

## ATLAS METAL

1135 N.W. 159th DRIVE, MIAMI, FLORIDA 33169

TEL 305.625.245 I TOLL FI

TOLL FREE 800.762.7565 FAX 305.623.0475
RV.COM SALES@ATLASFOODSERV.COM

#### RM/RMX & RM-HP SERIES

## Service and Installation Manual

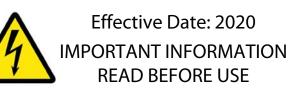
Please read this manual completely before attempting to install or operate this equipment! Notify carrier of damage! Inspect all components immediately. See page 2.



DROP-IN COLD PAN
3" RECESSED TOP
REFRIGERATED SIDE COILS
SELF-CONTAINED OR REMOTE



DROP-IN HOT/COLD PAN 3" RECESSED TOP DUAL SERVICE HOT OR COLD (HOT MODE - WATER MUST BE USED)



#### **CONTENTS**

RECEIVING & INSPECTING EQUIPMENT	
SERIAL AND MODEL # LOCATION	1
RM SPECIFICATIONS, FEATURES AND ACCESSORIES	2
ELECTRICAL CHARACTERISTICS AND CUT-OUT REQUIREMEMENTSINSTALLATION, OPERATION AND S/S MAINTENANCEPARTS LIST	3
INSTALLATION, OPERATION AND S/S MAINTENANCE	4
PARTS LIST	5,6,7
RM-HP SPECIFICATIONS FEATURES AND ACCESSORIES	8-9
INSTALLATION, OPERATION AND S/S MAINTENANCE	10
PARTS LIST	11
AUTOMATIC WATER FILL INSTALLATION, OPERATION & PARTS LIST	12-13
TROUBLE SHOOTING GUIDE	14
THERMOSTAT SETTINGS, ELECTRICAL & REFRIGERATION CHART	15
ELECTRONIC TEMPERATURE CONTROL SET-UP	16
ELECTRICAL SCHEMATICS	
LIMITED WARRANTY	
WARRANTY INFORMATION	21

## RECEIVING AND INSPECTING THE EQUIPMENT

- 1. VISUALLY INSPECT THE SHIPPING CRATE. DAMAGE SHOULD BE NOTED AND REPORTED TO THE DELIVERING CARRIER.
- 2. IF DAMAGED, OPEN AND INSPECT CONTENTS WITH CARRIER.
- 3. IF CRATE IS NOT DAMAGED AND THERE IS CONCEALED DAMAGE TO THE EQUIPMENT, NOTIFY THE CARRIER. NOTIFICATION MUST BE MADE VERBALLY AND IN WRITING.
- 4. REQUEST AN INSPECTION BY THE SHIPPING COMPANY FOR THE DAMAGED EQUIPMENT WITHIN 10 DAYS FROM RECEIPT OF THE EQUIPMENT
- 5. FREIGHT CARRIERS CAN SUPPLY THE NECESSARY FORMS ON REQUEST.
- 6. SAVE ALL CRATING MATERIALS UNTIL INSPECTION HAS BEEN MADE OR WAIVED.

## **SERIAL NUMBER LOCATION**

THE SERIAL AND MODEL# CAN BE FOUND ON THE CONDENSING UNIT ENCLOSURE - SEE OPERATORS SIDE CONTROL PANEL WHEN CALLING ATLAS FOR PARTS AND SERVICE. ALWAYS HAVE THIS INFORMATION AVAILABLE.
SERIAL #:
MODEL #:
NSTALLATION DATE:



## ATLAS METAL

1135 N.W. 159th DRIVE, MIAMI, FLORIDA 33169

TEL 305.625.2451 TOLL FRE WWW.ATLASFOODSERV.COM

TOLL FREE 800.762.7565 FAX 305.623.0475
RV.COM SALES@ATLASFOODSERV.COM

Project:	
Item No.:	
Quantity:	

#### **DROP-IN SERVING EQUIPMENT**



## **COLD PAN**

(3" Recessed Top)
Refrigerated
with Side Coils
Self-Contained

Ш	KWI-2
	RM-3

□ RM-4 □ RM-5

□**RM-6** 

#### **SPECIFICATIONS**

**TOP**: Constructed of 18 gauge, type 304 stainless steel, die stamped with a raised perimeter bead. There shall be a solid vinyl gasket under the beaded edge to form a seal to the counter top, thus preventing seepage or marring of the counter top. Embossed mounting lugs are provided along the inner surface, 3" down from the top, to hold the pan rails and a full set of removable separator channels in place.

**LINER**: The inner liner shall be 18 gauge, type 304 stainless steel with a 3" recessed top, one piece construction, all welded, ground and polished to a uniform finish. All corners are coved with a minimum 1/4" radius. The liner has copper tubing firmly soldered to the top 3" on all sides. A 3/4 dia. drain with strainer, 4" PVC nipple, and valve is provided.

**INSULATION**: The pan is fully insulated with high density polystyrene, 1" thick on all sides, 2" thick on the bottom and enclosed with a 22 gauge galvanized steel outer case.

**REFRIGERATION SYSTEM**: The compressor housing shall be fabricated from 14 gauge galvanized and bolted to the base of the unit. A fully self-contained condensing unit is provided with a hermetically sealed compressor and digital electronic thermostat/thermometer. The system is fully charged with CFC free refrigerant and ready to operate.

**NOTE**: Proper ventilation must be provided in the counter.

**ELECTRICAL**: The unit will be wired for 15 amps., 120 volt, single phase operation with an on/off switch and pilot light. A 6' long, 3-wire cord and plug (NEMA 5-15P) will be provided.

Specifications subject to change without notice.

#### STANDARD FEATURES

- Refrigerated copper tubing, within the 3" recess, around all sides meets your toughest health department standards
- Fully insulated for maximum efficiency and energy savings
- Factory applied gasket makes installation a snap and seals units to the counter top, thus eliminating seepage
- Accommodates standard 12" X 20" pans with the use of separator channel(s) and pan rails, or fractional size pans with the use of optional adapter bars
- 1-Year Parts & Labor Warranty
- NSF Certified; UL Listed

#### **ACCESSORIES**

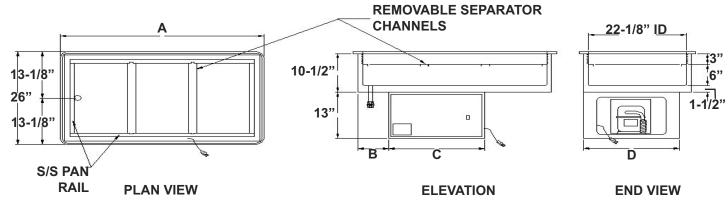
- 5YW 5-Year Compressor Warranty
- WFB Stainless steel perforated false bottom
- Stainless Steel adapter bars (pg DI-51-52)
- Stainless Steel adapter plates (pg DI-51-52)
- CP Cover Plate with handles, S/S
- **2060-1** Condensate Evaporator
- RS Remote on/off switch for counter mounting
- RDVE Rear Drain Valve Extension
- \* 220 Volt 50 Cycle Compressor

<sup>\*</sup>Please see Operation & Installation Manual for <u>ALL</u> operation and maintenance details.

\* Units with these accessories are <u>not</u> currently UL listed.







