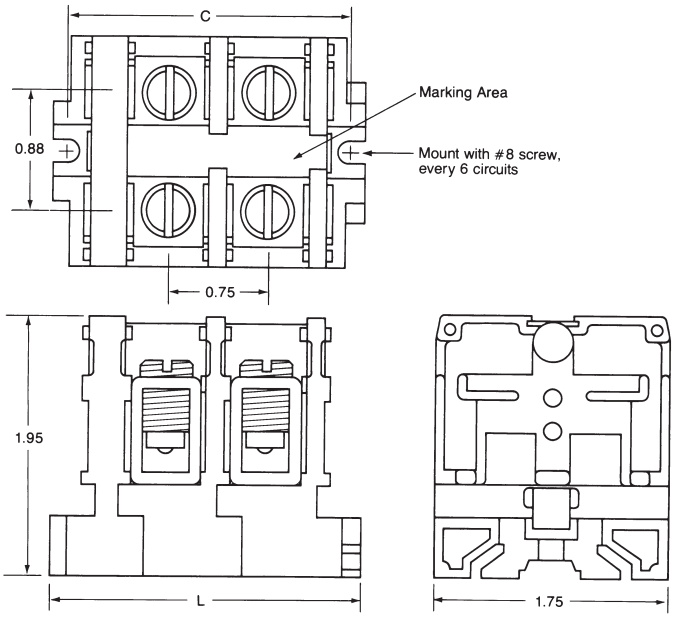
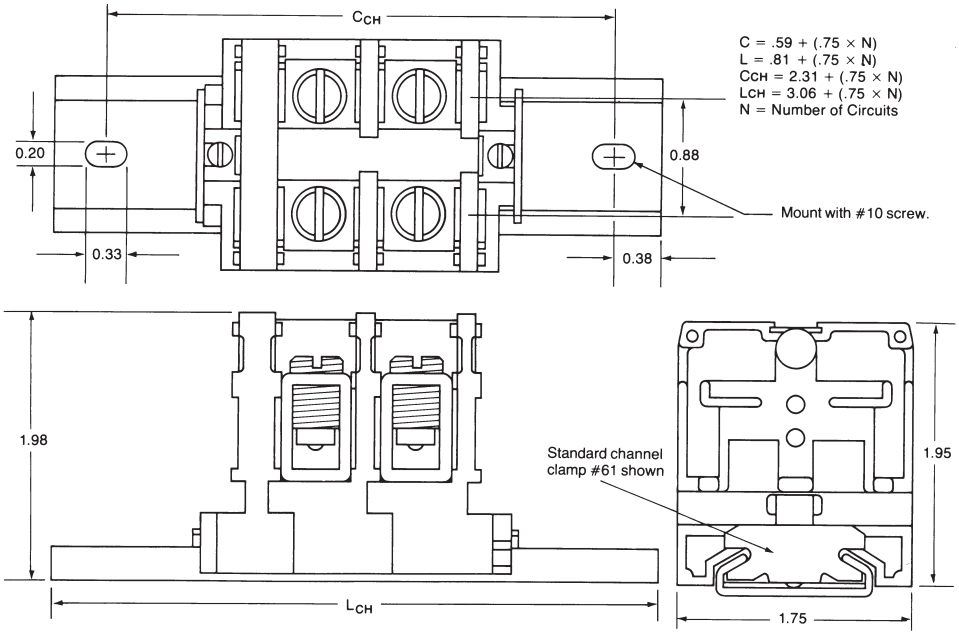
# 800 Series, Intermediate Heavy Duty

## Flat Base




## Dovetail Base Mounted On Standard #60 Channel




LR25557 E63810



Catalog 1308389
Revised 6-06

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Dimensions are in millimeters and inches unless otherwise specified.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 52-55-1106-0800
C. America: 57-1-254-4444

South America: 55-11-2103-6000
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-208-420-8341

# 400 Series, Ultra Heavy Duty

## Product Facts

**400 Series**

- **Compact 2/0 or 250 kcmil (MCM) block - at least 57 circuits per 6- foot length, 1-3/16" [30.16] center-to-center spacing.**
- **High current capacity snap-fit sectional block — tubular contacts accept single or combinations of wire sizes as large as 250 kcmil (MCM).**
- **Two contact styles available; rated up to 270 amperes for copper wire.**
- **Allen head screws allow maximum torque when using large wire sizes.**
- **Withstand voltages in excess of IEEE switchgear standards for 750 volts. Meet clearance and creepage spacing specified in UL, CSA, and NEMA Industrial Control Standards for 600 volts.**
- **Same block directly mounts on surface or channel mounts.**
- **Only one end section needed per block assembly.**
- **Readily identify circuits—order blocks with painted marking area or use removable vinyl marking strip. Preprinted marking strips are also available.**
- **Factory assembled blocks available.**
- **Ultra Heavy Duty phenolic block sections do not snap-fit with other block styles.**

This Ultra Heavy Duty line includes the 400 Series rated up to 270 A.



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# 400 Series, Ultra Heavy Duty, 600 V, 1.19" [30.23] Pitch

## Material & Finish

**Housing Materia**l—Phenolic, filled flame retardant
**Flammability**—UL94V-1
**Color**—Black

## Contacts:

**Material**—Electrical grade copper conductor; plated steel screws resist corrosion

**Tubular Screw Type**—
Small: 1/2" [12.7] - 13 Hex
Large: 3/4" [19.05] - 16 Hex socket set screw

## Mechanical Properties

**Pitch (terminal spacing)**—1.19" [30.23]; 9 circuits/foot

**Wire Strip Length**—
Tubular Screw (small): 1" [25.4]
Tubular Screw (large): 1" [25.4]

## Electrical Properties

**Maximum Current**—255A for a single 250MCM wire

**Operating Voltage**—Blocks meet 600V creepage and clearance requirements; withstand voltage greatly exceeds standards for 750V

**Wire Range**—Tubular Screw (small): #12-#2/0 AWG solid or stranded; Tubular Screw (large): #6 AWG-250 kcmil (MCM) solid or stranded

