

DESCRIPTION/APPLICATION

The Tri-Barrier product is an original Thomas & Betts design and we set new terminal block standards with its introduction. In recent years, some of our competition has copied this design.

It's easy to see why we're copied. Our Tri-Barrier blocks help contain stray or frayed wire ends. This prevents electrical shorts — not only between positions on the same block, but also between other components immediately adjacent to the block. With today's high-density PCB designs, this has become an increasingly important feature.

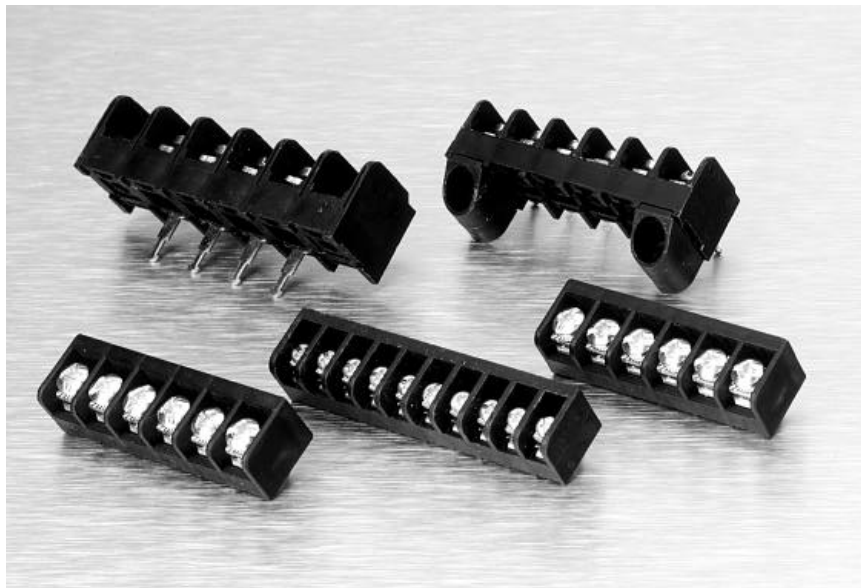
APPLICATIONS

- Industrial controls and automation
- Machine tools
- HVAC/R
- Power supplies
- Security/Irrigation
- Transformers

DESIGN ADVANTAGES

- Back barriers to safeguard field wiring
- Fast wiring – backed-out wire-ready screws
- Interrupted thread prevents screws from falling out
- Standoffs allow flux and solvents to drain during cleaning
- Molded-to-length or cut-to-length versions available
- Slotted or phil-slot screws available

TRI-BARRIER STRIPS



CONNECTOR INDEX

0.250"	Pitch, Series #3.....	56-59
0.250"	Pitch, Series RSB2.....	60, 61
0.325"	Pitch, Series #4.....	62-65
0.325"	Pitch, Series RSB3.....	66-69
0.375"	Pitch, Series #6.....	70-73
0.375"	Pitch, Series RSB6.....	74-77
0.375"	Pitch, Series BC6, Panel Mount.....	78-79
0.375"	Pitch, Series MB6, Double Level.....	80, 81
0.4375"	Pitch, Series #8.....	82, 83

0.325" PITCH
SERIES #4
TRI-BARRIER

PHYSICAL PROPERTIES

HOUSING MATERIAL: Polyamide
FLAMMABILITY: UL94V-0
COLOR: Black

TERMINAL

TERMINALS: Bright acid tin over copper alloy
SCREWS: #4-40 steel, zinc plating with clear chromate coating. Wire clamping screw standard. Binding head screw with undercut optional.