MODEL	PAN OPENINGS	PAN SIZE	"A"	ELECTRICAL CHARACTERISTICS	CUT-OUT REQUIRED	SHIP WT. (LBS.)
RM-1	1	19-7/8" X 11-7/8" X 9" (50.4 X 30.1 X 22.8cm)	18-1/8" (46.3cm)	3.0 amps 120V - 1/5HP	24-1/2" X 16-1/2" (62.2 X 41.9cm)	148 (67.1kg)
RM-2	2	19-7/8" X 25-5/8" X 9" (50.4 X 65 X 22.8cm)	31-3/4" (81.2cm)	6.0 amps 120V - 1/4HP	24-1/2" X 30-1/4" (62.2 X 76.8cm)	203 (92kg)
RM-3	3	19-7/8" X 39-3/8" X 9" (50.4 X 99.9 X 22.8cm)	45-1/2" (116.2cm)	6.0 amps 120V - 1/4HP	24-1/2" X 44" (62.2 X 111.7cm)	244 (110.6kg)
RM-4	4	19-7/8" X 53-1/8" X 9" (50.4 X 134.9 X 22.8cm)	59-1/8" (151.1cm)	7.8 amps 120V - 1/3HP	24-1/2" X 57-3/4" (62.2 X 146.6cm)	274 (124.3kg)
RM-5	5	19-7/8" X 66-7/8" X 9" (50.4 X 169.8 X 22.8cm)	73" (186cm)	10.7 amps 120V - 1/2HP	24-1/2" X 71-1/2" (62.2 X 181.6cm)	341 (154.6kg)
RM-6	6	19-7/8" X 80-5/8" X 9" (50.4 X 204.7 X 22.8cm)	86-3/4" (220.9cm)	10.7 amps 120V - 1/2HP	24-1/2" X 85-1/4" (62.2 X 216.5cm)	389 (176.4kg)

REMOTE REFRIGERATION	RMX LESS COMP. WT.
MODEL	(LBS.)
RMX-1	85 (38.5kg)
RMX-2	140 (63.5kg)
RMX-3	185 (83.9kg)
RMX-4	215 (97.5kg)
RMX-5	240 (108.8kg)
RMX-6	300 (136kg)

	В	C	D
RM-1	6"	18"	13-3/4"
	(15.2cm)	(45.7cm)	(34.9cm)
RM-2	7"	21-1/2"	21-5/8"
	(17.7cm)	(54.6cm)	(54.9cm)
RM-3	7"	21-1/2"	21-5/8"
	(17.7cm)	(54.6cm)	(54.9cm)
RM-4	7"	21-1/2"	21-5/8"
	(17.7cm)	(54.6cm)	(54.9cm)
RM-5	7"	21-1/2"	21-5/8"
	(17.7cm)	(54.6cm)	(54.9cm)
RM-6	7"	21-1/2"	21-5/8"
	(17.7cm)	(54.6cm)	(54.9cm)

## RMX - REFRIGERATED COLD PAN WITHOUT COMPRESSOR

RM-1: Units include Refrigerated Cold pan, Thermostat, Cap Tube, & Drier RM-2-6: Units include Refrigerated Cold pan, Thermostat, Expansion Valve, & Drier (all for hookup in field by others.)

#### **COMPRESSORS FOR REMOTE INSTALLATIONS**

**2029** - 1/5 HP for RMX-1 **2029-5** - 1/4 HP for RMX-2 & 3 **2029-6** - 1/3 HP for RMX-4 **2029-7** - 1/2 HP for RMX-5 & 6

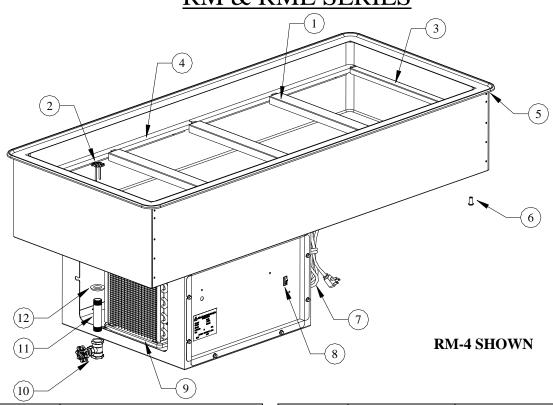
**DI-16** 2/19-sc



Subsidiary of Mercury Aircraft, Inc.

1135 N.W. 159th DR., MIAMI, FL 33169 PHONE (305) 625-2451, (800) 762-7565, FAX (305) 623-0475, E-mail: sales@atlasfoodserv.com

## PARTS LIST FOR RECESSED MECHANICAL COLD PANS RM & RML SERIES



ITEM	PART	DESCRIPTION		
NUMBER	NUMBER			
1	S80103-0	Separator Channel (RM)		
	S85008-0	Separator Channel (RML)		
2	86-3202	Perforated Snap- In Drain		
	S83432-0	Pan Rail End RM'S (2 Req'd)		
3	S83442-0	Pan Rail Ends for RM-1, RML, (2 Req'd)		
	S83438-0	Pan Rail Sides for RM-1 (2 Req'd)		
		Pan Rail Sides for RM-2 (2 Req'd)		
	S83440-0	Pan Rail Sides for RM-4 (4 Req'd)		
	505110 0	Pan Rail Sides for RM-6 (6 Req'd)		
	S83439-0	Pan Rail Sides for RM-3 (2 Req'd)		
4	S83441-0	Pan Rail Sides for RM-5 (4 Req'd)		
7		Pan Rail Sides for RML Only		
	S83443-0	Pan Rail Sides for RML-2 (4 Req'd)		
		Pan Rail Sides for RML-3 (6 Req'd)		
		Pan Rail Sides for RML-4 (8 Req'd)		

ITEM	PART	DESCRIPTION	
NUMBER	NUMBER		
5	7002-0+Model #	Vinyl Bead Gasket	
6	7020-0	Nylon Spacer	
7	1003-0	Power Cord with Plug RM-1,2,3,4	
/	1002-7	Power Cord with Plug RM-5,6	
8	1069-1	Switch with Light	
	2029-0	1/5 H.P. Compressor	
9	2029-5	1/4 H.P. Compressor	
9	2029-6	1/3 H.P. Compressor	
2029-7		1/2 H.P. Compressor	
10	3016-2	Stop Valve	
11	30-3130	PVC Nipple	
12	49-1028	Grommet	
13	22-1397	Thermostat (Not Shown)	
14	2024-2	Drier (Not Shown))	
15	2027-0	0.031 Cap Tube (for 1/5 H.P) Comp. (Not Shown)	
	•	(NOU SHOWII)	
16	494-54(not shown	1/4 Expansion Valve RM-4-5-6	
17	494-53(not shown	1/8 Expansion Valve RM-2-3	

#### RECESSED MECHANICAL COLD PANS

#### RM & RML SERIES

#### INSTALLATION

Provide the correct counter cut-out opening (see chart below) and drop in. The vinyl gasket assures complete seating. A non-toxic silicone seal may be used between the gasket and counter top (not required).

Note: Units are supplied with a nipple and gate valve to be connected for draining.