**Dielectric Strength (RH 40% @ sea level)**—300 V/mil thickness per ASTM D149

**Breakdown Voltage, AC, 60Hz**—
Contact-to-Contact: 10,000V
Contact-to-Ground: 10,000V

**UL High Voltage Arc Tracking (in./min.)**—.49-.58 [12.45-14.73]

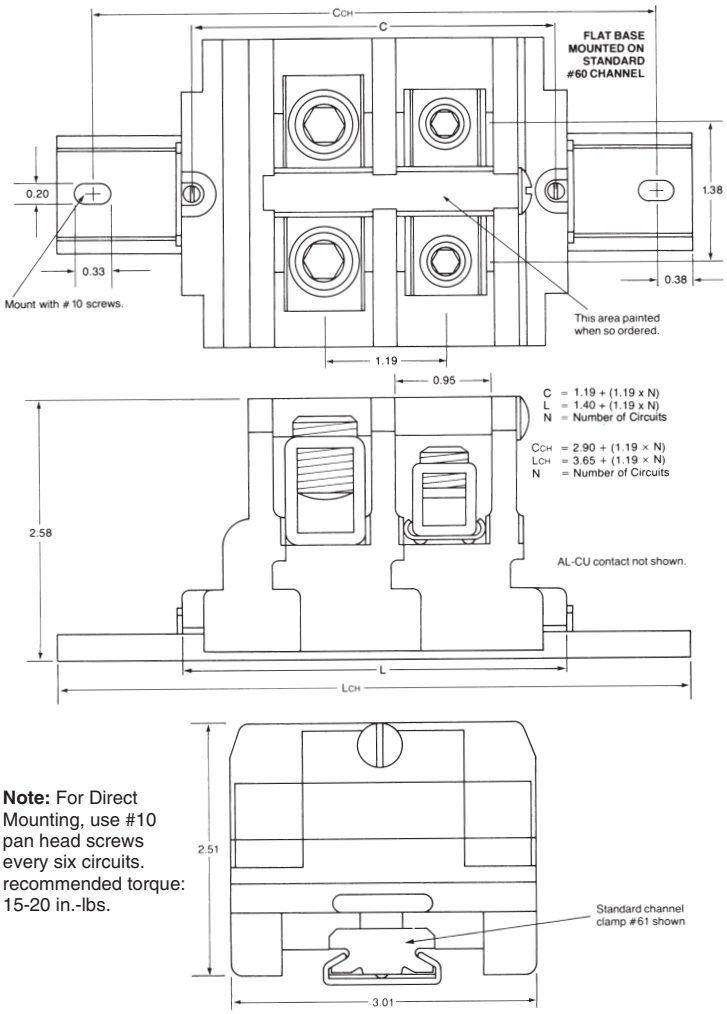
## Environmental Properties

**Max. Continuous Temperature**—150°C [302°F]

**Water Absorption (24hrs. % wt. gain)**— .45% per ASTM D149

**Chemical Resistance**—Resistant to acids, alkalies, and aliphatic hydrocarbons and ketones per ASTM D543

**Radiation Resistance (ergs g-1 (C)**—2.7 x 108




**Note:** For Direct Mounting, use #10 pan head screws every six circuits. recommended torque: 15-20 in.-lbs.

**Same part used for both panel and channel mounting.**

| Description | Wire Range | Part Number | Catalog Number |
|---|---|---|---|
| Tubular Screw, Unpainted | #12-2/0 | 1437396-4 | 416 |
| Tubular Screw, Painted | #12-2/0 | 1437396-7 | 426-BU |
| Tubular Screw, Unpainted | #6-250 kcmil/MCM | 1437396-5 | 417 |
| Tubular Screw, Painted | #6-250 kcmil/MCM | 1437396-8 | 427-BU |
| End Section | — | 1437396-9 | 430-BU |

## UL Independent Testing Service Recognitions:

**Tubular Screw:** Catalog # 416 & 426-BU
1 #2/0 AWG, 1 #1/0 AWG, 1 #1 AWG,
1 or 2 #2 AWG, 1 to 3 #4 AWG, 1 to 3 #6 AWG,
1 to 4 #8 AWG, 1 to 6 #10 AWG, 2 to 8 #12 AWG,

**Tubular Screw:** Catalog # 417 & 427-BU
1 #250kcmil (MCM), 1 #4/0 AWG, 1 #3/0 AWG,
1 or 2 #2/0 AWG, 1 or 2 #1/0 AWG, 1 or 2 #1 AWG, 1 to 3 #2 AWG, 1 to 4 #4 AWG,
1 to 5 #6 AWG

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# 400 Series, Ultra Heavy Duty Accessories

## Mounting Channel



## Channel Clamps



| Steel Channel | Break Away Steel | Pre-punched Aluminum Channel | Screw Channel Clamps | Universal Clamps | Snap-In Clamps |
|---|---|---|---|---|---|
| **Part Number** | | | | | |
| 9-1437381-1<br>9-1437381-8 | 9-1437381-2 | 9-1437381-9<br>1437382-2 | 9-1437381-5 | 1437382-3 | 9-1437381-7 |
| **Catalog Number** | | | | | |
| 60<br>63-BU | 60-B-36 | 64<br>67 | 61 | 68 | 62 |
| **Standard Length** | | | | | |
| 6 feet<br>3 feet | 3 feet | 6 feet<br>3 feet | — | — | — |

## Marking Accessories




| Plastic Cloth Tape | Vinyl Marking Strips | Elevated Marking Strip | Holding Screw |
|---|---|---|---|
| **Part Number** | | | |
| 8-1437381-0 | 6-1437381-3 | 4-1437391-1 | 7-1437381-8 |
| **Catalog Number** | | | |
| 55-BU | 50-BU | 52-BU | 53-BU |
| **Standard Length** | | | |
| 50 feet | 25 feet | 18 inches | — |

**Notes:**
For factory assembled blocks on channel, prefix Catalog # with “0” and suffix with number of blocks desired. Without channel (maximum of 6 sections) delete “0”.
Example: Ten tubular screw sections preassembled on channel = 041710

For unpainted factory assembled blocks supplied with a removable marking strip add -1 to Catalog Number.

For blocks with two or more different contact sections, imprinted marking strips or special features, consult Technical Support.

### Related Product Data

**Wire Pins and Ferrules**—Pages 108-110
For more information on AMP Standard Terminals and Splices or Quick-Connect FASTON Receptacles and Tabs, request Catalog 82042.





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## Engineering Notes



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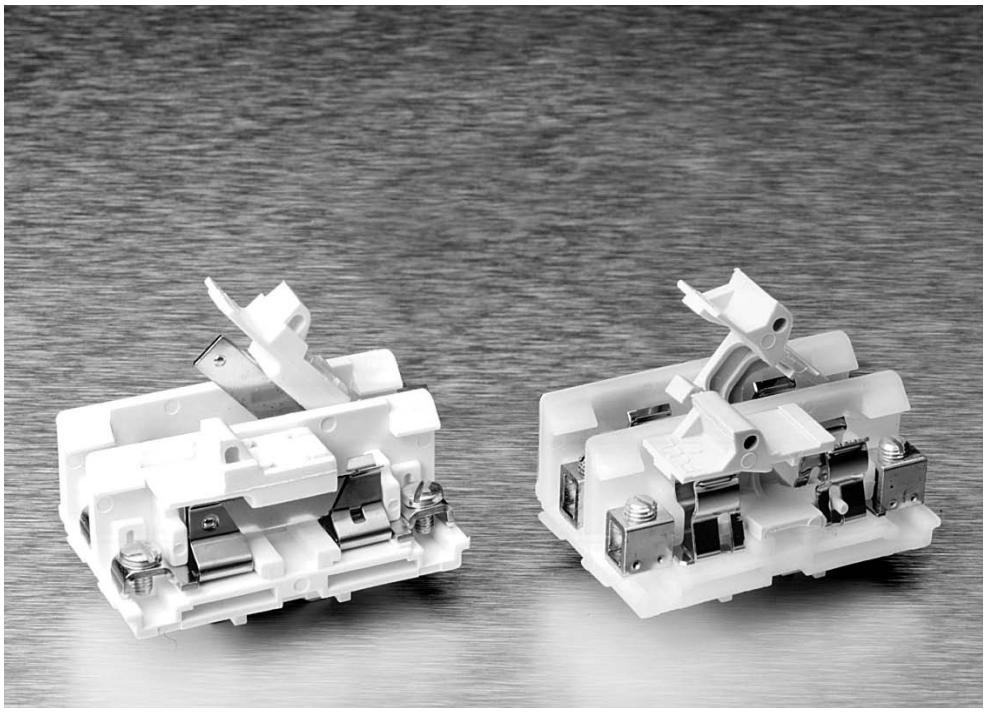
# Fuse & Switch



## Product Facts

### High Density Blocks

- Fuse and Switch Blocks rated 15A and 300V.
- High Density 0.36" [9.14] centerline spacing saves panel space; at least 33 circuits per foot.

### Fuse Blocks

- Provide in-line circuit protection for virtually any circuit or group of circuits — select contacts for terminated or unterminated wire.
- Remove, check and replace fuses safely and quickly — switch action fuse blocks open circuits before fuse can be removed or installed.
- Contacts conservatively rated to 30 amperes.

### Switch Blocks

- Quickly and easily interrupt a circuit or group of circuits — insert switch blocks directly in line. Contacts available for terminated or unterminated wire.
- Keep circuits open for extended periods — switch blade can be removed entirely from block for lock-out protection.
- Rated to 15 amperes.

### Common Features of 300 & 0300 Series

- At least 91 circuits per 6-foot length, 3/4 inch center-to-center spacing.
- Blocks meet 600 volt clearance and creepage spacings specified in UL, CSA, and NEMA Industrial Control Standards.
- Choose nylon housing material — for more rugged applications; polypropylene for fire retardant characteristics.
- Dovetail base fits standard mounting channel — can also be mounted on flat surfaces.
- Only one end section needed per block assembly.
- Readily identify circuits — mark directly on white, matte-surface puller assembly, marking tab on block, or use removable marking tape.
- Open or close several circuits simultaneously — holes in puller handles allow use of nylon "ganging" rods.
- Fuse and Switch block sections snap-fit with 300 & 600 Volt, phenolic Medium Duty, Heavy Duty, and Intermediate Heavy Duty blocks.

This broad line features High Density Blocks (Series 0135), Nylon & Polypropylene Blocks (Series 0300) and Phenolic Blocks (Series 300).



