



## Refrigerated Fluid Chiller System RFCS-G0

The **Refrigerated Fluid Chiller System RFCS-G0** can achieve cooling capacities of 1 kW, 1.5 kW and 2.3 kW. In the standard versions, these cooling systems are designed as active coolers complete with compressor, air cooled condenser, submersible pump and electronic control.

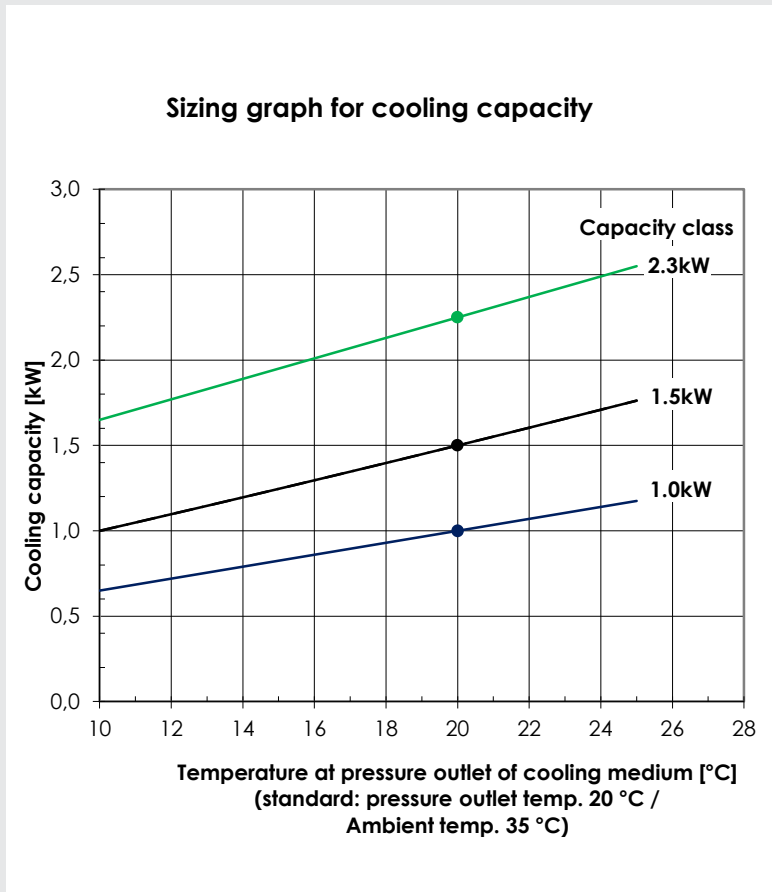
**Whether integrated into a machine or used as an auxiliary cooler, this system will tackle any cooling task and guarantees quality with utmost precision.**

### Technical specifications

Model	RFCS-G0-1000	RFCS-G0-1500	RFCS-G0-2300
Cooling capacity (for 20°C at pressure outlet and 35°C ambient temperature)	1.0 kW	1.5 kW	2.3 kW
Coolant	DI / IW (*1)	DI / IW (*1)	DI / IW (*1)
Temperature control accuracy	+/-1.5K	+/-1.5K	+/-1.5K
Permitted ambient temperature range	+10 °C .. +45 °C	+10 °C .. +45 °C	+10 °C .. +45 °C
Standard operating range	+15 °C .. +25 °C	+15 °C .. +25 °C	+15 °C .. +25 °C
Pump capacity	10 l at 1.5 bar	10 l at 1.5 bar	10 l at 1.5 bar
Electrical specifications	$I_{max} = 9A$ $U = 230V$ $f = 50/60Hz$ $P_{max} = 1.2 kW$	$I_{max} = 9.3A$ $U = 230V$ $f = 50/60Hz$ $P_{max} = 1.4 kW$	$I_{max} = 9.7A$ $U = 230V$ $f = 50/60Hz$ $P_{max} = 1.7 kW$
Tank capacity	9 l	9 l	9 l
Weight when empty	approx. 43 kg	approx. 45 kg	approx. 48 kg
Dimensions	443 x 524 x 443 mm (W x D x H)	443 x 524 x 443 mm (W x D x H)	443 x 524 x 443 mm (W x D x H)

