


**Enclosed Non-Reversing Combination Controller, AC Operation - Type 1/12K/IP66 ⑥⑦**

Amp / Horsepower Rating				Non-Metallic Type 1/12K/IP66 Enclosure (KS7-COC4R)			
							
Max. Horsepower ①②③				O/L Relay Ampere Range	Magnetic Response Current	Catalog Number ④⑤⑥⑦	Dim Code
Three Phase							
200V	230V	460V	575V				
KTA9-32S Standard Interrupting Capacity							
~	~	~	~	0.10...0.16	2.2	CX7-9-10- <b>*</b> -AS0.16A-A10-PG▼	Q4
~	~	~	~	0.16...0.25	3.5	CX7-9-10- <b>*</b> -AS0.25A-A10-PG▼	Q4
~	~	~	~	0.25...0.40	5.6	CX7-9-10- <b>*</b> -AS0.40A-A10-PG▼	Q4
~	~	~	~	0.40...0.63	8.8	CX7-9-10- <b>*</b> -AS0.63A-A10-PG▼	Q4
~	~	1/2	1/2	0.63...1.0	14	CX7-9-10- <b>*</b> -AS1.0A-A10-PG▼	Q4
~	~	3/4	~	1.0...1.6	22	CX7-9-10- <b>*</b> -AS1.6A-A10-PG▼	Q4
1/2	1/2	1	1-1/2	1.6...2.5	35	CX7-9-10- <b>*</b> -AS2.5A-A10-PG▼	Q4
3/4	3/4	2	3	2.5...4.0	52	CX7-9-10- <b>*</b> -AS4.0A-A10-PG▼	Q4
1	1-1/2	3	~	4.0...6.3	88	CX7-9-10- <b>*</b> -AS6.3A-A10-PG▼	Q4
2	2	5	~	6.3...10	140	CX7-12-10- <b>*</b> -AS10A-A10-PG▼	Q4
3	5	10	~	10...16	224	CX7-16-10- <b>*</b> -AS16A-A10-PG▼	Q4
KTA9-40H High Interrupting Capacity							
~	~	~	~	0.40...0.63	8.8	CX7-9-10- <b>*</b> -AH0.63A-A10-PG▼	Q4
~	~	1/2	1/2	0.63...1.0	14	CX7-9-10- <b>*</b> -AH1.0A-A10-PG▼	Q4
~	~	3/4	~	1.0...1.6	22	CX7-9-10- <b>*</b> -AH1.6A-A10-PG▼	Q4
1/2	1/2	1	1-1/2	1.6...2.5	33	CX7-9-10- <b>*</b> -AH2.5A-A10-PG▼	Q4
3/4	3/4	2	3	2.5...4.0	52	CX7-9-10- <b>*</b> -AH4.0A-A10-PG▼	Q4
1	1-1/2	3	5	4.0...6.3	82	CX7-9-10- <b>*</b> -AH6.3A-A10-PG▼	Q4
2	2	5	7-1/2	6.3...10	130	CX7-12-10- <b>*</b> -AH10A-A10-PG▼	Q4
3	5	10	10	10...16	208	CX7-16-10- <b>*</b> -AH16A-A10-PG▼	Q4
5	5	10	~	14.5...20	260	CX7-23-10- <b>*</b> -AH20A-A10-PG▼	Q4
5	7-1/2	15	~	18...25	325	CX7-23-10- <b>*</b> -AH25A-A10-PG▼	Q4

**Includes:**

- Type 1/12K Non-metallic enclosure (KS7-COC4R)
- KTA9 "Type E/F" Self-protected Combination Motor Controller with 1 NO front mount Auxiliary Contact (Cat #: KT9-PE1-10)
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE)
- CA7 contactor (for remote operation), AC coil
- Gray and black Type 1/12K; IP66 handle (KT9-SHB + KT9-KN) ③
- Power wiring
- Factory installed Pilot device option ⑥

*Replace ▼ with option code.  
See page F1.71 for factory installed modifications*

**Contactor**

**AC Coil Codes (\*) ④**

AC Coil Code	Voltage Range	
	50 Hz	60 Hz
24Z	24V	24V
120	110V	120V
220W	200-220V	208-240V
415	400-415V	~
480 ⑥	440V	480V
600 ⑥	550V	600V

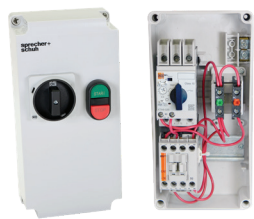
KWIKstarter coils are wired standard from the factory to terminals "L1" and "L2" (for line voltage control). This means the coil voltage must match the line voltage. When a coil is specified for 120V or less, it will be wired for a separate control source (not wired to L1 and L2).