MECHANICAL

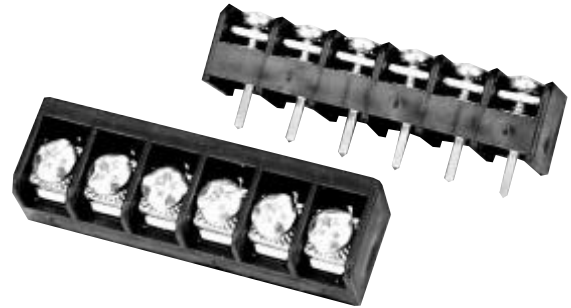
PITCH (TERMINAL SPACING): 0.325"
RECOMMENDED PCB HOLE DIA.: 1.8mm (.073")
RECOMMENDED TIGHTENING TORQUE: 7 in.-lbs. max.

ELECTRICAL PROPERTIES

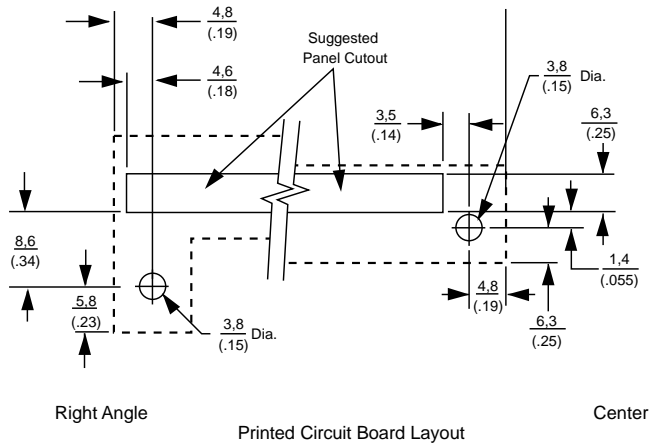
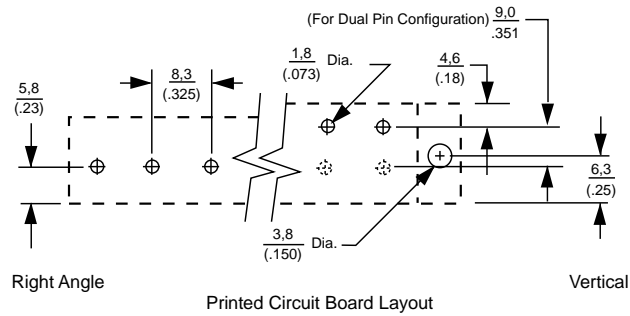
MAXIMUM CURRENT: 20A
OPERATING VOLTAGE: 150V/300V (limited rating)
WIRE RANGE: 14-22 AWG

ENVIRONMENTAL PROPERTIES

OPERATING TEMPERATURE RANGE: 105°C max.



4PCV-06



0.325" PITCH
SERIES #4 TRI-BARRIER

ORDERING INFORMATION

4 PCV-04-004

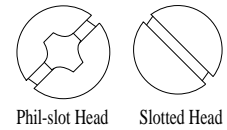
A **B** **C** **D**

A Screw Size Spacing
4 = #4-40 on .325" Centers

C No. of Circuits (Not Positions)
02 through 32

B Terminal Style
DBL = Double Printed Circuit Pin
PCR = Printed Circuit, Right Angle
PCV = Printed Circuit Pin, Vertical
WWV = Solderless Wire Wrap, Vertical

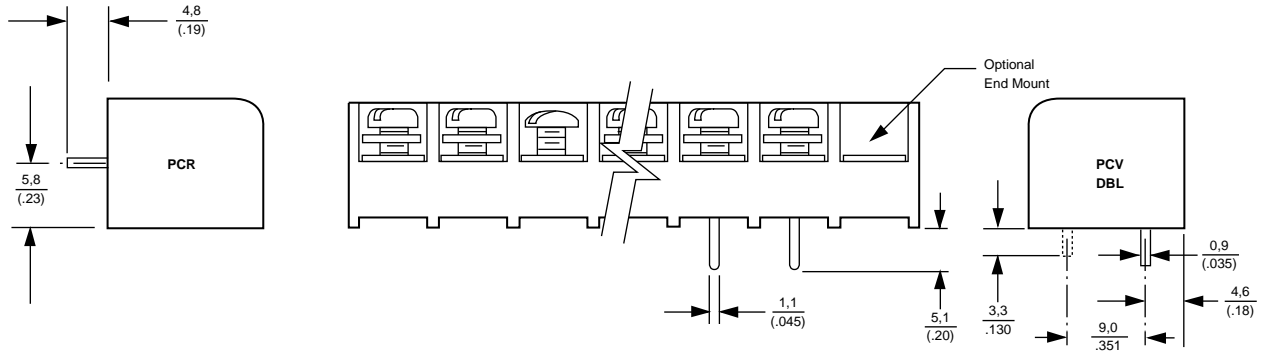
D Modifiers
Use table below.
Note: If modifier is -000
it may be omitted. (4PCV-06)