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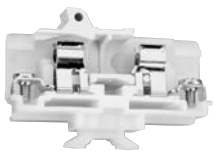
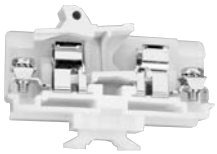
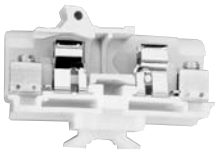
# 0300 Series, Fuse & Switch, Nylon and Polypropylene



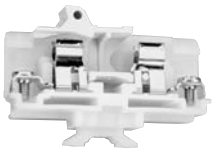
**Fuse Block Strap Screw**



**Fuse Block Strap Clamp**



**Fuse Block Tubular Screw**



**Switch Block Strap Screw**

**Characteristics**

| Type of Block | Model | Part Number | Model | Part Number | Model | Part Number | Model | Part Number |
|---|---|---|---|---|---|---|---|---|
| **Channel Mount (Dovetail Base)** | | | | | | | | |
| Nylon | 0311 | 1437397-1 | 0318 | 1437397-3 | 0312 | 1437397-2 | 0371 | 1-1437397-7 |
| Polypropylene | P0311 | 4-1437397-0 | P0318 | 4-1437397-3 | P0312 | 4-1437397-2 | P0371 | 4-1437397-4 |
| Corrosion Resistant Nylon | D0311 | 1-1437389-1 | D0318 | 1776726-1 | D0312 | 1-1437389-2 | D0371 | 1-1437389-7 |
| Corrosion Resistant Polypropylene | DP0311 | 6-1437389-2 | DP0318 | 1776727-1 | DP0312 | 6-1437389-3 | DP0371 | 1776728-1 |

**Contact Type**

| | | | | |
|---|---|---|---|---|
| **Specifications** | | | | |
| Wire Range (AWG) Solid & Stranded | 22-8 | 18-8 | 18-8 | 22-8 |
| Wire Strip Length (in.) | — | 1/2 | 1/2 | — |
| Screw Type | 10-32 binding head | 8-32 pan head w/clamp | 1/4"-28 set screw | 10-32 binding head |
| **Ampacity** | | | | |
| | 25 A | 25 A | 25 A | 15 A |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **End Sections** | | | | | | | | |
| Channel Mount, Nylon | 0380 | 2-1437397-0 | 0380 | 2-1437397-0 | 0380 | 2-1437397-0 | 0380 | 2-1437397-0 |
| Channel Mount, Polypropylene | P0380 | 4-1437397-7 | P0380 | 4-1437397-7 | P0380 | 4-1437397-7 | P0380 | 4-1437397-7 |

**Notes:** Standard package is 100 pieces for contact, 25 pieces for end section.

For factory assembled blocks on channel, suffix Catalog Number with number of blocks desired. Without channel delete “0” prefix on Catalog Number.
EXAMPLE:
Ten strap-screw fuse block sections preassembled on channel = 031110.

For blocks with two or more contact types, preassembled with other blocks, imprinting or special features, consult Technical Support.



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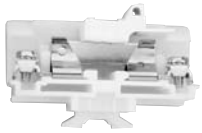
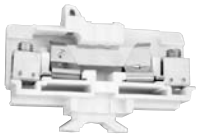
## 0300 Series, Fuse & Switch, Nylon and Polypropylene (Continued)



**Switch Block Strap Clamp**



**Switch Block Tubular Screw**

| Model | Part Number | Model | Part Number |
|---|---|---|---|
| 0378 | 1-1437397-9 | 0372 | 1-1437397-8 |
| P0378 | 4-1437397-6 | P0372 | 4-1437397-5 |
| D0378 | 1776729-1 | D0372 | 1776731-1 |
| DP0378 | 1776730-1 | DP0372 | 1776732-1 |
|  | |  | |
| 18-8 | | 18-8 | |
| 1/2 | | 1/2 | |
| 8-32 pan head w/clamp | | 1/4"-28 set screw | |
| 15 A | | 15 A | |
| 0380 | 2-1437397-0 | 0380 | 2-1437397-0 |
| P0380 | 4-1437397-7 | P0380 | 4-1437397-7 |

### Specifications

**Pitch**—0.75" [19.05] centerline, 16 circuits per foot

**Voltage Rating**—Blocks meet 600 volt creepage and clearance requirements of NEMA, UL and CSA for general industrial control equipment and panelboards. Withstand voltages greatly in excess of IEE switchgear standards for 750 volts.

**Fuse Size**—Any 13/32 x 1-1/2 in. [10.32 x 28.10] ferrule type cartridge fuse up to 25 amps, indicating or non-indicating, which meets Mil. Spec. F-15160.

### Standard Contacts

**Material**—Electrical grade copper or copper alloy conductor. Steel Screws plated to resist corrosion in most industrial applications

**AL-CU Tubular Screw**—Aluminum compatibility with aluminum or copper conductors. AL-CU is tin-plated brass.

### Environmental Contacts (for highly corrosive atmospheres)

**Tubular Screw**—Electrical grade copper tube with nickel plating. Nickel plated brass screws.

**Strap Screw**—Nickel plated brass straps and screws. Nickel plating meets specification QQ-N-290A Class I, Grade G.

### Polyamide Material:

**Housing Material**—Polyamide, Unfilled Type 6/6

**Max. Continuous Temperature**—125°C, (257°F)

**Breakdown Voltage (AC, 60 Hz)**—

Contact-to-Contact: 7000V

Contact-to-Ground: 10,000V

**Dielectric Strength (RH 40% at Sea Level)**—470-385 Volts/mil thickness Per ASTM D149

**UL High Voltage Arc Tracking (inches/min.)**—.01-.35 [.25-8.89]

**Water Absorption (24 hrs. % wt. gain)**—1.5% per ASTM D570

**Flammability**—UL94V-2

**Chemical Resistance**—Resistant to aromatic hydrocarbons, strong alkalies per ASTM D543

**Radiation Resistance (ergs g-1 (C)**—8 x 107

**Color**—Translucent White

### Polypropylene Material:

**Housing Material**—Polypropylene, Filled self-extinguishing

**Max. Continuous Temperature**—105°C, (221°F)

**Breakdown Voltage (AC, 60Hz)**—

Contact-to-Ground: 10,000V

Contact-to-Contact: 7000V

**Dielectric Strength (RH 40% at Sea Level)**—500 Volts/mil thickness per ASTM D149

**UL High Voltage Arc Tracking (inches/min.)**—Did not track

**Water Absorption (24 hrs. % wt. gain)**—0.02% Per ASTM D570

**Flammability**—UL94V-0

**Chemical Resistance**—Resistant to most acids, alkalines, and saline solutions. Also resistant to higher aliphatic solvents and polar substances per ASTM D543

**Radiation Resistance (ergs g-1 (C)**— No data Available

**Color**—Opaque White

| **Fuse Puller:** | |
|---|---|
| Material | High-temperature, glass-reinforced nylon |
| Color | Black |
| **Switch Handle:** | |
| Material | Polypropylene |
| Color | White |





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## 0300 Series, Fuse & Switch, Nylon and Polypropylene (Continued)

### Mounting Channel

| Steel Channel | Break Away Steel | Pre-punched Aluminum Channel |
|---|---|---|
| **Part Number** | | |
| 9-1437381-1<br>9-1437381-8 | 9-1437381-2 | 9-1437381-9<br>1437382-2 |
| **Catalog Number** | | |
| 60<br>63-BU | 60-B-36 | 64<br>67 |
| **Standard Length** | | |
| 6 feet<br>3 feet | 3 feet | 6 feet<br>3 feet |

