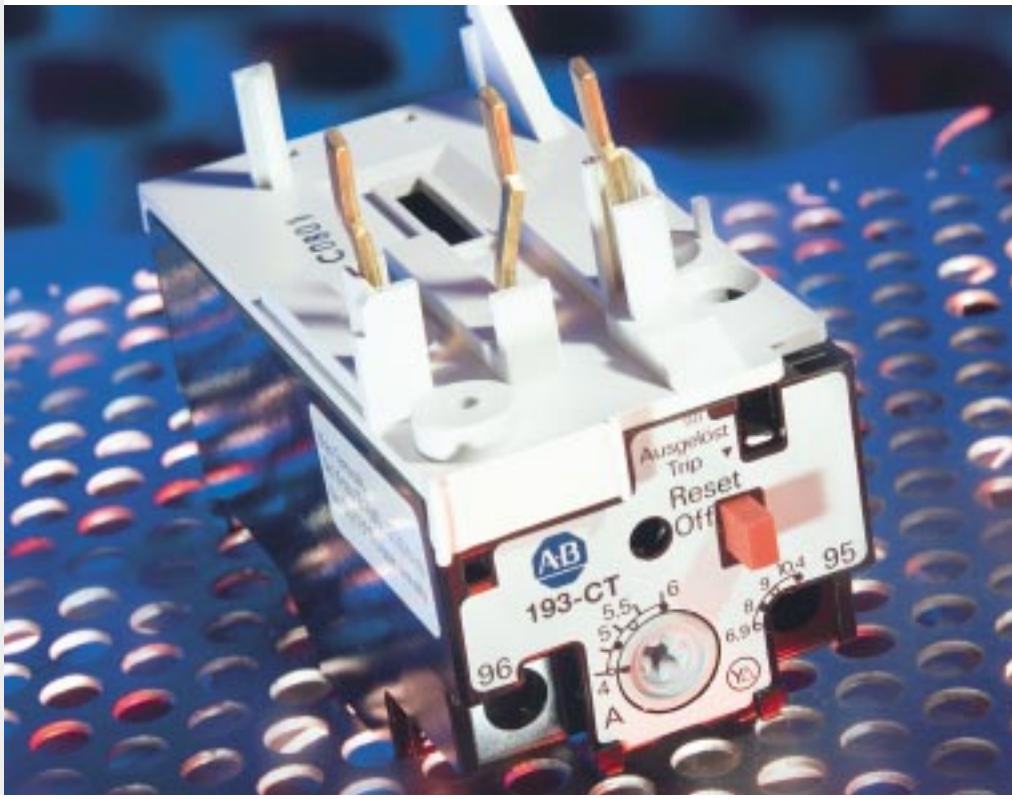
Allen-Bradley

Bulletin 193-CT Overload Relay

Reliable, simple motor protection

The Allen-Bradley 193-CT overload relay from complete automation supplier Rockwell Automation provides reliable motor protection in normal duty applications regardless of installation location, installation position and ambient temperature. In addition, the tripping accuracy is high and constant.

- Bimetallic overload relay
- Directly mounts to 100-C contactors (9…23 A)
- Motor protection at phase loss (trips at maximum 125% of current setting)
- Trip class 10
- Optional normally open auxiliary contact
- Manual reset only
- Trip indication
- UL, CSA and CE



Overload Relays		Setting Range [A]	Cat. No.	Max. current rating of backup gL fuse [A] IEC Coordination Type 1	2
Mounts on:		0.10…0.15	193-CT-A15	50	1
100-C Contactor	C09…C23	0.15…0.23	193-CT-A23	50	1
		0.23…0.35	193-CT-A35	50	2
		0.35…0.55	193-CT-A55	50	2
		0.55…0.8	193-CT-A80	50	2
		0.8…1.2	193-CT-B12	50	4
		1.2…1.8	193-CT-B18	50	4
		1.8…2.7	193-CT-B27	50	6
		2.7…4	193-CT-B40	50	10
		4…6	193-CT-B60	50	16
		6…9	193-CT-B90	50	20
	C12…C23	9…12.5	193-CT-C12	50	25
	C16	12.5…17.5	193-CT-C17	50	25
	C23			50	35

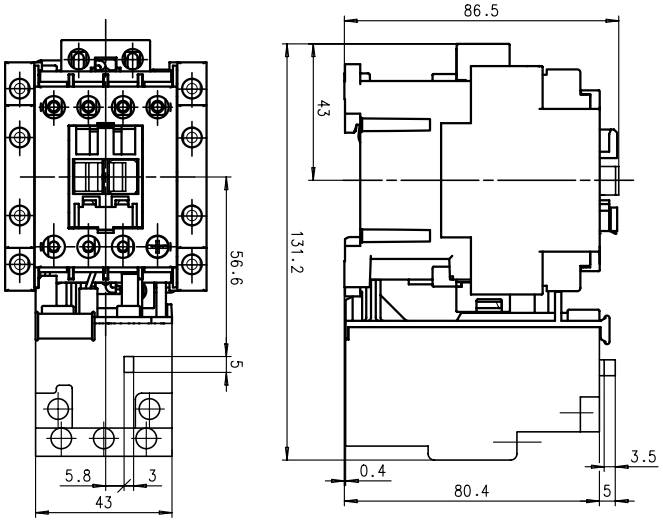
Accessories			Cat. No.		
193-CT Overload Relay (Optional N.O. Auxiliary Contact)	All	—	193-M-F10	—	—
193-CT Overload Relay (Separate Mounting Adapter)	All	—	193-CTAPM	—	—

