

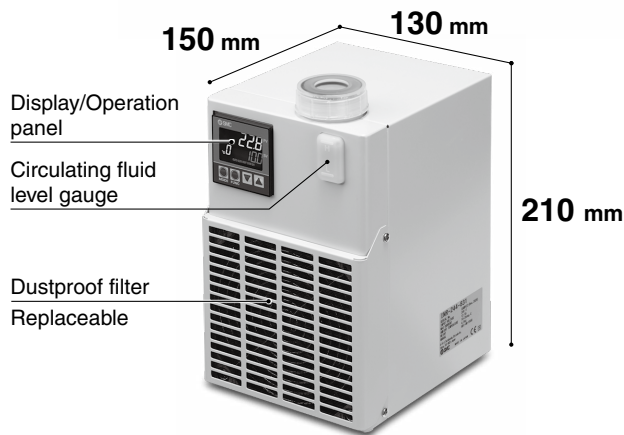
# Peltier-type Chiller

# Thermo-con/ Compact Type

## Air-cooled



- Compact, Space saving
- Refrigerant-free
- Low-noise design: 45 dBA  
(When selecting an option)
- Cooling capacity: 220 W
- Temperature stability:  
 $\pm 0.01$  to  $0.03^{\circ}\text{C}$
- Set temperature range:  
 $10^{\circ}\text{C}$  to  $60^{\circ}\text{C}$
- 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

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

\*1 Conditions: Set temperature  $25^{\circ}\text{C}$ , Ambient temperature  $25^{\circ}\text{C}$ , Circulating flow rate 1 L/min (For options, refer to the performance charts.)

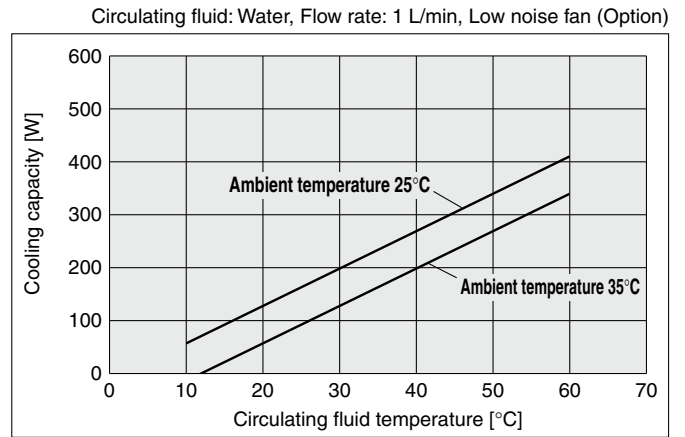
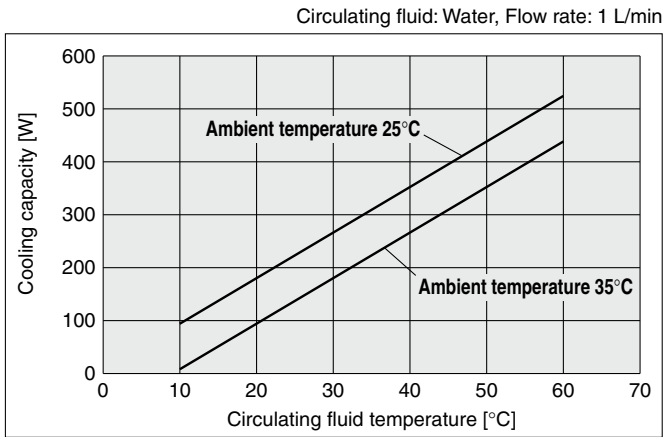
\*2 The indicated values are when there is a stable load without turbulence. It may be out of this range depending on the operating conditions. An AC adapter and a power supply cable suitable to this product are available as optional accessories. For details, refer to the back cover.

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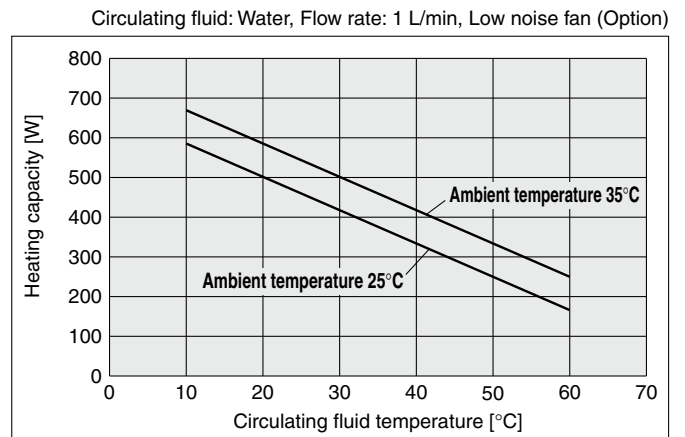
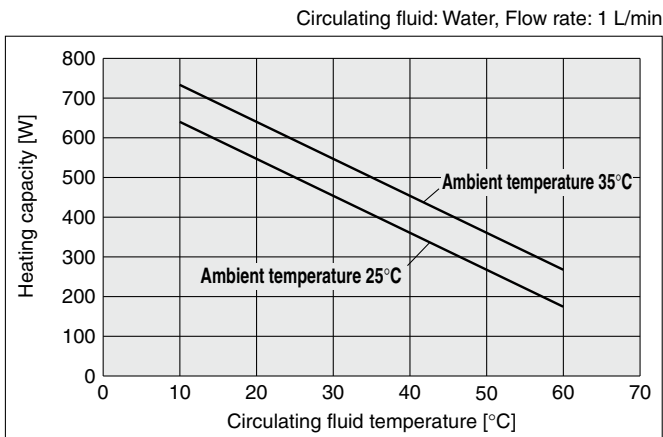
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## Cooling Capacity



