


**Enclosed Non-Reversing Combination Controller, AC Operation - Type 4 / 12**

Amp / Horsepower Rating					Painted Steel, Type 4 / 12 Enclosure				Dimension Code	
Max. Horsepower ①②				O/L Relay Ampere Range	Magnetic Response Current	Catalog Number ③④				
Three Phase										
200V	230V	460V	575V							
<b>KTA9-32S Standard Interrupting Capacity</b>										
~	~	~	~	0.10...0.16	2.2	<b>CX7-9-10-*</b> -AS0.16A-A10-WG	<b>W6</b>			
~	~	~	~	0.16...0.25	3.5	<b>CX7-9-10-*</b> -AS0.25A-A10-WG	<b>W6</b>			
~	~	~	~	0.25...0.40	5.6	<b>CX7-9-10-*</b> -AS0.4A-A10-WG	<b>W6</b>			
~	~	~	~	0.40...0.63	8.8	<b>CX7-9-10-*</b> -AS0.63A-A10-WG	<b>W6</b>			
~	~	1/2	1/2	0.63...1.0	14	<b>CX7-9-10-*</b> -AS1.0A-A10-WG	<b>W6</b>			
~	~	3/4	~	1.0...1.6	22	<b>CX7-9-10-*</b> -AS1.6A-A10-WG	<b>W6</b>			
1/2	1/2	1	1-1/2	1.6...2.5	35	<b>CX7-9-10-*</b> -AS2.5A-A10-WG	<b>W6</b>			
3/4	3/4	2	3	2.5...4.0	52	<b>CX7-9-10-*</b> -AS4.0A-A10-WG	<b>W6</b>			
1	1-1/2	3	~	4.0...6.3	88	<b>CX7-9-10-*</b> -AS6.3A-A10-WG	<b>W6</b>			
2	2	5	~	6.3...10	140	<b>CX7-12-10-*</b> -AS10A-A10-WG	<b>W6</b>			
3	5	10	~	10...16	224	<b>CX7-16-10-*</b> -AS16A-A10-WG	<b>W6</b>			
<b>KTA9-40H High Interrupting Capacity</b>										
~	~	~	~	0.40...0.63	8.8	<b>CX7-9-10-*</b> -AH0.63A-A10-WG	<b>W6</b>			
~	~	1/2	1/2	0.63...1.0	14	<b>CX7-9-10-*</b> -AH1.0A-A10-WG	<b>W6</b>			
~	~	3/4	~	1.0...1.6	22	<b>CX7-9-10-*</b> -AH1.6A-A10-WG	<b>W6</b>			
1/2	1/2	1	1-1/2	1.6...2.5	33	<b>CX7-9-10-*</b> -AH2.5A-A10-WG	<b>W6</b>			
3/4	3/4	2	3	2.5...4.0	52	<b>CX7-9-10-*</b> -AH4.0A-A10-WG	<b>W6</b>			
1	1-1/2	3	5	4.0...6.3	82	<b>CX7-9-10-*</b> -AH6.3A-A10-WG	<b>W6</b>			
2	2	5	7-1/2	6.3...10	130	<b>CX7-12-10-*</b> -AH10A-A10-WG	<b>W6</b>			
3	5	10	10	10...16	208	<b>CX7-16-10-*</b> -AH16A-A10-WG	<b>W6</b>			
5	5	10	~	14.5...20	260	<b>CX7-23-10-*</b> -AH20A-A10-WG	<b>W6</b>			
5	7-1/2	15	~	18...25	325	<b>CX7-23-10-*</b> -AH25A-A10-WG	<b>W6</b>			
7-1/2	10	20	~	24...29	406	<b>CX7-30-10-*</b> -AH29A-A10-WG	<b>W6</b>			
7-1/2	10	25	~	27...32	448	<b>CX7-37-10-*</b> -AH32A-A10-WG	<b>W6</b>			
10	10	25	~	30...36	432	<b>CX7-37-10-*</b> -AH36A-A10-WG	<b>W6</b>			
10	10	30	~	34...40	480	<b>CX7-43-10-*</b> -AH40A-A10-WG	<b>W6</b>			
<b>KTA7-45H High Interrupting Capacity</b>										
3	3	7-1/2	10	6.3...10	130	<b>CX7-30-10-*</b> -AH10A-A10-WG	<b>W7</b>			
5	5	10	15	10...16	208	<b>CX7-30-10-*</b> -AH16A-A10-WG	<b>W7</b>			
5	7-1/2	15	20	14.5...20	260	<b>CX7-30-10-*</b> -AH20A-A10-WG	<b>W7</b>			
7-1/2	10	20	20	18...25	325	<b>CX7-30-10-*</b> -AH25A-A10-WG	<b>W7</b>			
7-1/2	10	20	25	23...32	416	<b>CX7-30-10-*</b> -AH32A-A10-WG	<b>W7</b>			
10	10	25	~	32...45	585	<b>CX7-37-10-*</b> -AH45A-A10-WG	<b>W7</b>			
10	15	30	~	32...45	585	<b>CX7-43-10-*</b> -AH45A-A10-WG	<b>W7</b>			

