

KWIKstarters

Preassembled or build from stock – Easy, fast, economical enclosed starters for applications up to 40HP

C1
KWIKstarters



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. Alternatively, an ABS IP66 IEC only enclosure offers a more economical choice in competitive situations. Built for convenience, space savings and economy, KWIKstarters are efficiently designed to use standard CA7/CA8 contactors and CEP7/CT8 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 40HP @ 460V in three sizes of enclosures, measuring:

- Q0 dim 163 x 83mm (6.4" x 3.3")
- Q1 dim 208 x 98mm (7.4" x 3.9")
- Q2/Q3 dim 250 x 150mm (9.85" x 4.93")

This covers over 85% of industrial motor control applications in a very compact package that can be mounted adjacent to or directly on equipment.

Build it yourself...

KWIKstarters may be assembled from stock components. Just grab a CA8 or CA7 contactor, an appropriate overload,

and snap them into the enclosure. Minimal wiring is required and assembly can be completed in minutes.

Thermal overload protection

KWIKstarters, using the CA8-09 to CA8-12 contactors, are equipped with Sprecher + Schuh’s CT8 bimetallic thermal overload relays. Protection is ensured by a complex current calibration procedure performed after each unit is at full operating temperature.

Solid state overload options

KWIKstarters, using CA7-9 to 55 amp contactors, are supplied with Sprecher + Schuh’s CEP7 solid state overload relay. The CEP7-1EE_ overload with manual reset is standard. The optional CEP7-1EF_ automatic reset device is also available on most units.

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.

See Section F for
Type E/F
CL-K
KWIKstarters



Start-Stop or Reset only

Illuminated Hand-Off-Auto

Multi-Function with Emergency Stop

Multi-Function

Forward-Stop-Reverse options

Combination KWIKstarters

KWIKstarter Type	
Non-reversing	
CL	KWIKstarter IEC 3-Phase
CLB	KWIKstarter IEC 1-Phase
CLN	KWIKstarter NEMA 3-Phase ①
CLNB	KWIKstarter NEMA 1-Phase ①
Reversing	
CLU	FVR KWIKstarter IEC
CLUN	FVR KWIKstarter NEMA ①

Enclosure Type	
KA	Type 4/4X/12 - IP66 Plastic
VA	ABS IP66 IEC Only

Enclosure Size	
BLANK	Standard 9...23 Amps
L	Large 30...55 Amps ②

Contactor Size	
<u>Miniature - Series CA8</u>	
COMING SOON!	809
	812
<u>Standard - Series CA7</u>	
	709
	712
	716
	723
	730
	737
	743
	755

Contactor Coil	
AC	DC
Miniature - Series CA8	
024Z	012D
0120	024D
0480	110D
0600	220D
Standard - Series CA7	
024Z	012E
0120	024E
220W	036E
0277	048E
0415	110E
0480	220E
0600	

CL	-	KA		812		024Z	-	C10	-	3	-	
CL	-	KA	L	730		0480	-	1EED	-	3U	-	

Overload Relay	
CT8 - Bimetallic Thermal	
CA8-09 thru CA8-12	
A-C...	CT8 O/L Relay, Class 10, manual or automatic reset
CEP7 - 3rd Gen. Solid State	
CA7-9(E) thru CA7-55(E)	
1E...	CEP7 O/L Relay, Man. Reset, Class 10 or 20
F...	CEP7 O/L Relay, Auto/Manual Reset, Class 10...30

Cover Control	
Non-Reversing	
1Y	Pilot Light Only
3	"Start-Stop" PB
4	"On-Off" PB
5	"Hand-Auto" S/S
6	"Off-On" S/S
17	"Hand-Off-Auto" Illum. S/S
3U	"Start-Stop" Multi-function PB
4U	"I-O" Multi-function PB
9	"Emergency Stop"
0	Reset Only
Reversing	
3U	"For-Stop-Rev" Multi-function
4U	"Up-Stop-Down" Multi-function
5U	"Open-Stop-Close" Multi
6	"For-Off-Rev" S/S
7	"Up-Off-Close" S/S
8	"Open-Off-Close" S/S
0	Reset Only/Plug

Options
For complete listing of Option Codes, refer to each Modification table in the section.

This illustration is for reference only.
Turn to the appropriate page to determine specific catalog number.

① See Section C7 for NEMA labeled KWIKstarter selection pages.
② Enclosure size "L" can also be used as an oversized enclosure on 9...23A starters.

KWIKstarters / Non-Reversing with CT8 Overload Relays ①④

Cover Control/ Enclosure (KS8-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		
KWIKstarter with Start & Raised Stop ④⑥										
 KS8-C0S4	0.5	1.5	2	2	5	5	1 ②	0	CL-KA809*-◆-3	Q0
	0.75	2	3	3	7.5	7.5	1 ②	0	CL-KA812*-◆-3	Q0
KWIKstarter with Reset										
 KS8-C0S1	0.5	1.5	2	2	5	5	1 ②	0	CL-KA809*-◆-0	Q0
	0.75	2	3	3	7.5	7.5	1 ②	0	CL-KA812*-◆-0	Q0



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.

AC Coil Codes (*) ⑤

AC Coil Code	Voltage Range	
	50 Hz	60 Hz
024Z	24V	24V
0120	110V	120V
0480	440V	480V
0600	525V	600V

DC Coil Codes (*) ⑤⑥

DC Coil Code	Voltage
024D	24V

Ordering Instructions

Specify Catalog Number	
Replace (*) with Coil Code Replace (◆) with O/L Relay	See this page only
Important Note: KWIKstarters (Q0 dim.) are only designed to accommodate CT8 Thermal Overload Relays.	

