

HMC/HTOR INSTRUCTION MANUAL

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Thank you for purchasing our products. Our products are designed and manufactured for the toughest industrial applications and are backed by two years limited warranty from the date of delivery to purchaser. To ensure the best performance from your products, please review this manual before product installation and use.

Warning

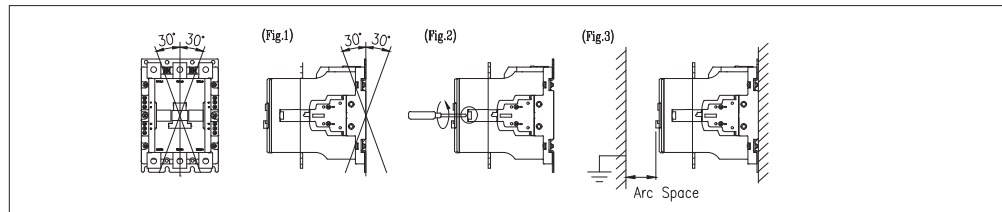
- 1) Before installation or inspection of contactors or overloads, overloads turn off disconnect and verify power has been removed.
- 2) Do not modify device.
- 3) Be sure to tighten terminal screws to specified torque. Loose terminal connection may result in fire.
- 4) Do not operate contactor with cover removed, an open arc-extinguishing chamber may result in electric shock and severe burns.
- 5) In the event of an overload trip, inspect system and remove the cause of the overload condition before re-applying power.
- 6) Installation, maintenance, and inspection should be performed by qualified personnel.
- 7) When disposing, treat products as industrial waste.

Check point before installation

Please verify that the product ratings are correct for intended application.

Installation Instruction

- 1) Install in environment free from excessive vibration and humidity.
- 2) Product may be installed in either a vertical or horizontal position. Up to 30° deviation is allowed. Consult Fig.1 for details.
- 3) Turn the screws counter-clockwise on both sides of the arc box by 90 degrees.(Fig.2)
- 4) Keep the distance more than 0.8inches with HMC-185A,225A and 1.2inches with HMC-265A,330A,400A arc or clearance space shown in Fig.3 when installing magnetic contactors in panel.



COIL The allowable voltage range of the operating coil.

FRAME SIZE	Rated Voltage	Coil Voltage & Frequency		FRAME SIZE	Rated Voltage	Coil Voltage & Frequency	
		AC 50/60Hz	DC			AC 50/60Hz	DC
HMC-185A 225A	24V	24~25V	24V	HMC-265A 330A 400A	100~200V	100~240V	100~220V
	100~200V	100~240V	100~220V				

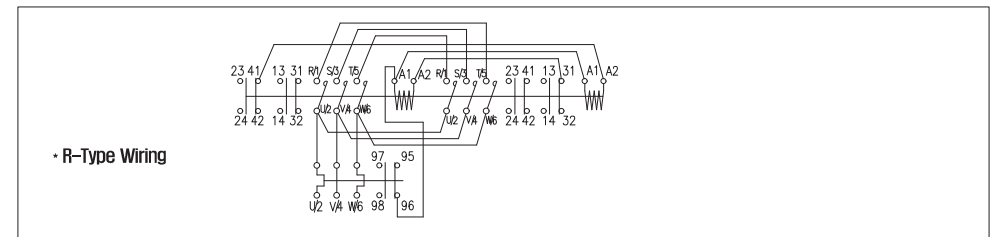
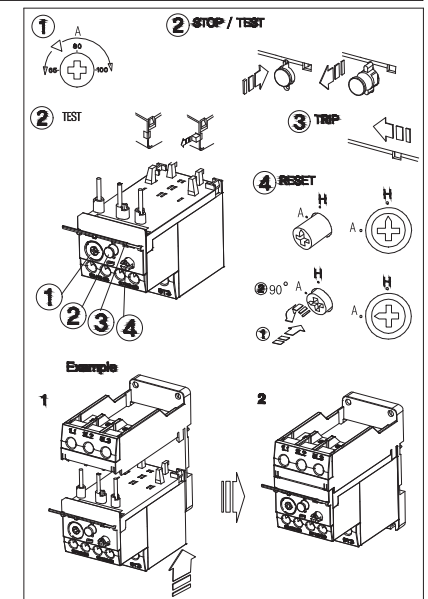
Thermal Overload Relay

- 1) Turn the current setting dial arrow to the appropriate amperage setting. For service factor other than 1.00, increase the current setting by the service factor percentage. HTOR relays may be setup to 20% higher than maximum motor rating.
- 2) Please rotate the current adjustment dial within the amp range scale.
- 3) Select either manual overload reset (H) or automatic reset (A) by depressing and rotating green button, so the arrow points to the desired mode. In manual mode reset the trip condition by pressing green button. Note: relay will only reset after sufficient cooling time has elapsed.
- 4) Test the overload by pulling the red button. Press the red button to open the N/C contacts (95-96)

	STOP	TEST/TRIP	RESET
NC 95-96			
NO 97-98			

Reversing Contactors

- 1) When using contactors in a reversing operation use either the mechanical interlock HMX2-MI or if using an electrical interlock, we recommend use of a time delay relay to avoid a possible short circuit.
- 2) When using an electrical interlock, the residual charge in the motor windings must be dissipated before transitioning to avoid a line side short.
- 3) Comply with UL508A Section 33.4
 - a) Electrically interlocked coil via control circuitry; or
 - b) Mechanically interlocked by a device that complies with 33.1.3



Wire Size and Tightening Torque (60/75°C Cu wire only)

FRAME SIZE	TERMINAL SCREW		SIZE OF WIRE [mm ²]	COMPRESSED TERMINAL(mm)		CONNECTING TORQUE[kgf cm]	
	CONTACTOR	RELAY		CONTACTOR	RELAY	CONTACTOR	RELAY
HMC-225AF	M10	M10	2~150	2-10~150-10	2-10~150-10	150	150
HMC-400AF	M12	M12	2~200	2-12~200-12	2-12~200-12	250	250