

Enclosed Motor Controllers and Molded Case Circuit Breakers



KTA9 Type-E Self Protected Manual Motor Controllers
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Explosion-Proof Motor Controllers



KTA9_EX
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KTA9_EZ
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The following pages contain a selection of single enclosed KTA9 & KTC9 motor controllers which can be applied as an individual Manual Self-Protected Combination Motor Controller or as an individual Manual Motor Starter dependent on the ratings of the individual unit.

- A Self-protected Combination Motor Controller (UL508 Construction Type E) performs all the functions of a Manual Combo starter including a UL approved means "Disconnect" with lockable and defeatable handle mechanism, short-circuit protection and overload protection for motor applications.
- A UL508 Manual Motor Controller is a manual motor starter including a motor disconnect combined with an overload relay.

Both can be combined with auxiliary contacts, shunt-trip or under-voltage trip units to meet your application requirements. The section that follows includes non-metallic enclosures, metallic enclosures and explosion-proof enclosures.

Enclosed Molded Case Circuit Breakers

The following pages contain a selection of individual enclosed KTU9 molded case circuit breakers for the protection of non-motor loads. KTU9 is a 480Y/277Volt or 600Y/347 volt UL489 approved circuit breaker and the selection of enclosures or combined with matching environmentally approved thru-the-door handle disconnect mechanism which also complies with UL489 standards. KTU9 offers at least 65 KAIC withstand ratings which exceeds those offered by many 600 Volt Class Molded Case Circuit Breakers which



KTU9 Molded Case Circuit Breakers
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are larger and more expensive. Enclosed KTU9 can be combined with auxiliary contacts, shunt-trip or under-voltage trip units to meet your application requirements.

Enclosed Type E/F Combination Starters

KTA9 or KTC9 can be applied in combination with a CA7 contactor for remote control and an enclosure with matching environmentally approved thru-the-door handle disconnect mechanism to meet all requirements for a Construction Type E or F Combination Starter. The following pages contain a selection of individual Combo starters which are smaller and less expensive than Classic Construction Type A (Fusible), or Type C (Thermal-magnetic Molded Case Circuit Breaker) as offered in Section C of this catalog. The following types are offered:



CX7 Ecombo KWIKStarter
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- Non-metallic enclosed Combo KwikStarter CX7 and CXU7 with AC or DC coils available as factory assembled or in kit form for field assembly
- Metallic enclosed Combo CX7 and CXU7 with AC or DC coils
- Explosion-proof enclosed CX7 and CXU7 with AC or DC coils

A variety of modifications are available.



CX7 Combination Controllers
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Enclosed KTA9 - IP66 - Type 4/4X/12K

| | | | | | | | |
|--|-------|------|---------|---|-----------------------|--------------------------|----------------|
| Amp / Horsepower Rating | | | | Non-metallic (IP65) Enclosure | | | |
| | | | |  | | | |
| Max. Horsepower ①②③ | | | | O/L Relay Ampere Range | Magnetic Res. Current | Catalog Number ④ | Dimension Code |
| Three Phase | | | | | | | |
| 200V | 230V | 460V | 575V | | | | |
| KTA9-32S Standard Interrupting Capacity | | | | | | | |
| ~ | ~ | ~ | ~ | 0.10...0.16 | 2.2 | KTA9-32S-0.16A-CG | AY |
| ~ | ~ | ~ | ~ | 0.16...0.25 | 3.5 | KTA9-32S-0.25A-CG | AY |
| ~ | ~ | ~ | ~ | 0.25...0.40 | 5.6 | KTA9-32S-0.4A-CG | AY |
| ~ | ~ | ~ | ~ | 0.40...0.63 | 8.8 | KTA9-32S-0.63A-CG | AY |
| ~ | ~ | 1/2 | 1/2 | 0.63...1.0 | 14 | KTA9-32S-1.0A-CG | AY |
| ~ | ~ | 3/4 | ~ | 1.0...1.6 | 22 | KTA9-32S-1.6A-CG | AY |
| 1/2 | 1/2 | 1 | 1-1/2 | 1.6...2.5 | 35 | KTA9-32S-2.5A-CG | AY |
| 3/4 | 3/4 | 2 | 3 | 2.5...4.0 | 52 | KTA9-32S-4.0A-CG | AY |
| 1 | 1-1/2 | 3 | 5 ⑥ | 4.0...6.3 | 88 | KTA9-32S-6.3A-CG | AY |
| 2 | 2 | 5 | 7-1/2 ⑥ | 6.3...10 | 140 | KTA9-32S-10A-CG | AY |
| 3 | 5 | 10 | 10 ⑥ | 10...16 ⑦ | 224 | KTA9-32S-16A-CG | AY |


Includes:

- Non-metallic (IP66 - Type 4/4X/12K) enclosure with integrated operator – watertight, dusttight
- KTA9-32S (Standard Interrupting Capacity) “Type E” Self-protected Combination Manual Controller ⑤
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE)
- Gray and black handle ④⑤

Modifications (Factory Assembled)

| Description | Add Suffix to Cat. Number |
|---|----------------------------------|
| KT9 Auxiliaries & Trip Contacts, Front Mount 250V max. 1 NO Auxiliary 1 NC Auxiliary | -B -A -C -D -R -S |
| 1 NO + 1 NC Auxiliary 2 NO Auxiliaries 1 NO SC+OL + 1 NC Auxiliary 1 NO SC+OL + 1 NO Auxiliary | |
| Side Mount 600V max. 2 NC Auxiliaries 2 NO Auxiliaries 1 NO + 1 NC Auxiliary | -AS02 -AS20 -AS11 |
| Additional KT9 Trip Contacts, Side Mount 600V max. 1 NO SC+OL+1 NO SC 1 NO SC+OL+1 NC SC 1 NC SC+OL+1 NO SC | -R00 -R01 -R10 |
| Accessories Undervoltage Release Module Shunt Release Module | -UA-* -AA-* |

