KWIKstarters

Preassembled or build from stock – Easy, fast, economical enclosed starters for applications up to 30HP

KWIKstarters are equipped with our advanced CEP7 Solid State Overload Relay as a standard

Sprecher + Schuh offers a broad selection of pre-assembled or "build-from-stock" starters housed in a high impact, non-metallic, cUL Approved, Type 1, 12, 4, 4X enclosure. Built for convenience, space savings and economy, KWIKstarters are efficiently designed to use stock CA7 contactors and CEP7 overloads usually stocked by distributors. Contactor and overload are either pre-wired and pre-mounted onto the enclosure's built-in DIN-rail or may be ordered as separate components. Ample knockouts and open terminals guarantee quick, no fuss wiring.

Sized for most industrial applications

KWIKstarters control motors up to 30HP @ 460V in two sizes of enclosures, measuring only 208 x 98mm (7.4" x 3.9") or 250 x 125mm (9.85" x 4.93") for our larger sizes. This covers over 85% of industrial motor control applications in a very compact package that can be mounted adjacent to or directly on

equipment.

Solid state overload options

KWIKstarters, sizes 9 to 23 amps, are supplied with Sprecher+Schuh's CEP7 solid state overload relay. The CEP7 overload is also standard on larger sizes (sizes 30 to 43 amps). The CEP7 solid state overload relays measure motor current directly through integrated current transformers and on board electronics. The electronics provide increased accuracy and numerous other advantages over electromechanical relays. Learn more about Sprecher + Schuh overload relays in Section B of this catalog.

Build it yourself...

KWIKstarters may be assembled from stock components. Just grab a CA7 contactor and overload of your choice and snap them into the enclosure. Minimal wiring is required and assembly can be completed in minutes.

Start-Stop or Reset only

Hand-Off-Auto with Pilot Light

Emergency Stop

Multi-Function

Forward-Stop-Reverse options

Combination Kwikstarters

sprecher+schuh

KWIKstarters with CEP7 Overload Relays ❶

Cover Control/ Enclosure (KS7-C0S1/C0S4)	Maximum Horsepower						Total Aux. Contacts Installed		cUL Approved- Type 1/12/4/4X IP66	Dimension Code
	Single Ø		Three Ø							
	115V	230V	200V	230V	460V	575V	NO	NC	Catalog Number	❸
KWIKstarter with Start & Raised Stop ❹❺										
	1/2	1 1/2	~	~	~	~	1 ❷	0	CBK7-9-✱-◆-P2	Q1
	~	~	2	2	5	7 1/2			CAK7-9-✱-◆-P2	
	1/2	2	~	~	~	~	1 ❷	0	CBK7-12-✱-◆-P2	Q1
	~	~	3	3	7 1/2	10			CAK7-12-✱-◆-P2	
	1	3	~	~	~	~	1 ❷	0	CBK7-16-✱-◆-P2	Q1
	~	~	5	5	10	15			CAK7-16-✱-◆-P2	
	2	3	~	~	~	~	1 ❷	0	CBK7-23-✱-◆-P2	Q1
	~	~	5	7 1/2	15	15			CAK7-23-✱-◆-P2	
KWIKstarter with Reset										
	1/2	1 1/2	~	~	~	~	1	0	CBK7-9-✱-◆-P0	Q1
	~	~	2	2	5	7 1/2			CAK7-9-✱-◆-P0	
	1/2	2	~	~	~	~	1	0	CBK7-12-✱-◆-P0	Q1
	~	~	3	3	7 1/2	10			CAK7-12-✱-◆-P0	
	1	3	~	~	~	~	1	0	CBK7-16-✱-◆-P0	Q1
	~	~	5	5	10	15			CAK7-16-✱-◆-P0	
	2	3	~	~	~	~	1	0	CBK7-23-✱-◆-P0	Q1
	~	~	5	7 1/2	15	15			CAK7-23-✱-◆-P0	

Coil Codes ❺

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	CBK7	CAK7
24Z	24V	24V	Separate	Separate
120	110V	120V	Common	Separate
220W	200V-220V	208V-240V	Common	Common
277	240V	277V	Common	~
415	400-415V	~	~	Common
480	440V	480V	~	Common
600	550V	600V	~	Common

Control Circuit Note

Common: Coils are assumed to be common with the line voltage and will be connected to the line source (L1-L2) per the table.

Separate: Coils are assumed to be from a separate source and will not be connected to the line source per the table.

Ordering Instructions

Specify Catalog Number	
Replace (✱) with Coil Code Replace (◆) with O/L Relay	See this page See page C1:12

Important Note: KWIKstarters (Q1 dim.) are only designed to accommodate CEP7 Solid State Overload Relays. Select O/L Relay Code from page C1:12.

❶ KWIKstarters are designed for three-wire control circuits. Two-wire (maintain) control can be accomplished by adding pushbutton latch KS7-PLA.

❷ A special design NO auxiliary contact (Cat.# KS7-PCK) is used as the holding circuit interlock, as well as, the START button interface. It is not available for other use.

❸ Refer to page C1:15 for dimensional information.

❹ STOP button also functions as RESET button. Plastic Bezel is standard.

❺ Other voltages available, see Section A.

KWIKstarters with CEP7 Overload Relays ❶❹❺

Cover Control/ Enclosure (KS7-C0S1/C0S4)	Maximum Horsepower						Total Aux. Contacts Installed		cUL Approved- Type 1/12/4/4X IP66	Dimension Code
	Single Ø		Three Ø							
	115V	230V	200V	230V	460V	575V	NO	NC	Catalog Number	❸
KWIKstarter with Start & Raised Stop ❹❺										
	1/2	1 1/2	~	~	~	~	1❷	0	CBK7-9E-✳-◆-P2	Q1
	~	~	2	2	5	7 1/2			CAK7-9E-✳-◆-P2	
	1/2	2	~	~	~	~	1❷	0	CBK7-12E-✳-◆-P2	Q1
	~	~	3	3	7 1/2	10			CAK7-12E-✳-◆-P2	
	1	3	~	~	~	~	1❷	0	CBK7-16E-✳-◆-P2	Q1
	~	~	5	5	10	15			CAK7-16E-✳-◆-P2	
	2	3	~	~	~	~	1❷	0	CBK7-23E-✳-◆-P2	Q1
	~	~	5	7 1/2	15	15			CAK7-23E-✳-◆-P2	
KWIKstarter with Reset										
	1/2	1 1/2	~	~	~	~	1	0	CBK7-9E-✳-◆-P0	Q1
	~	~	2	2	5	7 1/2			CAK7-9E-✳-◆-P0	
	1/2	2	~	~	~	~	1	0	CBK7-12E-✳-◆-P0	Q1
	~	~	3	3	7 1/2	10			CAK7-12E-✳-◆-P0	
	1	3	~	~	~	~	1	0	CBK7-16E-✳-◆-P0	Q1
	~	~	5	5	10	15			CAK7-16E-✳-◆-P0	
	2	3	~	~	~	~	1	0	CBK7-23E-✳-◆-P0	Q1
	~	~	5	7 1/2	15	15			CAK7-23E-✳-◆-P0	

Coil Codes ❺

DC Coil Codes	Voltage
12E	12V
24E	24V

Ordering Instructions

Specify Catalog Number	
Replace (✳) with Coil Code Replace (◆) with O/L Relay	See this page See page C1:12
Important Note: KWIKstarters (Q1 dim.) are only designed to accommodate CEP7 Solid State Overload Relays. Select O/L Relay Code from page C1:12.	

