

Series description: Wilo-RainSystem AF Comfort



Design

Ready-to-plug rainwater utilisation system

Application

Rainwater utilisation for saving potable water in conjunction with cisterns or tanks

Type key

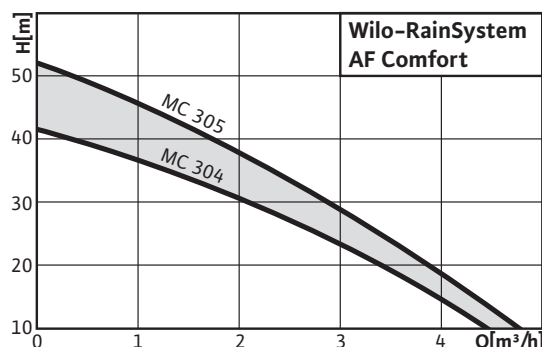
Example	Wilo-AF Comfort MC 304 EM
AF	Automatic rainwater utilisation and potable water replenishment system (Aqua Feed)
MC	Self-priming, horizontal, multistage centrifugal pump of the series MultiCargo MC
3	Volume flow (m ³ /h) at optimum efficiency
04	Number of stages
EM	Single-phase motor 1~230 V, 50 Hz

Special features/product advantages

- Compact, ready-to-plug rainwater utilisation system
- In compliance with DIN 1989 and EN 1717
- Tested according to RALGZ 994 quality standard
- Low-noise, due to multi-stage centrifugal pump and complete encapsulation of the system
- Automatic support function for
 - Evacuation of air in the suction line
 - High economic efficiency due to needs-based potable water replenishment

Technical data

- Mains connection 1~230 V, 50 Hz
- Suction head max. 8 m
- Operating pressure max. 8 bar
- Protection class IP 42
- Connections:
 - Pressure pipe/pressure side Rp 1
 - Suction side R 1/ G 1
 - Potable water replenishment R ¾
 - Connection overflow DN 70



Equipment/function

- Connection-ready module with compact construction
- Electrical and hydraulic connections already in place, mounted on corrosion-protected base frame.
- Comprising:
 - Self-priming, corrosion-free, low-noise MultiCargo MC centrifugal pump
 - Pressure-side pipework R 1
 - Potable water replenishment reservoir (11 l) with float valve
 - Cover made of EPP
 - 3.0 m connecting cable and mains plug
 - Rain Control Economy RCE central switchgear with control electronics including solenoid valve and pressure transmitter, 420 mA and level sensor with 20 m cable for level indicator
 - Connection for overflow signalling device and/or backflow warning as standard
 - Menu-prompted operation and LCD display
 - Operation and fault signals
 - Automatic water exchange in the replenishment reservoir
 - Automatic prevention of lime deposits on the solenoid valve
 - Permanent display of rainwater storage tank level, system pressure, operating status via LCD

Description/design

- Ready-to-plug single-pump water-supply unit as compact module for single-family houses
- Fully automatic supply of rainwater from an underground storage tank or rainwater storage
- 11-litre replenishment reservoir for optimised replenishment of potable water into the consumer network when rainwater storage tank is not full
- System fulfils the criteria outlined in DIN 1989 and EN 1717
- Automatic switchover to potable water replenishment, time-sensitive water exchange in replenishment reservoir, built-in automatic switch-off during dry run.
- AF Comfort system control: RainControl Economy RCE electronic control device with additional functions such as:
 - Automatic solenoid valve actuation to prevent lime deposits
 - Variable switch-off pressure
 - Commissioning with factory-configured basic parameters (plug & pump)
 - Continuous logging of operating data
 - Economy mode function
 - Operating status log
 - Operation and parameterisation by means of menu-driven function keys
- Cover

Materials

- Pump housing stainless steel 1.4301
- Impeller made of Noryl
- Shaft stainless steel 1.4028
- Mechanical seal made of ceramic/carbon
- Stage chambers made of Noryl

