



Bulletin 193 E1 PLUS Overload Relay Application and Installation
Application et installation du relais de surcharge Famille 193 E1 PLUS
Überlastrelais Bulletin 193 E1 PLUS, Anwendung und Installation
Aplicación e instalación del relé de sobrecarga, Boletín 193 E1 PLUS
Boletim 193 E1 PLUS Aplicação e Instalação do Relé de Sobrecarga
Applicazione ed installazione dei relè termici Bollettino 193 E1 PLUS
ブレイテン193 E1 PLUS 過負荷継電器の応用と取付け
Bulletin 193 E1 PLUS 过载继电器的使用与安装
 (Cat 193-ED1_ _ , 193*-EE_ _)

Installation
Instalación
Instalação
Installazione
 取付け方法
 安装



ATTENTION: To prevent electrical shock, disconnect from power source before installing or servicing. Install in suitable enclosure. Keep free from contaminants.

ATTENTION: Avant le montage et la mise en service, couper l'alimentation secteur pour éviter toute décharge. Prévoir une mise en coffret ou armoire appropriée. Protéger le produit contre les environnements agressifs.

ACHTUNG: Vor Installations- oder Servicearbeiten Stromversorgung zur Vermeidung von elektrischen Unfällen trennen. Die Geräte müssen in einem passenden Gehäuse eingebaut und gegen Verschmutzung geschützt werden.

ATENCION: Desconéctese de la corriente eléctrica, antes de la instalación o del servicio, a fin de impedir sacudidas eléctricas. Instálelo en una caja apropiada. Manténgalo libre de contaminantes.

ATENÇÃO: Para evitar choques, desconectar da corrente elétrica antes de fazer a instalação ou a manutenção. Instalar em caixa apropriada. Manter livre de contaminantes.

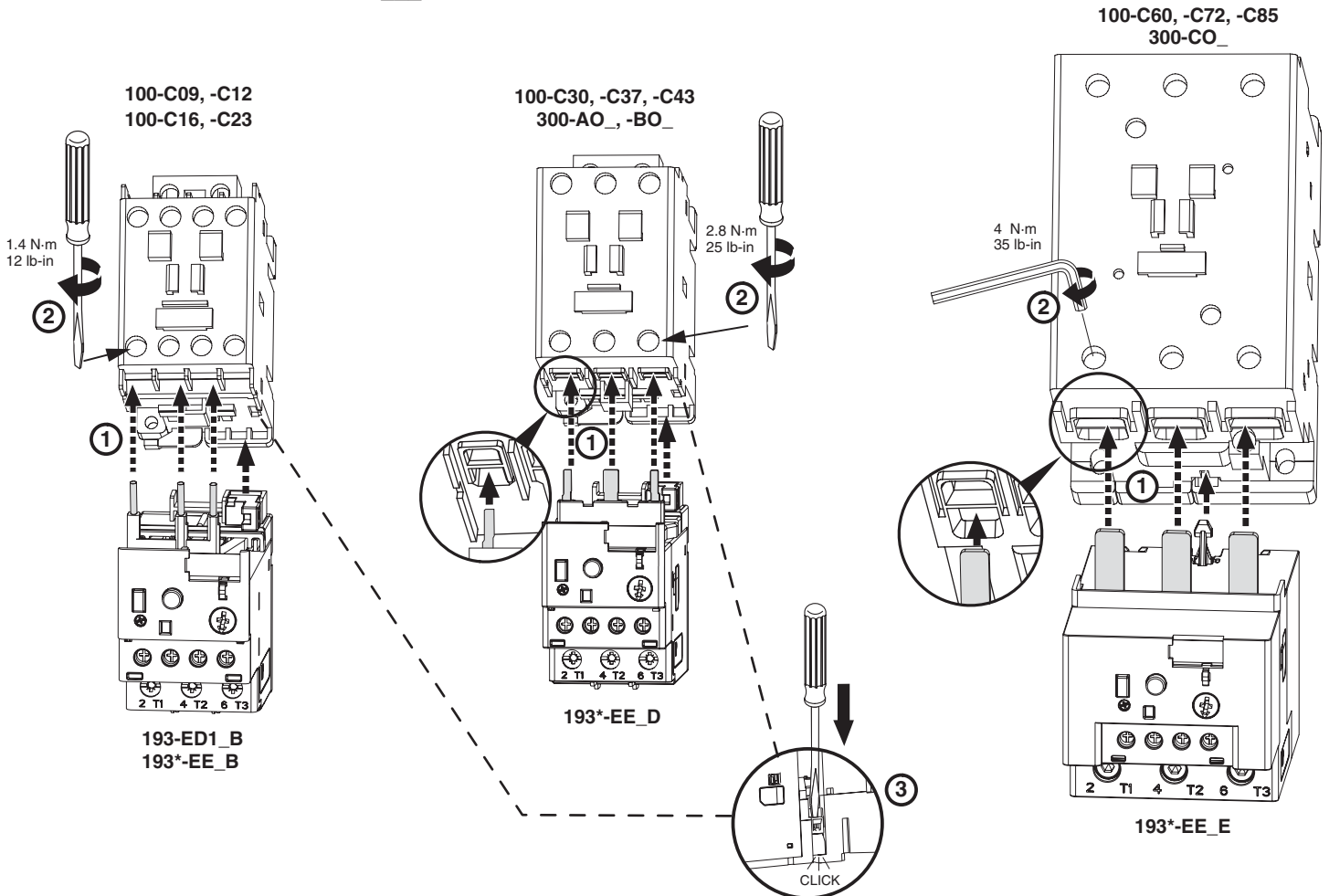
ATTENZIONE: Per prevenire infortuni, togliere tensione prima dell'installazione o manutenzione. Installare in custodia idonea. Tenere lontano da contaminanti.