❶ KWIKstarters are designed for three-wire control circuits. Two-wire (maintain) control can be accomplished by adding pushbutton latch KS7-PLA.

❷ A special design NO auxiliary contact (Cat.# KS7-PCK) is used as the holding circuit interlock, as well as, the START button interface. It is not available for other use.

❸ Refer to page C1:15 for dimensional information.

❹ STOP button also functions as RESET button. Plastic Bezel is standard.

❺ CA7-9E...23E with electronic coils are not interchangeable with non-electronic DC or AC coils

sprecher+schuh

KWIKstarters with CEP7 Overload Relays ❶

Enclosure (KS7-C2S4)	Maximum Horsepower						Total Aux. Contacts Installed		cUL Approved- Type 1/12/4/4X IP66	Dimension Code
	Single Ø		Three Ø				NO	NC	Catalog Number	❸
	115V	230V	200V	230V	460V	575V				
	KWIKstarters with AC Coil									
	2	5	~	~	~	~	1	0	**CBK7-30-✱-◆-P▼**	Q2
	~	~	7-1/2	10	20	25			**CAK7-30-✱-◆-P▼**	
	3	5	~	~	~	~	1	0	**CBK7-37-✱-◆-P▼**	Q2
	~	~	10	10	25	30			**CAK7-37-✱-◆-P▼**	
	3	7-1/2	~	~	~	~	1	0	**CBK7-43-✱-◆-P▼**	Q2
	~	~	10	15	30	30			**CAK7-43-✱-◆-P▼**	

Control Circuit Note
Common: Coils and pilot devices in the control circuit are assumed to be common with the line voltage and will be connected to the line source (L1-L2) per the table.
Separate: Coils and pilot devices in the control circuit are assumed to be from a separate source and will not be connected to the line source per the table. Pilot lights are 240 VAC maximum.

Replace ◆ with one of the following Overload Relays

For use with KWIKstarter...	Amp Range	Overload Relay Code (◆)	Catalog No. (of Overload Relay used)
1-Phase & 3-Phase / Manual Reset / Class 10 or 20			
CAK7-30...43	5.4...27	1EED	CEP7-1EEED
	11...55	1EFD	CEP7-1EEFD
1-Phase & 3-Phase / Auto or Manual Reset / Class 10...30 *			
CAK7-30...43	5.4....27	FED	CEP7-1EFED
	11....55	FFD	CEP7-1EFFD

* List Price Adder applies

Pilot Device Options (includes reset) ❷❺

Pushbutton Description	Replace ▼ in catalog number with
START-STOP Multi-function (shown)	3U
I-O Multi-function	4U
OFF-ON 2-Position Selector switch	6
Pilot Light Red (LED) with START-STOP Multi-function *	1R3U
Pilot Light Red (LED) with I-0 Multi-function *	1R4U

Coil Codes (✱) ❹❻

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	CBK7	CAK7
24Z	24V	24V	Separate	Separate
120	110V	120V	Common	Separate
220W	200-220V	208-240V	Common	Common
277	240V	277V	Common	~
415	400-415V	~	~	Common
480	440V	480V	~	Common
600	550V	600V	~	Common

Optional CA7 Modifications (Factory Assembled) *

Description	Add to end of catalog number
Electronic Interface	-JE
Surge Suppressor RD	-C
Surge Suppressor Varistor	-V
Additional NC Contact	-L01
Additional NO Contact	-L10

* List Price Adder applies

Ordering Instructions

Specify Catalog Number	
Replace (✱) with Coil Code Replace (◆) with O/L Relay Replace (▼) with Pilot Device Option	**See this page only**

❶ Use CEP7-1__ overloads only – and also backward compatible to CEP7-ED1/EE.
❷ Plastic Bezel is standard. Pilot Device options include D7-BX_ Base Mounted contact blocks. See page H69 for more information.
❸ Refer to page C1:13 for wiring diagram and C1:16 for dimensional information.
❹ Other voltages available, see Section A.
❺ One and only one Pilot Device option must be selected. If Pilot Light option is selected then coil voltage must be 24V, 120V or 240V AC only.
❻ CPT not possible with KS7-C2S4 (Q2) enclosure.

C1

KWIKstarters

KWIKstarters with CEP7 Overload Relays ❶

Enclosure (KS7-C2S4)	Maximum Horsepower						Total Aux. Contacts Installed		cUL Approved-Type 1/12/4/4X IP66	Dimension Code ❸
	Single Ø		Three Ø				NO	NC	Catalog Number	
	115V	230V	200V	230V	460V	575V				
	KWIKstarters with Electronic DC Coil ❹									
	2	5	~	~	~	~	1	0	**CBK7-30E-✱-◆-P▼**	Q2
	~	~	7-1/2	10	20	25			**CAK7-30E-✱-◆-P▼**	
	3	5	~	~	~	~	1	0	**CBK7-37E-✱-◆-P▼**	Q2
	~	~	10	10	25	30			**CAK7-37E-✱-◆-P▼**	
	3	7-1/2	~	~	~	~	1	0	**CBK7-43E-✱-◆-P▼**	Q2
	~	~	10	15	30	30			**CAK7-43E-✱-◆-P▼**	

Replace ◆ with one of the following Overload Relays

For use with KWIKstarter...	Amp Range	Overload Relay Code (◆)	Catalog No. (of Overload Relay used)
1-Phase & 3-Phase / Manual Reset / Class 10 or 20			
CAK7-30...43	5.4...27	**1EED**	CEP7-1EEED
	11...55	**1EFD**	CEP7-1EEFD
1-Phase & 3-Phase / Auto or Manual Reset / Class 10...30 *			
CAK7-30...43	5.4....27	**FED**	CEP7-1EFED
	11....55	**FFD**	CEP7-1EFFD

*** List Price Adder applies**

Pilot Device Options (includes reset) ❷❺

Pushbutton Description	Replace ▼ in catalog number with
START-STOP Multi-function (shown)	**3U**
I-O Multi-function	**4U**
OFF-ON 2-Position Selector switch	**6**
Pilot Light Red (LED) with START-STOP Multi-function *	**1R3U**
Pilot Light Red (LED) with I-0 Multi-function *	**1R4U**

Optional CA7 Modifications (Factory Assembled)*

Description	Add to end of catalog number
Electronic Interface	**-JE**
Surge Suppressor RD	**-C**
Surge Suppressor Varistor	**-V**
Additional NC Contact	**-L01**
Additional NO Contact	**-L10**

*** List Price Adder applies**

Coil Codes ❹❻

D.C. Coil Code	Voltage Range
	VDC
12E	12V
24E	24V
36E	36-48V
48E	48-72V
110E	110-125V
220E	220-250V

Ordering Instructions

Specify Catalog Number	
Replace (✱) with Coil Code Replace (◆) with O/L Relay Replace (▼) with Pilot Device Option	**See this page only**

