Role of Current Relays in Compressor Ignition

Category: Refrigeration
written by www.mbsm.pro | 29 January 2026

CHARACTERISTIC TABLES OF VARIOUS START AND PROTECTION STEMS

CURRENT RELAYS

Model	Compressor horse (HP)	Terminal	Apply current()	Applied current (A)
117U 2010	1/3	5	4.5	4.5
117U 2100	1/4	6	3	3.6
117U 2104	1/5	4	6.6	6.5
117U 2050	1/2	1	14	1.4

THERMAL OVERLOAD PROTECTORS

Compressor power (HP)	1/2	1/3	1/4	1/5	1/6	1/2
Max Connect current (A)	12.5	9	9.8	7.5	7	5
Max Connect current (A)	19	16	14	3.5	3.5	3.5
Max release (A)	5	4.75	4	3.5	3	3.3

Compressor power (HP)	Compressor power (HP)	Max connect current (A)	Minimum delease
	8583	6.83	1.93
1/2	BEA15	2.8	2.8
1/3	BEA10	3.8	3.6
1/4	BGA11	1.25	3.25
1/5	BGA11	1.75	3.55

THERMAL OVERLOAD PROTECTORS

Compressor power (HP)	1/2	1/3	1/4	1/5	1/6	1/2
Power Model 151	12.5	9	8	7.5	7.5	7
Max connect current (A)	8	4.05	3.65	4	3.5	3.5
Release current (A)	5	4.75	4	3.5	3	3

THERMAL OVERLOAD PROTECTOR CAPS

Compressor power (HP)	Overload current (A)	Movement temperature	Applied current (123+10%)	Reply return nurment temperatures
5	35	125±10℃	JET+TEW	60±10℃
1/2	30		JET+TEW	
1/4	25		JET+TEW	

Selecting the right electrical components is the heartbeat of refrigeration maintenance. When a compressor fails to start or constantly trips, the culprit is often a mismatched Current Relay or a fatigued Thermal Overload Protector. Ensuring these parts align perfectly with the compressor’s horsepower (HP) and amperage rating is vital for long-term system reliability.

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MAQ QD168H, Can this compressor be installed in a 1.5-meter two-door refrigerator?

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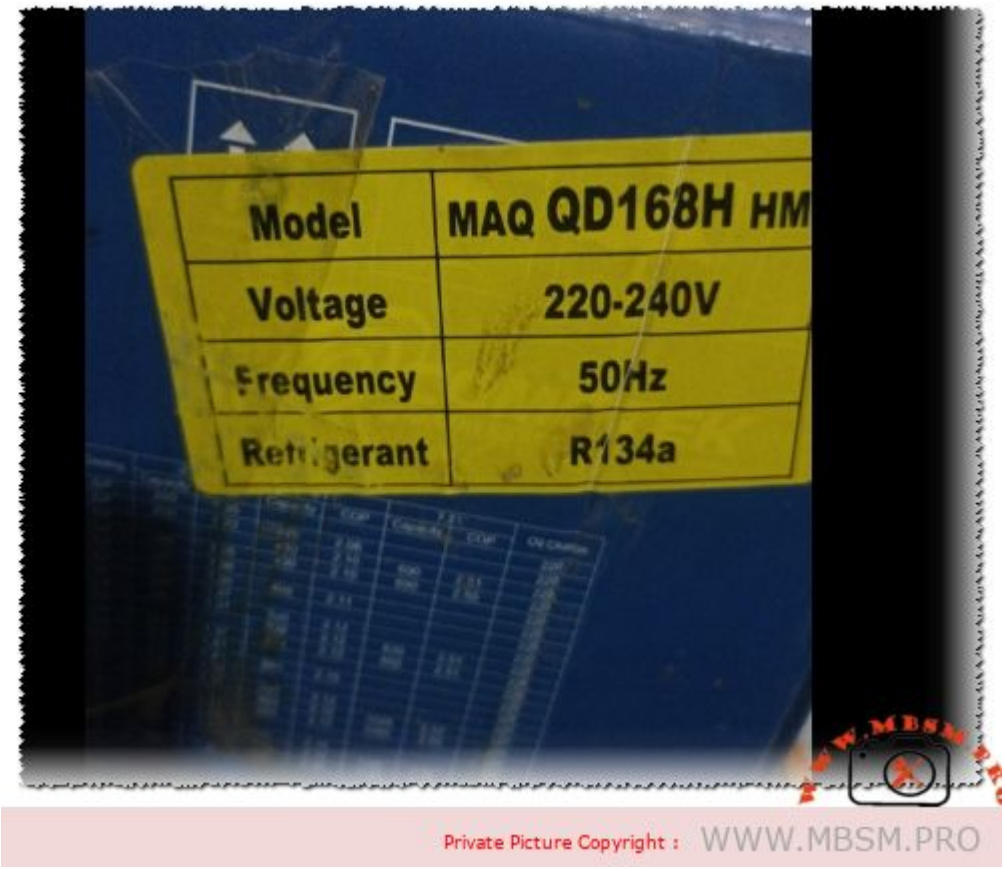