Enclosure Only - IP66 - Type 4/4X/12K

| | Description | For use With | Catalog Number |
|---|-------------------|--------------------|-----------------|
|  | Gray/Black handle | KTA9-32S up to 13A | KT9-ENN |
| | Red/Yellow handle | KTA9-32S up to 13A | KT9-ENRY |

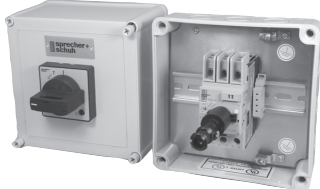
- ① Horsepower ratings shown in the table above are for reference. *The final selection of the controller depends on the actual motor full load current and service factor.*
 - For motor with service factor less than 1.15. Use motor nameplate full load current times 0.9 and choose the motor starter with 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. Refer to page F5 for applied KAIC ratings.
- ③ KTA9 may be applied to single phase loads if 3 poles of device are wired in series. See footnote 1 for device selection criteria.
- ④ A red and yellow handle may be selected instead of the standard gray and black handle. Change “CG” suffix to “CJ”. Ex: Change KTA9-32S-0.16A-CG to KTA9-32S-0.16A-CJ.
- ⑤ Handles are built-in to the enclosure and are not available as components.
- ⑥ Catalog numbers with specific voltages (i.e. @ 575V) shaded in gray are suitable for use as a manual motor starter only because they are not Type E rated. See page F5 for ratings.
- ⑦ This device is 30 KAIC approved up to 13 amps.

-UA..AA Coil Codes (*)

| AC Coil Code | Voltage Range | |
|--------------|---------------|-------------|
| | 50 Hz | 60 Hz |
| 24V | 24V | 24V...28V |
| 120V | 110V | 120V |
| 230V | 220...230V | ~ |
| 260V | ~ | 240...260V |
| 277V | ~ | 277V |
| 400V | 380...400V | ~ |
| 480V | 415V | 480V |

F
Enclosed Motor Circuit Controllers

Enclosed KTA9 - Type 4 / 4X / 12

| Amp / Horsepower Rating | | | | Non-metallic, Type 4 / 4X / 12 Enclosure | | | |
|---|---------|------|---------|--|-----------------------|--------------------|----------|
|  | | | | O/L Relay Ampere Range | Magnetic Res. Current | Catalog Number ③ | Dim Code |
| | | | | | | | |
| Three Phase | | | | | | | |
| 200V | 230V | 460V | 575V | | | | |
| KTA9-32S Standard Interrupting Capacity | | | | | | | |
| ~ | ~ | ~ | ~ | 0.10...0.16 | 2.2 | KTA9-32S-0.16A-VG | Q5 |
| ~ | ~ | ~ | ~ | 0.16...0.25 | 3.5 | KTA9-32S-0.25A-VG | Q5 |
| ~ | ~ | ~ | ~ | 0.25...0.40 | 5.6 | KTA9-32S-0.40A-VG | Q5 |
| ~ | ~ | ~ | ~ | 0.40...0.63 | 8.8 | KTA9-32S-0.63A-VG | Q5 |
| ~ | ~ | 1/2 | 1/2 | 0.63...1.0 | 14 | KTA9-32S-1.0A-VG | Q5 |
| ~ | ~ | 3/4 | ~ | 1.0...1.6 | 22 | KTA9-32S-1.6A-VG | Q5 |
| 1/2 | 1/2 | 1 | 1-1/2 | 1.6...2.5 | 35 | KTA9-32S-2.5A-VG | Q5 |
| 3/4 | 3/4 | 2 | 3 | 2.5...4.0 | 52 | KTA9-32S-4.0A-VG | Q5 |
| 1 | 1-1/2 | 3 | 5 ④ | 4.0...6.3 | 88 | KTA9-32S-6.3A-VG ④ | Q5 |
| 2 | 2 | 5 | 7-1/2 ④ | 6.3...10 | 140 | KTA9-32S-10A-VG ④ | Q5 |
| 3 | 5 | 10 | 10 ④ | 10...16 | 224 | KTA9-32S-16A-VG ④ | Q5 |
| 5 ④ | 5 ④ | 10 ④ | 15 ④ | 14.5...20 | 280 | KTA9-32S-20A-VG ④ | Q5 |
| 5 ④ | 7-1/2 ④ | 15 ④ | 20 ④ | 18...25 | 330 | KTA9-32S-25A-VG ④ | Q5 |
| 7-1/2 ④ | 10 ④ | 20 ④ | 25 ④ | 24...29 | 406 | KTA9-32S-29A-VG ④ | Q5 |
| 7-1/2 ④ | 10 ④ | 20 ④ | 30 ④ | 27...32 | 448 | KTA9-32S-32A-VG ④ | Q5 |
| KTA9-40H High Interrupting Capacity | | | | | | | |
| ~ | ~ | ~ | ~ | 0.40...0.63 | 8.8 | KTA9-40H-0.63A-VG | Q6 |
| ~ | ~ | 1/2 | 1/2 | 0.63...1.0 | 14 | KTA9-40H-1.0A-VG | Q6 |
| ~ | ~ | 3/4 | ~ | 1.0...1.6 | 22 | KTA9-40H-1.6A-VG | Q6 |
| 1/2 | 1/2 | 1 | 1-1/2 | 1.6...2.5 | 33 | KTA9-40H-2.5A-VG | Q6 |
| 3/4 | 3/4 | 2 | 3 | 2.5...4.0 | 52 | KTA9-40H-4.0A-VG | Q6 |
| 1 | 1-1/2 | 3 | 5 | 4.0...6.3 | 82 | KTA9-40H-6.3A-VG | Q6 |
| 2 | 2 | 5 | 7-1/2 | 6.3...10 | 130 | KTA9-40H-10A-VG | Q6 |
| 3 | 5 | 10 | 10 | 10...16 | 208 | KTA9-40H-16A-VG | Q6 |
| 5 | 5 | 10 | 15 ④ | 14.5...20 | 260 | KTA9-40H-20A-VG ④ | Q6 |
| 5 | 7-1/2 | 15 | 20 ④ | 18...25 | 325 | KTA9-40H-25A-VG ④ | Q6 |
| 7-1/2 | 10 | 20 | 25 ④ | 24...29 | 406 | KTA9-40H-29A-VG ④ | Q6 |
| 7-1/2 | 10 | 20 | 30 ④ | 27...32 | 448 | KTA9-40H-32A-VG ④ | Q6 |
| 10 | 10 | 25 | 30 ④ | 30...36 | 432 | KTA9-40H-36A-VG ④ | Q6 |
| 10 | 10 | 30 | 30 ④ | 34...40 | 480 | KTA9-40H-40A-VG ④ | Q6 |
| KTA7-45H High Interrupting Capacity | | | | | | | |
| 2 | 3 | 5 | 7-1/2 | 6.3...10 | 130 | KTA7-45H-10A-VG | Q7 |
| 3 | 5 | 10 | 10 | 10...16 | 208 | KTA7-45H-16A-VG | Q7 |
| 5 | 5 | 10 | 15 | 14.5...20 | 260 | KTA7-45H-20A-VG | Q7 |
| 7-1/2 | 7-1/2 | 15 | 20 | 18...25 | 325 | KTA7-45H-25A-VG | Q7 |
| 7-1/2 | 10 | 20 | 30 | 23...32 | 416 | KTA7-45H-32A-VG | Q7 |
| 10 | 15 | 30 | 40 ④ | 32...45 | 585 | KTA7-45H-45A-VG | Q7 |

