BARRACOUTA

Techsys Corporation

Main Features. (Version 1811.00 Onwards)

- An industry proven dedicated pump control system designed to operate fixed speed pumps.
- Complete control package.
  - Connect power, wire in the pumps and attach the pressure tube, level transducer or floats.
- Supplied equipment.
  - Barracouta controller
  - IP65 Enclosure
  - Mains Isolator
  - Circuit breakers
- Optional equipment.
  - 25Bar pressure transducer 4-20mA
  - 3.5Mtr Submersible level transducer.
  - Air pump level system.
  - Floats.
- Capable of operating up to 2 pumps.
- Real English Menus with a 2 Line 16 characters LCD Display.
- Pump enabled and run indicators.
- Easy navigation menu system with password access control.
- For clarity Menus disappear when an option or function is not selected or required.
- Simple push button actions to enable/disable or manually operate each pump.
- Inbuilt settable time clock.
- Remote Control capability via digital input or telemetry.
- SCADA Compatible Modbus/RS485 for remote data acquisition, download or control.
- Two control modes.
  - One Cut In and Cut Out pressure/level for all pumps with time delayed starting of pumps.
  - Individual Cut In and Cut Out pressures/levels for each pump.
- Data protection or user entry via access code.
- Eight programmable inputs for user selectable functions with adjustable delay.
- Two programmable voltage free outputs for BMS interfacing or user selectable output functions.
- Selectable Duty /Standby and Backup pump operating mode options.
- Programmable spin-up mode for any pump that has not recently run. Adjustable Interval & time.
- Temporary mute of the buzzer on key press actions for silent operation.
- Continuous display of the pressure/level when fitted with a transducer or air pump system.
- Simple scaling and zeroing for all types of sensors or transducers.
- Data logs for local or remote viewing.
  - Total system flow.
  - Resettable Hours run and pump starts for each pump
  - Status of all inputs or outputs.
  - Highest pressure/level
  - Communications status
- Fault logging.
- Optional Low and High Pressure/Level action options.
  - Shutdowm
  - Alarm only
  - No Action.
- Adjustable Low Pressure/Level setting with adjustable delay for the Low Pressure/Level Shutdown.
- User adjustable Cut In (Restart) Pressure/Level setting.

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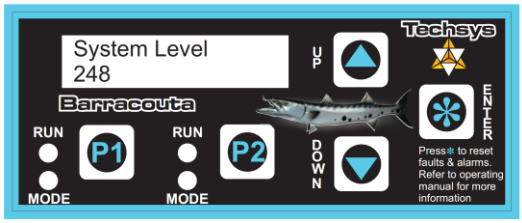
- Also has an adjustable next pump Cut In (ON) delay timer
- ❑ User adjustable Cut Out (Turn off pumps) Pressure/Level setting.
  - Also has an adjustable next pump Cut Out (OFF) delay timer
- ❑ Adjustable High Pressure/Level setting with adjustable delay for the High Pressure/Level Shutdown.
- ❑ A High Pressure/Level shutdown displays the pressure/level that exceeded the limit until the system is reset.
- ❑ Individual pump fault protection shut down option with adjustable delay.
- ❑ Individual pump protection option with auto-resetting and adjustable delay.
- ❑ Anti cycle options.
  - Pump minimum run time.
  - Maximum starts per hour.
- ❑ System Restart Delay Timer.
- ❑ System No Flow Input with adjustable timer.
- ❑ Pump Rotation Options:
  - Normal Full Autorotation will occur during any system restart.
  - Fixed Pump Start. The same pump starts on every restart.
  - Pump with the lowest hours to start next.



- ❑ Pause Input.
  - Two options available.
    - Pause all pumps including the Jockey pump.
    - Pause the main pumps and allow the Jockey pump to run.
- ❑ Low Level Input option.
  - For use with floats or similar on pressure applications. Displays "Paused - Low-Level".
- ❑ User Access Code Features
- ❑ Telemetry
  - The Barracouta is capable of communicating with an external telemetry system based on digital Inputs and/or Outputs from other devices.
  - A serial communications port is provided for direct connection to SCADA or BMS system for access to the Barracouta operating parameters. This is via RS485 MODBUS RTU protocol. A full list of register addresses can be provided.
- ❑ Digital Outputs
  - The Barracouta has 2 programmable outputs that can be selected for a variety of functions. They are rated to 5 amps 240VAC with change over contacts.
- ❑ Digital Inputs
  - The Barracouta has 8 programmable voltage free inputs that can be selected for a variety of functions.
- ❑ Four programmable Start and Stop times for system operation.