注意: 感電事故防止のため、取付けまたは修理の際は電源から取り外してください。適切なケース内に取り付けてください。また、汚染物質がないことを確認してください。

注意: 为了防止触电，在安装或维修之前必须先切断电源。安装在合适的设备箱内。防止接触污染物。

193-E_ _ = 3 Ø

193S-E_ _ = 1 Ø



E1 PLUS Features

Caractéristiques du E1 PLUS

Leistungsmerkmale des E1 PLUS

Características del E1 PLUS

Características E1 PLUS

Funzioni dell'E1 PLUS

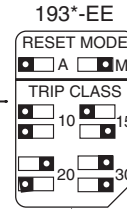
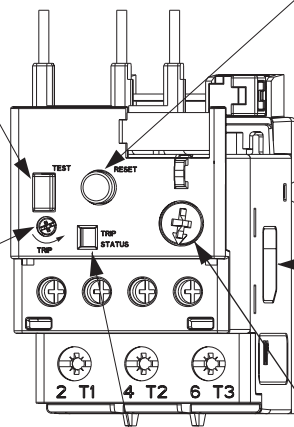
E1 PLUS の特長

E1 PLUS 继电器的特性

Push To Test
 Enfoncez pour tester
 Testschalter
 Presione para probar
 Pressione para testar
 Spingere per provare
 押してテストします。
 按下按钮进行测试

Rotate to Manually Trip
 Faire pivoter pour déclencher manuellement
 Für manuelle Auslösung drehen
 Rotar para disparar manualmente
 Gire para disparar manualmente
 Ruotare per intervenire manualmente
 旋转进行手动设置
 回転すると手動トリップします。

Push to Reset
 Enfoncez pour réinitialiser
 Nullstellschalter
 Presione para reiniciar
 Pressione para religar
 Premere per reimpostare
 推進并重新设置
 押してリセットします。



193*EE
 RESET MODE
 A M
 TRIP CLASS
 10 15
 20 30

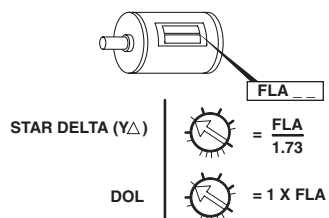
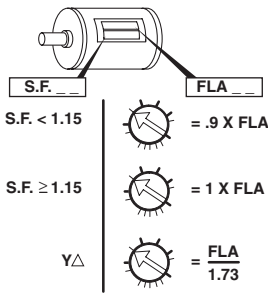
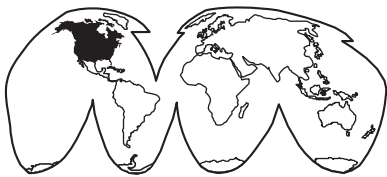
A = Automatic/Manual Reset Mode
 A = Mode de réinitialisation automatique/manuel
 A = Automatische/Manuelle Nullstellung
 A = Modo de reinicio automático/manual
 A = Modo de religação automático/manual
 A = Modalità reimpostazione automatica/Manuale
 自动和手动模式
 A = 自動/手動リセットモード

M = Manual Reset Mode
 M = Mode de réinitialisation manuel
 M = Manuelle Nullstellung
 M = Modo de reinicio manual
 M = Modo de religação manual
 M = Modalità reimpostazione manuale
 手动模式
 M = 手動リセットモード

Selectable Trip Class
 Classe de déclenchement sélectionnable
 Wählbare Auslösestufen
 Clase de disparo seleccionable
 Seleção da classe de disparo
 Classe di intervento selezionabile
 選択可能なトリップ種類
 可选用的跳闸等级

- Trip Indicator Window
 Yellow indicator not visible: Not Tripped.
 Yellow indicator visible: Tripped.
- Fenêtre d'indicateur de déclenchement
 Indicateur jaune non visible : pas de déclenchement
 Indicateur jaune visible : déclenchement
- Auslösungsanzeigefenster
 Gelbe Anzeige nicht sichtbar: keine Auslösung
 Gelbe Anzeige sichtbar: Auslösung
- Ventana indicadora de disparo
 Indicador amarillo no visible: No disparado
 Indicador amarillo visible: Disparado

