



Allen-Bradley

Plastic Enclosures for DOL-Starters - Application Instruction
Kunststoffgehäuse für DOL-Starter - Anwendungsanweisung
Boîtiers plastiques pour démarreurs direct - Notice d'application
Custodie in plastica per avviatori diretti - Istruzioni di applicazione
Cofre de plástico para arrancadores directos - Instrucciones de uso

198E-AOS..
198E-COS..

ATTENTION:

To prevent electrical shock, disconnect from power source before installing or servicing.
To be commissioned and maintained only by qualified personnel; pay attention to the operating instructions!
When wired for 2-wire control, a motor connected to the circuit may start automatically when the overload relay is in the automatic reset position or when a person actuates the RESET push button.

ACHTUNG:

Um Unfälle zu vermeiden, vor Installations- oder Servicearbeiten die Stromversorgung unterbrechen.
Inbetriebsetzung und Wartung nur durch Fachpersonal; Betriebsanleitung beachten!
Bei Startern mit Dauerkontaktsteuerung kann ein Motor automatisch starten, wenn das Motorschutzrelais auf automatische Rückstellung eingestellt ist oder wenn nach einer Auslösung des Motorschutzrelais die Rückstelltaste betätigt wird.

ATTENTION:

Avant le montage ou le maintenance, couper l'alimentation secteur afin d'éviter tout accident.
Mise en service et entretien: seulement par du personnel spécialisé; respecter les instructions d'exploitation!
Si la commande de démarrage est réalisée avec un contact permanent, le moteur peut démarrer automatiquement lorsque le relais de surcharge est en mode de réarmement automatique ou après déclenchement du relais de surcharge, le bouton de réinitialisation est actionné.

ATTENZIONE:

Per prevenire infortuni, togliere tensione prima dell'installazione o manutenzione.
Messa in servizio e manutenzione solo da personale specializzato; attenersi alle istruzioni per l'esercizio!
Quando collegato con controllo a due fili, il motore connesso al circuito può avviarsi automaticamente se il relè è impostato su reset automatico o se il pulsante di RESET del relè di sovraccarico viene premuto.

ATENCIÓN:

Desconectar la alimentación eléctrica antes de realizar el montaje o mantenimiento, para evitar accidentes. Puesta en servicio y mantenimiento exclusivamente por personal especializado; ¡Respetar las instrucciones de puesta en servicio y mantenimiento!
Cuando el sistema de control es por contacto permanente, el motor se puede conectar automáticamente si el relé de sobrecarga tiene ajustado el rearme en posición de automático o cuando una persona acciona el pulsador RESET (rearme).

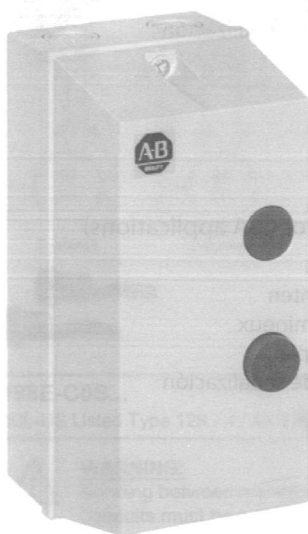


198E-AOS..

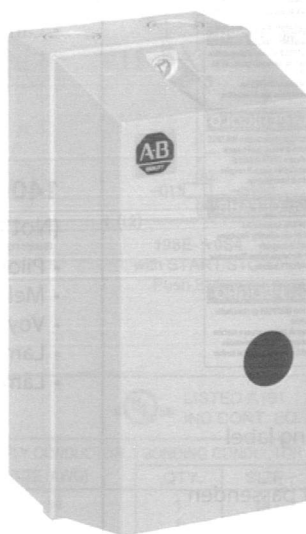
EN / IEC 62208
EN / IEC 60947-4-1

198E-COS..