MODEL NUMBER	CUT-OUT SIZE
RM-1	24 1/2 X 16 1/2
RM-2	24 1/2 X 30 1/4
RM-3	24 1/2 X 44
RM-4	24 1/2 X 57 3/4
RM-5	24 1/2 X 71 1/2
RM-6	24 1/2 X 85 1/4
RML-2	16 1/2 X 46 1/2
RML-3	16 1/2 X 68 1/4
RML-4	16 1/2 X 90

The unit should be level for draining purposes. When installing unit in a counter, it is recommended that the operator side of the counter be completely open for air circulation. When this is not possible, such as in an island counter, it is recommended that two grill openings are provided approximately 18" x 18" of free air for intake and exhaust at the opposite ends of the counter. Also the counter must have an opening of approximately 24" x 14" to access the compressor for maintenance. Then the compressor can be reached by removing four (4) screws from the control and rear panels.

The unit is supplied with a power cord and NEMA plug. Refer to the data plate on the compressor housing for the amperage and voltage information. Use a licensed electrician when installing power source.

Note: see TABLE# 1 for BTU/HR and evaporator temperatures.

\_\_\_\_\_

#### OPERATION

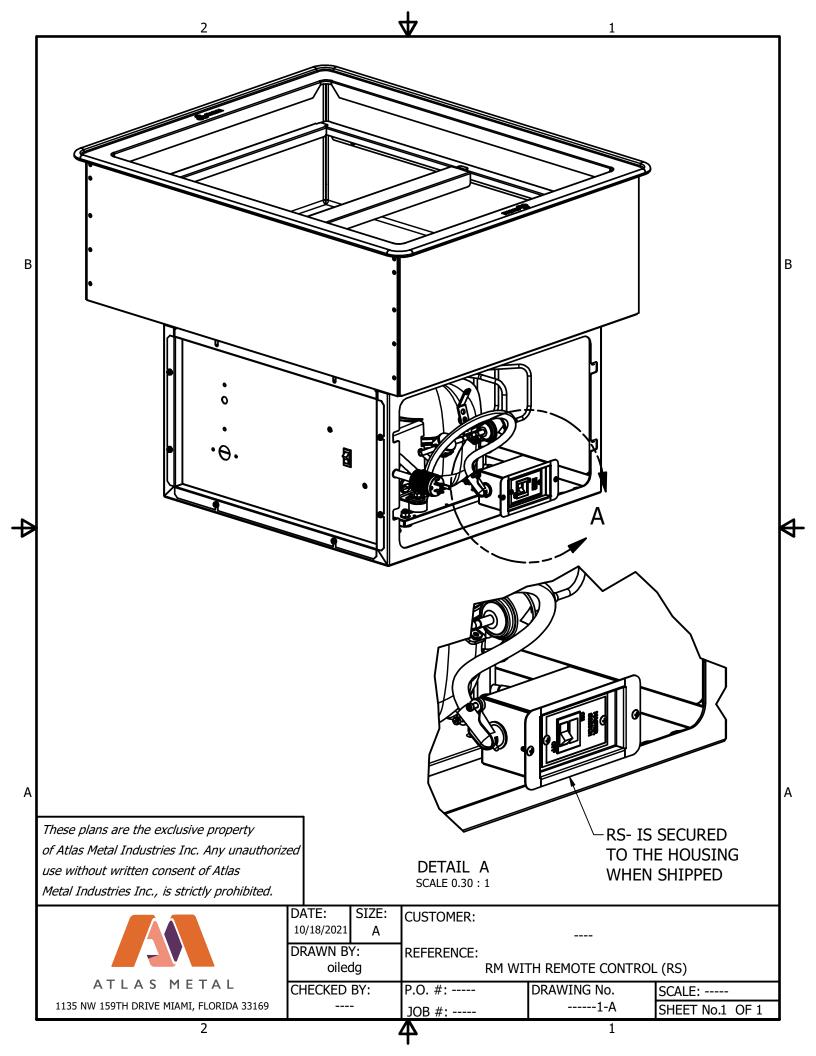
This unit should be turned on one hour before serving and turned off after completing the serving period. The thermostat has been pre-set at the factory.

\_\_\_\_\_\_

All food products must be 34-35 degrees when placed in the unit. Food products must be 3 inches below the top of the unit. **Note: The unit should not operate 24/7.** 

#### MAINTENANCE

<u>NEVER</u> CLEAN PANS WITH A CHLORIDE BASED PRODUCT. CHLORIDES OR IMPROPER CLEANING COULD SCAR, MARK AND/OR CORRODE PANS. <u>DO NOT</u> USE STEEL WOOL OR ABRASIVE PRODUCTS. TO CLEAN USE SOAPY WARM WATER, RINSE THOROUGHLY TO REMOVE ALL RESIDUES. <u>FAILURE TO MEET THESE CONDITIONS WILL VOID WARRANTY</u>. CLEAN CONDENSER COIL REGULARLY.





## ATLAS METAL

1135 N.W. 159th DRIVE, MIAMI, FLORIDA 33169

TEL 305.625.2451 TOLL FREE 800.762.7565 FAX 305.623.0475 WWW.ATLASFOODSERV.COM SALES@ATLASFOODSERV.COM

Project:	
Item No.:	
Quantity:	

#### **DROP-IN SERVING EQUIPMENT**



# HOT/COLD PAN

(3" Recessed Top)
Dual Temp.
Hot or Cold Service
(For Hot Mode)
Water Must Be Used

Ш	$oldsymbol{U}$	IVI	-1	П	-2
	R	M	-ŀ	16	<b>-</b> 3

□RM-HP-4

□RM-HP-5

□RM-HP-6

#### **SPECIFICATIONS**

**TOP**: Constructed of 18 gauge, type 304 stainless steel, die stamped with a raised perimeter bead. There shall be a solid vinyl gasket under the beaded edge to form a seal to the counter top, thus preventing seepage or marring of the counter top. Embossed mounting lugs are provided along the inner surface, 3" down from the top, to hold the pan rails and a full set of removable separator channels in place.

**LINER**: The inner liner shall be 18 gauge, type 304 stainless steel, one piece construction, all welded, ground and polished to a uniform finish. All corners are coved with a minimum 1/4" radius. The liner has copper tubing firmly soldered to the top 3" on all sides. A 3/4" dia. drain with strainer, 4" copper nipple, and valve is provided.

**INSULATION**: The pan is fully insulated with high density fiberglass, 1-3/8" thick on all sides, 1-1/2" thick on the bottom and enclosed with a 22 gauge galvanized steel outer case.

**HEATING ELEMENT**: An immersion type heating element is provided in the bottom of the pan along with a perforated stainless steel sheath cover. A thermostat control is included. **Please note: the element <u>must</u> be submerged in water to operate properly**.

**REFRIGERATION SYSTEM**: The compressor housing shall be fabricated from galvanized formed angles and bolted to the base of the unit. A fully self-contained condensing unit is provided with a hermetically sealed compressor and a thermostat control. The system is fully charged with CFC free refrigerant and ready to operate.

NOTE: Proper ventilation must be provided in counter

**ELECTRICAL**: The unit is pre-wired with a hot/cold selector switch that prevents dual operation, with the required thermostat controls and pilot light. The unit is provided with a 6' long, 3-wire cord and a twist lock plug.

Specifications subject to change without notice.