- Visor de disparo
 Se o indicador amarelo não estiver visível: não disparado
 Se o indicador amarelo estiver visível: disparado
- Finestra indicatrice di intervento.
 Indicatore giallo non visibile: non scattato.
 Indicatore giallo visibile: scattato.
- トリップ表示ウィンドウ
 黄色インジケータが表示されていない場合:トリップなし
 黄色インジケータが表示されている場合:トリップ済み
- 跳闸指示窗
 黄色标记未显示: 没有跳闸
 黄色标记显示: 已跳闸



- To adjust trip current, turn dial until the desired current is aligned with the ▲ pointer. Trip rating is 120% of dial setting.
- Pour régler l'intensité de déclenchement, tournez le cadran jusqu'à ce que le pointeur ▲ soit sur l'intensité voulue. La valeur nominale de déclenchement est de 120% du réglage cadran.
- Zur Einstellung des Auslösestroms drehen Sie den Schalter, bis der Zeiger ▲ auf die gewünschte Stromstärke zeigt. Der zur Auslösung erforderliche Nennstrom beträgt 120% des eingestellten Wertes.
- Para ajustar la corriente del disparo, gire el dial hasta que la corriente deseada esté alineada con la marca ▲. La capacidad nominal del disparo es el 120% del posicionamiento del dial.
- Para regular a corrente de disparo, gire o disco mostrador até que a corrente desejada esteja alinhada com o indicador ▲. A classe de disparo corresponde a 120% da marcação no mostrador.
- Per regolare la corrente di intervento, ruotare il regolatore fin quando la corrente desiderata non è allineata con il puntatore ▲. Il valore nominale di intervento corrisponde al 120% dell'impostazione del regolatore.
- トリップ電流を調整するには、所定の電流の目盛りが▲印に来るまでダイヤルを回してください。トリップ定格は、ダイヤル設定値の120%です。
- 若欲调节跳闸电流设定，可转动刻度盘，使所需的设定值对准▲箭头。跳闸电流额定值是刻度盘显示值的120%。



ATTENTION: Do not use automatic reset mode in applications where unexpected automatic restart of the motor can cause injury to persons or damage to equipment.

ATTENTION : N'utilisez pas le mode Remise à zéro automatique dans les applications où un redémarrage automatique inattendu du moteur pourrait provoquer des blessures personnelles ou des dégâts matériels.

ACHTUNG: Der automatische Rücksetzmodus darf nicht in Anwendungen verwendet werden, in denen der unerwartete Neustart des Motors zu Personen- oder Sachschäden führen kann.

ATENCIÓN: No use el modo de reseteo automático en aplicaciones donde el re arranque repentino del motor pueda causar lesiones personales o daño al equipo.

ATENÇÃO: não utilize o modo de reajuste automático em aplicações nas quais o reinício automático e inesperado do motor possa causar ferimentos às pessoas ou danos ao equipamento.

ATTENZIONE: non usare la modalità di ripristino automatico in applicazioni dove il riavviamento automatico improvviso del motore può provocare infortuni o danni all'apparecchiatura.

注意：モーターの予期しない自動再スタートによって負傷や機器の破損をまねく恐れのあるような応用では、自動リセット・モードを使用しないでください。

注意: 在马达突然自动再起动可能导致人员伤害或设备损坏的地方，切勿采用自动复原模式。

Contact Status
Etat des contacts
Kontaktstatus
Estado del contacto

Situação de contato
Stato dei contatti
接触狀態
接触状态

Normal		Test	Tripped
95	96	Open	Open
97	98	Open	Closed

97	95	97	95	97	95
98	96	98	96	98	96

Wiring Diagram - 3 Phase Full Voltage DOL Starter

Schéma de câblage - Pleine tension triphasée Démarreur DOL (direct en ligne)

Verkabelungsschema - 3-phasiger Vollspannungs-DOL-Motoranlasser

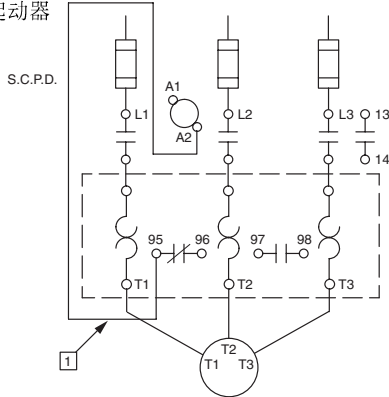
Diagrama de cableado - Arrancador DOL (directo en línea) trifásico de voltaje pleno

Diagrama de circuito - Dispositivo de partida DOL, trifásico, de máxima tensão

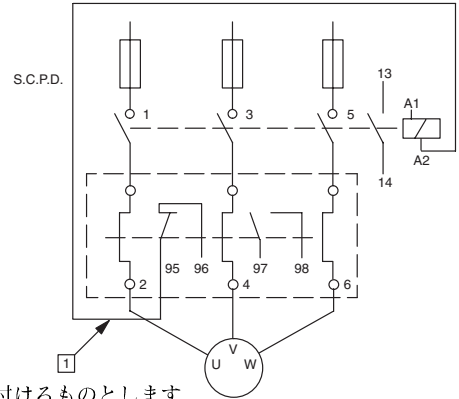
Schema elettrico - Avviatore diretto trifase a tensione piena