- ① Horsepower ratings shown in the table above are for reference. The final selection of the controller depends on the actual motor full load current and service factor. For motor with service factor less than 1.15. Use motor nameplate full load current times 0.9 and choose the motor starter with the appropriate current range. Example: Motor FLC = 4.2A; S.F. = 1.0. 4.2A x 0.9 = 3.78A. Select catalog number KTA9-32S-4.0A.
- ② Magnetic trip is fixed at 14x the maximum value of the current adjustment range.
- ③ CX7 may be applied to single phase loads. Contact factory for these specifications.
- ④ Other voltages available, see Section A in this catalog.
- ⑤ KAIC Assembly Rating Index. See pages F73-F76 for Application Rating Guide.
- ⑥ One Pilot Device option must be selected. Plastic Bezel is standard. Pilot Device options include D7-BX\_ Base Mounted contact blocks. Pilot Light option must match coil voltage 24V AC or DC, 120V AC or 240V AC only. See Section H for more information.

- ⑦ CPT not possible with KS7-COC4R. Refer to page F1.86 for wiring diagram and F1.87 for dimensional information.
- ⑧ A red and yellow handle may be selected instead of the standard gray and black handle. Change "PG" suffix to "PJ". Ex: Change CX7-9-10-**\***-AS0.16A-A10-PG▼ to CX7-9-10-**\***-AS0.16A-A10-PJ▼.
- ⑨ Catalog number (-A10) includes front-mounted auxiliary KT9-PE1-10 with 250 VAC maximum control circuit matching line voltage, or provided from separate source, used to de-energize contactor coil under fault condition (auxiliary not available for customer use). For control circuits greater than 300 VAC, which is common with line voltage, the auxiliary will not be wired into the control circuit since the contactor coil will be de-energized when KTA9 is tripped due to overload or short circuit; therefore, the KT9-PE1-10 auxiliary is available for customer use.

**Enclosed Non-Reversing Combination Controller, Electronic DC Operation - Type 1/12K/IP66 ④⑥⑦**

Amp / Horsepower Rating					O/L Relay Ampere Range		Magnetic Response Current	Non-Metallic Type 1/12K/IP66 Enclosure (KS7-COC4R)		Dim Code
								Catalog Number ④⑥⑧		
Max. Horsepower ①②③				Three Phase	O/L Relay Ampere Range	Magnetic Response Current	Non-Metallic Type 1/12K/IP66 Enclosure (KS7-COC4R)		Dim Code	
200V	230V	460V	575V				Catalog Number ④⑥⑧			
<b>KTA9-32S Standard Interrupting Capacity</b>										
~	~	~	~	~	0.10...0.16	2.2	CX7-9E-10-*-AS0.16A-A10-PG▼	Q4		
~	~	~	~	~	0.16...0.25	3.5	CX7-9E-10-*-AS0.25A-A10-PG▼	Q4		
~	~	~	~	~	0.25...0.40	5.6	CX7-9E-10-*-AS0.40A-A10-PG▼	Q4		
~	~	~	~	~	0.40...0.63	8.8	CX7-9E-10-*-AS0.63A-A10-PG▼	Q4		
~	~	1/2	1/2	~	0.63...1.0	14	CX7-9E-10-*-AS1.0A-A10-PG▼	Q4		
~	~	3/4	~	~	1.0...1.6	22	CX7-9E-10-*-AS1.6A-A10-PG▼	Q4		
1/2	1/2	1	1-1/2	~	1.6...2.5	35	CX7-9E-10-*-AS2.5A-A10-PG▼	Q4		
3/4	3/4	2	3	~	2.5...4.0	52	CX7-9E-10-*-AS4.0A-A10-PG▼	Q4		
1	1-1/2	3	~	~	4.0...6.3	88	CX7-9E-10-*-AS6.3A-A10-PG▼	Q4		
2	2	5	~	~	6.3...10	140	CX7-12E-10-*-AS10A-A10-PG▼	Q4		
3	5	10	~	~	10...16	224	CX7-16E-10-*-AS16A-A10-PG▼	Q4		
<b>KTA9-40H High Interrupting Capacity</b>										
~	~	~	~	~	0.40...0.63	8.8	CX7-9E-10-*-AH0.63A-A10-PG▼	Q4		
~	~	1/2	1/2	~	0.63...1.0	14	CX7-9E-10-*-AH1.0A-A10-PG▼	Q4		
~	~	3/4	~	~	1.0...1.6	22	CX7-9E-10-*-AH1.6A-A10-PG▼	Q4		
1/2	1/2	1	1-1/2	~	1.6...2.5	33	CX7-9E-10-*-AH2.5A-A10-PG▼	Q4		
3/4	3/4	2	3	~	2.5...4.0	52	CX7-9E-10-*-AH4.0A-A10-PG▼	Q4		
1	1-1/2	3	5	~	4.0...6.3	82	CX7-9E-10-*-AH6.3A-A10-PG▼	Q4		
2	2	5	7-1/2	~	6.3...10	130	CX7-12E-10-*-AH10A-A10-PG▼	Q4		
3	5	10	10	~	10...16	208	CX7-16E-10-*-AH16A-A10-PG▼	Q4		
5	5	10	~	~	14.5...20	260	CX7-23E-10-*-AH20A-A10-PG▼	Q4		
5	7-1/2	15	~	~	18...25	325	CX7-23E-10-*-AH25A-A10-PG▼	Q4		



