

CORIO CP-601F Refrigerated – Heating Circulator

Refrigerated Circulators from the CORIO CP range are suitable for applications with a temperature range up to +200°C. The enhanced pump performance ensures they are suitable for easy temperature control tasks in combination with external applications.



Your advantages

- Models for internal and external applications
- Bright, white, easy to read display
- Very quiet
- Easy pump change-over between internal and external circulation
- External pump connections
- Powerful and infinitely adjustable pressure pump
- USB connection
- RS232 interface for online communication
- Space-saving cooling coil design yields more usable space in the bath tank
- Bath lid and drain tap included
- Removable ventilation grid
- Refrigeration unit without side vents
- Class III (FL) according to DIN 12876-1

Technical data

| Available voltage versions | | Bath | |
|-----------------------------------|---------------------|------------------------------------|-------------------------|
| Order No. | 9 013 705 | Bath tank | Stainless steel |
| Available voltage versions: | | Bath cover | integrated |
| 9 013 705.01 | | Usable bath opening cm (W x L / D) | 22 x 15 / 20 |
| 9 013 705.02 | | | |
| 9 013 705.33 | | | |
| 9 013 705.04 | | | |
| 9 013 705.05 | | | |
| 9 013 705.33.chn | | | |
| Cooling | | Other | |
| Cooling of compressor | 1-stage Air | Classification | Classification III (FL) |
| | | Pump function | Pressure Pump |
| | | Pump type | Immersion Pump |
| Electronics | | Dimensions and volumes | |
| Temperature control | PID1 | Weight kg | 38.5 |
| Absolute temperature calibration | 1 Point Calibration | Barbed fittings inner diameter | 8/12 mm |
| Temperature display | LED | Dimensions cm (W x L x H) | 36 x 46 x 74 |
| Temperature setting | Keypad | Filling volume l | 8 ... 10 |
| Electronic Timer hr:min | 0 ... 999 | Pump connections | M16x1 male |
| Temperature values | | | |
| Working temperature range °C | -35 ... +200 | | |
| Temperature stability °C | ±0.03 | | |
| Ambient temperature °C | +5.0 ... +40.0 | | |
| Temperature display resolution °C | 0.01 ... 0.1 | | |

Performance values

| 100V/50Hz | | | | | | | | 100V/60Hz | | | | | | | |
|------------------------------------|-----|-----|------|------|------|------|------|------------------------------------|-----|-----|------|------|------|------|------|
| Heating capacity kW | | | | | | | | Heating capacity kW | | | | | | | |
| Cooling capacity (Ethanol) | | | | | | | | Cooling capacity (Ethanol) | | | | | | | |
| °C | 200 | 20 | 10 | 0 | -10 | -20 | -30 | °C | 200 | 20 | 10 | 0 | -10 | -20 | -30 |
| kW | 0.6 | 0.6 | 0.54 | 0.5 | 0.33 | 0.19 | 0.07 | kW | 0.6 | 0.6 | 0.54 | 0.5 | 0.33 | 0.19 | 0.07 |
| Viscosity max. cST | | | | | | | | Viscosity max. cST | | | | | | | |
| Refrigerant | | | | | | | | Refrigerant | | | | | | | |
| Filling volume g | | | | | | | | Filling volume g | | | | | | | |
| Global Warming Potential for R404A | | | | | | | | Global Warming Potential for R404A | | | | | | | |
| Carbon dioxide equivalent t | | | | | | | | Carbon dioxide equivalent t | | | | | | | |
| Pump capacity flow rate l/min | | | | | | | | Pump capacity flow rate l/min | | | | | | | |
| Pump capacity flow pressure bar | | | | | | | | Pump capacity flow pressure bar | | | | | | | |
| 115V/60Hz | | | | | | | | | | | | | | | |
| Heating capacity kW | | | | | | | | 1 | | | | | | | |
| Cooling capacity (Ethanol) | | | | | | | | | | | | | | | |
| °C | 200 | 20 | 0 | -10 | -20 | -30 | | °C | 200 | 20 | 0 | -10 | -20 | -30 | |
| kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | | kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | |
| Viscosity max. cST | | | | | | | | 50 | | | | | | | |
| Refrigerant | | | | | | | | R449A | | | | | | | |
| Filling volume g | | | | | | | | 150 | | | | | | | |
| Global Warming Potential for R449A | | | | | | | | 1397 | | | | | | | |
| Carbon dioxide equivalent t | | | | | | | | 0.21 | | | | | | | |
| Pump capacity flow rate l/min | | | | | | | | 8 ... 27 | | | | | | | |
| Pump capacity flow pressure bar | | | | | | | | 0.1 ... 0.7 | | | | | | | |
| 200V/50Hz | | | | | | | | 200V/60Hz | | | | | | | |
| Heating capacity kW | | | | | | | | 1.8 | | | | | | | |
| Cooling capacity (Ethanol) | | | | | | | | Cooling capacity (Ethanol) | | | | | | | |
| °C | 200 | 20 | 0 | -10 | -20 | -30 | | °C | 200 | 20 | 0 | -10 | -20 | -30 | |
| kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | | kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | |
| Viscosity max. cST | | | | | | | | 50 | | | | | | | |
| Refrigerant | | | | | | | | R449A | | | | | | | |
| Filling volume g | | | | | | | | 150 | | | | | | | |
| Global Warming Potential for R449A | | | | | | | | 1397 | | | | | | | |
| Carbon dioxide equivalent t | | | | | | | | 0.21 | | | | | | | |
| Pump capacity flow rate l/min | | | | | | | | 8 ... 27 | | | | | | | |
| Pump capacity flow pressure bar | | | | | | | | 0.1 ... 0.7 | | | | | | | |
| 230V/50Hz | | | | | | | | 230V/60Hz | | | | | | | |
| Heating capacity kW | | | | | | | | 2 | | | | | | | |
| Cooling capacity (Ethanol) | | | | | | | | Cooling capacity | | | | | | | |
| °C | 200 | 20 | 0 | -10 | -20 | -30 | | °C | 200 | 20 | 0 | -10 | -20 | -30 | |
| kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | | kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | |
| Viscosity max. cST | | | | | | | | 50 | | | | | | | |
| Refrigerant | | | | | | | | R449A | | | | | | | |