配線図 - 3相全电压 DOL 始動器

配线图 - 三相全电压DOL起动机



- 1 Connection must be fitted by user
- 1 Connexion à régler par l'utilisateur
- 1 Verbindung muß vom Benutzer hergestellt werden
- 1 La conexión debe ser realizada por el usuario
- 1 Conexão deve ser colocada pelo usuário
- 1 Il collegamento deve essere adattato dall'utente
- 1 接続部はユーザー側で取付けるものとします。
- 1 线路连接必须由用户完成



Wiring Diagram - 1 Phase Full Voltage DOL Starter (193S-___)

Schéma de câblage - Pleine tension monophasée Démarreur DOL (direct en ligne)

Verkabelungsschema - 1-phasiger Vollspannungs-DOL-Motoranlasser

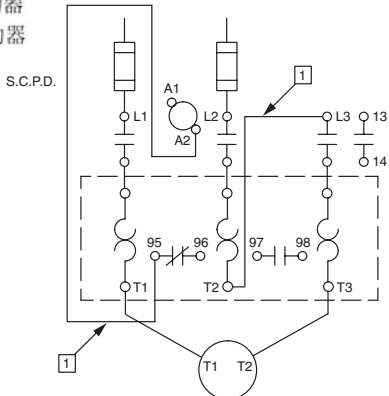
Diagrama de cableado - Arrancador DOL (directo en línea) monofásico de voltaje pleno

Diagrama de circuito - Dispositivo de partida DOL, monofásico, de máxima tensão

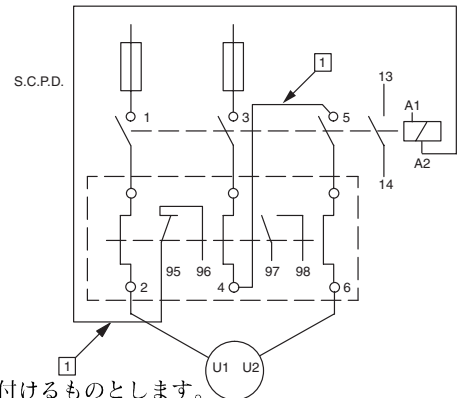
Schema elettrico - Avviatore diretto monofase a tensione piena

配線図 - 1相全电压 DOL 始動器

配线图 - 单相全电压DOL起动机



- 1 Connection must be fitted by user
- 1 Connexion à régler par l'utilisateur
- 1 Verbindung muß vom Benutzer hergestellt werden
- 1 La conexión debe ser realizada por el usuario
- 1 Conexão deve ser colocada pelo usuário
- 1 Il collegamento deve essere adattato dall'utente
- 1 接続部はユーザー側で取付けるものとします。
- 1 线路连接必须由用户完成



Main Connections
Raccordements Principale
Hauptanschlüsse
Collegamenti Principale
Conexões principais
Conexiones Principales

主体连接
 主接続

Rated Insulation Voltage (Ui): 690V AC
Rated Operational Voltage (Ue) IEC/UL: 690V AC/600V AC
Rated Operating Frequency: 50 / 60 Hz



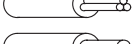
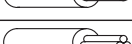
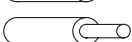



Terminal Screw	193-ED1_B *		193-EE_D *		193-EE_E	
	193-EE_B		M5		M8	
	1x	2.5 ... 16 mm ² 2.5 Nm	1x	2.5 ... 16 mm ² 2.5 Nm	1x	4 ... 35 mm ² 4 Nm
	2x	2.5 ... 10 mm ² 3.4 Nm	2x	2.5 ... 10 mm ² 3.4 Nm	2x	4 ... 25 mm ² 4 Nm
	1x	2.5 ... 25 mm ² 2.5 Nm	1x	2.5 ... 25 mm ² 2.5 Nm	1x	4 ... 50 mm ² 4 Nm
	2x	2.5 ... 16 mm ² 3.4 Nm	2x	2.5 ... 16 mm ² 3.4 Nm	2x	4 ... 35 mm ² 4 Nm
	1x	14... 6 AWG 22 lb-in	1x	14... 6 AWG 22 lb-in	1x	12 ... 1 AWG 35 lb-in
	2x	12...6 AWG 30 lb-in	2x	12...6 AWG 30 lb-in	2x	8 ... 2 AWG 35 lb-in
		#2		#2		--
		1 x 6 mm		1 x 6 mm		--
		--		--		4 mm