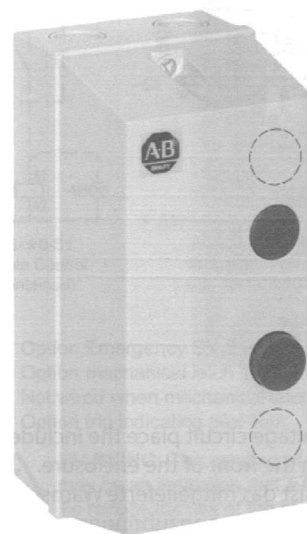
EN / IEC 62208
EN / IEC 60947-4-1
UL 50
UL 60947-4-1
CAN/CSA-C22.2 No. 60947-4-1



START / STOP
Push Buttons



RESET
Push Button

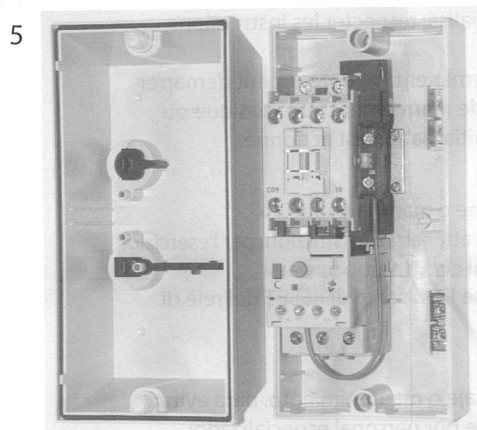
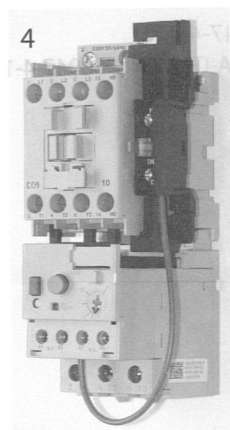
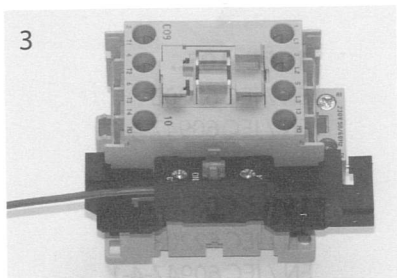
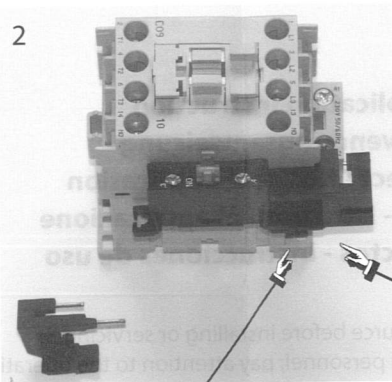
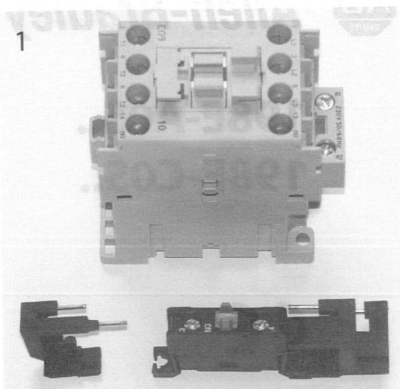


Options

Pilot Light (Run)
Green

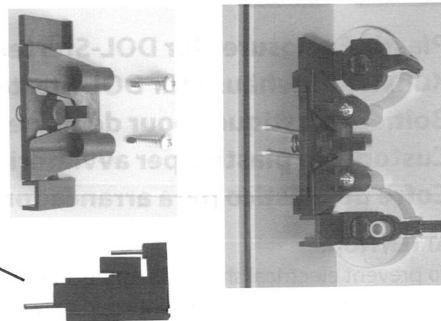
Pilot Light (Failure)
red

198E-A0S4 / -C0S4 with START / STOP Push Buttons



⚠ 198E-PLA:
 Replace connection module
 Verbindungsmodul austauschen
 Remplacer le module de connexion
 Sostituire il modulo di collegamento
 Reemplaza el módulo de conexión

Accessories

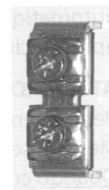


198E-PLA

- Push button latch for maintained control
- Drucktasten-Verklüpfung für Dauerkontakt-Steuerung
- Accrochage des bouton-poussoirs pour commande de contact permanent
- Ritenuta di pulsante per comando a contatto permanente
- Retención de pulsador para mando a contacto permanente

198E-PNT

- Neutral Terminal
- Neutraleiterklemme
- Borne de neutre
- Morsetto di neutro
- Borna de neutro



USA + Canada:

(Use 800F Pilot Lights only)

800FD-P...

