# RF382300



MOTOR PROTECTION RELAY, PHASE FAILURE/SINGLE-PHASE SENSITIVE. THREE-POLE **Electric** (THREE-PHASE), MANUAL OR AUTOMATIC RESETTING. DIRECT MOUNTING ON BF09 - BF38 AND AUTOMATION CONTACTORS, 17...23A



Product type designation   Motor protection relay     Ceneral characteristics   Nr.   3     Number of poles   Nr.   3     Overvoltage category   III     Pollution degree   3     Frontal IP degree   IP20     Type of release   Thermal     Protection fuse   gG (IEC)   A   50     aM (IEC)   A   25   RKS (UL)   A   90     Phase failure detection   yes   Manual or automatic   Pess     Reset mode   Manual or automatic   A   60     Power circuit characteristics   V   690   6     Rated insulation voltage Uinp   kV   6   6     Rated operational voltage Uinp   kV   6   6     Rated operational current le   Operational current min Operational current min A   17     Operational current min Operational current min A   23   17     Tripping class   10A   yes     Tripindicator   yes   10A
Number of polesNr.3Overvoltage categoryIIIPollution degree3Frontal IP degreeIP20Type of releaseThermalProtection fusegG (IEC)A50aM (IEC)A25RK5 (UL)A90Phase failure detectionyesReset modeyesManual or automaticPower circuit characteristicsV690Rated insulation voltage Ui IEC/ENV690Rated operational voltageV690Qperational requencyminHz0maxHz4000Operational current leOperational current minA17Operational current minA2310ATripping class10Ayes10ATest Buttonyesyes10A
Overvoltage category   III     Pollution degree   3     Frontal IP degree   IP20     Type of release   Thermal     Protection fuse   gG (IEC)   A   50     aM (IEC)   A   25     RK5 (UL)   A   90     Phase failure detection   yes     Reset mode   Manual or automatic     Power circuit characteristics   Manual or automatic     Rated insulation voltage Ui IEC/EN   V   690     Rated operational voltage   V   690     Operational frequency   min   Hz   0     Operational current le   Operational current min   A   17     Operational current max   A   23   Tripping class   10A     Test Button   yes   yes   10A
Pollution degree   3     Frontal IP degree   IP20     Type of release   Thermal     Protection fuse   gG (IEC)   A   50     aM (IEC)   A   25     RK5 (UL)   A   90     Phase failure detection   yes     Reset mode   Manual or automatic     Power circuit characteristics   Manual or automatic     Rated insulation voltage Ui IEC/EN   V   690     Rated operational voltage   V   690     Operational frequency   min   Hz   0     Max   Hz   400   0     Operational current le   Operational current min   A   17     Operational current max   A   23   10A     Tripping class   10A   yes   10A
Frontal IP degreeIP20Type of releaseThermalProtection fusegG (IEC)A50aM (IEC)A25RK5 (UL)A90Phase failure detectionyesReset modewanual or automaticPower circuit characteristicsManual or automaticPower circuit characteristicsVRated insulation voltage Ui IEC/ENV690Rated operational voltageV690Operational frequencymin maxHz0 maxOperational current leOperational current min Operational current maxA23Tripping class10Ayes10ATest Buttonyesyes10A
Type of release   Thermal     Protection fuse   gG (IEC)   A   50     aM (IEC)   A   25     RK5 (UL)   A   90     Phase failure detection   yes     Reset mode   Manual or automatic     Power circuit characteristics   Manual or automatic     Power circuit characteristics   V   690     Rated insulation voltage Ui IEC/EN   V   690     Rated operational voltage   V   690     Operational frequency   min   Hz   400     Operational current le   Operational current min Operational current max   A   23     Tripping class   10A   10A   10A
Protection fuse   gG (IEC)   A   50     aM (IEC)   A   25     RK5 (UL)   A   90     Phase failure detection   yes     Reset mode   Manual or automatic     Power circuit characteristics   Manual or automatic     Power circuit characteristics   V   690     Rated insulation voltage Ui IEC/EN   V   690     Rated operational voltage   V   690     Qperational frequency   min   Hz   0     max   Hz   400   0     Operational current le   Operational current min   A   17     Operational current max   A   23   10A     Test Button   yes   yes   10A
