

Unimotive 20w



Unimotive 20w with accessories: Multi Flow Control Cube (M-FCC) and 60/40 Water / Glycantine mixture as the heat transfer fluid (HTF)

Requirement

The test was carried out to demonstrate the flow rate performance of the unit in combination with a Multi Flow Control Cube (M-FCC) when using a 60/40 Water / Glycantine mixture as the heat transfer fluid (HTF).

Method

The test object was an e-motor. The e-motor was connected to the Huber unit via 2 x 3m M38 hoses. The test was carried out at set-points of +20°C; 0°C; -10°C; -20°C; -30°C and -40°C with the results recorded using Huber’s service software.

Setup details

Unit

Temperature range: -45°C...+95°C
 Heating power: 12.0 kW
 Cooling power: 21.0 kW @ +20°C
 Pump: 201 l/min; 5.3 bar

M-FCC MID

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

Test conditions

Tubing: 2 x 3m M38x1.5 Metal Insulated
 Control: Internal
 Heat Transfer Fluid: Water / Glycantine G40 (60/40)

E-Engine

Results

1. Performance:

The graphic shows a cool-down from +20°C to -40°C. It can be seen that the stability at the set-points is maintained. Additionally, the graphic shows the stable flow rate control from +20°C down to -40°C.

Set Point	Flow rate
+20°C	75.14 l/min
0°C	68.90 l/min
-10°C	61.76 l/min
-20°C	50.30 l/min
-30°C	34.03 l/min
-40°C	16.32 l/min