❶ Use CEP7-1__ overloads only – and also backward compatible to CEP7-ED1/EE.
❷ Plastic Bezel is standard. Pilot Device options include D7-BX_ Base Mounted contact blocks. See page H69 for more information.
❸ Refer to page C1:13 for wiring diagram and C1:16 for dimensional information.
❹ CA7-9E...55E with electronic coils are not interchangeable with non-electronic DC or AC coils.
❺ One and only one Pilot Device option must be selected.
❻ CPT not possible with KS7-C2S4 (Q2) enclosure.

sprecher+schuh

C1

KWIKstarters

KWIKstarters with CEP7 Overload Relays with H-O-A and Light ❶❷❸❺

Cover Control/ Enclosure	Maximum Horsepower						Total Aux. Contacts Installed		cUL Approved- Type 1/12/4/4X IP66	Dim Code
	Single Ø		Three Ø							
	115V	230V	200V	230V	460V	575V	NO	NC	Catalog Number	❹
	KWIKstarter with Reset and H-O-A Selector Switch and Light with AC Coil									
	1/2	1 1/2	~	~	~	~	1	0	CBK7-9-✶-◆-P0+1R7	Q1
	~	~	2	2	5	7 1/2			CAK7-9-✶-◆-P0+1R7	
	1/2	2	~	~	~	~	1	0	CBK7-12-✶-◆-P0+1R7	Q1
	~	~	3	3	7 1/2	10			CAK7-12-✶-◆-P0+1R7	
	1	3	~	~	~	~	1	0	CBK7-16-✶-◆-P0+1R7	Q1
	~	~	5	5	10	15			CAK7-16-✶-◆-P0+1R7	
	2	3	~	~	~	~	1	0	CBK7-23-✶-◆-P0+1R7	Q1
	~	~	5	7 1/2	15	15			CAK7-23-✶-◆-P0+1R7	
	KWIKstarter with Reset and H-O-A Selector Switch and Light with Electronic DC Coil ❻									
	1/2	1 1/2	~	~	~	~	1	0	CBK7-9E-✶-◆-P0+1R7	Q1
	~	~	2	2	5	7 1/2			CAK7-9E-✶-◆-P0+1R7	
	1/2	2	~	~	~	~	1	0	CBK7-12E-✶-◆-P0+1R7	Q1
	~	~	3	3	7 1/2	10			CAK7-12E-✶-◆-P0+1R7	
	1	3	~	~	~	~	1	0	CBK7-16E-✶-◆-P0+1R7	Q1
	~	~	5	5	10	15			CAK7-16E-✶-◆-P0+1R7	
	2	3	~	~	~	~	1	0	CBK7-23E-✶-◆-P0+1R7	Q1
	~	~	5	7 1/2	15	15			CAK7-23E-✶-◆-P0+1R7	

Coil Codes ❻

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	CBK7	CAK7
24Z	24V	24V	Separate	Separate
120	110V	120V	Common	Separate
220W	200-220V	208-240V	Common	Common
D.C. Coil Code	Voltage Range			
	VDC			
12E	12V			
24E	24V			

Control Circuit Note

Common: Coils and pilot devices in the control circuit are assumed to be common with the line voltage and will be connected to the line source (L1-L2) per the table.

Separate: Coils and pilot devices in the control circuit are assumed to be from a separate source and will not be connected to the line source per the table. Line Voltage not listed: (i.e.: 480 and 575 VAC) require a separate control source (i.e.: 120 VAC). D7D pilot devices are rated 300 VAC maximum.

Ordering Instructions

Specify Catalog Number	
Replace (✶) with Coil Code Replace (◆) with O/L Relay	See this page See page C1:12
Important Note: KWIKstarters (Q1 dim.) are only designed to accommodate CEP7 Solid State Overload Relays. Select O/L Relay Code from page C1:12.	

❶ This is a factory assembly. The KS7-C0S1 (Q1) enclosure does not include knock-outs for field assembly of this starter.

❷ Uses D7D-P4N_ Red Monolithic "Run" pilot light with LED bulb. Pilot light voltage to match coil voltage for 24, 120, 240 VAC control. Red "Run" Light can be changed for Green. Change +1R7 to +1G7. For example, CAK7-9-✶-◆-P0+1R7 becomes CAK7-9-✶-◆-P0+1G7.

❸ Uses D7D-SM32x20 Monolithic 3-position selector switch for maintain control, HAND-OFF-AUTO function with legend plate.

❹ Refer to page C1:14 for wiring and dimensional information. This is a clam-shell enclosure design with wires to cover controls.

❺ One NO auxilliary for customer use. There is no room for additional auxilliaries.

❻ CA7-9E...23E with electronic coils are not interchangeable with non-electronic DC or AC coils.

KWIKstarters with CEP7 Overload Relays with I-O Multifunction and E-Stop ❶❷❸❺

Cover Control/ Enclosure	Maximum Horsepower						Total Aux. Contacts Installed		cUL Approved- Type 1/12/4/4X IP66	Dim Code
	Single Ø		Three Ø							
	115V	230V	200V	230V	460V	575V	NO	NC	Catalog Number	❹
	KWIKstarter with Reset, Multifunction I-O Pushbutton and E-Stop with AC Coil									
	1/2	1 1/2	~	~	~	~	1	0	**CBK7-9-✱-◆-P0+4U-9**	Q1
	~	~	2	2	5	7 1/2			**CAK7-9-✱-◆-P0+4U-9**	
	1/2	2	~	~	~	~	1	0	**CBK7-12-✱-◆-P0+4U-9**	Q1
	~	~	3	3	7 1/2	10			**CAK7-12-✱-◆-P0+4U-9**	
	1	3	~	~	~	~	1	0	**CBK7-16-✱-◆-P0+4U-9**	Q1
	~	~	5	5	10	15			**CAK7-16-✱-◆-P0+4U-9**	
	2	3	~	~	~	~	1	0	**CBK7-23-✱-◆-P0+4U-9**	Q1
	~	~	5	7 1/2	15	15			**CAK7-23-✱-◆-P0+4U-9**	

Coil Codes

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	CBK7	CAK7
24Z	24V	24V	Separate	Separate
120	110V	120V	Common	Separate
220W	200-220V	208-240V	Common	Common
277	240V	277V	Common	~
415	400-415V	~	~	Common
480	440V	480V	~	Common
600	550V	600V	~	Common

Control Circuit Note

Common: Coils and pilot devices in the control circuit are assumed to be common with the line voltage and will be connected to the line source (L1-L2) per the table.

Separate: Coils and pilot devices in the control circuit are assumed to be from a separate source and will not be connected to the line source per the table. Line Voltage not listed: (i.e.: 480 and 575 VAC) require a separate control source (i.e.: 120 VAC).

Ordering Instructions

Specify Catalog Number	
Replace (✱) with Coil Code Replace (◆) with O/L Relay	See this page See page C1:12

Important Note: KWIKstarters (Q1 dim.) are only designed to accommodate Relays or CEP7 Solid State Overload Relays. Select O/L Relay Code from page C1:12.

❶ This is a factory assembly. The KS7-C0S1 (Q1) enclosure does not include knock-outs for field assembly of this starter.

❷ Uses D7P-U2EFFEPX11 Two-Position Multifunction push button with legend I/O.

