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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