

# Applications in the water segment

## Universal Motor Controller UMC100.3



### Modular design for best performance

- Combines full protection and flexible control of pump motors
- Thanks to its modularity it can be flexibly adjusted
- Covers the whole range from small standalone applications up to very large systems with central control and supervision through a control system
- Suitability proven in numerous pump station and water supply projects worldwide



### Motor protection

All current and voltage based motor protection features are available, e.g.

- Dry-run
- Underload and overload based on active power or current measurement
- Wrong direction of operation
- Phase loss and imbalance
- Too frequent starts
- Earth fault



### Diagnostics

All relevant process and diagnostic data is available on the operator panel and transferred to the control system via fieldbus. Fault messages are shown as clear text. User specific messages can also be defined.

- Current
- Voltage
- Load
- Energy
- Total Harmonic Distortion (THD)
- Fault, warning, status



### Communication

The UMC100.3 supports the most common fieldbus and ethernet protocols. All motor control and protection functions are also fully functional in standalone operation mode.

- Profibus® DP
- DeviceNet™
- Modbus® RTU
- EtherNet/IP™
- Modbus® TCP
- PROFINET® IO



### Motor control

- Integrated, easy to use motor starter functions
- Additionally, programmable logic available, e.g. for synchronizing pumps and pump cleaning sequences

# Optimized for use in water applications

such as pumping stations, fresh and  
wastewater, water treatment,  
desalination and irrigation

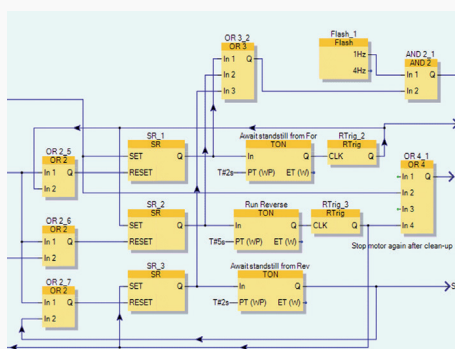


01 Amanzimtoti waste water treatment works in Durban/South Africa

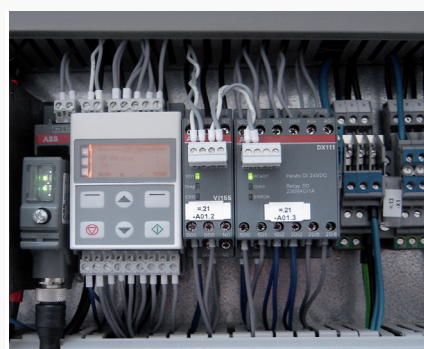


02 Panel from Amanzimtoti waste water treatment works

## Examples of water applications



03 Application with programmable logic for pump cleaning



04 Switchboard of a pumping station in Germany