*** FOR MULTIPLE CONDUCTOR APPLICATIONS THE SAME SIZE AND STYLE WIRE MUST BE USED.**
POUR LES APPLICATIONS A CONDUCTEURS MULTIPLES, UTILISEZ UN CABLE DE MEME TAILLE ET DE MEME STYLE.
BEI VERWENDUNG MEHRERER LEITER MUSS DIESELBE DRAHTSTARKE UND DRAHTART VERWENDET WERDEN.
PER PIÙ CONDUTTORI È NECESSARIO UTILIZZARE LE STESSE DIMENSIONI E TIPI DI CAVO.
PARA CONDUCTORES DIVERSOS, UTILIZE O MESMO TIPO E TAMANHO DE FIO.
EN APLICACIONES CON MÚLTIPLES CONDUCTORES DEBE UTILIZARSE CABLE DEL MISMO TAMAÑO Y ESTILO.
 複数の導体を使用する場合は、同じサイズおよび型のワイヤを使用することが必要です;ε
 对于多种导线应用, 必须使用大小和样式都相同的线缆。

Control Connections
Bornes de Commande
Steueranschlüsse
Morsetti di Comando
Conexões de controle
Conexiones de Control

控制连接
 制御接続


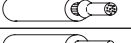

Rated Insulation Voltage (Ui): 690V AC
Rated Operational Voltage (Ue) IEC/UL: 690V AC/600V AC
Rated Operating Current (Ie): B600 N.O. / N.C.

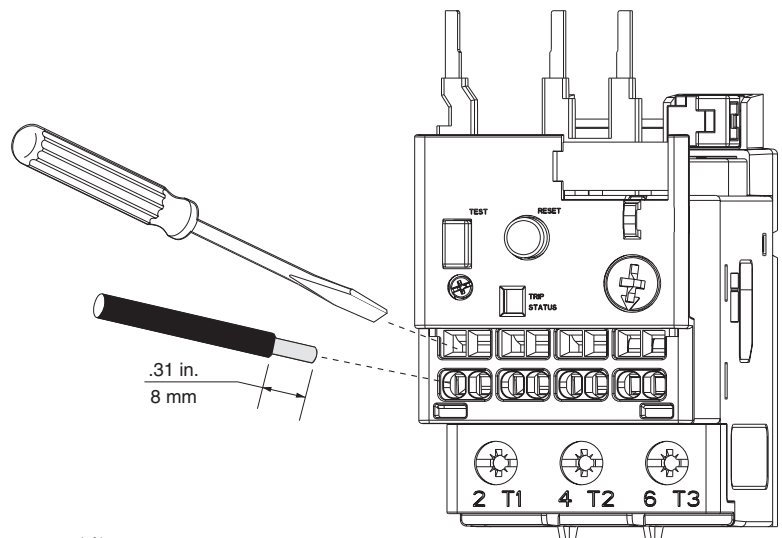
Terminal Screw	M3	
	1x	0.5 ... 2.5 mm ² 0.55 Nm
	2x	0.2 ... 0.75 mm ² 0.55 Nm
	1x	0.5 ... 4 mm ² 0.55 Nm
	2x	0.2 ... 1.5 mm ² 0.55 Nm
	1x	24 ... 10 AWG 5 lb-in
	2x	22 ... 16 AWG 5 lb-in
		#1
		0.6 x 3.5 mm

Cage Clamp Operation (193R-EE)
Fonctionnement de la connexion Cage Clamp
Käfigklemmenbetrieb
Operación para sujetar la caja
Operação para prender a caixa
Morsettatura

夹紧笼的操作

ケージクランプの操作

	0.25 ... 1 mm ²
	0.2 ... 1.5 mm ²
	24 ... 14 AWG

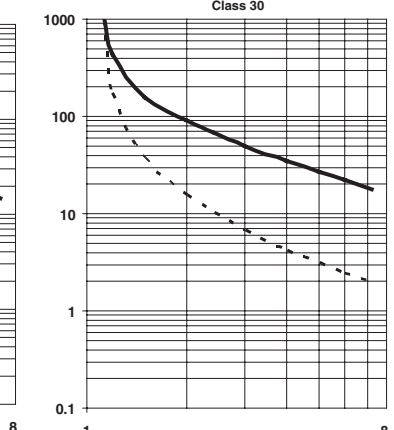
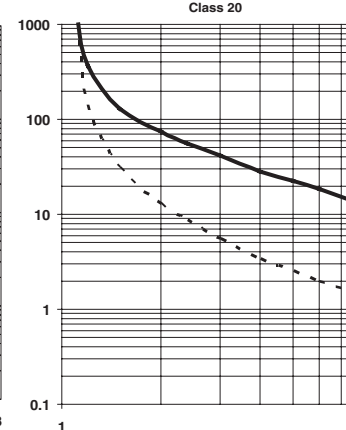
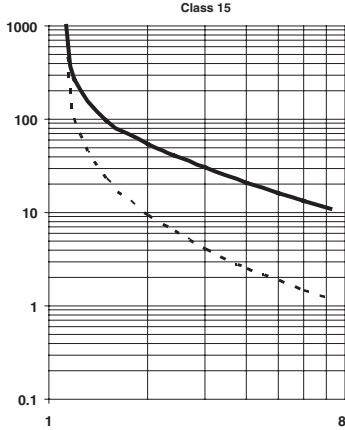
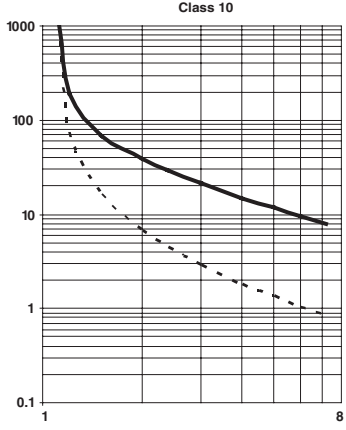