The MAQ QD168H is a high-performance 1/4 HP hermetic compressor designed for R134a refrigerant systems. Ideal for domestic refrigerators and freezers, it offers a cooling capacity of approximately 195W. This article provides a deep dive into its electrical characteristics, displacement, and compatible replacements to ensure a professional and efficient cooling system repair or build.

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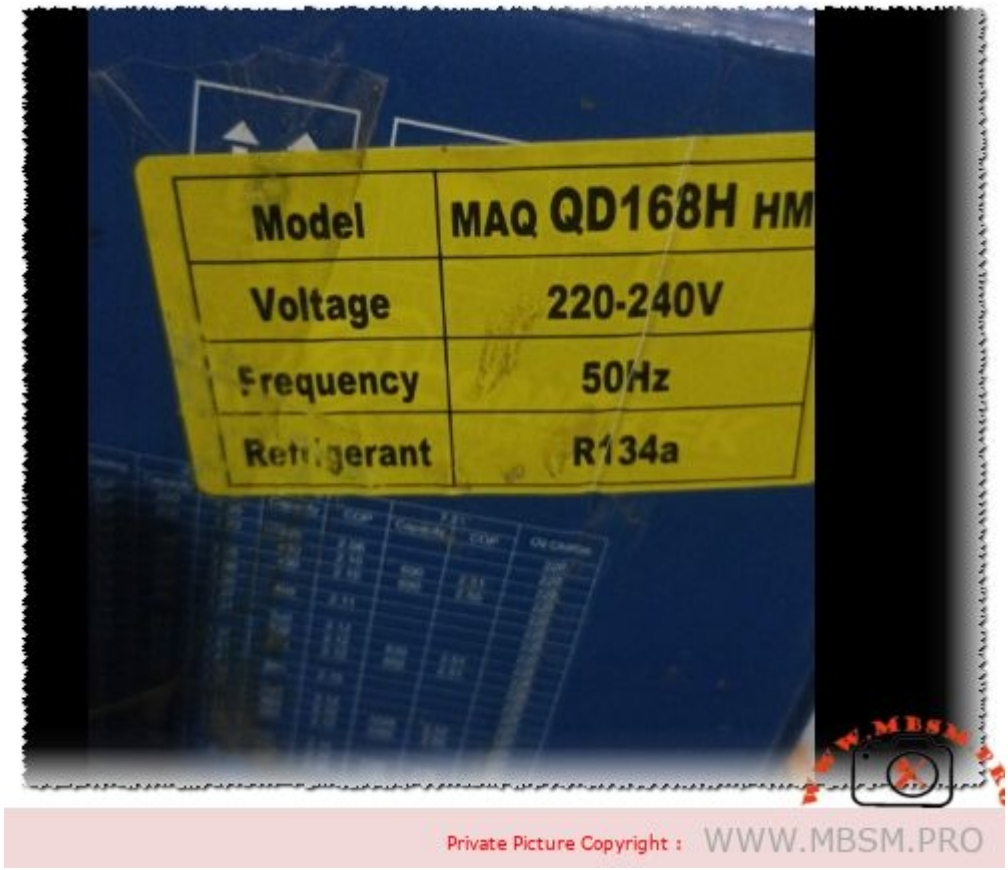

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The Technician’s Take on the Matsushita QA77C17GAX5

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The Matsushita QA77C17GAX5 is a workhorse in the refrigeration world. This 1/4 HP R134a compressor is a go-to for many household fridges and freezers. In this guide, we break down the technical specs, electrical wiring, and the most reliable replacement options to help you get your cooling system back up and running fast.

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