

# Bulletin 857 Relay



Converting Multilin 469 Relay  
to an Allen-Bradley Bulletin 857

## Installation Instructions

The Bulletin 857-KIT469-1 and 857-KIT469-2 were developed to allow customers to replace their existing installed Multilin 469 overload relays with the Rockwell Automation Bulletin 857. Every installed application is different so we have tried to enable customers to customize their installation as best as possible.

- 1) Remove the Bulletin 857-KIT469-1 or 857-KIT469-2 from the box. Components that should be in the kit box is the 469/857 adapter plate and a terminal block strip with sixty terminal blocks. A gasket strip and mounting hardware are also included.

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- 2) **WARNING** Disconnect all power and control wires at the back of the Multilin 469. Ensure that the wires are properly labeled so as to not lose track of where the wires go.



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- 3) Remove the Multilin 469 from the front of your MCC cabinet.
  - 4) Remove all mounting brackets and materials from the MCC cabinet that were there to hold the Multilin 469 in place.
  - 5) Expand the width of the existing cut out to 7.6" (193 mm) per the include drawing. Four mounting holes will need to be drilled, per the attached drawing, to secure the mounting plate to the front of the low voltage panel door.

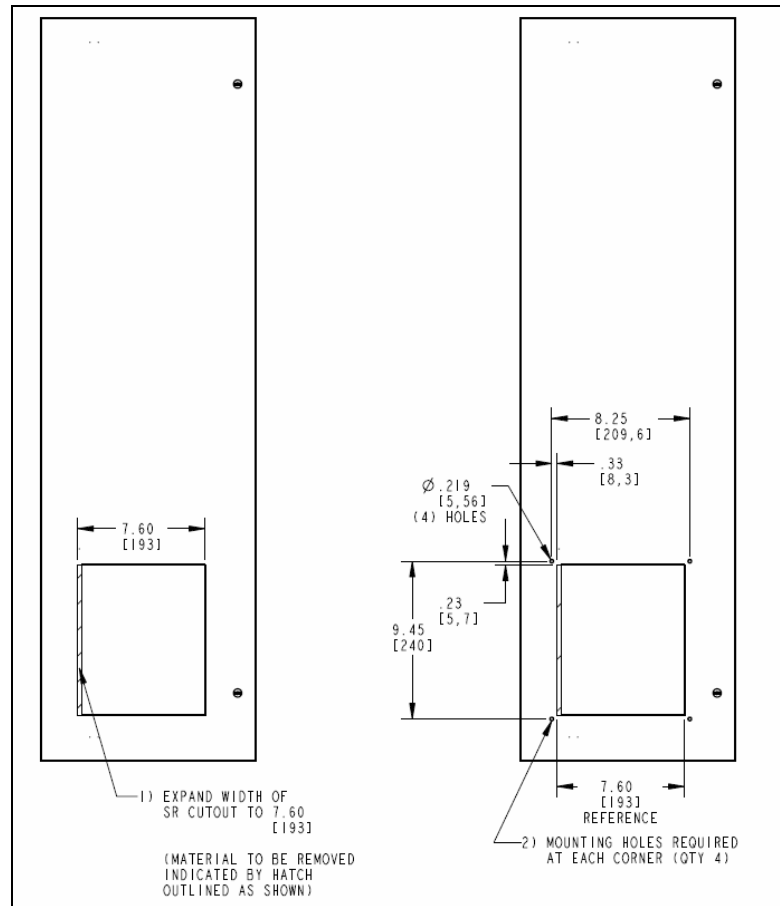
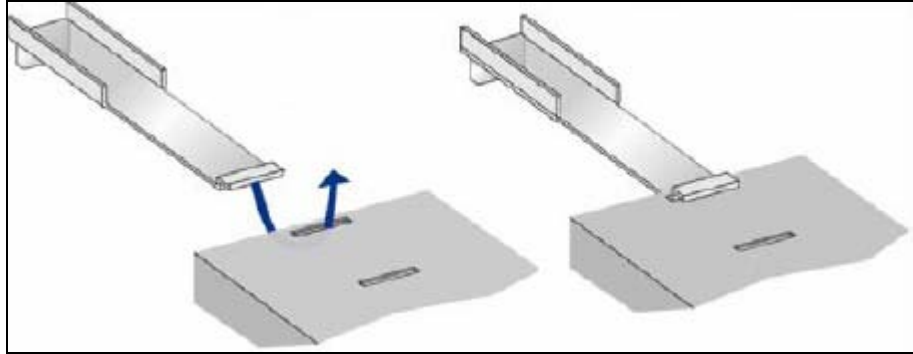


