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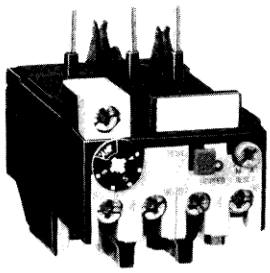
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Find the *Rockwell / Allen-Bradley 193-BSC-15* at our website: *Click HERE*

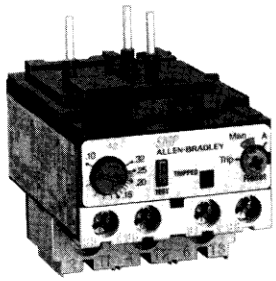
Rockwell Automation
Allen-Bradley

Bulletin 193 SMP™ Solid-state Overload Relay

Series B to SMP-1™ Cross Reference



Series B Cat. No. 193–BSB30



SMP–1 Cat. No. 193–A1C1

The Bulletin 193 SMP-1 solid-state overload relay replaces the Bulletin 193 Series B bimetallic overload relay. The SMP-1 overload relay provides the same protective features that the Series B provides, as well as some additional innovations that allow for even greater protection of AC motors. The SMP-1 overload relay:

- trips as quickly as 2 seconds under phase loss conditions on fully loaded motors
- reduces panel heat
- has a wider adjustment range

The transition to the SMP-1 overload relay will require minimal adjustment for the panel builder and user, as the SMP-1 overload relay has been designed to be completely interchangeable with the existing Bulletin 193 Series B product. This attention to detail results in identical dimensions so that no adjustments have to be made for reset locations, wiring methods, or attachment to Bulletin 100 contactors.

SMP and SMP-1 are trademarks of Allen-Bradley Company, Inc.

New Features

Wider Adjustment Range

The SMP-1 overload relay provides a maximum current adjustment range of 3.2:1, which allows a single SMP-1 relay to be used as a replacement for up to three of the Bulletin 193 Series B relays.

Phase Loss Protection

A major benefit gained by using the SMP-1 overload relay is improved phase loss protection. The SMP-1 overload relay utilizes a custom application-specific integrated circuit (ASIC) to better protect against damage when phase loss conditions occur. Under such conditions, the SMP-1 overload relay trips as quickly as 2 seconds under phase loss conditions on fully loaded motors, reducing the damage incurred by 3-phase motors.

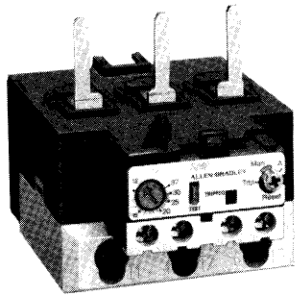
Low Energy Consumption and Reduced Heat Generation

Unlike traditional overload relays, the SMP-1 overload relay uses solid-state circuits to model motor windings. This drastically decreases the amount of energy required to provide overload functionality. The SMP-1 overload relay uses only 150 mW of power to provide overcurrent protection. This lowers operating costs, but even more significantly, it reduces the heat normally associated with traditional overload relays.

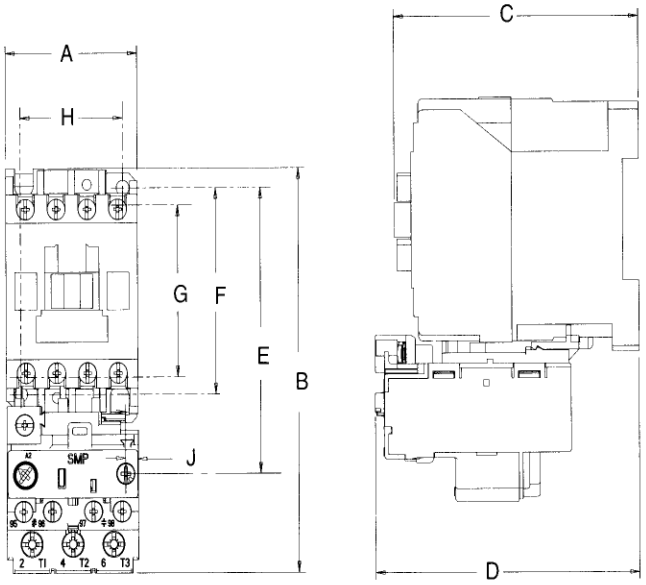
Direct Attachment through 180A

Previously, for contactors rated more than 75A, extra time and special kits were required to mount the traditional electromechanical overload relay. The SMP-1 overload relay eliminates those requirements; overload relays rated up to 180A are available for direct mounting to contactors.