- Pilot Lights
- Meldeleuchten
- Voyants lumineux
- Lampade spia
- Lámparas de señalización



140-L...

(Not for UL or CSA applications)

- Pilot Lights
- Meldeleuchten
- Voyants lumineux
- Lampade spia
- Lámparas de señalización



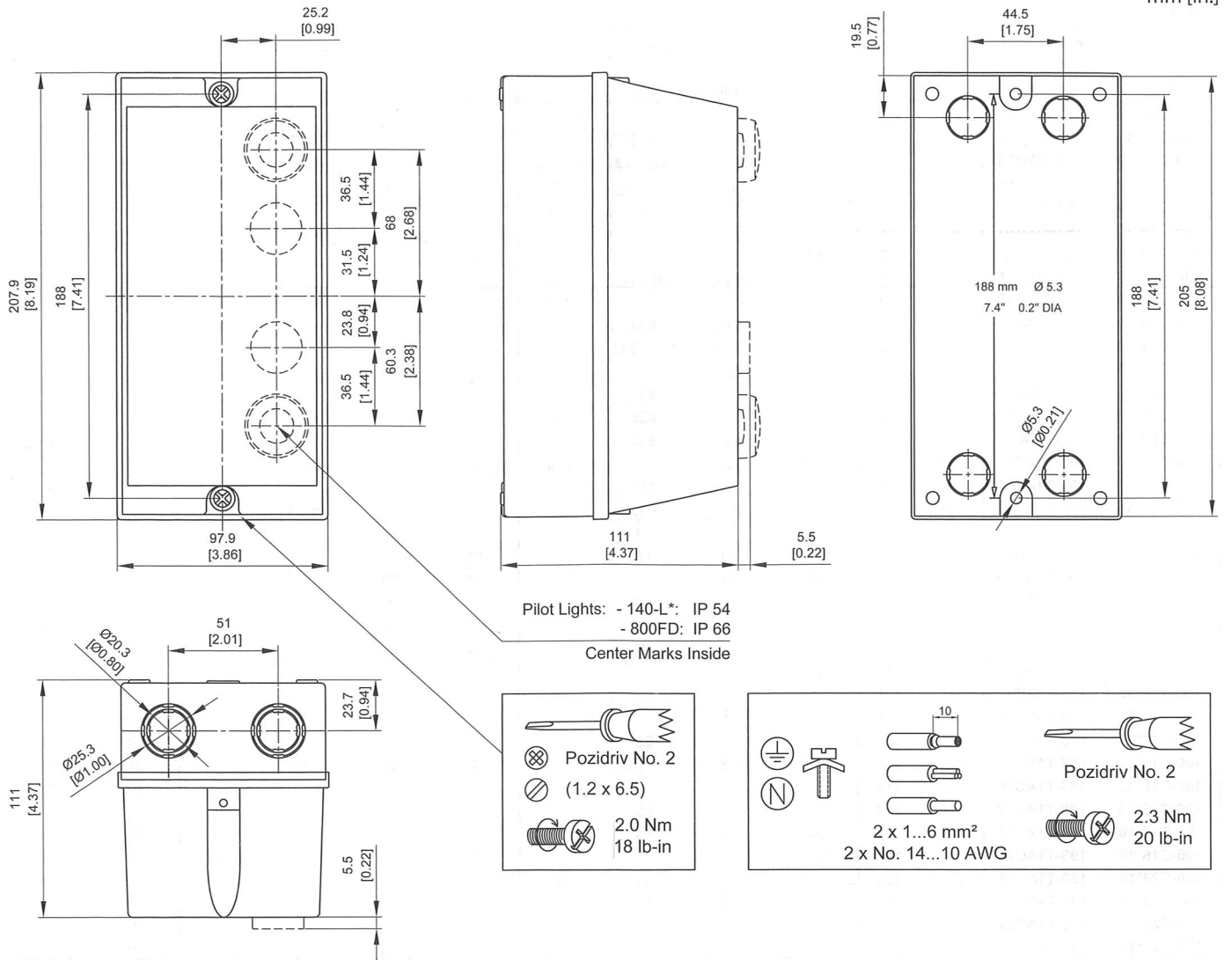
198E-A0S1 / -C0S1 with RESET Push Button