#### STANDARD FEATURES

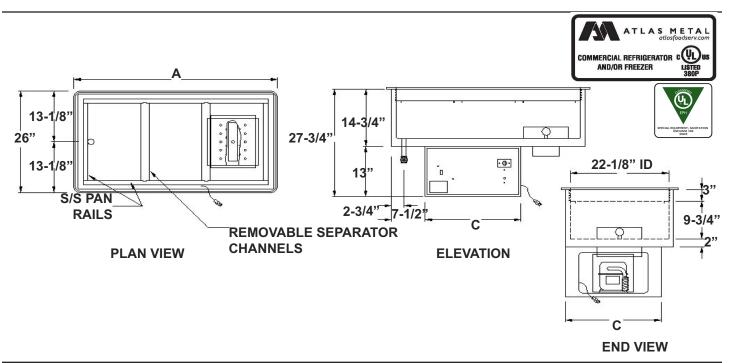
- Dual Temp. a hot serving unit becomes a refrigerated cold pan at the flip of a switch
- Fully insulated for maximum efficiency and energy savings
- Factory applied gasket makes installation a snap and seals units to the counter top, thus eliminating seepage
- Accommodates standard 12" X 20" pans with the use of separator channel(s) and pan rails, or fractional size pans with the use of optional adapter bars
- 1-Year Parts & Labor Warranty
- NSF Certified and UL Listed

#### **ACCESSORIES**

- **5YW** 5-Year Compressor Warranty
- Stainless Steel adapter bars (pgs. DI-51-52)
- Stainless Steel adapter plates (pgs. DI-51-52)
- CP Cover Plate with handles, S/S
- RSHP Remote Switch for counter mounting
- RDVE Rear Drain Valve Extension
- AF Automatic water fill
- \* 220 Volt 50 Cycle Compressor

<sup>\*</sup>Please see Operation & Installation Manual for <u>ALL</u> operation and maintenance details.

\* Units with these accessories are <u>not</u> currently UL listed.



MODEL	"A"	PAN SIZE	ELECTRICAL CH	ARACTERISTICS	NEMA	SHIP WT.
			HOT OPERATION	COLD OPERATION	CONFIGURA- TION	(LBS.)
RM-HP-1	18-1/8" (46.3cm)	19-7/8" X 11-7/8" X 9" (50.4 X 30.1 X 22.8cm)	16.7 amps 2KW - 120V	3.0 amps 120V - 1/5 HP	L5-30P	145 (65.8kg)
RM-HP-2	31-3/4" (81.2cm)	19-7/8" X 25-5/8" X 12-1/4" (50.4 X 65.6 X 31.1cm)	16.7 amps 2KW - 120V 14.5 amps 3KW - 208V 12.5 amps 3KW - 240V	6.0 amps 120V - 1/4 HP	L5-30P L-14-30P L-14-30P	236 (107kg)
RM-HP-3	45-1/2" (116.2cm)	19-7/8" X 39-3/8" X 12-1/4" (50.4 X 99.9 X 31.1cm)	16.7 amps 2KW - 120V 14.5 amps 3KW - 208V 12.5 amps 3KW - 240V	6.0 amps 120V - 1/4 HP	L5-30P L-14-30P L-14-30P	267 (121.1kg)
RM-HP-4	59-1/8" (151.1cm)	19-7/8" X 53-1/8" X 12-1/4" (50.4 X 134.1 X 31.1cm)	14.5 amps 3KW - 208V 12.5 amps 3KW - 240V 19.3 amps 4KW - 208V 16.7 amps 4KW - 240V	7.8 amps 120V - 1/3 HP	L-14-30P L-14-30P L-14-30P L-14-30P	305 (138.3kg)
RM-HP-5	73" (186cm)	19-7/8" X 66-7/8" X 12-1/4" (50.4 X 169.8 X 31.1cm)	19.3 amps 4KW - 208V 16.7 amps 4KW - 240V	10.7 amps 120V - 1/2 HP	L-14-30P L-14-30P	342 (155.1kg)
RM-HP-6	86-3/4" (220.9cm)	19-7/8" X 80-5/8" X 12-1/4" (50.4 X 204.7 X 31.1cm)	19.3 amps 4KW - 208V 16.7 amps 4KW - 240V	10.7 amps 120V - 1/2 HP	L-14-30P L-14-30P	423 (191.8kg)

<sup>\*</sup>Units are wired to prevent simultaneous operation in the hot and cold mode. Numeral following the model letters denotes the 12" x 20" pan capacity.

PAN OPENINGS	COUNTER CUT-OUT REQUIRED	"C"
OPENINGS	24-1/2" X 16-1/2"	18"
1	(62.2 X 41.9cm)	(45.7cm)
_	24-1/2" X 30-1/4"	21-1/2"
2	(62.2 X 76.8cm)	(54.6cm)
_	24-1/2" X 44"	21-1/2"
3	(62.2 X 111.7cm)	(54.6cm)
	24-1/2" X 57-3/4"	21-1/2"
4	(62.2 X 146.6cm)	(54.6cm)
_	24-1/2" X 71-1/2"	21-1/2"
5	(62.2 X 181.6cm)	(54.6cm)
	24-1/2" X 85-1/4"	21-1/2"
6	(62.2 X 216.5cm)	(54.6cm)

## RM-HPX - HOT/COLD PAN WITHOUT COMPRESSOR

Units include Hot/Cold Pan, Thermostat, Expansion Valve & Drier (for hook up in field by others)

#### **COMPRESSORS FOR REMOTE INSTALLATIONS**

2029 - 1/5 HP for RM-HPX-1

2029-5 - 1/4 HP for RM-HPX-2 & 3

2029-6 - 1/3 HP for RM-HPX-4

2029-7 - 1/2 HP for RM-HPX-5 & 6

RSHP - Remote Control Panel is required to operate unit.

Atlas Metal Industries ● 1135 NW 159th Dr. Miami, FL 33169 ● (800) 762-7565 Fax: (305) 623-0475 ● atlasfoodserv.com

**DI-20** 2/19-sc

## HOT OR REFRIGERATED COLD PAN

#### **RM-HP SERIES**

#### **INSTALLATION**

Provide the correct counter cut-out opening (see chart below), and drop in. The vinyl gasket assures complete seating. A non-toxic silicone seal may be used between the gasket and counter top (not required).

Note: Units are supplied with a nipple and stop valve to be connected for draining.

"Waste water connections are to conform to the International Plumbing Code 2003, International Code Council (ICC) or the Uniform Plumbing Code 2003, International Association of Plumbing and Mechanical Officials (IAPMO)", or the equivalent.

	CUT-OUT SIZE
RM-HP-2	24 1/2 X 30 1/4
RM-HP-3	24 1/2 X 44
RM-HP-4	24 1/2 X 57 3/4
RM-HP-5	24 1/2 X 71 1/2
RM-HP-6	24 1/2 X 85 1/4

The unit should be level for draining purposes. When installing unit in a counter, it is recommended that the operator side of the counter be completely open for air circulation. When this is not possible, such as in an island counter, it is recommended that two grill openings be provided, approximately 18" x 18" of free air for intake and exhaust, at opposite ends of the counter, and a minimum clearance of 14" at the top, 24" at the back and 10" at each side of the enclosure.

