

# Mbsm.pro, compressor, AE16LMY, 3/8 hp, R134a, HBP, 17.4 cc, 5/8 hp, R404, LBP, 14.5 cc.

 mbsm.pro/62897.html

March 22, 2025



The **AE16LMY** compressor is a versatile hermetic compressor designed for both **R134a** (medium/high temperature) and **R404a** (low temperature) applications. Below is a detailed breakdown of its specifications, cooling capacities, applications, and key features when operating in **High Back Pressure (HBP)** mode with **R134a** and **Low Back Pressure (LBP)** mode with **R404a**.

## AE16LMY Compressor Overview

### General Specifications

- **Nominal Horsepower (HP):**
  - **R134a Mode (HBP):** 3/8 HP
  - **R404a Mode (LBP):** 5/8 HP
- **Displacement:**
  - **R134a Mode (HBP):** 17.4 cc
  - **R404a Mode (LBP):** 14.5 cc
- **Motor Type:** CSIR (Capacitor Start Induction Run) / CSR (Capacitor Start Run) with FC C/V control
- **Weight:** 13.7 kg
- **Lubricant:** Emkarate RL22HB POE (Polyolester lubricant)
- **Connections:** Rotolock suction and discharge connections

### 1. R134a Application (HBP Mode)

#### Evaporating Temperature Range:

**Medium to High Temperature: -15°C to 10°C**

#### Cooling Capacity (Watts):

Evaporating Temp (°C)	Cooling Capacity (Watts)
-15	1068
-10	1335
-5	1635

Evaporating Temp (°C)	Cooling Capacity (Watts)
0	1970
5	2340
10	2740

**Applications:**

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**R134a Mode (HBP):**

The AE16LMY is ideal for medium to high-temperature refrigeration systems, such as:

- Commercial refrigerators
  - Beverage coolers
  - Air conditioning systems
  - Display cases in supermarkets
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**2. R404a Application (LBP Mode)**

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**Evaporating Temperature Range:**

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**Low Temperature: -32°C to 0°C**

**Cooling Capacity (Watts):**

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Evaporating Temp (°C)	Cooling Capacity (Watts)
-32	524
-30	717
-25	948
-20	1215
-15	1540
-10	1920
0	2400

**Applications:**

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### **R404a Mode (LBP):**

When used with **R404a**, the AE16LMY is suitable for low-temperature applications, including:

- Walk-in freezers
  - Industrial chillers
  - Cold storage facilities
  - Transport refrigeration systems
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## **Key Features**

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### **1. Dual Refrigerant Compatibility:**

The AE16LMY can operate efficiently with both **R134a** (medium/high temperature) and **R404a** (low temperature), making it highly adaptable to diverse applications.

### **2. Advanced Motor Design:**

The CSIR motor type with FC C/V control ensures consistent performance and energy efficiency.

### **3. Compact & Lightweight:**

With a weight of just 13.7 kg and compact dimensions, this compressor is easy to install and maintain.

### **4. Rotolock Connections:**

Equipped with rotolock suction and discharge connections, which are particularly beneficial for low-temperature applications.

### **5. No Oil Cooler Required:**

The AE16LMY does not require an oil cooler when used with **R404a** in low-temperature applications.

### **6. Liquid Injection Kits:**

For low-temperature **R404a** applications, liquid injection kits may be required to ensure optimal performance.

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## **Performance Highlights**

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- **Versatility:** The AE16LMY's ability to handle a wide range of evaporating temperatures and cooling capacities makes it suitable for diverse applications, from commercial refrigeration to industrial freezers.
  - **Efficiency:** Its advanced motor design and compatibility with POE lubricants ensure smooth operation and extended compressor life.
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## **Applications Summary**

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- **R134a Mode (HBP):**
  - Medium to high refrigeration needs.
  - Examples: Supermarkets, convenience stores, air conditioning systems.







