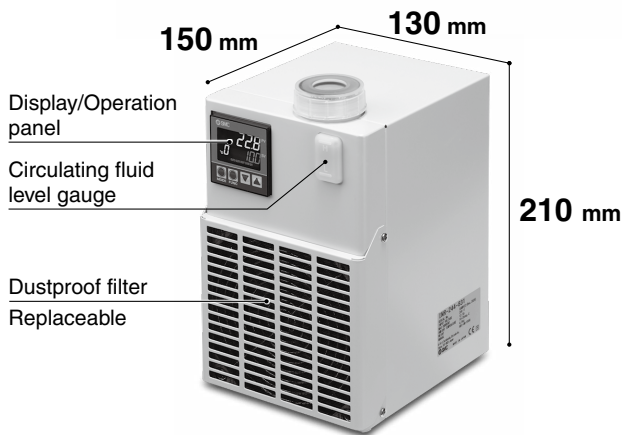


Peltier-type Chiller Thermo-con/ Compact Type **Air-cooled**

The INR-244-831 compact type thermo-con is to be discontinued as of December 2023. Consider selecting an HEF series compact type thermo-con as a substitute. [Click here for details.](#)



- Compact, Space saving
- Refrigerant-free
- Low-noise design: 45 dBA
(When selecting an option)
- Cooling capacity: 220 W
- Temperature stability:
 ± 0.01 to 0.03°C
- Set temperature range:
 10°C to 60°C
- Fluid contact material:
Stainless steel, Resin
(Aluminum and copper material-free)



How to Order

INR-244-831 -

Option

Nil	None
X125	High pressure pump
X126	Low noise fan
X127	High pressure pump Low noise fan

Specifications

Cooling method		Thermoelectric device (Thermo-module)
Radiating method		Forced air cooling
Control method		Cooling/Heating automatic shift PID control
Ambient temperature		10 to 35°C
Circulating fluid system	Circulating fluid	Tap water, Ethylene glycol aqueous solution (20% or less)
	Set temperature range	10.0 to 60.0°C (No condensation)
	Cooling capacity	220 W (Tap water)*1
	Heating capacity	500 W (Tap water)*1
	Temperature stability	± 0.01 to 0.03°C *2
	Pump capacity	Refer to the performance charts.
	Tank capacity	Approx. 110 mL
Electrical system	Port size	Rc1/4
	Fluid contact material	Stainless steel, EPDM, NBR, Ceramics, PPE, PPS, Carbon, PP, POM
	Power supply	24 VDC $\pm 10\%$
	Power consumption	12.5 A
Communications		RS-485
Weight		Approx. 4.5 kg
Noise level		Approx. 58 dBA (Low noise fan (Option): 45 dBA)
Accessories		DC input power supply cable (1 m), Operation Manual (The 24 VDC power supply should be prepared by the user.)
Safety standards		CE/UKCA marking, UL (NRTL) standards

*1 Conditions: Set temperature 25°C, Ambient temperature 25°C, Circulating flow rate 1 L/min (For options, refer to the performance charts.)

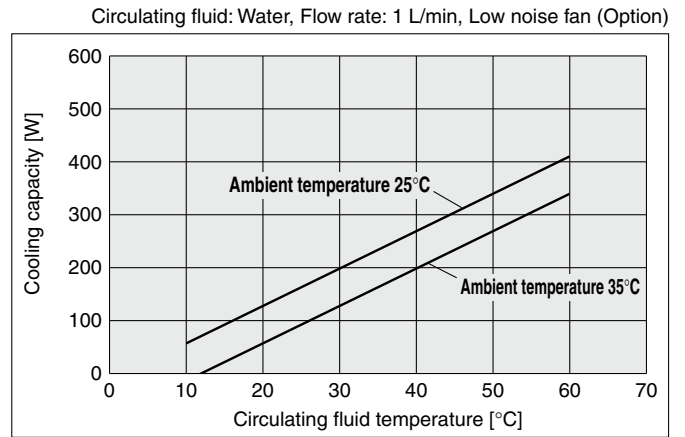
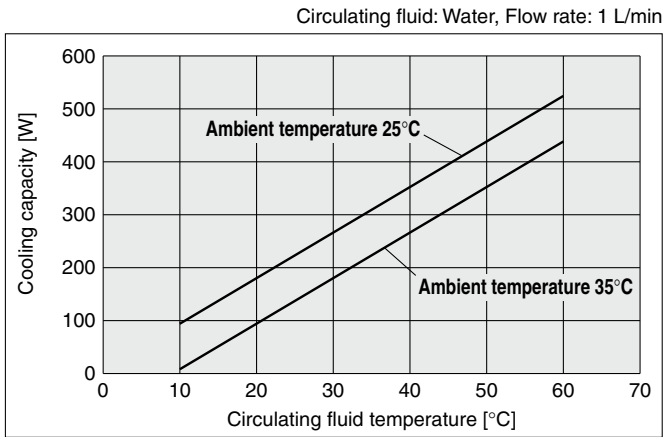
*2 The indicated values are when there is a stable load without turbulence. It may be out of this range depending on the operating conditions. An AC adapter and a power supply cable suitable to this product are available as optional accessories. For details, refer to the back cover.