The unit is supplied with a power cord and NEMA plug. Refer to the data plate on the compressor housing for the amperage and voltage information. Use a licensed electrician when installing power source.

#### **OPERATION**

\*IF ORDERED WITH AUTO-FILL PLEASE SEE PAGE 11

#### **HEATING CYCLE**

- 1-Turn master switch to "OFF" position.
- 2-Close drain valve.
- 3-Fill unit, preferably with "HOT" water until heating element is completely submerged (water must be level or above the water fill line). "WARNING": HEATING ELEMENT

## WILL BE DAMAGED IF NOT SUBMERGED AT ALL TIMES DURING HEATING CYCLE. Check

water level before heating operation and approximately every 4 hours of continuous operation. Failure to do so will void warranty.

- 4-Turn selector switch to "HOT".
- 5-Turn master switch to "ON".
- 6-Select desired setting on heating thermostat dial (1-Warm, 10-Hot).
- 7-Cover unit with serving pans. Unit will be ready for serving in approximately 30 minutes.

#### **HEATING TO COOLING**

- 1-Turn master switch to "OFF" position.
- 2-Remove serving pans.
- 3-Drain hot water completely.
- 4-Turn selector switch to "COLD".
- 5-Turn master switch to "ON".
- "CAUTION": Unit is equipped with a safety device. Cold cycle will not energize until the stainless liner temperature is at 120 degrees or below.
- 6-Select desired cooling thermostat setting, (1 cool, 7 coldest)
- 7-Cover unit with serving pans. Unit will cool down and be ready for serving in approximately 30 minutes.
- \*Unit is not intended to operate 24/7.

#### COOL TO HEAT

Follow same steps shown for heat cycle.

#### **MAINTENANCE**

**NEVER** CLEAN PANS WITH A CHLORIDE BASED PRODUCT. CHLORIDES OR IMPROPER CLEANING COULD SCAR, MARK AND/OR CORRODE PANS. **DO NOT** USE STEEL WOOL OR ABRASIVE PRODUCTS. TO CLEAN USE SOAPY WARM WATER, RINSE THOROUGHLY TO REMOVE ALL RESIDUES.

#### **CLEAN CONDENSER COIL REGULARLY.**

HEATER SHEATH SHOULD BE PERIODICALLY CLEANED OF LIME OR OTHER BUILT-UP MATERIAL TO PREVENT ELEMENT OVER HEATING.

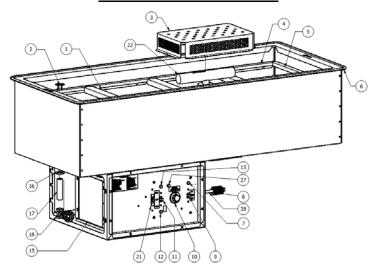
FAILURE TO MEET THESE CONDITIONS WILL VOID WARRANTY.



Subsidiary of Mercury Aircraft, Inc.

1135 N.W. 159th DR., MIAMI, FL 33169 PHONE (305) 625-2451, (800) 762-7565, FAX (305) 623-0475, E-mail: sales@atlasfoodserv.com

# PARTS LIST HOT OR COLD COMBINATION UNIT RM-HP SERIES



ITEM NUMBER	PART NUMBER	DESCRIPTION	
1	S80103-0	Separator Channel	
2	86-3202	Perforated Snap-In Drain	
3	S80608-0	Element Cover (Units 4, 5, 6)	
3	S80607-0	Element Cover (Units 2, 3)	
	S83439-000	Insert side (unit 3)	
4	S83440-000	Insert side (unit 2,4,6)	
	S83441-000	Insert side (unit 5)	
5	S83432-000	Insert end (RM-1 side 2-6 end)	
6	7002-0+Model #	Vinyl Bead Gasket	
7	1100	Master & heating pilot light (red)	
	2691-3	30 AMP 120/250 Volt Plug	
8	2091-3	RMHP-4,5,6 (not shown)	
0	12-256	30 AMP 120 Volt Plug	
	12-230	RMHP-2,3 (not shown)	
9	12-202	Master Switch PS30AC2-1	
10	22-1402	Heating Thermostat	
11	112-1252	Manual Control P&S 1228	
12	112-1102	Cooling Pilot Light (Blue)	
13		Pilot Light (*)	
14	2044-0	Cooling Thermostat	
	2029-07JP	1/5 H.P. Compressor	
	2029-07JF	(RMHP-1)	
	2029-56JL	1/4 H.P. Compressor	
15	2029-303L	(RMHP-2 & 3)	
	2029-66Л	1/3 H.P. Compressor	
	2027-003L	(RMHP-4)	
	2029-76ZL	1/2 H.P. Compressor	
	2027-70ZL	(RMHP-5 & 6)	
	2029-*	3/4 H.P. Compressor	
		(RMHP-*)	
16	49-1028	Grommet	

ITEM NUMBER	PART NUMBER	DESCRIPTION	
17	3006-2	<sup>3</sup> / <sub>4</sub> " x 4" Brass Nipple	
18	3016-11	Brass Ball Valve	
21	1118-1101	15 amp breaker RMHP-2-6 (Not Shown)	
	111-1069	Heating Elem. 120V 2000W	
	111-1062	Heating Elem. 208V 3000W	
22	111-1063	Heating Elem. 208V 4000W	
	111-1060	Heating Elem. 240V 3000W	
	111-1061	Heating Elem. 240V 4000W	
25	494-53	1/8 expansion valve (RMHP 2 & 3)	
26	494-54	1/4 expansion valve (RMHP 4,5 & 6)	
27	112-1103	Low water level pilot light (amber)	
28	1004-3	12/3 S.O. Power cord (2,3)	
	1004-5	12/4 Power cord (4,5,6)	
	22-1407	Dial Knob	
	22-140/	used on Std & RSHP	

# HOT OR REFRIGERATED COLD PAN RM-HP SERIES

## <u>AUTOMATIC WATER FILLUNITS</u>

## WIH, WH AND WCMHP/RMHP SERIES

## INSTALLATION

When installing water supply to the unit, the supply lines must be purged to remove particles from damaging the solenoid valve operation. A factory supplied in-line water strainer is installed. However, it is recommended the customer supply a primary water filtering system for protection.

\*Note-Atlas Metal Ind. Inc. is not responsible for routine maintenance of the strainer or customer supplied water filter system.

\*Atlas Metal Industries Inc. recommends that all units installed to a water source use our Autofill or any backflow protection of your choice. Please refer to your local code.

Any attempt to change or modify the Auto Fill system will void the warranty.

### **OPERATION**

#### **HEATING CYCLE**

- 1. Turn master switch to "OFF" position.
- 2. Close drain valve.
- 3. Turn master switch to "ON" position.
- 4. Turn on Auto Fill.
- Fill unit, preferably with "HOT" water until heating element is completely submerged (water must be level.)
   WARNING: HEATING ELEMENT WILL BE DAMAGED IF NOT SUBMERGED AT ALL TIMES DURING HEATING CYCLE!
- 6. Turn selector switch to "HOT".
- 7. Select desired setting on heating thermostat dial (1-Warm, 10-Hot).
- 8. Cover unit with serving pans. Unit will be ready for serving in approximately 30 minutes.

OPERATOR MUST CHECK PERIODICALLY THAT HEATING ELEMENT IS SUBMERGED.