Terminal Style	Modifier Slotted Head	Modifier Phil-slot Head	Screw Style	Mounting Construction
DBL	000	006	Wire Clamp	No Mounting
	001	007	Binding Head	
PCV	000	006	Wire Clamp	No Mounting
	001	007	Binding Head	
	004	008	Wire Clamp	
	005	009	Binding Head	
PCR	000	006	Wire Clamp	No Mounting
	001	007	Binding Head	
	004	008	Wire Clamp	
	005	009	Binding Head	
WWV	000	006	Wire Clamp	
	001	007	Binding Head	
	004	008	Wire Clamp	No Mounting
	005	009	Binding Head	

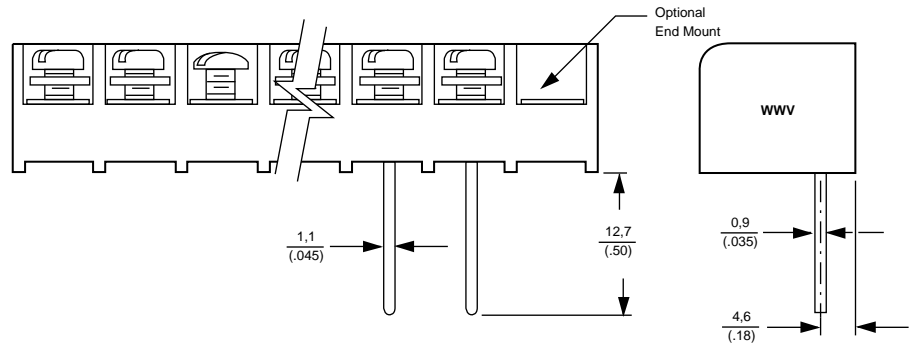
0.325" PITCH
SERIES #4
TRI-BARRIER

Printed Circuit Pin

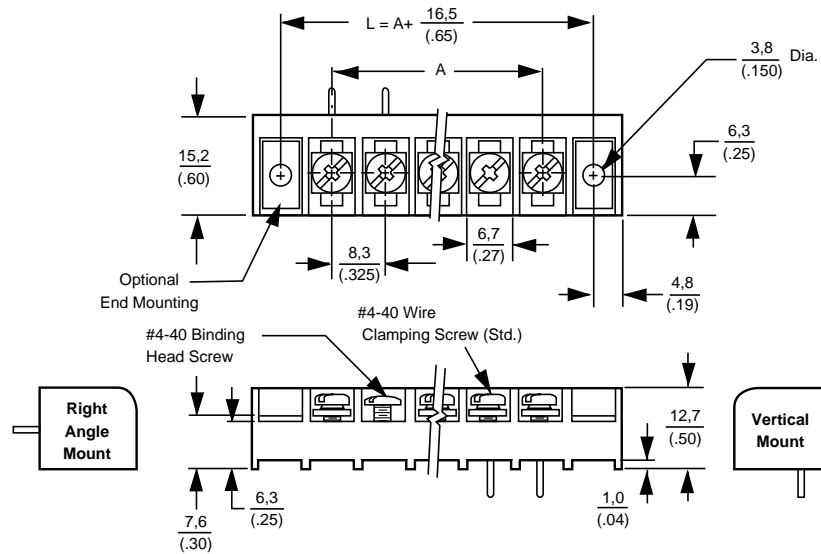


Wire Wrap

#4 WWR Not available



0.325" PITCH
SERIES #4
TRI-BARRIER



Dimensions

TERMINALS	A	TERMINALS	A
2	(0.325) 8,2	17	(5.20) 132,1
3	(0.65) 16,5	18	(5.52) 140,3
4	(0.97) 24,7	19	(5.85) 148,6
5	(1.30) 33,0	20	(6.17) 156,8
6	(1.62) 41,3	21	(6.50) 165,1
7	(1.95) 49,5	22	(6.82) 173,3
8	(2.27) 57,8	23	(7.15) 181,6
9	(2.60) 66,0	24	(7.47) 189,9
10	(2.92) 74,3	25	(7.80) 198,1
