



Motor Logic Solid-State Overload Relays

Motor Logic solid-state overload relays (SSOLRs) feature: 3 to 1 adjustment for trip current; phase loss and unbalance protection; direct replacement for Type S melting alloy. They are ambient insensitive and self-powered. Switch selectable trip class; Class II ground fault detection; and direct replacement for Type S melting alloy. Electrical remote reset is also available.

NOTE: Motor Logic SSOLRs are designed to protect 50/60 Hz, three-phase AC motors from overload, phase unbalance, and phase loss conditions. Open Delta systems or grounded B-phase systems are difficult to balance and could cause the Motor Logic SSOLR to trip.

Table 16.299: Class 10/20 (Selectable): For Separate Mounting Solid-State Overload Relay, 600 Vac Maximum

NEMA Size ^[5] (3-Pole)	Full Load Current Range (A)	Open Type
		Trip Class 10/20
00B	1.5–4.5 ^[6]	SFB20
00C	3–9 ^[6]	SFC20
0	6–18 ^[6]	SF020
1	9–27 ^[6]	SF120
2	15–45	SF220
3	30–90	SF320
4	45–135	SF420

Table 16.300: Class 10/20 (Selectable): Replacement SSOLR for Retrofit of Square D Type S Starter Solid-State Overload Relay 600 Vac Maximum

Locate 8536 Starter in this column		Order Class 9065 Overload Relay from this column
NEMA Size ^[5]	Full Load Current Range (A)	Open Type
		Trip Class 10/20
00B ^[6]	1.5–4.5	SFB20
00C ^[6]	3–9	SFC20
0 ^[6]	6–18	SF020
1 ^[6]	9–27	SF120
2	15–45	ST220
3	30–90	ST320
4	45–135	ST420
5 ^[7]	90–270	ST520
5 ^[8]	90–270	SF520
6 ^[7]	180–540	ST620
7 ^[7]	270–810	ST720

^[5] Size 00B and 00C are not actual NEMA sizes. These designations are used to differentiate the lower FLA of these devices from the NEMA Size 00 Motor Logic solid-state overload relay.
^[6] Size 00B, 00C, 0, and 1 come without lugs. Lower amperage loads can be protected by looping the power wires. Lugs are available. See Table 16.374.
^[7] Size 5, 6, and 7 replacement overload relays are only for existing NEMA style Type S starters with a Motor Logic overload relay. External CTs and additional components are not included.
^[8] Size 5 is a complete drop-in replacement for Square D Type S melting alloy, bimetallic, and Y500 overload relays only.