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



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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 (113%±10%)	Reply return nurment temperatures
5	35	125±10℃	JET+TEW	60±10℃
1/2	30		JET+TEW	
1/4	25		JET+TEW	

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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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Mbsmpro.com, Compressor, FMXY9C, 1/5 hp, Inverter, Fullmotion, R600a, 230V 43-134Hz, LBP, Variable Speed, High Efficiency

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The Embraco FMXY9C is a high-efficiency inverter compressor designed for modern R600a refrigeration systems. Operating at variable speeds between 43Hz and 134Hz, this unit offers superior energy savings. This guide provides technical specifications, diagnostic protocols for technicians, and a list of compatible replacements to ensure a professional-grade repair every single time.

Defrost Timer Module

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The Universal Electronic Defrost Timer Module is a critical component for modernizing refrigerator repairs. Designed to replace failing mechanical timers and expensive control boards, this solid-state device offers unmatched reliability. Featuring a 220V input and 10A capacity, it ensures precise timing for compressor operation and defrost cycles in various domestic refrigeration brands.

TEE NTU 170 MT Compressor 1/4 HP R600a

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The TEE NTU 170 MT is a high-efficiency hermetic reciprocating compressor designed for low back pressure applications using R600a refrigerant. Known for its reliability in household refrigeration, this unit operates at 220-240V 50Hz. This article explores its technical specs, cooling capacity, and suitable replacements for HVAC technicians and engineers worldwide.