### Channel Clamps

### Marking Accessories

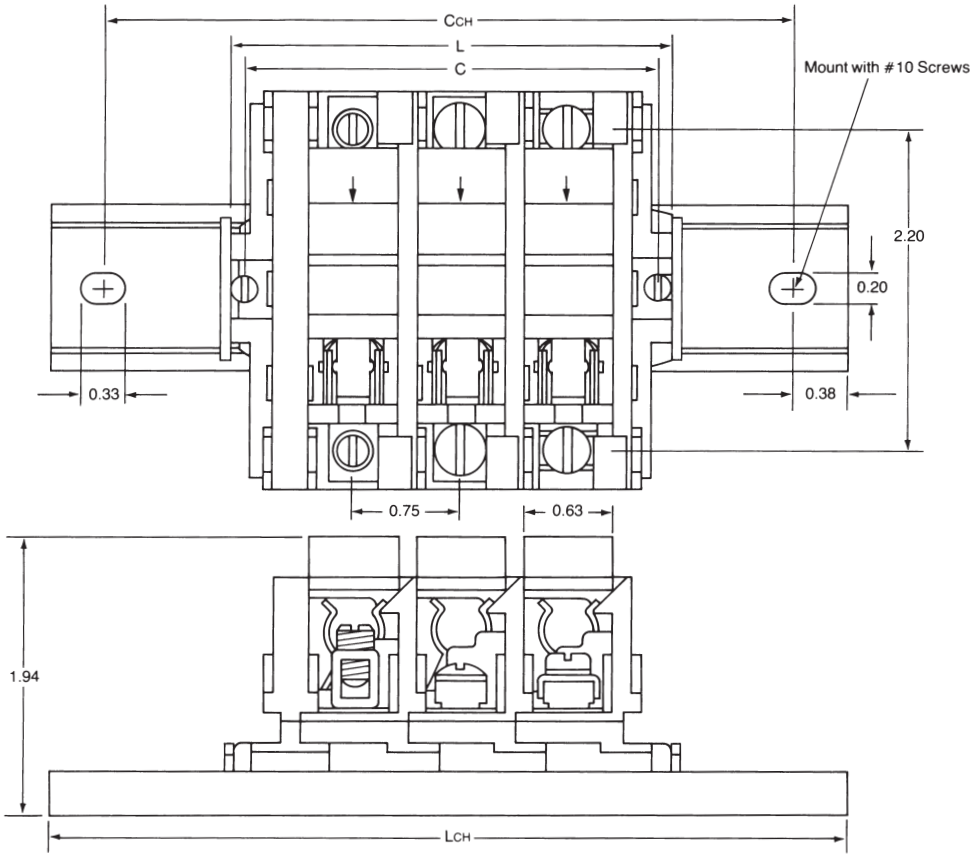
| Screw Channel Clamps | Universal Clamps | Snap-In Clamps | Ganging Rod | Coated Cloth Marking tape |
|---|---|---|---|---|
| **Part Number** | | | | |
| 9-1437381-5 | 1437382-3 | 9-1437381-7 | 3-1437381-9 | 8-1437381-0 |
| **Catalog Number** | | | | |
| 61 | 68 | 62 | 30 | 55-BU |
| **Standard Length** | | | | |
| — | — | — | 2 feet | 50 feet |

### Related Product Data

**Wire Pins and Ferrules**—Pages 108-110
For more information on AMP Standard Terminals and Splices or Quick-Connect FASTON Receptacles and Tabs, request Catalog 82042.

## 0300 Series, Fuse & Switch, Nylon and Polypropylene (Continued)

**Dovetail Base Mounted On Standard #60 Channel. May Also Be Mounted Direct**

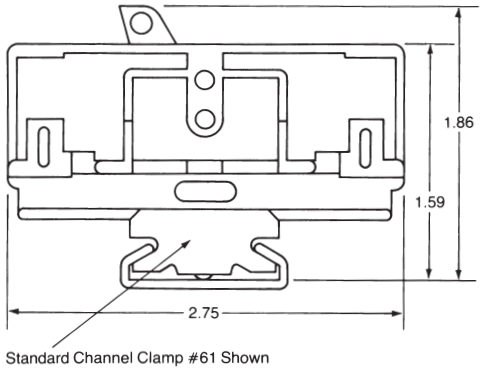



**CHANNEL MOUNTED**

CCH = 2.28 + (.75 x N)
LCH = 3.03 + (.75 x N)
N = Number of Circuits

**DIRECT MOUNTED**

C = .56 + (.75 x N)
L = .78 + (.75 x N)
N = Number of Circuits




Standard Channel Clamp #61 Shown





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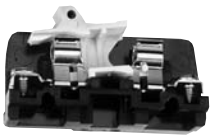
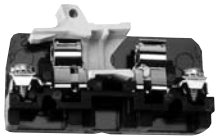
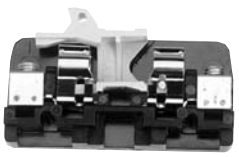
## 300 Series, Fuse & Switch, Phenolic


| Characteristics | Strap Screw | | Strap Clamp | | Tubular Screw | |
|---|---|---|---|---|---|---|
| **Type of Block** | **Model** | **Part Number** | **Model** | **Part Number** | **Model** | **Part Number** |
| **Direct Mount (Flat Base)** | | | | | | |
| Fuse Block with Puller | 351 | 2-1437397-8 | 358 | 3-1437397-1 | 352 | 3-1437397-0 |
| Fuse Block without Puller | 361 | 2-1437397-2 | 368-BU | 3-1437397-5 | 362-BU | 3-1437397-3 |
| Switch Block | 341 | 2-1437397-5 | 348 | 2-1437397-7 | 342 | 2-1437397-6 |
| **Channel Mount (Dovetail Base)** | | | | | | |
| Fuse Block with Puller | 0351 | 1437397-9 | 0358 | 1-1437397-2 | 0352 | 1-1437397-0 |
| Fuse Block without Puller | 0361 | 1437397-4 | 0368 | 1-1437397-6 | 0362 | 1-1437397-5 |
| Switch Block | 0341 | 1437397-6 | 0348 | 1437397-8 | 0342 | 1437397-7 |
| **Contact Type** | | | | | | |
| |  | |  | |  | |
| **Specifications** | | | | | | |
| Wire Range (AWG) Solid & Stranded | 22-8 | | 18-8 | | 18-8 | |
| Wire Strip Length (in.) | — | | 1/2 | | 1/2 | |
| Screw Type | 8-32 binding head | | 8-32 pan head w/clamp | | 1/4"-28 set screw | |
| **Ampacity** | | | | | | |
| Fuse Blocks | 25A | | 25A | | 25A | |
| Switch Blocks | 15A | | 15A | | 15A | |
| **End Sections** | | | | | | |
| No Contact, Flat Base | 330-BU | 2-14376397-4 | 330-BU | 2-14376397-4 | 330-BU | 2-14376397-4 |
| No Contact, Dovetail Base | 0330 | 14376397-5 | 0330 | 14376397-5 | 0330 | 14376397-5 |

### Comparison (Type of Block)




**Direct Mount (Flat Base)**

**Channel Mount (Dovetail Base)**

**Notes:** Standard package is 10 pieces.

For factory assembled blocks, suffix Catalog Number with number of blocks desired (Maximum number of flat base preassembled sections is 6).
EXAMPLE:
Twelve strap screw, fuse block sections preassembled on channel = 035112.
Six flat tubular screw, switch blocks preassembled without channel for direct mounting = 3426

For blocks with two or more different contact sections, preassembled with other blocks, imprinting or special features, consult Technical Support.

Environmental contacts for highly corrosive atmospheres are available with Nickel plating on non-ferrous hardware. To order, prefix Catalog Number with "D".

Except Switch Blocks

LR25557 E34934



Catalog 1308389
Revised 6-06

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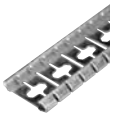
UK: 44-208-420-8341

# 300 Series, Fuse & Switch, Phenolic—Accessories

## Mounting Channel


## Fuse Puller


| Steel Channel | Break Away Steel | Pre-punched Aluminum Channel | Fuse Puller | 3-Gang Fuse Puller |
|---|---|---|---|---|
| **Part Number** | | | | |
| 9-1437381-1<br>9-1437381-8 | 9-1437381-2 | 9-1437381-9<br>1437382-2 | 2-1437397-1 | 2-1437397-2 |
| **Catalog Number** | | | | |
| 60-BU<br>63-BU | 60-B-36 | 64<br>67 | 31-BU | 32 |
| **Standard Length** | | | | |
| 6 feet<br>3 feet | 3 feet | 6 feet<br>3 feet | — | — |

## Channel Clamps



## Marking Accessories


| Screw Channel Clamps | Universal Clamps | Snap-In Clamps | Ganging Rod | Coated Cloth Marking Tape |
|---|---|---|---|---|
| **Part Number** | | | | |
| 9-1437381-5 | 1437382-3 | 9-1437381-7 | 3-1437381-9 | 8-1437381-0 |
| **Catalog Number** | | | | |
| 61 | 68 | 62 | 30 | 55-BU |
| **Standard Length** | | | | |
| — | — | — | 2 feet | 50 feet |