Replace ♦ with one if the following Overload Relays

For use with contactor...	Amp Range	Overload Relay Code (♦)	Catalog No. (of overload Relay used)
1 or 3-Phase, Auto/Manual, Class 10			
CA8-09	0.10...016	A16	CT8-A16
	0.16...0.25	A25	CT8-A25
	0.25...0.4	A40	CT8-A40
	0.35...0.5	A50	CT8-A50
	0.45...0.63	A63	CT8-A63
	0.55...0.8	A80	CT8-A80
	0.75...1.0	B10	CT8-B10
	0.90...1.3	B13	CT8-B13
	1.10...1.6	B16	CT8-B16
	1.4...2.0	B20	CT8-B20
	1.8...2.5	B25	CT8-B25
	2.3...3.2	B32	CT8-B32
	2.9...4.0	B40	CT8-B40
	3.5...4.8	B48	CT8-B48
	4.5...6.3	B63	CT8-B63
	5.5...7.5	B75	CT8-B75
CA8-09 or 12	7.2...10	C10	CT8-C10
CA8-12	9.0...12.5	C12	CT8-C12

① KWIKstarters are designed for three-wire control circuits. Two-wire (maintain) control can be accomplished by adding pushbutton latch LA2-KS8-PCA.

② A special design NO auxiliary contact (Cat.# KS8-PCK) is used as the holding circuit interlock, as well as, the START button interface. It is not available for other use.

③ Refer to dimensional information on page C1:12.

④ STOP button also functions as RESET button. Plastic Bezel is standard.

⑤ Other voltages available, see Section A.

⑥ List price adder may apply.

KWIKstarters / Non-Reversing with CEP7 Overload Relays

Cover Control/ Enclosure (KS7-COS1/COS4)	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	④	
KWIKstarter with Start & Raised Stop ④⑤											
 KS7-COS4	0.5 ~	1.5 ~	~ 2	~ 2	~ 5	~ 7.5	1 ②	0	CLB-KA709*-◆-3 CL-KA709*-◆-3	Q1	
	0.5 ~	2 ~	~ 3	~ 3	~ 7.5	~ 10	1 ②	0	CLB-KA712*-◆-3 CL-KA712*-◆-3	Q1	
	1 ~	3 ~	~ 5	~ 5	~ 10	~ 15	1 ②	0	CLB-KA716*-◆-3 CL-KA716*-◆-3	Q1	
	2 ~	3 ~	~ 5	~ 7.5	~ 15	~ 15	1 ②	0	CLB-KA723*-◆-3 CL-KA723*-◆-3	Q1	
	KWIKstarter with Reset										
	 KS7-COS1	0.5 ~	1.5 ~	~ 2	~ 2	~ 5	~ 7.5	1	0	CLB-KA709*-◆-0 CL-KA709*-◆-0	Q1
		0.5 ~	2 ~	~ 3	~ 3	~ 7.5	~ 10	1	0	CLB-KA712*-◆-0 CL-KA712*-◆-0	Q1
		1 ~	3 ~	~ 5	~ 5	~ 10	~ 15	1	0	CLB-KA716*-◆-0 CL-KA716*-◆-0	Q1
2 ~		3 ~	~ 5	~ 7.5	~ 15	~ 15	1	0	CLB-KA723*-◆-0 CL-KA723*-◆-0	Q1	

AC Coil Codes (*) ⑥

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	1-phase	3-phase
024Z	24V	24V	Separate	Separate
0120	110V	120V	Common	Separate
220W	200V-220V	208V-240V	Common	Common
0277	240V	277V	Common	~
0415	400-415V	~	~	Common
0480	440V	480V	~	Common
0600	550V	600V	~	Common

DC Coil Codes (*) ⑥⑦

DC Coil Codes	Voltage
012E	12V
024E	24V

Replace ◆ with one if 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			
CL-KA709...723 CLB-KA709...723	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 ⑦			
CL-KA709...723 CLB-KA709...723	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

Ordering Instructions

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

- ① KWIKstarters are designed for three-wire control circuits. Two-wire (maintain) control can be accomplished by adding pushbutton latch KS7-PLA.
- ② 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.
- ③ Refer to page C1:15 for dimensional information.
- ④ STOP button also functions as RESET button. Plastic Bezel is standard.
- ⑤ Other voltages available, see Section A.
- ⑥ CA7-9E...23E with electronic coils are not interchangeable with non-electronic DC or AC coils
- ⑦ List price adder may apply.

KWIKstarters / Non-Reversing with CEP7 Overload Relays ①

Cover Control/ Enclosure (KS7-C2S4)	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
	KWIKstarters with Start-Stop Multifunction and Reset									
	2	5	~	~	~	~	1	0	CLB-KAL730*-◆-▼ CL-KAL730*-◆-▼	Q2
	3	5	~	~	~	~	1	0	CLB-KAL737*-◆-▼ CL-KAL737*-◆-▼	Q2
	3	7.5	~	~	~	~	1	0	CLB-KAL743*-◆-▼ CL-KAL743*-◆-▼	Q2
	5	10	~	~	~	~	1	0	CLB-KAL755*-◆-▼ CL-KAL755*-◆-▼	Q2



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.

