



MOTOR PROTECTION RELAY, NON PHASE FAILURE/NON SINGLE-PHASE SENSITIVE. THREE-POLE (THREE-PHASE), MANUAL OR AUTOMATIC RESETTING. DIRECT MOUNTING ON BF09 - BF38 CONTACTORS, 9...14A



Product designation			RFN38
Product type designation			Motor protection relay
General characteristics			
Number of poles		Nr.	3
Overvoltage category			III
Pollution degree			3
Frontal IP degree			IP20
Type of release			Thermal
Protection fuse			
	gG (IEC)	Α	32
	aM (IEC)	Α	16
	RK5 (UL)	Α	50
Phase failure detection	,		no
Decet made			Manual or
Reset mode			automatic
Power circuit characteristics			
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	6
Rated operational voltage		V	690
Operational frequency			
	min	Hz	0
	max	Hz	400
Operational current le			
	Operational current min	Α	9.00
	Operational current max	Α	14
Tripping class	•		10A
Test Button			Yes
Trip indicator			yes
Terminals			·
			screw and
	type		washer
	screw		M4
	width	mm	12.6
	tool		Phillips 2
Tightening torque for terminals			
	min	Nm	2
	max	Nm	2.5
	min	Ibin	1.5
	max	Ibin	1.8
Conductor section			
	AWG/kcmil max		8
Auxiliary circuit characteristics			
Auxiliary contacts			
•	NO	Nr.	1