#### **HEATING TO COOLING**

- 1. Turn master switch to "OFF" position
- 2. Remove serving pans.
- 3. Drain hot water completely.
- 4. Turn selector switch to "COLD".
- 5. Turn master switch to "ON".

**CAUTION:** Unit is equipped with a safety device. The compressor will not turn until stainless liner temperature is at 120 degrees or below.

- For WCM-HP Select desire cooling thermostat setting (1-Cool, 7-Coldest).
   For RM-HP, no setup necessary; Unit ships with factory temperature controls complete.
- Cover unit with serving pans. Unit will cool down and be ready for serving in approximately 30 minutes
  - \*Unit is not intended to operate 24/7.

#### **COOL TO HEAT**

Follow same steps shown for heat cycle

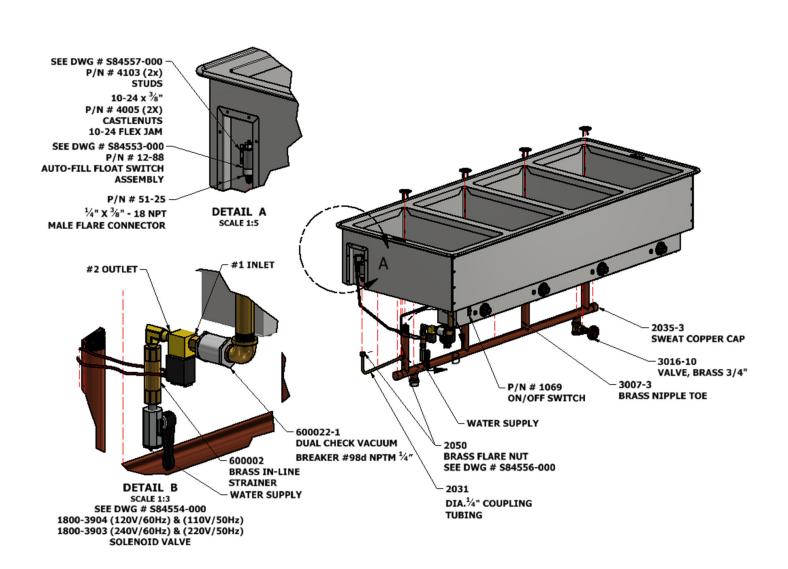
## **AUTOMATIC WATER FILLUNITS**

\*Note - Factory water depth settings for A/F units are 3/8" from the bottom of the liner and for WCM-HP and RM-HP, water depth should be 4" from the bottom of the liner.

DO NOT manually add water to Auto-fill units above water level mark, damage and leakage to the Automatic sensor could result. As the water evaporates the pans will fill automatically.

If the orange warning light turns on, please turn off the unit and check that the autofill is working properly.

It is recommended that the Auto Fill be in the off position when not in use.





Subsidiary of Mercury Aircraft, Inc.

1135 N.W. 159th DR., MIAMI, FL 33169 PHONE (305) 625-2451, (800) 762-7565, FAX (305) 623-0475, E-mail: sales@atlasfoodserv.com

Refrigerated Drop-In Trouble Shooting Guide					
Symptom Probable Cause					
	Unit not plugged in.				
	No power at receptacle.				
Unit will not run	Thermostat and or switch not in the on position.				
	Unit may be in a defrost cycle (if supplied) wait approximately 20 min.				
	Call factory for service at 1-800-762-7565				
	Condenser coil dirty				
Condenser runs but short cycles	Inadequate ventilation.				
Short Cycles	Call factory for service at 1-800-762-7565				
	Condenser coil dirty.				
G 1	Inadequate ventilation.				
Condenser runs constantly.	Unit installed in a hot location				
constantly.	Call factory for service at 1-800-762-7565				
	NOTE: WF series runs constantly.				
	Food product must be chilled to 33-35 deg. when placed in unit.				
Food product not	Air movement over food product.				
cold enough.	Food product not being stirred or rotated.				
	Call factory for service at 1-800-762-7565				

## RM-RMHP ELECTRONIC THERMOSTAT SETTINGS

<u>UNIT</u>	S1 (deg. F)	DIFF.(deg. F)
RM-1	18	8
RM-2-3	15	6
RM-4-5	18	8
RM-6	-2	7
RML-2-3-4	6	8
RMHP-2-3-4-5-6	3	8

## **ELECTRICAL & REFRIGERATION CHART**

							Low	High	BTU@
Model	Volts	Amps.	Watts	HP	Ref.	Oz.	psig.	psig.	M10 90A
RM-1	120	3		1/5	134A	4	5	150	505
RM-2	120	6		1/4	404A	18	30	300	1000
RM-3	120	6		1/4	404A	20	32	280	1000
RM-4	120	7.8		1/3	404A	22	30	240	1340
RM-5	120	10.7		1/2	404A	24	25	270	2180
RM-6	120	10.7		1/2	404A	26	25	270	2180
RML-2	120	6		1/4	404A	18	30	225	1000
RML-3	120	6		1/4	404A	20	30	220	1000
RML-4	120	7.8		1/3	404A	22	30	225	1340
RMHP-2	120	6/16.7	2000	1/4	404A	18	26	240	1000
RMHP-3	120	6/16.7	2000	1/4	404A	20	32	280	1000
RMHP-4	120/208	7.8/14.2	3000	1/3	404A	22	30	240	1340
RMHP-4	120/240	7.8/12.5	3000	1/3	404A	22	30	240	1340
RMHP-5	120/208	10.7/19.3	4000	1/2	404A	24	32	275	2180
RMHP-5	120/240	10.7/16.7	4000	1/2	404A	24	32	275	2180
RMHP-6	120/208	10.7/19.3	4000	1/2	404A	26	25	270	2180
RMHP-6	120/240	10.7/16.7	4000	1/2	404A	26	25	270	2180

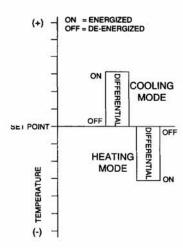


Figure 1: Setpoint and Differential Settings. Diagram indicates relay on and off points in either the heating or cooling modes.

#### **Programming Steps and Display**

The ETC can be programmed in four simple steps using the LCD display and the three keys on the face of the control.

- Step 1- To start programming, press the SET key once to access the Fahrenheit/Celsius mode. The display will show the current status, either F for degrees Fahrenheit or C for degrees Celsius. Then press either the upt or down parrow key to toggle between the F or C designation.
- Step 2Press the **SET** key again to access the setpoint. The LCD will display the current setpoint and the **S1** annunciator will be blinking on and off to indicate that the control is in the setpoint mode. Then press either the up<sup>1</sup> key to increase or the down key to decrease the setpoint to the desired temperature.
- Step 3Press the SET key again to access the differential. The LCD will display the current differential and the DIF 1 annunciator will be blinking on and off to indicate that the control is in the differential mode. Then press either the up® key to increase or the down key to decrease the differential to the desired setting.
- Step 4Press the SET key again to access the cooling or heating mode.
  The LCD will display the current mode, either C1 for cooling or
  H1 for heating. Then press either the up<sup>1</sup> or down I key to
  toggle between the C1 or H1 designation. Press the SET key
  once more and programming is complete.