Figure 1 – Mounting Dimensions of 857 Relay

- 6) Place the Bulletin 857 mounting plate onto the door cut out that was just made. The terminal block strip should be inserted inside the cabinet. The hole on the adapter plate can either be at the top or bottom of the cut out; the installer just needs to insert in the orientation they wish.
- 7) Secure the adapter plate into position on the door by using the four screws supplied.
- 8) Remove the galvanized mounting bracket that is attached to the Bulletin 857.

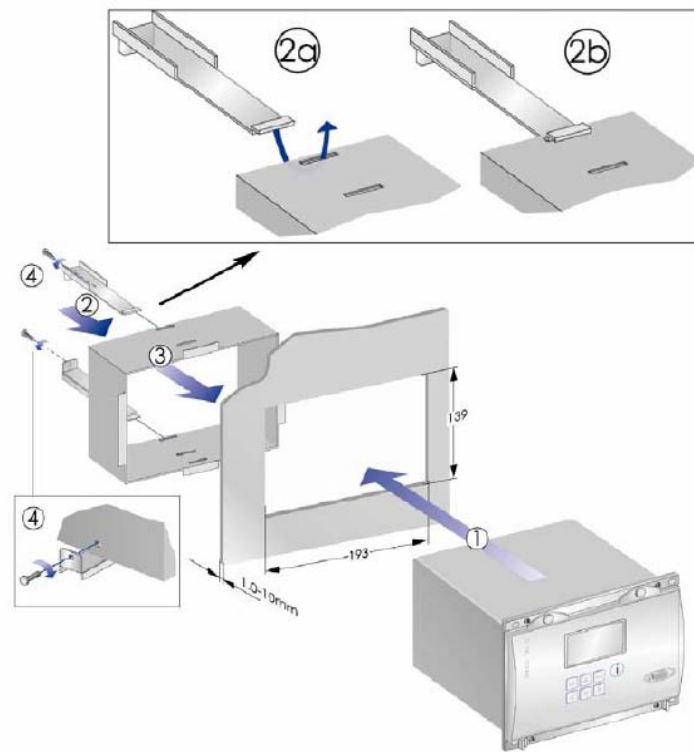


- 9) If a mounting collar is required for your specific installation, slide the collar onto the Bulletin 857 now. If no collar is required, insert the Bulletin 857 into the mounting plate hole.

**Table 1 – Mounting Collar Part Numbers and Description**

Part Number	Description
857-VYX233	100 mm mounting collar
857-VYX077	60 mm mounting collar
857-VYX076	40 mm mounting collar

- 10) Now use the mounting bracket from step 8) to secure the Bulletin 857 to the low voltage door per the drawings below.



- 11) Once the installation is complete, use the reference sheet (Appendix A) to connect the Multilin 469 connections to the terminal block strip attached to the adapter kit.

**Note:** The wiring reference sheet is to be used as a guide. Your application may have different wiring requirements.

- 12) For added reference material, refer to the Bulletin 857 User Manual, publication no. 857-UM001\_-EN-P.