AC Coil Codes (*) ②③

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	1-phase	3-phase
024Z	24V	24V	Separate	Separate
0120	110V	120V	Common	Separate
220W	200-220V	208-240V	Common	Common
0277	240V	277V	Common	~
0415	400-415V	~	~	Common
0480	440V	480V	~	Common
0600	550V	600V	~	Common

DC Coil Codes (*) ④⑤⑦⑧

D.C. Coil Code	Voltage [DC]
012E	12V
024E	24V

Optional CA7 Modifications (Factory Assembled) ⑥

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

Ordering Instructions

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

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			
CL-KAL730...55	5.4...27	1EED	CEP7-1EED
CLB-KAL730...55	11...55	1EFD	CEP7-1EFD
1-Phase & 3-Phase / Auto or Manual Reset / Class 10...30 ⑧			
CL-KAL730...55	5.4...27	FED	CEP7-1EFED
CLB-KAL730...55	11...55	FFD	CEP7-1EFFD

Pilot Device Options (includes reset) ⑨

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 ⑧	13U
Pilot Light Red (LED) with I-O Multi-function ⑧	14U

① Use CEP7-1__ overloads only. Also backward compatible to CEP7-ED1/EE.

② Plastic Bezel is standard. Pilot Device options include D7-BX_ Base Mounted contact blocks. See page H6.7 for more information.

③ Refer to page C1.16 for dimensional information.

④ Other voltages available, see Section A.

⑤ 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.

⑥ CPT not possible with KS7-C2S4 (Q2) enclosure.

⑦ CA7-9E...23E with electronic coils are not interchangeable with non-electronic DC or AC coils

⑧ List price adder may apply.

KWIKstarters / Non-Reversing with CEP7 Overload Relays and Illuminated H-O-A ①②

Cover Control/ Enclosure	Maximum Horsepower						Total Aux. Contacts Installed ③		cUL Approved- Type 1/12/4/4X IP66	Dim Code
	Single Ø		Three Ø							
	115V	230V	200V	230V	460V	575V	NO	NC	Catalog Number	②
	KWIKstarter with Illuminated H-O-A Selector Switch and Reset									
	0.5	1.5	~	~	~	~	1	0	CLB-KA709*~◆-17	Q1
	~	~	2	2	5	7.5			CL-KA709*~◆-17	
	0.5	2	~	~	~	~	1	0	CLB-KA712*~◆-17	Q1
	~	~	3	3	7.5	10			CL-KA712*~◆-17	
	1	3	~	~	~	~	1	0	CLB-KA716*~◆-17	Q1
	~	~	5	5	10	15			CL-KA716*~◆-17	
2	3	~	~	~	~	1	0	CLB-KA723*~◆-17	Q1	
~	~	5	7.5	15	15			CL-KA723*~◆-17		

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.

C1
KWIKstarters

AC Coil Codes (*) ④

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	1-phase	3-phase
024Z	24V	24V	Separate	Separate
0120	110V	120V	Common	Separate
220W	200-220V	208-240V	Common	Common

DC Coil Codes (*) ④⑤⑥

D.C. Coil Code	Voltage Range
	VDC
012E	12V
024E	24V

Replace ◆ with one if 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			
CL-KA709...723 CLB-KA709...723	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 ⑥			
CL-KA709...723 CLB-KA709...723	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

Ordering Instructions

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

① This is a factory assembly. The KS7-C0S1 (Q1) enclosure does not include knock-outs for field assembly of this starter.

② Refer to page C1:14 for wiring and dimensional information. This is a clam-shell enclosure design with wires to cover controls.

③ One NO auxiliary for customer use. There is no room for additional auxiliaries.

④ Other voltages available. See Section A.

⑤ CA7-9E...23E with electronic coils are not interchangeable with non-electronic DC or AC coils

⑥ List price adder may apply.

KWIKstarters with CEP7 Overload Relays with I-O Multifunction and E-Stop ①②③④

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	④
	KWIKstarter with Multifunction I-O Pushbutton, E-Stop and Reset ②									
	0.5	1.5	~	~	~	~	1	0	CLB-KA709*~◆-4U-9 CL-KA709*~◆-4U-9	Q1
	~	~	2	2	5	7.5	1	0		
	0.5	2	~	~	~	~	1	0	CLB-KA712*~◆-4U-9 CL-KA712*~◆-4U-9	Q1
	~	~	3	3	7.5	10	1	0		
	1	3	~	~	~	~	1	0	CLB-KA716*~◆-4U-9 CL-KA716*~◆-4U-9	Q1
	~	~	5	5	10	15	1	0		
	2	3	~	~	~	~	1	0	CLB-KA723*~◆-4U-9 CL-KA723*~◆-4U-9	Q1
	~	~	5	7.5	15	15	1	0		

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.

AC Coil Codes (*) ①②

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	1-phase	3-phase
024Z	24V	24V	Separate	Separate
0120	110V	120V	Common	Separate
220W	200-220V	208-240V	Common	Common
0277	240V	277V	Common	~
0415	400-415V	~	~	Common
0480	440V	480V	~	Common
0600	550V	600V	~	Common

DC Coil Codes (*) ③④⑦⑧

D.C. Coil Code	Voltage [DC]
012E	12V
024E	24V

Replace ◆ with one if 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			
CL-KA709...723 CLB-KA709...723	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 ⑥			
CL-KA709...723 CLB-KA709...723	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