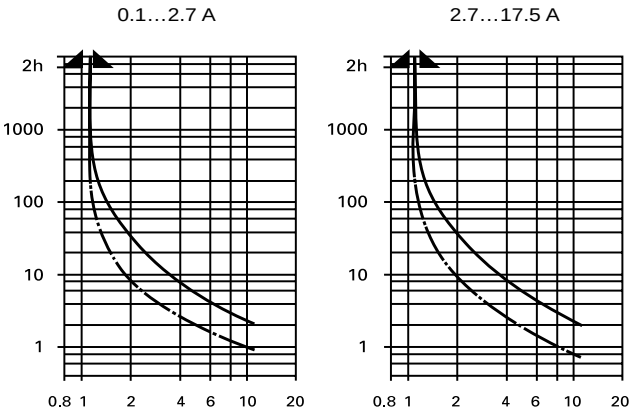
Product Profile

Rockwell Automation

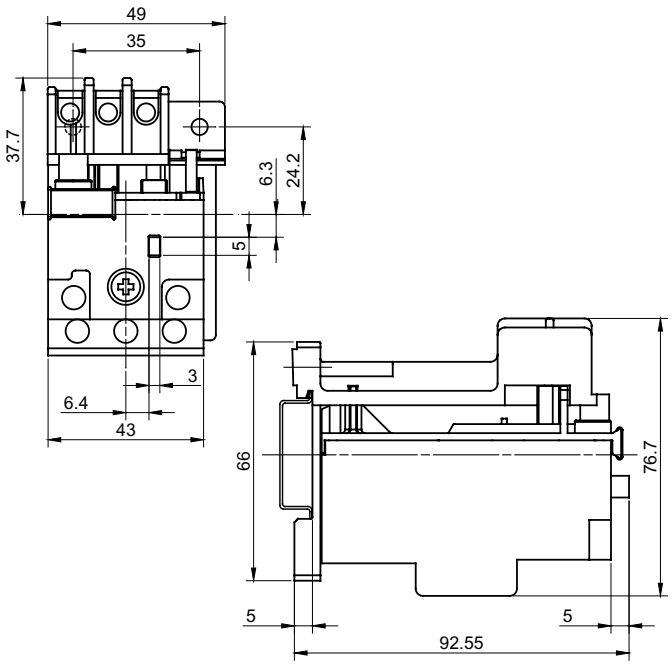
Dimensions — Dimensions are in mm. Dimensions are not intended to be used for manufacturing purposes.

193-CT on 100-C Contactor





193-CT with 193-CTAPM Separate Mounting Adapter



Main Circuit			
Rated Insulation Voltage			
IEC	AC	690 V	
UL/CSA	AC	600 V	
Max. Wire Size			
IEC	Fine Stranded w. Ferrule	[mm²]	2 x (1…2.5)
	Coarse Stranded or Solid	[mm²]	2 x (1.5…4)
UL/CSA	Stranded or Solid	[AWG]	2 x (14…10)
Recommended Torque		[N-m]	1.4…2.0
		[lb-in]	12…20
Control Circuit			
Rated Insulation Voltage			
IEC	AC	690 V	
UL/CSA	AC	600 V	
Rated Operating Current			
IEC AC-12		[A]	4
IEC AC-15	200…240 V	[A]	3
	380…415 V	[A]	1.6
NEMA			B600, R300
Max. Wire Size			
IEC	Fine Stranded w. Ferrule	[mm²]	2 x (0.75…2.5)
	Coarse Stranded or Solid	[mm²]	2 x (0.75…2.5)
UL/CSA	Stranded or Solid	[AWG]	2 x (18…14)
Recommended Torque		[N-m]	1.2
		[lb-in]	11
General			
Standards Compliance	IEC 60947, DIN VDE 0660, UL 508, CSA C22.2 No. 14		
Approvals	CE, cULus		
Ambient Temperature	Open		–20…+60 °C (–4…+140 °F)
	Enclosed		–20…+40 °C (–4…+104 °F)

Trip curve notes:

Time/current characteristics of thermal overload relay

Mean value of tolerance bands 3-phase heated. Full line curves relate to cold relay. Dashed curves relate to relay at operating temperature (at set current load).

Tolerance trip time ±20%, ±10% for current.

Storage temperature limits from –25°C…+75°C.

Operating limit specified in IEC 60947-4 for –5°C…+40°C are included in the –20°C…+60°C range.

◢◣ Specified points relative to operating temperature condition; in compliance with IEC 60947-4.

Single phasing (phase failure):
Trip limits 1.05…1.25 of set current I_{eF} (1.05…1.32 I_{eF} is permissible according to IEC 60947-4).

For motors up to 10 kW, the 2-phase trip at 1.25 I_{eF} max. guarantees heat buildup limitation to the value which occurs in the event of a 3-phase trip at 1.2 I_{eF} .

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