Dimensional Information

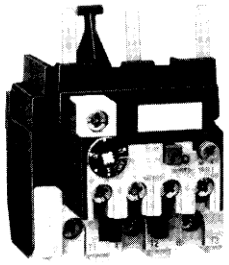


SMP–1 Cat No. 193–A1K3

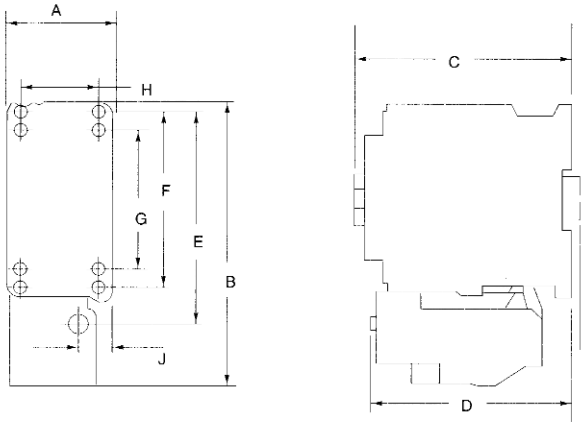


Dimensions in Millimeters (Inches)

	Contactor Cat. No.	A Wide	B High	C Deep	D	E	F	G	H	J
SMP-1 Overload Relay	100-A09, -A12	45 (1-25/32)	117.7 (41/64)	84 (3-5/16)	90.7 (3-37/64)	83.2 (3-9/32)	60 (2-3/8)	50 (1-31/32)	35 (1-25/64)	4.3 (11/64)
	100-A18, A24	55 (2-11/64)	127 (5)	92 (3-5/8)	96 (3-25/32)	94 (3-45/64)	75 (2-61/64)	60 (2-3/8)	35 (1-25/64)	15.1 (19/32)
	100-A30	55 (2-11/64)	145.8 (5-3/4)	109 (4-19/64)	92.5 (3-41/64)	112 (4-13/32)	90 (3-35/64)	75 (2-61/64)	40 (1-9/16)	12.5 (1/2)
	A38, A45	75 (2-61/64)	174.3 (6-7/8)	125 (4-15/16)	120.1 (4-47/64)	127 (5)	100 (3-5/16)	– –	55 (2-11/64)	19.4 (49/64)
	A60, A75	91 (3-37/64)	186.6 (7-11/32)	142 (5-19/32)	134.2 (5-9/32)	134.6 (5-5/16)	110 (4-11/32)	– –	80 (3-5/32)	21.9 (21/32)



Series B Cat. No. 193–CPC45



Dimensions in Millimeters (Inches)

	Contactor Cat. No.	A Wide	B High	C Deep	D	E	F	G	H	J
Series B Overload Relay	100-A09, -A12	45 (1-13/16)	119 (4-11/16)	84 (3-5/16)	98 (3-55/64)	80 (3-11/64)	60 (2-23/64)	50 (1-31/32)	35 (1-3/8)	6 (15/64)
	100-A18, -A24	55 (2-13/64)	127 (5)	92 (3-5/8)	103 (4-1/16)	91 (3-37/64)	75 (2-61/64)	60 (2-23/64)	35 (1-3/8)	17 (43/64)
	100-A30	55 (2-5/32)	145 (5-45/64)	109 (4-19/64)	99 (3-59/64)	109 (4-19/64)	90 (3-35/64)	75 (2-61/64)	40 (1-37/64)	14 (9/16)
	100-A38, -A45	75 (2-61/64)	175 (6-29/32)	125 (4-59/64)	94 (3-11/16)	129 (5-1/16)	100 (3-15/64)	– –	55 (2-11/64)	11 (7/16)
	100-A60, -A75	91 (3-3/4)	187 (7-3/8)	147 (5-51/64)	108 (4-1/4)	137 (5-25/64)	110 (4-15/32)	– –	80 (3-5/32)	29 (1-9/64)