11	(3.25) 82,5	26	(8.13) 206,4
12	(3.57) 90,8	27	(8.45) 214,6
13	(3.90) 99,1	28	(8.78) 222,9
14	(4.22) 107,3	29	(9.10) 231,1
15	(4.55) 115,6	30	(9.43) 239,4
16	(4.87) 123,8		

0.325" PITCH SERIES RSB3

PHYSICAL PROPERTIES

HOUSING MATERIAL: Polypropylene

FLAMMABILITY: UL94V-2

COLOR: Black

TERMINAL

TERMINALS: Brass w/bright Tin plating

SCREWS: Steel w/Zinc + Chromate plating

CLAMP: Steel w/Zinc + Chromate plating

MECHANICAL

PITCH (TERMINAL SPACING): .325 in

SCREW SIZE: 6-32

RECOMMENDED PCB HOLE DIA.: .062"

WIRE STRIP LENGTH: .31 in

RECOMMENDED TIGHTENING TORQUE: 9 in lbs.

RECOMMENDED SCREWDRIVERS: Stanley 1006-4,

Sears Craftsman 41581, Any #2 Phillips-Head

WIRE LUG WIDTH (MAX.): .265 in

ELECTRICAL PROPERTIES

MAXIMUM CURRENT: 15A

OPERATING VOLTAGE: 300V

WIRE RANGE: #14-26 AWG

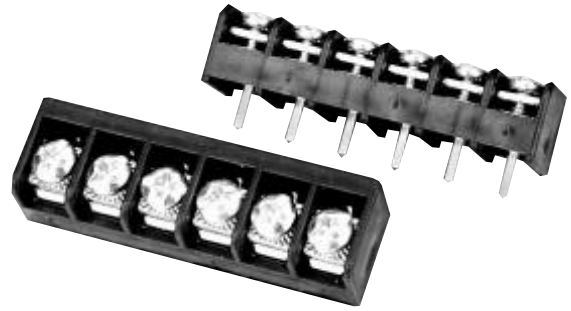
DIELECTRIC WITHSTAND: 4000V

ENVIRONMENTAL PROPERTIES

OPERATING TEMPERATURE RANGE:

-60°C to +105°C

(-76°F to +221°F)

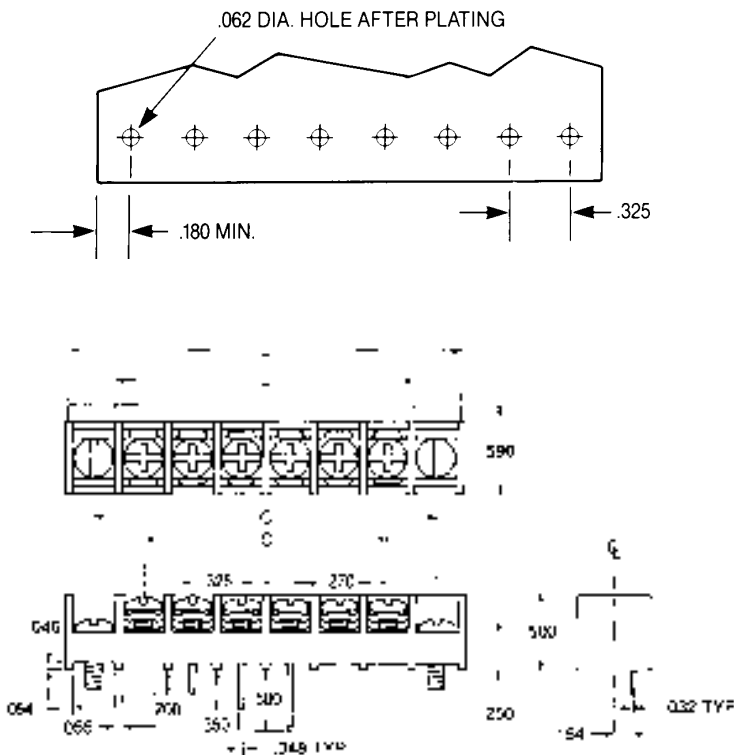


RSB3VP061202

Dimensions

CIRCUITS (NOT POSITIONS)	C1 IN.	L1* IN.	C2 IN.	L2* IN.
02	.325	.704	.975	1.354
03	.650	1.029	1.300	1.679
04	.975	1.354	1.625	2.004
05	1.300	1.679	1.950	2.329
06	1.625	2.004	2.275	2.654
07	1.950	2.329	2.600	2.979
08	2.275	2.654	2.925	3.304
09	2.600	2.979	3.250	3.629
10	2.925	3.304	3.575	3.954
11	3.250	3.629	3.900	4.279
12	3.575	3.954	4.225	4.604
13	3.900	4.279	4.550	4.929
14	4.225	4.604	4.875	5.254
16	4.875	5.254	5.525	5.904
17	5.200	5.579	5.850	6.229
18	5.525	5.904	6.175	7.554
19	5.850	6.229	6.500	6.879
20	6.175	6.554	6.825	7.204
21	6.500	6.879	7.150	7.529
22	6.825	7.204	7.475	7.854
23	7.150	7.529	7.800	8.179
24	7.475	7.854	8.125	8.504
25	7.800	8.179	8.450	8.829
26	8.125	8.504	8.775	9.154
27	8.450	8.829	9.100	9.479
28	8.775	9.154	9.425	9.804
29	9.100	9.479	9.750	10.129
30	9.425	9.804	10.075	10.454
31	9.750	10.129	10.400	10.779
32	10.075	10.454	10.725	11.104
33	10.400	10.779	11.050	11.429
34	10.725	11.104	11.357	11.754
35	11.050	11.429		
36	11.357	11.754		

*L2 and L1 are based on molded-to-length strips.



COMPUTING BARRIER BLOCK LENGTHS

DIRECT MOUNTING: Use C1 and L1 for Mounting Option "P".

END POSITION MOUNTING: Use C2 and L2 for Mounting Option "M".



LR49571 E60980

BUCHANAN

0.325" PITCH
SERIES RSB3

ORDERING INFORMATION

RSB 3 V P 06 12 02 11 N N
A **B** **C** **D** **E** **F** **G** **H** **I** **J**

A Single Screw Tri-Barrier Strip RSB

B Contact Spacing (Center-to-Center)
3=.325 in.


C Mounting Position
V=Vertical Mounting
R=Right-Angle Mounting

D End Contact Mounting Options
M=End Position Mounting: open end positions with barriers.
P=Direct Mounting: all positions filled with contacts, with barriers
T=End Position Mounting: Open end positions with mounting plate, with barriers




E No. of Circuits (Not Positions)
02 through 34 for M Option
02 through 36 for P Option

F Terminal Style
12=Printed Circuit Pin
13=Non-Feed Through
14=Extended Circuit Board
15=Right-Angle Circuit Board
17=Wire Wrap

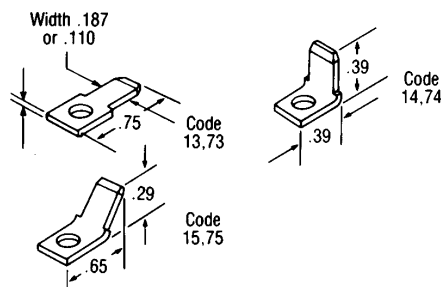
G Top Hardware Options
01=Bright zinc and chromate plated steel binding-head screw


02=Bright zinc and chromate plated steel screw and captive clamp – Do not order in combination with other top hardware.