Step	Annunciator	Description	Display
1	F or C	Fahrenheit or Celsius Scale	F
2	S1 (blinking)	Setpoint Temperature	》 70
3	DIF 1 (blinking)	Differential Temperature	DIF 5
4	C1/H1	Cooling or Heating Mode	

**NOTE:** The ETC will automatically end programming if no keys are depressed for a period of thirty seconds. Any settings that have been input to the control will be accepted at that point.

All control settings are retained in non-volatile memory if power to ETC is interrupted for any reason. Re-programming is not necessary after power outages or disconnects unless different control settings are required.

#### **Lockout Switch**

The ETC is provided with a lockout switch to prevent tampering by unauthorized personnel. When placed in the **LOCK** position, the keypad is disabled and no changes to the settings can be made. When placed in the **UNLOCK** position, the keypad will function normally.

To access the lockout switch, disconnect the power supply and open the control. The switch is located on the inside cover about 2 inches above the bottom. (see Figure 2). To disable the keypad, slide the switch to the left LOCK position. To enable the keypad, slide the switch to the right 'INLOCK position. All ETC controls are shipped with this switch in the INLOCK position.

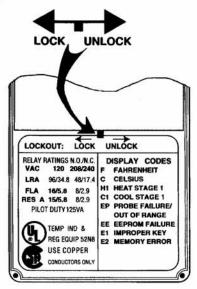


Figure 2: Lockout Switch

#### TROUBLESHOOTING ERROR MESSAGES

#### **Display Messages**

E1 - Appears when either the up 

or down 

key is pressed when not in the programming mode.

To correct: If the E1 message appears even when no keys are being pressed, replace the control.

- E2 Appears if the control settings are not properly stored in memory.
  To correct: Check all settings and correct if necessary.
- EP Appears when the probe is open, shorted or sensing a temperature that is out of range.

**To correct:** Check to see if the sensed temperature is out of range. If not, check for probe damage by comparing it to a known ambient temperature between -30°F and 220°F. Replace the probe if necessary.

EE - Appears if the EEPROM data has been corrupted.

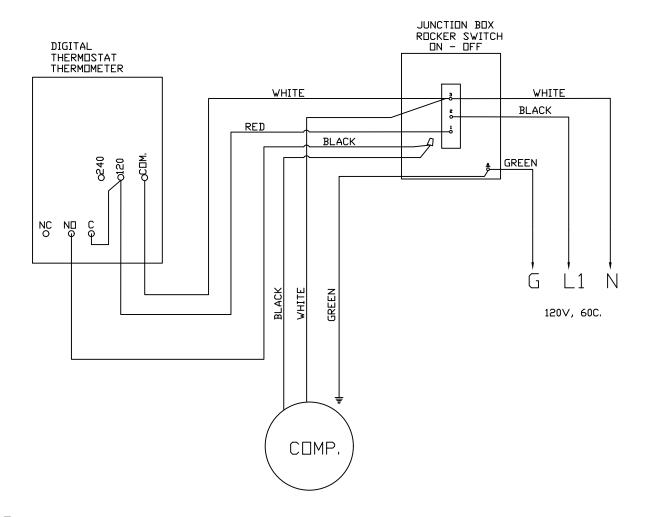
To correct: This condition cannot be field repaired. Replace the control.

CL - Appears if calibration mode has been entered.

To correct: Remove power to the control for at least five seconds. Reapply power. If the CL message still appears, replace the control.

4 3 🕏 2

#### RM 1-2-3-4-5-6 ELECTRIC HOOK UP



RM-1-----1/5H.P. RM-2-3----1/4H.P. RM-4----1/3H.P. RM-5-6----1/2H.P.

RML-2-3----1/4H.P. RML-4----1/3H.P.

120V, 60C.

RM-1 WIRE NUT TOGETHER BLACK WIRE FROM THERMOSTAT TO BLACK WIRE FROM COMPRESSOR IN JUNCTION BOX

RM 1-2-3-4-5-6 FOLLOW DIAGRAM

REVISION HISTORY						
REV	DESCRIPTION	DATE	BY			
1						
2						
3						
4						
5						
•	4					

These plans are the exclusive property
of Atlas Metal Industries Inc. Any unauthorized
use without written consent of Atlas
Metal Industries Inc., is strictly prohibited.

