

## DYNEO DD-1000F Refrigerated/Heating Circulator

### New temperature control technology for demanding applications

DYNEO DD refrigerated circulators have a wide working temperature range. Refrigerated circulators are suitable for both internal and external applications. The multilingual 3.5-inch color display and unique rotary knob provide for straightforward and intuitive operation. Pump capacity is 22 l/min with pressure of 0.6 bar. The cooling machines operate precisely and reliably even at elevated ambient temperatures up to +40 °C.



Made in Germany

### Your advantages

- Powerful cooling machines
- Suitable for internal and external applications
- Optimized cooling coil design saves space in the bath tank
- Powerful and infinitely adjustable pressure pump
- Flow rate 22 l/min, pressure 0.6 bar
- Easy switching between internal and external circulation
- Large color TFT display, multilingual interface
- Central rotary knob (controller) simplifies operation
- Integrated programmer
- Integrated external Pt100 connection
- USB port
- RS232 interface or analog interfaces (optional)
- Bath cover included with delivery
- Integrated drain makes emptying liquid easy and safe.

### Technical Data

Order No.	9021707							
Order No. with RS232 Option	9021707.D							
Order No. with analog Option	9021707.A							
Model series	DYNEO							
Category	Refrigerated - Heating Circulators							
Working temperature range (°C)	-50 ... +200							
Temperature control	PID							
Temperature stability (°C)	±0.01							
Setting / display resolution	0.01 °C							
Temperature Display	3.5" TFT Display							
Heating capacity (kW)	1							
Cooling capacity (Medium Ethanol)	°C	20	10	0	-10	-20	-30	-40
	kW	1	1	0.9	0.73	0.5	0.3	0.13
Pump capacity flow rate (l/min)	8 ... 23							
Pump capacity flow pressure (psi)	1.5 ... 8.7							
Viscosity max. (cSt)	50							

Bath opening / bath depth (W x L / D inch)	8.7 x 5.9 / 5.9
Pump connections	M16x1
Barbed fittings diameter (inner dia. / mm)	8 / 12
Filling volume liters	5 ... 7.5
Refrigerant stage 1	R452A
Filling volume refrigerant stage 1 (g)	175
Global Warming Potential for	2140
Carbon dioxide equivalent stage 1 (t)	0.375
Digital interface	USB
Analog connection input / output	Optional
Ambient temperature	5...40 °C
Dimensions W x L x H (inch)	16.5 x 19.3 / 27.6
Weight (LBS)	112.9
Included with each unit	2 each barbed fitting for tubing 8 and 12 mm inner dia. (pump connections M16x1 male)
Bath tank	Stainless steel
Bath cover	integrated
Cooling of compressor	Air
Available voltage versions	115V/60Hz 200-230V/50-60Hz