| | | | | | | | | | | | | | |
|------------------------------------|-------------|------------------------------------|-------------|------|------|------|----|-----|-----|------|------|------|------|
| Filling volume g | 150 | Filling volume g | 150 | | | | | | | | | | |
| Global Warming Potential for R449A | 1397 | Global Warming Potential for R449A | 1397 | | | | | | | | | | |
| Carbon dioxide equivalent t | 0.21 | Carbon dioxide equivalent t | 0.21 | | | | | | | | | | |
| Pump capacity flow rate l/min | 8 ... 27 | Pump capacity flow rate l/min | 8 ... 27 | | | | | | | | | | |
| Pump capacity flow pressure bar | 0.1 ... 0.7 | Pump capacity flow pressure bar | 0.1 ... 0.7 | | | | | | | | | | |
| 200V/50Hz | | 200V/60Hz | | | | | | | | | | | |
| Heating capacity kW | 1.8 | Heating capacity kW | 1.8 | | | | | | | | | | |
| Cooling capacity (Ethanol) | | Cooling capacity (Ethanol) | | | | | | | | | | | |
| °C | 200 | 20 | 0 | -10 | -20 | -30 | °C | 200 | 20 | 0 | -10 | -20 | -30 |
| kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 |
| Viscosity max. cST | 50 | Viscosity max. cST | 50 | | | | | | | | | | |
| Refrigerant | R449A | Refrigerant | R449A | | | | | | | | | | |
| Filling volume g | 150 | Filling volume g | 150 | | | | | | | | | | |
| Global Warming Potential for R449A | 1397 | Global Warming Potential for R449A | 1397 | | | | | | | | | | |
| Carbon dioxide equivalent t | 0.21 | Carbon dioxide equivalent t | 0.21 | | | | | | | | | | |
| Pump capacity flow rate l/min | 8 ... 27 | Pump capacity flow rate l/min | 8 ... 27 | | | | | | | | | | |
| Pump capacity flow pressure bar | 0.1 ... 0.7 | Pump capacity flow pressure bar | 0.1 ... 0.7 | | | | | | | | | | |
| 230V/50Hz | | 230V/60Hz | | | | | | | | | | | |
| Heating capacity kW | 2 | Heating capacity kW | 2 | | | | | | | | | | |
| Cooling capacity (Ethanol) | | Cooling capacity (Ethanol) | | | | | | | | | | | |
| °C | 200 | 20 | 0 | -10 | -20 | -30 | °C | 200 | 20 | 0 | -10 | -20 | -30 |
| kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 |
| Viscosity max. cST | 50 | Viscosity max. cST | 50 | | | | | | | | | | |
| Refrigerant | R449A | Refrigerant | R449A | | | | | | | | | | |
| Filling volume g | 150 | Filling volume g | 150 | | | | | | | | | | |
| Global Warming Potential for R449A | 1397 | Global Warming Potential for R449A | 1397 | | | | | | | | | | |
| Carbon dioxide equivalent t | 0.21 | Carbon dioxide equivalent t | 0.21 | | | | | | | | | | |
| Pump capacity flow rate l/min | 8 ... 27 | Pump capacity flow rate l/min | 8 ... 27 | | | | | | | | | | |
| Pump capacity flow pressure bar | 0.1 ... 0.7 | Pump capacity flow pressure bar | 0.1 ... 0.7 | | | | | | | | | | |
| 200V/50Hz | | 200V/60Hz | | | | | | | | | | | |
| Heating capacity kW | 1.8 | Heating capacity kW | 1.8 | | | | | | | | | | |
| Cooling capacity (Ethanol) | | Cooling capacity (Ethanol) | | | | | | | | | | | |
| °C | 200 | 20 | 0 | -10 | -20 | -30 | °C | 200 | 20 | 0 | -10 | -20 | -30 |
| kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 |
| Viscosity max. cST | 50 | Viscosity max. cST | 50 | | | | | | | | | | |
| Refrigerant | R449A | Refrigerant | R449A | | | | | | | | | | |
| Filling volume g | 150 | Filling volume g | 150 | | | | | | | | | | |
| Global Warming Potential for R449A | 1397 | Global Warming Potential for R449A | 1397 | | | | | | | | | | |
| Carbon dioxide equivalent t | 0.21 | Carbon dioxide equivalent t | 0.21 | | | | | | | | | | |
| Pump capacity flow rate l/min | 8 ... 27 | Pump capacity flow rate l/min | 8 ... 27 | | | | | | | | | | |
| Pump capacity flow pressure bar | 0.1 ... 0.7 | Pump capacity flow pressure bar | 0.1 ... 0.7 | | | | | | | | | | |
| 230V/50Hz | | 230V/60Hz | | | | | | | | | | | |
| Heating capacity kW | 2 | Heating capacity kW | 2 | | | | | | | | | | |

