



Customer

MHI-JINLING
AIR CONDITIONERS CO., LTD



Individual Model
Specifications
THACOM
Rotary Compressor

【 Model No. RM-B5077MDE2 】

MARK	REV. NO.	DATE	CHKD

APPROVED

H. Miyano

CHECKED & DRAWN

S. Miura

DATE

Aug. 2010

MITSUBISHI HEAVY INDUSTRIES, LTD.

SPEC. NO.	REV.	PAGE	DISTR.	SIZE
ESP-PA-9491		1/2	XX	A4=1-2



1. Scope

This INDIVIDUAL MODEL SPECIFICATIONS applies to model **RM-B5077MDE2** (3-Ph, DC) of THACOM Hermetic Rotary Compressors.

The general matter and the application standards of all Rotary Compressors comply with the GENERAL SPECIFICATIONS (Spec No.ESP-PA-5313).

2. Range of Production

The products are as shown below.

(1) Compressor

Part Name	No. Req	Part No.	Drw. No.
Compressor	1	AHT201A864DS	AHM000Z681A
Curve, Performance	—	—	—

(2) Wiring Diagram

Part Name	No. Req	Part No.	Drw. No.
Diagram, Wiring	—	—	AHM000Z243

3. Individual Specifications

(1) Compressor Data

No. of Cylinder	1	Cylinder Diameter	40 mm
Cylinder Height	22 mm	Displacement	7.71 cm ³
Refrigerant	R 410A	Refrigerant Charge	900 g(max)
Oil	DIAMOND FREEZE MA68	Oil Charge	300 cm ³
Weight (incl. oil)	9.2 kg	Compressor Cooling	Natural Air Draft

(2) Rated Performance

Power Source ※	Voltage (INV. In-put)	1-Ph 100V 60Hz					
	Frequency (INV. Output)	54Hz ※1		78Hz ※2		22Hz ※3 (Active off)	39Hz ※4
		Nagoya R&D center	THACOM	Nagoya R&D center	THACOM	Nagoya R&D center	Nagoya R&D center
Capacity [W]		2810±3%	-	3040±3%	-	1500±5%	1700±5%
Motor Input [W]		527±3%	-	699±3%	-	159±5%	261±5%
Rated Load Amperes [A]		3.09±5%	-	2.93±5%	-	2.17±5%	2.09±5%
η_{all} [%] ※6		77.7±3%	-	72.9±3%	-	79.4±5%	75.5±5%

※ INV. : RXA505A228 (ROM: C22RK F1.0 6958h 08.6.19) Reactor Part No.SSA554B087

※1 DST/SST=45.6/12.5°C, SC=5.2deg, SH=Nagoya R&D center:5.9deg, THACOM:15deg

※2 DST/SST=38.4/-0.2°C, SC=11.1deg, SH=Nagoya R&D center:5.0deg, THACOM:15deg

※3 DST/SST=40.9/20.7°C, SC/SH=1.8/5.0deg

※4 DST/SST=30.7/2.7°C, SC/SH=6.8/5.2deg

※5 Data of Motor Input

※6 Total Efficiency(without Inverter Efficiency)= $\eta_i \times \eta_m \times \eta_{motor}$

η_i : Indicational Efficiency

η_m : Mechanical Efficiency

η_{motor} : Motor Efficiency

(3) Motor Data

Motor Type	3-Ph, 4-Pole, Permanent Magnet Synchronous Motor
Starting Method	SET GUIDE MOTOR INV.DRIVE
Rated Power Supply	3-Ph, 136V DC 60Hz
Rated Output	550 W
Insulation Class Rating	Class-E
Resistance of Winding [at.20°C]	1.703 Ω
Demagnetizing[-1%] current	26.8 A [at -20°C], 30.4 A [at 20°C]
Application rotational frequency	20 ~ 115 rps (Active torque control less than 29rps)

