**Fractional Manual Starters**

Easy, simple starting of Motors up to 1 HP

Sprecher + Schuh Fractional Manual Starters (FMS) consist of a snap switch combined with a thermal overload device operating on the solder-ratchet principle. To reset the overload mechanism, the switch lever is moved to the OFF position. The motor can be restarted by simply pushing the switch lever to the ON position. The switch is designed to prevent being held closed under a sustained motor overload.

---

**Easy to Order**

FMS Starters are easy to order. Simply choose a 1-Pole or 2-Pole with or without the Neon pilot light and then order the required Heater Element. You're done!

**Typical Applications**

Starting and overload protection of small 1-phase 115…230V AC/DC or 277 VAC motors used on the following applications:

- Unit heaters
- Fans
- Stokers
- Pumps
- Refrigeration compressors

---

**Fractional Manual Starters**

**Discount Schedule B8**

Visit www.sprecherschuh.com/ecatalog for pricing and the most up-to-date information.

C12
Technical Information

**Eutectic Operation**
Thermal overload devices using the eutectic alloy method are spring loaded in the normal, or reset, position. When the heater is cold, the solder is solid and holding the spring loaded rachet. When FLA is passed through the heater, and if excess current flows, then the solder will melt and allow the rachet mechanism to turn. This result trips the device. The device is reset by turning the switch to the OFF position and allowing it to cool.

**Standards Compliance**
- UL 508
- EN60947-4-1
- CSA C22.2, No. 14

**Certifications**
- UL Listed - Enclosed Products (File No. E14841; Guide No. NLRV)
- CSA Certified (File No. LR 1234)
- American Bureau of Shipping (ABS)
- CE marked

**Dimensions**

<table>
<thead>
<tr>
<th>FMS Type 1 General Purpose Surface Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Dimensions Diagram]</td>
</tr>
</tbody>
</table>

**Trip Time**
- Class 20
- Reset Time: The actual time to reset will vary based on the ambient temperature surrounding the overload. Under most conditions, it will take from approximately 90 seconds up to 5 minutes for the solder to solidify enough for the overload to be reset. Until this happens, the overload will not be able to be reset by pressing on the reset button. The ratchet assembly inside the overload block will spin freely until the solder has solidified.

**TIME - Current Characteristics at 40°C**

![Current Characteristics Graph]

NOTE: Trip will occur at 115% of FLA