| | | | | | | | | | | | | | |
|------------------------------------|-----|-----|------|------|------|------|------------------------------------|-----|-----|------|------|------|------|
| Cooling capacity (Ethanol) | | | | | | | Cooling capacity (Ethanol) | | | | | | |
| °C | 200 | 20 | 0 | -10 | -20 | -30 | °C | 200 | 20 | 0 | -10 | -20 | -30 |
| kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 |
| Viscosity max. cST | | | | | | | Viscosity max. cST | | | | | | |
| Refrigerant | | | | | | | Refrigerant | | | | | | |
| Filling volume g | | | | | | | Filling volume g | | | | | | |
| Global Warming Potential for R449A | | | | | | | Global Warming Potential for R449A | | | | | | |
| Carbon dioxide equivalent t | | | | | | | Carbon dioxide equivalent t | | | | | | |
| Pump capacity flow rate l/min | | | | | | | Pump capacity flow rate l/min | | | | | | |
| Pump capacity flow pressure bar | | | | | | | Pump capacity flow pressure bar | | | | | | |
| 200V/50Hz | | | | | | | 200V/60Hz | | | | | | |
| Heating capacity kW | | | | | | | Heating capacity kW | | | | | | |
| Cooling capacity (Ethanol) | | | | | | | Cooling capacity (Ethanol) | | | | | | |
| °C | 200 | 20 | 0 | -10 | -20 | -30 | °C | 200 | 20 | 0 | -10 | -20 | -30 |
| kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 |
| Viscosity max. cST | | | | | | | Viscosity max. cST | | | | | | |
| Refrigerant | | | | | | | Refrigerant | | | | | | |
| Filling volume g | | | | | | | Filling volume g | | | | | | |
| Global Warming Potential for R449A | | | | | | | Global Warming Potential for R449A | | | | | | |
| Carbon dioxide equivalent t | | | | | | | Carbon dioxide equivalent t | | | | | | |
| Pump capacity flow rate l/min | | | | | | | Pump capacity flow rate l/min | | | | | | |
| Pump capacity flow pressure bar | | | | | | | Pump capacity flow pressure bar | | | | | | |
| 230V/50Hz | | | | | | | 230V/60Hz | | | | | | |
| Heating capacity kW | | | | | | | Heating capacity kW | | | | | | |
| Cooling capacity (Ethanol) | | | | | | | Cooling capacity (Ethanol) | | | | | | |
| °C | 200 | 20 | 0 | -10 | -20 | -30 | °C | 200 | 20 | 0 | -10 | -20 | -30 |
| kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 | kW | 0.6 | 0.6 | 0.44 | 0.27 | 0.16 | 0.04 |
| Viscosity max. cST | | | | | | | Viscosity max. cST | | | | | | |
| Refrigerant | | | | | | | Refrigerant | | | | | | |
| Filling volume g | | | | | | | Filling volume g | | | | | | |
| Global Warming Potential for R449A | | | | | | | Global Warming Potential for R449A | | | | | | |
| Carbon dioxide equivalent t | | | | | | | Carbon dioxide equivalent t | | | | | | |
| Pump capacity flow rate l/min | | | | | | | Pump capacity flow rate l/min | | | | | | |
| Pump capacity flow pressure bar | | | | | | | Pump capacity flow pressure bar | | | | | | |

