**ENERGY AND AUTOMATION** 

MOTOR PROTECTION RELAY, PHASE FAILURE/SINGLE-PHASE SENSITIVE. THREE-POLE **electric** (THREE-PHASE), AUTOMATIC RESETTING. DIRECT MOUNTING ON BG06, BG09, BG12 MINI-CONTACTORS, 3...5A



Product designation			11RFA9
Product type designation			Motor protection relay
General characteristics			Toldy
Number of poles		Nr.	3
Overvoltage category			III
Pollution degree			3
Frontal IP degree			IP20
Type of release			Thermal
Protection fuse			
	gG (IEC)	Α	16
	aM (IEC)	Α	6
	RK5 (UL)	Α	15
Phase failure detection	,		yes
Reset mode			Automatic
Power circuit characteristics			
Rated insulation voltage Ui IEC/EN		V	690
Rated impulse withstand voltage Uimp		kV	8
Rated operational voltage		V	690
Operational frequency			
	min	Hz	0
	max	Hz	400
Operational current le			
•	Operational current min	Α	3
	Operational current max	Α	5
Tripping class	·		10A
Test Button			yes
Trip indicator			yes
Terminals			
			screw and
	type		
	.,,,,		washer
	screw		washer M4
		mm	
	screw	mm	M4
Tightening torque for terminals	screw width	mm	M4 9.8
Tightening torque for terminals	screw width	mm Nm	M4 9.8
Tightening torque for terminals	screw width tool		M4 9.8 Phillips 2
Tightening torque for terminals	screw width tool min	Nm	M4 9.8 Phillips 2 2.3 2.3 1.7
Tightening torque for terminals	screw width tool min max	Nm Nm	M4 9.8 Phillips 2 2.3 2.3
	screw width tool min max min	Nm Nm Ibin	M4 9.8 Phillips 2 2.3 2.3 1.7
	screw width tool min max min	Nm Nm Ibin	M4 9.8 Phillips 2 2.3 2.3 1.7
Conductor section	screw width tool  min max min max	Nm Nm Ibin	M4 9.8 Phillips 2 2.3 2.3 1.7 1.7
Conductor section  Auxiliary circuit characteristics	screw width tool  min max min max	Nm Nm Ibin	M4 9.8 Phillips 2 2.3 2.3 1.7 1.7
Tightening torque for terminals  Conductor section  Auxiliary circuit characteristics  Auxiliary contacts	screw width tool  min max min max	Nm Nm Ibin	M4 9.8 Phillips 2 2.3 2.3 1.7 1.7



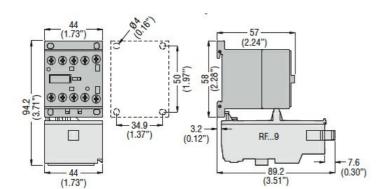
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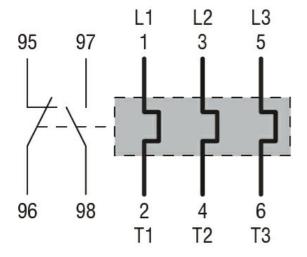
Auxiliary Rated insulation voltage Ui IEC/EN		V	690
Auxiliary Rated impulse withstand voltage Uimp		kV	6
Auxiliary Rated operational voltage		V	690
Operating current AC15		<u> </u>	
	24V	Α	1.5
	120V	Α	1.5
	240V	Α	0.75
IEC Conventional free air thermal current Ith		Α	10
Terminals			
	Auxiliary circuit type		screw and washer
	Auxiliary circuit screw		M3,5
	Auxiliary circuit width	mm	8
	Auxiliary circuit tool		Phillips 1
Conductor section			
	Auxiliary circuit Flexible w/o lug max	mm²	2.5
	Auxiliary circut Flexible c/w lug max	mm²	2.5
Tightening torque for terminals	_		
	Auxiliary circuit min	Nm	1
	Auxiliary circuit max	Nm	1
	Auxiliary circuit min	lbin	0.74
III /CCA and IFC/FN COOA7 F 4 decimation	Auxiliary circuit max	lbin	0.74
UL/CSA and IEC/EN 60947-5-1 designation  Ambient conditions			C300-R300
Operating temperature			
operating temperature	min	°C	-20
	max	°C	55
Storage temperature			
3	min	°C	-55
	max	°C	70
Compensation temperature			
·	min	°C	-15
	max	°C	55
Max altitude		m	3000
Mechanical features			
Operating position			
	normal		Vertical plan
	allowable		±30°
Fixing			Direct mounting on BG06 BG09 BG12
Weight		<u> </u>	116
UL technical data		g	110
Full-load current (FLA) for three-phase AC motor			
. a. load darion (i Ery for three phase Ao motor	at 480V	Α	5
	at 700 V	, ,	•
	at 600V	Α	5

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## Wiring diagrams



## Certifications and compliance

Compliance

CSA C22.2 n° 14

IEC/EN 60947-1

IEC/EN 60947-4-1

**UL508** 

Certifications

CCC

CSA

cULus

EAC

ETIM classification

**ETIM 8.0** 

EC000106 -

Thermal overload

relay