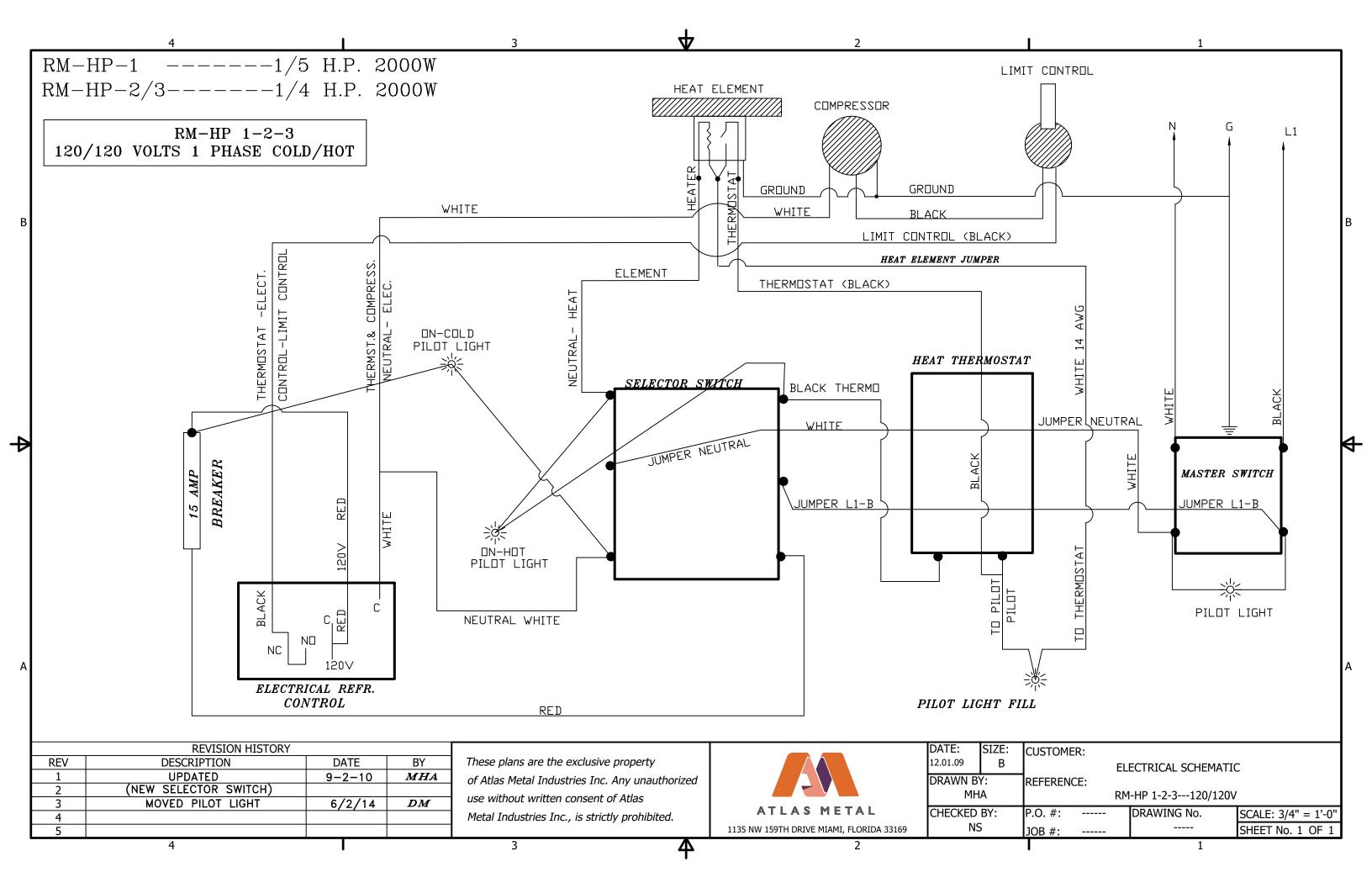


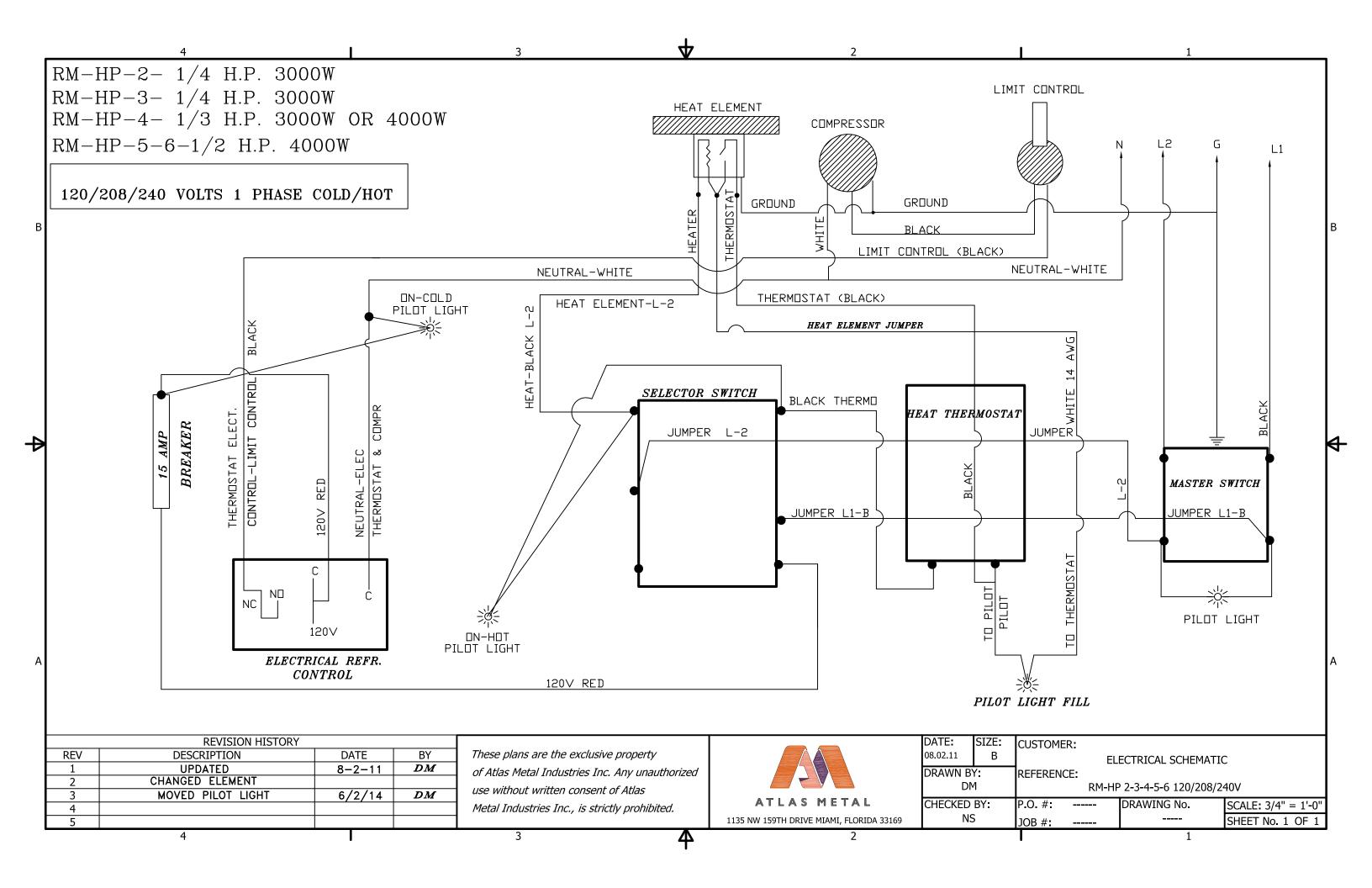
DRAWN BY: MHA REFERENCE: 120VOLTS (1) PHASE  CHECKED BY: P.O. #: DRAWING No. SCALE: 3/4" =	DATE: 03.28.00	SIZE: B	CUSTOME		1-5-6 ELECTRICAL SCH	HEMATIC
CHECKED BY: P.O. #: DRAWING No. SCALE: 3/4" =		• •	REFEREN	~=:	120VOLTS (1) PHASE	
			P.O. #:		DRAWING No.	SCALE: 3/4" = 1'-0"
NS JOB #: SHEET No. 1 C	NS	5	JOB #:			SHEET No. 1 OF 1

l l

4

.







## LIMITED WARRANTY

Atlas Metal Industries, Inc. warrants to the Purchaser of this product that the same shall be free from defects in the workmanship and material for a period of one year from the date of original installation of the equipment, but not to exceed eighteen (18) months after date of shipment from factory. During this period of time Atlas Metal Industries, Inc. will replace all defective parts and will pay for authorized replacement labor. Replacement and installation of such parts and labor shall be provided only upon prior written authority of Atlas Metal Industries, Inc.

The Refrigeration warranty is for a twenty (20) month time period and includes supplying the compressor at a no charge basis provided the damage to the compressor was not caused by the customer or end user. Authorized replacement labor will be paid for a period of one year from date of installation. Freight costs for defective unit to and from Atlas Metal Industries, Inc. are not included, and all defective parts must be returned to the factory freight prepaid for evaluation. ALL WARRANTY LABOR MUST BE AUTHORIZED BY ATLAS METAL INDUSTRIES, INC. PRIOR TO THE ACTUAL WORK BEING DONE. This warranty does not apply to any equipment or any part thereof, which has been subjected to shipping damage, improper voltage, alteration, abuse or misuses, and does not cover loss of food, other products, or damage to property due to mechanical or electrical malfunction.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. SELLER DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OF THE GOODS OR THE FITNESS OF THE GOODS FOR ANY PURPOSE AND BUYER AGREES THAT THE GOODS ARE SOLD "AS IS."



## WARRANTY INFORMATION

In order to have your invoice approved for payment by the factory, please note the following					
An authorization number <u>must</u> be the factory prior to performing any service.					
Atlas Metal will not approve excessive access to the unit being serviced. If desallow reasonable access, contact the fa	sign does <u>not</u>				
All travel time that exceeds 100 mi must be authorized by the factory.	•				

Thank You: Warranty service Dept.