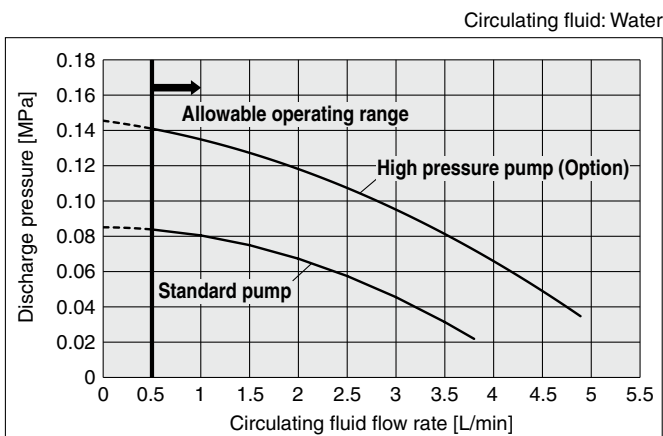
\* For the high pressure pump (Option), the cooling capacity decreases by approx. 20 W.

## Heating Capacity

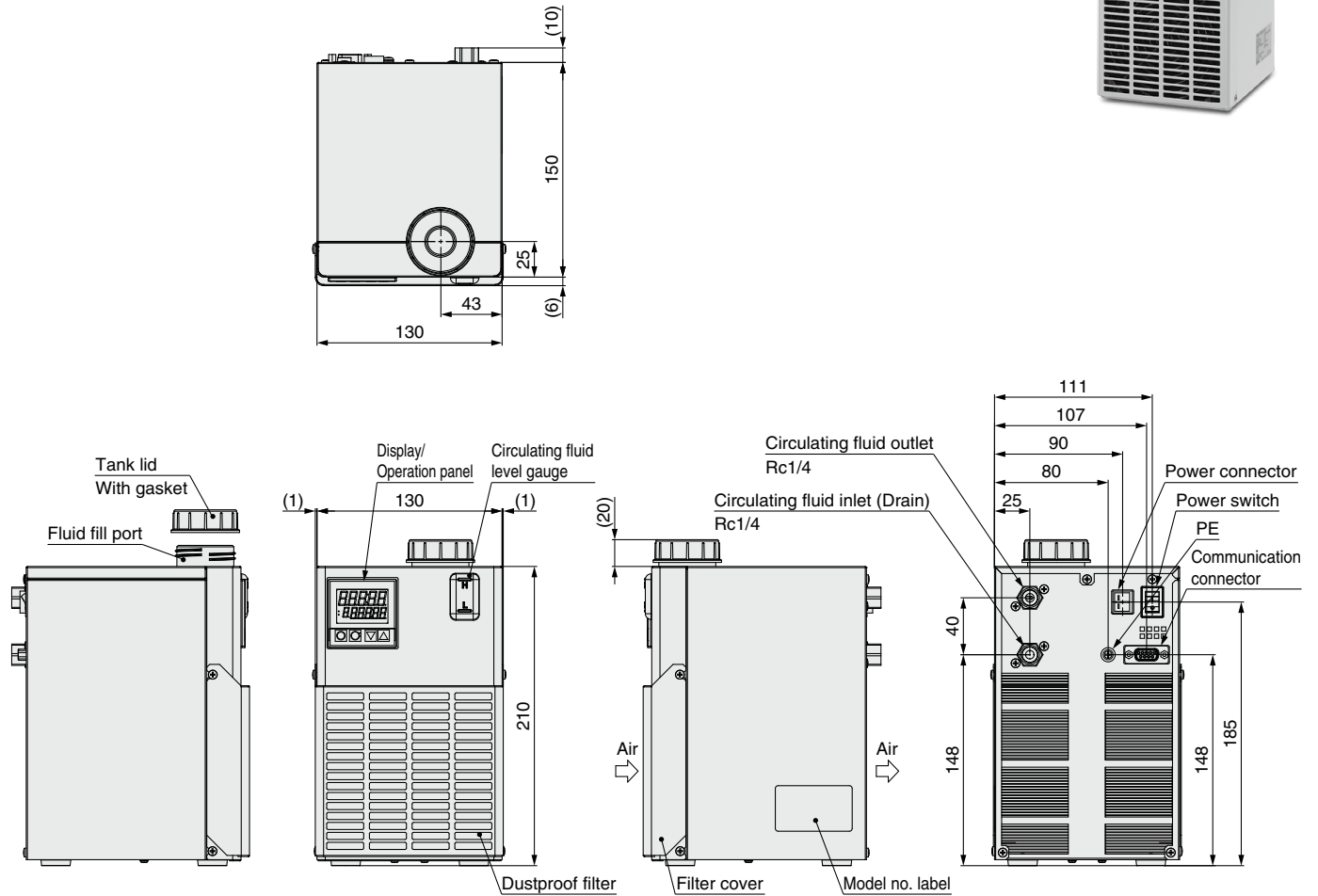


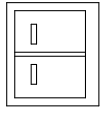
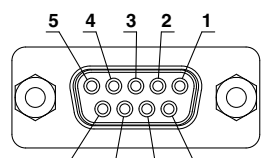
\* For the high pressure pump (Option), the heating capacity increases by approx. 10 W.

## Pump Capacity (Thermo-con Outlet)



**Dimensions**

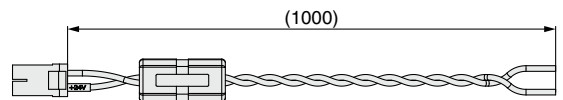


Connector name	No.	Signal contents	Connector type/Part no.
Power connector	1	24 VDC +	 J.S.T. Mfg. Co., Ltd. JFA connector J4000 series SC02B-J42SK-GHXR
	2	24 VDC -	
Communication connector	1	RS-485 BUS +	 D-sub 9 pin (socket type) Holding screw: M2.6