Cross-reference Guide

Use the table below as a guide for cross referencing from Bulletin 193 series B bimetallic IEC overload relays to the SMP-1 solid state overload relay. Note that the shaded areas indicate an overload relay that could be replaced by one of two of the new SMP-1 overload relays. The application full load current should be checked to ensure that the best replacement is chosen.

Series B Cat. No.	Series B Adjustment Range	SMP-1 Cat .No.	SMP-1 Adjustment Range
193-BSA18	0.10–0.16A	193-A1A1	.1–.32A
193-BSA26	.016–0.24A		
193-BSA35	0.24–0.40A	193-A1C1	.32–1A
193-BSA70	0.40–0.60A		
193-BSA90	0.60–1.0A		
193-BSB12	0.8–1.2A	193-A1D1	1.0–2.9A
193-BSB16	1.0–1.6A		
193-BSB22	1.5–2.3A		
193-BSB30	2.0–3.0A	193-A1E1	1.6–5.0A
193-BSB42	2.8–4.2A		
193-BSB60	4.0–6.0A	193-A1F1	3.7–12A
193-BSB80	5.5–8.0A		
193-BSC10	6.0–10A		
193-BSC15	10–16A	193-A1H1	12–32A
193-BSC24	16–24A		
193-BSC32	22–32A		
193-CPC30	18–30A	193-A1J2	14–45A
193-CPC45	30–45A		
193-CPC63	45–60A	193-A1K3	23–75A
193-CPC75	60–75A		
193-HPD110	66–110A	193-A1L4	66–110A
193-DPC88	60–88A	193-A1M5	57–180A
193-DPD120	80–120A		
193-DPD200	120–200A		
193-EPD180	120–180A	193-A1N6	96–300A
193-EPD300	180–300A		
193-FPD240	160–240A	193-A1P6	128–400A
193-FPD400	240–400A		
193-GPD378	252–378A	193-A1R6	200–630A
193-GPD630	378–630A		

To make the SMP overload relay an auto/manual reset, change the catalog string to A4. Example: **Cat. No. 193-A1C1** becomes **Cat. No. 193-A4C1**.

The catalog number as listed is incomplete. To complete the catalog number, insert the coil voltage code from the coil selection table below.

Coil Voltage Table

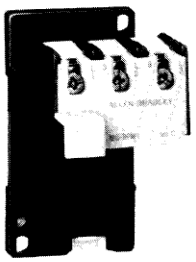
Voltage	24	48	110	120	208	220	240	277	380	415	440	480	500	600
50 Hz	K	Y	D	–	–	A	T	–	N	I	B	–	M	–
60 Hz	J	X	–	D	H	L	A	F	–	–	G	B	–	C

Product Data
Bulletin 193 Series B to SMP–1 Solid–state
Overload Relay Cross Reference

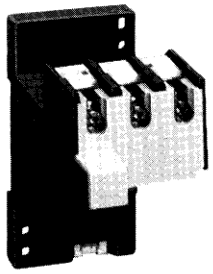
Updated Accessories

Other accessories that have been updated are shown below.

Panel Mounting Adapter

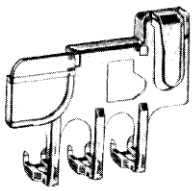


Series B Cat. No. 193–BPM1

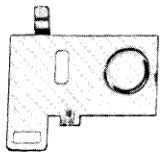


SMP–1 Cat. No. 193–BPM2

Anti-tamper Shield



Series B Cat. No. 193–BC1

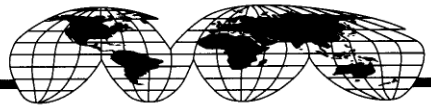


SMP–1 Cat. No. 193–BC5

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