# Appendix A

## Wiring Configuration for Converting From Multilin 469 to AB Bulletin 857

469 Terminal	Description	857 with 857-RAD	857 with 857-RAA
A01	RTD #1 Hot	RTD#1 + (1)	RTD#1 + (1)
A02	RTD #1 Compensation	RTD#1 - (2)	RTD#1 - (2)
A03	RTD Return (1 and 2)	RTD#1 W (3)	RTD#1 W (3)
		RTD#2 W (7)	RTD#2 W (7)
A04	RTD #2 Compensation	RTD#2 - (6)	RTD#2 - (6)
A05	RTD #2 Hot	RTD#2 + (5)	RTD#2 + (5)
A06	RTD #3 Hot	RTD#3 + (9)	RTD#3 + (9)
A07	RTD #3 Compensation	RTD#3 - (10)	RTD#3 - (10)
A08	RTD Return (3 and 4)	RTD#3 W (11)	RTD#3 W (11)
		RTD#4 W (15)	RTD#4 W (15)
A09	RTD #4 Compensation	RTD#4 - (14)	RTD#4 - (14)
A10	RTD #4 Hot	RTD#4 + (13)	RTD#4 + (13)
A11	RTD #5 Hot	RTD#5 + (1)	RTD#5 + (1)
A12	RTD #5 Compensation	RTD#5 - (2)	RTD#5 - (2)
A13	RTD Return (5 and 6)	RTD#5 W (3)	RTD#5 W (3)
		RTD#6 W (7)	RTD#6 W (7)
A14	RTD #6 Compensation	RTD#6 - (6)	RTD#6 - (6)
A15	RTD #6 Hot	RTD#6 + (5)	RTD#6 + (5)
A16	Analog Output Common –	Any mA OUT(-) (10,12,14,16)	Not Applicable
A17	Analog Output 1 +	mA OUT1 + (9)	Not Applicable
A18	Analog Output 2 +	mA OUT2 + (11)	Not Applicable
A19	Analog Output 3 +	mA OUT3 + (13)	Not Applicable
A20	Analog Output 4 +	mA OUT4 + (15)	Not Applicable
A21	Analog Shield	Any mA IN(-) (2,4,6,8)	Not Applicable
A22	Analog In 24 V DC Power Supply +	Not Applicable	Not Applicable
A23	Analog Input 1 +	mA IN1 + (1)	Not Applicable
A24	Analog Input 2 +	mA IN2 + (3)	Not Applicable
A25	Analog Input 3 +	mA IN3 + (5)	Not Applicable
A26	Analog Input 4 +	mA IN4 + (7)	Not Applicable
A27	Analog Input Common –	Any mA IN(-) (2,4,6,8)	Not Applicable
B01	RTD Shield	Any RTD GND (4,8,12,16)	Any RTD GND (4,8,12,16)
B02	Auxiliary RS485 +	Order Dependent	Order Dependent
B03	Auxiliary RS485 –	Order Dependent	Order Dependent

469 Terminal	Description	857 with 857-RAD	857 with 857-RAA
B04	Auxiliary RS485 Common	Order Dependent	Order Dependent
C01	Access +	Contact Factory	Contact Factory
C02	Access -	Contact Factory	Contact Factory
C03	469 Under Test +	Contact Factory	Contact Factory
C04	469 Under Test -	Contact Factory	Contact Factory
D01	RTD #7 Hot	RTD#7 + (9)	RTD#7 + (9)
D02	RTD #7 Compensation	RTD#7 - (10)	RTD#7 - (10)
D03	RTD Return (7 and 8)	RTD#7 W (11)	RTD#7 W (11)
		RTD#8 W (15)	RTD#8 W (15)
D04	RTD #8 Compensation	RTD#8 - (14)	RTD#8 - (14)
D05	RTD #8 Hot	RTD#8 + (13)	RTD#8 + (13)
D06	RTD #9 Hot	RTD#9 + (1)	RTD#9 + (1)
D07	RTD #9 Compensation	RTD#9 - (2)	RTD#9 - (2)
D08	RTD Return (9 and 10)	RTD#9 W (3)	RTD#9 W (3)
		RTD#10 W (7)	RTD#10 W (7)
D09	RTD #10 Compensation	RTD#10 - (6)	RTD#10 - (6)
D10	RTD #10 Hot	RTD#10 + (5)	RTD#10 + (5)
D11	RTD #11 Hot	RTD#11 + (9)	RTD#11 + (9)
D12	RTD #11 Compensation	RTD#11 - (10)	RTD#11 - (10)
D13	RTD Return (11 and 12)	RTD#3 W (11)	RTD#3 W (11)
		RTD#4 W (15)	RTD#4 W (15)
D14	RTD #12 Compensation	RTD#12 - (14)	RTD#12 - (14)
D15	RTD #12 Hot	RTD#12 + (13)	RTD#12 + (13)
D16	Starter Status	N/A - Contact factory	N/A - Contact factory
D17	Emergency Restart	X3-2*	X3-2*
D18	Remote Reset	X3-3*	X3-3*
D19	Assignable Switch 1	X3-4*	X3-4*
D20	Assignable Switch 2	X3-5*	X3-5*
D21	Assignable Switch 3	X3-6*	X3-6*
D22	Assignable Switch 4	X3-7*	X3-7*
D23	Switch Common	Not Used	Not Used
D24	Switch +24 V DC	X3-1	X3-1
D25	Computer RS485 +	Not Supported	Not Supported
D26	Computer RS485 -	Not Supported	Not Supported
D27	Computer RS485 Common	Not Supported	Not Supported
E01	1 Trip NC	X3-12*	X3-12*
E02	1 Trip NO	X3-14*	X3-14*

