

Bulletin 857 Relay




Converting Multilin 269 Relay to an Allen-Bradley Bulletin 857

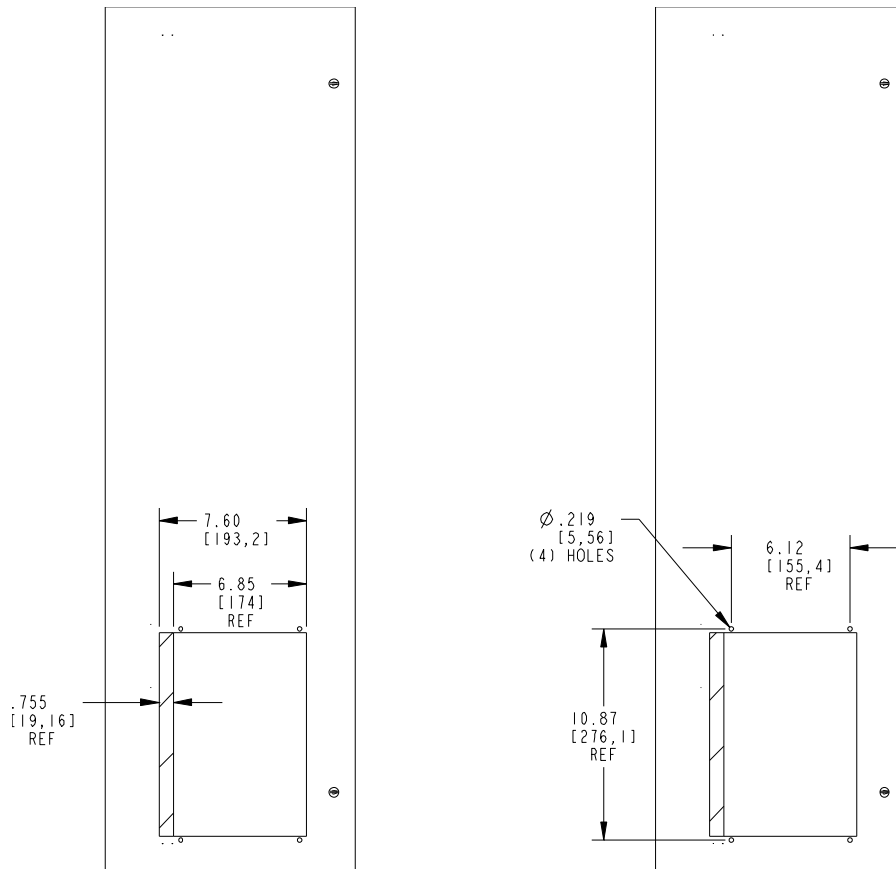
Installation Instructions

The Bulletin 857-KIT269-1 and 857-KIT269-2 were developed to allow customers to replace their existing installed Multilin 269 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-KIT269-1 or 857-KIT269-2 from the box. Components that should be in the kit box is the 269/857 adapter plate and a terminal block strip with sixty terminal blocks.

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- 2) **WARNING**  Disconnect all power and control wires at the back of the Multilin 269. 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 269 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 269 in place.
 - 5) Expand the width of the existing cut out to 7.6" (193 mm) per the included 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.



1) Expand width of 269 cutout to 7.60 [193]

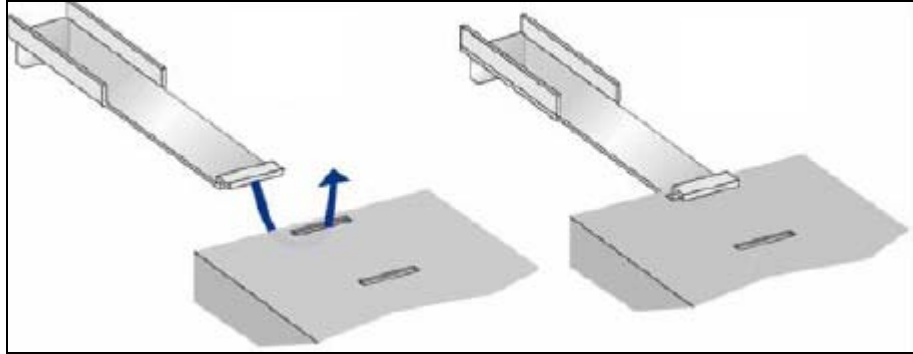
(Material to be removed indicated by hatch outlined as shown)

Reference dimensions shown may vary.

2) Existing standard Multilin 269 mounting holes shown for reference.

Figure 1 – Mounting Dimensions

- 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.