- **R404a Mode (LBP):**
    - Low-temperature refrigeration systems.
    - Examples: Freezers, cold storage units, industrial cooling.
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## Conclusion

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The **AE16LMY** compressor is a dual-mode solution that excels in both **R134a** (HBP) and **R404a** (LBP) applications. Its ability to deliver reliable performance across a broad range of evaporating temperatures and cooling capacities makes it an invaluable component in modern refrigeration technology. By understanding its specifications and capabilities, professionals can select the appropriate configuration based on their specific refrigeration needs.

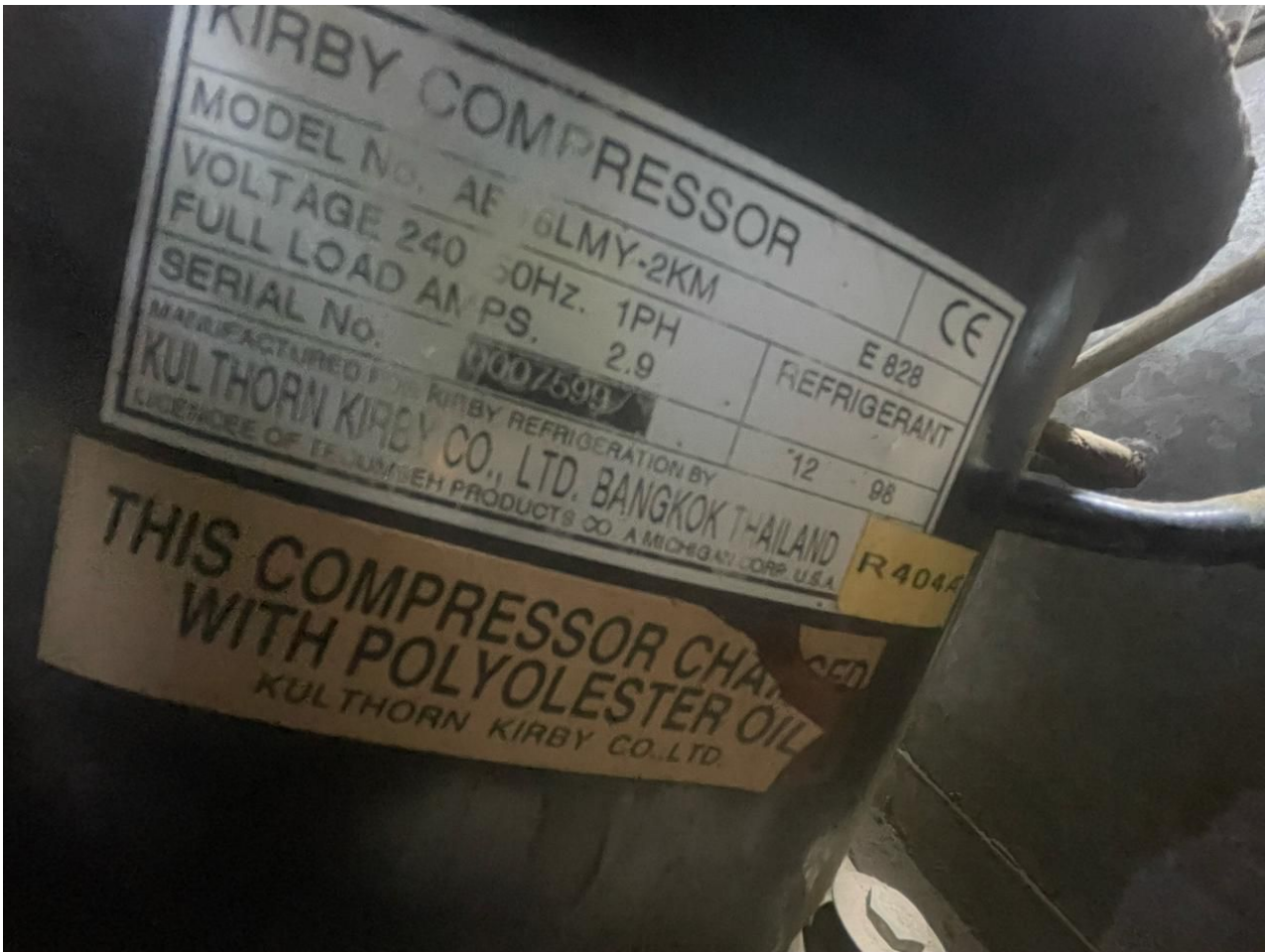
## COMPRESSORS - HERMETIC

Superseded Models	Nom. HP	Nominal rating (watts) @ 54 Deg C Cond.Temp.							Disp (cc)	Motor Type	Motor Cooling	Refrig Control	Wt (Kg)		
		-35	-30	-25	-20	-15	-10	-5						0	5
<b>R134a LOW MODELS</b> [Emkarate RL22HB POE lubricant]															
[-25°C to -5°C evap temp range]															
	BPM1072Z	AZ33LY	1/1.2	81							3.40	RSIR	ST	C	7.1
	BPM1084Z	B1085A, AE8ZA7,	1/8	102							4.15	RSIR	ST	C	7.1
	NB2112Z	NB1112Z	1/6	126	169	220	280	348	6.26	CSIR	ST	C	9.5		
	NB1118Z	B3116B#, B3118B#	1/5	179	243	316	404	501	8.00	RSIR	ST	C	10.4		
		AE5ZF9, AE4ZF11													
BP series	NE3121Z	E 3121 A, AE1385A AE4ZG12, E3121Z	1/4	229	303	393	497	618	13.60	RSIR	OC	C	11.1		
	NE3130Z	E 3130B, AE1411 A	1/3	313	412	531	671	830	15.28	RSIR	OC	C	11.1		
	T2134Z	-	3/8	357	482	639	830	1055	19.04	CSIR	FC	C/V	13.9		
	T2140Z	-	1/2	389	547	746	986	1266	22.40	CSIR	FC	C/V	14.0		
<b>R134a MED/HIGH MODELS</b> [Emkarate RL22HB POE lubricant]															
[-15°C to 10°C evap temp range]															
	NB5132Z	AE5HY, B5132Z	1/6	250 314 387					4.85	RSIR	ST	C	9.5		