❸ Uses D7P-MT44PX01 Emergency Stop Push Button.

❹ Refer to page C1:15 for wiring and dimensional information. This is a clam-shell enclosure design with wires to cover controls.

❺ There is no room for additional auxilliaries.

sprecher+schuh

C1

KWIKstarters

Three Phase Reversing KWIKstarters with CEP7 Overload Relays ❶

Enclosure (KS7-C0S4R)	Maximum Horsepower				Auxiliary Contacts per Contactor ❼		cUL Approved-Type 1/12/4/4X IP66	Dimension Code ❸
	Three Ø				NO	NC	Catalog Number	
	200V	230V	460V	575V				
	FVR 3-Phase with AC Coil							
	2	2	5	7 1/2	1	1	**CAUK7-9-✱-◆-P▼**	Q3
	3	3	7 1/2	10	1	1	**CAUK7-12-✱-◆-P▼**	Q3
	5	5	10	15	1	1	**CAUK7-16-✱-◆-P▼**	Q3
	5	7 1/2	15	15	1	1	**CAUK7-23-✱-◆-P▼**	Q3

Coil Codes (✱) ❹❻

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	CBK7	CAK7
24Z	24V	24V	Separate	Separate
120	110V	120V	Common	Separate
220W	200-220V	208-240V	Common	Common
277	240V	277V	Common	~
415	400-415V	~	~	Common
480	440V	480V	~	Common
600	550V	600V	~	Common

Pilot Device Options (includes reset) ❷❺

Pushbutton Description	Replace ▼ in catalog number with
FOR-STOP-REV Multi-function (shown)	3U
UP-STOP-DOWN Multi-function	4U
OPEN-STOP-CLOSE Multi-function	5U
FOR-STOP-REV 3-Position Selector switch	6
UP-OFF-DOWN 3-Position Selector switch	7
OPEN-OFF-CLOSE 3-Position Selector switch	8
Overload Alarm Pilot Light	1Y
D7-N8 22mm Hole Plug	0

Optional CA7 Modifications (Factory Assembled) *

Description (supplied on each contactor)	Add to end of catalog number
Electronic Interface	-2JE
Surge Suppressor RD	-2C
Surge Suppressor Varistor	-2V

* List Price Adder applies

Ordering Instructions

Specify Catalog Number	
Replace (✱) with Coil Code Replace (◆) with O/L Relay Replace (▼) with Pilot Device Option	See this page only

Control Circuit Note

Common: Coils and pilot devices in the control circuit are assumed to be common with the line voltage and will be connected to the line source (L1-L2) per the table.

Separate: Coils and pilot devices in the control circuit are assumed to be from a separate source and will not be connected to the line source per the table. Pilot lights are 240 VAC maximum.

Replace ◆ with one of the following Overload Relays

For use with KWIKstarter...	Amp Range	Overload Relay Code (◆)	Catalog Number (of Overload Relay used)
1-Phase & 3-Phase / Manual Reset / Class 10 or 20			
CAUK7-9...23 CAUK7-9E...23E	0.1...0.5	**1EAB**	CEP7-1EEAB
	0.2...1.0	**1EBB**	CEP7-1EEBB
	1.0...5.0	**1ECB**	CEP7-1EECB
	3.2...16	**1EDB**	CEP7-1EEDB
	5.4...27	**1EEB**	CEP7-1EEEB
1-Phase & 3-Phase / Auto or Manual Reset / Class 10...30 *			
CAUK7-9...23 CAUK7-9E...23E	0.1...0.5	**FAB**	CEP7-1EFAB
	0.2...1.0	**FBB**	CEP7-1EFBB
	1.0...5.0	**FCB**	CEP7-1EFCB
	3.2...16	**FDB**	CEP7-1EFDB
	5.4...27	**FEB**	CEP7-1EFEB

* List Price Adder applies

❶ Use CEP7-1_ _ overloads only – and also backward compatible to CEP7-ED1/EE.

❷ Plastic Bezel is standard. Pilot Device options include D7-BX_ Base Mounted contact blocks. See page H69 for more information.

❸ Refer to page C1:14 for wiring diagram and C1:16 for dimensional information.

❹ Other voltages available, see Section A.

❺ One Pilot Device option must be selected. Blanks are not available. If Pilot Light option is selected then coil voltage must be 24V, 120V or 240V AC only.

❻ CPT not possible with KS7-C0S4R (Q3) enclosure.

❼ One N.C. auxiliary contact is used for electrical interlocking. On CAUK7 reversing starters, the N.C. contact comes from the Mechanical/Electrical Interlock unit (Cat# CM7-02).

sprecher+schuh

Three Phase Reversing KWIKstarters with CEP7 Overload Relays ❶

Enclosure (KS7-C0S4R)	Maximum Horsepower				Auxiliary Contacts per Contactor ❼		cUL Approved-Type 1/12/4/4X IP66	Dimension Code ❸
	Three Ø							
	200V	230V	460V	575V	NO	NC	Catalog Number	
	FVR 3-Phase with Electronic DC Coil							
	2	2	5	7 1/2	1	1	**CAUK7-9E-✳-◆-P▼**	Q3
	3	3	7 1/2	10	1	1	**CAUK7-12E-✳-◆-P▼**	Q3
	5	5	10	15	1	1	**CAUK7-16E-✳-◆-P▼**	Q3
	5	7 1/2	15	15	1	1	**CAUK7-23E-✳-◆-P▼**	Q3

Coil Codes ❹❻

D.C. Coil Code	Voltage Range
	VDC
12E	12V
24E	24V
36E	36-48V
48E	48-72V
110E	110-125V
220E	220-250V

Pilot Device Options (includes reset) ❷❺

Pushbutton Description	Replace ▼ in catalog number with
FOR-STOP-REV Multi-function (shown)	3U
UP-STOP-DOWN Multi-function	4U
OPEN-STOP-CLOSE Multi-function	5U
FOR-STOP-REV 3-Position Selector switch	6
UP-OFF-DOWN 3-Position Selector switch	7
OPEN-OFF-CLOSE 3-Position Selector switch	8
Overload Alarm Pilot Light	1Y
D7-N8 22mm Hole Plug	0

Optional CA7 Modifications (Factory Assembled) *

Description (supplied on each contactor)	Add to end of catalog number
Electronic Interface	-2JE
Surge Suppressor RD	-2C
Surge Suppressor Varistor	-2V

* List Price adder applies

Ordering Instructions

Specify Catalog Number	
Replace (✳) with Coil Code Replace (◆) with O/L Relay Replace (▼) with Pilot Device Option	**See this page only**

Replace ◆ with one of the following Overload Relays

For use with KWIKstarter...	Amp Range	Overload Relay Code (◆)	Catalog Number (of Overload Relay used)
1-Phase & 3-Phase / Manual Reset / Class 10 or 20			
CAUK7-9...23 CAUK7-9E...23E	0.1...0.5	1EAB	CEP7-1EEAB
	0.2...1.0	1EBB	CEP7-1EEBB
	1.0...5.0	1ECB	CEP7-1EECB
	3.2...16	1EDB	CEP7-1EEDB
	5.4...27	1EEB	CEP7-1EEEB
1-Phase & 3-Phase / Auto or Manual Reset / Class 10...30 *			
CAUK7-9...23 CAUK7-9E...23E	0.1...0.5	FAB	CEP7-1EFAB
	0.2...1.0	FBB	CEP7-1EFBB
	1.0...5.0	FCB	CEP7-1EFCB
	3.2...16	FDB	CEP7-1EFDB
	5.4...27	FEB	CEP7-1EFEB