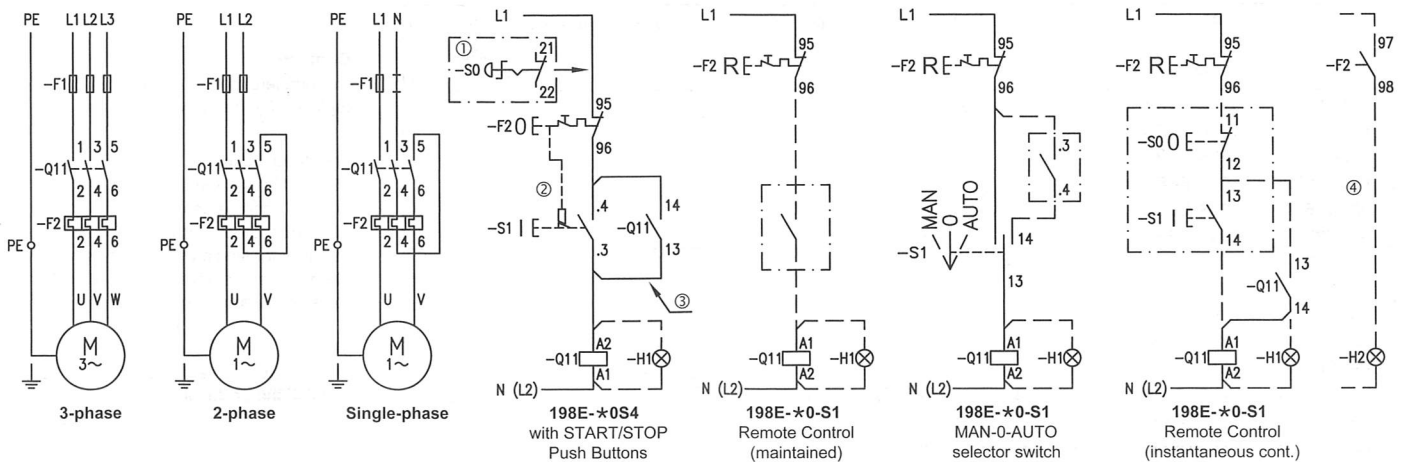
IMPORTANT NOTICE:

- In case of a separate control voltage circuit place the included warning label in the appropriate language on the front of the enclosure.
- Bei separater Steuerspannung ist das mitgelieferte Warnschild in der passenden Sprache auf der Frontseite des Gehäuses anzubringen.
- En cas d'une tension de commande séparée, placer l'étiquette d'avertissement incluse, dans la langue appropriée, sur la face du boîtier.
- In caso di tensione di controllo separata posizionare l'etichetta d'avvertimento inclusa, nella lingua appropriata sulla parte anteriore della custodia.
- En caso de una tensión de circuito de control separado, colocar la etiqueta de advertencia incluido en el idioma adecuado en la parte frontal del cofre.

Dimensions



Wiring Diagrams



198E-COS...

cUL-US Listed Type 12K / 4 / 4X Enclosure

LISTED A191
IND CONT. EQ.



WARNING:
Bonding between metallic conduits must be provided.

AVERTISSEMENT:
Une liaison électrique doit être assurée entre les conduits métalliques.

SUPPLY CONDUCTOR SIZE (AWG)	BONDING CONDUCTOR	
	QTY.	SIZE
14	1	14
12	1	12
10	2	12

FOR USE WITH ALLEN-BRADLEY
GROUNDING ADAPTER KIT, CAT. NO. 198-GR1

SEE APPLICABLE CODES AND LAW
FOR GROUNDING REQUIREMENTS



WARNING: The opening of the branch circuit protective device may be an indication that a fault current has been interrupted. To reduce the risk of fire or electric shock, current-carrying parts and other components of the controller should be examined and replaced if damaged.

WARNING: With the mechanical latch (☒) installed or when wired for 2-wire control, a motor connected to the circuit may start automatically when the overload relay is in the automatic reset position.

