# **CX7 Enclosed** Type E/F **Combination** Confrollers

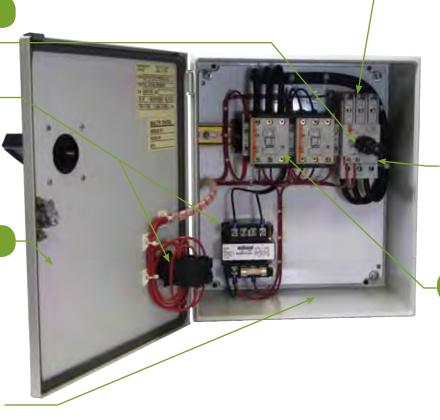
A compact, low-cost alternative to the traditional combination starter!

### Flexible

- Defeatable interlocked door mechanism clearly shows ON/OFF or tripped condition
- Factory modifications include multi-function pilot devices, pilot lights, front and side-mount auxiliaries, terminal blocks and more

### Enclosed

- Type 3/4/4X/12 approved through-the-door motor disconnect
- NEMA 4/12 rated suitable for indoors or outdoors
- Three compact sizes for a reduced panel footprint 10" x 5" x 5" deep 10" x 8" x 8.25" deep 14" x 12" x 10" deep
- Generous space for control power transformer and terminal blocks or relays



### **KT7** Quality

- "Self-Protected Type E" device provides currentlimiting short-circuit protection up to 65kA, and Class 10 thermal overload protection
- The Type E rating eliminates the need for an additional circuit breaker or fused disconnect to provide branch circuit protection – the KT7 *is* the BCPD
- · Short circuit indication
- Differential tripping mechanism provides accelerated tripping under single-phase conditions

### **CA7 Reliability**

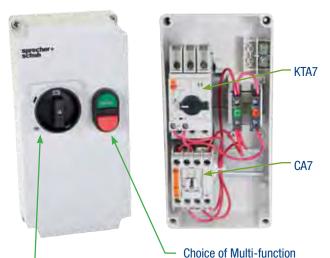
- Provides for remote control functions
- Available for AC or DC control
- Reversing and non-reversing models
- Fewer components mean a smaller enclosure and lower cost



### CX7 = CA7 Contactor + KT7 "Type E" Motor Circuit Controller

Sprecher + Schuh's CX7 enclosed combination starter is a simple, compact alternative to traditional combination starters. With decreased overall dimensions and fewer components required, the CX7 can be housed in a much smaller enclosure — resulting in lower cost. Sprecher + Schuh's KT7 controller makes it possible, providing motor disconnect, current-limiting short-circuit protection, Class 10 overload protection and signaling functions all in one device.

# Type E/F Combo Solutions



Type 1/12K/IP66 handle (KT7-SHB)

100



(KT7-SHB)

CAU7

pushbutton, Selector switch or

Pilot Light (factory assembled)

pushbutton, Selector Switch or Pilot Light (factory assembled)

### Non-Reversing Combination KWIKstarter

- Full voltage non-reversing controller from 9A to 23A
- Three Phase up to 15 HP @ 480Y/277V
- Type 1/12K Non-metallic enclosure (KS7-C0C4R)
- KTA7 "Type E/F" Self-protected Motor Controller with one NO front mount Auxiliary Contact
- Terminal Adaptor for Type E Applications
- CA7 contactor for AC or DC control (for remote operation)
- Gray and black Type 1/12K; IP66 handle
- Includes Power wiring
- Factory installed Pilot device option using base mount contacts means no wires to the cover

### Reversing Combination KWIKstarter

- Full voltage reversing controller from 9A to 23A
- Three Phase up to 15 HP @ 480Y/277V
- Type 1/12K Non-metallic enclosure (KS7-C0C4R)
- KTA7 "Type E/F" Self-protected Motor Controller with one NO front mount Auxiliary Contact
- Terminal Adaptor for Type E Applications
- CA7 contactor for AC or DC control (for remote operation)
- Gray and black Type 1/12K; IP66 handle
- Includes Power wiring
- Factory installed Pilot device option using base mount contacts means no wires to the cover

### CX7 KWIKstarters: Order factory assembled or build from stock

The Sprecher + Schuh CX7 Type E/F Combination KWIKstarters can be built from stock using standard distributor stock.



KTA7-25S...25H Self-Protected Combination Controller



CA7-9...23 **Contactors** 





KT7-SHB Handle Mechanism



KS7-COC4R Enclosure



# The KT7 Motor Circuit Controller Makes it Possible

Sprecher + Schuh's KT7 motor circuit controller combines several control and protection functions into one compact unit. It provides Class 10 thermal overload protection, current-limiting short-circuit protection up to 65kA, and signaling capabilities. And its rating as a self-protected Construction Type E device allows it to serve as the motor disconnect, and eliminates the need for additional circuit breakers or fused disconnect switches to provide branch circuit protection.

#### Thermal Overload + Short Circuit Protection + Switching/Signaling + Motor Disconnect



Non-Reversing Type E/F Combination Controller

- Full voltage non-reversing controller from 9A to 43A
- Three Phase up to 30 HP @ 480Y/277V or 600Y/347V
- Type 12 / 4 enclosure watertight, dustight
- KTA7 "Type E/F" Self-protected Motor Controller with one NO front mount Auxiliary Contact
- Terminal Adaptor for Type E Applications
- CA7 contactor for AC or DC control (for remote operation)
- Includes Power wiring
- Gray and black Type 4/4X/12; IP66 handle
- Pilot device shown is factory installed option



 Type 4/4X/12 IP66 handle (KT7-HTN)

### Reversing Type E/F Combination Controller

- Full voltage reversing controller from 9A to 43 A
- Three Phase up to 30 HP @ 480Y/277V or 600Y/347V
- Type 12 / 4 enclosure watertight, dustight
- KT7 "Type E/F" Motor Controller with one NO front mount Auxiliary Contact
- Terminal Adaptor for Type E Applications
- CA7 contactor for AC or DC control (for remote operation)
- Includes Power wiring
- Gray and black Type 4/4X/12; IP66 handle
- Control power transformer, pilot device, terminals and other equipment shown are factory installed options

## More Options for your Panels

### **Explosion Proof Type E/F Controllers**

The Sprecher + Schuh CX7 Type E/F Combination Controller is also available in an Explosion Proof Type 7/9 enclosure, up to 30 HP @ 480Y/277V or 600Y/347V. This enclosure is just 12-1/2" x 10-1/2" x 8-3/8" deep and can be modified with standard options, such as Start-Stop pushbuttons or Selector Switches. Standard options include additional auxiliaries on the KT7 or the CA7 contactor. The CX7 Explosion Proof Type E/F Motor Controller is a compact, reliable alternative to heavier, more expensive, traditional combination starters.

### **Simplex & Duplex Pump Controllers**

Sprecher + Schuh duplex pump controllers are designed for two specific requirements: duplexing and alternation.

#### Duplexing

Duplexing provides capacity for above normal demand or system peaking by allowing both motors to run simultaneously. It also provides standby capacity if one unit fails. Two pilot devices (pressure or float switches) are required to provide electrical signals to the controller.

#### **Alternation**

Alternation provides for equal wear on the two machines being controlled by reversing the "lead" and "lag" role of the specific motors. Alternation occurs at any time the two motors are at rest.

#### Less is More

KT7's Type E Rating means fewer components, and a much smaller enclosure than the traditional duplex pump controller. And one control power transformer is sufficient to power this compact design.







# Fewer components and smaller enclosures mean reduced cost and significant space savings!

Contact your Sprecher + Schuh representative for more information.

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