

C1. Polar Bear *Plus* - Flow Synthesiser

Part number	35780
Conformity	CE
Commodity Code	8419500090

General

Cylinder material		Copper, chrome plated
Cylinder diameter	mm	125
Cylinder height	mm	110
Temperature range	°C	-40 to 150
Temperature Sensor		PT100
Dimensions, without dome (W x D x H)	mm	200 x 320 x 300
Weight	kg	13
Display		VGA
Set point temperature setting resolution	°C	0.01
Temperature display resolution	°C	0.01
Safety circuit min. (software)	°C	-50
Safety circuit max. (software)	°C	160
Thermal Fuse (hardware)*	°C	160
Accuracy	°C	better than 1.5
Control method		PID
Control accuracy	°C	±0.2

Coil Reactor

Tubing Material		FEP
Size, working volume with 2.4mm bore tubing	mL	50

Heating times

Heating output	W	180
Heating time from 20°C to 50°C	min	
Cooling time from 20°C to 100°C	min	
Cooling time from 20°C to 150°C	min	

Cooling times

Cooling time from 20°C to 0°C	min	7
Cooling time from 20°C to -20°C	min	14
Cooling time from 20°C to -40°C	min	23

Electrical

Voltage	V	220 - 240
Frequency	Hz	50/60
Power input	W	630
Fuses (External)		F1, 10A
Fuses (Internal)		F2, 1A F3, 2A

Connectivity

Ethernet interface		Yes
USB Data Storage		Yes
Real time historical log		Yes
Computer and Labview integration		Yes

Environment

Permissible ambient temperature	°C	5 - 40
Permissible relative moisture		No data
Protection class according to DIN EN 60529		IP 20

*The cut out temperature of the thermal fuse depends on its position within the unit and the level of insulation.