Includes:

- Type 4 / 4X / 12 enclosure – watertight, dusttight, corrosion resistant
- KTA9 “Type E” Self-protected Combination Manual Controller (Standard Interrupting Capacity) ⑤
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE or KT7-45-TE)
- Gray and black Type 4/4X/12; IP66 handle (Cat.# KT9-HTN) ④

Modifications (Factory Assembled)

| Description | Add Suffix to Cat. Number |
|---|---------------------------|
| KT9 Auxiliaries & Trip Contacts, Front Mount 250V max. | |
| 1 NO Auxiliary | -B |
| 1 NC Auxiliary | -A |
| 1 NO + 1 NC Auxiliary | -C |
| 2 NO Auxiliaries | -D |
| 1 NO SC+OL + 1 NC | -R |
| 1 NO SC+OL + 1 NO | -S |
| Side Mount 600V max. | |
| 2 NC Auxiliaries | -AS02 |
| 2 NO Auxiliaries | -AS20 |
| 1 NO + 1 NC Auxiliary | -AS11 |
| Additional KT9 Trip Contacts, Side Mount 600V max. | |
| 1 NO SC+OL+1 NO SC | -R00 |
| 1 NO SC+OL+1 NC SC | -R01 |
| 1 NC SC+OL+1 NO SC | -R10 |
| Accessories | |
| Undervoltage Release Module | -UA-* |
| Shunt Release Module | -AA-* |

-UA..-AA Coil Codes (*)

| AC Coil Code | Voltage Range | |
|--------------|---------------|------------|
| | 50 Hz | 60 Hz |
| 24V | 24V | 24V...28V |
| 120V | 110V | 120V |
| 230V | 220...230V | ~ |
| 260V | ~ | 240...260V |
| 277V | ~ | 277V |
| 400V | 380...400V | ~ |
| 480V | 415V | 480V |

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.

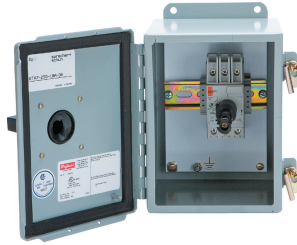
② KTA9 may be applied to single phase loads if 3 poles of device are wired in series. See footnote 1 for device selection criteria.

- ③ A red and yellow handle may be selected instead of the standard gray and black handle. Change “VG” suffix to “VJ”. Ex: Change KTA9-32S-0.16-VG to KTA9-32S-0.16-VJ.

④ Catalog numbers with specific voltages (i.e. @ 575V) shaded in gray are suitable for use as a manual motor starter only because they are not Type E rated. See page F5 for ratings.