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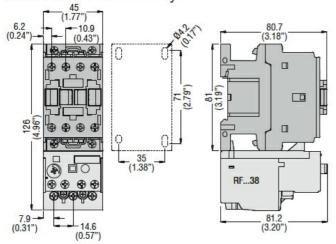
Auxiliary Rated insulation voltage UirEC/EN		NC	Nr.	1
Auxiliary Rated impulse withstand voltage Ulimp Auxiliary Rated operational voltage Operating current AC15 24V A 3 240V A 1.5 380V A 0.95 480V A 0.75 500V A 0.75 500V A 0.75 500V A 0.6 Operating current DC13 125V A 0.11 600V A 0.6 Operating current DC13 125V A 0.11 600V A 0.22 IEC Conventional free air thermal current Ith Auxiliary circuit screw Auxiliary circuit screw Auxiliary circuit torgent Washer Washer Auxiliary circuit torgent Washer Washer Auxiliary circuit torgent Washer	Auxiliary Rated insulation voltage Ui IEC/EN	140		
Auxiliary circuit min	_			
A 3 120V A 1.5 120V A 0.95 120V A 0.95 120V A 0.75 120V A 0.6 120V A 0.0 120				
24V			<u> </u>	
1200	of committee of the com	24V	Α	3
240V				
A				
A				
S00V				
Conventional free air thermal current Ith				
Conventional free air thermal current lth				
125V	Operating current DC13			
Conventional free air thermal current Ith	operating carrent 2010	125V	Α	0.11
EC Conventional free air thermal current lth Terminals				
Auxiliary circuit type	IEC Conventional free air thermal current Ith	0001		
Auxiliary circuit type Auxiliary circuit screw Auxiliary circuit width Auxiliary circuit width Auxiliary circuit totol Auxiliary circuit totol Auxiliary circuit tiple w/o lug max Auxiliary circuit min Auxiliary circuit max Auxiliary circuit min Auxiliary circuit max Auxiliary circuit			А	10
Auxiliary circuit screw Auxiliary circuit tool Max 8 Phillips 2	Tomiliaio			screw and
Auxiliary circuit screw Auxiliary circuit width Auxiliary circuit tool Auxiliary circuit Flexible w/o lug max Auxiliary circuit Flexible c/w lug max Mm² 2.5 mm² 2		Auxiliary circuit type		
Auxiliary circuit width Auxiliary circuit tool		Auxiliary circuit screw		
Auxiliary circuit tool Phillips 2			mm	
Auxiliary circuit Flexible w/o lug max Auxiliary circuit Flexible c/w lug max Auxiliary circuit Flexible c/w lug max Auxiliary circuit Flexible c/w lug max Auxiliary circuit min Auxiliary circuit max Nm 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			111111	
Auxiliary circuit Flexible w/o lug max Auxiliary circuit Flexible c/w lug max Auxiliary circuit min Figure 1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (Conductor section	Auxiliary circuit tool		Fillips 2
Auxiliary circuit Flexible c/w lug max mm² 2.5	Conductor Section	Auxiliary circuit Flavible w/e lug may	mm²	2.5
Tightening torque for terminals Auxiliary circuit min Auxiliary circuit min Nm 0.8 Auxiliary circuit max Auxiliary circuit min Nm 0.59 Auxiliary circuit min Ibin 0.59 Auxiliary circuit max Ibin 0.74 UL/CSA and IEC/EN 60947-5-1 designation Ambient conditions Operating temperature min °C -255 max °C 60 max °C 70 Compensation temperature min °C -50 max °C 70 Compensation temperature min °C -20 max °C 60 max °C 60 Max altitude min °C -20 max °C 60 max °C 60 Mechanical features Operating position mormal allowable ±30° pricet mounting on BF09 BF38 BF38 Weight g 160 ULt technical data Full-load current (FLA) for three-phase AC motor		•		
Auxiliary circuit min Auxiliary circuit max Befoor-R300 Maxiliary circuit max Auxiliary circuit max Befoor-R300 Maxiliary circuit m	Tightoning torque for terminals	Auxiliary Circut Flexible C/W lug max	111111	2.0
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Auxiliary circuit max				
DU/CSA and IEC/EN 60947-5-1 designation				
Ambient conditions Operating temperature min °C -25 max °C 60 Storage temperature min °C -50 max °C 70 Compensation temperature min °C -20 max °C 60 Max altitude m 3000 Mechanical features m 3000 Operating position normal allowable ±30° Fixing Direct mounting on BF09 BF38 Weight g 160 UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 14	III /004 and IE0/EN 00047 E 4 design etter	Auxiliary circuit max	IDIN	
Operating temperature min or c max or c do -25 max or c do Storage temperature min or c do -50 max or c do Compensation temperature min or c do -20 max or c do Max altitude m do 3000 Mechanical features m do 3000 Operating position normal allowable do ±30° Fixing Direct mounting on BF09 BF38 Weight g do UL technical data To do Full-load current (FLA) for three-phase AC motor at 480V A 14				B600-R300
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Storage temperature				
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max °C 70 Compensation temperature min °C -20 max °C 60 Max altitude m 3000 Mechanical features Vertical plan Operating position normal allowable ±30° Fixing Direct mounting on BF09 BF38 Weight g 160 UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 14	Storage temperature		0.0	50
Compensation temperature min °C -20 max °C 60 Max altitude m 3000 Mechanical features Operating position normal Vertical plan allowable ±30° Fixing Direct mounting on BF09 BF38 Weight g 160 UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 14				
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Max altitude m 3000 Mechanical features Vertical plan allowable 5 Direct mounting on BF09 BF38 Direct mounting on BF09 BF38 Weight g 160 UL technical data at 480V A 14	Compensation temperature	_	2.0	00
Max altitude m 3000 Mechanical features Operating position normal vertical plan allowable ±30° Fixing Direct mounting on BF09 BF38 Weight UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 14				
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Fixing Allowable ±30° Fixing Direct mounting on BF09 BF38 Weight g 160 UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 14	Operating position			
Fixing Direct mounting on BF09 BF38 Weight g 160 UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 14				
Fixing on BF09 BF38 Weight g 160 UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 14		allowable		
BF38 Weight g 160 UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 14				
Weight g 160 UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 14	Fixing			
UL technical data Full-load current (FLA) for three-phase AC motor at 480V A 14				
Full-load current (FLA) for three-phase AC motor at 480V A 14			g	160
at 480V A 14				
	Full-load current (FLA) for three-phase AC motor			
at 600V A 14				
		at 600V	A	14

ENERGY AND AUTOMATION

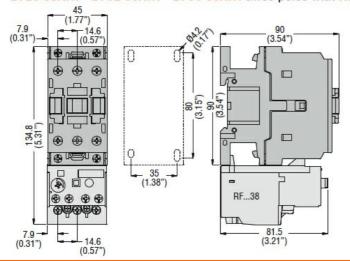
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Dimensions

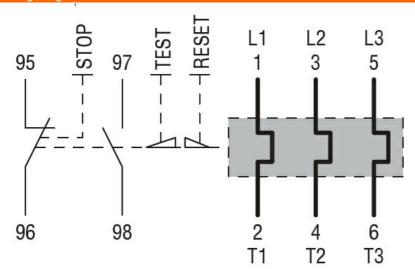
BF00 A... BF09 A... - BF12 A... - BF18 A... - BF25 A... three poles with RF...38 thermal overload relay



- BF32 00A... - BF38 00A... three poles with RF...38 thermal overload relay BF26 00A...



Wiring diagrams



Certifications and compliance

Compliance

RFN381400

CSA C22.2 n° 14

IEC/EN 60947-1



ENERGY AND AUTOMATION

RFN381400

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	IEC/EN 60947-4-1
	UL508
Certifications	
	CCC
	cULus
	EAC
ETIM classification	

ETIM 8.0

EC000106 -Thermal overload relay