Ordering Instructions

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

- ① This is a factory assembly. The KS7-C0S1 (Q1) enclosure does not include knock-outs for field assembly of this starter.
- ② Uses D7P-U2EFFEPX11 Two-Position Multifunction push button with legend I/O.
- ③ Uses D7P-MT44PX01 Emergency Stop Push Button.
- ④ Refer to page C1:14 for wiring and dimensional information. This is a clam-shell enclosure design with wires to cover controls.
- ⑤ There is no room for additional auxiliaries.
- ⑥ List price adder may apply.
- ⑦ CPT not possible with KS7-C2S4 (Q2) enclosure.
- ⑧ CA7-9E...23E with electronic coils are not interchangeable with non-electronic DC or AC coils

KWIKstarters / Reversing with CEP7 Overload Relays

Cover Control/ Enclosure (KS7-COS4R)	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	③
	FVR KWIKstarter with Multi-function Pushbutton and Reset									
	0.5	1.5	2	2	5	7.5	1①	0	CLU-KAL709*-◆-▼	Q3
	0.5	2	3	3	7.5	10	1①	0	CLU-KAL712*-◆-▼	Q3
	1	3	5	5	10	15	1①	0	CLU-KAL716*-◆-▼	Q3
	2	3	5	7.5	15	15	1①	0	CLU-KAL723*-◆-▼	Q3



C1

KWIKstarters

AC Coil Codes (*) ①②

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	1-phase	3-phase
024Z	24V	24V	Separate	Separate
0120	110V	120V	Common	Separate
220W	200-220V	208-240V	Common	Common
0277	240V	277V	Common	~
0415	400-415V	~	~	Common
0480	440V	480V	~	Common
0600	550V	600V	~	Common

DC Coil Codes (*) ③④⑤

D.C. Coil Code	Voltage Range
	VDC
012E	12V
024E	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. 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			
CLU-KAL709...723	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 ③			
CLU-KAL709...723	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

Pilot Device Options (includes reset) ⑥⑦

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 (Reset Only)	0

Optional CA7 Modifications (Factory Assembled) ⑧

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

Ordering Instructions

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

- ① Use CEP7-1... overloads only. Backward compatible to CEP7-ED1/EE.
- ② Plastic Bezel is standard. Pilot Device options include D7-BX... Base Mounted contact blocks. See page H6.7 for more information.
- ③ Refer to page C1.13 for wiring diagram and C1.16 for dimensional information.
- ④ Other voltages available, see Section A.
- ⑤ 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.
- ⑥ CPT not possible with KS7-C0S4R (Q3) enclosure.
- ⑦ One N.C. auxiliary contact is used for electrical interlocking. On CLU reversing starters, the N.C. contact comes from the Mechanical/Electrical Interlock unit (Cat# CM7-02).
- ⑧ List price adder may apply.

KWIKstarter Enclosures with CA8 and CT8 Overload Relays

Component	Description	For Use With		Environmental Approvals	Catalog Number
		Contactors	Overload		
	Flush Green START / Extended Red STOP- Mechanical interface auxiliary contact (KS8-PCK) included in enclosure.	CA8-09...12	CT8	cUL Type 1/12/4/4x IEC IP66	KS8-C0S4
	Blue RESET Only	CA8-09...12	CT8	cUL Type 1/12/4/4x IEC IP66	KS8-C0S1

COMING SOON!

KWIKstarter Enclosures with CA7-9..55 and CEP7 Overload Relays ①②

Component	Description	For Use With		Environmental Approvals	Catalog Number
		Contactors	Overload		
	Flush Green START / Extended Red STOP- Mechanical interface auxiliary contact (KS7-PCK) included in enclosure.	CA7-9...23	CEP7-1...B	cUL Type 1/12/4/4x IEC IP66	KS7-C0S4
				ABS IP66 IEC Only	KS7-A0S4
	Blue RESET Only	CA7-9...23	CEP7-1...B	cUL Type 1/12/4/4x IEC IP66	KS7-C0S1
				ABS IP66 IEC Only	KS7-A0S1
	Enclosure for KWIKstarter ② CL-KAL730...755 CLB-KAL730...755	CA7-30...55 CA7-30E...55E	CEP7-1...D ④	cUL Type 1/12/4/4x IEC IP66	KS7-C2S4
	Enclosure for Reversing KWIKstarter ③ CLU-KAL709...723	CAU7-9...23 CAU7-9E...23E	CEP7-1...B ④	cUL Type 1/12/4/4x IEC IP66	KS7-C0S4R

① KWIKstarters in this dimension are only designed to accommodate CA7-9...23 contactors with CEP7 Solid State Overload Relays. If ordering components, select contactor from Section A and overload relay from Section B in this catalog.

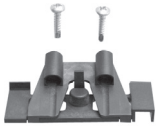
② KWIKstarter enclosure KS7-C2S4 are designed to fit CA7-30(E)...55(E) contactors with CEP7 Overload Relays. CT7N Thermal Overloads can not be substituted.

③ 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.

④ 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.

⑤ KS7-C_ Series B enclosures are compatible to 3rd gen CEP7-1 and backwards compatible with 2nd gen CEP7-ED1/EE.