**Includes:**

- Type 1/12K Non-metallic enclosure (KS7-COC4R)
- KTA9 "Type E/F" Self-protected Combination Motor Controller with 1 NO front mount Auxiliary Contact (Cat #: KT9-PE1-10)
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE)
- CA7 contactors (for remote operation), with Electronic DC Coil
- Gray and black Type 1/12K; IP66 handle (KT9-SHB) + KT9-KN ③
- Power wiring
- Factory installed Pilot device option ⑥

Replace ▼ with option code. See page F1.71 for factory installed modifications

**Contactor Electronic DC Coil Codes (\*) ④**

DC Coil Codes	Voltage
12E	12V
24E	24V
36E	36-48V
48E	48-72V
110E	110-125V
220E	220-250V

KWIKstarter coils are wired standard from the factory to terminals "L1" and "L2" (for line voltage control). This means the coil voltage must match the line voltage. When a coil is specified for 120V or less, it will be wired for a separate control source (not wired to L1 and L2).

- ① Horsepower ratings shown in the table above are for reference. The final selection of the controller depends on the actual motor full load current and service factor. For motor with service factor less than 1.15. Use motor nameplate full load current times 0.9 and choose the motor starter with the appropriate current range. Example: Motor FLC = 4.2A; S.F. = 1.0. 4.2A x 0.9 = 3.78A. Select catalog number KTA9-32S-4.0A.
- ② Magnetic trip is fixed at 14x the maximum value of the current adjustment range.
- ③ CX7 may be applied to single phase loads. Contact factory for these specifications.
- ④ CX7-9E...23E with electronic coils are not interchangeable with non-electronic DC or AC coils.
- ⑤ KAIC Assembly Rating Index. See pages F73-F76 for Application Rating Guide.

- ⑥ One Pilot Device option must be selected. Plastic Bezel is standard. Pilot Device options include D7-BX\_ Base Mounted contact blocks. Pilot Light option must match coil voltage 24V AC or DC, 120V AC or 240V AC only. See Section H for more information.
- ⑦ CPT not possible with KS7-COC4R. Refer to page F1.86 for wiring diagram and F1.87 for dimensional information.
- ⑧ A red and yellow handle may be selected instead of the standard gray and black handle. Change "PG" suffix to "PJ". Ex: Change CX7-9-10-\*-AS0.16A-A10-PG▼ to CX7-9-10-\*-AS0.16A-A10-PJ▼.