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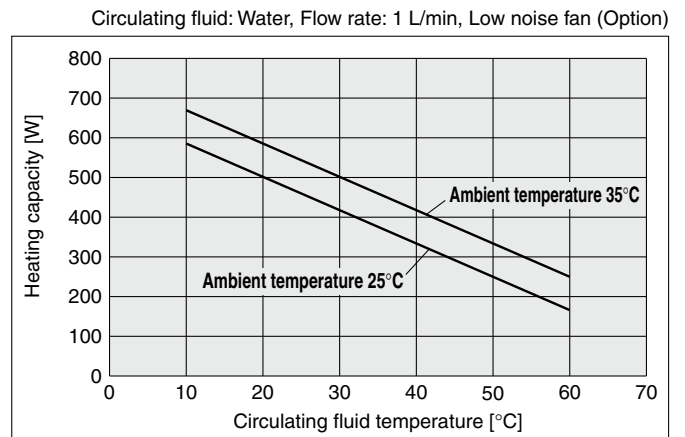
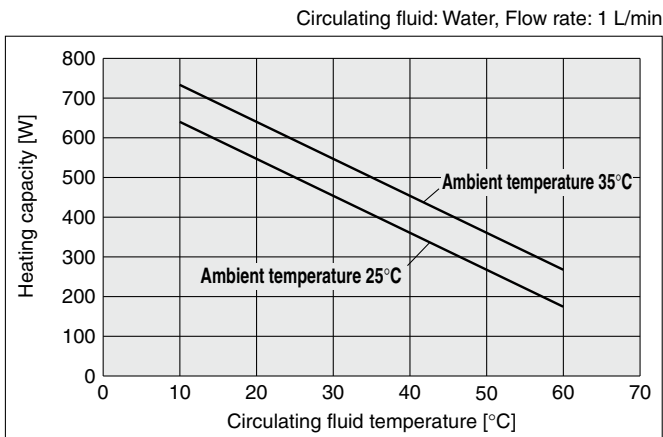
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Cooling Capacity



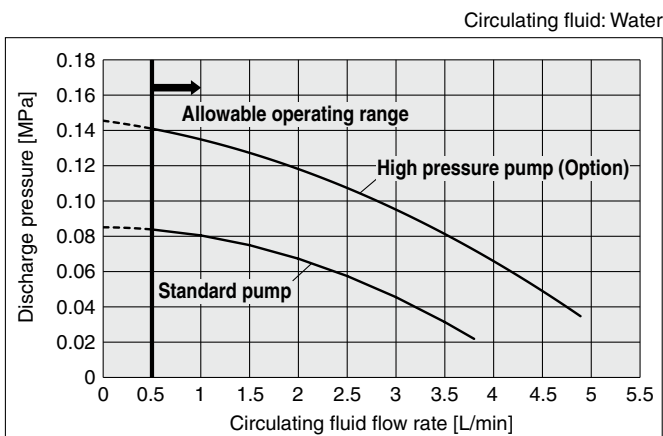
* For the high pressure pump (Option), the cooling capacity decreases by approx. 20 W.

