



RAINWATER HARVESTING

WILO-RainSystem AF 400

- **Compact self-contained module**
pre-assembled on vibration dampened height adjustable steel frame
- **Highly economical demand responsive water supply**
- **2 - super silent multi-stage centrifugal pressure booster pumps**
- **High reliability**
- **Through-flow diaphragm pressure vessel to DIN 4807 allows power savings on leakage make-up**
- **All parts in contact with the fluid handled are corrosion proof**
- **Electronic controller**
fully automatic system with comprehensive signals array and volt-free contacts for run and fault signalling (BMS/DDC-adaptable)



A self-contained rainwater utilisation system for reducing drinking water demand in commercial and industrial applications.

The AF400 is a fully automatic self-contained multi-pump rainwater recycling unit with an integral 400-litre mains water cistern. The AF400-2 is supplied with two pressure booster pumps. A choice of five different models to suit a range of applications.

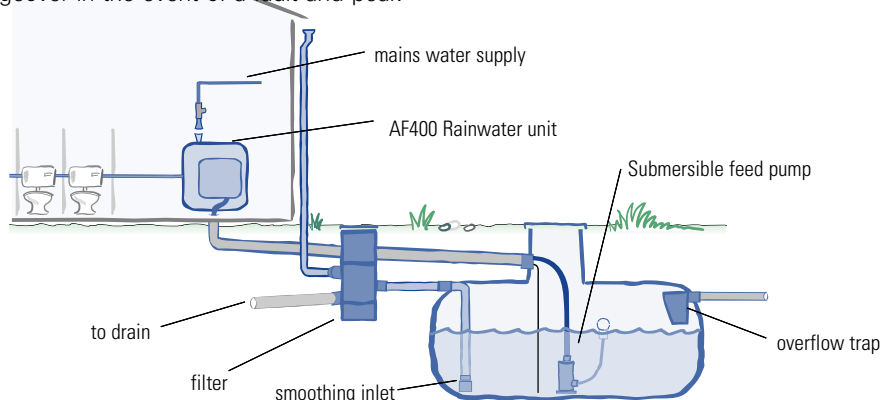
An additional submersible feed pump is required for installation in the remote rainwater storage tank.

This system provides an ideal solution for applications where long distances between plant and storage tank must be catered for.

duty operation. Reliability is further improved by each pump having a separate suction line. Pump operation is equalised by automatic duty cycling and integrated testing of idling pumps. Maintenance-free electronic controls give a permanent display of water level, system pressure and operation status. The entire assembly is mounted on its own vibration-dampened steel frame. The AF400 is ideal for integration into Building Management Systems. Units supporting different flows and pressure requirements are available - see next page.

Note:
For submersible pumps required for make-up feed services in the rain water storage tank refer to the Rainharvesting Systems Ltd Multigo Pressure Pump data sheet

The AF400 has a high degree of operational reliability due to the automatic pump changeover in the event of a fault and peak



MAIN FEATURES

- Maintenance-free electronic controls
- Automatic mains water top-up
- Pump operation equalised by automatic duty cycling and integrated testing of idling pumps
- Automatic fault changeover and peak duty operation give high operational reliability
- Dry running protection for pumps
- Automatic cistern feed pump control
- Low voltage plant and level control
- Integrated electronic overload protection
- Comprehensive signal indication at the control unit and volt-free contacts for collective run and fault signals
- Ideally suited for use in conjunction with Building Management systems

TECHNICAL DATA

Approved fluids: Clean water free of suspended matter, industrial and rain water, cold/ condenser water

Flow rate: max. 32 m³/h (on request)

Max head: 56 m

Max. working pressure: 10 bar

Fluid temp: +5°C to +35°C

Ambient temp. max. 40°C

Power supply: 1 phase 230 V, 50 Hz (or 3 phase 400 V, 50 Hz)

Rated power each pump [P2]: 550 / 750 / 1100 W

Overload protection: integrated electronic overload control

Hybrid cistern: 400 litres

Pump control: Fully electronic control of water supply and cistern make-up pumps, actuated by pressure transducer 4-20 mA and reed contacts

Connections:

Outlets: 1.5" male (discharge manifold pipe)

Inlets: Free-flow mains water top-up to DIN 1988 (tank-integrated top-up tundish and non-splash inlet)

Cistern pump: DN 50 inlet nozzle (cistern integrated with non-splash inlet)

Overflow: DN 100 with overflow P-trap and full bore passage to DIN 1986

Dimensions: 780 W x 1045 H x 1440 D

SCOPE OF SUPPLY

Fully self-contained compact module hydraulically and electrically assembled and mounted on vibration-dampened height-adjustable tubular steel frame, consisting of:

- 2 off non self-priming corrosion proof super silent centrifugal pumps
- 1.5" male discharge manifold including control set of DIN/DVGW certificated 8 litre diaphragm throughflow pressure vessel, isolating valve with drain and pressure gauge 0-10 bar
- Suction and discharge ball isolating valves and DIN/DVGW-approved checkvalve
- Large volume hybrid tank with all connections, non-splash inlets and P-trap overflow
- Electronic 'RainControl Hybrid' control unit with control electronics, pressure transducer 4-20 mA and low voltage level controller
- 1" DVGW-certificated solenoid valve for mains water top-up
- Operation and maintenance manual

OPTIONS

- Storage extension modules
- Rain water storage level indicator
- Hour-run meter • 60 Hz version
- Individual run and fault signals
- Time switch • 3 phase 230 V, 50 Hz

Model	Mode	Max. head (m)	Pumping output in cu. m/h																	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
AF400/304	one pump	45	with a head of (m)	40.5	35	28.5	20	10.1												
	both pumps	45		43	40.7	38	35	31.8	28.2	24	19.9	15	10							
AF400/305	one pump	56		50.2	43	34.9	25.1	14												
	both pumps	56		53.7	51	47.7	43.6	39.3	35	30	24.7	19.4	14							
AF400/603	one pump	33		32	30	27	23.8	20.5	16.6	12	7									
	both pumps	33		32.5	31.8	31	30	29	27.5	26	24	22.3	20.5	18.7	16.7	14.4	12.3	9.8	7	
AF400/604	one pump	45		42.8	40	36.2	31.5	26	19.8	13	6									
	both pumps	45		43.8	42.5	41.3	39.8	38	36	34	31.5	29	26	23	20	17	13	10	6	
AF400/605	one pump	56		54	51.3	47.6	43	37.8	31	23	14									
	both pumps	56		55	54	53	51.6	50	48	46	43.6	41	38	35	31	28	23	19	14	

NB continuous development may necessitate change in these details without notice E&OE



Rainharvesting Systems Ltd.

The Green Shop
Cheltenham Road, Bisley,
Stroud, Gloucestershire GL6 7BX
Tel: 0845 223 5430
Fax: 01452 772008
E-mail: sales@rainharvesting.co.uk
Website: www.rainharvesting.co.uk

Distributor: