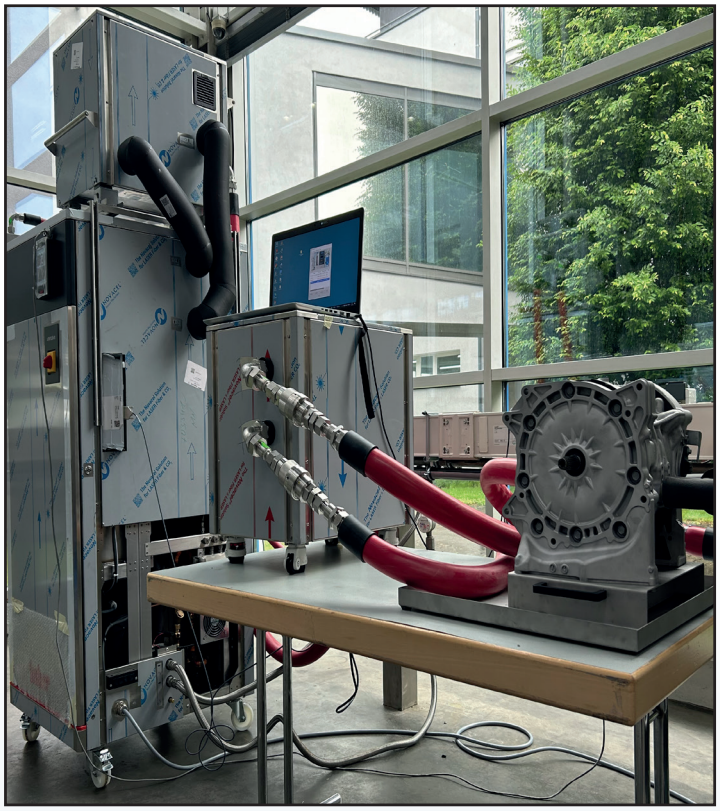
Unimotive GL 10w



Unimotive GL 10w with accessories: Flow Control Cube (FCC) and Automatic Drain & Re-fill (ADR), operating at -40°C

Requirement
The Unimotive 10 GL w uses CO2 as a refrigerant and is equipped with a powerful magnetically coupled pump.
The test was carried out to demonstrate the efficiency and performance of the unit in combination with a Flow Control Cube (FCC) and the Automated Drain & Refill system (ADR) when using a 60/40 water/glycol mixture as the heat transfer fluid (HTF).

Method
The test object, an e-motor, was connected to the Huber unit via 2 x M38 hoses and 2 x Dry-Disconnects. The test was carried out at set-points of +20°C and -40°C with the results recorded using Huber's service software.

Setup details
Unit

Temperature range:	-45°C…95°C
Heating power:	24.0 kW
Cooling power:	21.5 kW @ +20°C
Pump:	201 l/min; 5.3 bar
HTF:	Water / Glycantine G40 (60/40)

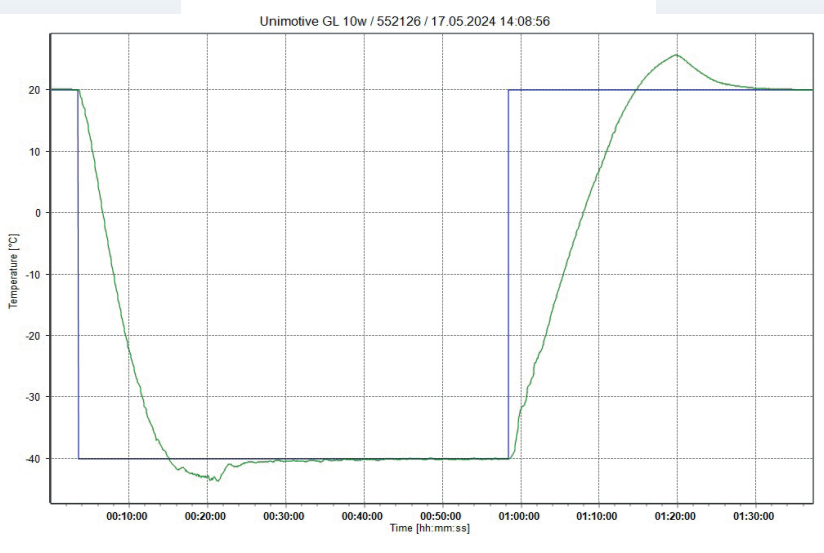
FCC

Temperature range:	-40°C…130°C
Flow:	0.2…80 l/min
Type of Flow Sensor:	Inductive

ADR, E-Engine

Results

1. Performance:
The graphic shows a rapid cool-down from +20°C to -40°C in approximately 12-minutes. At -40°C, it can be seen that the stability at the set-point is maintained.



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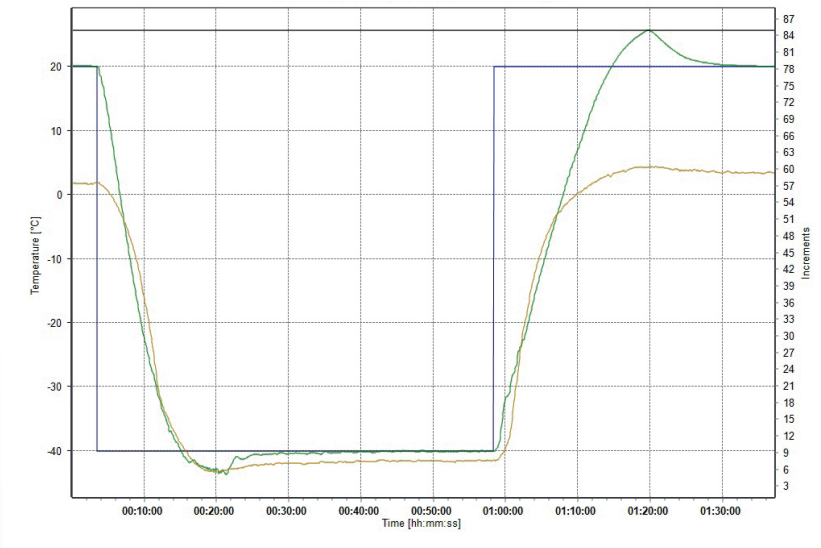
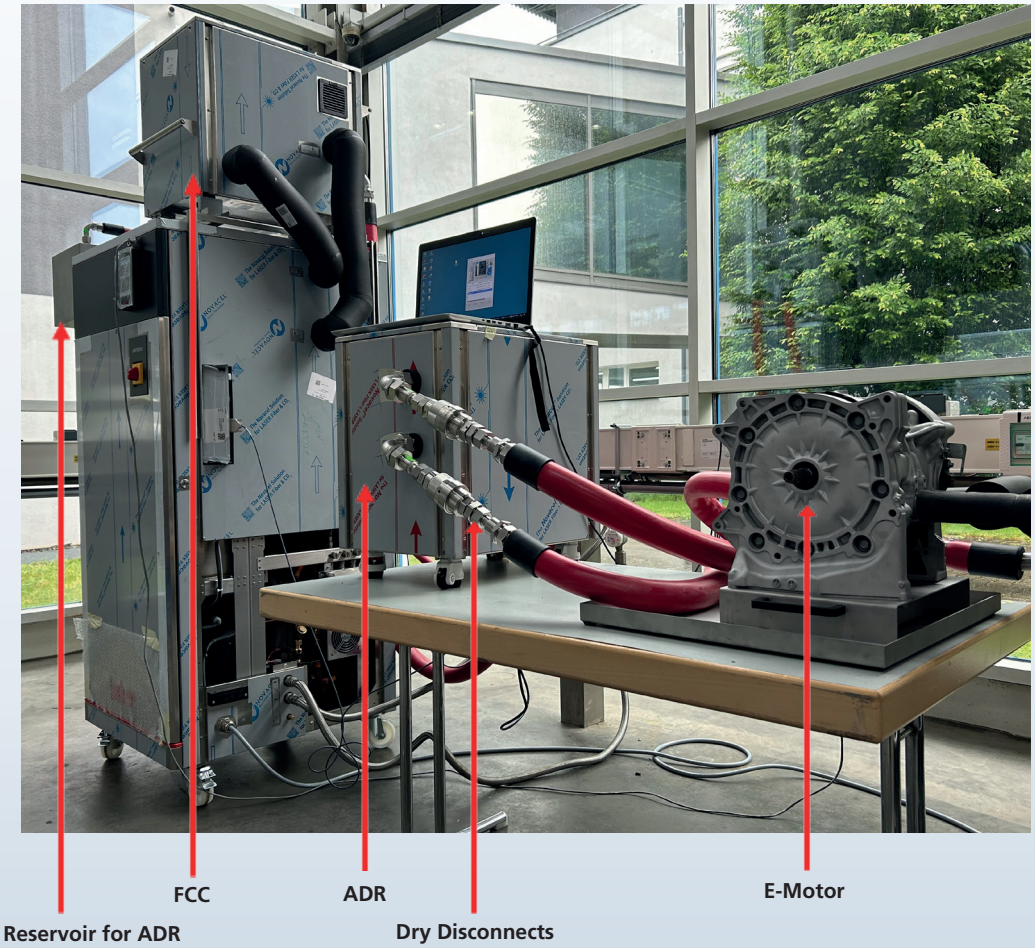
2. Flow Rate

The graphic shows the stable flow rate control from +20°C to -40°C . The flow rate at +20°C was 60 l/min and at -40°C is approx. 8 l/min.



3.Set up



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