記事1. 全ての接続線は、客先にて手配願います。尚、接続線は105℃以上の耐熱線を使用願います。

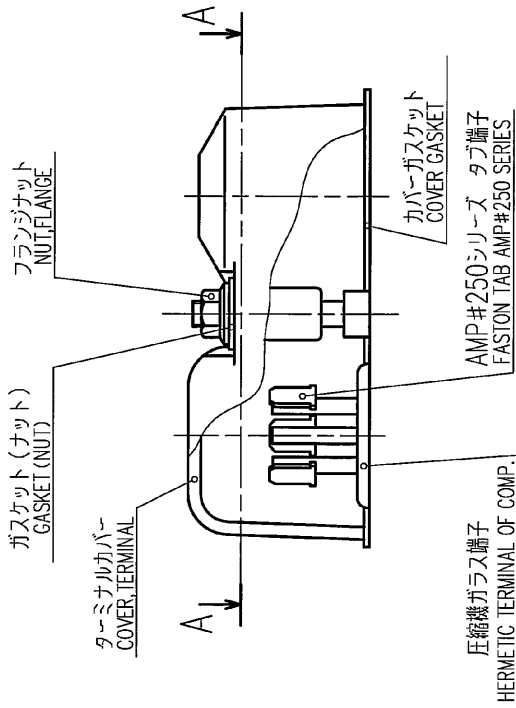
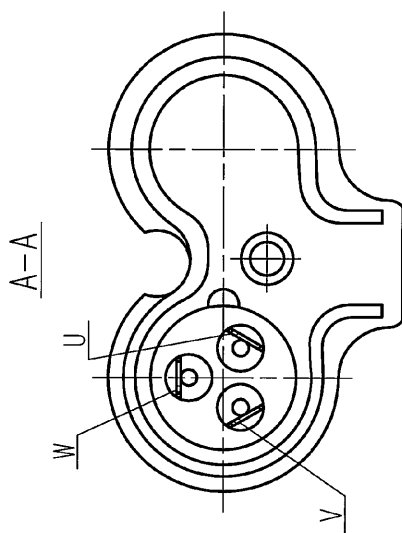
NOTE 1. ALL CONNECTING WIRES SHALL BE PREPARED BY USER. THE WIRES SHALL BE RESISTANT UP TO TEMPERATURES OF 105°C AND HIGHER.

2. ターミナルカバー固定用ナットは、 $0.49 \sim 0.98 \text{ N} \cdot \text{m}$ ($5 \sim 10 \text{ kgf} \cdot \text{cm}$) のトルクで締付け願います。

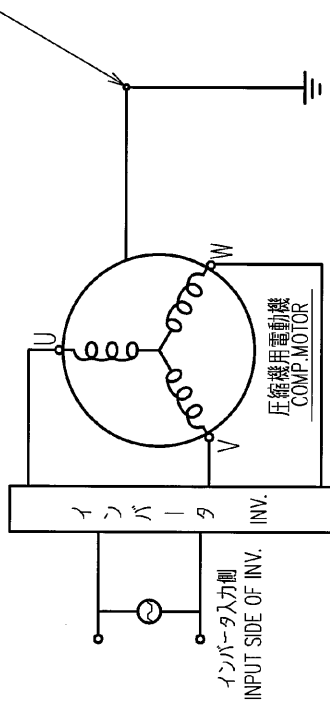
2. FIXING NUT OF TERMINAL COVER SHALL BE TIGHTENED BY TORQUE $0.49 \sim 0.98 \text{ N} \cdot \text{m}$ ($5 \sim 10 \text{ kgf} \cdot \text{cm}$).

3. コンブ外脚にあるアースねじ穴に使用するスクリューは $1.18 \sim 1.47 \text{ N} \cdot \text{m}$ ($12 \sim 15 \text{ kgf} \cdot \text{cm}$) のトルクで締付け願います。

3. THE SCREW USED TO THREADED HOLE FOR GROUND OF MOUNTING BRACKET SHALL BE TIGHTENED BY TORQUE $1.18 \sim 1.47 \text{ N} \cdot \text{m}$ ($12 \sim 15 \text{ kgf} \cdot \text{cm}$).



コンブ外脚アースねじ穴 (M4×0.7)
THREADED HOLE FOR GROUND
OF MOUNTING BRACKET (M4×0.7)



類別サイズ		尺法 SCALE	形式 MODEL	組立部 NEXT ASSY	特別配布先
		1:1	RM		1 SSM1
訂呼 MARK	訂呼 REV. 番号	年 月 日 DATE	点検 CHKD	名称 NAME	2 SSM1
認可 APPD	検出 CHKD	野口	野口	ワイヤリング ダイアグラム	3 JVV1
		06.5.10		DIAGRAM, WIRING	4 JVV2
				図種 番 Dwg. NDL	5
				ZAHM000Z243	6
				別訂入 特別配布先	7
				SUFFIX REV. MARK PAGE ST. DISTR.	8
				1/1 AA	9
				冊 数	E A3

三菱重工業株式会社 冷熱事業本部
MITSUBISHI HEAVY INDUSTRIES, LTD.