Heating Capacity

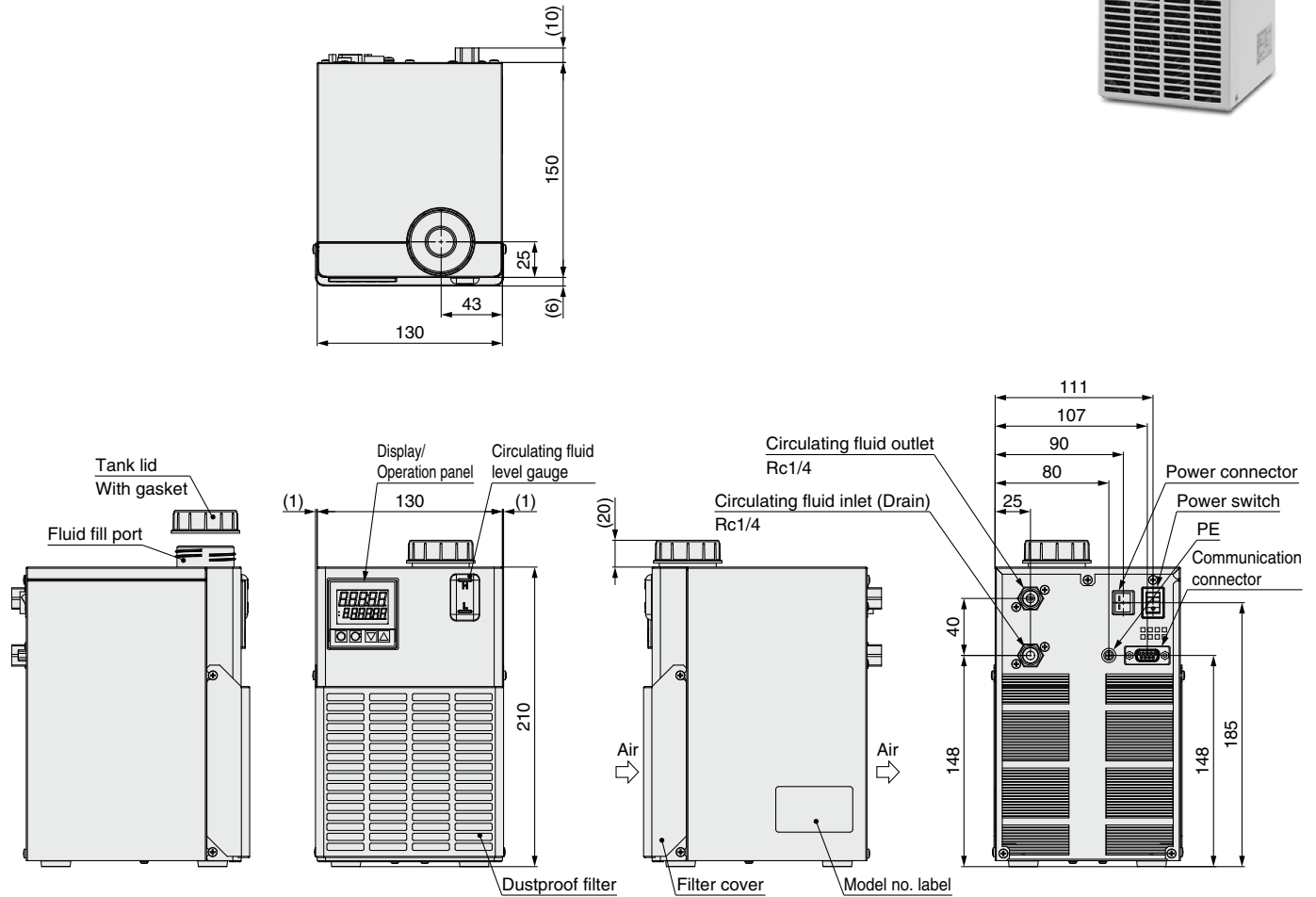


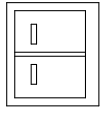
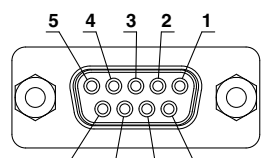
* For the high pressure pump (Option), the heating capacity increases by approx. 10 W.