F Enclosed Motor Circuit Controllers

**Enclosed Non-Reversing Combination Controller with E-Stop, AC Operation - Type 1/12K/IP66 ①⑦⑧**

Amp / Horsepower Rating					Non-Metallic Type 1/12K/IP66 Enclosure (KS7-C0C4R)		
Max. Horsepower ②③④				O/L Relay Ampere Range	Magnetic Response Current	Catalog Number ⑤⑦⑨⑩	Dim Code
Three Phase							
200V	230V	460V	575V				
<b>KTA9-32S Standard Interrupting Capacity</b>							
~	~	~	~	0.10...0.16	2.2	<b>CX7-9-10-*-AS0.16A-A10-PG4U-9</b>	Q4
~	~	~	~	0.16...0.25	3.5	<b>CX7-9-10-*-AS0.25A-A10-PG4U-9</b>	Q4
~	~	~	~	0.25...0.40	5.6	<b>CX7-9-10-*-AS0.40A-A10-PG4U-9</b>	Q4
~	~	~	~	0.40...0.63	8.8	<b>CX7-9-10-*-AS0.63A-A10-PG4U-9</b>	Q4
~	~	1/2	1/2	0.63...1.0	14	<b>CX7-9-10-*-AS1.0A-A10-PG4U-9</b>	Q4
~	~	3/4	~	1.0...1.6	22	<b>CX7-9-10-*-AS1.6A-A10-PG4U-9</b>	Q4
1/2	1/2	1	1-1/2	1.6...2.5	35	<b>CX7-9-10-*-AS2.5A-A10-PG4U-9</b>	Q4
3/4	3/4	2	3	2.5...4.0	52	<b>CX7-9-10-*-AS4.0A-A10-PG4U-9</b>	Q4
1	1-1/2	3	~	4.0...6.3	88	<b>CX7-9-10-*-AS6.3A-A10-PG4U-9</b>	Q4
2	2	5	~	6.3...10	140	<b>CX7-12-10-*-AS10A-A10-PG4U-9</b>	Q4
3	5	10	~	10...16	224	<b>CX7-16-10-*-AS16A-A10-PG4U-9</b>	Q4
<b>KTA9-40H High Interrupting Capacity</b>							
~	~	~	~	0.40...0.63	8.8	<b>CX7-9-10-*-AH0.63A-A10-PG4U-9</b>	Q4
~	~	1/2	1/2	0.63...1.0	14	<b>CX7-9-10-*-AH1.0A-A10-PG4U-9</b>	Q4
~	~	3/4	~	1.0...1.6	22	<b>CX7-9-10-*-AH1.6A-A10-PG4U-9</b>	Q4
1/2	1/2	1	1-1/2	1.6...2.5	33	<b>CX7-9-10-*-AH2.5A-A10-PG4U-9</b>	Q4
3/4	3/4	2	3	2.5...4.0	52	<b>CX7-9-10-*-AH4.0A-A10-PG4U-9</b>	Q4
1	1-1/2	3	5	4.0...6.3	82	<b>CX7-9-10-*-AH6.3A-A10-PG4U-9</b>	Q4
2	2	5	7-1/2	6.3...10	130	<b>CX7-12-10-*-AH10A-A10-PG4U-9</b>	Q4
3	5	10	10	10...16	208	<b>CX7-16-10-*-AH16A-A10-PG4U-9</b>	Q4
5	5	10	~	14.5...20	260	<b>CX7-23-10-*-AH20A-A10-PG4U-9</b>	Q4
5	7-1/2	15	~	18...25	325	<b>CX7-23-10-*-AH25A-A10-PG4U-9</b>	Q4



**Includes:**

- Type 1/12K Non-metallic enclosure (KS7-C0C4R) ①
- KTA9 “Type E/F” Self-protected Combination Motor Controller with 1 NO front mount Auxiliary Contact (Cat #: KT9-PE1-10)
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE)
- CA7 contactor (for remote operation), AC coil
- Multifunction 2-position Push Button and Emergency Stop ⑦
- Gray and black Type 1/12K; IP66 handle (KT9-SHB + KT9-KN) ⑨
- Power wiring

**This is a factory assembly.**

Optional factory modifications are not available on this device.

**Contactor**

**AC Coil Codes (\*) ⑤**

AC Coil Code	Voltage Range	
	50 Hz	60 Hz
<b>24Z</b>	24V	24V
<b>120</b>	110V	120V
<b>220W</b>	200-220V	208-240V
<b>415</b>	400-415V	~
<b>480 ⑥</b>	440V	480V
<b>600 ⑥</b>	550V	600V

KWIKstarter coils are wired standard from the factory to terminals “L1” and “L2” (for line voltage control). This means the coil voltage must match the line voltage. When a coil is specified for 120V or less, it will be wired for a separate control source (not wired to L1 and L2).

- ① This is a factory assembly. The KS7-C0C4R does not include knock-outs for field assembly of this starter.
- ② Horsepower ratings shown in the table above are for reference. The final selection of the controller depends on the actual motor full load current and service factor. For motor with service factor less than 1.15. Use motor nameplate full load current times 0.9 and choose the motor starter with the appropriate current range. Example: Motor FLC = 4.2A; S.F. = 1.0. 4.2A x 0.9 = 3.78A. Select catalog number KTA9-32S-4.0A.
- ③ Magnetic trip is fixed at 14x the maximum value of the current adjustment range.
- ④ CX7 may be applied to single phase loads. Contact factory for these specifications.
- ⑤ Other voltages available, see Section A in this catalog.
- ⑥ KAIC Assembly Rating Index. See pages F73-F76 for Application Rating Guide.
- ⑦ Uses D7P-U2EFFEPX11 Two-Position Multifunction push button with legend I/O and D7P-MT44PX01 Emergency Stop Push Button.

- ⑧ CPT not possible with KS7-C0C4R. Refer page F1.87 for dimensional information.
- ⑨ A red and yellow handle may be selected instead of the standard gray and black handle. Change “PG” suffix to “PJ”. Ex: CX7-9-10-\*-AS0.16A-A10-PG4U-9 becomes CX7-9-10-\*-AS0.16A-A10-PJ4U-9.
- ⑩ Catalog number (-A10) includes front-mounted auxiliary KT9-PE1-10 with 250 VAC maximum control circuit matching line voltage, or provided from separate source, used to de-energize contactor coil under fault condition (auxiliary not available for customer use). For control circuits greater than 300 VAC, which is common with line voltage, the auxiliary will not be wired into the control circuit since the contactor coil will be de-energized when KTA9 is tripped due to overload or short circuit; therefore, the KT9-PE1-10 auxiliary is available for customer use.

