Motor protection relays **Thermal overload relays**

for BG series mini-contactors

Non phase failure / non single phase sensitive Three poles (three phase)



11 RFN9...

Order code		Protection fuses IEC UL aM gG K5		Qty per pkg			
	[A]	[A]	[A]	[A]	n°	[kg]	

MANUAL RESETTING.

Direct mounting on BG06, BG09, BG12 mini-contactors.

11 RFN9 015	0.09 - 0.15	0.25	_	_	1	0.123
11 RFN9 023	0.14 - 0.23	0.5	_	1	1	0.123
11 RFN9 033	0.2 - 0.33	0.5	1	1	1	0.123
11 RFN9 05	0.3 - 0.5	1	2	3	1	0.123
11 RFN9 075	0.45 - 0.75	1	2	3	1	0.123
11 RFN9 1	0.6 - 1	2	4	3	1	0.123
11 RFN9 1V5	0.9 - 1.5	2	4	6	1	0.123
11 RFN9 2V3	1.4 - 2.3	4	6	10	1	0.123
11 RFN9 33	2 - 3.3	4	10	10	1	0.123
11 RFN9 5	3 - 5	6	16	15	1	0.123
11 RFN9 75	4.5 - 7.5	8	20	25	1	0.123
11 RFN9 10	6 - 10	10	32	30	1	0.123
11 RFN9 15	9 - 15	16	40	45	1	0.123
ALITOMATIC DECETTING						

AUTOMATIC RESETTING.

Direct mounting on BG06, BG09, BG12 mini-contactors.

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0.09 - 0.15	0.25	_	_	1	0.123
0.14 - 0.23	0.5	_	1	1	0.123
0.2 - 0.33	0.5	1	1	1	0.123
0.3 - 0.5	1	2	3	1	0.123
0.45 - 0.75	1	2	3	1	0.123
0.6 - 1	2	4	3	1	0.123
0.9 - 1.5	2	4	6	1	0.123
1.4 - 2.3	4	6	10	1	0.123
2 - 3.3	4	10	10	1	0.123
3 - 5	6	16	15	1	0.123
4.5 - 7.5	8	20	25	1	0.123
6 - 10	10	32	30	1	0.123
9 - 15	16	40	45	1	0.123
	0.09 - 0.15 0.14 - 0.23 0.2 - 0.33 0.3 - 0.5 0.45 - 0.75 0.6 - 1 0.9 - 1.5 1.4 - 2.3 2 - 3.3 3 - 5 4.5 - 7.5 6 - 10	0.09 - 0.15 0.25 0.14 - 0.23 0.5 0.2 - 0.33 0.5 0.3 - 0.5 1 0.45 - 0.75 1 0.6 - 1 2 0.9 - 1.5 2 1.4 - 2.3 4 2 - 3.3 4 3 - 5 6 4.5 - 7.5 8 6 - 10 10	0.09 - 0.15 0.25 — 0.14 - 0.23 0.5 — 0.2 - 0.33 0.5 1 0.3 - 0.5 1 2 0.45 - 0.75 1 2 0.6 - 1 2 4 0.9 - 1.5 2 4 1.4 - 2.3 4 6 2 - 3.3 4 10 3 - 5 6 16 4.5 - 7.5 8 20 6 - 10 10 32	0.09 - 0.15 0.25 — — 0.14 - 0.23 0.5 — 1 0.2 - 0.33 0.5 1 1 0.3 - 0.5 1 2 3 0.45 - 0.75 1 2 3 0.6 - 1 2 4 3 0.9 - 1.5 2 4 6 1.4 - 2.3 4 6 10 2 - 3.3 4 10 10 3 - 5 6 16 15 4.5 - 7.5 8 20 25 6 - 10 10 32 30	0.14 - 0.23 0.5 — 1 1 0.2 - 0.33 0.5 1 1 1 0.3 - 0.5 1 2 3 1 0.45 - 0.75 1 2 3 1 0.6 - 1 2 4 3 1 0.9 - 1.5 2 4 6 1 1.4 - 2.3 4 6 10 1 2 - 3.3 4 10 10 1 3 - 5 6 16 15 1 4.5 - 7.5 8 20 25 1 6 - 10 10 32 30 1

NOTE: The appropriate adjustment range of the overload relay should be selected on the basis of the motor nameplate full-load current when direct, across the line starting is considered.

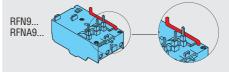
Three-phase IEC motor powers ①						
230V	400V	415V	440V	500V	690V	
[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	

0	@	@	@	@	0
0	0	2	2	2	2
0	0	0	0	0	0
0	0	0	0	0	0
0	0	2	@	2	0.37
0	0	2	0.37	0.37	0.55
0	0	0.55	0.55	0.55	0.75
0.37	0.55-0.75	0.75	0.75	1.1	1.1-1.5
0.55	1.1	1.1	1.1-1.5	1.5	2.2
0.75-1.1	1.5	1.5-2.2	2.2	2.2	3-3.7
1.5	2.2-3	3-3.7	3-3.7	3-3.7	4
2.2	3.7-4	4	3.7-4	4-5.5	_
3.2	5.5	5.5-7.5	5.5	_	_

0	0	@	2	2	0
0	0	0	0	0	0
0	0	0	0	0	0
0	@	@	2	2	2
0	@	@	2	2	0.37
0	0	0	0.37	0.37	0.55
0	0	0.55	0.55	0.55	0.75
0.37	0.55-0.75	0.75	0.75	1.1	1.1-1.5
0.55	1.1	1.1	1.1-1.5	1.5	2.2
0.75-1.1	1.5	1.5-2.2	2.2	2.2	3-3.7
1.5	2.2-3	3-3.7	3-3.7	3-3.7	4
2.2	3.7-4	4	3.7-4	4-5.5	_
3.2	5.5	5.5-7.5	5.5	_	_

- The indicated powers apply to 4-pole motors; it is advisable to always check that the nameplate motor current is within the relay adjustment range.
- No standard power ratings exist; select relay according to current consumption

NOTE: To facilitate connection between the auxiliary NC contact of the RFN...9 thermal relay and terminal A2 of the contactor, insert the conductor into the appropriate conduit as shown.



Certifications and compliance

Certifications obtained:

Gertingations obtained.				
	C			
	U			
	L	С	Е	C
	u	S	Α	C
Type	S	Α	С	C
RFN9 RFNA9		•	•	•

Certified products.

cULus – UL Listed for USA and Canada (cULus - File E93601) as Auxiliary Devices – Thermal Overload Relays, 600VAC, open type, ambient compensated, 5000 Amps RMS symmetrical short circuit rating; the trip current is 120% FLA. CSA – CSA certified for Canada only (File 54332) as Auxiliary Devices for use with magnetic contactors.

Compliant with standards: IEC/EN 60947-1, IEC/EN 60947-4-1, UL508, CSA C22.2 $\rm n^{\circ}$ 14.



11 RFNA9...