	NB5144Z	AE6LMY, B5144Z	1/6	326 403 492					5.9	RSIR	FC	C	9.8		
	NB6144Z	AE8LMY, B6144Z	1/5	326 403 492					5.9	CSIR	FC	C/V	9.7		
	NE6160Z	AE4430Y, B6160Z	1/5	374 492 623					8.0	CSIR	FC	C/V	9.9		
	NE6170Z	AE4440Y, B6170Z	1/4	443 570 718					8.85	CSIR	FC	C/V	10.3		
	NE6187Z	AE4448Y, E6187Z	1/3	637 804 997					12.0	CSIR	FC	C/V	10.8		
	NE6210Z	AE14LMY	1/3	723 913 1134					13.6	CSIR	FC	WV	11.7		
	T6213Z	AE16LMY	3/8	835 1068 1335					17.4	CSIR	FC	C/V	13.7		
NB series	T6215Z	AKA4476Y, AJ22LMY	1/2	1003 1288 1616					20.4	CSIR	FC	C/V	14.2		
	NJ6220Z	AJA4492Y, AJ26LMY	3/4	1471 1881 2330					26.2	CSIR	FC	C/V	19.7		
	NJ6226Z	AJA4512Y, AJ34LMY	1	1764 2226 2732					34.4	CSR	FC	C/V	22.0		
<b>R404A LOW MODELS</b> [Emkarate RL22HB POE lubricant]															
[-30°C to -10°C evap temp range]															
	NE2125GK	AE8MG, E2125GK	1/3	204	303	416	544	687	8.9	CSIR	FC	C/V	10.6		
	NE2134GK	AE12LMY, E2134GK	1/2	283	424	585	765	965	12.0	CSIR	FC	C/V	10.7		
	T2155GK	AE16LMY	5/8	368	524	717	948	1215	14.5	CSR	FC	C/V	14.9		
	T2168GK	AKL19ZS, AJ18LZ	3/4	487	678	906	1169	1467	17.4	CSR	FC	C/V	15.3		
	T2178GK	-	1	606	827	1081	1368	1688	20.4	CSR	FC	C/V	16.7		
	T2180GK	-	1.12	639	873	1147	1460	1813	22.4	CSR	FC	C/V	17.3		
	NJ2192GK	AKL26ZS, AJ26LZ	1.25	752	1021	1345	1725	2161	26.2	CSR	FC	C/V	22.8		
NE series	NJ2212GK	AJ33LZ, AJ34LZ	1.5	945	1333	1775	2273	2825	34.4	CSR	FC	C/V	22.0		
<b>R404A MED/HIGH MODELS</b> [Emkarate RL22HB POE lubricant]															
[-10°C to 10°C evap temp range]															
	NE6181GK	B6181GK	1/4	565 689 836 1006 1200					7.4	CSIR	FC	C/V	10.9		
	NE6210GK	E6210GK	1/3	669 821 999 1205 1436					8.9	CSIR	FC	C/V	10.6		
	NE9213GK	E9213GK	3/8	862 1080 1327 1602 1906					12.0	CSR	FC	C/V	11.6		
	T6217GK	-	1/2	959 1220 1512 1833 2184					14.5	CSIR	FC	C/V	14.6		
	T6220GK	-	5/8	1161 1471 1823 2214 2647					17.4	CSR	FC	C/V	14.6		
	NJ9226GK	-	3/4	1584 1998 2470 2998 3584					21.7	CSR	FC	C/V	22.1		