**Enclosed Reversing Combination Controller, AC Operation - Type 1/12K/IP66 ⑥⑦**

Amp / Horsepower Rating					Non-Metallic Type 1/12K/IP66 Enclosure (KS7-COC4R)		Dim Code
Max. Horsepower ①②③				O/L Relay Ampere Range	Magnetic Response Current	Catalog Number ④⑤⑥⑦	
Three Phase							
200V	230V	460V	575V				
<b>KTA9-32S Standard Interrupting Capacity</b>							
~	~	~	~	0.10...0.16	2.2	CXU7-9-10- <b>*</b> -AS0.16A-A10-PG▼	Q4
~	~	~	~	0.16...0.25	3.5	CXU7-9-10- <b>*</b> -AS0.25A-A10-PG▼	Q4
~	~	~	~	0.25...0.40	5.6	CXU7-9-10- <b>*</b> -AS0.40A-A10-PG▼	Q4
~	~	~	~	0.40...0.63	8.8	CXU7-9-10- <b>*</b> -AS0.63A-A10-PG▼	Q4
~	~	1/2	1/2	0.63...1.0	14	CXU7-9-10- <b>*</b> -AS1.0A-A10-PG▼	Q4
~	~	3/4	~	1.0...1.6	22	CXU7-9-10- <b>*</b> -AS1.6A-A10-PG▼	Q4
1/2	1/2	1	1-1/2	1.6...2.5	35	CXU7-9-10- <b>*</b> -AS2.5A-A10-PG▼	Q4
3/4	3/4	2	3	2.5...4.0	52	CXU7-9-10- <b>*</b> -AS4.0A-A10-PG▼	Q4
1	1-1/2	3	~	4.0...6.3	88	CXU7-9-10- <b>*</b> -AS6.3A-A10-PG▼	Q4
2	2	5	~	6.3...10	140	CXU7-12-10- <b>*</b> -AS10A-A10-PG▼	Q4
3	5	10	~	10...16	224	CXU7-16-10- <b>*</b> -AS16A-A10-PG▼	Q4
<b>KTA9-40H High Interrupting Capacity</b>							
~	~	~	~	0.40...0.63	8.8	CXU7-9-10- <b>*</b> -AH0.63A-A10-PG▼	Q4
~	~	1/2	1/2	0.63...1.0	14	CXU7-9-10- <b>*</b> -AH1.0A-A10-PG▼	Q4
~	~	3/4	~	1.0...1.6	22	CXU7-9-10- <b>*</b> -AH1.6A-A10-PG▼	Q4
1/2	1/2	1	1-1/2	1.6...2.5	33	CXU7-9-10- <b>*</b> -AH2.5A-A10-PG▼	Q4
3/4	3/4	2	3	2.5...4.0	52	CXU7-9-10- <b>*</b> -AH4.0A-A10-PG▼	Q4
1	1-1/2	3	5	4.0...6.3	82	CXU7-9-10- <b>*</b> -AH6.3A-A10-PG▼	Q4
2	2	5	7-1/2	6.3...10	130	CXU7-12-10- <b>*</b> -AH10A-A10-PG▼	Q4
3	5	10	10	10...16	208	CXU7-16-10- <b>*</b> -AH16A-A10-PG▼	Q4
5	5	10	~	14.5...20	260	CXU7-23-10- <b>*</b> -AH20A-A10-PG▼	Q4
5	7-1/2	15	~	18...25	325	CXU7-23-10- <b>*</b> -AH25A-A10-PG▼	Q4



**Includes:**

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- KTA9 “Type E/F” Self-protected Combination Motor Controller with 1 NO front mount Auxiliary Contact (Cat #: KT9-PE1-10)
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE)
- CA7 contactor (for remote operation), AC coil
- Gray and black Type 1/12K; IP66 handle (KT9-SHB + KT9-KN) ③
- Power wiring
- Factory installed Pilot device option ⑥

*Replace ▼ with option code. See page F1.71 for factory installed modifications*

**Contactor AC Coil Codes (\*) ④**

AC Coil Code	Voltage Range	
	50 Hz	60 Hz
24Z	24V	24V
120	110V	120V
220W	200-220V	208-240V
415	400-415V	~
480 ⑥	440V	480V
600 ⑥	550V	600V

KWIKstarter coils are wired standard from the factory to terminals “L1” and “L2” (for line voltage control). This means the coil voltage must match the line voltage. When a coil is specified for 120V or less, it will be wired for a separate control source (not wired to L1 and L2).