(4)

Trip Curve
Courbe de déclenchement
Auslösekurve
Curva del disparo
Curva de disparo
Curva di intervento
 トリップ曲線
 跳閘曲線

COLD START
 DEMARRAGE A FROID
 KALTSTART
 ARRANQUE EN FRIO
 PARTIDA À FRIO
 AVVIAMENTO A FREDDO
 冷始動
 冷态启动

HOT START
 DEMARRAGE A CHAUD
 WARMSTART
 ARRANQUE EN CALIENTE
 PARTIDA À QUENTE
 AVVIAMENTO A CALDO
 熱始動
 热态启动



Multiple of FLA
 Intensités pleine charge multiples

Múltiplo de FLA
 Vielfache des FLA-Wertes

Intensités pleine charge multiples
 Multiplo di Max amp.

FLA 倍率
 满载电流安培(FLA)的倍数

Short Circuit Ratings

Table 1 Standard Fault Short Circuit Ratings per UL508 and CSA 22.2 No. 14

E1 Plus Cat. No.	Max. available fault current (kA)	Max. voltage (V)	S.C.P.D.
193, 193R, 193S	ED1AB, ED1BB, EEAB, EEBB	1	Suitable for use with fuses only
	ED1CB, ED1DB, EE1CB, EE1DB, EECB, EEDB, EEED, EEFD, EEPB, EERB, EESB, EETD	5	
	EEFE, EEFB, EEEG, EEUE	10	

Table 2 Type I and Type II Fuse Coordination with Bul. 100-C contactors per EN 60947-4-1

E1 Plus Cat. No.	Contactor Cat. No.	Max. starter FLC (A)	Prospective S.C. current, Ir (kA)	Conditional S.C. current, Iq (kA)	Max. voltage (V)	Type I Max. Class J or CC fuse (A)	Type II Max. Class J or CC fuse (A)
193, 193R	ED1AB, EEAB	100-C09	0.5	1	100	600	3
	ED1BB, EEBB						6
	ED1CB, ED1DB, EECB, EEDB	100-C09	9	1			15
		100-C12	12				20
		100-C16	16				30
		100-C23	23				40
		100-C30	30				50
	ED1EB, EEEB	100-C12	12	3			15
		100-C16	16				20
		100-C23	23				30
		100-C30	30				40
		100-C37	37				50
	EEED, EEFD	100-C30	30	3			15
		100-C43	43				20
		100-C60	60				30
		100-C72	72				40
		100-C85	85				50
	EEFE, EEFB	100-C60	60	5			15
		100-C72	72				20
		100-C85	85				30
		100-C85	85				40
100-C85		85	50				

Table 3 Short Circuit Ratings per EN 60947-4-1

E1 Plus Cat. No.	Prospective S.C. current, Ir (kA)	Conditional S.C. current, Iq (kA)	Max. voltage (V)	S.C.P.D.
193, 193R, 193S	ED1AB, ED1BB, EEAB, EEBB	100	690	Suitable for use with fuses only
	ED1CB, ED1DB, EECB, EEDB, EEPB, EERB			
	ED1EB, EEEB, EEED, EEFD, EEFB, EEEF, EESB, EETD			
	EEFE, EEFB, EEEG, EEUE			
	EEFE, EEFB, EEEG, EEUE			