* List Price adder applies

❶ Use CEP7-1_ _ overloads only – and also backward compatible to CEP7-ED1/EE.
❷ Plastic Bezel is standard. Pilot Device options include D7-BX_ Base Mounted contact blocks. See page H69 for more information.
❸ Refer to page C1:14 for wiring diagram and C1:16 for dimensional information.
❹ CA7-9E...55E with electronic coils are not interchangeable with non-electronic DC or AC coils.
❺ One Pilot Device option must be selected. Blanks are not available. If Pilot Light option is selected then coil voltage must be 24V DC only.
❻ CPT not possible with KS7-C0S4R (Q3) enclosure.
❼ One N.C. auxiliary contact is used for electrical interlocking. On CAUK7 reversing starters, the N.C. contact comes from the Mechanical/Electrical Interlock unit (Cat# CM7-02).

KWIKstarter 9...23A Enclosures with CEP7 Overload Relays ❶

Component	Description	For Use With		Environmental Approvals	Catalog Number
		Contactor	Overload		
	Flush Green START / Extended Red STOP-Mechanical interface auxiliary contact (KS7-PCK) included in enclosure.	CA7-9...23	CEP7-1___B ❺	cUL Type 1/12/4/4x IEC IP66	**KS7-C0S4**
	Blue RESET Only	CA7-9...23	CEP7-1___B ❺	cUL Type 1/12/4/4x IEC IP66	**KS7-C0S1**

KWIKstarter Enclosures for use with CA7 Contactors and Overload Relays ❶❹

Component	Description	For Use With		Environmental Approvals	Catalog Number
		Contactor	Overload		
	Enclosure for KWIKstarter ❷ CAK7/CBK7-30...43 CAK7/CBK7-30E...43E	CA7-30...43 CA7-30E...43E	CEP7-1___D ❺	cUL Type 1/12/4/4x IEC IP66	**KS7-C2S4**
	Enclosure for Reversing KWIKstarter ❸ CAUK7-9...23 CAUK7-9E...23E	CAU7-9...23 CAU7-9E...23E	CEP7-1___B ❺	cUL Type 1/12/4/4x IEC IP66	**KS7-C0S4R**

❶ KWIKstarters are only designed to accommodate CA7-9...43 contactors with CEP7 Solid State Overload Relays. If ordering components, select contactor from Section A and overload relay from Section B in this catalog.

❷ KWIKstarter enclosure KS7-C2S4 are designed to fit CA7-30(E)...43(E) contactors with CEP7 Overload Relays. CT7N Thermal Overloads can not be substituted.

❸ KWIKstarter enclosure KS7-C0S4R are designed to fit CAU7-9(E)...23(E) reversing contactors with CEP7 Overload Relays. CT7N Thermal Overloads can not be substituted.

❹ KS7-C2S4 and KS7-C0S4R are supplied with two 22mm holes for Pilot Devices. A Reset is required and one additional pilot device kit from page C1:11 must be selected. Use of a CPT is not possible.

❺ KS7-C_ Series B enclosures are compatible to 3rd gen CEP7-1 and 2nd gen CEP7-ED1/EE. KS7-C_ Series A enclosures (obsolete) are compatible to 2nd gen CEP7-ED1/EE.

KWIKstarter Components with CEP7 Overload Relays (for use with KS7-C0S1/KS7-C0S4)

Component	Description	For Use With...	Catalog Number
	Start - Contact kit Specially designed NO auxiliary; mechanically interfaces with the START button. Mounts on right side. A KS7-PCK is included in every KS7-COS4 enclosure.	KS7-C0S4 (Replacement Part)	**KS7-PCK**
	Pushbutton Latch - For maintain contact control (2-wire control)	KS7-C0S4	**KS7-PLA**
	Neutral Terminal	KS7-C0S1 KS7-C0S4	**KS7-PNT**
	Grounding Kit (for use with metal conduit)	All Kwikstarter enclosures	**KS7-GR1**

KWIKstarter Pilot Device Kits (for use with KS7-C2S4/KS7-C0S4R) ❶

Kits	Description	For Use With Enclosure...	Contact Blocks included		Catalog Number
			NO	NC	
	Multi-Function Pushbutton kit Non-illuminated START-STOP I-O	KS7-C2S4 Type 1, 12, 4, 4X	1	1	**KS7-P3U** **KS7-P4U**
	FOR-STOP-REV UP-STOP-DOWN OPEN-STOP-CLOSE	KS7-C0S4R Type 1, 12, 4, 4X	2	1	**KS7-P3U-REV** **KS7-P4U-REV** **KS7-P5U-REV**
	Selector switch kits Non-illuminated, includes legend plate ON-OFF 2-Position	KS7-C2S4 Type 1, 12, 4, 4X	1	-	**KS7-P6**
	FOR-OFF-REV 3-Position UP-OFF-DOWN 3-Position OPEN-OFF-CLOSE 3-Position	KS7-C0S4R Type 1, 12, 4, 4X	2	-	**KS7-P6-REV** **KS7-P7-REV** **KS7-P8-REV**
	Reset Pushbutton, Blue Plastic push button, flush operator with Blue Cap and R text	KS7-C2S4 KS7-C0S4	Black Plastic with Blue Cap and White "R"		**D7P-F611** ❷

❶ Plastic Bezel is standard. Pilot Device options include D7-BX_ Base Mounted contact blocks. See page H6:7 for more information.
❷ D7P-R611 and CEP7-1ERA can not be used with KS7-C2S4 or KS7-C0S4R. See Section H for more information.

KWIKstarters with CEP7 Solid State Overload Relay ❶

For use with KWIKstarter...	Amp Range	Overload Relay Code (◆)	Catalog Number (of Overload Relay used)
1-Phase & 3-Phase / Manual Reset / Class 10 or 20			
CAK7/CBK7-9...23 **CAK7/CBK7-9E...23E** **CAUK7-9...23** **CAUK7-9E...23E**	0.1...0.5	**1EAB**	CEP7-1EEAB
	0.2...1.0	**1EBB**	CEP7-1EEBB
	1.0...5.0	**1ECB**	CEP7-1EECB
	3.2...16	**1EDB**	CEP7-1EEDB
	5.4...27	**1EEB**	CEP7-1EEEB
1-Phase & 3-Phase / Auto or Manual Reset / Class 10...30			
CAK7/CBK7-9...23 **CAK7/CBK7-9E...23E** **CAUK7-9...23** **CAUK7-9E...23E**	0.1...0.5	**FAB**	CEP7-1EFAB
	0.2...1.0	**FBB**	CEP7-1EFBB
	1.0...5.0	**FCB**	CEP7-1EFCB
	3.2...16	**FDB**	CEP7-1EFDB
	5.4...27	**FEB**	CEP7-1EFEB