Component Selection for Enclosed Starters

3-phase Motors

Components		Current Range		230V 50Hz	400V 50Hz	500V 50Hz	690V 50Hz	200V 60Hz	230V 60Hz	460V 60Hz	575V 60Hz	100kA, 690V	100kA, 600V
Contactor ¹⁾	Overload Relay ²⁾	Min A	Max A	kW	kW	kW	kW	HP	HP	HP	HP	DIN Fuses Type gL/gG	Max. Fuse Class CC, J
100-C09*10	193-ED1AB	0.10	0.50	0.06...0.09	0.06...0.12	0.06...0.12	0.06...0.18	--	--	--	--	2	3
100-C09*10	193-ED1BB	0.20	1.0	0.12	0.18...0.25	0.18...0.37	0.25...0.55	--	--	1/4...1/3	1/4...1/2	4	4
100-C09*10	193-ED1CB	1.0	5.0	0.18...1.1	0.37...1.5	0.55...2.2	0.75...3	1/4...3/4	1/4...1	1/2...2	3/4...3	16	10
100-C09*10	193-ED1DB	3.2	16	1.5...3	2.2...4	3.0...4	4	1...2	1 1/2...2	3...5	5...7 1/2	20	15
100-C12*10	193-ED1DB	3.2	16	4	5.5	5.5	5.5	3	3	7 1/2	10	25	20
100-C16*10	193-ED1DB	3.2	16		7.5	7.5	7.5	3	3	7 1/2	10	32	30
100-C16*10	193-ED1EB	5.7	27	5.5				5	5	10	15	35	45
100-C23*10	193-ED1EB	5.7	27	7.5	10...11	10...13	10	5	7 1/2	15	15	40	45
100-C09*10	193-T1AA16	0.10	0.16				0.06	--	--	--	--	2	1
100-C09*10	193-T1AA25	0.16	0.25		0.06	0.06	0.09	--	--	--	--	2	1
100-C09*10	193-T1AA40	0.25	0.40		0.09	0.09...0.12	0.12...0.18	--	--	--	--	2	1
100-C09*10	193-T1AA50	0.35	0.50	0.06	0.12			--	--	--	--	4	2
100-C09*10	193-T1AA63	0.45	0.63	0.09		0.18	0.25	--	--	--	1/4	4	3
100-C09*10	193-T1AA80	0.55	0.80	0.12	0.18	0.25	0.37	--	--	1/4...1/3	1/3	4	3
100-C09*10	193-T1AB10	0.75	1.00		0.25	0.37	0.55	--	--	1/3	1/2	6	4
100-C09*10	193-T1AB13	0.90	1.30	0.18	0.37		0.75	--	1/4	1/2		6	4
100-C09*10	193-T1AB16	1.10	1.6	0.25		0.55		1/4	1/3	3/4	3/4	6	4
100-C09*10	193-T1AB20	1.40	2.0		0.75	0.75	1.1	1/3	1/3	3/4...1	1	6	4
100-C09*10	193-T1AB25	1.80	2.5	0.37		1.1	1.5		1/2		1 1/2	10	6
100-C09*10	193-T1AB32	2.3	3.2	0.55	1.1	1.5	2.2	1/2	3/4	1 1/2	2	10	6
100-C09*10	193-T1AB40	2.9	4.0	0.75	1.5			3/4	3/4	2	3	10	10
100-C09*10	193-T1AB48	3.5	4.8			2.2	3	1	1	3	3	10	10
100-C09*10	193-T1AB63	4.5	6.3	1.1	2.2	3	4	1 1/2	1 1/2		5	16	12
100-C09*10	193-T1AB75	5.5	7.5	1.5	3	4		1 1/2...2	2	5	5	16	15
100-C09*10	193-T1AC10	7.2	10.0	2.2	4			2			7 1/2	20	20
100-C09*10	193-T1AC12	9.00	12.5	3								25	20
100-C12*10	193-T1AB75	5.5	7.5				5.5					16	15
100-C12*10	193-T1AC10	7.2	10.0									20	20
100-C12*10	193-T1AC12	9.00	12.5		5.5			3	3	7 1/2	10	25	20
100-C16*10	193-T1AC10	7.2	10.0				7.5					20	20
100-C16*10	193-T1AC12	9.00	12.5			7.5						25	20
100-C16*10	193-T1AC16	11.3	16.0	4	7.5	7.5			5	10		32	30
100-C16*10	193-T1AC20	15.0	20.0					5			15	32	30
100-C23*10	193-T1AC16	11.3	16.0				10					32	30
100-C23*10	193-T1AC20	15.0	20.0			11						40	35
100-C23*10	193-T1AC21	17.50	21.5	5.5		13				15		40	35
100-C23*10	193-T1AC25	21.00	25.0		11				7 1/2			40	40