Pump Capacity (Thermo-con Outlet)



Dimensions

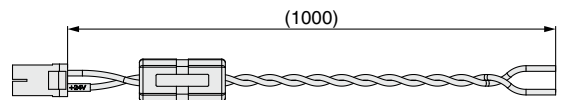


Connector name	No.	Signal contents	Connector type/Part no.
Power connector	1	24 VDC +	 J.S.T. Mfg. Co., Ltd. JFA connector J4000 series SC02B-J42SK-GHXR
	2	24 VDC -	
Communication connector	1	RS-485 BUS +	 D-sub 9 pin (socket type) Holding screw: M2.6
	2-8	Unused	
	9	RS-485 BUS -	

Power Cable (Accessory)

Connector: J42FSC-02V-KX (J.S.T. Mfg Co., Ltd.-made)
Cable: 16AWG

Wire color	Contents
Brown	24 VDC +
Blue	24 VDC -

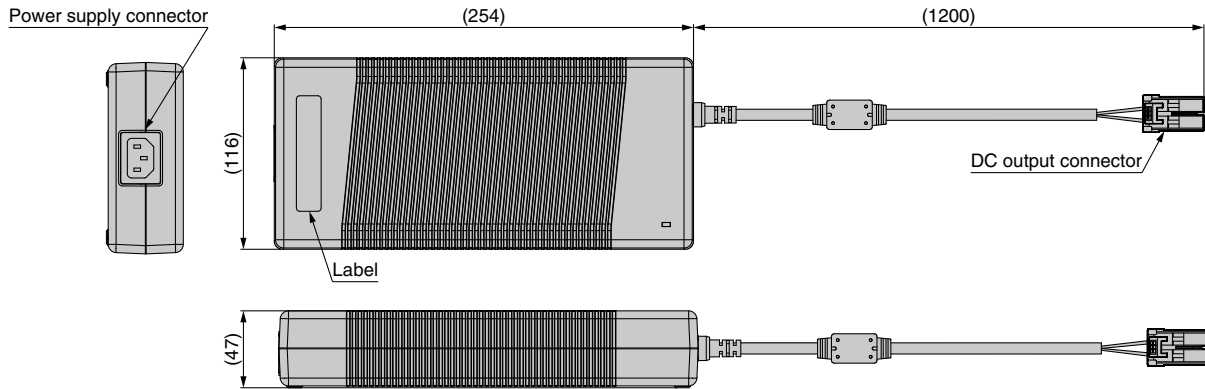


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Optional Accessories

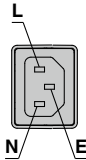
AC adapter

Part no.	Applicable model
HEC-S1896	INR-244-831



Power supply connector IEC60320 C14 (or equivalent)

Pin no.	Signal contents
N	100-240 VAC
L	100-240 VAC
E	PE



DC output connector JST: J42FSC-02V-KX

Pin no.	Signal contents
1	24 VDC +
2	24 VDC -



Specifications

Power supply input	100-240 VAC, Single-phase, 50/60 Hz, Max. 3.9 A
DC output	24 VDC, Max. 12.5 A
Operating environment	Ambient temperature: 0 to 40°C, Humidity: 20 to 80%RH, (no condensation)
DC output connection	Thermo-con (INR-244-831)

* Not for use with other products

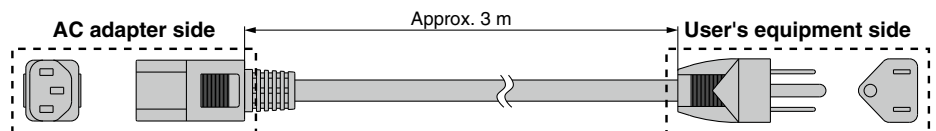
Power Supply Cable

⚠ The power supply cable can only be used for the applicable models shown below. Do not use it for other products.

■ For single-phase 100/115 VAC type

* Not applicable for the 200 V type.

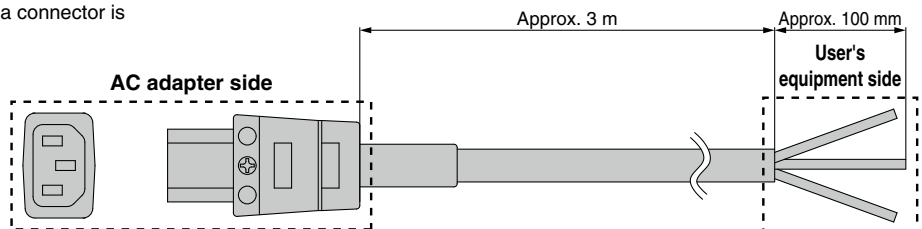
Part no.	Applicable model
HRS-CA001	HEC-S1896



■ For single-phase 200 VAC type

* Can also be used with the 100 V power type if a connector is provided by the customer

Part no.	Applicable model
HRS-CA002	HEC-S1896



⚠ **Safety Instructions** Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.