (A) | Pmax (PSI) |
|-----------------------------|---------|-----------|-----------------|--------------------|------------|
| CO-3 HELIX V80-04-1/7.5/VCE | 7.5     | 3         | 208-230/460/575 | 17.2-16.2/8.1/6.8  | 232        |