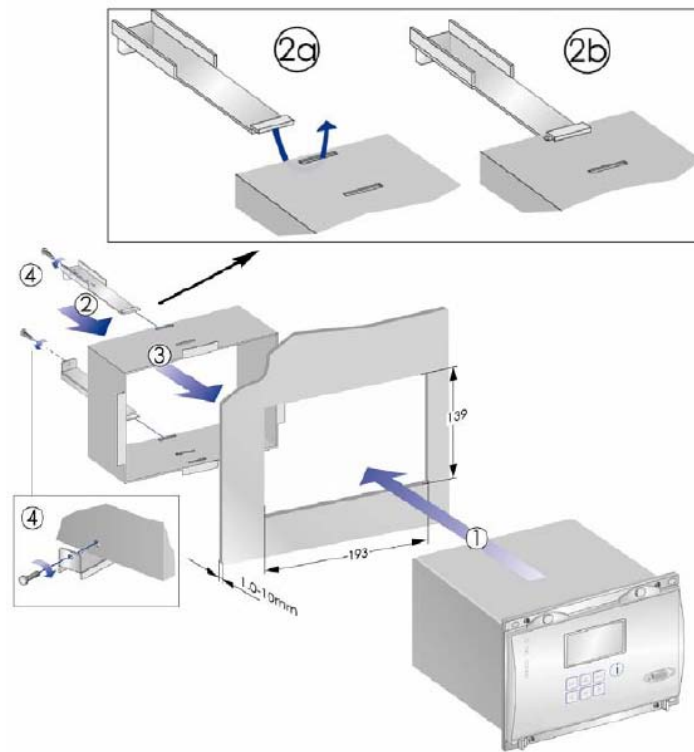


- 9) If a mounting collar is required for your specific installation, slide the collar onto the Bulletin 857 now. If no collar is required, insert the Bulletin 857 into the mounting plate hole.

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 269 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 269 to Allen-Bradley Bulletin 857

269 Terminal	Description	857 with 857-RAD	857 with 857-RAA
1	RTD #1 Hot	RTD#1 + (1)	RTD#1 + (1)
2	RTD #1 Compensation	RTD#1 - (2)	RTD#1 - (2)
3	RTD #1 Return	RTD#1 W (3)	RTD#1 W (3)
4	RTD #1 Shield	RTD#1 GND (4)	RTD#1 GND (4)
5	RTD #2 Hot	RTD#2 - (5)	RTD#2 - (5)
6	RTD #2 Compensation	RTD#2 + (6)	RTD#2 + (6)
7	RTD #2 Return	RTD#2 W (7)	RTD#2 W (7)
8	RTD #2 Shield	RTD#2 GND (8)	RTD#2 GND (8)
9	RTD #3 Hot	RTD#3 + (9)	RTD#3 + (9)
10	RTD #3 Compensation	RTD#3 - (10)	RTD#3 - (10)
11	RTD #3 Return	RTD#3 W (11)	RTD#3 W (11)
12	RTD #3 Shield	RTD#3 GND (12)	RTD#3 GND (12)
13	RTD #7 Hot	RTD#7 + (9)	RTD#7 + (9)
14	RTD #7 Compensation	RTD#7 - (10)	RTD#7 - (10)
15	RTD #7 Return	RTD#7 W (11)	RTD#7 W (11)
16	RTD #7 Shield	RTD#7 GND (12)	RTD#7 GND (12)
17	RTD #8 Hot	RTD#8 + (13)	RTD#8 + (13)
18	RTD #8 Compensation	RTD#8 - (14)	RTD#8 - (14)
19	RTD #8 Return	RTD#8 W (15)	RTD#8 W (15)
20	RTD #8 Shield	RTD#8 GND (16)	RTD#8 GND (16)
21	RTD #9 Hot**	RTD#9 + (1)	RTD#9 + (1)
22	RTD #9 Compensation**	RTD#9 - (2)	RTD#9 - (2)
23	RTD #9 Return**	RTD#9 W (3)	RTD#9 W (3)
24	RTD #9 Shield**	RTD#9 GND (4)	RTD#9 GND (4)
25	RTD #10 Hot**	RTD#10 - (5)	RTD#10 - (5)
26	RTD #10 Compensation**	RTD#10 + (6)	RTD#10 + (6)
27	RTD #10 Return**	RTD#10 W (7)	RTD#10 W (7)
28	RTD #10 Shield**	RTD#10 GND (8)	RTD#10 GND (8)
29	Trip NO	X3-14*	X3-14*
30	Trip Common	X3-13*, X3-15*	X3-13*, X3-15*
31	Trip NC	X3-12*	X3-12*
32	Alarm NC	X3-11	X3-11
33	Alarm Common	X3-9	X3-9
34	Alarm NO	X3-10	X3-10
35	Aux 1 NC	X2-1*	X2-1*
36	Aux 1 Common	X2-2*, X2-4*	X2-2*, X2-4*
37	Aux 1 NO	X2-3*	X2-3*
38	Aux 2 NC	X2-7*	X2-7*
39	Aux 2 Common	X2-6*, X2-8*	X2-6*, X2-8*
40	Aux 2 NO	X2-5*	X2-5*