❶ CEP7 Overloads are available for use in KWIKStarters if the premium features are required (see Section B).

sprecher+schuh

KWIKstarter (in enclosure KS7-C0S1/C0S4)

CUSTOMER MUST PROVIDE PROPER BRANCH CIRCUIT PROTECTION (F1)
SEE THE APPLICATION INSTRUCTION SHEET - COMPONENT SELECTION TABLES
FOR MAX. FUSE SIZE & CLASS AND APPLICABLE SHORT CIRCUIT RATING
(USE 75ºC COPPER WIRE ONLY)

3-PHASE
FACTORY WIRING
FOR CAK7
(SEE NOTE-4)

2-PHASE
FACTORY WIRING
FOR CBK7 W/ CEP7S OL
(SEE NOTE-4)

SINGLE-PHASE
1Ø ≤ 120V MOTORS

KS7-C0S4
WITH START-STOP PUSHBUTTON

KS7-C0S1
REMOTE CONTROL (MAINTAINED)

KS7-C0S1
REMOTE CONTROL (START-STOP)
(INSTANTANEOUS CONTROL)
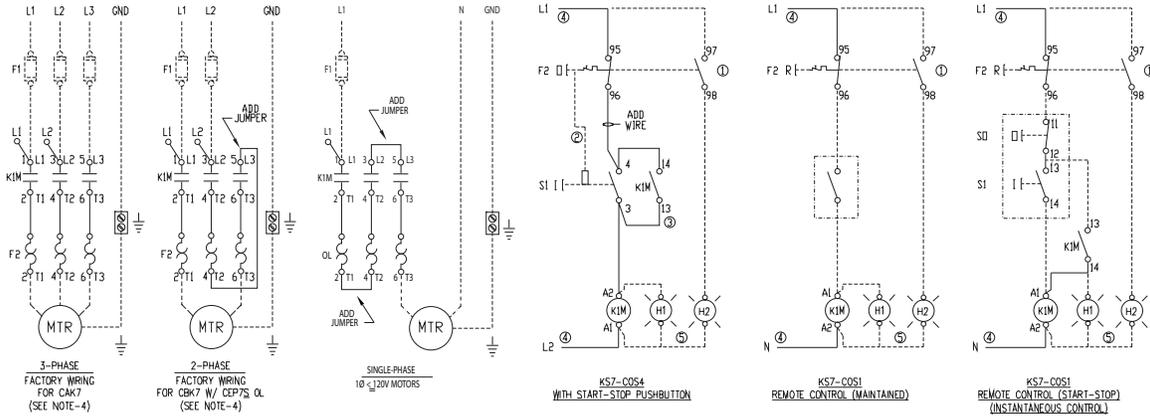
THIS DRAWING IS FOR THE FOLLOWING ENCLOSURES:
KS7-C0S4   with integrated START-STOP push buttons
KS7-C0S1   with integrated RESET push button

NOTES:
1) MECHANICAL LATCH KS7-PLA FOR MAAINTAINED CONTROL (OPTIONAL).
2) START CONTACT KIT KS7-PCK (INCLUDED) MOUNTS ON THE RIGHT SIDE WITH MOLDED PRE-FORMED JUMPERS.
3) DO NOT WIRE CONTROLS CIRCUIT TO LINE SIDE OF CONTACTOR WHEN COIL VOLTAGE IS 120V OR LESS. (FACTORY WIRING STANDARD)
4) OPTIONAL PILOT LIGHTS.

KWIKstarter (in enclosure KS7-C2S4)
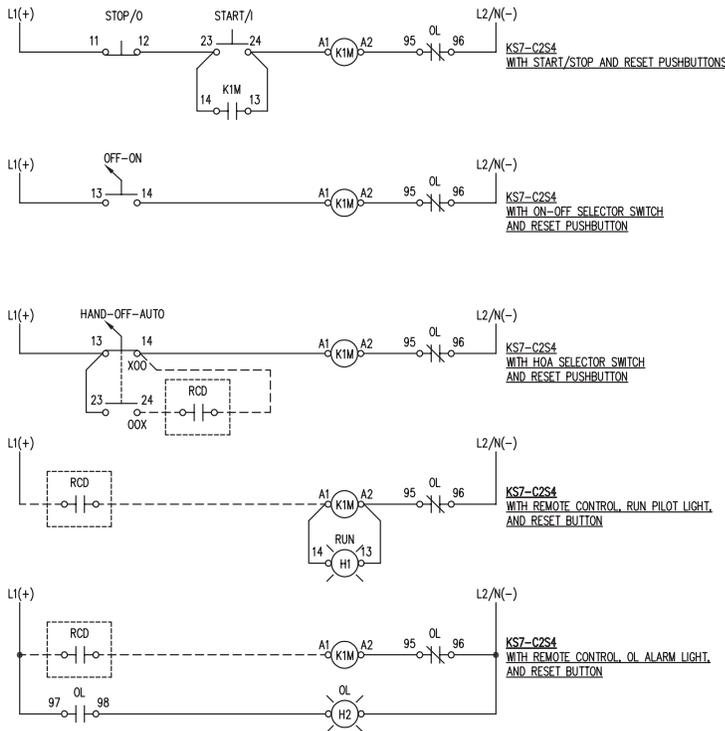
KS7-C2S4
WITH START/STOP AND RESET PUSHBUTTONS

KS7-C2S4
WITH ON-OFF SELECTOR SWITCH
AND RESET PUSHBUTTON

KS7-C2S4
WITH HOA SELECTOR SWITCH
AND RESET PUSHBUTTON

KS7-C2S4
WITH REMOTE CONTROL, RUN PILOT LIGHT,
AND RESET BUTTON

KS7-C2S4
WITH REMOTE CONTROL, OL ALARM LIGHT,
AND RESET BUTTON

CUSTOMER WILL PROVIDE BRANCH CIRCUIT PROTECTION (F1)
SEE THE APPLICATION INSTRUCTION SHEET – COMPONENT SELECTION TABLES
FOR MAX. FUSE SIZE, CLASS, AND APPLICABLE SHORT CIRCUIT RATING
(USE 75ºC COPPER WIRE ONLY)

3-PHASE
CAK7 W/ CEP7

2-PHASE
CBK7 W/ CEP7

SINGLE-PHASE
CBK7 W/ CEP7
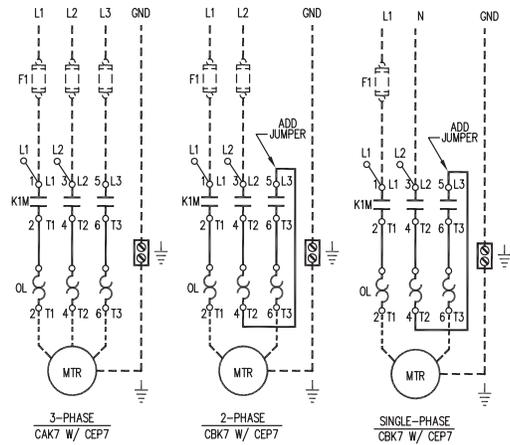
NOTES:
1. DO NOT CONNECT A1-A2 TO L1-L2 UNLESS COIL VOLTAGE MATCHES LINE VOLTAGE
2. PILOT LIGHTS POSSIBLE FOR REMOTE OR OVERLOAD ALARM IF NO START/STOP CONTROL DEVICES IN COVER
3. RCD = REMOTE CONTROL DEVICE (BY OTHERS)