### Physical Properties

**Housing Materia**l—Phenolic, filled flame retardant
**Color**—Black

### Contacts

**Material**—Copper alloy spring clips. Steel screws plated to resist corrosion in most industrial applications
**Strap Screw**—11/32" max. lug width

### Mechanical Properties

**Pitch (terminal spacing)**—0.75" [19.05] (16 circuits per foot)

### Fuse Puller

**Material**—High temperature, glass-reinforced polyamide
**Color**—Beige

### Switch Handles

**Material**—Polypropylene
**Color**—White

### Electrical Properties

**Operating Voltage**—Blocks meet 600V creepage and clearance requirements of NEMA, UL and CSA standards for general industrial control equipment and panelboards; withstand voltage exceeds IEEE switchgear standards for 750V
**Dielectric Strength (RH 40% @ sea level)**—300 volts/mil thickness per ASTM D149
**UL High Voltage Arc Tracking (inches/min.)**—.49-.58 [12.45-14.73]
**Fuse Size**—Any 13/32 x 1-1/2 in. [10.32 x 38.10] ferrule type cartridge fuse up to 25 amps, indicating or non-indicating, which meets Mil. Spec. F-15160, is recommended.

### Environmental Properties

**Max. Service Temperature**—150°C (302°F)
**Water Absorption (24hrs. % wt. gain)**—0.45% per ASTM D570
**Flammability Rating**—UL94V-1
**Chemical Resistance**—Resistant to acids, alkalies, and aliphatic hydrocarbons and ketones, per ASTM D543
**Radiation Resistance (ergs g-1 (C)**—2.7 x 108

### UL Independent Testing Service Recognitions:

**Wire Sizes**—Solid or Stranded, Tubular Screw Cat. # 362-BU, 0362
1 #4 AWG, 1 #6 AWG, 1 #8 AWG, 1 to 4 #10 AWG, 1 to 5 #12 AWG, 1 to 6 #14 AWG, 1 to 6 #16 AWG, 1 to 8 #18 AWG

### Related Product Data

**Wire Pins and Ferrules**—Pages 132-134
For more information on AMP Standard Terminals and Splices or Quick-Connect FASTON Receptacles and Tabs, request Catalog 82042.

**Cat #'s 31 and 32**

E63810





Catalog 1308389
Revised 6-06

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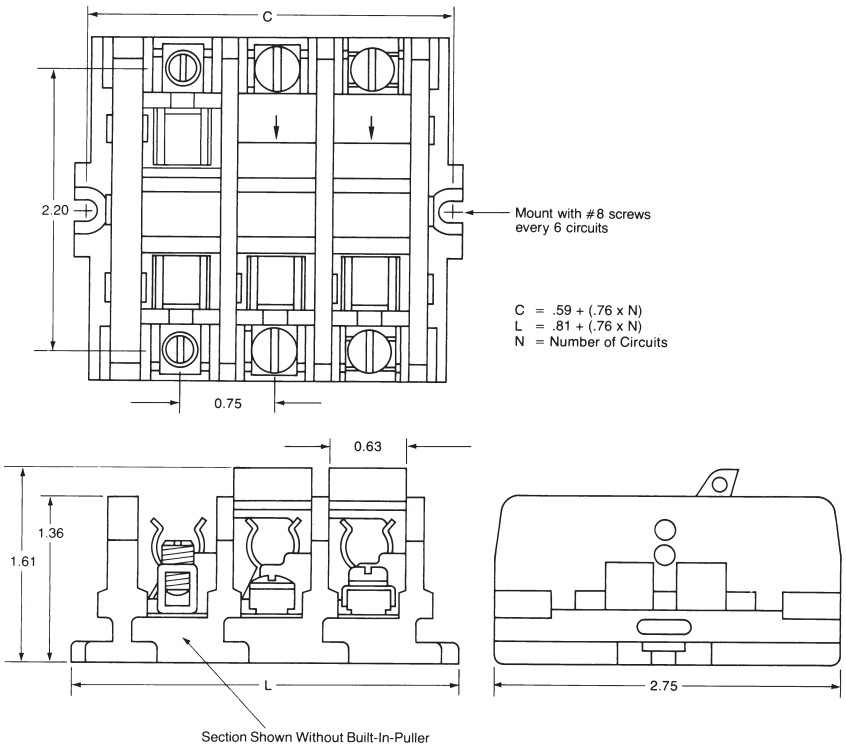
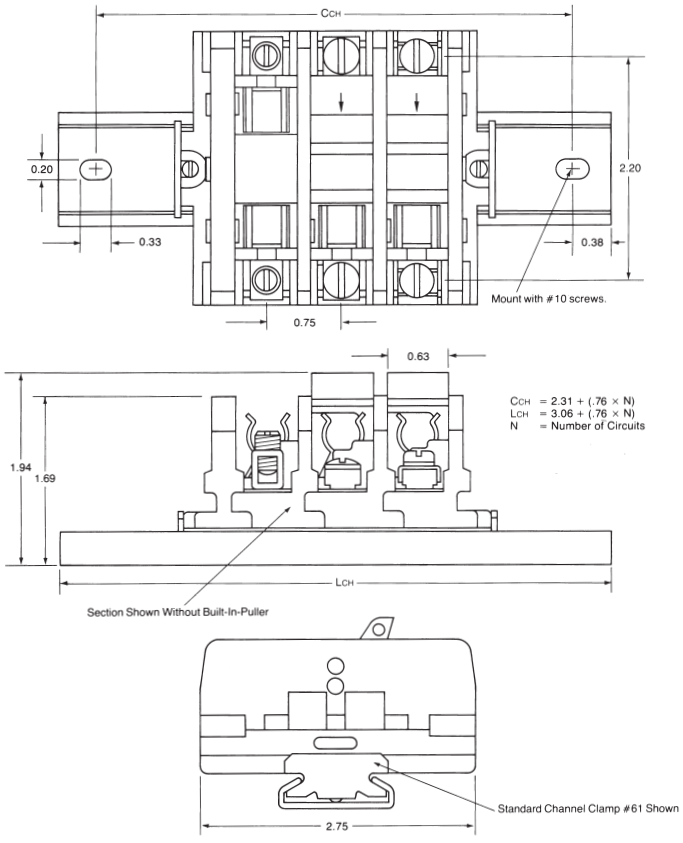
## 300 Series, Fuse & Switch, Phenolic, Flat Base




### Dovetail Base Mounted On Standard #60 Channel



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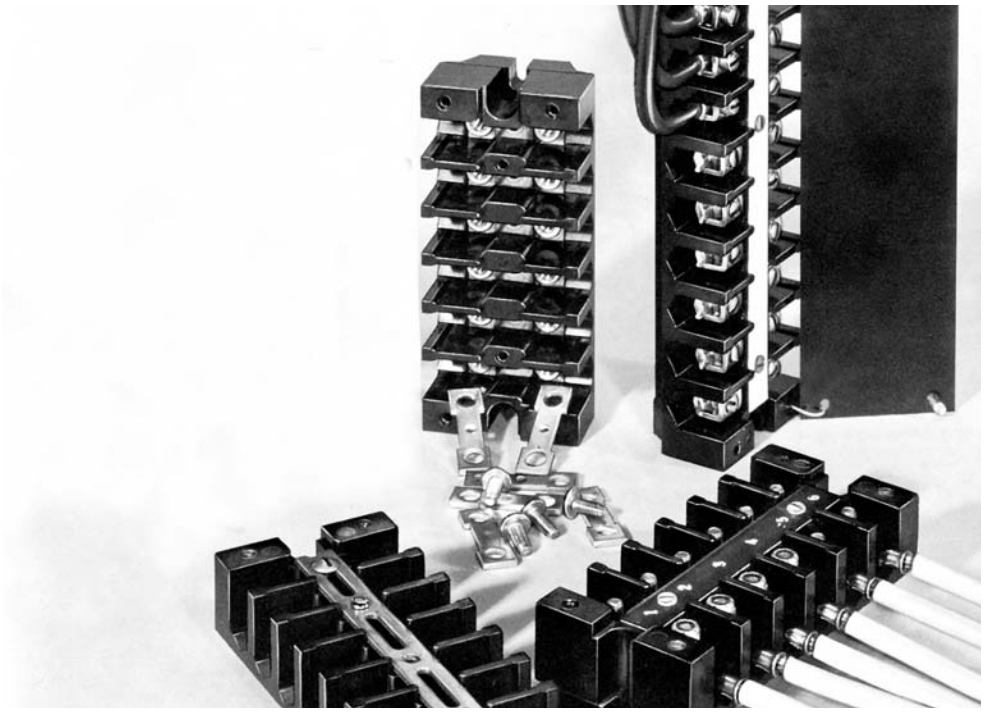
## One-Piece Phenolic Blocks