Quick-Connect Blades (supplied with 01 screw)

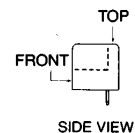
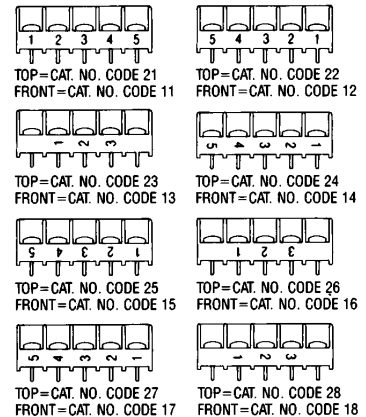
.110 wide		.187 wide	
x.020 thick		x.020 thick	
13	73=		
14	74=		
15	75=		

Catalog Number Codes: 13 through 15 and 73 through 75. A complete selection of .187" and .110" quick-connect blades for connecting wire terminated with female quick connects. Single sided types in flat 45° and 90° angle bends can be supplied. Material is brass with tin plating. All blades supplied with 01 screws. Various quick-connects can be combined.



H Circuit Identification Options
Catalog Number Codes: 11 through 18 and 21 through 28. RSB3 blocks may be ordered with white circuit identification numbers on the molding in sixteen variations. Custom markings available on special order.

NN=No Circuit Identification



I Material
N-Polypropylene

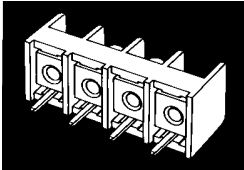
J Color
N-Black

0.325" PITCH SERIES RSB3

MOUNTING POSITION

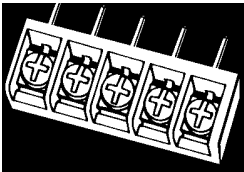
Vertical Mounting

CATALOG LETTER CODE: **V**. Used where direct top-to-bottom feed-through is required with no need for circuit isolation on the bottom side. The most common example of this is printed circuit board mounting.



Right Angle Mounting

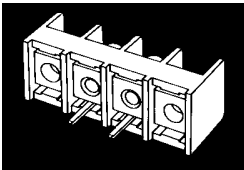
CATALOG LETTER CODE: **R**. Provides a printed circuit board mounting option with top-side wire entry. Supplied with terminal option 15.



END CONTACT MOUNTING OPTIONS

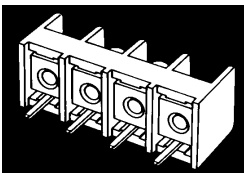
End Position Mounting

CATALOG LETTER CODE: **M**. Supplied without contact in end sections to allow installer to mount blocks with screws in end section holes. Base of block will support #6 mounting screws.



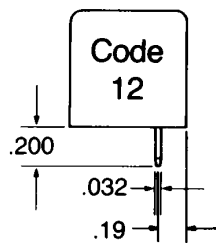
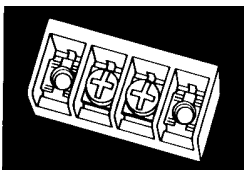
Direct Mounting

CATALOG LETTER CODE: **P**. RSB3 may be solder-mounted using the bottom terminals themselves, as in the case of printed circuit board applications.



End Position Mounting with Mounting Plates

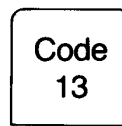
CATALOG LETTER CODE: **T**. Supplied with threaded mounting plates instead of contacts in end sections to facilitate bottom screw mounting using standard 6-32 screws.