Enclosed KTA9 - Type 12

| Amp / Horsepower Rating | | | | Painted Steel, Type 12 Enclosure | | | | Dim Code |
|--|---------|------|---------|----------------------------------|-----------------------|--------------------|----------|----------|
| Max. Horsepower ①②③ | | | | O/L Relay Ampere Range | Magnetic Res. Current | Catalog Number ④ | Dim Code | |
| Three Phase | | | | | | | | |
| 200V | 230V | 460V | 575V | | | | | |
| KTA9-32S Standard Interrupting Capacity | | | | | | | | |
| ~ | ~ | ~ | ~ | 0.10...0.16 | 2.2 | KTA9-32S-0.16A-DG | L | |
| ~ | ~ | ~ | ~ | 0.16...0.25 | 3.5 | KTA9-32S-0.25A-DG | L | |
| ~ | ~ | ~ | ~ | 0.25...0.40 | 5.6 | KTA9-32S-0.40A-DG | L | |
| ~ | ~ | ~ | ~ | 0.40...0.63 | 8.8 | KTA9-32S-0.63A-DG | L | |
| ~ | ~ | 1/2 | 1/2 | 0.63...1.0 | 14 | KTA9-32S-1.0A-DG | L | |
| ~ | ~ | 3/4 | ~ | 1.0...1.6 | 22 | KTA9-32S-1.6A-DG | L | |
| 1/2 | 1/2 | 1 | 1-1/2 | 1.6...2.5 | 35 | KTA9-32S-2.5A-DG | L | |
| 3/4 | 3/4 | 2 | 3 | 2.5...4.0 | 52 | KTA9-32S-4.0A-DG | L | |
| 1 | 1-1/2 | 3 | 5 ④ | 4.0...6.3 | 88 | KTA9-32S-6.3A-DG ④ | L | |
| 2 | 2 | 5 | 7-1/2 ④ | 6.3...10 | 140 | KTA9-32S-10A-DG ④ | L | |
| 3 | 5 | 10 | 10 ④ | 10...16 | 224 | KTA9-32S-16A-DG ④ | L | |
| 5 ④ | 5 ④ | 10 ④ | 15 ④ | 14.5...20 | 280 | KTA9-32S-20A-DG ④ | L | |
| 5 ④ | 7-1/2 ④ | 15 ④ | 20 ④ | 18...25 | 330 | KTA9-32S-25A-DG ④ | L | |
| 7-1/2 ④ | 10 ④ | 20 ④ | 25 ④ | 24...29 | 406 | KTA9-32S-29A-DG ④ | L | |
| 7-1/2 ④ | 10 ④ | 20 ④ | 30 ④ | 27...32 | 448 | KTA9-32S-32A-DG ④ | L | |
| KTA9-40H High Interrupting Capacity | | | | | | | | |
| ~ | ~ | ~ | ~ | 0.40...0.63 | 8.8 | KTA9-40H-0.63A-DG | L | |
| ~ | ~ | 1/2 | 1/2 | 0.63...1.0 | 14 | KTA9-40H-1.0A-DG | L | |
| ~ | ~ | 3/4 | ~ | 1.0...1.6 | 22 | KTA9-40H-1.6A-DG | L | |
| 1/2 | 1/2 | 1 | 1-1/2 | 1.6...2.5 | 33 | KTA9-40H-2.5A-DG | L | |
| 3/4 | 3/4 | 2 | 3 | 2.5...4.0 | 52 | KTA9-40H-4.0A-DG | L | |
| 1 | 1-1/2 | 3 | 5 | 4.0...6.3 | 82 | KTA9-40H-6.3A-DG | L | |
| 2 | 2 | 5 | 7-1/2 | 6.3...10 | 130 | KTA9-40H-10A-DG | L | |
| 3 | 5 | 10 | 10 | 10...16 | 208 | KTA9-40H-16A-DG | L | |
| 5 | 5 | 10 | 15 ④ | 14.5...20 | 260 | KTA9-40H-20A-DG ④ | L | |
| 5 | 7-1/2 | 15 | 20 ④ | 18...25 | 325 | KTA9-40H-25A-DG ④ | L | |
| 7-1/2 | 10 | 20 | 25 ④ | 24...29 | 406 | KTA9-40H-29A-DG ④ | L | |
| 7-1/2 | 10 | 20 | 30 ④ | 27...32 | 448 | KTA9-40H-32A-DG ④ | L | |
| 10 | 10 | 25 | 30 ④ | 30...36 | 432 | KTA9-40H-36A-DG ④ | L | |
| 10 | 10 | 30 | 30 ④ | 34...40 | 480 | KTA9-40H-40A-DG ④ | L | |



Includes:

- Type 12 enclosure – dusttight
- KTA9 “Type E” Self-protected Combination Manual Controller ⑤
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE)
- Gray and black Type 4/4X/12; IP66 handle (Cat.# KT9-HTN) ④

Modifications (Factory Assembled)

| Description | Add Suffix to Cat. Number |
|---|---------------------------|
| KT9 Auxiliaries & Trip Contacts, Front Mount 250V max. | |
| 1 NO Auxiliary | -B |
| 1 NC Auxiliary | -A |
| 1 NO + 1 NC Auxiliary | -C |
| 2 NO Auxiliaries | -D |
| 1 NO SC+OL + 1 NC | -R |
| 1 NO SC+OL + 1 NO | -S |
| Side Mount 600V max. | |
| 2 NC Auxiliaries | -AS02 |
| 2 NO Auxiliaries | -AS20 |
| 1 NO + 1 NC Auxiliary | -AS11 |
| Additional KT9 Trip Contacts, Side Mount 600V max. | |
| 1 NO SC+OL+1 NO SC | -R00 |
| 1 NO SC+OL+1 NC SC | -R01 |
| 1 NC SC+OL+1 NO SC | -R10 |
| Accessories | |
| Undervoltage Release Module | -UA-* |
| Shunt Release Module | -AA-* |

-UA..-AA Coil Codes (*)

| AC Coil Code | Voltage Range | |
|--------------|---------------|------------|
| | 50 Hz | 60 Hz |
| 24V | 24V | 24V...28V |
| 120V | 110V | 120V |
| 230V | 220...230V | ~ |
| 260V | ~ | 240...260V |
| 277V | ~ | 277V |
| 400V | 380...400V | ~ |
| 480V | 415V | 480V |

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.