### Product Facts

- **Two, four, six, eight, and twelve circuit models available — 5/8" [15.88] center-to-center contact spacing.**
- **No assembly required — each is a single, easily installed unit.**
- **Three contact styles available —strap screw, captive strap clamp, and moving tubular contact.**
- **Use wire up to #6 AWG with tubular contact. Strap screw and strap clamp contacts are available for #8 and smaller.**
- **Withstand voltages in excess of IEEE standards for 750 volts. Meet clearance and creepage spacings specified in UL, CSA, and NEMA Industrial Control Standards for 600 Volts.**
- **Strap contacts rated at 50 amperes — tubular contact conservatively rated at 70 amperes.**
- **Pilot point screws supplied with strap screw and clamp contacts —speeds installation time.**
- **Plain white marking strip supplied with each block — circuits are easily identified.**
- **Special purpose blocks available—choose from blocks with solder posts, printed circuit board pins, or nuts on screw posts, removable circuit links, and a shorting bar.**



Traditionally, these rugged One-Piece Blocks are the standard means of connection for heavy industrial applications like rail transport, utility, and traffic control industries. Ideal for dirty and vibration prone environments.



LR25557 E63810



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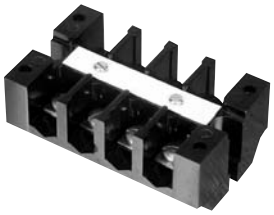
# B100, #B100 Series, One-Piece Blocks, 600 V — Phenolic



## Material & Finish

**Housing Material**—Phenolic, filled flame retardant
**Flammability**—UL94V-1
**Color**—Black

## Contacts

**Standard Material**—Electrical grade copper or copper alloy conductor. Steel screws plated to resist corrosion in most industrial applications.

**Brass Material**—For Corrosive Environment (2B100, 4B100 Series) Nickel plated brass straps and screws. Meets specification QQ-N-290A Class 1, Grade G

**Wire Range**—Strap Screw: #18-8 AWG solid or stranded; Tubular Clamp: #14-6 AWG solid or stranded

**Screw Type**—Strap Screw: #10-32 Binding Head; Tubular Clamp: #1/4"[6.35]-28 Set Screw

**Strap Screw**—7/16" [11.11] max. lug width

## Mechanical Properties

**Pitch (terminal spacing)**—.63" [16.00]

**Wire Strip Length**—Strap Screw: as needed for lugging; Tubular Clamp: 1/2" [12.1]

## Electrical Properties

**Maximum Current**—70A for a single #6 AWG wire

**Operating Voltage**—Blocks meet 600V creepage and clearance requirements for general industrial control equipment and panelboards; greatly exceeds IEEE switchgear standards for 750 volts.

**Dielectric Strength (RH 40% @ sea level)**—300 Volts/mil thickness per ASTM D149

**UL High Voltage Arc Tracking (in./min.)**—.49-.58 [12.45-14.73]

## Environmental Properties

**Max. Continuous Temperature**—150°C (302°F)

**Water Absorption (24hrs. % wt. gain)**—.45% per ASTM D570

**Chemical Resistance**—Resistant to acids, alkalies, and aliphatic hydrocarbons and ketones per ASTM D543

**Radiation Resistance (ergs $G^{-1}$ (C)**—$2.7 \times 10^8$ min

## UL Independent Testing Service Recognitions

**Wire Sizes**—Solid or Stranded, Tubular Clamp

1—#6 AWG, 1—#8 AWG, 1or 2 — #10 AWG, 1or 2—#12 AWG, 1 to 3—#14 AWG, 1 —#10 & 1 —#12 AWG 1 — #12 & 1 — #14 AWG

| Circuits | Steel Screw w/Strap | | Tubular Clamp | | Brass Screw w/Strap | |
|---|---|---|---|---|---|---|
| | Part Number | Catalog Number | Part Number | Catalog Number | Part Number | Catalog Number |
| **Contact Type** | | | | | | |
| **AMPACITY** | 50A | | 65A | | 50A | |
| **Standard** | | | | | | |
| 2 | 2-1437382-6 | B102 | 2-1437382-8 | B102S | 2-1437381-0 | 2B102 |
| 4 | 3-1437382-0 | B104 | 3-1437382-6 | B104S | 2-1437381-2 | 2B104 |
| 6 | 4-1437382-0 | B106-BU | 4-1437382-5 | B106S | 2-1437381-6 | 2B106 |
| 8 | 4-1437382-9 | B108 | 5-1437382-5 | B108S | 3-1437381-0 | 2B108 |
| 12 | 5-1437382-9 | B112-BU | 6-1437382-7 | B112S | 3-1437381-3 | 2B112 |
| **Shorting** | | | | | | |
| 2 | 4-1437381-0 | 3B102P | — | — | 5-1437381-6 | 4B102P |
| 4 | 4-1437381-1 | 3B104P | — | — | 5-1437381-7 | 4B104P |
| 6 | 4-1437381-3 | 3B106P | — | — | 5-1437381-8 | 4B106P |
| 8 | 4-1437381-5 | 3B108P | — | — | 5-1437381-9 | 4B108P |
| 12 | 4-1437381-7 | 3B112P | — | — | 5-1437381-0 | 4B112P |

| Circuits | Strap Screw #8 & Smaller | | Threaded Post & Nut | |
|---|---|---|---|---|
| **Removable Link** | | | | |
| 2 | 8-1437381-4 | 5B102 | — | — |
| 4 | 8-1437381-5 | 5B104 | — | — |
| 6 | 8-1437381-7 | 5B106 | — | — |
| 8 | 8-1437381-8 | 5B108 | — | — |
| 12 | 9-1437381-0 | 5B112 | — | — |
| **Stud, #10-32** | | | | |
| 2 | — | — | 1-1437382-8 | 7B102 |
| 4 | — | — | 2-1437382-0 | 7B104 |
| 6 | — | — | 2-1437382-1 | 7B106 |
| 8 | — | — | 2-1437382-2 | 7B108 |
| 12 | — | — | 2-1437382-3 | 7B112 |

**Notes:**
For prenumbered marking strip, add suffix "N" to Catalog Number. Cannot be used on 3B or 4B series.

For factory assembled hinged cover, add suffix "H" to Catalog Number. Cannot be used on 3B or 4B series.

For factory assembled thumbscrew-fastened cover, add suffix "T" to Catalog Number. Cannot be used on 3B or 4B series.

Screws and removable links shipped unassembled.

**Except for 3B and 4B Series**

LR25557 E63810



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# B100, #B100 Series, One-Piece Blocks, 600 V — Phenolic Accessories

## Covers and Marking




| Circuits | Laminated Phenolic Cover | | Shorting Block Cover | | White Marking Strip | | Numbered Marking Strip | |
|---|---|---|---|---|---|---|---|---|
| | Part Number | Catalog Number | Part Number | Catalog Number | Part Number | Catalog Number | Part Number | Catalog Number |
| 2 | 7-1437382-5 | C102-BU | 9-1437382-2 | CS102 | 1-1437383-5 | S102 | 1776733-2 | N102 |
| 4 | 7-1437382-6 | C104-BU | 9-1437382-3 | CS104 | 1-1437383-6 | S104 | 1-1437383-1 | N104 |
| 6 | 7-1437382-7 | C106-BU | 9-1437382-4 | CS106 | 1-1437383-7 | S106 | 1-1437383-2 | N106 |
| 8 | 7-1437382-8 | C108-BU | 9-1437382-5 | CS108 | 1-1437383-8 | S108 | 1-1437383-3 | N108 |
| 12 | 7-1437382-9 | C112-BU | 9-1437382-6 | CS112 | 1-1437383-9 | S112 | 1-1437383-4 | N112 |



## Jumpers


## Hardware



| Circuits | 30A Copper Jumpers | | 50A 12 Circuit Jumpers | | Connecting Link | | Lock Nuts | | Shorting Screw | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Part No. | Catalog No. | Part No. | Catalog No. | Part No. | Catalog No. | Part No. | Catalog No. | Part No. | Catalog No. |
| 2 | 1437383-2 | J102 | — | — | — | — | — | — | — | — |
| 4 | 1437383-3 | J104 | — | — | — | — | — | — | — | — |
| 6 | 1437383-4 | J106 | — | — | — | — | — | — | — | — |
| 8 | 1437383-5 | J108 | — | — | — | — | — | — | — | — |
| 12 | 1437383-6 | J112 | 1437395-9 | HJ112 | — | — | — | — | — | — |
| **Hardware** | | | | | | | | | | |
| — | — | — | — | — | 9-1437382-0 | CL101 | 1437383-7 | LN101-BU | 7-1437381-7 | 51-BU |

### Related Product Data

**Wire Pins and Ferrules**—Pages 108-110
For more information on AMP Standard Terminals and Splices or Quick-Connect FASTON Receptacles and Tabs, request Catalog 82042.