sprecher+schuh

C1

KWIKstarters

Reversing KWIKstarter (in enclosure KS7-C0S4R)
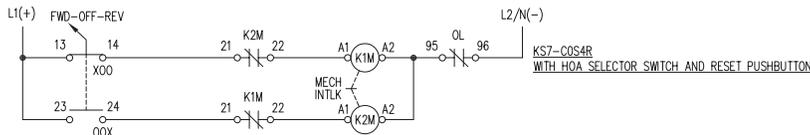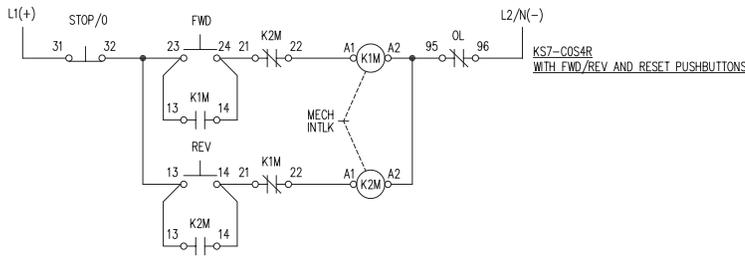
KS7–C0S4R
WITH FWD/REV AND RESET PUSHBUTTONS

KS7–C0S4R
WITH HOA SELECTOR SWITCH AND RESET PUSHBUTTON

NOTE:
DO NOT CONNECT A1–A2 TO L1–L2 UNLESS COIL VOLTAGE MATCHES LINE VOLTAGE

CUSTOMER WILL PROVIDE BRANCH CIRCUIT PROTECTION (F1)
SEE THE APPLICATION INSTRUCTION SHEET – COMPONENT SELECTION TABLES
FOR MAX. FUSE SIZE, CLASS, AND APPLICABLE SHORT CIRCUIT RATING
(USE 75°C COPPER WIRE ONLY)

3–PHASE
CAK7 W/ CEP7
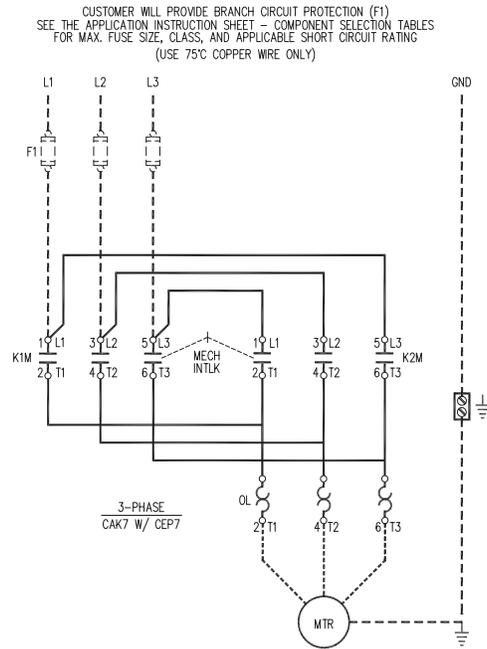
KWIKstarter (in enclosure KS7-C0S1) with HOA option

HAND-OFF-AUTO with Pilot Light
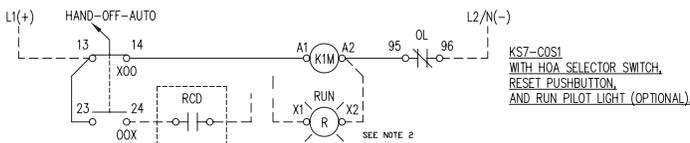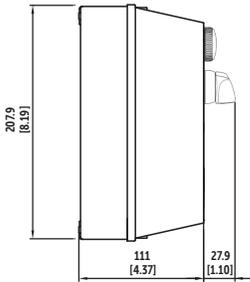
207.9
[8.19]

111
[4.37]

27.9
[1.10]

KS7–C0S1
WITH HOA SELECTOR SWITCH,
RESET PUSHBUTTON,
AND RUN PILOT LIGHT (OPTIONAL).

SEE NOTE 2

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	CBK7	CAK7
24Z	24V	24V	Separate	Separate
120	110V	120V	Common	Separate
208	~	208V	~	Common
220W	200V-220V	208V-240V	Common	Common
240	220V	240V	Common	Common

D.C. Coil Code	Voltage Range	Control Source	
	VDC	CBK7	CAK7
12E	12V	Separate	Separate
24E	24V	Separate	Separate

CUSTOMER WILL PROVIDE BRANCH CIRCUIT PROTECTION (F1)
SEE THE APPLICATION INSTRUCTION SHEET – COMPONENT SELECTION TABLES
FOR MAX. FUSE SIZE, CLASS, AND APPLICABLE SHORT CIRCUIT RATING
(USE 75°C COPPER WIRE ONLY)

3–PHASE
CAK7 W/ CEP7

2–PHASE
CBK7 W/ CEP7

SINGLE-PHASE
CBK7 W/ CEP7
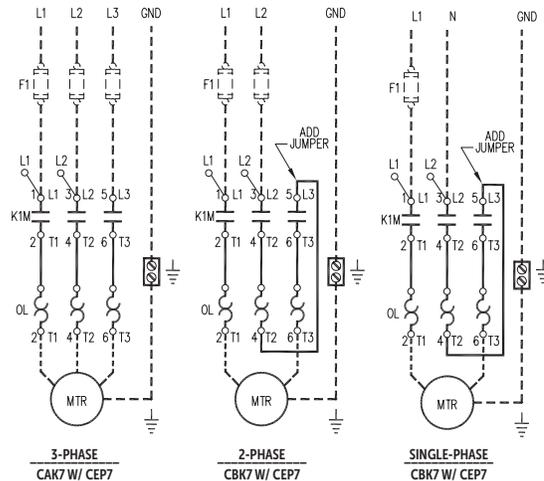
NOTES:

1. RCD = REMOTE CONTROL DEVICE (BY OTHERS). WIRE RCD TO TERMINAL
    24 ON THE H–O–A SEL. SW. AND TERMINAL A1 ON THE CONTACTOR.
2. DASHED LINES – – – – – – INDICATE WIRING PROVIDED IN THE FIELD.

C1:14

KWIKstarter (in enclosure KS7-COS1) with Emergency Stop option

EMERGENCY STOP with
MULTI-FUNCTION

207.9
[8.19]

111
[4.37]

32.1
[1.26]

CUSTOMER WILL PROVIDE BRANCH CIRCUIT PROTECTION (F1)
SEE THE APPLICATION INSTRUCTION SHEET – COMPONENT SELECTION TABLES
FOR MAX. FUSE SIZE, CLASS, AND APPLICABLE SHORT CIRCUIT RATING
(USE 75°C COPPER WIRE ONLY)

3-PHASE
CAK7 W/ CEP7

2-PHASE
CBK7 W/ CEP7

SINGLE-PHASE
CBK7 W/ CEP7

L1(+)   E–STOP   STOP/0   START/I   L2/N(−)

KS7–COS1 MULTIFUNCTION
WITH START/STOP/E–STOP
AND RESET PUSHBUTTONS

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	CBK7	CAK7
24Z	24V	24V	Separate	Separate
120	110V	120V	Common	Separate
208	~	208V	~	Common
220W	200V-220V	208V-240V	Common	Common
240	220V	240V	Common	Common

KWIKstarter Enclosure KS7-C0S1/C0S4 *(Dimension Code Q1)*

Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.

