

HYDAC INTERNATIONAL



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.

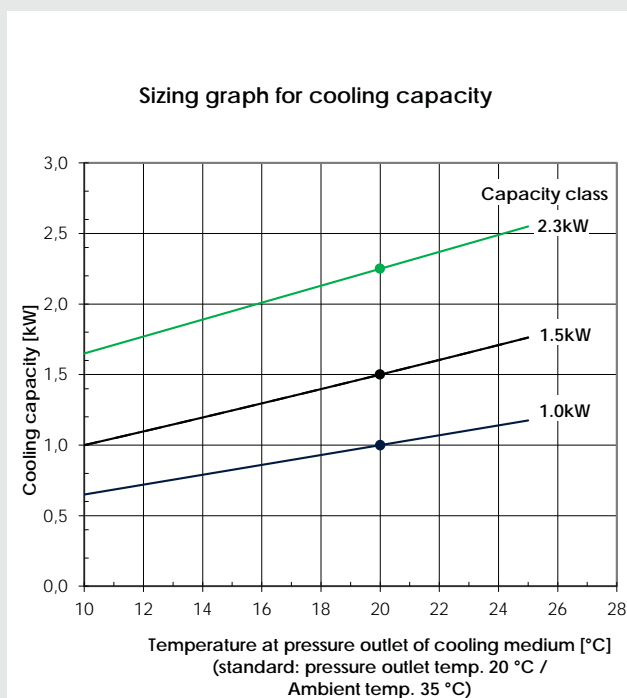
Whether integrated into a machine or used as an auxiliary cooler, this system will tackle any cooling task and guarantees quality with utmost precision.

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

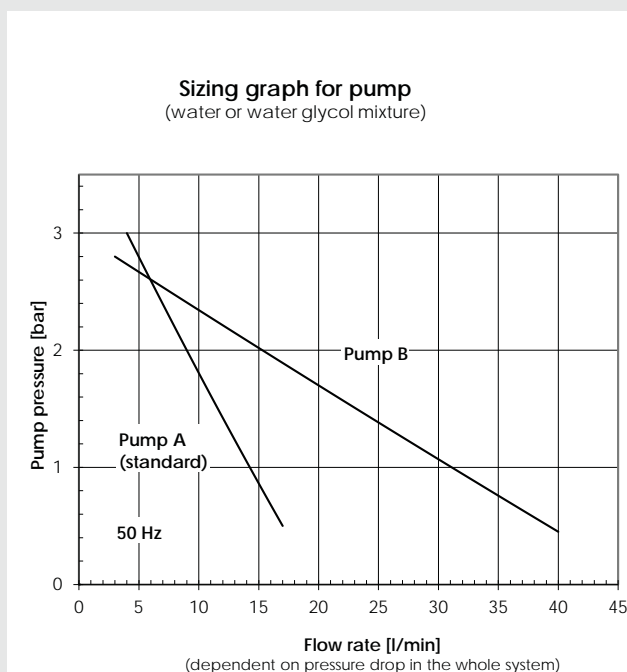


Correction factors for cooling capacity for different temperatures

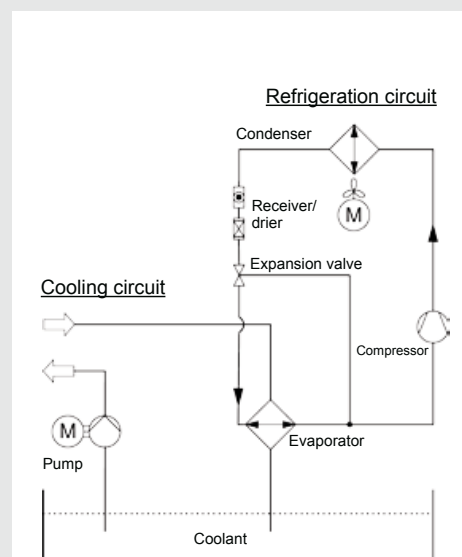
30 °C	1.1
32.5 °C	1.05
35 °C	1
37.5 °C	0.95
40 °C	0.9



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 $\pm 1.5\text{K}$
- 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 $\pm 0.1\text{ K}$ (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

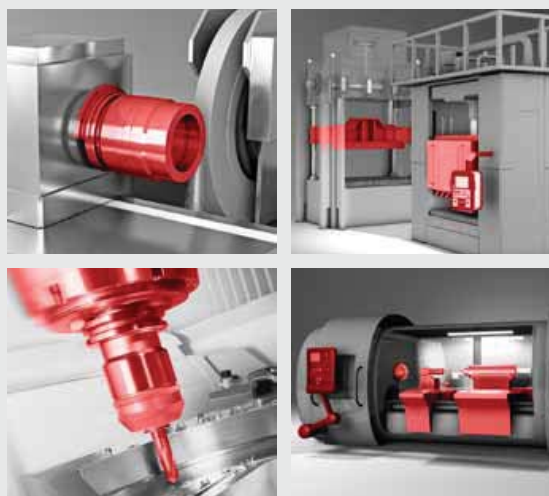
- **Compact** ✓
- **Energy efficient** ✓
- **User-friendly** ✓
- Leakage-free, seal-less submersible pump ✓
- Compact dimensions → small "footprint" ✓
- User-friendly control interface ✓
- Can be used for various coolants / fluids ✓
- Cleanable air filter ✓
- Energy efficient refrigeration ✓
- Plug &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



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