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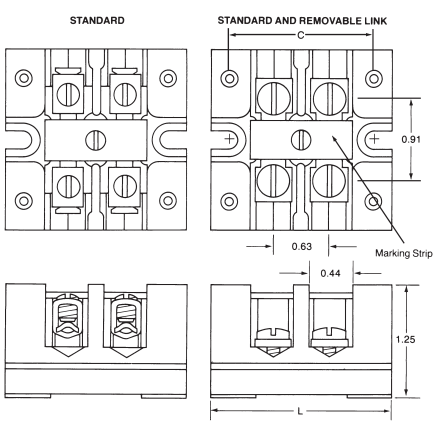
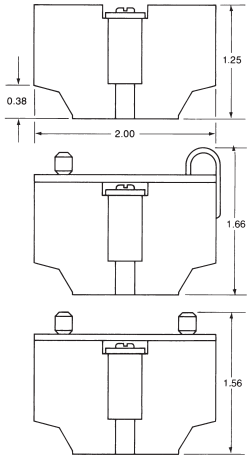
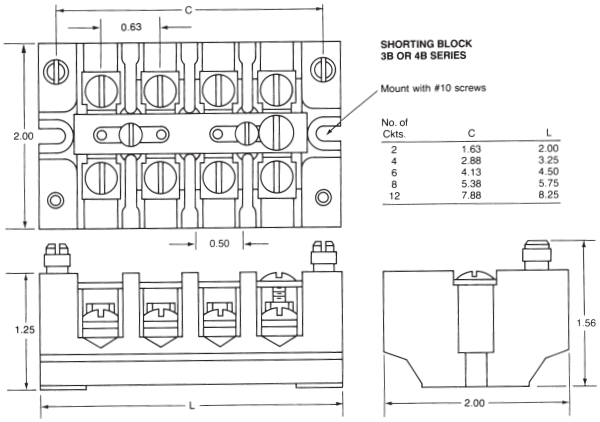
# B100, #B100 Series, One-Piece Blocks, 600 V — Phenolic

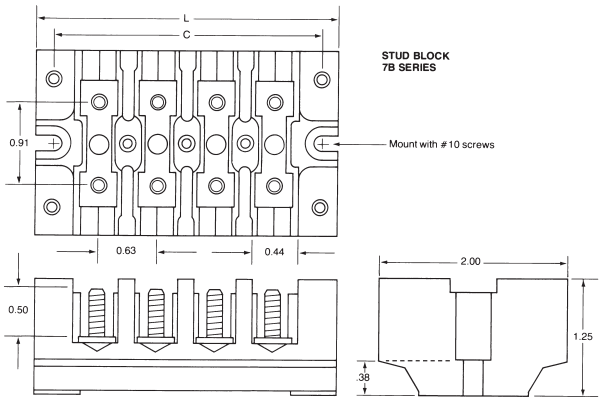



| No. of Ckts. | C | L |
|---|---|---|
| 2 | 1.63 | 2.00 |
| 4 | 2.88 | 3.25 |
| 6 | 4.13 | 4.50 |
| 8 | 5.38 | 5.75 |
| 12 | 7.88 | 8.25 |




| No. of Ckts. | C | L |
|---|---|---|
| 2 | 1.63 | 2.00 |
| 4 | 2.88 | 3.25 |
| 6 | 4.13 | 4.50 |
| 8 | 5.38 | 5.75 |
| 12 | 7.88 | 8.25 |



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## Pre-Printed Marking Strips

Circuit identification is greatly simplified with the use of pre-printed strips for BUCHANAN terminal blocks. These hot-stamped strips are available for all snap-assembled sections (except Fuse, Switch, and Circuit Breaker models which are marked individually). The strips can be ordered separately or pre-installed on factory assembled sectional block units.

Unlike painted or screened letters, hot-stamped letters are designed to not rub or flake off during industrial use so that they will retain their legibility.

Marking strips are stamped with consecutive numbers that can be ordered to read from left-to-right or right-to-left, and in vertical or horizontal positions. Number sequences can begin with any number. This allows circuits to be identified in a manner most consistent with the terminal block application.

**M 50 005 13 G**

Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

Ⓐ **M** = Hot-Stamped Marking Strip

Ⓑ **Terminal Block Series and Designator**
- **10** = Miniature or Single Tier
- **12** = Double Tier
- **67** = 900 Series Medium Duty
- **24** = Nylon Heavy Duty
- **21** = Phenolic Heavy Duty
- **80** = Intermediate Heavy Duty
- **40** = Ultra Heavy Duty
- **T2** = TSB230
- **T5** = TSB500
- **T6** = TSB1000
- **T7** = TSB2000

Ⓒ **Number of Circuits to be Consecutively Numbered**
(Use three digits: Ex.: 005 = 5, 055 = 55, etc.)

Ⓓ **Marking Style Options**
- **11** = 1 2 3 4 5...
- **12** = ...5 4 3 2 1
- **13** = ... 1 2 3 4 5
- **14** = ... 5 4 3 2 1

Ⓔ **"First Number In Series" Designator***

| | |
|---|---|
| **A** = 1 | **F** = 6 |
| **B** = 2 | **G** = 7 |
| **C** = 3 | **H** = 8 |
| **D** = 4 | **J** = 9 |
| **E** = 5 | **K** = 0 |

### Marking Strip Installed On A Factory-Assembled Terminal Block

**615 005 11 A**

Ⓐ Ⓑ Ⓒ Ⓓ

Ⓐ **Basic Sectional Block Catalog #**

Ⓑ **Number of Circuits to be Factory Assembled and Consecutively Numbered**
(Use three digits: Ex: 005 = 5, 055 = 55, etc.)

Ⓒ **Marking Style Options**
- **11** = 1 2 3 4 5...
- **12** = ...5 4 3 2 1
- **13** = 1 2 3 4 5...
- **14** = ... 5 4 3 2 1

Ⓓ **"First Number In Series" Designator***

| | |
|---|---|
| **A** = 1 | **F** = 6 |
| **B** = 2 | **G** = 7 |
| **C** = 3 | **H** = 8 |
| **D** = 4 | **J** = 9 |
| **E** = 5 | **K** = 0 |

* Letters in this position designate the first number to be used in the consecutive sequence. Ex.: "A" would start the sequence with the number 1. "EK" would start the sequence with the number 50. "BKK" would start the series with 200. For non-sequential numbering and special characters, consult Technical Support.