**Includes:**

- Type 4 / 12 enclosure - watertight, dusttight
- 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 or KT7-45-TE)
- CA7 contactor (for remote operation), AC coil
- Power wiring
- Gray and black Type 4/4X/12; IP66 handle (Cat.# KT9-HTN) ③
- Pilot device shown is factory installed option

See page F1.77 for factory installed modifications

**Contactor AC Coil Codes (\*) ④**

AC Coil Code	Voltage Range	
	50 Hz	60 Hz
<b>024Z</b>	24V	24V
<b>0120</b>	<b>110V</b>	<b>120V</b>
<b>220W</b>	<b>200-220V</b>	<b>208-240V</b>
<b>0415</b>	400-415V	~
<b>0480</b> ⑥	<b>440V</b>	<b>480V</b>
<b>0600</b> ⑥	550V	600V

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 CX7 may be applied to single phase loads. See footnote 1 for device selection criteria. To order single phase unit, change "CX7" in catalog number to "CBX7". Three pole series connection will be provided. Ex: Change **CX7-9-10-\***-0.16A-A10-WG to **CBX7-9-10-\***-0.16A-A10-WJ.

- ③ A red and yellow handle may be selected instead of the standard gray and black handle. Change "WG" suffix to "WJ". Ex: Change **CX7-9-10-\***-0.16A-A10-WG to **CX7-9-10-\***-0.16A-A10-WJ.
- ④ Other voltages available, see Section A in this catalog.
- ⑤ KAIC Assembly Rating Index. See pages F73-F76 for Application Rating Guide.
- ⑥ 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 Coil - Type 4 / 12**

Amp / Horsepower Rating					Painted Steel, Type 4 / 12 Enclosur3		Dimension Code
Max. Horsepower ①②				O/L Relay Ampere Range	Magnetic Response Current	Catalog Number ③	
Three Phase							
200V	230V	460V	575V				
<b>KTA9-32S Standard Interrupting Capacity</b>							
~	~	~	~	0.10...0.16	2.2	<b>CX7-9E-10-*-AS0.16A-A10-WG</b>	W6
~	~	~	~	0.16...0.25	3.5	<b>CX7-9E-10-*-AS0.25A-A10-WG</b>	W6
~	~	~	~	0.25...0.40	5.6	<b>CX7-9E-10-*-AS0.4A-A10-WG</b>	W6
~	~	~	~	0.40...0.63	8.8	<b>CX7-9E-10-*-AS0.63A-A10-WG</b>	W6
~	~	1/2	1/2	0.63...1.0	14	<b>CX7-9E-10-*-AS1.0A-A10-WG</b>	W6
~	~	3/4	~	1.0...1.6	22	<b>CX7-9E-10-*-AS1.6A-A10-WG</b>	W6
1/2	1/2	1	1-1/2	1.6...2.5	35	<b>CX7-9E-10-*-AS2.5A-A10-WG</b>	W6
3/4	3/4	2	3	2.5...4.0	52	<b>CX7-9E-10-*-AS4.0A-A10-WG</b>	W6
1	1-1/2	3	~	4.0...6.3	88	<b>CX7-9E-10-*-AS6.3A-A10-WG</b>	W6
2	2	5	~	6.3...10	140	<b>CX7-12E-10-*-AS10A-A10-WG</b>	W6
3	5	10	~	10...16	224	<b>CX7-16E-10-*-AS16A-A10-WG</b>	W6
<b>KTA9-40H High Interrupting Capacity</b>							
~	~	~	~	0.40...0.63	8.8	<b>CX7-9E-10-*-AH0.63A-A10-WG</b>	W6
~	~	1/2	1/2	0.63...1.0	14	<b>CX7-9E-10-*-AH1.0A-A10-WG</b>	W6
~	~	3/4	~	1.0...1.6	22	<b>CX7-9E-10-*-AH1.6A-A10-WG</b>	W6
1/2	1/2	1	1-1/2	1.6...2.5	33	<b>CX7-9E-10-*-AH2.5A-A10-WG</b>	W6
3/4	3/4	2	3	2.5...4.0	52	<b>CX7-9E-10-*-AH4.0A-A10-WG</b>	W6
1	1-1/2	3	5	4.0...6.3	82	<b>CX7-9E-10-*-AH6.3A-A10-WG</b>	W6
2	2	5	7-1/2	6.3...10	130	<b>CX7-12E-10-*-AH10A-A10-WG</b>	W6
3	5	10	10	10...16	208	<b>CX7-16E-10-*-AH16A-A10-WG</b>	W6
5	5	10	~	14.5...20	260	<b>CX7-23E-10-*-AH20A-A10-WG</b>	W6
5	7-1/2	15	~	18...25	325	<b>CX7-23E-10-*-AH25A-A10-WG</b>	W6
7-1/2	10	20	~	24...29	406	<b>CX7-30E-10-*-AH29A-A10-WG</b>	W6
7-1/2	10	25	~	27...32	448	<b>CX7-37E-10-*-AH32A-A10-WG</b>	W6
10	10	25	~	30...36	432	<b>CX7-37E-10-*-AH36A-A10-WG</b>	W6
10	10	30	~	34...40	480	<b>CX7-43E-10-*-AH40A-A10-WG</b>	W6
<b>KTA7-45H High Interrupting Capacity</b>							
3	3	7-1/2	10	6.3...10	130	<b>CX7-30E-10-*-AH10A-A10-WG</b>	W7
5	5	10	15	10...16	208	<b>CX7-30E-10-*-AH16A-A10-WG</b>	W7
5	7-1/2	15	20	14.5...20	260	<b>CX7-30E-10-*-AH20A-A10-WG</b>	W7
7-1/2	10	20	20	18...25	325	<b>CX7-30E-10-*-AH25A-A10-WG</b>	W7
7-1/2	10	20	25	23...32	416	<b>CX7-37E-10-*-AH32A-A10-WG</b>	W7
10	10	25	~	32...45	585	<b>CX7-37E-10-*-AH45A-A10-WG</b>	W7
10	15	30	~	32...45	585	<b>CX7-43E-10-*-AH45A-A10-WG</b>	W7

Painted Steel, Type 4 / 12 Enclosur3



**Includes:**

- Type 4 / 12 enclosure - watertight, dusttight
- KT9 "Type E/F" Combination Motor Controller with 1 NO front mount Auxiliary Contact (Cat #: KT9-PE1-10)
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE or KT7-45-TE)
- CA7 contactor (for remote operation), Electronic DC coil
- Power wiring
- Gray and black Type 4/4X/12; IP66 handle (Cat.# KT9-HTN) ④
- Pilot device shown is factory installed option

See page F1.77 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

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 rating. Example: Motor FLC = 4.2A; S.F. = 1.0. 4.2A x 0.9 = 3.78A. Select catalog number KTA9-32S-4.0A.

② CX7 may be applied to single phase loads. Contact factory for these specifications.

③ A red and yellow handle may be selected instead of the standard gray and black handle. Change "WG" suffix to "WJ". Ex: Change CX7-9E-10-\*-0.16A-A10-**WG** to CX7-9E-10-\*-0.16A-A10-**WJ**.

④ CX7-9E...43E 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.

**Ordering Instructions**

Specify Catalog Number	
Replace (*) with Coil Code	See Coil Code tables on this page for codes
Select modifications if required	

Enclosed Motor Circuit Controllers

**Enclosed Reversing Combination Controller, AC Operation - Type 4 / 12**

Amp / Horsepower Rating					Painted Steel, Type 4 / 12 Enclosure		Dimension Code
Max. Horsepower ①②				O/L Relay Ampere Range	Magnetic Response Current	Catalog Number ③④	
Three Phase							
200V	230V	460V	575V				
<b>KTA9-32S Standard Interrupting Capacity</b>							
~	~	~	~	0.10...0.16	2.2	CXU7-9-10-*AS0.16A-A10-WG	W6
~	~	~	~	0.16...0.25	3.5	CXU7-9-10-*AS0.25A-A10-WG	W6
~	~	~	~	0.25...0.40	5.6	CXU7-9-10-*AS0.40A-A10-WG	W6
~	~	~	~	0.40...0.63	8.8	CXU7-9-10-*AS0.63A-A10-WG	W6
~	~	1/2	1/2	0.63...1.0	14	CXU7-9-10-*AS1.0A-A10-WG	W6
~	~	3/4	~	1.0...1.6	22	CXU7-9-10-*AS1.6A-A10-WG	W6
1/2	1/2	1	1-1/2	1.6...2.5	35	CXU7-9-10-*AS2.5A-A10-WG	W6
3/4	3/4	2	3	2.5...4.0	52	CXU7-9-10-*AS4.0A-A10-WG	W6
1	1-1/2	3	~	4.0...6.3	88	CXU7-9-10-*AS6.3A-A10-WG	W6
2	2	5	~	6.3...10	140	CXU7-12-10-*AS10A-A10-WG	W6
3	5	10	~	10...16	224	CXU7-16-10-*AS16A-A10-WG	W6
<b>KTA9-40H High Interrupting Capacity</b>							
~	~	~	~	0.40...0.63	8.8	CXU7-9-10-*AH0.63A-A10-WG	W6
~	~	1/2	1/2	0.63...1.0	14	CXU7-9-10-*AH1.0A-A10-WG	W6
~	~	3/4	~	1.0...1.6	22	CXU7-9-10-*AH1.6A-A10-WG	W6
1/2	1/2	1	1-1/2	1.6...2.5	33	CXU7-9-10-*AH2.5A-A10-WG	W6
3/4	3/4	2	3	2.5...4.0	52	CXU7-9-10-*AH4.0A-A10-WG	W6
1	1-1/2	3	5	4.0...6.3	82	CXU7-9-10-*AH6.3A-A10-WG	W6
2	2	5	7-1/2	6.3...10	130	CXU7-12-10-*AH10A-A10-WG	W6
3	5	10	10	10...16	208	CXU7-16-10-*AH16A-A10-WG	W6
5	5	10	~	14.5...20	260	CXU7-23-10-*AH20A-A10-WG	W6
5	7-1/2	15	~	18...25	325	CXU7-23-10-*AH25A-A10-WG	W6
7-1/2	10	20	~	24...29	406	CXU7-30-10-*AH29A-A10-WG	W6
7-1/2	10	25	~	27...32	448	CXU7-37-10-*AH32A-A10-WG	W6
10	10	25	~	30...36	432	CXU7-37-10-*AH36A-A10-WG	W6
10	10	30	~	34...40	480	CXU7-43-10-*AH40A-A10-WG	W6
<b>KTA9-45H High Interrupting Capacity</b>							
3	3	7-1/2	10	6.3...10	130	CXU7-30-22-*AH10A-A10-WG	W7
5	5	10	15	10...16	208	CXU7-30-22-*AH16A-A10-WG	W7
5	7-1/2	15	20	14.5...20	260	CXU7-30-22-*AH20A-A10-WG	W7
7-1/2	10	20	20	18...25	325	CXU7-30-22-*AH25A-A10-WG	W7
7-1/2	10	20	25	23...32	416	CXU7-37-22-*AH32A-A10-WG	W7
10	10	25	~	32...45	585	CXU7-37-22-*AH45A-A10-WG	W7
10	15	30	~	32...45	585	CXU7-43-22-*AH45A-A10-WG	W7



**Includes:**

- Type 4 / 12 enclosure - watertight, dustight
- KT9 "Type E/F" Combination Motor Controller with 1 NO front mount Auxiliary Contact (Cat #: KT9-PE1-10)
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE or KT7-45-TE)
- CA7 contactors (for remote operation), AC coil
- Power wiring
- Gray and black Type 4/4X/12; IP66 handle (Cat.# KT9-HTN) ③
- Control power transformer, pilot device, terminals and other equipment shown are factory installed options

See page F1.77 for factory installed modifications

**Contactor AC Coil Codes (\*) ⑤**

AC Coil Code	Voltage Range	
	50 Hz	60 Hz
024Z	24V	24V
0120	110V	120V
220W	200-220V	208-240V
0415	400-415V	~
0480 ⑥	440V	480V
0600 ⑥	550V	600V

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 CXU7 may be applied to single phase loads. Contact factory for these applications.
- ③ A red and yellow handle may be selected instead of the standard gray and black handle. Change "WG" suffix to "WJ". Ex: Change CXU7-9-10-\*0.16A-A10-WG to CXU7-9-10-\*0.16A-A10-WJ.
- ④ Other voltages available, see Section A in this catalog.

- ⑤ KAIC Assembly Rating Index. See pages F73-F76 for Application Rating Guide.
- ⑥ 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, Electronic DC Coil - Type 4 / 12

Amp / Horsepower Rating					Painted Steel, Type 4 / 12 Enclosure		Dimension Code
Max. Horsepower ①②				O/L Relay Ampere Range	Magnetic Response Current	Catalog Number ③	
Three Phase							
200V	230V	460V	575V				
<b>KTA9-32S Standard Interrupting Capacity</b>							
~	~	~	~	0.10...0.16	2.2	CXU7-9E-10-*-AS0.16A-A10-WG	W6
~	~	~	~	0.16...0.25	3.5	CXU7-9E-10-*-AS0.25A-A10-WG	W6
~	~	~	~	0.25...0.40	5.6	CXU7-9E-10-*-AS0.40A-A10-WG	W6
~	~	~	~	0.40...0.63	8.8	CXU7-9E-10-*-AS0.63A-A10-WG	W6
~	~	1/2	1/2	0.63...1.0	14	CXU7-9E-10-*-AS1.0A-A10-WG	W6
~	~	3/4	~	1.0...1.6	22	CXU7-9E-10-*-AS1.6A-A10-WG	W6
1/2	1/2	1	1-1/2	1.6...2.5	35	CXU7-9E-10-*-AS2.5A-A10-WG	W6
3/4	3/4	2	3	2.5...4.0	52	CXU7-9E-10-*-AS4.0A-A10-WG	W6
1	1-1/2	3	~	4.0...6.3	88	CXU7-9E-10-*-AS6.3A-A10-WG	W6
2	2	5	~	6.3...10	140	CXU7-12E-10-*-AS10A-A10-WG	W6
3	5	10	~	10...16	224	CXU7-16E-10-*-AS16A-A10-WG	W6
<b>KTA9-40H High Interrupting Capacity</b>							
~	~	~	~	0.40...0.63	8.8	CXU7-9E-10-*-AH0.63A-A10-WG	W6
~	~	1/2	1/2	0.63...1.0	14	CXU7-9E-10-*-AH1.0A-A10-WG	W6
~	~	3/4	~	1.0...1.6	22	CXU7-9E-10-*-AH1.6A-A10-WG	W6
1/2	1/2	1	1-1/2	1.6...2.5	33	CXU7-9E-10-*-AH2.5A-A10-WG	W6
3/4	3/4	2	3	2.5...4.0	52	CXU7-9E-10-*-AH4.0A-A10-WG	W6
1	1-1/2	3	5	4.0...6.3	82	CXU7-9E-10-*-AH6.3A-A10-WG	W6
2	2	5	7-1/2	6.3...10	130	CXU7-12E-10-*-AH10A-A10-WG	W6
3	5	10	10	10...16	208	CXU7-16E-10-*-AH16A-A10-WG	W6
5	5	10	~	14.5...20	260	CXU7-23E-10-*-AH20A-A10-WG	W6
5	7-1/2	15	~	18...25	325	CXU7-23E-10-*-AH25A-A10-WG	W6
7-1/2	10	20	~	24...29	406	CXU7-30E-10-*-AH29A-A10-WG	W6
7-1/2	10	25	~	27...32	448	CXU7-37E-10-*-AH32A-A10-WG	W6
10	10	25	~	30...36	432	CXU7-37E-10-*-AH36A-A10-WG	W6
10	10	30	~	34...40	480	CXU7-43E-10-*-AH40A-A10-WG	W6
<b>KTA7-45H High Interrupting Capacity</b>							
3	3	7-1/2	10	6.3...10	130	CXU7-30E-22-*-AH10A-A10-WG	W7
5	5	10	15	10...16	208	CXU7-30E-22-*-AH16A-A10-WG	W7
5	7-1/2	15	20	14.5...20	260	CXU7-30E-22-*-AH20A-A10-WG	W7
7-1/2	10	20	20	18...25	325	CXU7-30E-22-*-AH25A-A10-WG	W7
7-1/2	10	20	25	23...32	416	CXU7-37E-22-*-AH32A-A10-WG	W7
10	10	25	~	32...45	585	CXU7-37E-22-*-AH45A-A10-WG	W7
10	15	30	~	32...45	585	CXU7-43E-22-*-AH45A-A10-WG	W7



#### Includes:

- Type 4 / 12 enclosure - watertight, dusttight
- KTA9 "Type E/F" Combination Motor Controller with 1 NO front mount Auxiliary Contact (Cat #: KT9-PE1-10)
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE or KT7-45-TE)
- CA7 contactors (for remote operation), Electronic DC coil
- Power wiring
- Gray and black Type 4/4X/12; IP66 handle (Cat.# KT9-HTN) ④
- Control power transformer, pilot device, terminals and other equipment shown are factory installed options

See page F1.77 for factory installed modifications

#### Contactors 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

#### Ordering Instructions

Specify Catalog Number	
Replace (*) with Coil Code Select modifications if required	See Coil Code tables on this page for codes

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 CXU7 may be applied to single phase loads. Contact factory for these applications.

③ A red and yellow handle may be selected instead of the standard gray and black handle. Change "WG" suffix to "WJ". Ex: Change CXU7-9E-10-\*-0.16A-A10-WG to CXU7-9E-10-\*-0.16A-A10-WJ.

④ CXU7-9E...43E 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.

### Non-Reversing and Reversing CX7 Combination Controller Modifications (Factory Assembled)

Description	Add Suffix to Catalog Number
<b>Pilot Devices ①</b>	
START-STOP multi-function pushbutton	3U
ON-OFF multi-function pushbutton	4U
FOR-STOP-REV multi-function pushbutton	3U
UP-STOP-DOWN multi-function pushbutton	4U
OPEN-STOP-CLOSE multi-function pushbutton	5U
HAND-AUTO selector switch	5
OFF-ON selector switch	6
HAND-OFF-AUTO selector switch	7
FOR-OFF-REV selector switch	6
UP-OFF-DOWN selector switch	7
OPEN-OFF-CLOSE selector switch	8
Pilot light only ③	1
Pilot lights only (2) ③	2
Pilot light w/ START-STOP multi-function pushbutton ③	13U
Pilot light w/ ON-OFF multi-function pushbutton ③	14U
Pilot light w/ HAND-AUTO selector switch ③	15
Pilot light w/ OFF-ON selector switch ③	16
Pilot light w/ HAND-OFF-AUTO selector switch ③	17
<b>Control Power Transformer</b>	
(with fused primary and secondary)	Replace (*) in catalog # with the following codes ②
<i>Primary volts</i> <i>Secondary volts</i>	
208                      120	<b>XA</b>
240                      120	<b>XB</b>
50 watt Standard Capacity      480                      120	<b>XC</b>
575                      120	<b>XD</b>
380                      110	<b>XG</b>
240                      24	<b>XE</b>
480                      24	<b>XF</b>
600                      24	<b>XJ</b>
<b>KT9 Auxiliaries &amp; Trip Contacts ⑤</b>	
<b>Front mount 250V maximum</b>	
1 NO + 1 NC Auxiliary	-C
2 NO Auxiliaries	-D
1 NO SC+OL + 1 NC Auxiliary	-R
1 NO SC+OL + 1 NO Auxiliary	-S
<b>Side Mount 600V maximum</b>	
2 NC Auxiliaries	-AS02
2 NO Auxiliaries	-AS20
1 NO + 1 NC Auxiliary	-AS11
1 NC SC+OL + 1 NO Auxiliary	-R10
1 NC SC+OL + 1 NC Auxiliary	-R11

Description	Add Suffix to Catalog Number
<b>Additional KT9 Trip Contacts - Side Mount (600V max)</b>	
1 NO SC+OL + 1 NO SC	-R00
1 NO SC+OL + 1 NC SC	-R01
1 NC SC+OL + 1 NO SC	-R10
<b>KT9 Accessories</b>	
Undervoltage Release Module	Select coil voltage from table below -UA-*
Shunt Release Module	-AA-*
<b>CA7 Auxiliary Contacts ⑥</b>	
1 NO Auxiliary	-S10
1 NC Auxiliary	-S01
1 NO + 1 NC Auxiliary	-S11
2 NO Auxiliaries	-S20
2 NC Auxiliaries	-S02
1 NO + 2 NC Auxiliary	-S12
2 NO + 1 NC Auxiliary	-S21
3 NO Auxiliaries	-S30
3 NC Auxiliaries	-S03
1 NO + 3 NC Auxiliary	-S13
3 NO + 1 NC Auxiliary	-S31
2 NO + 2 NC Auxiliary	-S22
4 NO Auxiliaries	-S40
4 NC Auxiliaries	-S04
<b>Alternate Aux. Contact Arrangement (CA7 only)</b>	
1 NC in lieu of standard 1 NO	-SX10
2 NC in lieu of standard 2 NO (on CXU7 only)	-SX2
<b>CA7 Contactor Accessories</b>	
Electronic Interface	-JE ④
Surge Suppressor RC	-RC
Surge Suppressor Varistor	-V
<b>Unwired Terminal Blocks</b> Specify quantity (▼)	-▼TB

### -UA..-AA Coil Codes (\*)

AC Coil Code	Voltage Range	
	50 Hz	60 Hz
24V	21V	24V
28V	24V	28V
120V	105V	120V
127V	110V	127V
230V	220...230V	~
240V	~	240...260V
277V	240V	277V
460V	380...400V	400...460V
480V	415V	480V
600V	550V	600V

- ① 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").
- ② Factory modifications often change the enclosure size. Refer to factory for dimensions when critical to the installation.

- ③ Pilot Lights may be applied with 24VAC/VDC, 120VAC or 240VAC Control Circuit. Pilot Lights with 277 VAC...575VAC require a control circuit transformer.
- ④ CR17E-24 will be used. CR17E-12 by special order only.
- ⑤ Additional auxiliaries are per contactor. Number of auxiliaries is double for reversing applications.



### CX7 Explosion Proof Combination Controllers - NEMA Type 4/4X/7/9 with Type 4 Gaskets

Amp / Horsepower Rating				O/L Relay Ampere Range	Magnetic Response Current	Catalog Number ⑥	Dimension Code
Max. Horsepower ①②③							
Three Phase							
200V	230V	460V	575V				
<b>KT A9-32S Standard Interrupting Capacity</b>							
~	~	~	~	0.10...0.16	2.2	CX7-9-10-*AS0.16A-A10-EZ	EZ
~	~	~	~	0.16...0.25	3.5	CX7-9-10-*AS0.25A-A10-EZ	EZ
~	~	~	~	0.25...0.40	5.6	CX7-9-10-*AS0.4A-A10-EZ	EZ
~	~	~	~	0.40...0.63	8.8	CX7-9-10-*AS0.63A-A10-EZ	EZ
~	~	1/2	1/2	0.63...1.0	14	CX7-9-10-*AS1A-A10-EZ	EZ
~	~	3/4	~	1.0...1.6	22	CX7-9-10-*AS1.6A-A10-EZ	EZ
1/2	1/2	1	1-1/2	1.6...2.5	35	CX7-9-10-*AS2.5A-A10-EZ	EZ
3/4	3/4	2	3	2.5...4.0	52	CX7-9-10-*AS4A-A10-EZ	EZ
1	1-1/2	3	~	4.0...6.3	88	CX7-9-10-*AS6.3A-A10-EZ	EZ
2	2	5	~	6.3...10	140	CX7-12-10-*AS10A-A10-EZ	EZ
3	5	10	~	10...16	224	CX7-16-10-*AS16A-A10-EZ	EZ
<b>KT A9-40H High Interrupting Capacity</b>							
~	~	~	~	0.40...0.63	8.8	CX7-9-10-*AH0.63A-A10-EZ	EZ
~	~	1/2	1/2	0.63...1.0	14	CX7-9-10-*AH1.0A-A10-EZ	EZ
~	~	3/4	~	1.0...1.6	22	CX7-9-10-*AH1.6A-A10-EZ	EZ
1/2	1/2	1	1-1/2	1.6...2.5	33	CX7-9-10-*AH2.5A-A10-EZ	EZ
3/4	3/4	2	3	2.5...4.0	52	CX7-9-10-*AH4A-A10-EZ	EZ
1	1-1/2	3	5	4.0...6.3	82	CX7-9-10-*AH6.3A-A10-EZ	EZ
2	2	5	7-1/2	6.3...10	130	CX7-12-10-*AH10A-A10-EZ	EZ
3	5	10	10	10...16	208	CX7-16-10-*AH16A-A10-EZ	EZ
5	5	10	~	14.5...20	260	CX7-23-10-*AH20A-A10-EZ	EZ
5	7-1/2	15	~	18...25	325	CX7-23-10-*AH25A-A10-EZ	EZ
7-1/2	10	20	~	24...29	406	CX7-23-10-*AH29A-A10-EZ	EZ
7-1/2	10	25	~	27...32	448	CX7-23-10-*AH32A-A10-EZ	EZ
10	10	25	~	30...36	432	CX7-23-10-*AH36A-A10-EZ	EZ
10	10	30	~	34...40	480	CX7-23-10-*AH40A-A10-EZ	EZ
<b>KT A7-45H High Interrupting Capacity</b>							
3	3	7-1/2	10	6.3...10	130	CX7-30-10-*AH10A-A10-EZ	EZ
5	5	10	15	10...16	208	CX7-30-10-*AH16A-A10-EZ	EZ
5	7-1/2	15	20	14.5...20	260	CX7-30-10-*AH20A-A10-EZ	EZ
7-1/2	10	20	20	18...25	325	CX7-30-10-*AH25A-A10-EZ	EZ
7-1/2	10	20	25	23...32	416	CX7-30-10-*AH32A-A10-EZ	EZ
10	10	25	~	32...45	585	CX7-37-10-*AH45A-A10-EZ	EZ
10	15	30	~	32...45	585	CX7-43-10-*AH45A-A10-EZ	EZ