KWIKstarter Components (for use with Start/Stop & Reset _0S1/0S4 Only)

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-C0S4 enclosure.	KS7-C0S4 (Replacement Part)	KS7-PCK
	Pushbutton Latch - For maintain contact control (2-wire control)	KS8-C0S4	LA2-KS8-PCA
		KS7-C0S4 KS7-A0S4	KS7-PLA
	Neutral Terminal	All KWIKstarter Enclosures	KS7-PNT
	Grounding Kit (for use with metal conduit)	KS7-C0S1 KS7-C0S4 enclosures	KS7-GR1

COMING SOON!
C1
KWIKstarters

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

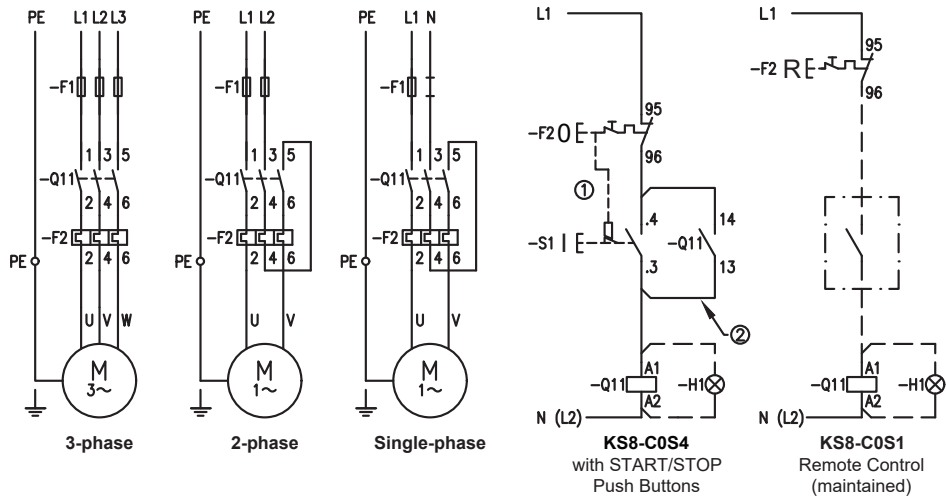
Kits	Description	For Use With Enclosure...	Contact Blocks included		Catalog Number
			NO	NC	
	Multi-Function Pushbutton kit Non-illuminated, plastic START-STOP I-O	KS7-C2S4 Type 1, 12, 4, 4X	1	1	KS7-P3U KS7-P4U
	FOR-STOP-REV UP-STOP-DOWN OPEN-STOP-CLOSE	KS7-C0S4R Type 1, 12, 4, 4X	2	1	KS7-P3U-REV KS7-P4U-REV KS7-P5U-REV
	Selector switch kits: Non-illuminated, plastic, 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 Kits 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.

KWIKstarter (in enclosure KS8-C0S1/C0S4)

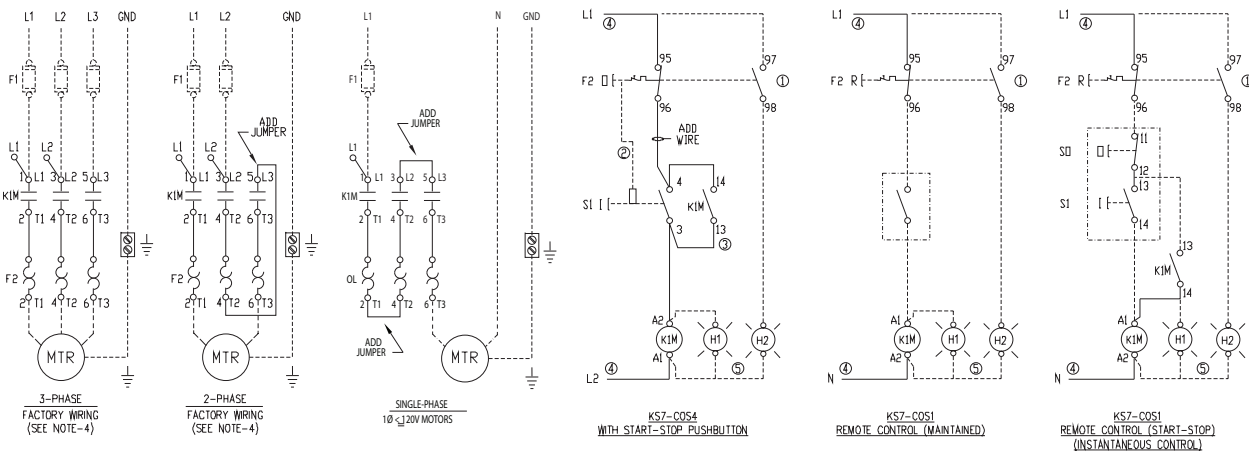
COMING SOON!



- ① Option mechanical latch LA2-KS8-PLA for maintained control
 ② Not wired when mechanical latch LA2-KS8-PLA is installed

KWIKstarter (in enclosure KS7-C0S1/C0S4 or KS7-A0S1/A0S4)

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 75°C COPPER WIRE ONLY)