$\begin{array}{cccc} & gG\left(\text{IEC}\right) & A & 50 \\ aM\left(\text{IEC}\right) & A & 25 \\ RK5\left(\text{UL}\right) & A & 90 \end{array} \\ \hline \\ \hline Phase failure detection & & & & & & & & & & \\ \hline \\ Reset mode & & & & & & & & & & & & & \\ \hline \\ Reset mode & & & & & & & & & & & & & & & \\ \hline \\ \hline \\$
aM (IEC) RK5 (UL)A25 RK5 (UL)Phase failure detectionyesReset modeyesReset modeManual or automaticPower circuit characteristicsManual or automaticPower circuit characteristicsVRated insulation voltage Ui IEC/ENVRated inpulse withstand voltage UimpkVRated operational voltageVOperational requencyVmin maxHz0 perational current leOperational current min Operational current maxA23Tripping class10ATest ButtonyesTrip indicatoryes
RK5 (UL)A90Phase failure detectionyesReset modeManual or automaticPower circuit characteristicsManual or automaticRated insulation voltage Ui IEC/ENV690Rated impulse withstand voltage UimpkV6Rated operational voltageV690Operational frequencyminHz0 maxOperational current leOperational current min Operational current maxA17 ATripping class10Ayes10ATrip indicatoryesyes10A
Phase failure detection   yes     Reset mode   Manual or automatic     Power circuit characteristics   Manual or automatic     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     Operational current le   Operational current min   A   17     Operational current min   A   23   10A     Tripping class   10A   yes   yes     Trip indicator   yes   yes   10A
Reset modeManual or automaticPower circuit characteristicsV690Rated insulation voltage Ui IEC/ENV690Rated impulse withstand voltage UimpkV6Rated operational voltageV690Operational frequencyminHz0maxHz400Operational current leOperational current min Operational current maxA17Tripping class10AyesTrip indicatoryes
Reset mode   automatic     Power circuit characteristics   v   690     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   0     Operational current le   Operational current min   A   17     Operational current max   A   23   10A     Tripping class   10A   yes   yes     Trip indicator   yes   10A
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     min   Hz   0   max   Hz   400     Operational current le   Operational current min   A   17   Operational current max   A   23     Tripping class   10A   yes   yes   Trip indicator   yes
Rated insulation voltage Ui IEC/ENV690Rated impulse withstand voltage UimpkV6Rated operational voltageV690Operational frequencyminHz0maxHz400Operational current leOperational current min Operational current maxA17Operational current maxA2310ATripping class10AyesTrip indicatoryes
Rated impulse withstand voltage Uimp   kV   6     Rated operational voltage   V   690     Operational frequency   min   Hz   0     Max   Hz   400   400     Operational current le   Operational current min   A   17     Operational current max   A   23   10A     Tripping class   10A   yes   10A     Trip indicator   yes   10A   10A
Rated operational voltage   V   690     Operational frequency   min   Hz   0     max   Hz   400     Operational current le   Operational current min   A   17     Operational current max   A   23     Tripping class   10A   yes     Trip indicator   yes
Operational frequency   min   Hz   0     Max   Hz   400     Operational current le   Operational current min   A   17     Operational current max   A   23     Tripping class   10A     Test Button   yes     Trip indicator   yes
min maxHz0 Hz400Operational current leOperational current min Operational current maxA17 23Tripping class10ATest ButtonyesTrip indicatoryes
maxHz400Operational current leOperational current min Operational current maxA17Operational current maxA23Tripping class10ATest ButtonyesTrip indicatoryes
Operational current le   Operational current min Operational current max   A   17     Operational current max   A   23     Tripping class   10A     Test Button   yes     Trip indicator   yes
Operational current min Operational current max A 17   Operational current max A 23   Tripping class 10A   Test Button yes   Trip indicator yes
Operational current maxA23Tripping class10ATest ButtonyesTrip indicatoryes
Tripping class10ATest ButtonyesTrip indicatoryes
Test Button yes   Trip indicator yes
Trip indicator yes
•
Terminals
type screw and
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
Flexible w/o lug max mm <sup>2</sup> 10
Flexible c/w lug max mm <sup>2</sup> 6
AWG/kcmil max 8