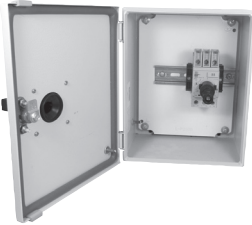
- For motor with service factor less than 1.15. Use motor nameplate full load current times 0.9 and choose the motor starter with the appropriate current range. Example: Motor FLC = 4.2A; S.F. = 1.0. 4.2A x 0.9 = 3.78A. Select catalog number KTA9-32S-4.0A.

② KTA9 may be applied to single phase loads if 3 poles of device are wired in series. See footnote 1 for device selection criteria.

④ A red and yellow handle may be selected instead of the standard gray and black handle. Change “DG” suffix to “DJ”. Ex: Change KTA9-32S-0.16-DG to KTA9-32S-0.16-DJ.

⑤ Catalog numbers with specific voltages (i.e. @ 575V) shaded in gray are suitable for use as a manual motor starter only because they are not Type E rated. See page F5 for ratings.

Enclosed KTA9 - Type 4 / 12

| Amp / Horsepower Rating | | | | Painted Steel, Type 4 / 12 Enclosure | | | |
|---|---------|------|---------|--------------------------------------|-----------------------|--------------------|----------|
|  | | | | O/L Relay Ampere Range | Magnetic Res. Current | Catalog Number ③ | Dim Code |
| | | | | | | | |
| Three Phase | | | | | | | |
| 200V | 230V | 460V | 575V | | | | |
| KTA9-32S Standard Interrupting Capacity | | | | | | | |
| ~ | ~ | ~ | ~ | 0.10...0.16 | 2.2 | KTA9-32S-0.16A-WG | W6 |
| ~ | ~ | ~ | ~ | 0.16...0.25 | 3.5 | KTA9-32S-0.25A-WG | W6 |
| ~ | ~ | ~ | ~ | 0.25...0.40 | 5.6 | KTA9-32S-0.40A-WG | W6 |
| ~ | ~ | ~ | ~ | 0.40...0.63 | 8.8 | KTA9-32S-0.63A-WG | W6 |
| ~ | ~ | 1/2 | 1/2 | 0.63...1.0 | 14 | KTA9-32S-1.0A-WG | W6 |
| ~ | ~ | 3/4 | ~ | 1.0...1.6 | 22 | KTA9-32S-1.6A-WG | W6 |
| 1/2 | 1/2 | 1 | 1-1/2 | 1.6...2.5 | 35 | KTA9-32S-2.5A-WG | W6 |
| 3/4 | 3/4 | 2 | 3 | 2.5...4.0 | 52 | KTA9-32S-4.0A-WG | W6 |
| 1 | 1-1/2 | 3 | 5 ④ | 4.0...6.3 | 88 | KTA9-32S-6.3A-WG ④ | W6 |
| 2 | 2 | 5 | 7-1/2 ④ | 6.3...10 | 140 | KTA9-32S-10A-WG ④ | W6 |
| 3 | 5 | 10 | 10 ④ | 10...16 | 224 | KTA9-32S-16A-WG ④ | W6 |
| 5 ④ | 5 ④ | 10 ④ | 15 ④ | 14.5...20 | 280 | KTA9-32S-20A-WG ④ | W6 |
| 5 ④ | 7-1/2 ④ | 15 ④ | 20 ④ | 18...25 | 330 | KTA9-32S-25A-WG ④ | W6 |
| 7-1/2 ④ | 10 ④ | 20 ④ | 25 ④ | 24...29 | 406 | KTA9-32S-29A-WG ④ | W6 |
| 7-1/2 ④ | 10 ④ | 20 ④ | 30 ④ | 27...32 | 448 | KTA9-32S-32A-WG ④ | W6 |
| KTA9-40H High Interrupting Capacity | | | | | | | |
| ~ | ~ | ~ | ~ | 0.40...0.63 | 8.8 | KTA9-40H-0.63A-VG | W6 |
| ~ | ~ | 1/2 | 1/2 | 0.63...1.0 | 14 | KTA9-40H-1.0A-VG | W6 |
| ~ | ~ | 3/4 | ~ | 1.0...1.6 | 22 | KTA9-40H-1.6A-VG | W6 |
| 1/2 | 1/2 | 1 | 1-1/2 | 1.6...2.5 | 33 | KTA9-40H-2.5A-WG | W6 |
| 3/4 | 3/4 | 2 | 3 | 2.5...4.0 | 52 | KTA9-40H-4.0A-WG | W6 |
| 1 | 1-1/2 | 3 | 5 | 4.0...6.3 | 82 | KTA9-40H-6.3A-WG | W6 |
| 2 | 2 | 5 | 7-1/2 | 6.3...10 | 130 | KTA9-40H-10A-WG | W6 |
| 3 | 5 | 10 | 10 | 10...16 | 208 | KTA9-40H-16A-WG | W6 |
| 5 | 5 | 10 | 15 ④ | 14.5...20 | 260 | KTA9-40H-20A-WG ④ | W6 |
| 5 | 7-1/2 | 15 | 20 ④ | 18...25 | 325 | KTA9-40H-25A-WG ④ | W6 |
| 7-1/2 | 10 | 20 | 25 ④ | 24...29 | 406 | KTA9-40H-29A-WG ④ | W6 |
| 7-1/2 | 10 | 20 | 30 ④ | 27...32 | 448 | KTA9-40H-32A-WG ④ | W6 |
| 10 | 10 | 25 | 30 ④ | 30...36 | 432 | KTA9-40H-36A-WG ④ | W6 |
| 10 | 10 | 30 | 30 ④ | 34...40 | 480 | KTA9-40H-40A-WG ④ | W6 |
| KTA7-45H High Interrupting Capacity | | | | | | | |
| 2 | 3 | 5 | 7-1/2 | 6.3...10 | 130 | KTA7-45H-10A-WG | R/F |
| 3 | 5 | 10 | 10 | 10...16 | 208 | KTA7-45H-16A-WG | R/F |
| 5 | 5 | 10 | 15 | 14.5...20 | 260 | KTA7-45H-20A-WG | R/F |
| 7-1/2 | 7-1/2 | 15 | 20 | 18...25 | 325 | KTA7-45H-25A-WG | R/F |
| 7-1/2 | 10 | 20 | 30 | 23...32 | 416 | KTA7-45H-32A-WG | R/F |
| 10 | 15 | 30 | 40 ④ | 32...45 | 585 | KTA7-45H-45A-WG ④ | R/F |

Includes:

- Type 4 / 12 enclosure – watertight, dusttight
- KTA9 “Type E” Self-protected Combination Manual Controller ④
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE or KT7-45-TE)
- Gray and black Type 4/4X/12; IP66 handle (Cat.# KT9-HTN) ⑤

Modifications (Factory Assembled)

| Description | Add Suffix to Cat. Number |
|---|---------------------------|
| KT9 Auxiliaries & Trip Contacts, Front Mount 250V max. | |
| 1 NO Auxiliary | -B |
| 1 NC Auxiliary | -A |
| 1 NO + 1 NC Auxiliary | -C |
| 2 NO Auxiliaries | -D |
| 1 NO SC+OL + 1 NC | -R |
| 1 NO SC+OL + 1 NO | -S |
| Side Mount 600V max. | |
| 2 NC Auxiliaries | -AS02 |
| 2 NO Auxiliaries | -AS20 |
| 1 NO + 1 NC Auxiliary | -AS11 |
| Additional KT9 Trip Contacts, Side Mount 600V max. | |
| 1 NO SC+OL+1 NO SC | -R00 |
| 1 NO SC+OL+1 NC SC | -R01 |
| 1 NC SC+OL+1 NO SC | -R10 |
| Accessories | |
| Undervoltage Release Module | -UA-* |
| Shunt Release Module | -AA-* |

-UA...AA Coil Codes (*)

| AC Coil Code | Voltage Range | |
|--------------|---------------|------------|
| | 50 Hz | 60 Hz |
| 24V | 24V | 24V...28V |
| 120V | 110V | 120V |
| 230V | 220...230V | ~ |
| 260V | ~ | 240...260V |
| 277V | ~ | 277V |
| 400V | 380...400V | ~ |
| 480V | 415V | 480V |

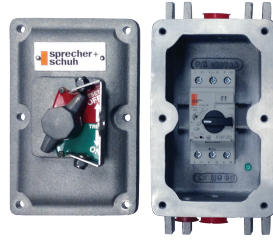
① Horsepower ratings shown in the table above are for reference. The final selection of the controller depends on the actual motor full load current and service factor.

- 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 KTA9 may be applied to single phase loads if 3 poles of device are wired in series. See footnote 1 for device selection criteria.
- ③ A red and yellow handle may be selected instead of the standard gray and black handle. Change “WG” suffix to “WJ”. Ex: Change KTA9-32S-0.16-WG to KTA9-32S-0.16-WJ.
- ④ Catalog numbers with specific voltages (i.e. @ 575V) shaded in gray are suitable for use as a manual motor starter only because they are not Type E rated. See page F5 for ratings.