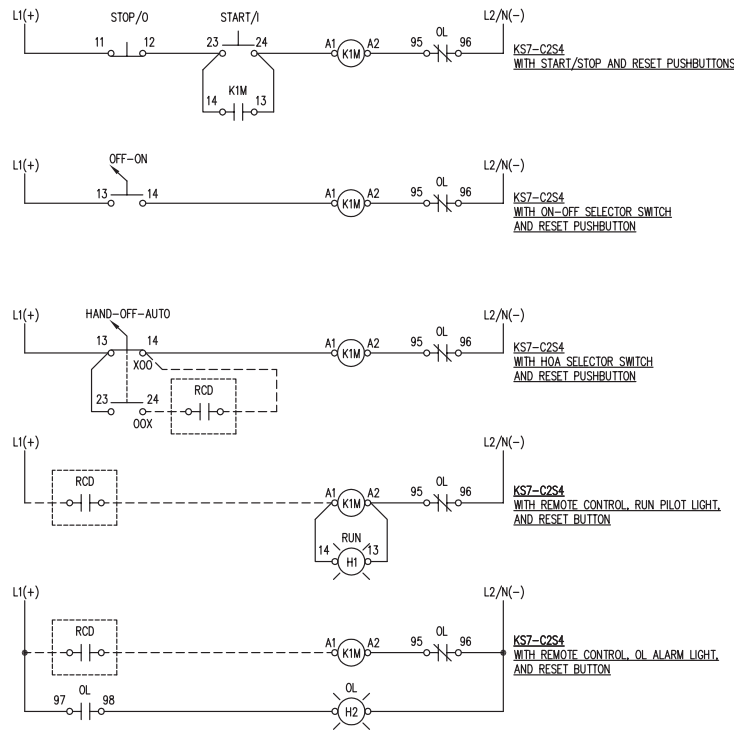


THIS DRAWING IS FOR THE FOLLOWING ENCLOSURES:
 KS7-C0S4 with integrated START-STOP push buttons
 KS7-C0S1 with integrated RESET push button

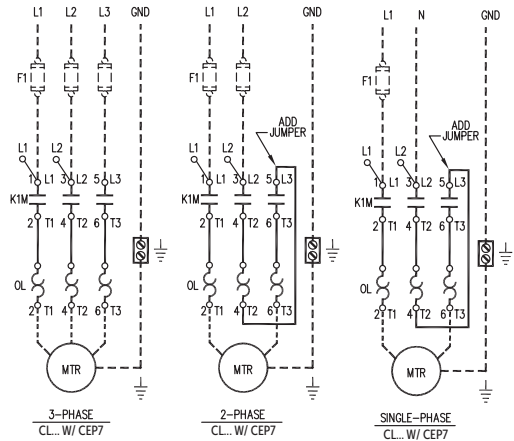
NOTES:

- 1) MECHANICAL LATCH KS7-PLA FOR MAINTAINED 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)



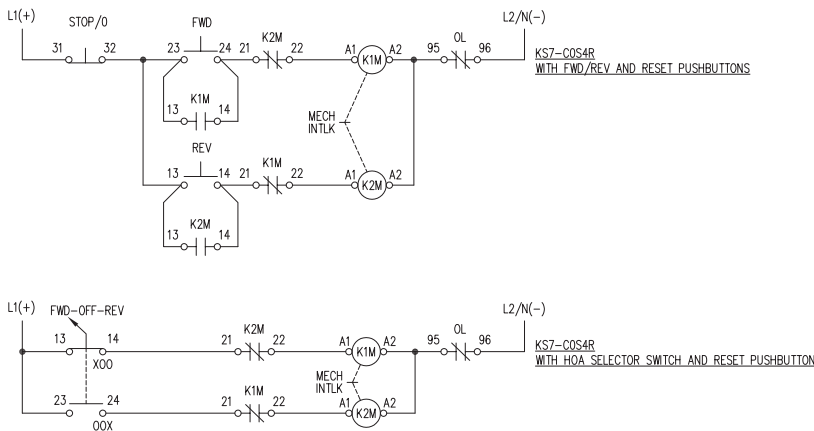
CUSTOMER WILL PROVIDE BRANCH CIRCUIT PROTECTION (F1)
SEE THE APPLICATION INSTRUCTION SHEET - COMPONENT SELECTION TABLES
FOR MAX. FUSE SIZE, CLASS, AND APPLICABLE SHORT CIRCUIT RATING
(USE 75°C COPPER WIRE ONLY)



NOTES:

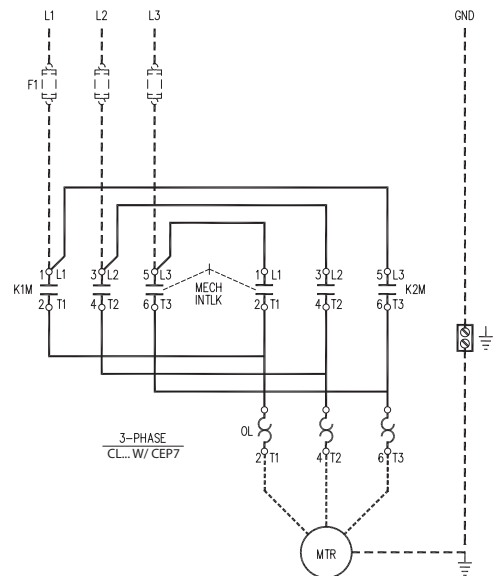
- DO NOT CONNECT A1-A2 TO L1-L2 UNLESS COIL VOLTAGE MATCHES LINE VOLTAGE
- PILOT LIGHTS POSSIBLE FOR REMOTE OR OVERLOAD ALARM IF NO START/STOP CONTROL DEVICES IN COVER
- RCD = REMOTE CONTROL DEVICE (BY OTHERS)

Reversing KWIKstarter (in enclosure KS7-C0S4R)



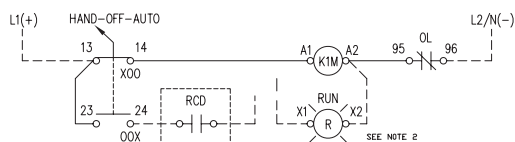
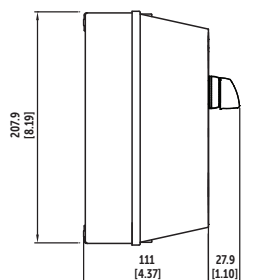
NOTE:
DO NOT CONNECT A1-A2 TO L1-L2 UNLESS COIL VOLTAGE MATCHES LINE VOLTAGE

