

Starters + Enclosed Product

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C

Starters + Enclosed Products

Starters and Enclosed Product

Open & enclosed pre-wired starters and enclosed contactors for any application



In addition to selling “open” components, Sprecher + Schuh also offers a full array of preassembled and enclosed products ready to install when they reach your dock.

Standard or customized

The cataloged products in this section comprise Sprecher + Schuh's standard offerings. In most cases, engineering drawings and bills-of-material have already been created and assembly procedures have been standardized. Generally speaking, lead times are shorter on these standard items.

- Fractional Manual Starters
- Enclosed contactors
- Magnetic motor starters
- KWIKstarters
- Combination starters
- Explosion-proof starters
- Multi-speed starters
- Reduced voltage starters
- Pump controllers
- Softstarters (see Section D)
- Type E/F combination controllers (see Section F)

Your sales representative and our Engineering department will also work with you to customize any of our standard pre-assembled or enclosed products to suit your exact specifications. Any combination of enclosure types, pilot devices, control power transformers, meters and other modi-



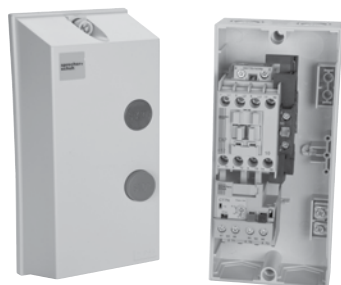
fications can be combined to provide exactly the panel you need.

UL/CSA approved shop

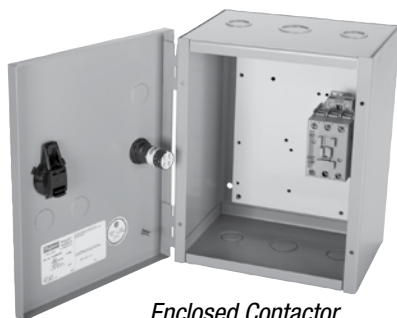
Sprecher + Schuh's assembly operations in the US and Canada are both UL Approved UL508A shops and CSA certified. This means, upon customer request, we can build UL 508A Listed and CSA compliant panels that satisfy the most rigorous UL inspection. Regardless of whether your panel has a UL508A Listing, panels built by Sprecher + Schuh adhere to UL mandated design and wiring standards.

Built with quality and pride

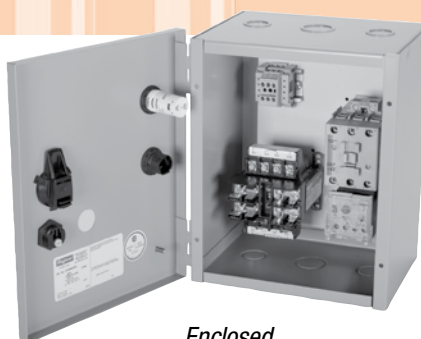
Every panel built by Sprecher + Schuh is meticulously designed and constructed. Where possible, all panels are



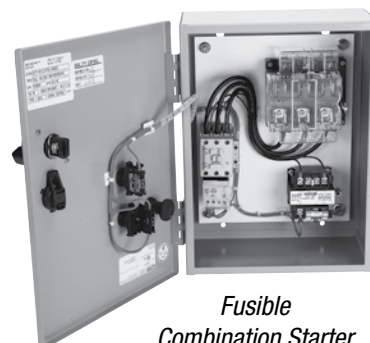
KWIKstarters



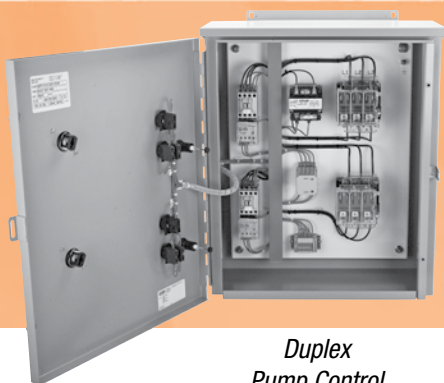
Enclosed Contactor



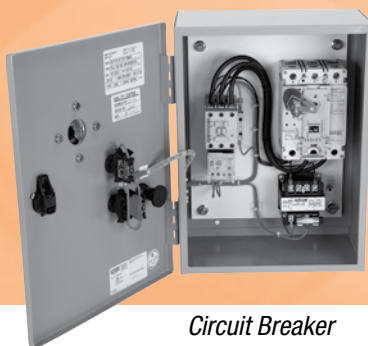
*Enclosed
Non-combination Starter*



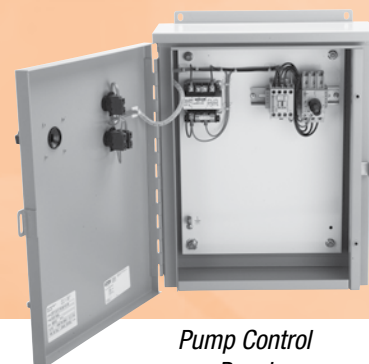
*Fusible
Combination Starter*



*Duplex
Pump Control*



*Circuit Breaker
Combination Starter*



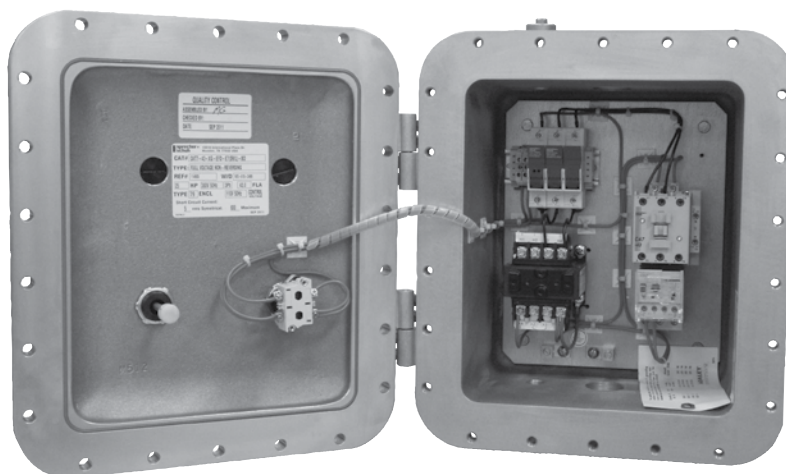
*Pump Control
Panel*

laid out with generous wiring space. Control wiring is neatly bundled and tied to the back pan. Outsourced components are industrial control quality from name brand manufacturers. Control wiring and device function is electrically tested before the panel leaves our facility.

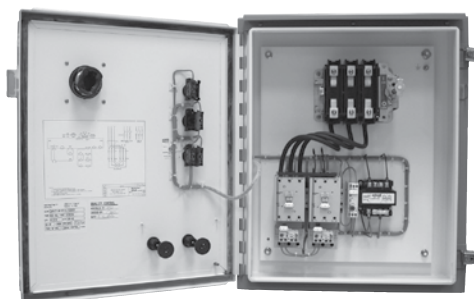
ISO 9001 and Atex Certified

Sprecher + Schuh is committed to a quality system, focused on customer solutions. This is achieved through superior products and services, excellent customer service, technical expertise, supplier partnerships, and industry leadership.

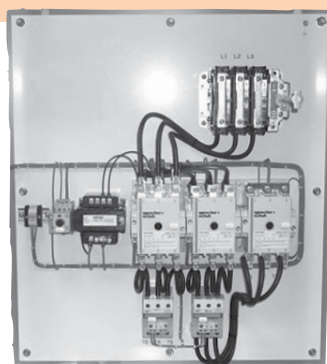
Our facility is ISO 9001 certified. That was the catalyst in allowing Sprecher + Schuh to obtain Atmospheres Explosives certification (ATEX). ATEX certification permits us to build explosion-proof equipment and panels to be supplied across the European Union, including Canada.



