



# HRW-CV008

## Anti-voltage-sag Kit (Accessory available separately)

### Operation Manual

Applicable model : HRW series

(Thermo Chiller)

#### Introduction

Thank you for purchasing the Anti-voltage-sag kit for the Thermo Chiller, HRW series. This operation manual is for personnel with adequate knowledge of general industrial equipment and device, and also the knowledge of assembly, operation, and maintenance of them. Do not start assembly operation, maintenance before thoroughly reading and understanding of this operation manual and the manual for Thermo Chiller, HRW series. Mounting are performed by customers referring this manual. Please refer the operation manual of Thermo Chiller for the guarantee. This manual is subject to change without prior notice.

#### Summary

- This kit is intended to prevent the Thermo Chiller from being stopped by voltage sag.

#### Safety caution

- Please read through after understanding display and symbols.

Display	Meaning
<b>Warning</b>	Incorrect operation leads to cause loss of life or serious injury of operator.
<b>Caution</b>	Incorrect operation leads to cause injury or damage or failure to the product, facility and equipment.

#### Warning

#### • Confirm the specification range

This product is designed as a part of the Anti-voltage-sag Kit for Thermo chiller, HRW series. Do not use this for application other than that in specification range.

#### • Operation manual and procedure shall be fully understood

Read Thermo chiller operation manual (HRX-OM-K003) thoroughly to understand the content. Keep the manual so that it is accessible any time.

#### • Do not supply power during mounting

Ensure lock out and tag out of the power supply. Otherwise, Thermo chiller may start by mistake.

#### Caution

#### • Do not disassemble nor remode to avoid fluid leakage and operation failure

Fluid leakage and operation failure are led to cause.

#### Preparation

- Plus screw driver (suitable to rotate M4, the main body length 150mm)

#### Parts mounting

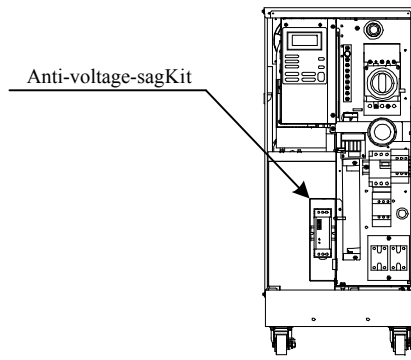


Fig. 1

#### Before mounting

Confirm all accessories at the page 3 of the unit.

#### Procedure 1.

Check the breaker handle is locked out and tagged out at the position "OFF" and remove the Front panel.

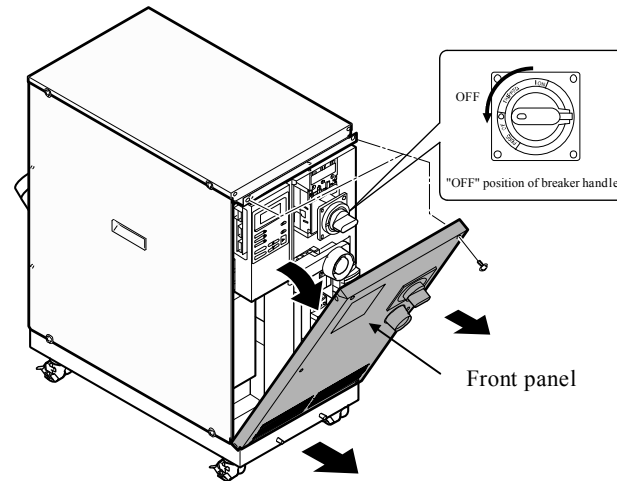


Fig. 2

#### Procedure 2.

Mount the Anti-voltage-sag kit as shown in Fig. 3, and fix it by panel screw. (Plus screw driver recommended torque: 1.5Nm)

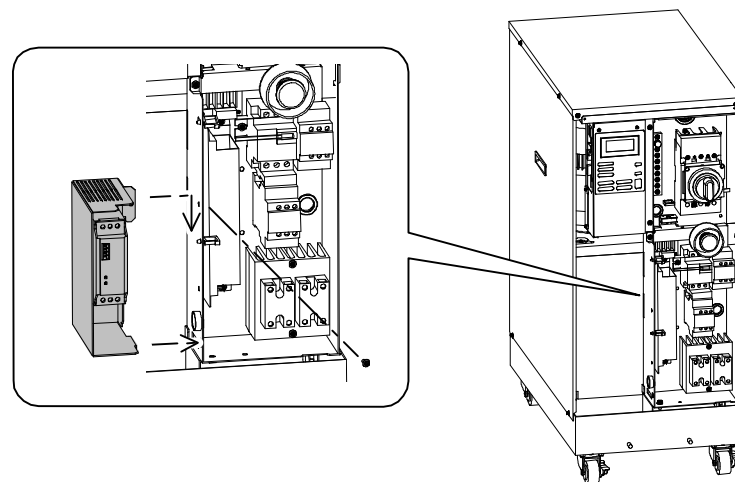


Fig. 3

#### Procedure 3.

Draw the cable A to the part B as shown in Fig. 4. Remove the screws for ground of the Thermo Chiller and connect the cable A. (Plus screw driver, recommended torque: 1.5Nm) Insert connector [J2] of Thermo Chiller to connector [J2] of Anti-voltage-sag Kit.

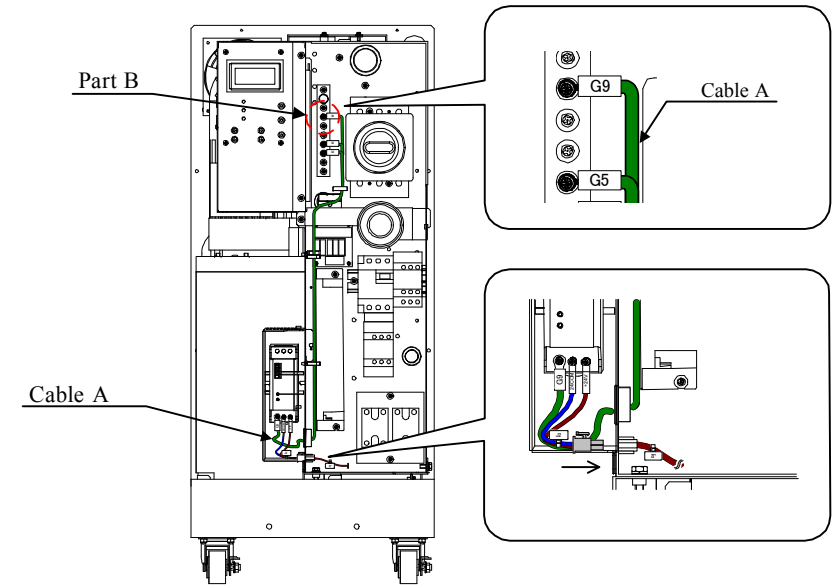


Fig. 4

#### Procedure 4.

Mount the Front panel. (Cross recessed driver, recommended torque: 1.5Nm)

#### Procedure 5.

Run the Thermo Chiller for test following the Operation Manual of the Thermo Chiller (HRX-OM-K003).

#### Specifications

Applicable model	Thermo Chiller HRW series
Purpose	Prevents the thermo-chiller from being stopped by voltage sag.
Specifications	In accordance with the product specifications for the Thermo Chiller HRW series (Doc. No. HRX-PS-K002).
Allowable voltage sag time	1sec

#### Accessories

Panel screw × 1pcs

Operation Manual  
[Doc. no. HRX-OM-L032] × 1 copy