

Fireman Damper Interface

for HVAC Starters

Sprecher + Schuh introduces the fireman and damper control interface options exclusively for the HVAC markets. These options are offered in a single package modification to our standard Non-Combination or Combination starters.

The Fireman and Damper interface modification is available in two control voltages; 24 V or 120V AC. The selection of 24 or 120 V AC for the control circuit is dependent on the damper motor control voltage and fireman override voltage which matches the control power transformer secondary (if CPT is provided). The fireman and damper modification is easily added with a simple -FD24 or -FD120 to the end of the catalog number. The modifications are fully integrated and factory installed for a ready-to-use starter.



Many Standard Features

The fireman and damper option provides many standard components for seamless integration into building operations,

- Shutdown Input
- Damper motor
- Damper Switch Input
- Remote Control Device
- Run Permissive
- Fireman's Override
- Indicating Lights
- Factory terminal block jumpers

Still a Compact Enclosed Starter

The fireman and damper option is available for combination and non-combination NEMA labeled HVAC starters in Type 1 or 3R enclosures. The -FD modification increases the size of the enclosure by only a few inches, thus maintaining the compact size Sprecher + Schuh starters are known for.

Because of their very compact size, KWIKstarters are not available with the -FD modification. Contact your Sprecher + Schuh representative for additional details.

Fireman Damper Interface

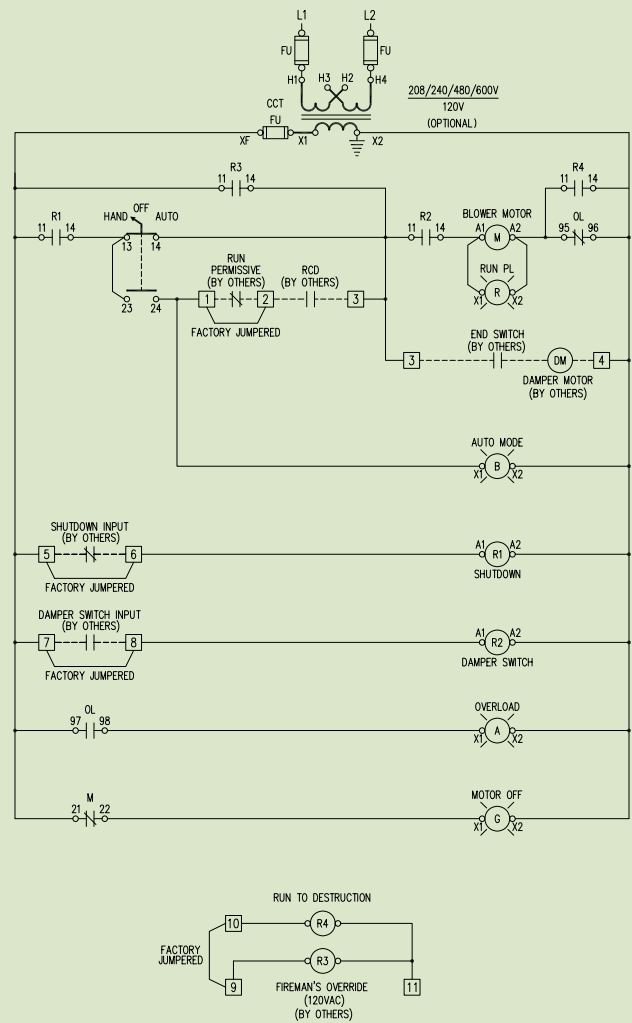
Standard Features

- **Shutdown Input** – Customer provides a normally closed dry contact which enables the starter until the shutdown button or E-stop is depressed which opens the contact and the blower starter is disabled in the Hand or Auto mode (except in Fireman's override).
- **Damper Motor** – Provides a 24 or 120 VAC output as specified to actuate the damper motor when the blower starter is either in the Hand or Auto mode. This option includes a connection for a customer provided end switch, which enables the damper motor to engage via an analog signal.
- **Damper Switch Input** – Customer provides a normally open dry contact from the damper limit switch. This option prevents the blower starter from energizing until the damper is open.
- **Remote Control Device (RCD)** – Customer provides a normally open dry contact from the Remote Control Device which enables the blower starter in the Auto mode. (i.e.: thermostat or CO2 sensor).
- **Run Permissive** – Customer provides normally closed dry contact. When the customer input contact opens the Auto mode is disabled.
- **Fireman's Override** – Customer provides a wet (powered) contact which energizes the damper circuit and then in turn energizes the blower motor regardless if in Hand or Auto mode, and regardless of the status of other inputs. This operation by-passes the overload relay and will run to destruction to extinguish the fire. Alternatively, a jumper can be removed for testing with the overload active in the circuit.
- **Indicating lights** – Four 22mm incandescent pilot lights (D7) are provided to indicate:
 - o Power applied, blower motor not running (Green)
 - o Auto mode selected (Blue)
 - o Blower motor is running (Red)
 - o Overload relay tripped (Amber)
- **Factory TB Jumpers** – Three factory installed terminal block jumpers are provided for shutdown, damper switch, and run permissive options which must be removed before connecting customer inputs.

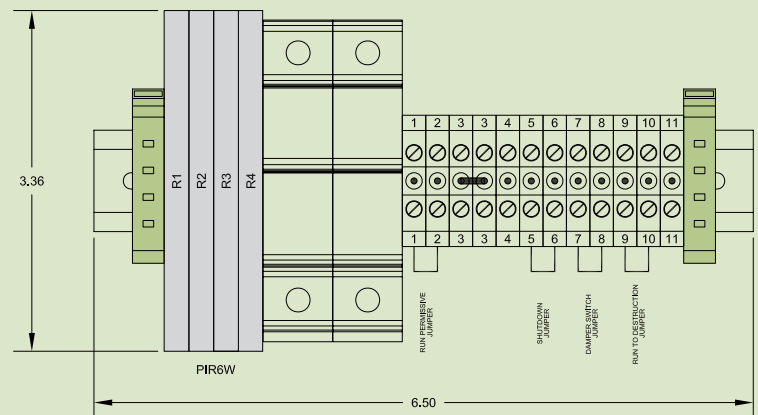
Minimal Size Increase

Enclosure Type	Dim Code	Approx. Dimension without -FD option	Dim Code	Approx. Dimension with -FD option
Non-Combination Starters				
Type 1	A	10 x 8 x 6	B	12 x 10 x 6
Type 1	B	12 x 10 x 6	D3	20 x 16 x 9
Type 3R	L	8 x 6 x 6	M	10 x 8 x 6
Type 3R	M	10 x 8 x 6	Q	20 x 16 x 8
Combination Starters				
Type 1	C	16 x 12 x 7	D3	20 x 16 x 9
Type 1	D3 & G	Size remains the same		
Type 3R	Q & T	Size remains the same		

Control Circuit Schematic



Terminal Blocks and Relays



Contact your Sprecher + Schuh representative for more information.

Sprecher + Schuh US Division Headquarters
 15910 International Plaza Dr., Houston, TX 77032
 Customer Service: (877) 721-5913; Fax: (800) 739-7370