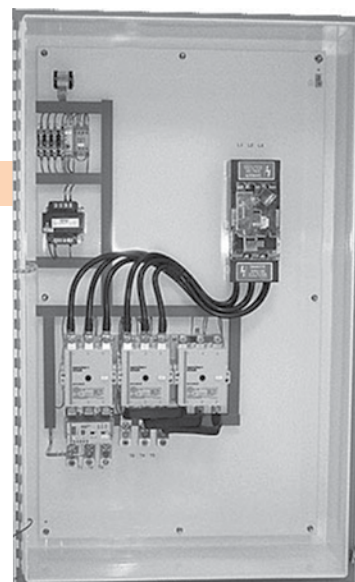
*Explosion Proof
Non-combination Starter*



Part-Winding Starter



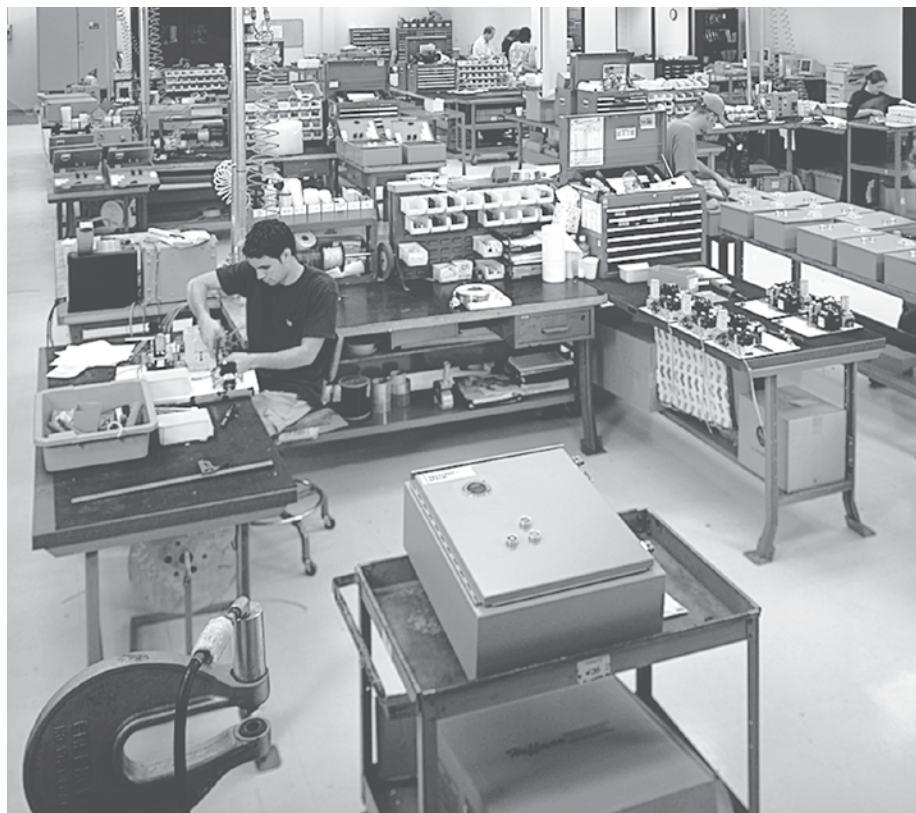
Multi-Speed Starter



Wye-Delta Starter

Orange Express

A program designed to meet the demand for shipment of enclosed contactors, starters and Type E Self-Protected Manual Motor Controllers in 3 days or less, from the time we enter your order until it is ready for shipment; **GUARANTEED.**