Scope of delivery

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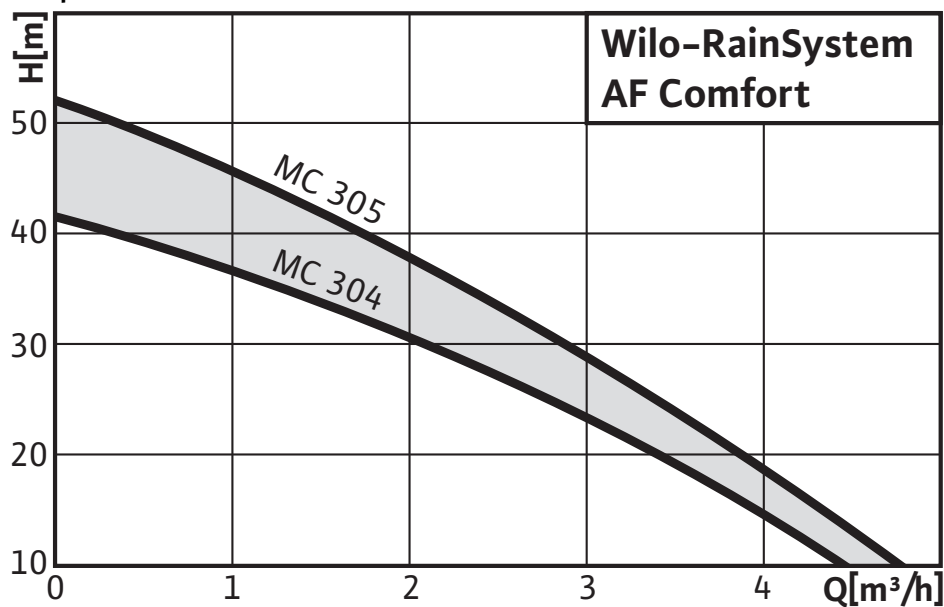
- Heavy-duty, ready-to-connect single-pump rainwater utilisation system with 3.0 m connecting cable and mains plug, RainControl Economy central switchgear with control electronics, level sensor with 20 m cable, measurement range 0.5 m
- **Including cover** and connection kit for replenishment overflow made of recyclable EPP

Options

- Overflow signalling device

Duty chart: Wilo-RainSystem AF Comfort

Pump curves



Equipment/function: Wilo-RainSystem AF Comfort

Design		
Compact rainwater utilisation system		•
Replenishment reservoir	V	11 l
Corrosion-free		•
Protection against low water level		•
UV-stabilized system tank		•
Diaphragm pressure vessel		–
Connection for backflow warning		•
Corrosion-free steel tubing framework		–
Ball valve on suction and pressure sides		–
Joint tubing on pressure side		–
Pressure gauge		–
Hydraulics		
Self-priming		•
Non-self-priming		–
Multistage centrifugal pump		•
Directly flanged motor		•
Motor data		
Mains connection		1~230 V, 50 Hz
Equipment/function		
Electronic control, RainControl Professional		–
Electronic system control, RainControl Hybrid		–
Menu-prompted operation and LCD display		•
Operation and fault signals		•
Wilo-Fluidcontrol (for automatic operation)		–
Pump cycling and test run function		–
Automatic fault-actuated switchover and peak-load cut-in		–
Automatic water exchange in the replenishment reservoir		•
Automatic prevention of lime deposits on the solenoid valve		•
Permanent display of rainwater storage tank level, system pressure, operating status via LCD		•
Accessories		
Operating hours counter		–
Individual run and fault signals		–
Extension modules		–
EPP cap		•

• = available, – = not available

Technical data: Wilo-RainSystem AF Comfort

Approved fluids (other fluids on request)

Pure water without settling sediment	•
Rainwater	•

Output

Q_{max}	Q	5 m ³ /h
H_{max}		52 m
Max. suction head	H	8.0 m
Nominal motor power	P_2	550 W 750 W
Start-up pressure		1.2 bar
Switch-off pressure		4.0 bar
Fluid temperature	T	+5...+35 °C
Max. ambient temperature	T	40 °C
Mains connection		1~230 V, 50 Hz
Replenishment reservoir	V	11 l
Gross weight	m	25.50 kg

Motor/electronics

Protection class	IP 54
Insulation class	F

Connections

Pressure pipe/pressure side	Rp 1
Inlet	R ¾
Connection overflow [DN]	70

Materials

Pump housing	1.4301
Impeller	Noryl
Pump shaft	1.4028
Mechanical seal	Carbon/ceramic
Stage chambers	Noryl

• = available, = not available

1) Potable water replenishment via float valve with free outlet in accordance with EN 1717

2) Potable water rep[]

Rainwater storage pump connection: Connecting piece d.50 (inlet integrated with non-turbulent supply line on the tank side)

3) with overflow siphon as anti-siphon trap and full passage in accordance with DIN 1986) Overall system protection class: