

CF30 Cryo-Compact Circulator

The first choice for routine and straightforward laboratory applications from -40°C to 150°C

Cryo-Compact Circulator for internal and external temperature applications

The CF series offers compact refrigerated/heating circulators. With small overall dimensions the units can even be placed on a very small surface or within a complex installation. All models offer a heating capacity of 2 kW and classification 3 according to DIN12876-1. The maximum ambient temperature of +40°C as well as a ventilation air cooling allow installing the units very closely side by side with other units or directly under a fume hood. Furthermore all the models feature pump connections for external temperature applications and a bath opening for temperature control of small objects directly in the circulator bath. Wetted parts are made of high quality stainless steel or plastic. The instruments provide a reliable Microprocessor electronics with high temperature stability as well as warning and safety functions.



Made 
in Germany

Your advantages

- Ergonomic design and easy operation
- Small overall dimensions for lowest space requirement
- Splash-proof keypad
- Large, bright LED temperature display
- Precise PID temperature control
- RS232 interface for PC connection
- Adjustable high temperature cut-off
- Classification 3 according to DIN12876-1
- Pump connections for external temperature applications
- Bath opening for temperature control of small objects in the bath
- Front drain

Technical Data

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|--|--------------------------|------|------|------|
| Order No. | 9400330 | | | |
| Model series | Economy | | | |
| Category | Cryo-Compact Circulators | | | |
| Working temperature range (°C) | -30 ... +150 | | | |
| Temperature stability (°C) | ±0.03 | | | |
| Setting / display resolution | 0.1 °C | | | |
| Temperature Display | LED | | | |
| Heating capacity (kW) | 1 | | | |
| Cooling capacity (Medium Ethanol) | °C | 20 | 0 | -20 |
| | kW | 0.32 | 0.25 | 0.15 |
| Pump capacity flow rate (l/min) | 15 | | | |
| Pump capacity flow pressure (psi) | 5.1 | | | |
| Bath opening / bath depth (W x L / D inch) | 6.3 x 1.2 / 5.5 | | | |

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|--|--|
| Pump connections | M16x1 |
| Barbed fittings diameter (inner dia. / mm) | 8 / 12 |
| Filling volume liters | 3.5 |
| Refrigerant stage 1 | R134a |
| Filling volume refrigerant stage 1 (g) | 150 |
| Global Warming Potential for | 1430 |
| Carbon dioxide equivalent stage 1 (t) | 0.215 |
| Digital interface | RS232 Optional: Profibus |
| Ambient temperature | 5...40 °C |
| Dimensions W x L x H (inch) | 9.4 x 18.1 x 15.7 |
| Weight (LBS) | 77 |
| Classification according to DIN12876-1 | Classification III (FL) |
| Included with each unit | 2 each barbed fittings for tubing 8 and 12 mm inner dia. (pump connections M16x1 female). |
| Cooling of compressor | Air |
| Power requirement V / Hz / A | 115/60/13 |
| Available voltage versions | 230 V / 50 Hz 230 V / 60 Hz 115 V / 60 Hz |

Characteristics

Display



Easy to read

Large LED temperature display for actual value and setpoint (resolution 0.1 °C)

Technical Features



Serial connection

RS232 interface for PC connection, e.g. for data communication and recording of measured values

Operation



Time saving

Comfortable and simple operation for setpoint adjustment

Warning & Safety Functions



Protective functions

Adjustable high temperature cut-off or dry-running protection

Temperature Control



Precise

PID Temperature control with set control parameters, temperature stability $\pm 0.02 \dots \pm 0.2$ °C



For flammable bath fluids

Classification III (FL) according to DIN 12876-1