TERMINAL STYLE

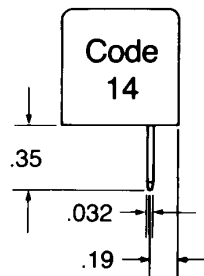
Printed Circuit Pin

CATALOG NUMBER CODE: **12**. Designed specifically for mounting on .063" thick circuit board. Special, readily solderable plating permits good fillet development in automated soldering processes.



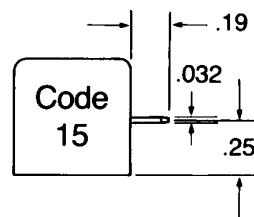
Non-Feed-Through

CATALOG NUMBER CODE: **13**.



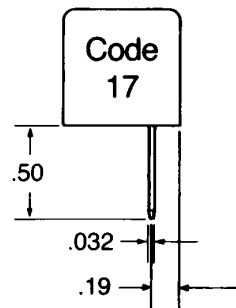
Extended Printed Circuit Pin

CATALOG NUMBER CODE: **14**. Useful for thicker printed circuit boards or single-wrap connections.



Right Angle Printed Circuit Pins

CATALOG NUMBER CODE: **15**.



Wire Wrap

CATALOG NUMBER CODE: **17**. Longer than extended circuit board terminals.

0.325" PITCH SERIES RSB3 ACCESSORIES

DESCRIPTION

BINDING HEAD SCREWS
Phil-slot, steel, bright zinc
and chromate plated

ORDER
NUMBER
3L01



CAPTIVE CLAMP SCREW
Phil-slot, steel, bright zinc
and chromate plated

ORDER
NUMBER
3L02



QUICK CONNECT BLADES

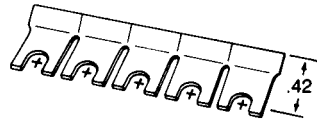
Ordering Information

PACKAGES OF 100:		.110 WIDE X .020 THICK	.187 WIDE X .020 THICK
Flat, Single-Sided	—	QC13	QC73
45°, Single-Sided	∟	QC14	QC74
90°, Single-Sided	L	QC15-BU	QC75

AROUND-THE-BARRIER SPADE JUMPER

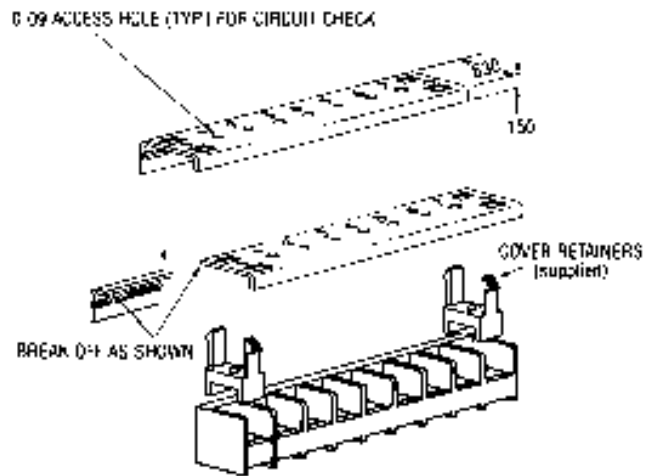
40 circuits; snap apart to
desired lengths. (Jumper
extends .42 in horizontally
from center of screw)

J310



SAFETY COVERS

Dead front protection prevents accidental contact with energized circuits. Access holes for test probes are provided over each terminal. Nylon clips are included with each cover. Covers meet UL94V-0, with 50°C temperature index. Black circuit identification optional.



Ordering Information

3 **C** **1** **N** **07**

Centerline Dimensions
3 = .325 in.

Cover Material
C = Yellow PVC

Style
1 = Closed Back

Number of Circuits
(Use Two Digits)
02 through 34

Circuit Identification
N = No Markings
F = Forward Sequence
(as shown)
R = Reverse Sequence