	NJ9232GK	-	1.25	1940 2456 3045 3706 4441					26.1	CSR	FC	C/V	22.2		
T series	NJ9238GK	-	1.5	2415 3014 3697 4463 5313					32.7	CSR	FC	C/V	22.1		
<b>R22 MED/HIGH MODELS</b> [Fuchs Reniso EM 46 alkyl benzene lubricant]															
[-5°C to 15°C evap temp range]															
	NB6152E+	AE8MHG, B6152E	1/5	394 483 584 697					4.85	CSIR	FC	C/V	10.2		
	NE6181E	AE8MG-1, B6181E	1/4	561 705 873 1063					7.4	CSIR	FC	C/V	10.9		
	NE6210E	AE9MG-1, E6210E	1/3	670 836 1026 1241					8.9	CSIR	FC	C/V	10.6		
	NE9213E	AE12MG-1, E9213E	3/8	980 1220 1491 1792					12.0	CSR	FC	C/V	11.9		
	T6217E	AE14MG-1	1/2	1073 1388 1728 2093					14.5	CSR	FC	C/V	16.1		
	T6220E	-	5/8	1345 1682 2065 2494					17.4	CSR	FC	C/V	16.2		
	NJ9226E	AJ20MG-1	3/4	1792 2249 2769 3352					21.7	CSR	FC	C/V	20.0		
	NJ7228FR	AJ24MG-1	1.0	1976 2325 2992 3786					23.8	CSR	FC	C/V	22.0		
	NJ9232E	AJ26MG-1	1.25	2159 2695 3313 4013					26.2	CSR	FC	C/V	20.2		
	NJ9238E	AJ34MG-1	1.5	2802 3427 4131 4914					32.7	CSR	FC	C/V	21.0		
	NJ7240FR	-	1.75	3075 3617 4443 5369					34.4	CSR	FC	C/V	22.0		
<b>R22 AIRCONDITIONING MODELS</b> [Bantelon Avilub FC32 MO lubricant]															
[-5°C to 15°C evap temp range]															
	NJ7228FA	AJA5510EXC	1.0	1976 2325 2992 3786					23.8	PSC	FC	C	22.0		
NJ series	NJ7231FA	AJB5515EXC	1.25	2317 2726 3315 3974					26.2	PSC	FC	C	19.8		
	NJ7238EA	AJA5518EXC	1.5	2830 3328 4048 4931					32.7	PSC	FC	C	21.0		
	NJ7240FA	AJA5519EXC	1.75	3075 3617 4443 5369					34.4	PSC	FC	C	22.0		

**Note:** Above models are 220 - 240/150. All compressors are complete with electric. Standards connections are stub suction & stub discharge except J comps (CSR & CSIR type) which come complete with rotolock suction & stub discharge.

# Old model with oil cooler.

+ Model NB6152 has Shell 32 Visc alkylbenzene lubricant.



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