Pricing Information

Configuration for all systems below - 2 Pump DOL, IP65 Plastic enclosure, Neon Alarm light & Buzzer
240 Systems have motor rated circuit breakers and designed to be used with motors fitted with internal thermal overloads.
415V System have motor protection breakers which include thermal & magnetic trip.

	240V Single Phase			415V Three Phase				
Size- KW	1.1	1.5	2.2	0.75	1.5	2.2	4	5.5
Motor O/L Size	10A	16A	16A	2.5A	4A	6A	10A	13A
Model Number	**BL-S 2-1.1/240**	**BL-S 2-1.5/240**	**BL-S 2-2.2/240**	**BL-S 2-0.75**	**BL-S 2-1.5**	**BL-S 2-2.2**	**BL-S 2-4**	**BL-S 2-5.5**
List Price								

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Outline of available menus.

- System set pressure/level.
- Current system flow rate.
  - Fault History menu.
    - Readouts for the last five (5) faults.
  - Pump Data Log.
    - Hour Run counters for each pump.
    - Pump Start counters for each pump.
    - Total starts in the last hour.
    - Status of all inputs and outputs.
    - Controller temperature.
    - Communications status monitor.
  - Settings.
    - Low pressure/level shutdown.
    - Cut In pressure/level.
    - Cut Out pressure/level.
    - High Pressure/level Limit/Alarm/Shutdown.
    - 3 Optional pressure/level cut in and cut out settings.
    - Pressure/level trips for activating digital outputs.
  - Timing.
    - Low pressure/level shutdown delay.
    - Cut In delay.
    - Cut Out delay.
    - High Pressure/level Shutdown delay.
    - Individual and System NO Flow input delay.
    - Delays for general inputs.
    - Pressure/level trip and flow trip delay for activating digital outputs.
  - Configuration.
    - Operating mode. - (Pressure or Level or Multi Level)
    - Number of pumps on the system.
    - Pressure/level transducer zero and scaling.
    - User Access Code.
    - Serial communications settings.
  - Independent Jockey Pump.
    - Cut In pressure/level.
    - Cut Out pressure/level.
    - Run On time
    - Cut In delay time
  - Outputs (2) All individually programmable to one of the options below.
    - Shutdown Fault.
    - Low Pressure/level Fault.
    - High Pressure/level Fault.
    - Any Alarm.
    - Pump 1-2 Run.
    - Pump 1-2 Fault.
    - System Paused.
    - Any Pump Shutdown.
    - Any Pump Running.
    - No Flow Shutdown.
    - Pressure/level Trip
    - Alternate Trip.
    - Aux Output 1-2.

- Inputs (8) All individually programmable to one of the options below.
  - Alternate No 2 Cut In – Cut Out settings.
  - Alternate No 3 Cut In – Cut Out settings.
  - Pump 1-2 Protect(Pause).
  - Pump 1-2 Stop.
  - Pump 1-2 Manual Run.
  - Cycle pumps.
  - Reset.
  - No Flow.
  - Aux Input 1-2
  - Cut In 1
  - Cut In 2
  - Cut Out 1
  - Cut Out 2
  - Low Limit
  - High Limit

Standard System Specifications.

Item	Description
Power supply	Control - 24 VDC- 20mA min 120mA max
External transducer power supply	24 VDC- 50mA max. Auto reset fuse protected
EMC/ EMI filtering	Designed to minimise conducted and radiated emissions.
Standard Transducer	N/A
Time based functions	±5% of real time
Output Relays	5 amp 250VAC changeover software configurable
Switched inputs	Voltage free - internal supply 24VDC - read threshold - 2mA
Operating temperature	0 to 50 degC
Enclosure	IP65
Contactors	Rated voltage - 690Vac Coil – 240VAC cycles - Mechanical. - 10x 10^6 Electrical. - 2 x 10^6 cycles/hr - 3600 auxiliary contacts - 1 x NO Standard - IEC947
Motor circuit breakers	Standard - IEC947 – Start current 10x FLC
Wiring	Standard - AS3000
Input supply Voltage - 3 phase	230 & 400V Options
Input supply tolerance - 3 phase	-20% + 10%
Input frequency range	48 to 62 Hz
Enclosure size	320W x 360H x 140D (mm)
Dimensions including light, buzzer & isolator.	360W x 410H x 140D (mm)
Average weight	4.5KG

All options are available with every controller. Some options will require extra hardware or connection/s to perform the desired task.

Controller Module Specifications.

- Size.
  - 10CM Wide x 19CM High x 6CM Deep
- Weight.
  - 200 Grams
- Standard supply voltage.
  - 24VDC +/- 10%
- Optional supply voltage.
  - 18VAC +/- 10%
- Power consumption.
  - 2W Typical