- ① Horsepower ratings shown in the table above are for reference. **The final selection of the controller depends on the actual motor full load current and service factor.** For motor with service factor less than 1.15. Use motor nameplate full load current times 0.9 and choose the motor starter with the appropriate current range. Example: Motor FLC = 4.2A; S.F. = 1.0. 4.2A x 0.9 = 3.78A. Select catalog number KTA9-32S-4.0A.
- ② Magnetic trip is fixed at 14x the maximum value of the current adjustment range.
- ③ CXU7 may be applied to single phase loads. Contact factory for specifications.
- ④ Other voltages available, see Section A in this catalog.
- ⑤ KAIC Assembly Rating Index. See pages F73-F76 for Application Rating Guide.
- ⑥ One Pilot Device option must be selected. Plastic Bezel is standard. Pilot Device options include D7-BX\_ Base Mounted contact blocks. Pilot Light option must match coil voltage 24V AC or DC, 120V AC or 240V AC only. See Section H for more information.

- ⑦ CPT not possible with KS7-COC4R. Refer to page F1.86 for wiring diagram and F1.87 for dimensional information.
- ⑧ A red and yellow handle may be selected instead of the standard gray and black handle. Change “PG” suffix to “PJ”. Ex: Change CXU7-9-10-**\***-AS0.16A-A10-PG▼ to CXU7-9-10-**\***-AS0.16A-A10-PJ▼.
- ⑨ Catalog number (-A10) includes front-mounted auxiliary KT9-PE1-10 with 250 VAC maximum control circuit matching line voltage, or provided from separate source, used to de-energize contactor coil under fault condition (auxiliary not available for customer use). For control circuits greater than 300 VAC, which is common with line voltage, the auxiliary will not be wired into the control circuit since the contactor coil will be de-energized when KTA9 is tripped due to overload or short circuit; therefore, the KT9-PE1-10 auxiliary is available for customer use.

Enclosed Motor Circuit Controllers

**Enclosed Reversing Combination Controller, Electronic DC Operation - Type 1/12K/IP66 ④⑥⑦**

Amp / Horsepower Rating				Non-Metallic Type 1/12K/IP66 Enclosure (KS7-COC4R)		Catalog Number ④⑥⑧	Dim Code
Max. Horsepower ①②③				O/L Relay Ampere Range	Magnetic Response Current		
Three Phase							
200V	230V	460V	575V				
<b>KTA9-32S Standard Interrupting Capacity</b>							
~	~	~	~	0.10...0.16	2.2	CXU7-9E-22-*AS0.16A-A10-PG▼	Q4
~	~	~	~	0.16...0.25	3.5	CXU7-9E-22-*AS0.25A-A10-PG▼	Q4
~	~	~	~	0.25...0.40	5.6	CXU7-9E-22-*AS0.40A-A10-PG▼	Q4
~	~	~	~	0.40...0.63	8.8	CXU7-9E-22-*AS0.63A-A10-PG▼	Q4
~	~	1/2	1/2	0.63...1.0	14	CXU7-9E-22-*AS1.0A-A10-PG▼	Q4
~	~	3/4	~	1.0...1.6	22	CXU7-9E-22-*AS1.6A-A10-PG▼	Q4
1/2	1/2	1	1-1/2	1.6...2.5	35	CXU7-9E-22-*AS2.5A-A10-PG▼	Q4
3/4	3/4	2	3	2.5...4.0	52	CXU7-9E-22-*AS4.0A-A10-PG▼	Q4
1	1-1/2	3	~	4.0...6.3	88	CXU7-9E-22-*AS6.3A-A10-PG▼	Q4
2	2	5	~	6.3...10	140	CXU7-12E-22-*AS10A-A10-PG▼	Q4
3	5	10	~	10...16	224	CXU7-16E-22-*AS16A-A10-PG▼	Q4
<b>KTA9-40H High Interrupting Capacity</b>							
~	~	~	~	0.40...0.63	8.8	CXU7-9E-22-*AH0.63A-A10-PG▼	Q4
~	~	1/2	1/2	0.63...1.0	14	CXU7-9E-22-*AH1.0A-A10-PG▼	Q4
~	~	3/4	~	1.0...1.6	22	CXU7-9E-22-*AH1.6A-A10-PG▼	Q4
1/2	1/2	1	1-1/2	1.6...2.5	33	CXU7-9E-22-*AH2.5A-A10-PG▼	Q4
3/4	3/4	2	3	2.5...4.0	52	CXU7-9E-22-*AH4.0A-A10-PG▼	Q4
1	1-1/2	3	5	4.0...6.3	82	CXU7-9E-22-*AH6.3A-A10-PG▼	Q4
2	2	5	7-1/2	6.3...10	130	CXU7-12E-22-*AH10A-A10-PG▼	Q4
3	5	10	10	10...16	208	CXU7-16E-22-*AH16A-A10-PG▼	Q4
5	5	10	~	14.5...20	260	CXU7-23E-22-*AH20A-A10-PG▼	Q4
5	7-1/2	15	~	18...25	325	CXU7-23E-22-*AH25A-A10-PG▼	Q4



