

Thermal Overload Relays

Ex9R Product Overview

Features

- For use with Ex9C and Ex9CR*
- Rated current up to 500A @ 600 Vac, 50/60 Hz
- Adjustable current setting for overload protection
- Overload protection trip Class 10 and Class 10A
- Phase loss protection
- Automatic or manual reset selectable
- Status indication
- STOP and TEST function
- Direct mount to contactors or 35 mm DIN rail mounting base option
- 5-Year limited warranty



*see page 80 for overloads for use with miniature contactors.



Certifications

- UL 508 Listed, File Number No. E353865, UL 60947-1 and 60947-4-1
- CSA C22.2 No. 14, File no. E353865
- IEC/EN 60947-4-1
- CE Approved
- CCC Certified



Thermal Overload Relays

Ex9R 38-500 Amperes



Certifications

IEC/EN 60947-4-1



Rated Amperage (Min - Max)	38A	
	Use with Contactors: Ex9C9-38	
	Catalog Number	
0.63-1	Ex9R38B1A	
1-1.6	Ex9R38B1.6A	
1.6-2.5	Ex9R38B2.5A	
2.5-4	Ex9R38B4A	
4-6	Ex9R38B6A	
5.5-8	Ex9R38B8A	
7-10	Ex9R38B10A	
9-13	Ex9R38B13A	
12-18	Ex9R38B18A	
16-24	Ex9R38B24A	
23-32	Ex9R38B32A	
30-38	Ex9R38B38A	

Rated Amperage (Min - Max)	100A	
	Use with Contactors: Ex9C40-100	
	Catalog Number	
23-32	Ex9R100B32A	
30-40	Ex9R100B40A	
37-50	Ex9R100B50A	
48-65	Ex9R100B65A	
55-70	Ex9R100B70A	
63-80	Ex9R100B80A	
80-104	Ex9R100B104A	



Rated Amperage (Min - Max)	185A	
	Use with Contactors: Ex9C115-185	
	Catalog Number	
75-115	Ex9R185B115A	
110-150	Ex9R185B150A	
140-210	Ex9R185B210A	

Rated Amperage (Min - Max)	500A	
	Use with Contactors: Ex9C225-500	
	Catalog Number	
160-225	Ex9R500B225A	
210-300	Ex9R500B300A	
280-400	Ex9R500B400A	
380-500	Ex9R500B500A	

Additional products, accessories and higher ratings available. Contact your NOARK representative or visit na.noark-electric.com for additional information.

Thermal Overload Relays

Ex9R Technical Data

		Ex9R	
Tripping Class		Class 10/10A	
Operating Frequency (Hz)		50/60	
Phase Failure Protection Function		Yes	
Automatic and Manual Reset			
Temperature Compensation			
Tripping Indicator			
Test and Stop Pushbutton			
Environmental Conditions	Altitude ft (m)	<6,562 (2,000)	
	Pollution Degree	Class III	
Rated Tripping Current (In)		1.2	
Sensitivity to Phase Failure (In)		30%	
Rated Working Voltage (V)		600	
Rated Impulse Withstand Voltage Uimp		6 kV	
Auxiliary Contacts	Number of Contacts		1NO+1NC
	Rated Operating Voltage Ue (V)	AC-15	220/380
		DC-13	220
	Rated Operating Current Ie (A)	AC-15	1.64 / 0.95
		DC-13	0.13
	Circuit Continuous Current		5 A 600 Vac, 1 A 300 Vdc
	Contact Rating		B600, R300
	Terminal Wire Range AWG*		#18-12
Terminal Torque in-lb (N.m)		15 (1.70)	
Terminal Wire Strip Length in		0.43	

* AWG = American Wire Gauge

Thermal Overload Relays

Ex9R Technical Data

Frame Size	38A											
Current Setting Range (A)	0.63-1	1-1.6	1.6-2.5	2.5-4	4-6	5.5-8	7-10	9-13	12-18	16-24	23-32	30-38
Short Circuit Rating, 3 Phase at 600 Vac (kA)	1			5								
Power Terminal	#18-8 AWG*											
Power Terminal Torque in-lb (N.m)	22 (2.5)											
Matched Contactor Type	Ex9C9-38											
Surface mount adapter for remote mounting	AD56UL											

Frame Size	100A							
Current Setting Range (A)	23-32	30-40	37-50	48-65	55-70	63-80	80-104	
Short Circuit Rating, 3 Phase at 600 Vac (kA)	5				10			
Power Terminal	#12-1 AWG*							
Power Terminal Torque in-lb (N.m)	80 (9)							
Matched Contactor Type	Ex9C40-100							
Surface mount adapter for remote mounting	AD53UL							

Frame Size	185A		
Current Setting Range (A)	75-115	110-150	140-210
Short Circuit Rating, 3 Phase at 600 Vac (kA)	10		
Power Terminal	Bus Bar Only		
Power Terminal Torque in-lb (N.m)	159 (18)		
Matched Contactor Type	Ex9C115-185		
Surface mount adapter for remote mounting	AD54UL		

Frame Size	500A			
Current Setting Range (A)	160-225	210-300	280-400	380-500
Short Circuit Rating, 3 Phase at 600 Vac (kA)	30			
Power Terminal	Bus Bar Only			
Power Terminal Torque in-lb (N.m)	310 (35)			
Matched Contactor Type	Ex9C225-500			
Surface mount adapter for remote mounting	AD55UL			

* AWG = American Wire Gauge