	2-8	Unused	
	9	RS-485 BUS -	

**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 -

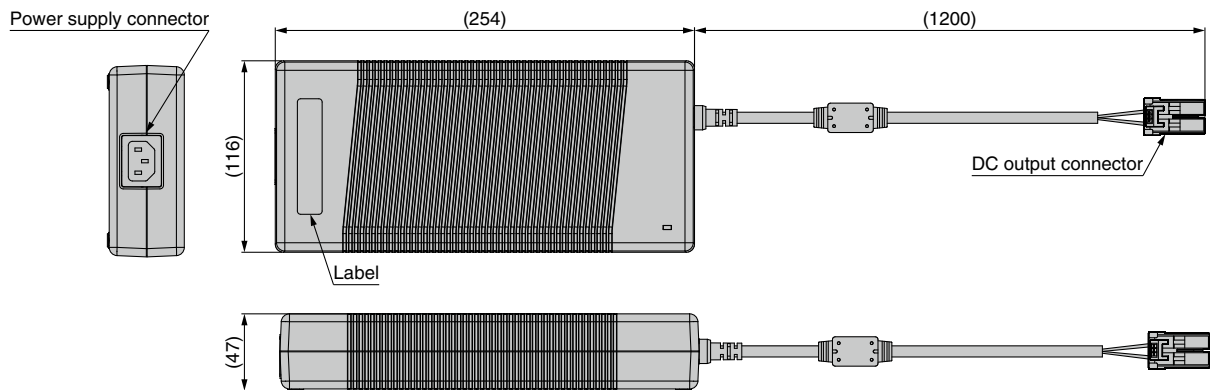


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## Optional Accessories

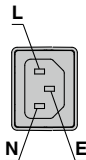
### AC adapter

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

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

\* Not for use with other products

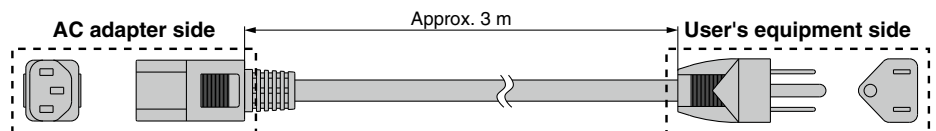
### Power Supply Cable

⚠ 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.

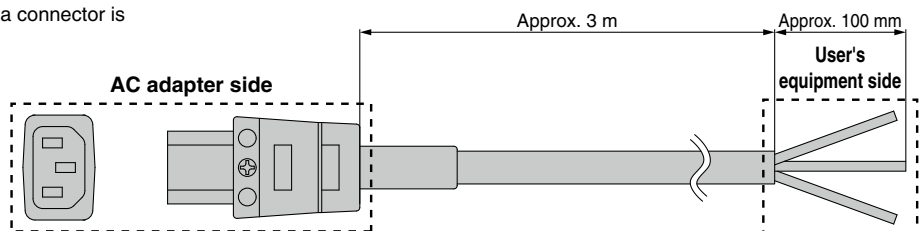
Part no.	Applicable model
HRS-CA001	HEC-S1896



#### ■ 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.