**Includes:**

- Type 1/12K Non-metallic enclosure (KS7-COC4R)
- KTA9 "Type E/F" Self-protected Combination Motor Controller with 1 NO front mount Auxiliary Contact (Cat #: KT9-PE1-10)
- Terminal Adaptor for Type E Applications (Cat.# KT9-25-TE)
- CA7 contactors (for remote operation), with Electronic DC coil
- Gray and black Type 1/12K; IP66 handle (KT9-SHB + KT9-KN) ③
- Power wiring
- Factory installed Pilot device option ⑥

*Replace ▼ with option code.  
See page F1.71 for  
factory installed modifications*

**Contactor Electronic DC Coil Codes (\*) ④**

DC Coil Codes	Voltage
12E	12V
24E	24V
36E	36-48V
48E	48-72V
110E	110-125V
220E	220-250V

KWIKstarter coils are wired standard from the factory to terminals "L1" and "L2" (for line voltage control). This means the coil voltage must match the line voltage. When a coil is specified for 120V or less, it will be wired for a separate control source (not wired to L1 and L2).

- ① Horsepower ratings shown in the table above are for reference. The final selection of the controller depends on the actual motor full load current and service factor. For motor with service factor less than 1.15. Use motor nameplate full load current times 0.9 and choose the motor starter with the appropriate current range. Example: Motor FLC = 4.2A; S.F. = 1.0. 4.2A x 0.9 = 3.78A. Select catalog number KTA9-32S-4.0A.
- ② Magnetic trip is fixed at 14x the maximum value of the current adjustment range.
- ③ CXU7 may be applied to single phase loads. Contact factory for these specifications.
- ④ CXU7-9E...23E with electronic coils are not interchangeable with non-electronic DC or AC coils.
- ⑤ KAIC Assembly Rating Index. See pages F73-F76 for Application Rating Guide.

- ⑥ One Pilot Device option must be selected. Blanks are not available. Plastic Bezel is standard. Pilot Device options include D7-BX Base Mounted contact blocks. Pilot Light option must match coil voltage 24V AC or DC, 120V AC or 240V AC only. See Section H for more information.
- ⑦ CPT not possible with KS7-COC4R. Refer to page F1.86 for wiring diagram and F1.87 for dimensional information.
- ⑧ A red and yellow handle may be selected instead of the standard gray and black handle. Change "PG" suffix to "PJ". Ex: Change CXU7-9-10-\*AS0.16A-A10-PG▼ to CXU7-9-10-\*AS0.16A-A10-PJ▼.

**CX7 Non-Reversing Controller Modifications**

Pilot Device Options - required	
Select one option only ①②③	Replace ▼ in catalog number with
START-STOP Multi-function	3U
I-O Multi-function	4U
OFF-ON 2-Position Selector switch	6
HAND-OFF-AUTO 3-Position Selector switch	7
Run Pilot Light Green	1G
Run Pilot Light Red	1R
Overload Alarm Pilot Light	1Y
D7-N8 22mm Hole Plug	0
Additional KT9 Auxiliaries & Trip Contacts	
Front Mount 250V maximum	
1 NO + 1 NC Auxiliary	-C
2 NO Auxiliaries	-D
1 NO SC+OL + 1 NC Auxiliary	-T10A01
1 NO SC+OL + 1 NO Auxiliary	-T10A10

**CX7 Non-Reversing Controller Additions**

Addition	Add to end of catalog number
CA7 Contactor Accessories	
Electronic Interface ④	-JE
Surge Suppressor RC	-RC
Surge Suppressor Varistor	-V
CA7 Auxiliary Contacts ⑤⑥	
1 NO Auxiliary	-S10
1 NC Auxiliary	-S01
1 NO + 1 NC Auxiliary	-S11
2 NO Auxiliaries	-S20
2 NC Auxiliaries	-S02
Alternate Aux. Contact Arrangement (CA7 only)	
1 NC in lieu of standard 1 NO	-SX10
2 NC in lieu of standard 2 NO (on CXU7 only)	-SX2
<b>Unwired Terminal Blocks</b> Specify quantity (▼)	-▼TB

**CXU7 Reversing Controller Modifications**

Pilot Device Options - required	
Select one option only ①②③	Replace ▼ in catalog number with
FOR-STOP-REV Multi-function	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
Additional KT7 Auxiliaries & Trip Contacts	
Front Mount 250V maximum	
1 NO + 1 NC Auxiliary	-C
2 NO Auxiliaries	-D
1 NO SC+OL + 1 NC Auxiliary	-T10A01
1 NO SC+OL + 1 NO Auxiliary	-T10A10


**CXU7 Reversing Controller Additions**

Addition	Add to end of catalog number
CA7 Contactor Accessories	
Electronic Interface ④	-JE
Surge Suppressor RC	-RC
Surge Suppressor Varistor	-V



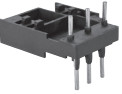
- ① KS7-C0C4R only has (1) 22mm hole to accommodate (1) pilot device.
- ② Currently supply D7 multi-function pushbuttons as standard which do not require protective boots to meet Type 4X.  
See Section H in this catalog for description (all suffix's ending in "U").
- ③ Pilot Lights may be applied with 24VAC/VDC, 120VAC or 240VAC Control Circuit. Pilot Lights with 380 VAC...575VAC require a control circuit transformer.