(\*1): DI = Deionised water; IW = Industrial water

## Sizing graph for cooling capacity

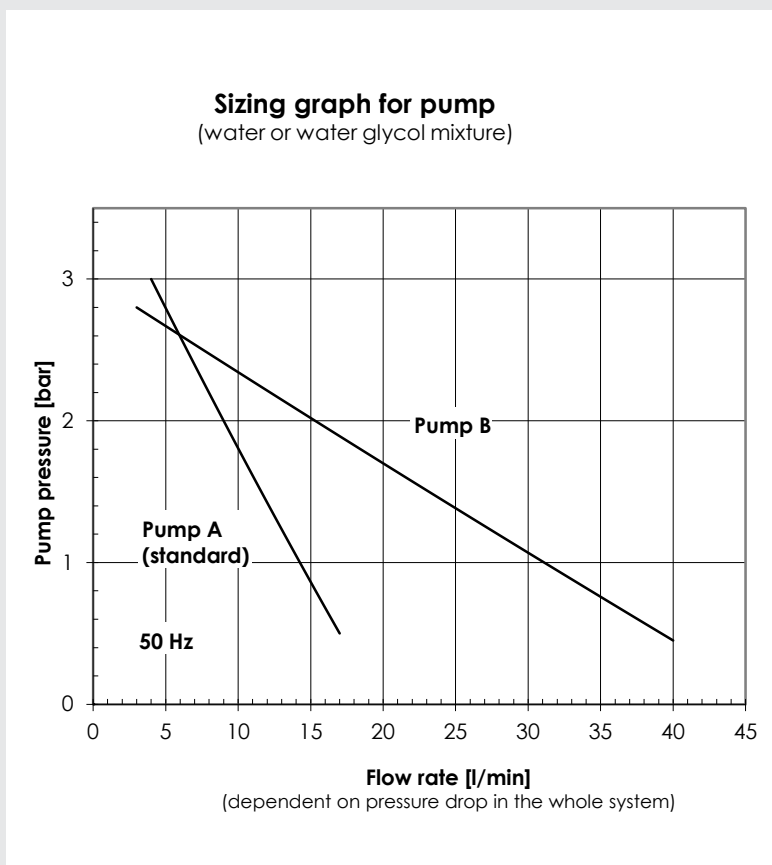


## Correction factors for cooling capacity for different temperatures

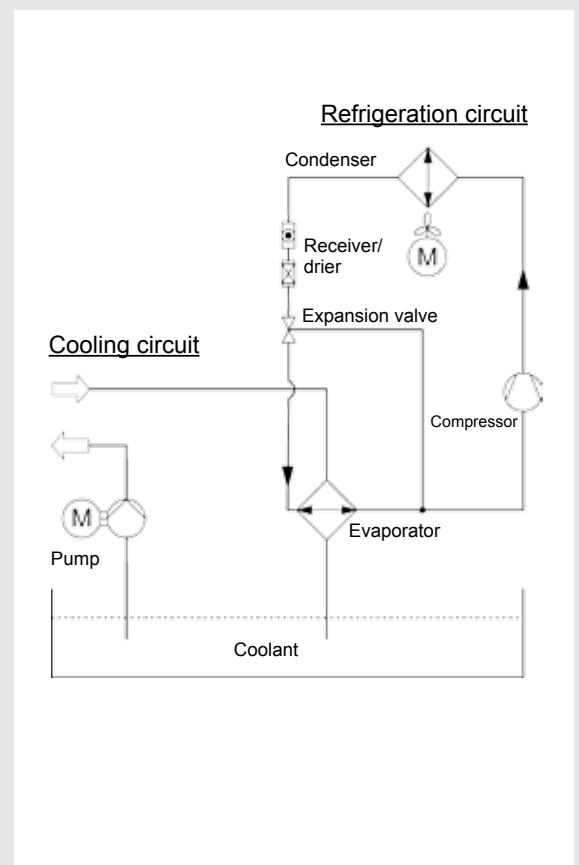
30 °C	1.1
32.5 °C	1.05
35 °C	1
37.5 °C	0.95
40 °C	0.9



## Pump characteristics



## Fluid circuit diagram



## Equipment features at a glance

- Stand-alone fluid cooling unit
- Air cooled condenser
- Air inlet at front, air outlet at rear
- Metal filter grille before the air inlet
- Electronic control with detailed condition information
- Volt-free centralised fault contact
- Precise temperature control accuracies from +/-1.5K
- Visual and electrical fluid level monitoring
- Ports on coolant side in 3/8"
- Paint in RAL 7035
- Electrical float switch
- High pressure switch
- 5 m power cable



## Optional equipment features

- Water-cooled condenser
- Speed regulated fans on condenser
- Version free of non-ferrous metal
- Several parallel cooling circuits
- Temperature control accuracy up to +/- 0.1 K (hot gas bypass)
- Ambient temperature dependent control using separate temperature sensor
- Serial interfaces for system monitoring (e.g. RS485, CanBus, ProfiBus, Ethernet)
- Filtration units for the coolant circuit
- Flow rate display and monitoring
- Display and control of conductance
- Main switch, Harting plug, remote start
- Other options on request

## The advantages to you of the RFCS-G0

- **Compact** ✓
- **Energy efficient** ✓
- **User-friendly** ✓
- Leakage-free, seal-less submersible pump ✓
- Compact dimensions → small "footprint" ✓
- User-friendly control interface ✓
- Can be used for various coolants / fluids ✓
- Cleanable air filter ✓
- Energy efficient refrigeration ✓
- Plug & Play solution ✓
- High level of operating safety ✓



## Applications of the RFCS-G0

(engineering, welding and soldering technology)

- Spindle cooling
- Motor cooling
- Control cabinet cooling
- Cooling lubricant cooling
- Beam sources
- Oil cooling
- Cooling of welding systems
- Cooling of soldering systems
- Laser cooling



**Note**

Subject to technical modifications.

**H.I.B** HYDAC INTERNATIONAL

**H.I.B Systemtechnik GmbH**  
Winterbrückenweg 30  
**D-66316 Friedberg-Derching**  
Phone: +49 (0) 821/747 71-400  
Fax: +49 (0) 821/747 71-410  
Internet: [www.h-i-b.de](http://www.h-i-b.de)  
E-Mail: [info@h-i-b.de](mailto:info@h-i-b.de)

**HYDAC COOLING GMBH**  
Industriegebiet  
**D-66280 Sulzbach / Saar**  
Phone: +49 (0) 6897/509-01  
Fax: +49 (0) 6897/509-454  
Internet: [www.hydac.com](http://www.hydac.com)  
E-Mail: [cooling@hydac.com](mailto:cooling@hydac.com)