



FluidController FC 5000 Coolant applications

Description

The FC 5000 is a stationary device for the automation of the coolant supply for up to two tanks. The tank level is monitored to do so and topped up automatically.

Topping the tank up with ready-mixed emulsion allows the specified tank level in the system to be almost constant at the target specifications. A proportional coolant mixing device is connected to the Fluid Controller. The existing line pressure is recorded. In the case of an error, an error is indicated by the status LED and the fieldbus interfaces.

An intelligent top-up concept makes it possible to realise error-free fluid management. The FluidController can also be installed as an extension of the FCU 5000 system.

Applications

- Monitoring/control of up to two coolant tanks
- Automation of fluid management on interlinked, decentralised systems
- Direct compatibility with FCU 5000

Advantages

- Ensuring a defined tank level
- Documentation of system-specific data
- Cost efficiency through high levels of automation
- I4.0-ready thanks to direct cloud connection

Technical data

General data		
Operating method	Suitable for continuous operation	
Self-diagnosis	Continuously with error indication via status LED and fieldbus interface	
Display	Via mobile end device (web server), LED	
Sealing material	FKM	
Ambient temperature range	0 to 40 °C / -17.8 to 104 °F	
Storage temperature range	0 to 50 °C / -17.8 to 122 °F	
Relative humidity	0 to 70 %, non-condensing	
CE mark	EN 61000-6-1/ 2/ 3/ 4	
Protection class according to DIN 40050	IP44	
Housing	Steel housing	
Weight (without accessories)	≈ 14.5 kg	
Hydraulic data		
Operating pressure	0.5 to 16 bar / 7 to 232 psi	
Permitted viscosity range	1 to 40 mm ² /s; to 180 Sus	
Fluid temperature range	10 to 40 °C / 50 to 104 °F	
Electrical data		
Supply voltage	100 to 240 V AC 50/60 Hz	
Max. power/current consumption	5 A	
Interfaces / data logs	Analogue input	2x 4 to 20 mA
	Level monitoring	
	Digital input	2x 24 V
	Level monitoring	
	Ethernet	2x TCP/IP Modbus TCP REST
	1x switching output	Potential-free contact (max. 24 V, 1 A)

Model code

FC 5 2 1 7 - 0 - 0 - 1 - U - 000

Type

FC = FluidController

Series

5 = 5000 series

Measuring points

1 = one measuring point

2 = two measuring points

Mode

1 = filling

Media

7 = aqueous coolants

Additional functions

0 = status LED

Display

0 = no additional function

Data interface

1 = standard (Modbus TCP, REST)

Supply voltage

U = 230 V AC

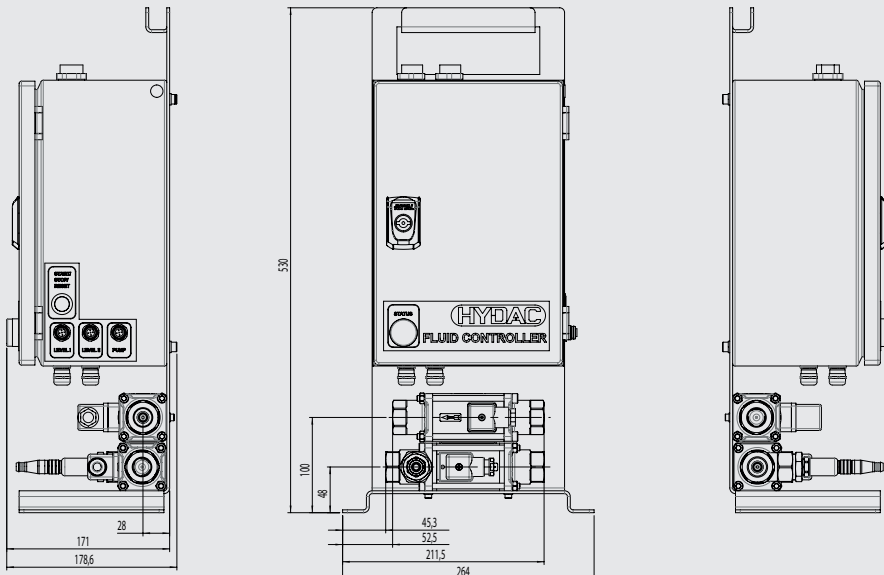
Modification

000 = standard

Accessories

Designation	Part no.
Electronics	
Level sensor kit for FC 5000	4783470
4G router for FC 5000	4742007
Hydraulics	
Connection kit input for two systems	4742008
Tank connection kit	4742009
Emulsion mixer for FC 5000 (0–10 %)	4742010

Dimensions



(All dimensions in mm)

Comment

The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

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