KTA9 Explosion Proof Motor Controllers - NEMA Type 7/9

| Amp / Horsepower Rating | | | | | O/L Relay Ampere Range | Magnetic Res. Current | Catalog Number | Dim Code |
|--|-------|------|-------|-------------|------------------------|--------------------------|----------------|----------|
| Max. Horsepower ①② | | | | | | | | |
| Three Phase | | | | | | | | |
| 200V | 230V | 460V | 575V | | | | | |
| KTA9-32S Standard Interrupting Capacity | | | | | | | | |
| ~ | ~ | ~ | ~ | 0.10...0.16 | 2.2 | KTA9-32S-0.16A-EX | EX | |
| ~ | ~ | ~ | ~ | 0.16...0.25 | 3.5 | KTA9-32S-0.25A-EX | EX | |
| ~ | ~ | ~ | ~ | 0.25...0.40 | 5.6 | KTA9-32S-0.4A-EX | EX | |
| ~ | ~ | ~ | ~ | 0.40...0.63 | 8.8 | KTA9-32S-0.63A-EX | EX | |
| ~ | ~ | 1/2 | 1/2 | 0.63...1.0 | 14 | KTA9-32S-1.0A-EX | EX | |
| ~ | ~ | 3/4 | ~ | 1.0...1.6 | 22 | KTA9-32S-1.6A-EX | EX | |
| 1/2 | 1/2 | 1 | 1-1/2 | 1.6...2.5 | 35 | KTA9-32S-2.5A-EX | EX | |
| 3/4 | 3/4 | 2 | 3 | 2.5...4.0 | 52 | KTA9-32S-4.0A-EX | EX | |
| 1 | 1-1/2 | 3 | 5 | 4.0...6.3 | 88 | KTA9-32S-6.3A-EX | EX | |
| 2 | 2 | 5 | 7-1/2 | 6.3...10 | 140 | KTA9-32S-10A-EX | EX | |
| 3 | 5 | 10 | 10 | 10...16 | 224 | KTA9-32S-16A-EX | EX | |
| 5 | 5 | 10 | 15 | 14.5...20 | 280 | KTA9-32S-20A-EX | EX | |
| 5 | 7-1/2 | 15 | 20 | 18...25 | 330 | KTA9-32S-25A-EX | EX | |
| 7-1/2 | 10 | 20 | 25 | 24...29 | 406 | KTA9-32S-29A-EX | EX | |
| 7-1/2 | 10 | 20 | 30 | 27...32 | 448 | KTA9-32S-32A-EX | EX | |



Includes:

- Class I, Div 1, 2, Group C, D
Class II, Div 1, 2, Group E, F & G enclosure
Class III
NEMA Type 7/9
- KTA9 "Type E" Self-protected Combination Manual Motor Controller
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE)

Modifications (Factory Assembled)

| Description | Add Suffix to Cat. Number |
|--|----------------------------------|
| KT9 Auxiliaries & Trip Contacts, Front Mount 250V max. 1 NO Auxiliary 1 NC Auxiliary 1 NO + 1 NC Auxiliary 2 NO Auxiliaries 1 NO SC+OL + 1 NC 1 NO SC+OL + 1 NO | -B -A -C -D -R -S |
| Side Mount 600V max. 2 NC Auxiliaries 2 NO Auxiliaries 1 NO + 1 NC Auxiliary | -AS02 -AS20 -AS11 |
| Additional KT9 Trip Contacts, Side Mount 600V max. 1 NO SC+OL+1 NO SC 1 NO SC+OL+1 NC SC 1 NC SC+OL+1 NO SC | -R00 -R01 -R10 |
| Accessories Undervoltage Release Module Shunt Release Module | -UA-* -AA-* |
| Enclosure Modifications Breather/Drain | -BD |

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.

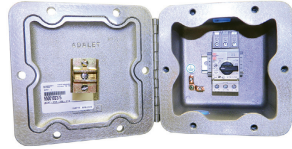
- For motor with service factor less than 1.15. Use motor nameplate full load current times 0.9 and choose the motor starter with the appropriate current range. Example: Motor FLC = 4.2A; S.F. = 1.0. 4.2A x 0.9 = 3.78A. Select catalog number KTA9-32S-0.40A.

- ② KTA9 may be applied to single phase loads if 3 poles of device are wired in series. See footnote 1 for device selection criteria.
- ③ Catalog numbers with specific voltages (i.e. @ 575V) shaded in gray are suitable for use as a manual motor starter only because they are not Type E rated. See page F5 for ratings.
- ④ -UA* and -AA* options not possible in the -EX Enclosure.

