

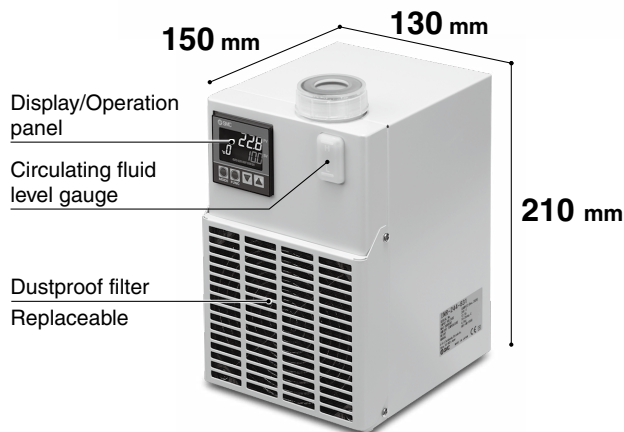
# Peltier-type Chiller

## 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

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Option

|      |                                     |
|------|-------------------------------------|
| Nil  | None                                |
| X125 | High pressure pump                  |
| X126 | Low noise fan                       |
| X127 | High pressure pump<br>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>Port size</b>              | Rc1/4                                                                                                   |
| <b>Electrical system</b>        | <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>              |                               | Power supply cable (1 m), Operation Manual<br>(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.)

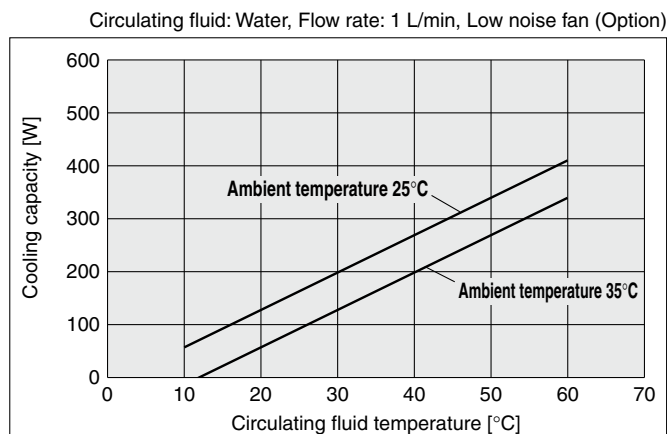
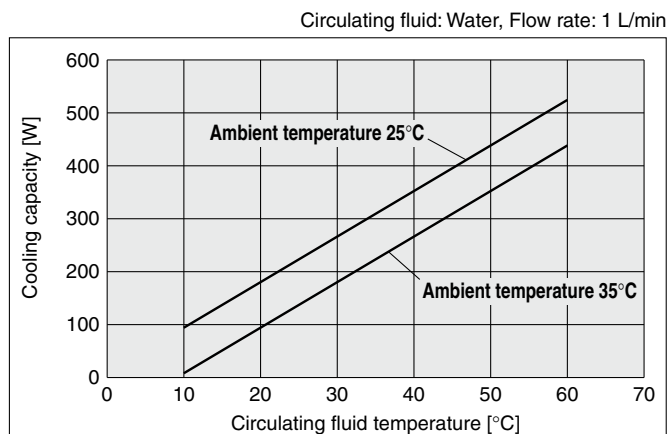
\*2 The indicated values are when there is a stable load without turbulence. It may be out of this range depending on the operating conditions.

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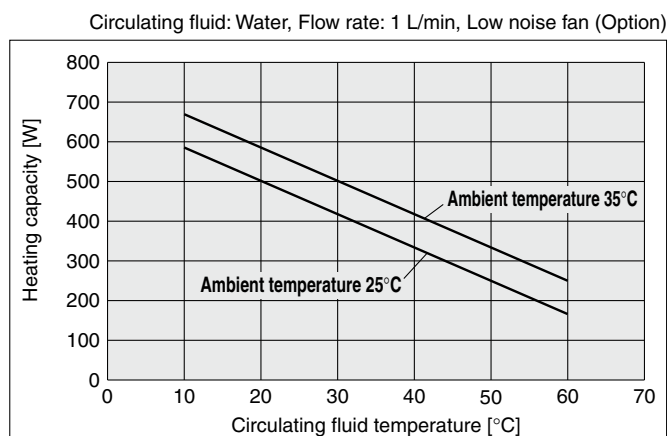
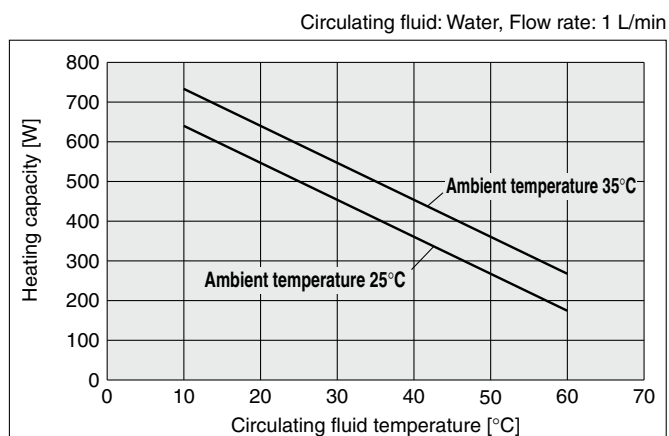
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## Cooling Capacity



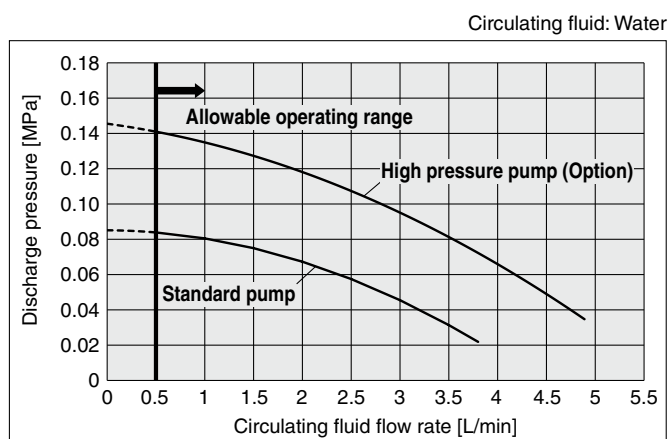
\* For the high pressure pump (Option), the cooling capacity decreases by approx. 20 W.

## Heating Capacity

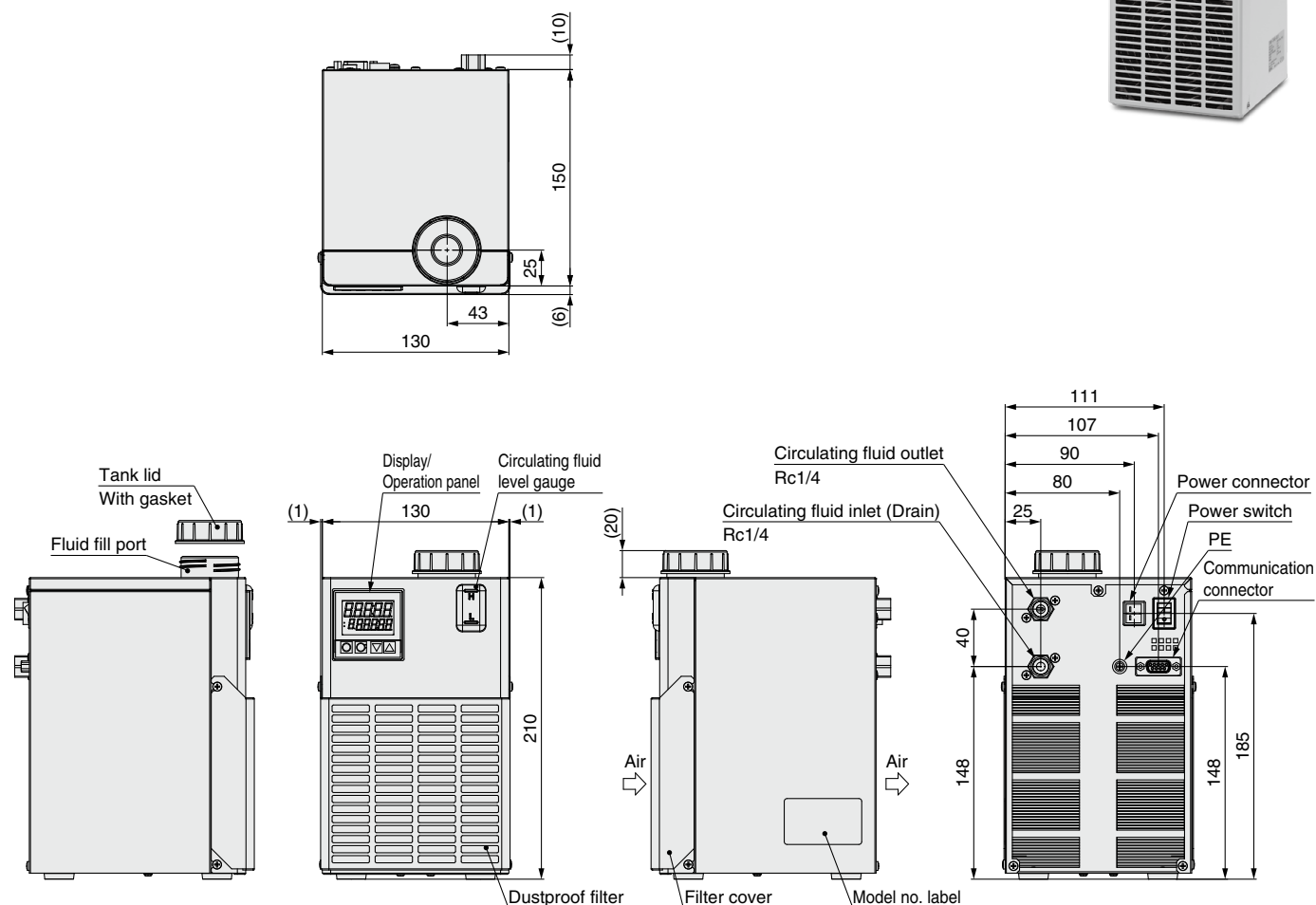


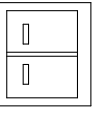
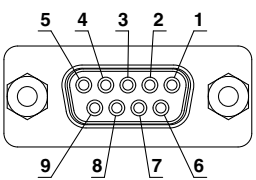
\* For the high pressure pump (Option), the heating capacity increases by approx. 10 W.

## Pump Capacity (Thermo-con Outlet)



## Dimensions



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

