# Mbsm.pro, Compressor, GM35AF, GM55AF, GM70AF, GM66AF, GM75AF, GM77AF, GM80AF, GM91AF, GM80AF

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## LBP Compressors with R134A Refrigerant: A Comprehensive Overview

LBP compressors, renowned for their reliability and efficiency, are widely used in various refrigeration applications. This article delves into the specifications of a range of LBP compressors that utilize R134A refrigerant, providing detailed information on their performance parameters and operational characteristics.

#### Table of Specifications

The table below outlines the key specifications for each model of the LBP compressors:

Model	Displacement (cm³)	Operating Voltage V/Hz	Power HP	Nominal Capacity Kcal	COP W/W	Motor Type	Capacitor Used
GM 35 AF	3.50	187-264V/50Hz	1/10	65	1.05	RSIR/RSCR	2 μF
GM 55 AF	5.48		1/6	118	1.06		3 μF
GM 70 AF	6.64		1/5	158	1.17		4 μF
GM 66 AF	6.60		1/5	147	1.28		4 μF
GM 75 AF	7.39		1/4	172	1.20		4 μF
GM 77 AF	7.70		1/4	165	1.29		4 μF
GM 80 AF	8.10		1/4+	198	1.26		4 μF
GM 91 AF	9.10		1/4+	185	1.29		4 μF
GM 80 AF + kap	8.10		1/4+	198	1.26	CSCR	4 μF

### Key Features and Performance Metrics

- 1. **Displacement**: The displacement values range from 3.50 cm³ to 9.10 cm³, indicating the volume of refrigerant that can be compressed per cycle. Higher displacement models like GM 91 AF are suitable for larger cooling capacities.
- 2. **Operating Voltage**: All models operate within the voltage range of 187-264V at a frequency of 50Hz, ensuring compatibility with standard electrical supplies.
- 3. **Power HP**: The power ratings vary from 1/10 HP to 1/4+ HP, reflecting the energy consumption and output capacity of each compressor. Models with higher power ratings, such as GM 80 AF and GM 91 AF, are designed for more demanding applications.
- 4. Nominal Capacity: The nominal cooling capacities range from 65 Kcal to 198

- Kcal, catering to different cooling requirements. For instance, the GM 80 AF and GM 80 AF + kap models both offer a high cooling capacity of 198 Kcal.
- 5. **COP** (**Coefficient of Performance**): The COP values indicate the efficiency of the compressors, with higher values signifying better performance. The GM 66 AF model boasts a COP of 1.28, making it one of the most efficient in the lineup.
- 6. **Motor Type**: Most models feature RSIR/RSCR motor types, known for their robustness and reliability. The GM 80 AF + kap model, however, uses a CSCR motor type, which may offer additional benefits depending on the application.
- 7. **Capacitor Used** : The capacitors used range from 2  $\mu F$  to 4  $\mu F$ , aiding in the starting and running of the motors. The GM 80 AF + kap model, with its additional start capacitor, ensures smoother operation under varying load conditions.

#### Additional Notes

- All the models listed can be equipped with RUN CAPACITORS upon request, enhancing their performance and longevity.
- The GM 80 AF + kap model is specifically designed with an additional start capacitor, making it ideal for applications requiring enhanced starting torque.

In conclusion, the LBP compressors with R134A refrigerant offer a versatile range of options to meet diverse cooling needs. Their robust design, coupled with high efficiency and reliability, makes them a preferred choice for various refrigeration systems.

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LBP COMPRESSORS WITH R134A REFRIGERANT											
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GM 80 AF + kap	8,10		1/4 +	198	1,26	CSCR	4 µF				

<sup>\*</sup>All the models above can be used with RUN CAPACITOS upon request \*GM80AF + kap model is with additional start capacitor