- ④ CRI7E-24 will be used. CRI7E-12 by special order only.
- ⑤ See page A47 for limitations on adding auxiliaries to Electronic DC Coil contactors.
- ⑥ Additional auxiliaries are per contactor. Number of auxiliaries is double for reversing applications. Multiply price adder by two (2).





**CX7 KWIKstarter Enclosures for use with KTA9 Type E Motor Controllers and CA7 Contactors ①③**

Component	Description	For Use With		Environmental Approvals	Catalog Number
		Type E Controller	Contactors		
	<b>Enclosure for Combo KWIKstarter ①</b> CX7/CXU7-9...23 CX7/CXU7-9E...23E	KTA9-32S KTA9-40H	CA7-9...23 CA7-9E...23E CAU7-9...23 CAU7-9E...23E	cUL Type 1/12K IEC IP66	<b>KS7-C0C4R</b>

**Handle Accessory for CX7/CXU7 KWIKstarters ①**

Accessory	Description	For Use With	Color	Catalog Number
	<b>Door Coupling Handle ①</b> • Padlockable • NEMA Type 1/12K and IP66 • Includes handle coupling (shaft) • Requires KT9-KN1 Locking Knob	All KT9s	Gray/Black Red/Yellow	T.B.A. T.B.A.
	<b>Lockable Twist Knob</b> • for use with KT9-SHB	All KT9s	Gray/Black	<b>KT9-KN</b>
	<b>Universal Connector for CX7/CXU7</b> • Provides electrical interconnection of KTA9 and CA7 (with AC or Electronic DC coil) • Applies to FVNR and FVR versions • Allows for mounting the CA7 on a single DIN rail	All KT9s	Black	T.B.A. ④

**CX7 KWIKstarter Pilot Device Kits (for use with KS7-C0C4R Type 1/12K) ①②⑥**

Kits	Description	Contact Blocks included		Catalog Number
		NO	NC	
	<b>Multi-Function Pushbutton kit</b> Non-illuminated <b>START-STOP</b> I-O	1	1	<b>KS7-P3U</b> <b>KS7-P4U</b>
	<b>FOR-STOP-REV</b> <b>UP-STOP-DOWN</b> <b>OPEN-STOP-CLOSE</b>	2	1	<b>KS7-P3U-REV</b> <b>KS7-P4U-REV</b> <b>KS7-P5U-REV</b>
	<b>Selector switch kits</b> Non-illuminated, includes legend plate			
	<b>ON-OFF 2-Position</b>	1	0	<b>KS7-P6</b>
	<b>HAND-OFF-AUTO 3-Position</b>	2	0	<b>KS7-P7</b>
	<b>FOR-OFF-REV 3-Position</b> <b>UP-OFF-DOWN 3-Position</b> <b>OPEN-OFF-CLOSE 3-Position</b>	2	0	<b>KS7-P6-REV</b> <b>KS7-P7-REV</b> <b>KS7-P8-REV</b>
	<b>Run Pilot Light or Overload Alarm Pilot Light</b> Plastic operator with diffuser lens in Red, Green or Yellow, with integrated LED power module	Replace ⑤ with color choice <b>R</b> = Red <b>G</b> = Green <b>Y</b> = Yellow		<b>KS7-P1⑤24V ⑥</b> <b>KS7-P1⑤120V</b> <b>KS7-P1⑤240V</b>
	<b>Hole Plug</b> used to plug 22.5mm holes.	Gray Plastic		<b>D7-N8</b>

- ① KS7-C0C4R is supplied with the following holes:
  - (1) one 22mm hole for a Pilot Device option, select one kit from this page.
  - (1) one 22mm hole for KT9-SHB (or SHRY) Disconnect or Reset handle.
- ② Plastic bezel is standard. Pilot Device Kits include D7-BX\_ Base Mounted contact blocks. See Section H for more information.

- ③ CPT not possible.
- ④ Standard KT9-32S-PEC23 does not work in CX7/CXU7 Kwikstarters.
- ⑤ KS7-P1⑤24V can be used with 24VAC or 24VDC.
- ⑥ KS7-C0C4R series B enclosures compatible to KTA9 series controllers  
KS7-C0C4R series A enclosures compatible to KTA9 series controllers