469 Terminal	Description	857 with 857-RAD	857 with 857-RAA
E03	2 Auxiliary Common	X2-6*, X2-8*	X2-6*, X2-8*
E04	3 Auxiliary NC	X2-1*	X2-1*
E05	3 Auxiliary NO	X2-3*	X2-3*
E06	4 Alarm COMMON	X3-9	X3-9
E07	5 Block Start NC	X7-15*	X7-15*
E08	5 Block Start NO	X7-17*	X7-17*
E09	6 Service Common	X2-9	X2-9
E10	not used		
E11	Coil Supervision +	Not Supported	Not Supported
E12	469 Drawout Indicator	Not Applicable	Not Applicable
F01	1 Trip Common	X3-13*, X3-15*	X3-13*, X3-15*
F02	2 Auxiliary NO	X2-5*	X2-5*
F03	2 Auxiliary NC	X2-7*	X2-7*
F04	3 Auxiliary COMMON	X2-2*, X2-4*	X2-2*, X2-4*
F05	4 Alarm NO	X3-10	X3-10
F06	4 Alarm NC	X3-11	X3-11
F07	5 Block Start Common	X7-16*, X7-18*	X7-16*, X7-18*
F08	6 Service NO	X2-11	X2-11
F09	6 Service NC	X2-10	X2-10
F10	not used		
F11	Coil Supervision	Not Supported	Not Supported
F12	469 Drawout Indicator	Not Applicable	Not Applicable
G01	Phase VT Neutral	X1-12	X1-12
G02	Phase A VT •	X1-11	X1-11
G03	Differential A CT •	Bulletin 860	Bulletin 860
G04	Differential B CT •	Bulletin 860	Bulletin 860
G05	Differential C CT •	Bulletin 860	Bulletin 860
G06	Phase A CT •	X1-1	X1-1
G07	Phase B CT •	X1-3	X1-3
G08	Phase C CT •	X1-5	X1-5
G09	1A/5A Ground CT •	(1A) - X1-7, (5A) - X1-9	(1A) - X1-7, (5A) - X1-9
G10	50:0.025 Ground CT •	Not Applicable	Not Applicable
G11	Filter Ground	Ground Stud	Ground Stud
G12	Safety Ground	Ground Stud	Ground Stud
H01	Phase B VT •	X1-13	X1-13
H02	Phase C VT •	X1-14	X1-14
H03	Differential A CT	Bulletin 860	Bulletin 860

<b>469 Terminal</b>	<b>Description</b>	<b>857 with 857-RAD</b>	<b>857 with 857-RAA</b>
H04	Differential B CT	Bulletin 860	Bulletin 860
H05	Differential C CT	Bulletin 860	Bulletin 860
H06	Phase A CT	X1-2	X1-2
H07	Phase B CT	X1-4	X1-4
H08	Phase C CT	X1-6	X1-6
H09	1A/5A Ground CT	(1A) - X1-8, (5A) - X1-10	(1A) - X1-8, (5A) - X1-10
H10	50:0.025 Ground CT	Not Applicable	Not Applicable
H11	Control Power –	X3-17	X3-17
H12	Control Power +	X3-18	X3-18





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