## Auxiliary circuit characteristics

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



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Auxiliary contacts

Auxiliary contacts			
	NO	Nr.	1
	NC	Nr.	1
Auxiliary Rated insulation voltage Ui IEC/EN		V	690
Auxiliary Rated impulse withstand voltage Uimp		kV V	6
Auxiliary Rated operational voltage		V	690
Operating current AC15	24V	۸	2
	24V 120V	A A	3 3
	240V	A	3 1.5
	380V	A	0.95
	480V	A	0.75
	500V	A	0.72
	600V	А	0.6
Operating current DC13			
	125V	А	0.11
	600V	А	0.22
IEC Conventional free air thermal current Ith		А	10
Terminals			
	Auxiliary circuit type		screw and washer
	Auxiliary circuit screw		M3.5
	Auxiliary circuit width	mm	8
	Auxiliary circuit tool		Phillips 2
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	0.8
	Auxiliary circuit max	Nm	1
	Auxiliary circuit min	lbin Ibin	0.59
UL/CSA and IEC/EN 60947-5-1 designation	Auxiliary circuit max	Ibin	0.74 B600-R300
Ambient conditions			B000-K300
Operating temperature			
operating temperature	min	°C	-25
	max	°Č	60
Storage temperature		-	
<b>.</b>	min	°C	-50
	max	°C	70
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…
i inity			BF38
Weight		g	160
UL technical data		Э	

RF382300

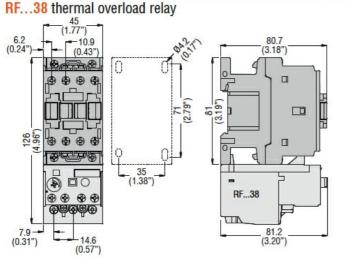




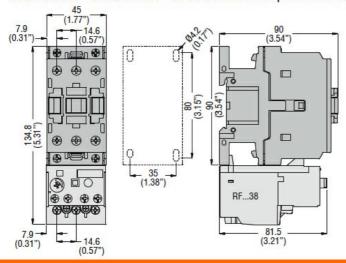
MOTOR PROTECTION RELAY, PHASE FAILURE/SINGLE-PHASE SENSITIVE. THREE-POLE electric (THREE-PHASE), MANUAL OR AUTOMATIC RESETTING. DIRECT MOUNTING ON BF09 - BF38 CONTACTORS, 17...23A

Full-load current (FLA) for three-phase AC motor

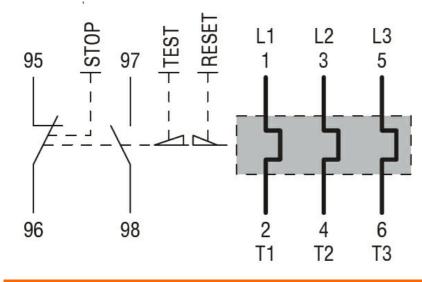
	at 480V	А	23	
	at 600V	Α	23	
Dimensions [mm (in)]				
BF00 A BF09 A BF12 A BF18 A BF25 A three poles with				



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



Wiring diagrams



#### Certifications and compliance

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### Compliance

•		
	CSA C22.2 n° 14	
	IEC/EN 60947-1	
	IEC/EN 60947-4-1	
	UL508	
Certifications		
	CCC	
	cULus	
	EAC	
ETIM classification		
		EC000106 -

ETIM 8.0

EC000106 -Thermal overload relay