# **BIMETALLIC OVERLOAD RELAYS**

## PRODUCT PROFILE

ATC Diversified's **Overload Relays** provide thermal Trip Class 10 overload protection for single and three phase motors, and phase loss protection for three phase motors. Other features like IP20 guarded terminals with dual terminal markings, integral stop button, and direct mounting will help you reduce your total installed costs and enhance the features and performance of your equipment.

# DELIVERING SUPERIOR PRODUCT QUALITY AND MANUFACTURING EXCELLENCE

<b>√</b> Proven	Our Overload Relays are UL Listed and CE marked meeting global standards requirements.		
<b>√</b> Reliability	Trip Class 10 for reliable and accurate protection against overload conditions. Trips within 10 seconds when carrying a current of 720%.		
<b>✓</b> Trip Indication	Visible trip indication to provide clear indication of what device tripped, simplifies troubleshooting in panels.		
<b>√</b> Visible Markings	High visibility labels and markings; dual IEC and NEMA terminal markings for ease of wiring anywhere in the world.		
<b>√</b> Modular Design	Modular design allows our Overload Relays to be direct mounted onto CON Series Contactors.		
✓ Visible Certifications	Our product certifications and electrical ratings are clearly marked on the outside of the devices for easy reference during installation.		
<b>✓</b> Added Safety	IP20 guarded terminals with dual terminal markings prevent accidental contact with live parts.		

	OVL	В	
Frame Size & Current Adjustment Range	<u> </u>		
2.8 - 4.0A (installs on Contactor: S9,S12,S18,S25,S32,S40)	4		
4.0 - 6.3A (installs on Contactor: S9,S12,S18,S25,S32,S40)	6R3		
5.6 - 8.0A (installs on Contactor: S9,S12,S18,S25,S32,S40)	8		
7.0 - 10.0A (installs on Contactor: S9,S12,S18,S25,S32,S40)	10		
8.0 - 12.5A (installs on Contactor: S9,S12,S18,S25,S32,S40)	12R5		
10 - 15A (installs on Contactor: S9,S12,S18,S25,S32,S40)	15		
11 - 17A (installs on Contactor: S9,S12,S18,S25,S32,S40)	17		
15 - 23A (installs on Contactor: S9,S12,S18,S25,S32,S40)	23		
22 - 32A (installs on Contactor: S9,S12,S18,S25,S32,S40)	32		
25 - 40A (installs on Contactor: S32,S40)	40		
Overload. Relay. Type		<u> </u>	
Bimetallic		В	
Frame Size			<u> </u>
Installs on Contactor: S9,S12,S18,S25,S32,S40			1
Installs on Contactor: S32,S40 *			2

<sup>\* 25 - 40</sup>A (Installs on Contactor: S32,S40) [40] only



#### **MULTIPLE FUNCTION ADVANTAGES**

#### **High Fault SCCR**

 High fault short circuit current rating of 100kA @ 480V and 600V with Class J fuses, provides safety and reliability in high fault applications.

#### **Adjustable Current Setting**

• Full load current adjustment ratio of approximately 1:1.5 enables overload relay to be set to exact FLA of motor.

#### **Phase Loss Sensitivity**

 Single phase sensitivity to protect motors against damaging phase loss conditions.

#### Selectable Reset Mode

 Manual or automatic reset and test modes, and stop button all in a single device for convenient control circuit wiring.

#### **Seamless Compatibility**

• Overload Relays direct mount onto all CON Series Contactors.

#### **Trip Test Function**

 Trip test function standard on all overload relays allows for easier installation, testing, and troubleshooting.



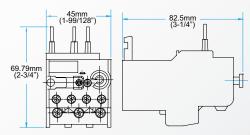
## **BIMETALLIC OVERLOAD RELAYS**

### **SPECIFICATIONS**

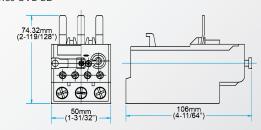
		OVL-B1	OVL-B2	
	UNITS			
ELECTRICAL GENERAL				
Current Setting Range	Α	0.28 ~ 32	25 ~ 50	
Operating Frequency	Hz		400	
Power Dissipation per Pole	W	1.3 ~ 2.0		
ELECTRICAL UL/CSA APPL				
MAIN CIRCUITS				
Rated Operating Voltage, Ue	VAC	600		
Standard Short Circuit Current	kA	5		
Max. Fuse Size*	A	90	125	
High Fault Short Circuit Current	kA		00	
Max. Fuse Size* (Class J)	A		50	
CONTROL CIRCUITS			<del></del>	
Pilot Duty Rating		AC: C600	DC: R300	
ELECTRICAL IEC APPLIC	ATIONS			
MAIN CIRCUITS				
Rated Insulation Voltage, Ui	V	6	90	
Rated Impulse Voltage, Uimp	kV	6		
Rated Operating Voltage, Ue	VAC	6	90	
Max. Rated Operating Current, le	Α	32	50	
Max. Fuse Size*	Α	63	100	
CONTROL CIRCUITS				
Rated Insulation Voltage, Ui	V	690		
Rated Operating Current, le				
@ 24V	Α	AC-15 : 4	DC-13:1	
@ 48V	Α	AC-15: 3.5	DC-13:0.5	
@ 60V	Α	AC-15 : 3.5	DC-13:0.5	
@ 110V	Α	DC-13 : 0.25		
@ 120V	Α	AC-15:3		
@ 220V	Α	DC-13:0.1		
@ 230V	Α	AC-15:2		
@ 250V	Α	DC-13 : 0.1		
@ 400V	Α	AC-15 : 1.5		
@ 500V	Α	AC-15 : 0.5		
@ 690V	Α	AC-15:0.3		
Max. Fuse Size (gL/gG)	Α	6		
ENVIRONMENTAL				
Ambient Operating Temp.	°C / °F	-25 to +60 / -13 to +140		
Ambient Storage Temp.	°C/°F	-40 to +70 / -40 to +158		
Altitude	m / ft.	2,000 / 6,562		
CONSTRUCTION				
Number of Poles	uL	3		
Trip Class	uL	10		
ROHS COMPLIANCE				
* Varies by current adjustment ra	naa of ousel	and rolay		

### **DIMENSIONS**

Series OVL-B1

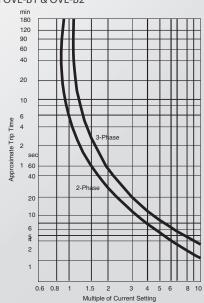


Series OVL-B2



### TRIP CHARACTERISTICS

For Series OVL-B1 & OVL-B2



## **PROVEN**

Conformity to Standards:

UL 508, 60947-4-1A CSA C22.2 No. 14 IEC 60947-1, 60947-4-1

#### **Certifications:**

UL File #: E68568 (Guide NKCR, NKCR7)

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)







## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

### **ATC Diversified Electronics:**

OVL6R3B1 OVL8B1 OVL17B1 OVL10B1 OVL32B1 OVL12R5B1 OVL15B1 OVL4B1 OVL40B2 OVL23B1