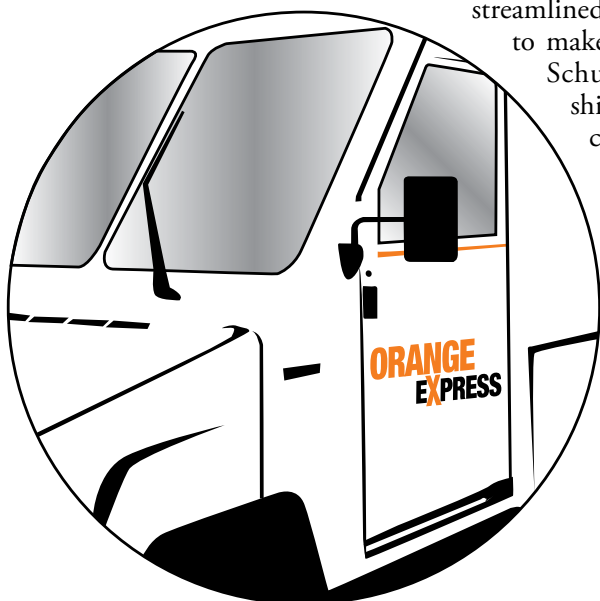


Sprecher + Schuh has shipped stock components for years while the demands on our Custom Control Panel Shop business has steadily increased. Our Houston, Richmond and Canada facilities accommodate customer demand for quick turn around on standard enclosed contactors, manual motor starters, magnetic motor starters and Combo starters. More stock, more manpower and streamlined logistics are all combined to make it possible for Sprecher + Schuh to guarantee three day shipment for a variety of enclosed products.

Check out the details of Orange Express; we are confident you won't be disappointed!

Getting started

- Orange Express orders received by Richmond Customer Service by noon on day one will ship by the end of day three.
- Orange Express orders must be complete with all details before the three day clock can be started.
- Orange Express orders must be clearly identified as an Orange Express order.
- Orange Express orders may be shipped standard freight or express. Express delivery must be clearly marked and will be pre-paid and charged.
- Orange Express orders are limited to the enclosed products detailed and marked with the OE logo in this catalog.
- Orange Express orders may include up to five items; that's five of the same item or five different line items.
- Orange Express orders must utilize established Sprecher + Schuh standard wiring diagrams.



Look for the Orange Express Icons

The OE icon is scattered throughout the catalog, indicating which products are available in the program. Orange Express includes the following products as detailed in the Orange Express Selection Guide:

- Kwikstarters II
- FVNR CA7 Contactors – Type 1 and 12 enclosed
- FVR CA7 Contactors – Type 1 and 12 enclosed
- FVNR CAT7 Magnetic Starters – Type 1, 12 and non-metallic 4X enclosed
- FVR CAUT7 Magnetic Starters – Type 1, 12 and non-metallic 4X enclosed
- FVNR CBT7 Magnetic Starters – Type 1, 12 and non-metallic 4X enclosed
- FVR CBUT7 Magnetic Starters – Type 1, 12 and non-metallic 4X enclosed.

- FVNR CATN7 NEMA Size 00, 0, 1 and 2 Magnetic Starters – Type 1, 12 and non-metallic 4X enclosed
- Combo CAT7 & CATN7 MCCB FVNR Magnetic Starters - Type 1, 12 and non-metallic 4X enclosed
- Combo CAT7 Fusible FVNR Magnetic Starters - Type 1, 12 and non-metallic 4X enclosed
- Combo CAT7 Non-Fusible FVNR Magnetic Starters - Type 1, 12 and non-metallic 4X enclosed
- KTA7 Type E Self-Protected Manual Motor Controller – Type IP65, 12, 4 and non-metallic 4X enclosed

- CX7 Type E KTA7 Self-Protected Combination FVNR Controller – Type 4/12 enclosed
- All contactors and starters listed above with AC coil only
- Options - factory installed modifications include:
- Start – Stop Pushbutton
- Hand – Off – Auto Selector Switch
- Forward – Stop – Reverse Pushbutton for FVR starters/contactors
- Forward – Off – Reverse Selector Switch for FVR starters/contactors
- Pilot Lights (Two Maximum)
- Additional interlocks
- Surge Suppressor
- Control Power Transformer (with primary and secondary fusing as required)



This item is available in the
ORANGE EXPRESS
3-day shipping program
See selection guide for details

Starters & Enclosed Prod.

OE



Our Guarantee

Orange Express orders not shipped by day three, for some unforeseen reason, will be shipped via premium freight at our expense; that's Sprecher + Schuh's guarantee of quality service and performance.

