**ENERGY AND AUTOMATION** 

MOTOR PROTECTION RELAY, PHASE FAILURE/SINGLE-PHASE SENSITIVE. THREE-POLE **electric** (THREE-PHASE), MANUAL RESETTING. DIRECT MOUNTING ON BF40 - BF94 CONTACTORS, 20...33A



Decition to the formation			DECC
Product designation			RF82
Product type designation			Motor protection relay
General characteristics			· siaj
Number of poles		Nr.	3
Overvoltage category			III
Pollution degree			3
Frontal IP degree			IP20
Type of release			Thermal
Protection fuse			_
	gG (IEC)	Α	63
	aM (IEC)	Α	40
	K5 (UL)	Α	110
Phase failure detection			yes
Reset mode			Manual
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 augment le			
Operational current le			
Operational current le	Operational current min	Α	20
Operational current le	Operational current min	A A	20 33
	Operational current min Operational current max	A A	33
Tripping class			33 10A
Tripping class Test Button			33 10A Yes
Tripping class Test Button Trip indicator			33 10A
Tripping class Test Button	Operational current max		33 10A Yes yes
Tripping class Test Button Trip indicator	Operational current max		33 10A Yes yes Yoke clamp
Tripping class Test Button Trip indicator	Operational current max  type screw	A	33 10A Yes yes Yoke clamp M5
Tripping class Test Button Trip indicator	Operational current max  type screw width		33 10A Yes yes Yoke clamp M5 9
Tripping class Test Button Trip indicator Terminals	Operational current max  type screw	A	33 10A Yes yes Yoke clamp M5
Tripping class Test Button Trip indicator	Operational current max  type screw width tool	mm	33 10A Yes yes  Yoke clamp M5 9 Phillips 2
Tripping class Test Button Trip indicator Terminals	Operational current max  type screw width tool min	Mm Nm	33 10A Yes yes Yoke clamp M5 9 Phillips 2
Tripping class Test Button Trip indicator Terminals	Operational current max  type screw width tool  min max	mm Nm Nm	33 10A Yes yes  Yoke clamp M5 9 Phillips 2  3.9 3.9
Tripping class Test Button Trip indicator Terminals	Operational current max  type screw width tool  min max min	mm Nm Nm Ibin	33 10A Yes yes  Yoke clamp M5 9 Phillips 2  3.9 3.9 2.88
Tripping class Test Button Trip indicator Terminals  Tightening torque for terminals	Operational current max  type screw width tool  min max	mm Nm Nm	33 10A Yes yes  Yoke clamp M5 9 Phillips 2  3.9 3.9
Tripping class Test Button Trip indicator Terminals	type screw width tool  min max min max	mm Nm Nm Ibin	33 10A Yes yes  Yoke clamp M5 9 Phillips 2  3.9 3.9 2.88 2.88
Tripping class Test Button Trip indicator Terminals  Tightening torque for terminals  Conductor section	Operational current max  type screw width tool  min max min	mm Nm Nm Ibin	33 10A Yes yes  Yoke clamp M5 9 Phillips 2  3.9 3.9 2.88
Tripping class Test Button Trip indicator Terminals  Tightening torque for terminals  Conductor section  Auxiliary circuit characteristics	type screw width tool  min max min max	mm Nm Nm Ibin	33 10A Yes yes  Yoke clamp M5 9 Phillips 2  3.9 3.9 2.88 2.88
Tripping class Test Button Trip indicator Terminals  Tightening torque for terminals  Conductor section	type screw width tool min max min max AWG/kcmil max	mm Nm Nm Ibin Ibin	33 10A Yes yes  Yoke clamp M5 9 Phillips 2  3.9 3.9 2.88 2.88
Tripping class Test Button Trip indicator Terminals  Tightening torque for terminals  Conductor section  Auxiliary circuit characteristics	type screw width tool  min max min max AWG/kcmil max	mm Nm Ibin Ibin	33 10A Yes yes Yoke clamp M5 9 Phillips 2 3.9 3.9 2.88 2.88
Tripping class Test Button Trip indicator Terminals  Tightening torque for terminals  Conductor section  Auxiliary circuit characteristics	type screw width tool min max min max AWG/kcmil max	mm Nm Nm Ibin Ibin	33 10A Yes yes  Yoke clamp M5 9 Phillips 2  3.9 3.9 2.88 2.88



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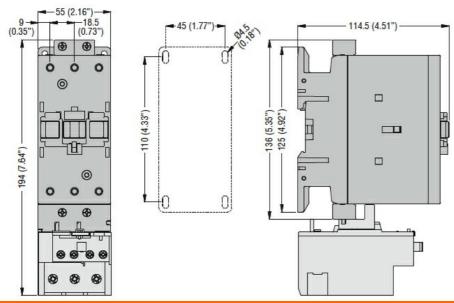
**ENERGY AND AUTOMATION** 

20...33A

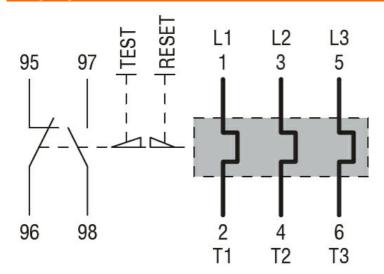
Auxiliary Rated impulse withstand voltage Uimp		kV	6
Auxiliary Rated operational voltage		V	690
Operating current AC15			
	24V	Α	3
	120V	Α	3
	240V	Α	1.5
	380V	Α	0.95
	480V	Α	0.75
	500V	Α	0.72
	600V	Α	0.6
Operating current DC13			
	125V	Α	0.11
	600V	A	0.22
IEC Conventional free air thermal current Ith		Α	10
Terminals			
	Auxiliary circuit type		screw and
			washer
	Auxiliary circuit screw		M3,5
	Auxiliary circuit width	mm	8 Distilises 4
0 1 1	Auxiliary circuit tool		Phillips 1
Conductor section	A 112 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	0.5
	Auxiliary circuit Flexible w/o lug max	mm²	2.5
<del>-</del>	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 /00A IEO/EN 00047 E 4 -l	Auxiliary circuit max	Ibin	0.74
UL/CSA and IEC/EN 60947-5-1 designation			B600-P600
Ambient conditions			
Operating temperature		° <b>C</b>	00
	min	°C	-20
04	max	°C	55
Storage temperature		° <b>C</b>	FF
	min	°C	-55
0	max	°C	80
Compensation temperature		°C	4 <i>E</i>
	min	°C	-15
May altituda	max	°C	55
Max altitude		m	3000
Mechanical features			
Operating position			\/ortical ml=
	normal		Vertical plan ±30°
	allowable		
Fixing			Direct mounting on BF40 BF94
Weight		g	365
UL technical data			
Full-load current (FLA) for three-phase AC motor			
, , , , , , , , , , , , , , , , , , , ,	at 480V	Α	33
	at 600V	Α	33
Dimensions			

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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

cULus

ETIM classification

EC000106 -

Thermal overload

relay

**ETIM 8.0**