≡ READY|RELAY

MORNINGSTAR READYRAIL SYSTEM DRY CONTACT BLOCK

Quick Start Guide

RB-RELAY

INCLUDES: ReadyRelay Block and (2) installed relays A and B.

IMPORTANT SAFETY INFORMATION:

WARNING: Shock Hazard
The Morningstar Ready Block must be installed by a qualified technician in accordance with the electrical regulations of the location of installation.

WARNING: Shock Hazard
Disconnect all power sources to the host and all other connected devices before working with ReadyRelay wiring. (continued)

MORNINGSTAR
INTEGRATEDSERIES
WORLD'S LEADING SOLAR CONTROLLERS & INVERTERS

Contact Information:
www.morningstarcorp.com
Phone: 1-215-321-4457

Do not install or remove a ReadyRelay while the host device is powered ON.

CAUTION: Equipment Damage
The relay circuit has no overcurrent protection. A fuse no larger than six (6) Amps must be installed - in either leg - to protect the circuit. Since the internal relay circuitry has no overcurrent protection, the installer must ensure that the circuit is fused. ReadyRelay failures that result from lack of overcurrent protection are not covered by the Morningstar warranty.

CAUTION: Equipment Damage
Power surges with in-rush current greater than 10 Amps can damage the relay.
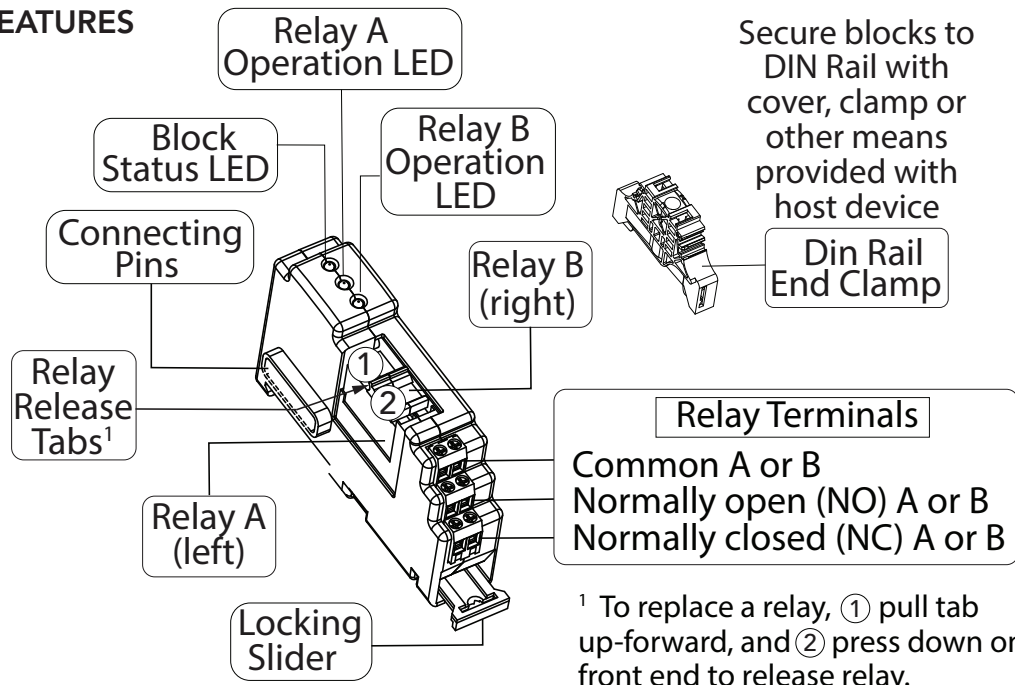
CAUTION: This guide must be used with the full product manual *that includes important information. Carefully read the ReadyRelay product manual for all specifications, safety, regulatory and warranty information, and for all required instructions on installation procedures, configuration, and operation.*

Scan QR Code to view full online manual

The ReadyRelay requires a Morningstar ReadyRail™-enabled host device, e.g., GenStar controller or ReadyEdge System Monitor and Communication Center to provide a mounting surface, power, and programming capability.
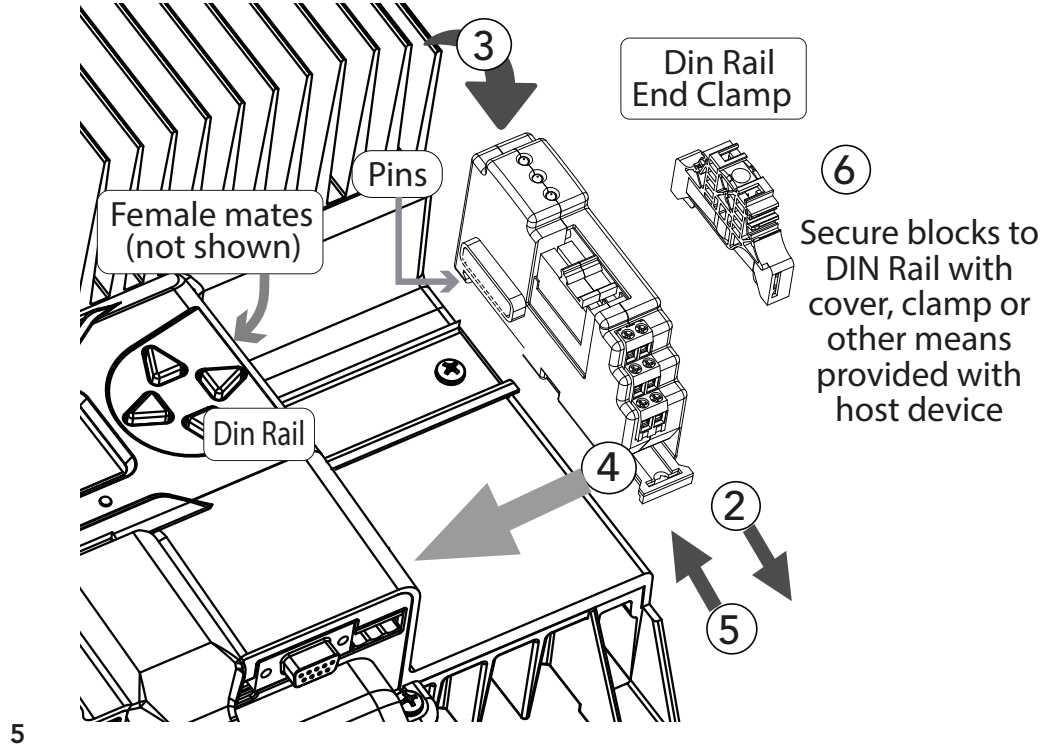