Single-phase Motors

Components		Current Range		230V 50Hz	115V 60Hz	200V 60Hz	230V 60Hz	100kA, 690V	100kA, 600V
Contactor ¹⁾	Overload Relay ²⁾	Min A	Max A	kW	HP	HP	HP	DIN Fuses Type gL/gG	Max. Fuse Class CC, J
100-C09*10	193S-EEPB	1.0	5.0	0.12...0.55	1/10...1/6	1/6...1/3	1/6...1/3	16	10
100-C09*10	193S-EERB	3.2	16	0.75...1.5	1/4...1/2	1/2...1 1/2	1/2...1 1/2	20	20
100-C12*10	193S-EERB	3.2	16	2.2	1/2	2	2	25	25
100-C16*10	193S-EERB	3.2	16	2.2	3/4	2	2	32	25
100-C16*10	193S-EESB	5.4	27	3.0	1	2	3	35	30
100-C23*10	193S-EESB	5.4	27	4.0	1 1/2...2	3	3	40	40
100-C09*10	193-T1AA16	0.10	0.16	--	--	--	--	2	1
100-C09*10	193-T1AA25	0.16	0.25	--	--	--	--	2	1
100-C09*10	193-T1AA40	0.25	0.40	--	--	--	--	2	1
100-C09*10	193-T1AA50	0.35	0.50	--	--	--	--	4	2
100-C09*10	193-T1AA63	0.45	0.63	--	--	--	--	4	3
100-C09*10	193-T1AA80	0.55	0.80	0.06	--	--	--	4	3
100-C09*10	193-T1AB10	0.75	1.0	0.09	--	--	--	6	4
100-C09*10	193-T1AB13	0.90	1.3	0.12	--	--	--	6	4
100-C09*10	193-T1AB16	1.1	1.6	0.12	--	--	--	6	6
100-C09*10	193-T1AB20	1.4	2.0	0.18	--	--	--	6	6
100-C09*10	193-T1AB25	1.8	2.5	0.25	--	--	1/6	10	10
100-C09*10	193-T1AB32	2.3	3.2	0.37	1/10	1/6	1/4	10	10
100-C09*10	193-T1AB40	2.9	4.0	0.37	1/8	1/4	1/3	10	10
100-C09*10	193-T1AB48	3.5	4.8	0.55	1/6	1/3	1/3	10	10
100-C09*10	193-T1AB63	4.5	6.3	0.75	1/4	1/2	1/2	16	15
100-C09*10	193-T1AB75	5.5	7.5	1.1	1/3		3/4	16	15
100-C09*10	193-T1AC10	7.2	10.0	1.1	1/3	3/4...1	1	20	20
100-C09*10	193-T1AC12	9.0	12.5	1.5	1/2	1 1/2	1 1/2	25	20
100-C16*10	193-T1AC16	11.3	16.0	2.2	3/4	2	2	32	30
100-C16*10	193-T1AC20	15.0	20.0	3	1		3	32	30
100-C23*10	193-T1AC21	17.5	21.5	3	1 1/2	3		40	35
100-C23*10	193-T1AC25	21.0	25.0		2			40	35

1) Contactors

To complete the Catalog No., replace * by the coil voltage code

2) Overload Relays

193-ED1*: Electronic overload relays (193-EE* can be used as well).
193S-EE*: Electronic overload relays specially for single-phase motors
 Max. environmental temperature 40 °C (outside the enclosure)

193-T1*: Thermal overload relays.
 Max. environmental temperature 40 °C (outside the enclosure)