All Benefits**ATC.**

Absolute Temperature Calibration, 1-point calibration (CD).

**Condensation protection.**

Superb design solution. Integrated ventilation directs air over the bath lid and minimizes condensation.

**Handle with ease.**

Makes day-to-day work easy. Comfortably move your JULABO Circulator around by using the ergonomic handles (front and rear).

**Internal. External.**

The pump is controlled via a lever located directly below the display. Easily change between internal and external circulation.

**Mobile.**

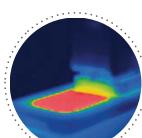
Extra easy handling. Integrated castors for easy repositioning of refrigerated circulators.

**More bath.**

Designed for more comfort. Thanks to the recessed cooling coil, the internal bath provides more space.

**Safety.**

CORIO CD and CP comply with Class III (FL) according to DIN 12876-1 and switches off automatically in case of high temperature or low liquid level alarm.

**Solid.**

Minimized energy loss through high-quality insulation.

**Space saving. Free up space.**

Place your JULABO Circulator right next to an application, another unit, or wall. That saves space. This is made possible by eliminating vents and connections on the sides.

**Stable.**

Rubber feet allow for a secured footing of your CORIO to prevent damage to your laboratory equipment.

**Tidy.**

The special drain tap for easy draining of bath fluids without tools.

**Touching permitted.**

Optimum safety. The ergonomic plastic handle protects your fingers from hot surfaces.

**100% Checked.**

100% testing. 100% quality. Each JULABO Circulator undergoes thorough quality testing before leaving the factory.

**Green technology.**

Development consistently applied environmentally friendly materials and technologies.

**JULABO. Quality.**

Highest standards of quality for a long product life.

**Quick start.**

Individual JULABO consultation and comprehensive manuals at your disposal.

**Satisfied customers.**

11 subsidiaries and more than 100 partners worldwide guarantee fast and qualified JULABO support.

**Services 24/7.**

Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at www.julabo.com.

**Timer. Integrated.**

CORIO circulators include an integrated timer function. When the set time has elapsed, a signal sounds and the device switches off. Setting range: 0 ... 999 minutes.

**Connection. Easy.**

Inclined pump connections (M16x1) facilitate the connection of applications. Each unit includes 2 barbed fittings of 8/12 mm diameter each.

**Brilliant.**

Very bright display makes it easy to read even from a distance.

**Everything at the front.**

All operating controls and safety functions are accessed easily and comfortably from the front.

**Exact.**

You can rely on it. PID1 control and 'Active Cooling Control' make the new CORIO precise and perfect.

**Switch on. And off you go.**

Intelligent operating concept. Ready for operation with just a few quick and easy steps.

**Early warning system for low liquid level.**

Maximum safety for your application. Optical and audible alarm allows user to refill bath fluid in time.

**Locked in.**

The lockable power plug guarantees safe connection. More process safety.

**Powerful. Adjustable.**

Strong pressure pump, continuously adjustable.

**Connectivity.**

Remote control made easy. CORIO CP circulators feature a USB connection and RS232 interface.