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UK: 44-208-420-8341

## Technical Summary

| Cat. No. | Terminal Block or Product Line | Contact Type Material Plate | Screw Style | Screw Slot Size | Screw Material & Plating | Recommended Screwdriver Dimensions Tip Thick | Recommended Screwdriver Dimensions Tip Width | Wire Strip Length | Wire Range AWG | Rec. Torque in. - lb. |
|---|---|---|---|---|---|---|---|---|---|---|
| 105-BU<br>115<br>125-BU | High Density Tubular Clamp | Electroplated Tubular Copper Contact | 6-32 Slotted Head Screw | 033" Wide x .040" Deep [.84 x 1.02] Steel | Steel Electroplated | .020" [.51] | 9/64" [.02] | 5/16" [7.94] | #12-30 | 10 |
| 211<br>241 | HeavyDuty Strap Screw | Copper Alloy Strap Electroplated | Binding Head 10-32 Thread | 062" Wide x 062" Deep [1.57 x 1.57] | " | .037" [.94] | 1/4" [6.35] | As Needed for Lugging | #8 or Smaller | 12 |
| 212<br>222-BU<br>242 | Heavy Duty Tubular Screw | Electroplated Tubular Copper Contact | Headless 1/4"-28 Thd. Slotted | 3/64" Wide x 1/16" Deep [1.19 x 1.59] | " | " | " | 1/2" [12.7] | #4-18 | 35 |
| 213<br>243 | Heavy Duty Tubular Clamp | " | " | " | " | " | " | | #6-18 | 35 |
| 218<br>248 | Heavy Duty Strap Clamp | Copper Alloy Strap Electroplated | Pan Head Saddle Clamp 8-32 Thd. | 3/64" Wide x 3/64" Deep [1.19 x 1.19] | " | " | " | | #8-18 | 12 |
| 351<br>361<br>0311 | Fuse Block Strap Screw | Copper Alloy Electroplated Spring Temper | Binding Head 8-32 Thd. | | " | " | " | As Needed for Lugging | #8 or Smaller | 10 |
| 358<br>368<br>318 | Fuse Block Strap Clamp | " | Pan Head w/SaddleClp. 8-32 Thd. | | " | " | " | 1/2" [12.7] | #8-18 | " |
| 352<br>362-BU<br>312 | Fuse Block Tubular Screw | Same as above except use H.D. Tubular Contact | Headless 1/4"-28 Thd. slotted | | " | " | " | " | " | " |
| 341<br>371<br>342 | Switch Block Strap Screw | CopperAlloy Electroplated Spring Temper | | | " | " | " | As Needed for Lugging | #8 or Smaller | " |
| 348<br>0378 | Switch Block Strap Clamp | " | Pan Head w/SaddleClp 8-32 Thd. | | " | " | " | 1/2" [12.7] | #8-18 | |
| 342<br>0372 | Switch Block Tubular Screw | Same as above except use H D. Tubular Contact | | | " | " | " | " | " | |
| 416<br>426-BU | Extra Heavy Duty Tubular Screw | Electroplated-Tubular Copper Contact | 1/2"-13 Hex Socket Hd. Set Screw | 1/4" [6.35] Hex | " | 1/2" [12.7] Hex | T-Bar Key | 7/8" [22.23] | #12-2/0 | 200 |

**Note:** Representative Catalog Numbers Listed.

## Technical Summary (Continued)

| Cat. No. | Terminal Block or Product Line | Contact Type Material plate | Screw Style | Screw Slot Size | Screw Material & Plating | Recommended Screwdriver Dimensions Tip Thick | Recommended Screwdriver Dimensions Tip Width | Wire Strip Length | Wire Range AWG | Rec. Torque in. - lb. |
|---|---|---|---|---|---|---|---|---|---|---|
| 417<br><br>427-BU | Extra HD<br><br>Tubular Screw | Electroplated<br><br>Tubular Copper Contact | 3/4"-16 Hex Socket Head Set Screw | 3/8" Hex [9.53] | Steel Electroplated | 3/8" Hex [9.53] | KeyT-Bar | 1" [25.4] | #6-250 | 375 kcmil (MCM) |
| 517<br>617<br>717 | Medium Duty Quick-Connect | 1/4" Wide QC .032" Thk Copper Alloy Electroplated | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 1546235-1 | Medium Duty Tubular Clamp | Electroplated Tubular Copper Contact | 10-32 Slotted Hd | .046" Wide x .046"Deep [1.17 x 1.17] | Steel Electroplated | .032" [.81] | 3/16" [4.76] | 11/32" [8.73] | #10-22 | 8 |
| 1546152-1 | Medium Duty QC & Tubular Screw | 1/4" Wide QC .032" Thk. Tubular Contact Both Copper Alloy Electroplated | " | " | " | " | " | " | #8-18 | 10 |
| 1546148-1 | Medium Duty Tubular Screw | Electroplated Tubular Copper Contact | " | " | " | " | " | " | | 8 |
| 1546143-1 | Medium Duty Strap Screw | Copper Alloy Strap Electroplated | 6-32 Thd. Slotted Binding Hd. | 3/64" Wide x 3/64" Deep [1.19 x 1.19] | " | " | " | As Needed for Lugging | #8 or Smaller | 12 |
| 824-BU | Intermediate Tubular Screw | Electroplated Tubular Copper Contact | 7/16"-20Thd. Slotted Headless | 5/64" Wide x 5/64" Deep [1.98 x 1.98] | " | .041" [1.04] | 3/8" [9.53] | 11/16" [17.46] | #12-1/0 | 50 |
| B102<br><br>B112-BU | One-Piece Blk. Strap Screw | Copper Alloy Strap Electroplated | 10-32 Thd. Slotted Binding Hd. | 1/16" Wide x 1/16" Deep [1.59 x 1.59] | " | .037" [.94] | 1/4" [6.35] | As Needed for Lugging | #8 or Smaller | 20 |
| B102S<br>B112S | One-Piece Blk. Tubular Contact | Tubular Contact | 1/4" -28 Thd. Headless Set Screw | 3/64" Wide x 3/64" Deep [1.19 x 1.19] | " | " | " | 1/2" [12.7] | #6-14 | 45 |

**Note:** Representative Catalog Numbers Listed.





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Dimensions are in inches and millimeters unless otherwise specified.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 52-55-1106-0800
C. America: 57-1-254-4444

South America: 55-11-2103-6000
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-208-420-8341

# UL 1059 Basic Voltage Rating

Voltage ratings of terminal blocks are based on the minimum spacing between electrical conductive parts of opposite polarity or between an electrically conductive part and a metal mounting surface measured under two conditions: Through Air, defined as the distance an arc must take through the air to go from one live conductor to another or from a live conductor to ground; and Over Surface, defined as the distance an arc must take over a surface of the insulating material going from one terminal to ground, assuming the arc will travel along the surface rather than through the air. The following chart shows UL 1059 spacing requirements in inches.

## Voltage Rating

| Description | Voltage | Spacing Requirements | |
|---|---|---|---|
| | | Thru Air | Over Surface |
| Class A<br>Service equipment including deadfront<br>switchboards, panel boards, service<br>entrance devices, etc. | <br>51 - 150<br>151 - 300<br>251 - 600 | <br>1/2 [12.7]<br>3/4 [19.05]<br>1 [25.4] | <br>3/4 [19.05]<br>1 1/4 [31.75]<br>2 [50.8] |
| Class B<br>Commercial appliances including<br>business equipment, electronic data<br>processing equipment and the like | <br>51 - 150<br>151 - 300<br>251 - 600 | <br>1/16 [1.59]<br>3/32 [2.38]<br>3/8 [9.53] | <br>1/16 [1.59]<br>3/32 [2.38]<br>1/2 [12.7] |
| Class C<br>General industrial and machine tools;<br>controls which can be further defined<br>as equipment falling under UL508 | <br>51 - 150<br>151 - 300<br>301 - 600 | <br>1/8 [3.18]<br>1/4 [6.35]<br>3/8 [9.53] | <br>1/4 [6.35]<br>3/8 [9.53]<br>1/2 [12.7] |
| Devices having limited ratings[a] | 51 - 300<br>301 - 600 | 1/16 [1.59]<br>3/16 [4.76] | 1/8 [3.18]<br>3/8 [9.53] |

[a]Load on any single circuit can not exceed 15 A at 51-150 V, 10 A at 151-300 V, 5 A at 301-600 V or the maximum current rating, whichever is less.

## Standard Test Criteria

| Test | Per: |
|---|---|
| Heat Cycling (term) | UL486E Section 10 |
| Static Heating (term) | UL486E Section 11 |
| Secureness | UL486E Section 12 |
| Pullout | UL486E Section 14 |
| Heating Test (block) | UL1059 Section 10 |
| Dielectric Withstand | UL1059 Section 11 |
| Strength of Base | UL1059 Section 13 |
| Tab Pull | UL1059 Section 14 |
| VPTA | UL1059 Section 15 |
| Salt Spray | MIL-202 Method 101 |
| Solderability | MIL-202 Method 208 |
| Solvents | MIL-202 Method 215 |