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)



KWIKstarter (in enclosure KS7-C0S1/A0S1) with HOA option

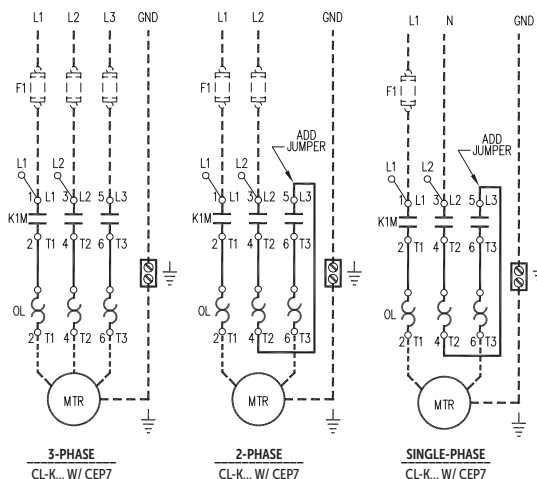
HAND-OFF-AUTO WITH
ILLUMINATED SELECTOR SWITCH



KS7-C0S1
WITH HOA ILLUMINATED
SELECTOR SWITCH AND
RESET PUSHBUTTON

A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	1-Phase	3-Phase
024Z	24V	24V	Separate	Separate
0120	110V	120V	Common	Separate
220W	200V-220V	208V-240V	Common	Common
D.C. Coil Code	Voltage Range		Control Source	
	VDC		1-Phase	3-Phase
012E	12V		Separate	Separate
024E	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)

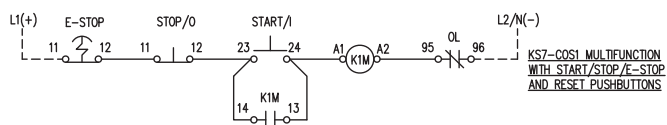
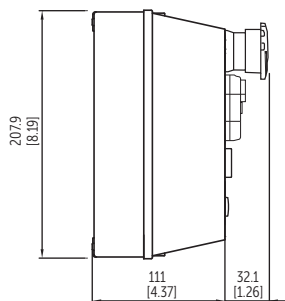


NOTES:

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.

KWIKstarter (in enclosure KS7-C0S1/A0S1) with Emergency Stop option

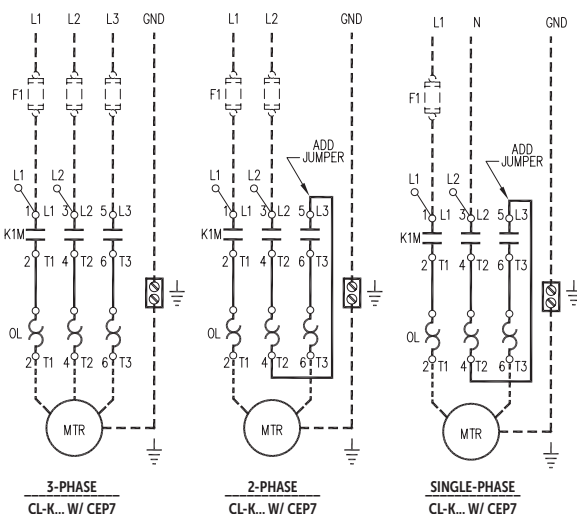
EMERGENCY STOP with
MULTI-FUNCTION



KS7-C0S1 MULTIFUNCTION
WITH START/STOP/E-STOP
AND RESET PUSHBUTTONS

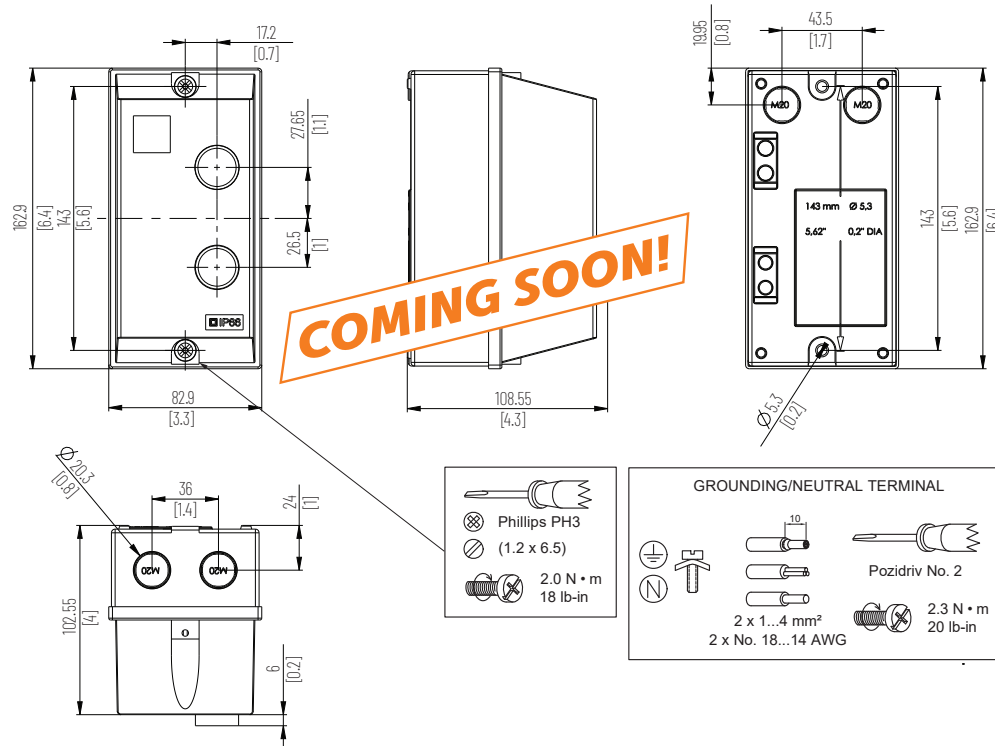
A.C. Coil Code	Voltage Range		Control Source	
	50 Hz	60 Hz	1-Phase	3-Phase
024Z	24V	24V	Separate	Separate
0120	110V	120V	Common	Separate
220W	200V-220V	208V-240V	Common	Common

