# Class 9065 Motor Logic Solid State Overload Relays

Application Flexibility with a Single Part Number





Motor  $\text{Logic}^{\text{TM}}$  is a solid state overload relay that provides reliable protection with increased application flexibility and reduced installation time and costs.

#### **Key Benefits**

- Simple installation
  - Self-powered, no external power source required
  - Fixed thermal unit design eliminates the need for separate thermal units
- Application flexibility
  - Switch selectable trip Class 10 or Class 20
  - 3:1 current range adjustability
  - Suitable for single-phase and three-phase systems
  - Harmonic immunity allows operation on same distribution feeder as non-linear loads
- Protection
  - Phase loss protection minimizes potential damage to motors caused by single phasing and can extend the life of the motor
  - Phase unbalance protection provides an additional degree of motor protection while minimizing nuisance tripping due to a dirty power supply
- Easy retrofit of existing Square D<sup>™</sup> Type S starters
  - Mounts on the same baseplate as existing starters
  - Reset mechanism is in the same location as the reset for existing starters

### **Key Features**

- Ambient insensitivity
- Thermal memory
  - Ensures accurate protection for both warm and cold motors
- Normally closed trip contact
- Trip-free operation
  - Ensures opening of device even if reset is pressed
- Trip test function
- Permanent tamper guard
  - Prevents tampering with the trip current adjustment dial setting
- UL Listed, CSA certified, and CE marked

In addition to stand-alone operations, Motor Logic solid state overload relays are available on full voltage non-reversing and reversing starters and combination starters (Class 8536, 8538, 8539, 8736, 8738, 8739) as well as multispeed starters (Class 8810) and in Model 6 Motor Control Centers.



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NEMA <sup>®</sup> Size 🗆	Full Load Current Range (Amperes)	Open Type Trip Class 10/20
Se	eparately Mounted L	Jnit
00B ◊	1.5 – 4.5	SFB20
00C ◊	3 – 9	SFC20
0 ◊	6 – 18	SF020
1 🛇	9 – 27	SF120
2	15 – 45	SF220
3	30 – 90	SF320
4	45 – 135	SF420

& Sizes 00B, 00C, 0, and 1 supplied without lugs. Lug conversion kits listed below. Output Lower ampere loads can be protected by looping of power wires.

NEMA 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.

Solid State Overload Relay Retrofits for Type S Starters: 600 Vac Max.				
Typical Starter Size o	Full Load Current Range (Amperes)	Open Type Trip Class 10/20		
Separately Mounted Unit				
00B ◊	1.5 – 4.5	SFB20		
00C ◊	3 – 9	SFC20		
0 ◊	6 – 18	SF020		
1 ◊	9 – 27	SF120		
2	15 – 45	ST220		
3	30 – 90	ST320		
4	45 – 135	ST420		
5 ¤	90 - 270	SF520		
50	90 – 270	ST520		
60	180 – 540	ST620		
70	270 – 810	ST720		

& Sizes 00B, 00C, 0, and 1 supplied without lugs. Lug conversion kits listed below

- I Lower ampere loads can be protected by looping of power wires.
- Drop in replacement for existing Square D NEMA Type S starters with melting alloy, bimetallic, or Form Y500 overload relays only.
- Replacement for existing Square D NEMA Type S starters with an existing Motor Logic solid state overload relay, does not include external CTs or additional components.
- NEMA 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.

Lug-Lug and Lug-Extender Kits for Separate Mounting and Retrofit with Motor Logic **Overload Relays on NEMA Type S Starters** 

Lug Kit Type	Sizes 00C, 0, and 1
Lug-Lug	9999 LL0
Lug-Extender	9999 LBO

Lug-Lug designed for separate mounting.

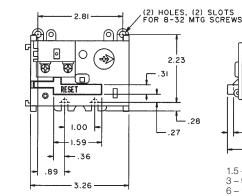
Lug-Extender designed to retrofit to existing Square D NEMA Type S starters

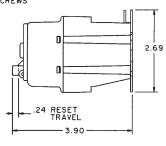


## Put our expertise to work for you.

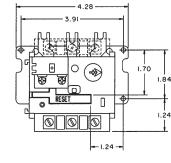
For more information on Square D brand enclosed switches, visit us online at www.schneider-electric.com/us or talk to one of our experts at 1-888-778-2733.

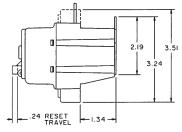
### Dimensions (shown in inches)



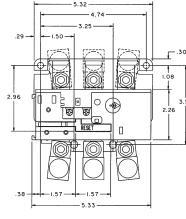


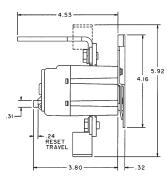
1.5 – 4.5 amp (Size 00B) 3 – 9 amp (Size 00C) 6 – 18 amp (Size 0) 9 – 27 amp (Size 1)



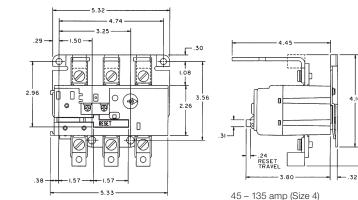


15 - 45 amp (Size 2)





30 - 90 amp (Size 3)



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