

# UWO - Rainwater Management Unit

## PowerTwin



- For use in buildings with 15 — 40 WCs
- Integrated and compact floor mounted appliance with high performance components
- Simple installation with four plumbing hook-ups and three plug and socket connections for controls
- Dual pressure pumps and optional loading pump
- 34L mainswater break tank to EN1717
- Advanced logic control with simple user config
- BMS contacts
- Tank contents gauge



### UWO–PowerTwin

Appliance based, integrated, rainwater supply and management unit for automatic control of rainwater distribution in medium sized buildings. Complete appliance with measurement, switching and control tasks. The PowerTwin eliminates onsite construction of manual control systems and provides a simple, single location for maintenance and fault diagnostics. Optional enclosure for the steel skid with removable panels for service access.

### Technical

Designed to transport clear water, such as rainwater and cooling or chilled water with automatic mains water backup and pump control

pump manufacturer type	Nocchi (Pentair) 2 x pressure (optional) 1 x loading
power supply	1~230V (11-16A) 3~400V (6-9A)
working temperature	5 - 40°C
delivered flow	6 - 10m <sup>3</sup> /hr
nominal height	36 - 60m
motor power	0.8 - 1.0kW
max. pressure	7bar

### Functional Description

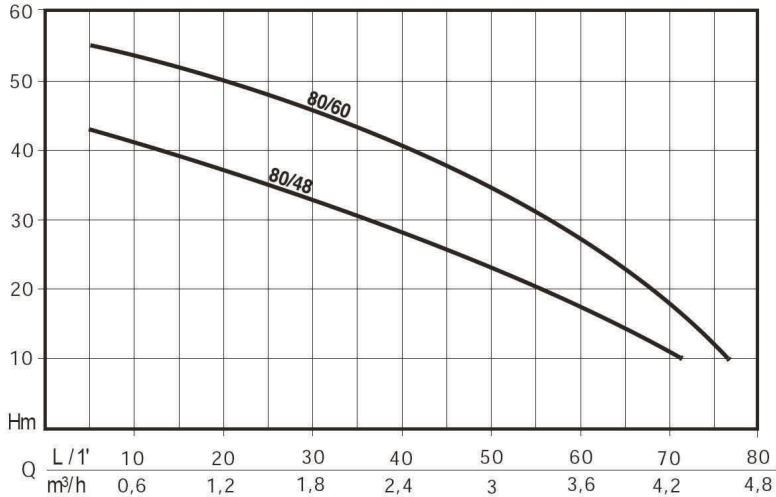
The UWO PowerTwin rainwater management appliance with automatic switching between rainwater and mainswater during periods of low rainfall. No mainswater is wasted due to the appliance mounted break tank that avoids feeding water into the main underground.

Double pump unit for direct pressurised supply from a range of Nocchi multistage centrifugal pumps. Alternate pump operation for shared work load or dual pump operation during high demand. User selectable start and stop pressure points for both pumps from 2.8 - 5.5bar. Dry run protection for both pumps. Optional tank located loading pump to feed the pressure pumps when distances >15m from the tank to controls are required. Auto mainswater supply in the event of low rainfall with backflow prevention to EN1717. Mainswater inlet float valve WRAS approved.

LCD display for parameter readings: Fill level display for main tanks, fault notice for pressure pumps, fault notice for back pressure and overflow of intermediate tank. Manual switching to mains water only operation.

# PowerTwin

## Pump Performance—pressure pump x 2



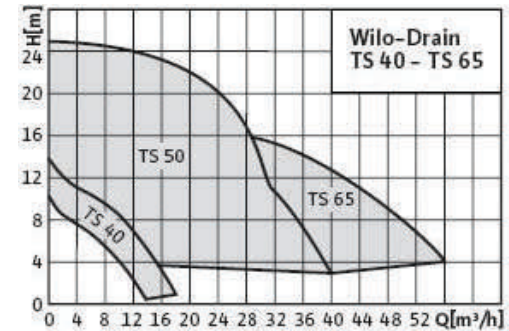
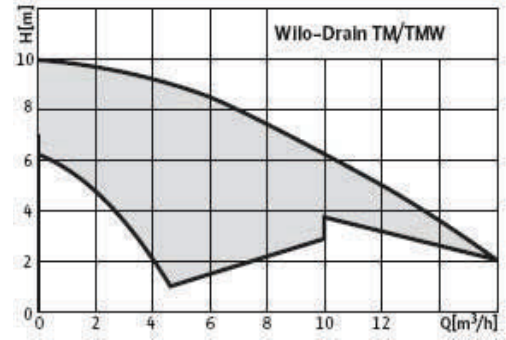
Std pressure pump model 80/60

## Principle Components

Pumps	Nocchi (see pump datasheets)
Motorised Vale	24 VDC
Pressure switch	G1
Flow switch	Stuart Turner
Controller	RVM 5.17
Break tank	34L PE
Tank gauge	4-20mA
Chassis	Steel tube (optional enclosure)
Mounting	Floor — 4 x anti-vibration pads

## Pump Performance— (optional)

loading pump x 1



Std loading pump model TMW 32/8

## Hook-ups

### Mechanical

mains water feed	G 1"
rainwater suction (in)	G1¼"
(optional)	2 x G1¼"
pressure supply (out)	G1"
emergency overflow	DN 50
break tank volume	34 L
weight (dry)	60 kg

### Electrical

system power	UK 3-pin (230V)
loading pump	Schuko (230V)
main tank gauge	Prop. plug & socket

