

# PRODUCT DATA SHEET

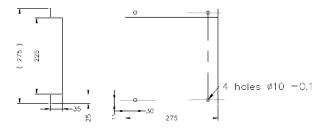
SUMMIT SERIES VERTICAL MULTISTAGE PUMP KIT TRANSDUCER CONTROLLED

BIA-1VMS5/10M-TRAN • 812326



#### INCLUDES

- VMS Pump
- Galvanised single pump base
- Manifold (304 Stainless Steel)
- Stainless Steel Counter Flanges
- Gaskets to suit Counter Flanges
- Watermarked Spring Check Valve
- 304 SS Pressure side isolation Ball Valve
- 30 Bar Liquid Filled Pressure Gauge
- BPT-18 25 bar pressure tank with 304 SS 25mm isolating Ball Valve
- NXT SPC1-22 Control panel
- BIA VMS 16bar 4-20mA pressure transducer



Base 275 x 275mm x 35mm high

### PRODUCT INTRODUCTION

BiANCO NXT Summit Series Pressure Transducer Controlled units are an all-in-one solution offering a professional quality range of vertical multistage pumps, engineered for exceptional efficiency, durability and dependable performance.

Operation is controlled by a 4-20mA Pressure Transducer connected to a BiANCO NXT SPC (Single Pump Controller) allowing for precise digital pressure adjustment.

Versatile and cost-effective, SUMMIT SERIES VMS solutions are designed for performance, reliability and ease of use.

#### PUMP TECHNICAL DATA

| RATED FLOW [M3/H]       | 4m3/hr                       |  |
|-------------------------|------------------------------|--|
| MAX FLOW                | 6m3/hr                       |  |
| MAX HEAD                | 110.7M                       |  |
| OPTIMUM OPERATING RANGE | 2.41m3/hr @ 102.4m 39.4% eff |  |
|                         | 5m3/hr @ 89.9m 56.6% eff     |  |
| WORKING AIR TEMP        | 0°C - 40°C                   |  |
| LIQUID TEMPERATURE      | -15°C - 120°C                |  |
| HIGHEST EFFICIANCY      | 58.4%                        |  |
| MAXIMUM PUMP PRESSURE   | 33 bar                       |  |
| NET WEIGHT (KG)         | 38kg                         |  |

| RATED VOLTAGE/CURRENT | Single phase 230V +10% - 6% |
|-----------------------|-----------------------------|
| RATED CURRENT         | 11.8 amps                   |
| CAPACITOR             | 40uF                        |
| POWER (KW)            | 2.2kW 2 pole                |
| MOTOR IP RATING       | IP55                        |
| MOTOR INSULATION      | Class F                     |
| MOTOR EFFICIENCY STD  | I.E.3                       |
| MOTOR EFFICIENCY      | 84.2%                       |
| cos Ø                 | 0.84                        |
| MECHANICAL SEAL       | AS-L-12                     |
| OUTLET DIN FLANGE     | DN32                        |

| DEFAULT CUT OUT    | 10.2 bar |
|--------------------|----------|
| DEFAULT CUT IN     | 8.4 bar  |
| OVERPRESSURE ALARM | 11.0 bar |





# SUMMIT SERIES VERTICAL MULTISTAGE PUMP KIT TRANSDUCER CONTROLLED

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# **CONTROLLER DETAILS**

The BiANCO NXT-SPC (Single Pump Controller) provides control and protection for an individual single phase pump.

The controller is simple to operate. The user not only enjoys superior control and protection of the pump but the user display provides user information about the running state of the system.

By digitally monitoring the running current, the response time of the BiANCO NXT SPC is superior to traditional analogue overload methods.

NXT-SPC has 2 x passive dry contacts and is equipped with a RS485 modbus interface to connect to a BMS

- Manual or Automatic operation
- NXT-SPC has an audible alarm and a flashing light to indicate an alarm state. It supports an external alarm unit
- Pump accumulated running time memory
- Pump start / stop delay time setting
- Last 5 error log



## PROTECTION FUNCTIONS

Protection functions can be set, enabled or disabled independently

- Over voltage
- Under voltage
- Dry Run (under current)
- Overload (over current)
- Pump stall
- Open phase protection
- Pump 'Anti-seize' function (96 hr default)