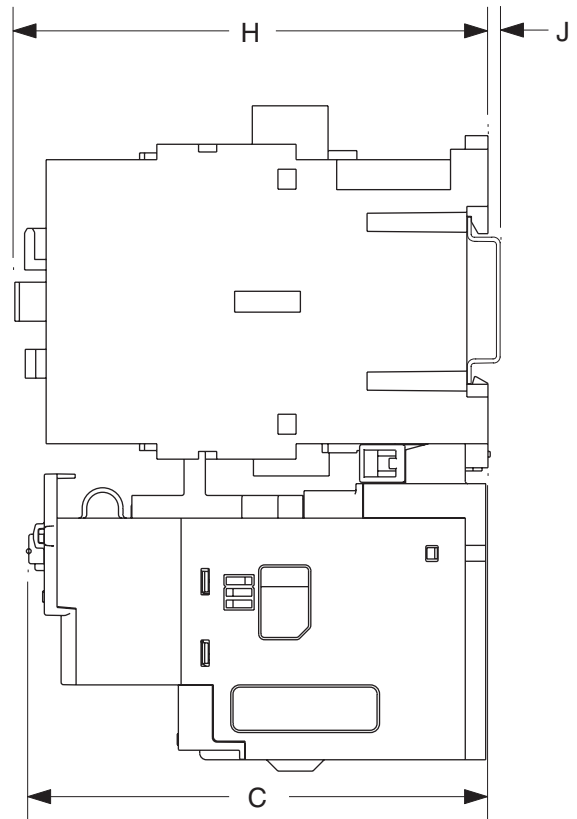
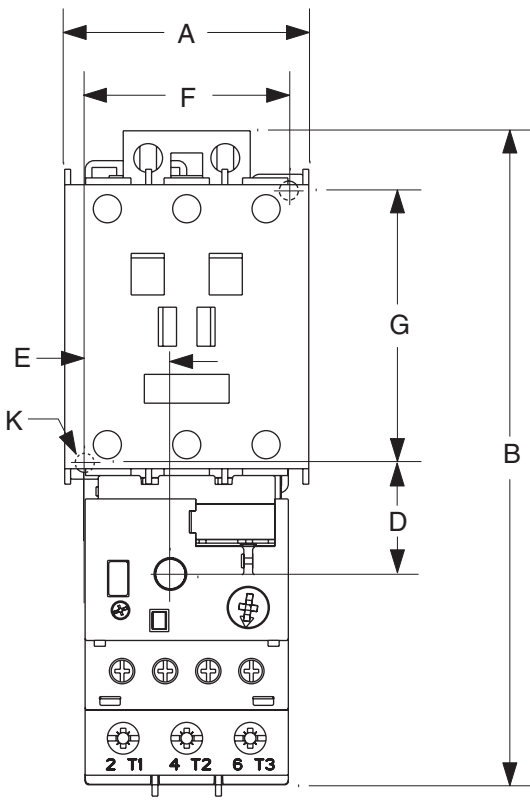
Table 4 High Fault Short Circuit Ratings per UL508 and CSA 22.2 No. 14

E1 Plus Cat. No.	Contactor Cat. No.	Max. starter FLC (A)	Max. available fault current (kA)	Max. voltage (V)	Max. UL Class J or CC fuse, CSA HRCI-J (A)	
193, 193R	ED1AB, EEAB	100-C09	0.5	100	3	
	ED1BB, EEBB				6	
	ED1CB, ED1DB, EE1CB, EE1DB, EECB, EEDB, EEEB				100-C09	9
					100-C12	12
					100-C16	16
					100-C23	23
					100-C30	30
	EEED, EEFD				100-C37	37
					100-C43	43
					100-C60	60
					100-C72	72
					100-C85	85

Fuse Selection Table Class gL/gG and Class aM Fusing

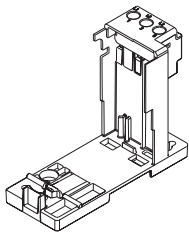
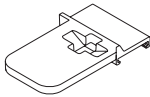
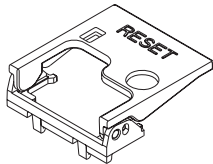
Motor [kW]	1500 rpm [A]	Fuse		Contactor		ED/EE O/L Relay	
		Type	Rated Current [A]	Type	Type	Type	Thermal Setting [A]
0.06	0.24	Class gL/gG	2	100-C09	193-ED1AB	0.10 - 0.50	
0.09	0.33	Class gL/gG	2	100-C09	193-ED1AB	0.10 - 0.50	
0.12	0.43	Class gL/gG	2	100-C09	193-ED1AB	0.10 - 0.50	
0.18	0.61	Class gL/gG	2	100-C09	193-ED1BB	0.20 - 1.0	
0.25	0.8	Class gL/gG	4	100-C09	193-ED1BB	0.20 - 1.0	
0.37	1.1	Class gL/gG	4	100-C09	193-ED1CB	1.0 - 5.0	
0.55	1.5	Class gL/gG	6	100-C09	193-ED1CB	1.0 - 5.0	
0.75	1.9	Class gL/gG	6	100-C09	193-ED1CB	1.0 - 5.0	
1.1	2.7	Class gL/gG	10	100-C09	193-ED1CB	1.0 - 5.0	
1.5	3.5	Class gL/gG	10	100-C09	193-ED1CB	1.0 - 5.0	
2.2	5.0	Class gL/gG	16	100-C09	193-ED1DB	3.2 - 16	
3	6.6	Class gL/gG	20	100-C09	193-ED1DB	3.2 - 16	
4	8.5	Class gL/gG	25	100-C09	193-ED1DB	3.2 - 16	
5.5	11	Class gL/gG	32	100-C12	193-ED1DB	3.2 - 16	
7.5	15	Class gL/gG	40	100-C23	193-ED1DB	3.2 - 16	
10	20	Class gL/gG	50	100-C30	193-EEFD	5.4 - 27	
11	22	Class gL/gG	63	100-C30	193-EEFD	5.4 - 27	
15	29	Class gL/gG	80	100-C30	193-EEFD	9 - 45	
18.5	36	Class gL/gG	80	100-C37	193-EEFD	9 - 45	
22	41	Class gL/gG	100	100-C43	193-EEFD	9 - 45	
30	56	Class gL/gG	125	100-C60	193-EEGE	18 - 90	
37	68	Class gL/gG	160	100-C72	193-EEGE	18 - 90	
45	81	Class gL/gG	160	100-C85	193-EEGE	18 - 90	