Catalog Number Coding

Starters and Enclosed Product

CAT

7-30

480

Contactors or Starter Type

Contactor Size

Coil Code (or CPT)

CA Non-reversing Contactor
CAT Starter
CBT Starter (Single Phase)
CATN Starter (NEMA- Three Phase)
CBTN Starter (NEMA- Single Phase)

CAU Reversing Contactor
CBU Reversing Contactor (Single Phase)
CAUT Reversing Starter
CBUT Reversing Starter (Single Phase)
CAUTN Reversing Starter (NEMA)

CAZTT Multispeed-Two Wind. (Conts/VAR TQ)
CAZHT Multispeed-Two Wind. (Const. HP)
CAETT Multispeed-One Wind. (Conts/VAR TQ)
CAEHT Multispeed-One Wind. (Const. HP)

CAAT Autotransformer Starter
CAYT Wye-Delta Starter
CAPWT Part Winding Starter

CAPT Pump Panels Simplex Pump Panel
CAPTN Simplex Pump Panel (NEMA Size)
CADPT Duplex Pump Panel

Small - Series CA7 ①

7-9(E)
 7-12(E)
 7-16(E)
 7-23(E)
 7-30(E)
 7-37(E)
 7-40(E)
 7-43(E)
 7-60(D)
 7-72(D)
 7-85(D)
 7-90(D)
 7-97(D)

Medium - Series CA6

6-115(-EI)
 6-140(-EI)
 6-180(-EI)
 6-210-EI
 6-250-EI
 6-300-EI
 6-420-EI
 6-630-EI
 6-860-EI

Large - Series CA5

5-1200

AC	DC
24(Z)	12E(DD)
110	24E(DD)
120	48E(DD)
208	110E(DD)
220	220E(DD)
220W	
240	
277	
380	
440	
480	
575	
600	

Control Transformer

Code	Primary	Secondary
XA	208	120
XB	240	120
XC	480	120
XD	575	120
XE	240	24
XF	480	24
XG	380	110

For additional **Control Transformer Codes**, refer to Modifications page in this section.

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

① (D) & (E) suffix designates contactors with DC coils

EED

TB20

G

3

Overload Relay

Short-Circuit / Disconnect

Enclosure

Enclosure Cover Control

Options

CEP7 Second Generation - Solid State

CA7-9 thru CA6-860-EI

D1... CEP7 O/L Relay, 3Ø, Class 10, man. reset

E... CEP7S O/L Relay, 1Ø, (selectable)

E... CEP7 O/L Relay, 3Ø, (selectable)

CT7N - Bimetallic Thermal

CA7-9 thru CA7-85

...A-C CT7N O/L Relay, Class 10, manual or automatic reset

...P CT7N O/L Relay, Class 10, manual or automatic reset, separate mount

- G** General Purpose - Type 1 (M1)
D Dusttight - Type 12 (M12)
W Watertight - Type 4 (M4)
C Watertight Corrosion Resistant - Type 4X (F4)
R Raintight - Type 3R (M3R)
E Explosion proof - Type 7 (M7)

Non-Reversing

- 1** Pilot Light Only
2 Pilot Lights (2) Only
3 "Start-Stop" PB
4 "On-Off" PB
5 "Hand-Auto" S/S
6 "Off-On" S/S
7 "Hand-Off-Auto" S/S
0 None

Reversing

- 2** Pilot Lights (2) Only
3 "For-Stop-Rev" PB
4 "Up-Stop-Down" PB
5 "Open-Stop-Close" PB
6 "For-Off-Rev" S/S
7 "Up-Off-Close" S/S
8 "Open-Off-Close" S/S
0 None

Multi-speed

- 2** Pilot Lights (2) Only
3 "High-Stop-Low"
4 "Fast-Stop-Slow"
5 "High-Off-Low"
6 "Fast-Off-Slow" S/S

For additional **Cover Control Codes**, refer to Modifications page in this section.

For complete listing of **Option Codes**, refer to Modifications page in this section.

Through-the-Door Operated Combo

Thermal Magnet Circuit Breaker		Fusible Disconnect		Non Fusible Disconnect	
TB15	15 Amp	JF61	600V/30A	JU61	600V/30A
TB20	20 Amp	JF62	600V/60A	JU62	600V/60A
TB25	25 Amp	JF63	600V/100A	JU63	600V/100A
↓ thru ↓		JF64	600V/200A	JU64	600V/200A
		JF65	600V/400A	JU65	600V/400A
TB700	700 Amp				
Blank	None	Blank	None	Blank	None