



# Aquaco Master Control Unit

*Variable speed packaged control unit for grey water and rainwater systems*

## Application

- A packaged booster pump set and mains water backup solution for commercial grey and rainwater recycling systems.
- Provides an uninterrupted variable speed supply of recycled water for WCs, irrigation and laundry.
- Volumes up to 44m<sup>3</sup>/h as standard. Larger, bespoke systems also available upon request.

## Benefits

- Reliable system with automatic mains top up ensuring continuity of supply.
- Individual inverter control for each pump ensuring true duty / standby.
- Automatic protection against water hammer.
- End of pump-curve detection and auto dry-run protection.
- Ease of installation.
- Fully automated process control via specially developed automated control unit
- Mains water top-up complete with WRAS compliant category 5 type AA airgap.
- Designed and Manufactured in the UK, reducing the carbon footprint or your system.

## Abbreviated Technical Specification

- Duty/assist, variable speed, multi-stage, self-priming, vertical centrifugal pumps.
- Maximum flow up to 40m<sup>3</sup>/hr (Larger, bespoke systems available).
- Maximum static head up to 170 metres.
- Automatic and Manual changeover to mains water operation.
- Volt Free BMS/Fault Alarms.



## Product Description

The Aquaco Master Control Unit range has a packaged design allowing easy location and installation. Located within the unit are centrifugal pumps, controls, break tank, an actuated diverter ball valve and WRAS compliant category 5 type AA air-gap providing the mains water top-up into the break tank.

A float switch constantly monitors the level of the recycled water in the storage tank so that the system automatically switches to the mains water break tank supply when the recycled water level is low.

Water is drawn from the main collection tank(s) into the packaged unit's inlet manifold before being boosted to the point of use via the two variable frequency drive multi-stage centrifugal pumps.

If there is a shortage of recycled water the mains water top-up system will move the actuated ball valve to draw from the mains water break tank ensuring continuity of supply. The link between the system controls and the mains water actuated ball valve is fully automated and the mains water top-up only operates when required.

## Technical Specification

AMCU Model Range	AMCU-4/	AMCU-6/	AMCU-10/	AMCU-15/
W x D x H	800mm x 1,010mm x 1,310mm	1,060mm x 1,010mm x 1,290mm	1,200mm x 1,299mm x 1,655mm	1,250mm x 1,299mm x 2,000mm
Empty Weight (Approx.)	169Kg	193Kg	231Kg	261Kg
Full Weight (Approx.)	569Kg	843Kg	1,231Kg	1,511Kg
Break Tank Capacity	400 Litres	650 Litres	1,000 Litres	1,250 Litres
Submersible Pump Connection	3/4" BSP	3/4" BSP	1 1/4" BSP	1 1/4" BSP



### AMCU Pump Duty & Head Capabilities

Proposed AMCU Model No.	Q (Duty/Assist) @ 50Hz for a Given Static Head (Metres) in Litres / Second																
	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
AMCU 4/5		3.4	2.72	1.44													
AMCU - 4/7			3.34	2.84	2.16	0.56											
AMCU - 4/10				3.44	3.12	2.76	2.3	1.56									
AMCU - 6/5		5	4.16	2.76													
AMCU - 6/7			5	4.32	3.5	2											
AMCU - 6/10					4.72	4.26	3.42	2.76	1.2								
AMCU - 6/11						4.64	4.24	3.68	2.9	1.52							
AMCU - 6/16								4.94	4.64	4.34	4	3.52	3	2.42	0.86		
AMCU - 10/4			6.2	3.36													
AMCU - 10/6				6.72	5.24	3.2											
AMCU - 10/8					7.1	6.3	5.24	3.6									
AMCU - 15/3			10.6	5													
AMCU - 15/4				10.6	6.6												
AMCU - 15/6						11.1	8.8	5.5									
AMCU - 15/10									12.2	11.3	10.2	8.58	6.4	2.9			
AMCU - 15/11										12.2	11.3	10.5	8.9	7.2	4.4	0.4	
AMCU - 15/13											12.2	11.5	10.6	9.5	8	6.2	3.5