FEATURES

- Relay A Operation LED
- Block Status LED
- Relay B Operation LED
- Connecting Pins
- Relay B (right)
- Relay Release Tabs[1]
- Relay Terminals
- Relay A (left)
- Locking Slider

Secure blocks to DIN Rail with cover, clamp or other means provided with host device

Din Rail End Clamp

Relay Terminals
Common A or B
Normally open (NO) A or B
Normally closed (NC) A or B

[1] To replace a relay, ① pull tab up-forward, and ② press down on front end to release relay.

MOUNTING (see installation detail illustration on p. 5 - reverse)

1) Power OFF host device

2) Pull yellow slider out

3) Fit Block slot downward onto DIN Rail

4) Slide the Block to the left, **but before** joining the male and female mates, be sure that pin guards and pins are lined up correctly. **Carefully** slide the Block farther to the left to securely join the Block with host-device female mates.

5) Push yellow slider in, to secure Block on rail

6) Secure Block(s) to DIN rail with cover, clamp, or other means provided with host device.

Install additional Blocks in the same fashion as above.

3

Din Rail
End Clamp

Pins

6

Female mates
(not shown)

Secure blocks to
DIN Rail with
cover, clamp or
other means
provided with
host device

Din Rail

4

2

5

CONFIGURATION - *first connect the battery to the host device to power the host device-relay block system*

ReadyRelay settings are adjusted in the host device's Morningstar LiveView web page. Refer to the Morningstar Website ReadyRelay full manual for details on how to connect to LiveView and access Installer Setup.

⚠️ **CAUTION:** *Configure the ReadyRelay via the host-device and the Morningstar Liveview webpage,* **FIRST**, *before wiring the relay.*

See important topics in Configuration Section - 4.0 - of the ReadyRelay manual titled: Threshold; Faults and Alarms; Charge Stage; External Source Control (ESC) Start-Stop, e.g., generator; Command/Schedule.

WIRING

⚡ **WARNING: Shock Hazard**
Disconnect all power sources to the host and all other connected devices before working with ReadyRelay wiring.

General Use - see wiring illustration on p. 7 below

Relay contact terminals can be wired to a generator starting circuit (consult ReadyRelay manual Section 5.2 for details), vent fan, communications equipment, larger relays for power switching, buzzer or trouble light (no auxiliary devices included).

After wiring, tighten the terminal connector screws to 5 in-lb (0.56 N-m) of torque. *Connect the battery to power the host device-relay block system.*

LOAD STARTING EXAMPLES WITH
RELAY B "NO" TERMINAL WIRING

NOTE:
After wiring, tighten the
terminal connector screws to
5 in-lb (0 .56 N-m) of torque

Relay A (left)
Relay B (right)

COM

Common
Conductor

CAUTION:
Size wiring based
on application -
available terminal
size range is #16-24
AWG

NO

Loop
Conductor

NC

CAUTION:
Use maximum
fuse-breaker sizes of
6A up to 30 Vdc
loads, and 0.5A
between 30 and 60
Vdc loads

LED INDICATIONS and TROUBLESHOOTING

The top ReadyRelay LED indicates Block status. The middle LED indicates operation of Relay A. The lower LED indicates operation of Relay B. The status LED will operate with a momentary heartbeat off every (5) seconds.
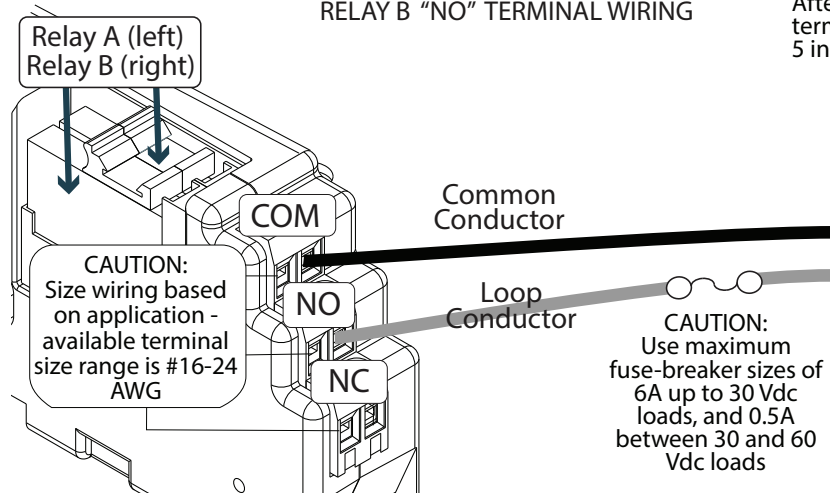
Status LED	Indication
Block not powered or could not start	OFF
Normal condition - no faults	Green solid
Block faulted	Red solid
Powered pre-boot	Red solid

Relay A or B LEDs	Indication
Relay open	OFF
Relay closed or closing	Green solid
Relay fault	Red solid