

# pumps

## PRODUCT DATA SHEET

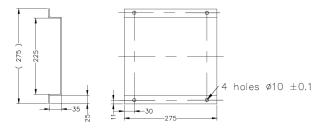
SUMMIT SERIES VERTICAL MULTISTAGE PUMP KIT TRANSDUCER CONTROLLED

BIA-1VMS3/18M-TRAN • 812323



#### 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 25bar 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]	2m3/hr
MAX FLOW	3.5m3/hr
MAX HEAD	159.2M
OPTIMUM OPERATING RANGE	1.2m3/hr @ 149.2m 31.4% eff
	2.5m3/hr @ 128.3m 45.9% eff
WORKING AIR TEMP	0°C - 40°C
LIQUID TEMPERATURE	-15°C - 120°C
HIGHEST EFFICIANCY	51.5%
MAXIMUM PUMP PRESSURE	33 bar
NET WEIGHT (KG)	41.5kg

RATED VOLTAGE/CURRENT	Single phase 230V +10% - 6%
RATED CURRENT	11.8 amps
POWER (KW)	2.2kW 2 pole
CAPACITOR	40uF
MOTOR IP RATING	IP55
MOTOR INSULATION	Class F
MOTOR EFFICIENCY STD	I.E.3
MOTOR EFFICIENCY	85.9%
cos Ø	0.85
MECHANICAL SEAL	AS-L-12
OUTLET DIN FLANGE	DN25

DEFAULT CUT OUT	15.0 bar
DEFAULT CUT IN	10.5 bar
OVERPRESSURE ALARM	16.0 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

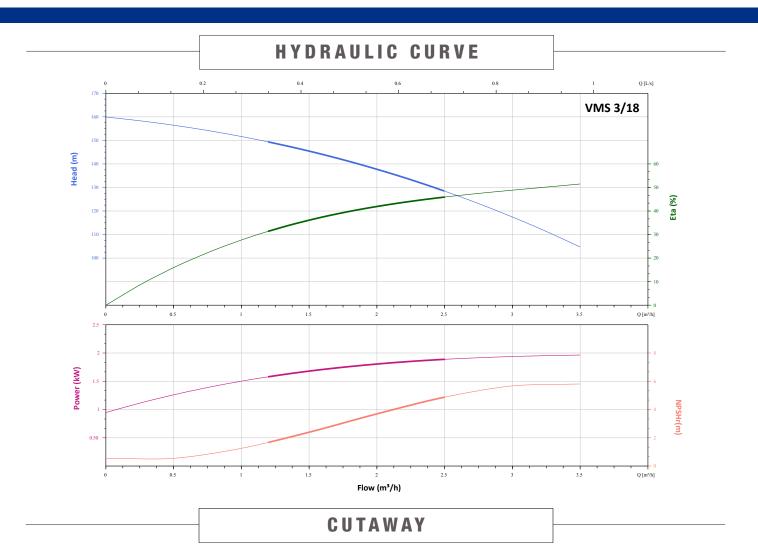
• 4-20mA level or pressure transmitter

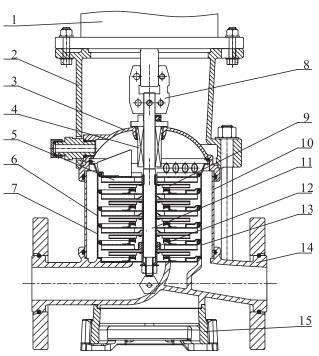
#### TECHNICAL DATA

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



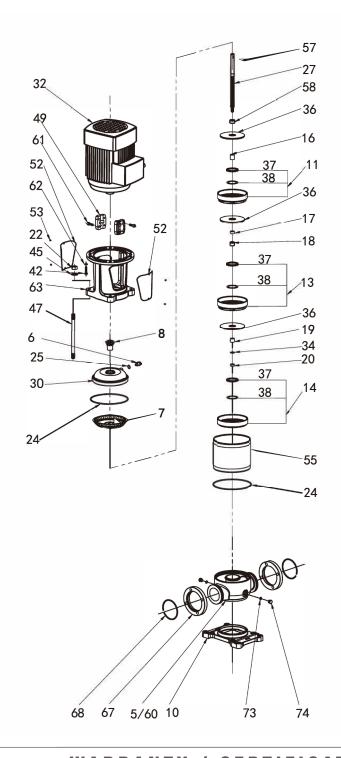




Motor	/
Bracket	Ductile Cast Iron
Seal Base	Stainless / Ductile Cast Iron
Mechanical Seal	AS-L-16
Top Diffuser	Stainless Steel
Diffuser	Stainless Steel
Support Diffuser	Stainless Steel
Coupling	Stainless Steel
Impeller	Stainless Steel
Cylinder	Stainless Steel
Shaft	Stainless Steel
Intermediate Bearing	SIC / WC
Inducer	Stainless Steel
Inlet/Outlet Chamber	Stainless Steel / Ductile Cast Iron
Base	Ductile Cast Iron
	Bracket Seal Base Mechanical Seal Top Diffuser Diffuser Support Diffuser Coupling Impeller Cylinder Shaft Intermediate Bearing Inducer Inlet/Outlet Chamber



# SUMMIT SERIES VERTICAL MULTISTAGE VMS TRANSDUCER CONTROLLED BIA-1VMS3/18M-TRAN • 812323



- 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