#### CONTROL INPUT

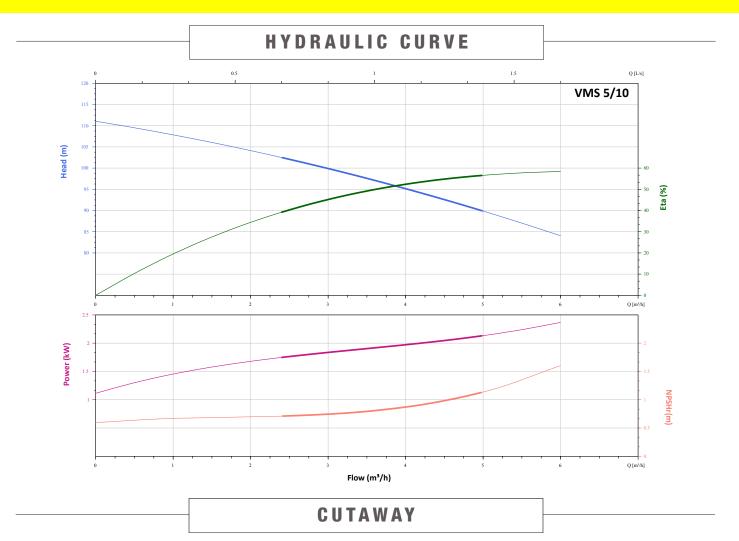
• 4-20mA level or pressure transmitter

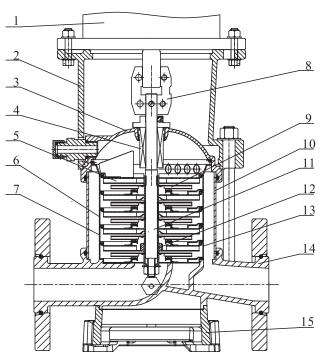
#### TECHNICAL DATA

| RATED VOLTAGE        | 1Ph 230V +10/-6% |
|----------------------|------------------|
| MAX. AMPERAGE        | 18 amps          |
| DEGREE OF PROTECTION | I.P. 65          |

| WORKING HUMIDITY     | 20% - 90% RH          |
|----------------------|-----------------------|
| OPERATING TEMERATURE | -25 degC to 55 deg C  |
| UNIT DIMENSIONS      | 342mm x 253mm x 130mm |



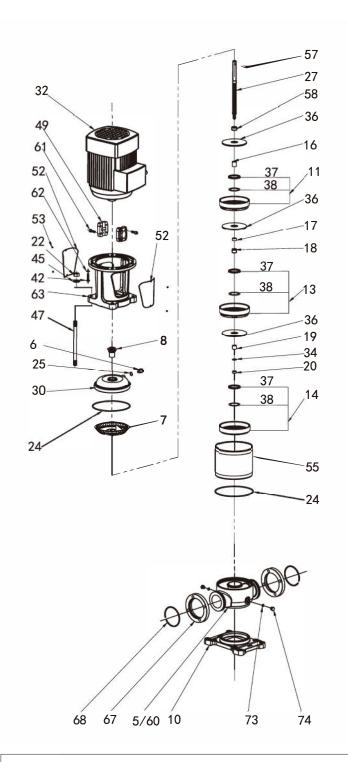




| 1  | Motor                | /                                   |
|----|----------------------|-------------------------------------|
| 2  | Bracket              | Ductile Cast Iron                   |
| 3  | Seal Base            | Stainless / Ductile Cast Iron       |
| 4  | Mechanical Seal      | AS-L-16                             |
| 5  | Top Diffuser         | Stainless Steel                     |
| 6  | Diffuser             | Stainless Steel                     |
| 7  | Support Diffuser     | Stainless Steel                     |
| 8  | Coupling             | Stainless Steel                     |
| 9  | Impeller             | Stainless Steel                     |
| 10 | Cylinder             | Stainless Steel                     |
| 11 | Shaft                | Stainless Steel                     |
| 12 | Intermediate Bearing | SIC / WC                            |
| 13 | Inducer              | Stainless Steel                     |
| 14 | Inlet/Outlet Chamber | Stainless Steel / Ductile Cast Iron |
| 15 | Base                 | Ductile Cast Iron                   |



# SUMMIT SERIES VERTICAL MULTISTAGE VMS TRANSDUCER CONTROLLED BIA-1VMS5/10M-TRAN • 812326



- 6 Air vent plug
- 7 Top diffuser
- 8 Mechanical seal
- 10 Base plate
- 11 Diffuser
- 13 Support diffuser
- 14 Inducer
- 16 Impeller sleeve
- 17 Short impeller sleeve
- 18 Wear ring
- 19 Inlet impeller cover
- 20 Lock nut
- 22 Nut
- 24 O-ring
- 25 O-ring
- 27 Pump shaft
- 30 Seal base 32 Motor
- 34 Washer
- 36 Impeller
- 37 Choma cover
- 38 Choma
- 42 Blot
- 45 Washer
- 47 Stay bolt
- 49 Coupling 52 Coupling guard
- 53 Screw
- 55 Cylinder
- 57 Shaft pin
- 58 Locating sleeve
- 60 Common inlet and outlet chamber
- 61 Socket head cap screw
- 62 Washer
- 63 Bracket
- 67 Flange
- 68 Flange retaining ring
- 73 O-ring
- 74 Drain plug

# WARRANTY / CERTIFICATIONS