25.2
[0.99]

Extended STOP

44.5
[1.75]

19.5
[0.77]

207.9
[8.19]

188
[7.41]

36.5
[1.44]

68
[2.68]

31.5
[1.24]

23.8
[0.94]

60.3
[2.38]

36.5
[1.44]

97.9
[3.86]

188 mm   Ø 5.3
7.4"   0.2" DIA

188
[7.41]

205
[8.08]

Ø5.3
[Ø0.21]

111
[4.37]

5.5
[0.22]

51
[2.01]

Ø20.3
[Ø0.80]

23.7
[0.94]

Ø25.3
[Ø 1.00]

111
[4.37]

5.5
[0.22]

Pozidriv No. 2
(1.2 x 6.5)
2.0 Nm
18 lb-in

10

2 x 1...6 mm²
2 x No. 14...10 AWG

Pozidriv No. 2
2.3 Nm
20 lb-in

sprecher+schuh
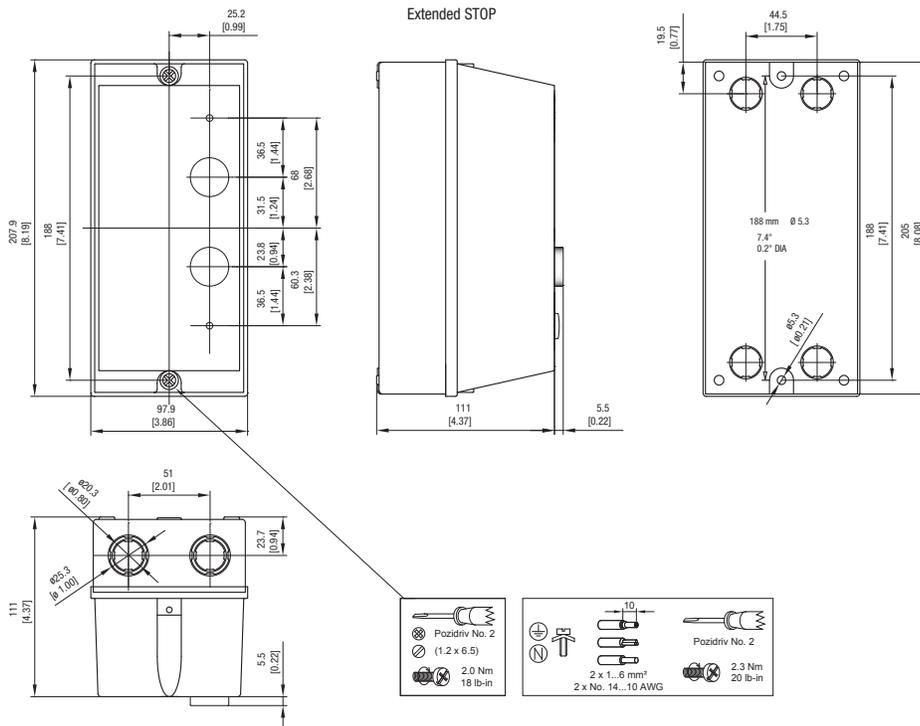
KWIKstarter Enclosure KS7-C2S4 *(Dimension Code Q2)*

Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.

125 [4.93] · 125 [4.93] · 16 [0.63] · 250 [9.85] · 169 [6.66] · 3.5 [0.14] · Ø23 [Ø0.91] · 13 [0.51] · 113.6 [4.48] · 235 [9.26] · 30 [1.18] · 78 [3.07] · 50 [1.97] · 110 [4.33]

Rotary operator alternatively (for maintained control)

28.1 [1.11]

125 [4.93] · 50 [1.97] · 24 [0.95] · 50 [1.97]

Pozidriv No. 2 (1.2 x 6.5) 2.0 Nm 18 lb-in

10 · 2 x 1...6 mm² · 2 x No. 14...10 AWG · Pozidriv No. 2 · 2.3 Nm 20 lb-in
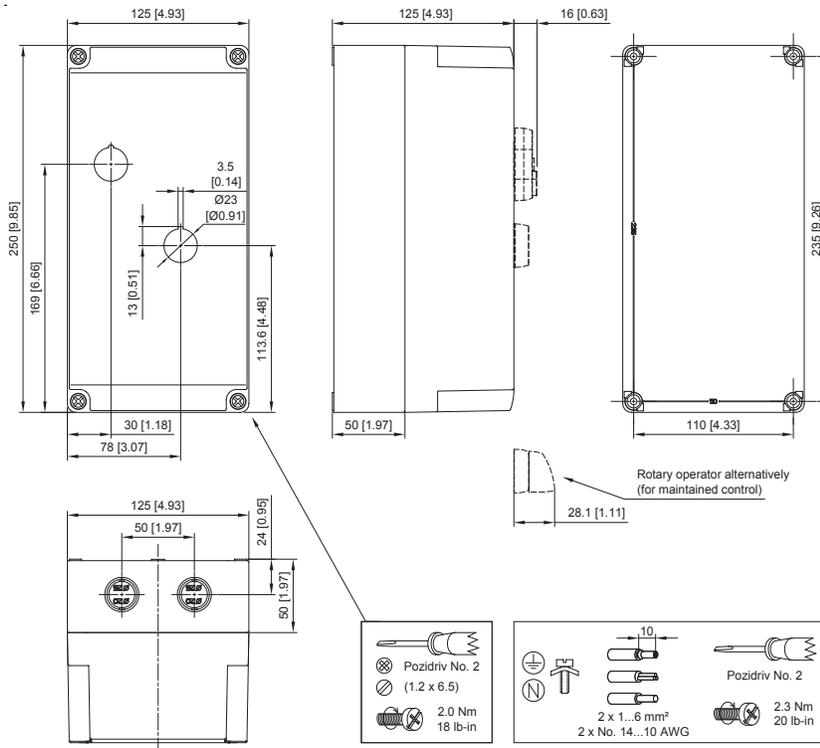
KWIKstarter Enclosure KS7-C0S4R *(Dimension Code Q3)*

125 [4.93] · 125 [4.93] · 250 [9.85] · 13 [0.51] · 3.5 [0.14] · Ø23 [Ø0.91] · 100 [3.94] · 111.5 [4.39] · 16 [0.63] · 235 [9.26] · 30 [1.18] · 88.6 [3.49] · 50 [1.97] · 110 [4.33]

Rotary operator alternatively (for maintained control)

28.1 [1.11]

125 [4.93] · 50 [1.97] · 24 [0.95] · 50 [1.97]

Pozidriv No. 2 (1.2 x 6.5) 2.0 Nm 18 lb-in

10 · 2 x 1...6 mm² · 2 x No. 14...10 AWG · Pozidriv No. 2 · 2.3 Nm 20 lb-in

C1:16