

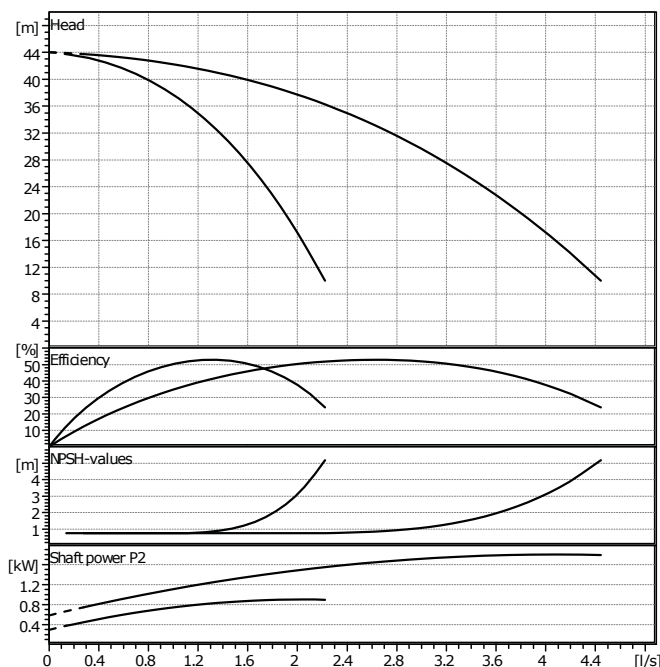
**BOSS-2 MULTIV  
404/EC2-VFC-1PH  
80460527**

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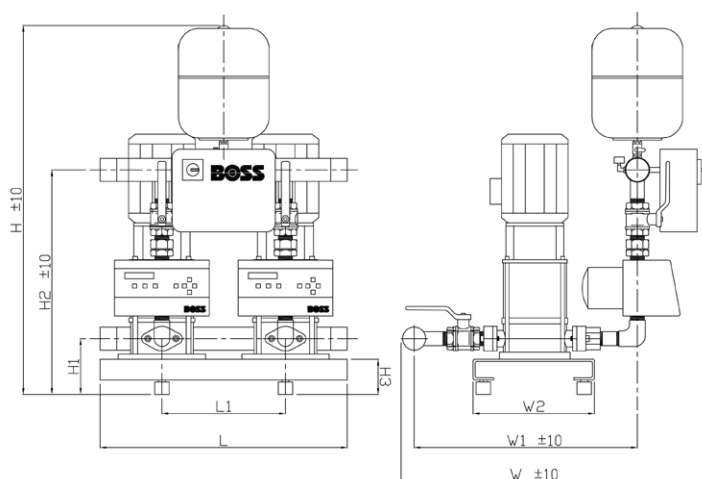
| Item | Description  |  |  |  |
|------|--|--|--|--|
|      | <p><b>BOSS-2 MULTI V 404/EC2-VFC-1PH<br/>80460527</b></p> <p>Description:<br/>Fully automatic self contained two pump booster set designed to provide reliable constant pressure water supply. The set is quiet running, making it suitable for use in domestic, commercial and industrial applications. The control system is based on proven electronic technology giving reliability and simple on site adjustment.</p> <p>Accessories:</p> <p>Commissioning<br/>80418417- First item on site<br/>80418428- Subsequent items on site</p> <p>80460357- BOSS CAVSA Valve</p> <p>Operational Cycle:<br/>System pressure is maintained by a hydraulic accumulator and monitored by integrated pressure sensor, keeping the system ready for instant draw off. When demand causes pressure to drop the duty pump starts and will ramp up in speed to match the system demand. The pump will continue to run, varying its speed to match the varying demand of the system. If the demand exceeds capacity of duty pump, the assist pump will ramp up in speed ensuring duty point is maintained. When the system demand reduces to zero. the pumps will ramp down until they stop. If the duty pump should fail, the assist pump will start and run until pressure is restored. The Duty pump is rotated between pumps after each operational cycle to ensure even wear.</p> <p>Specification:<br/>Pumps: Vertical multi stage design of stainless steel construction, WRAS approved.<br/>Motor: Totally enclosed fan cooled (TEFC). IPSS, class F. 230 volts, three phase, direct on line (DOL) starting via pipe mounted inverter. IE2 Motor Efficiency.<br/>Inverter: 2x dedicated pipe mounted electro controllers with two line back lit LCD display and user interface. Contains electronic regulation system utilising pressure, flow sensors and frequency inverter to maintain constant pressure according to the set point pressure (automatic mode). Hand mode also available for pump testing. Electro Controller protects pump against: dry running (if float switch not used). over current, too high water temperature. frost, short-circuits, over/under voltages<br/>Pipe Work: 304 stainless steel. sized in accordance with the overall hydraulic performance of the unit.<br/>Valves: Nickel-plated brass full flow isolation and non- return valves.<br/>Accumulator: 1x 8 litre MWP 8 bar, WRAS approved c/w through flow shutoff valve for testing and draining.<br/>Control Panel: IPSS, 230v terminal box with individual pump MCB's and door interlocked isolator. Additional wiring box with volt free contact for general fault indication.<br/>Inverter Alarms: Dry running, over-current, high water temp, frost protection, short circuit, over and under voltage.<br/>Display: System pressure, set point</p> |  |  |  |

**BOSS-2 MULTI V  
404/EC2-VFC-1PH  
80460527**

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Optimum selection band (but not limited to):  
Flow: 0.4 - 3.7  
Head: 16 - 36



Requested data

|                     |             |                    |
|---------------------|-------------|--------------------|
| Flow                | 0           | l/s                |
| Head                | 0           | m                  |
| Fluid               | Water, pure |                    |
| Fluid temperature   | 20          | c                  |
| Density             | 998.3       | kg/m <sup>3</sup>  |
| Kinematic viscosity | 1.005       | mm <sup>2</sup> /s |
| Vapor pressure      | 2.337       | kPa                |

Pump data

|                        |                                |
|------------------------|--------------------------------|
| Make                   | BOSS                           |
| Type                   | BOSS-2 MULTI V 404/EC2-VFC-1PH |
| Design                 | Booster Set                    |
| Pumpe type             | Multi-pump set                 |
| Pressure rating        | PN10                           |
| Min. fluid temperature | 0 C                            |
| Max. fluid temperature | 40 C                           |

Hydraulic data (duty point)

|                |      |       |
|----------------|------|-------|
| Flow           | 0    | l/s   |
| Head           | 0    | m     |
| Speed          | 2900 | 1/min |
| Shaft power P2 |      | kW    |
| NPSH           |      | m     |

Materials / Shaft seal

|                 |                |
|-----------------|----------------|
| Housing         | 1.4301         |
| Shaft           | 1.4301         |
| Impeller        | 1.4301         |
| Stage chambers  | 1.4301         |
| Mechanical seal | Carbon/ceramic |
| Unit pipework   | 1.4301         |

|                |        |
|----------------|--------|
| Suction side   | 2" BSP |
| Discharge side | 2" BSP |
| Weight         | 95 kg  |

Electrical Data

|                              |                |       |
|------------------------------|----------------|-------|
| Rated power P2               | 2.2            | kW    |
| Nominal speed                | 2900           | 1/min |
| Rated voltage                | 3~230 V, 50 Hz |       |
| Max. current/Min. protection | 3.0/32.0       | A     |
| Degree of protection         | IP55           |       |
| Permitted voltage tolerance  | +/- 10%        |       |

|                              |          |
|------------------------------|----------|
| Item no. of standard version | 29990442 |
|------------------------------|----------|