Motor [kW]	1500 rpm [A]	Fuse		Contactor		ED/EE O/L Relay	
		Type	Rated Current [A]	Type	Type	Type	Thermal Setting [A]
0.06	0.24	Class aM	1	100-C09	193-ED1AB	0.10 - 0.50	
0.09	0.33	Class aM	1	100-C09	193-ED1AB	0.10 - 0.50	
0.12	0.43	Class aM	1	100-C09	193-ED1AB	0.10 - 0.50	
0.18	0.61	Class aM	2	100-C09	193-ED1BB	0.20 - 1.0	
0.25	0.8	Class aM	2	100-C09	193-ED1BB	0.20 - 1.0	
0.37	1.1	Class aM	2	100-C09	193-ED1CB	1.0 - 5.0	
0.55	1.5	Class aM	2	100-C09	193-ED1CB	1.0 - 5.0	
0.75	1.9	Class aM	4	100-C09	193-ED1CB	1.0 - 5.0	
1.1	2.7	Class aM	4	100-C09	193-ED1CB	1.0 - 5.0	
1.5	3.5	Class aM	4	100-C09	193-ED1CB	1.0 - 5.0	
2.2	5.0	Class aM	6	100-C09	193-ED1DB	3.2 - 16	
3	6.6	Class aM	8	100-C09	193-ED1DB	3.2 - 16	
4	8.5	Class aM	10	100-C09	193-ED1DB	3.2 - 16	
5.5	11	Class aM	12	100-C12	193-ED1DB	3.2 - 16	
7.5	15	Class aM	16	100-C16	193-ED1DB	3.2 - 16	
11	22	Class aM	25	100-C30	193-EEFD	9 - 45	
15	29	Class aM	32	100-C30	193-EEFD	9 - 45	
18.5	36	Class aM	40	100-C37	193-EEFD	9 - 45	
22	41	Class aM	50	100-C43	193-EEFD	9 - 45	
30	56	Class aM	63	100-C60	193-EEGE	18 - 90	
37	68	Class aM	80	100-C72	193-EEGE	18 - 90	
45	81	Class aM	100	100-C85	193-EEGE	18 - 90	



CONTACTOR CAT. NO.	E1 PLUS CAT. NO.		A	B	C	D	E	F	G	H	J	K
100-C09, -C12, -C16, -C23	193-ED1_B, 193*-EE_B	mm (in)	45 (1.76)	146.6 (5.77)	85.2 (3.35)	24.5 (.96)	13.9 (.55)	35 (1.38)	60 (2.36)	86.5 (3.40)	2 (.08)	4.5 (.17)
100-C30, -C37	193*-EE_D	mm (in)	45 (1.76)	146.6 (5.77)	101.2 (3.98)	24.5 (.96)	13.9 (.55)	35 (1.38)	60 (2.36)	104 (4.09)	2 (.08)	4.5 (.17)
100-C43		mm (in)	54 (2.12)	146.6 (5.77)	101.2 (3.98)	24.5 (.96)	18.4 (.74)	45 (1.77)	60 (2.36)	104 (4.09)	2 (.08)	4.5 (.17)
100-C60, -C72, -C85	193*-EE_E	mm (in)	72 (2.83)	192 (7.57)	120.4 (4.74)	29 (1.14)	23.8 (.94)	55 (2.16)	100 (3.94)	126 (4.94)	2 (.08)	5.4 (.21)
300-AO_, -BO_	193*-EE_D	mm (in)	45 (1.76)	146.6 (5.77)	101.2 (3.98)	24.5 (.96)	13.9 (.55)	35 (1.38)	60 (2.36)	104 (4.09)	2 (.08)	4.5 (.17)
300-CO_	193*-EE_E	mm (in)	72 (2.83)	192 (7.57)	120.4 (4.74)	29 (1.14)	23.8 (.94)	55 (2.16)	100 (3.94)	126 (4.94)	2 (.08)	5.4 (.21)

Accessories
Accessoires
Zubehör
Accesorios
Accessori
 付属品
 附件

	For Use With	Cat. No.
DIN Rail/Panel Adapter 	193-ED1_B, 193*-EE_B	193-EPB
	193*-EE_D	193-EPD
	193*-EE_E	193-EPE
Current Adjustment Shield 	193-ED1 (all) 193*-EE (all)	193-BC8
External Reset Adapter 	193-ED1 (all) 193*-EE (all)	193-ERA