F Enclosed Motor Circuit Controllers

KTA9 Explosion Proof Motor Controllers – NEMA Type 4/7/9 with Gasket

| Amp / Horsepower Rating | | | | O/L Relay Ampere Range | Magnetic Res. Current | Catalog Number ☉ | Dim Code |
|--|---------|------|---------|------------------------|-----------------------|-------------------|----------|
| Max. Horsepower ①② | | | | | | | |
| Three Phase | | | | | | | |
| 200V | 230V | 460V | 575V | | | | |
| KTA9-32S Standard Interrupting Capacity | | | | | | | |
| ~ | ~ | ~ | ~ | 0.10...0.16 | 2.2 | KTA9-32S-0.16A-EY | EY |
| ~ | ~ | ~ | ~ | 0.16...0.25 | 3.5 | KTA9-32S-0.25A-EY | EY |
| ~ | ~ | ~ | ~ | 0.25...0.40 | 5.6 | KTA9-32S-0.40A-EY | EY |
| ~ | ~ | ~ | ~ | 0.40...0.63 | 8.8 | KTA9-32S-0.63A-EY | EY |
| ~ | ~ | 1/2 | 1/2 | 0.63...1.0 | 14 | KTA9-32S-1.0A-EY | EY |
| ~ | ~ | 3/4 | ~ | 1.0...1.6 | 22 | KTA9-32S-1.6A-EY | EY |
| 1/2 | 1/2 | 1 | 1-1/2 | 1.6...2.5 | 35 | KTA9-32S-2.5A-EY | EY |
| 3/4 | 3/4 | 2 | 3 | 2.5...4.0 | 52 | KTA9-32S-4.0A-EY | EY |
| 1 | 1-1/2 | 3 | 5 ☉ | 4.0...6.3 | 88 | KTA9-32S-6.3A-EY | EY |
| 2 | 2 | 5 | 7-1/2 ☉ | 6.3...10 | 140 | KTA9-32S-10A-EY | EY |
| 3 | 5 | 10 | 10 ☉ | 10...16 | 224 | KTA9-32S-16A-EY | EY |
| 5 ☉ | 5 ☉ | 10 ☉ | 15 ☉ | 14.5...20 | 280 | KTA9-32S-20A-EY | EY |
| 5 ☉ | 7-1/2 ☉ | 15 ☉ | 20 ☉ | 18...25 | 330 | KTA9-32S-25A-EY | EY |
| 7-1/2 ☉ | 10 ☉ | 20 ☉ | 25 ☉ | 24...29 | 406 | KTA9-32S-29A-EY | EY |
| 7-1/2 ☉ | 10 ☉ | 20 ☉ | 30 ☉ | 27...32 | 448 | KTA9-32S-32A-EY | EY |
| KTA9-40H High Interrupting Capacity | | | | | | | |
| ~ | ~ | ~ | ~ | 0.40...0.63 | 8.8 | KTA9-40H-0.63A-EY | EY |
| ~ | ~ | 1/2 | 1/2 | 0.63...1.0 | 14 | KTA9-40H-1.0A-EY | EY |
| ~ | ~ | 3/4 | ~ | 1.0...1.6 | 22 | KTA9-40H-1.6A-EY | EY |
| 1/2 | 1/2 | 1 | 1-1/2 | 1.6...2.5 | 33 | KTA9-40H-2.5A-EY | EY |
| 3/4 | 3/4 | 2 | 3 | 2.5...4.0 | 52 | KTA9-40H-4.0A-EY | EY |
| 1 | 1-1/2 | 3 | 5 | 4.0...6.3 | 82 | KTA9-40H-6.3A-EY | EY |
| 2 | 2 | 5 | 7-1/2 | 6.3...10 | 130 | KTA9-40H-10A-EY | EY |
| 3 | 5 | 10 | 10 | 10...16 | 208 | KTA9-40H-16A-EY | EY |
| 5 | 5 | 10 | 15 ☉ | 14.5...20 | 260 | KTA9-40H-20A-EY | EY |
| 5 | 7-1/2 | 15 | 20 ☉ | 18...25 | 325 | KTA9-40H-25A-EY | EY |
| 7-1/2 | 10 | 20 | 25 ☉ | 24...29 | 406 | KTA9-40H-29A-EY | EY |
| 7-1/2 | 10 | 20 | 30 ☉ | 27...32 | 448 | KTA9-40H-32A-EY | EY |
| 10 | 10 | 25 | 30 ☉ | 30...36 | 432 | KTA9-40H-36A-EY | EY |
| 10 | 10 | 30 | 30 ☉ | 34...40 | 480 | KTA9-40H-40A-EY | EY |
| KTA7-45H High Interrupting Capacity | | | | | | | |
| 2 | 3 | 5 | 7-1/2 | 6.3...10 | 130 | KTA7-45H-10A-EZ | EZ |
| 3 | 5 | 10 | 10 | 10...16 | 208 | KTA7-45H-16A-EZ | EZ |
| 5 | 5 | 10 | 15 | 14.5...20 | 260 | KTA7-45H-20A-EZ | EZ |
| 7-1/2 | 7-1/2 | 15 | 20 | 18...25 | 325 | KTA7-45H-25A-EZ | EZ |
| 7-1/2 | 10 | 20 | 30 | 23...32 | 416 | KTA7-45H-32A-EZ | EZ |
| 10 | 15 | 30 | 40 ☉ | 32...45 | 585 | KTA7-45H-45A-EZ | EZ |



EY Enclosure shown

Includes:

- Class I, Div 1, 2, Group C, D
Class II, Div 1, 2, Group E, F & G enclosure
Class III
- NEMA Type 4/7/9
- KTA9 "Type E" Self-protected Combination Manual Motor Controller ☉
- Terminal Adaptor for Type E Applications (Cat.# KT9-40-TE or KT7-45-TE)

Modifications (Factory Assembled)

| Description | Add Suffix to Cat. Number |
|--|----------------------------------|
| KT9 Auxiliaries & Trip Contacts, Front Mount 250V max. 1 NO Auxiliary 1 NC Auxiliary 1 NO + 1 NC Auxiliary 2 NO Auxiliaries 1 NO SC+OL + 1 NC 1 NO SC+OL + 1 NO | -B -A -C -D -R -S |
| Side Mount 600V max. 2 NC Auxiliaries 2 NO Auxiliaries 1 NO + 1 NC Auxiliary | -AS02 -AS20 -AS11 |
| Additional KT9 Trip Contacts, Side Mount 600V max. 1 NO SC+OL+1 NO SC 1 NO SC+OL+1 NC SC 1 NC SC+OL+1 NO SC | -R00 -R01 -R10 |
| Accessories Undervoltage Release Module Shunt Release Module | -UA-* -AA-* |
| Enclosure Modifications Breather/Drain | -BD |

-UA..-AA Coil Codes (*)

| AC Coil Code | Voltage Range | |
|--------------|---------------|------------|
| | 50 Hz | 60 Hz |
| 24V | 24V | 24V...28V |
| 120V | 110V | 120V |
| 230V | 220...230V | ~ |
| 260V | ~ | 240...260V |
| 277V | ~ | 277V |
| 400V | 380...400V | ~ |
| 480V | 415V | 480V |

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 KTA9 may be applied to single phase loads if 3 poles of device are wired in series. See footnote ① for device selection criteria.

③ Catalog numbers with specific voltages (i.e. @ 575V) shaded in gray are suitable for use as a manual motor starter only because they are not Type E rated. See page F5 for ratings.