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)



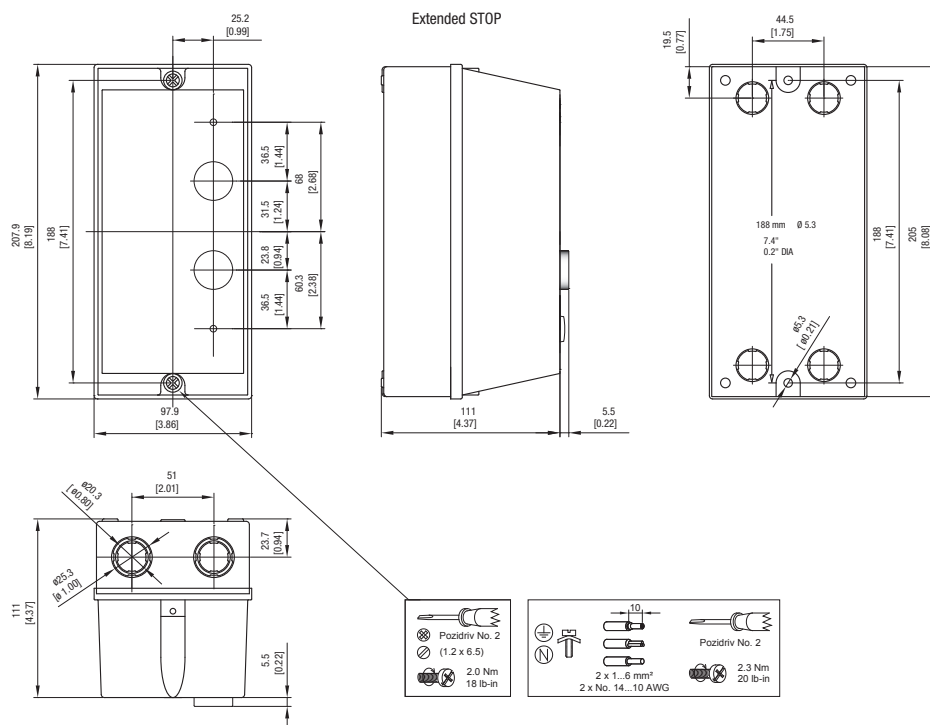
KWIKstarter Enclosure KS8-C0S1/C0S4 (Dimension Code Q0)

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



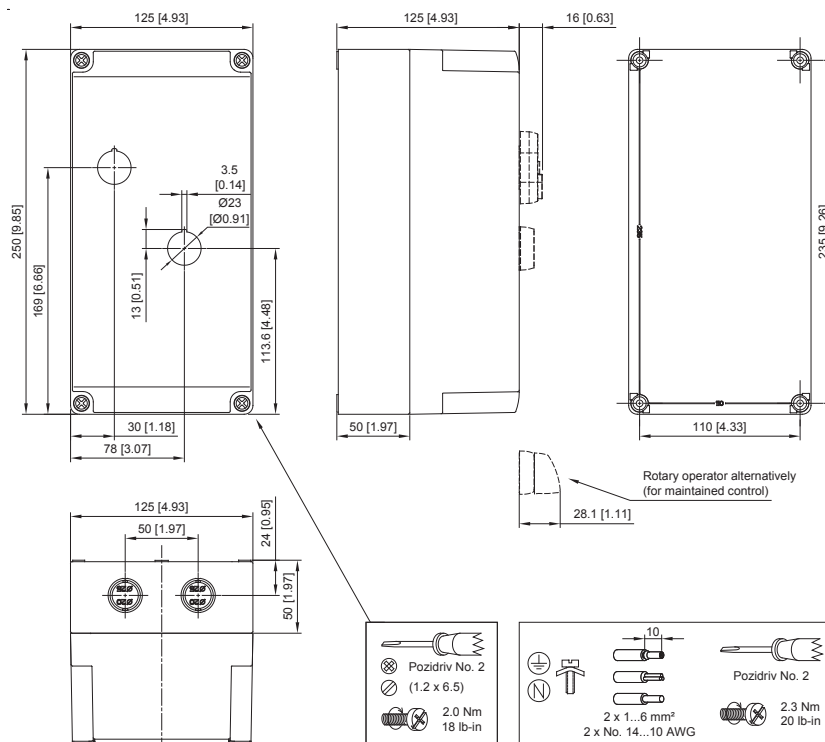
KWIKstarter Enclosure KS7-C0S1/C0S4 or KS7-A0S1/A0S4 (Dimension Code Q1)

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



KWIKstarter Enclosure KS7-C2S4 (Dimension Code Q2)

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

**KWIKstarter Enclosure KS7-C0S4R** (*Dimension Code Q3*)

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