* Assignable

** 269 Plus only

269 Terminal	Description	857 with 857-RAD	857 with 857-RAA
41	Input Power L	X3-18	X3-18
42	Input Power G	Ground Stud	Ground Stud
43	Input Power L2/N	X3-17	X3-17
44	Spare Input -	X3-4*	X3-4*
45	Spare Input +	X3-1	X3-1
46	RS485 -**	Order Dependent	Order Dependent
47	RS485 +**	Order Dependent	Order Dependent
48	Differential Relay -**	X3-5*	X3-5*
49	Differential Relay +**	X3-1	X3-1
50	Speed Switch -**	X3-6*	X3-6*
51	Speed Switch +**	X3-1	X3-1
52	Access -	Contact Factory	Contact Factory
53	Access +	Contact Factory	Contact Factory
54	Emergency Restart -	X3-2*	X3-2*
55	Emergency Restart +	X3-1	X3-1
56	External Reset -	X3-3*	X3-3*
57	External Reset +	X3-1	X3-1
58	Analog Output (GND) -	Any mA OUT(-) (10,12,14,16)	Not Applicable
59	Analog Output +	mA OUT1 + (9)	Not Applicable
60	RTD #6 Shield	RTD#6 GND (8)	RTD#6 GND (8)
61	RTD #6 Return	RTD#6 W (7)	RTD#6 W (7)
62	RTD #6 Compensation	RTD#6 + (6)	RTD#6 + (6)
63	RTD #6 Hot	RTD#6 - (5)	RTD#6 - (5)
64	RTD #5 Shield	RTD#5 GND (4)	RTD#5 GND (4)
65	RTD #5 Return	RTD#5 W (3)	RTD#5 W (3)
66	RTD #5 Compensation	RTD#5 - (2)	RTD#5 - (2)
67	RTD #5 Hot	RTD#5 + (1)	RTD#5 + (1)
68	RTD #4 Shield	RTD#8 GND (16)	RTD#8 GND (16)
69	RTD #4 Return	RTD#8 W (15)	RTD#8 W (15)
70	RTD #4 Compensation	RTD#8 - (14)	RTD#8 - (14)
71	RTD #4 Hot	RTD#8 + (13)	RTD#8 + (13)
72	Ground C/T 5A	X1-9	X1-9
73	Ground C/T COM	X1-10	X1-10
74	Ground C/T 2000:1	Not Applicable	Not Applicable
75	Phase C C/T 5A	X1-5	X1-5
76	Phase C C/T COM	X1-6	X1-6
77	Phase C C/T 1A	X1-5	X1-5
78	Phase B C/T 5A	X1-3	X1-3
79	Phase B C/T COM	X1-4	X1-4
80	Phase B C/T 1A	X1-3	X1-3
81	Phase A C/T 5A	X1-1	X1-1
82	Phase A C/T COM	X1-2	X1-2
83	Phase A C/T 1A	X1-1	X1-1

* Assignable

** 269 Plus only

269 Terminal	Description	857 with 857-RAD	857 with 857-RAA
84	Meter -	Not Applicable	Not Applicable
85	Meter +	Not Applicable	Not Applicable
86	RS 422 Rx - (with 4 - wire MOD)**	Not Applicable	Not Applicable
87	RS 422 Rx + (with 4 - wire MOD)**	Not Applicable	Not Applicable
88	RS485 Shield**	Order Dependent	Order Dependent

* Assignable

** 269 Plus only

MPM Terminal	Description	857 with 857-RAD	857 with 857-RAA
1	V1 Voltage Input	X1-11	X1-11
2	V2 Voltage Input	X1-12, X1-13	X1-12, X1-13
3	V3 Voltage Input	X1-14	X1-14
4	VN Voltage Input	X1-13	X1-13
5	Filter Ground - Control Power	Not Required	Not Required
6	Safety Ground - Control Power	Not Required	Not Required
7	N/-(Control Power)	Not Required	Not Required
8	L/+(Control Power)	Not Required	Not Required
9	Phase A C/T 5A	X1-1	X1-1
10	Phase A C/T 1A	X1-1	X1-1
11	Phase A C/T COM	X1-2	X1-2
12	Phase B C/T 5A	X1-3	X1-3
13	Phase B C/T 1A	X1-3	X1-3
14	Phase B C/T COM	X1-4	X1-4
15	Phase C C/T 5A	X1-5	X1-5
16	Phase C C/T 1A	X1-5	X1-5
17	Phase C C/T COM	X1-6	X1-6
21	Analog Out Shield	Any mA OUT(-) (10,12,14,16)	Not Applicable
24	Analog Out Com	Any mA OUT(-) (10,12,14,16)	Not Applicable
25	Analog Out 4+ (PF)	mA OUT4 + (15)*	Not Applicable
26	Analog Out 3+ (KVAR)	mA OUT3 + (13)*	Not Applicable
27	Analog Out 2+ (KW)	mA OUT2 + (11)*	Not Applicable
28	Analog Out 1+ (AMP)	mA OUT1 + (9)*	Not Applicable
31	Not Required	Not Required	Not Required
32	Not Required	Not Required	Not Required
33	Not Required	Not Required	Not Required
43	Not Required	Not Required	Not Required
44	Not Required	Not Required	Not Required
45	Not Required	Not Required	Not Required
46	Not Required	Not Required	Not Required
47	Not Required	Not Required	Not Required
48	Not Required	Not Required	Not Required

* Assignable

** 269 Plus only

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