#### Includes:

- Class I, Div I, Group B, C & D – Class II, Div I, Group E, F & G enclosure Class III, Zone I, IIB & H2
- KT9 “Type E” Self-protected Combination Manual Motor Controller with 1 NO front mount auxiliary contact (Cat.# KT9-PE1-10)
- Terminal Adaptor for Combo Type E/F Applications (Cat.# KT9-40-TE or KT7-45-TE)
- CA7 contactor (for remote operation), AC coil
- Power wiring

#### Modifications (Factory Assembled)

KT9 Auxiliaries & Trip Contacts	
Front Mount 250V max. 1 NC Auxiliary 1 NO + 1 NC Auxiliary 2 NO Auxiliaries 1 NO SC+OL + 1 NC Auxiliary 1 NO SC+OL + 1 NO Auxiliary	-A -C -D -R -S
Side Mount 600V max. 2 NO Auxiliaries 1 NO + 1 NC Auxiliary 1 NC SC+OL + 1 NO Auxiliary 1 NC SC+OL + 1 NC Auxiliary	-AS20 -AS11 -R10 -R11
CA7 Contactor Accessories	Add Suffix to Cat. Number
1 NC Auxiliary 1 NO Auxiliary	-S01 -S10
Electronic Interface Surge Suppressor RC Surge Suppressor Varistor	-JE -RC -V
Enclosure Modifications Dual START/STOP pushbutton ON/OFF selector switch H-O-A Breather/Drain	3 6 7 -BD

#### Contactor AC Coil Codes (\*) ④

AC Coil Code	Voltage Range	
	50 Hz	60 Hz
024Z	24V	24V
0120	110V	120V
220W	200-220V	208-240V
0415	400-415V	~
0480 ⑥	440V	480V
0600 ⑥	550V	600V

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. See footnote 1 for device selection criteria. To order single phase unit, change “CX7” in catalog number to “CBX7”. Three pole series connection will be provided. Ex: Change CX7-9-10-\*0.16A-A10-EZ to CBX7-9-10-\*0.16A-A10-EZ.
- ④ Other voltages available, see Section A in this catalog.

#### Ordering Instructions

Specify Catalog Number	
Replace (*) with Coil Code	See tables on this page for codes
Select modifications if required	

- ⑤ Catalog number (-A10) includes front-mounted auxiliary KT9-PE1-10 with 300 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.