HIGH DENSITY TERMINAL BLOCKS

series **TB** high density

c3controls' line of High Density terminal blocks are both innovative and user-friendly. Available in multiple terminal points from 4, 6, and 12 in a single molded housing, are simple to install, and they carry an electrical rating of 30A @ 600V AC (UL/CSA) and 30A @ 750V AC (IEC).

PROVEN

c**UL**us CE

Conformity to Standards:
High Density Terminal Blocks
UL 1059
CSA C22.2 No. 65, 188
IEC 60947-1, 60947-7

High Density Shorting Terminal Block
UL 1059
CSA C22.2 No. 65, 188
IEC 60947-1, 60947-7

Certifications:

UL File #: E145984 (Guide XCFR2, XCFR8)

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

UL File #: E531447

CE Marked (per EU Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EU)

Visit www.c3controls.com to download product certifications.

HIGH DENSITY TERMINAL BLOCKS

Every c3controls product is designed and manufactured to meet the needs of the machine builder, including our line of High Density Terminal Blocks. Check out all the features of our Series TB High Density Terminal Blocks below!

ENGINEERED TO HANDLE YOUR MOST COMPLEX WIRING APPLICATIONS

Feature	Description
✓ **Proven**	Our high density terminal blocks and shorting block meet UL and CSA standards, and are RoHS compliant.
✓ **Multiple Wire Sizes**	High density terminal blocks accommodate #18 to #10 AWG wires (0.34 – 4mm^2).
✓ **Wide Range of Operation**	A wide range of 4, 6, and 12 point circuit terminal blocks in a single molded housing rated for 600V, 30A continuous service.
✓ **Shorting Block**	c3controls' new high density shorting terminal block provides ease of connecting systems to applications such as current transformers, switchgear, and tap points.
✓ **Convenient**	c3controls high density terminal blocks are directly interchangeable with GE CR151 terminal blocks and our shorting block is directly interchangeable with GE EB27B06S terminal blocks.
✓ **Wiring Made Easy**	Wiring to the terminal blocks is made easy by unobstructed access to terminals.
✓ **Heavy-Duty Construction**	We mold our terminal block housings from unbreakable thermoplastic and we use quality zinc plated brass and electrolytic copper for our metal parts for excellent conductivity and to minimize corrosion.
✓ **Quick Identification**	Terminal markers are available and can be hand marked or custom printed.
✓ **Easy to Install**	Available panel mounting or 35mm DIN rail mounting for easy assembly.
✓ **Time Savings**	Individual blocks can be quickly and easily added or removed without disturbing adjacent blocks. Only a screwdriver is required for removal.
✓ **Limited Lifetime Warranty***	Every product is backed by our limited lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.
✓ **Guaranteed Same-Day Shipping***	Product availability reduces inventory, and improves cash-flow—saving you money. With c3controls any order for standard catalog items received by 6:00pm ET is guaranteed to ship same-day.
✓ **Advantage Pricing**	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.

*See c3controls Terms & Conditions

"*c3controls' products uphold our commitment to provide quality solutions to our customers while keeping our costs under control.*"

Len Frid, Electrical Engineer • **Advanced Poly-Packaging, Inc.**

High Density / **TERMINAL BLOCKS**

series
TB
high density

HIGH DENSITY TERMINAL BLOCKS

HDTB-4
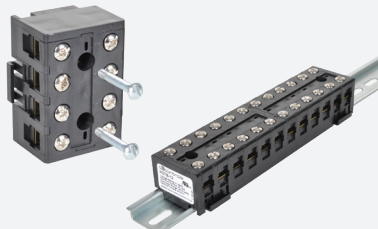
HDTB-6

HDTB-12

HDTB-SB-6

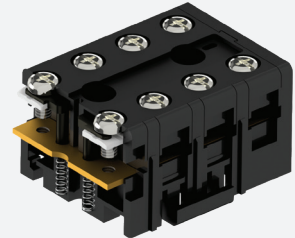## UNIQUE PRODUCT LINE FEATURES

HIGH DENSITY

Multiple terminal points, 4, 6, or 12 in a single molded housing providing high density of terminal connections in a compact size.

FLEXIBILITY

#8-32 terminal screws and integrated 35mm DIN Rail snap and panel mounting geometry allow for the terminal block to be used in a wide variety of applications.

READY TO INSTALL

Out of the box and ready to install! Screws come in the backed out position with convenient spring-return open terminals for easy wiring, even allows for up to two (2) ring lugs.

QUICK IDENTIFICATION

Large marking strip available that can be hand marked or custom printed to provide quick and accurate identification of the terminals.

SHORTING TERMINAL BLOCK
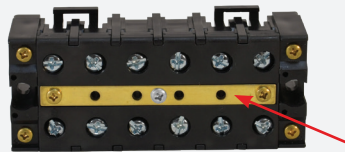
Brass shorting strip to easily short terminals. Terminals can be shorted as per customer requirement.

TRANSPARENT COVER

Optional transparent cover available for high density shorting terminal block provides added safety and protection.

FIND IT FAST

High Density Terminal Blocks

- Certifications
- Specifications
- Dimension Drawings
- Installation Instructions
- Easy To Buy

www.c3controls.com

REVISION 01.2023

Everything under control :: c3controls

Section 23 | 3

HIGH DENSITY TERMINAL BLOCKS

DISCOUNT SCHEDULE G

	HDTB-4			HDTB-6			HDTB-12		
SPECIFICATIONS	**4 CIRCUIT TERMINAL BLOCK**			**6 CIRCUIT TERMINAL BLOCK**			**12 CIRCUIT TERMINAL BLOCK**		
Certifications	UL 1059 File #: E145984			UL 1059 File #: E145984			UL 1059 File #: E145984		
Voltage Rating (V)	600V			600V			600V		
Maximum Current (A)	30A			30A			30A		
Wire Range	#18 - #10 AWG			#18 - #10 AWG			#18 - #10 AWG		
Wire Strip Length	5/16"			5/16"			5/16"		
Tightening Torque	7-12 lb-in. (max. 18-20 lb-in.)			7-12 lb-in. (max. 18-20 lb-in.)			7-12 lb-in. (max. 18-20 lb-in.)		
ROHS COMPLIANCE	For RoHS compliance documentation by product, refer to www.c3controls.com								
TERMINAL BLOCKS	**CAT. NO.**	**PCS./PKG.**	**LIST/PC.**	**CAT. NO.**	**PCS./PKG.**	**LIST/PC.**	**CAT. NO.**	**PCS./PKG.**	**LIST/PC.**
Black	HDTB-4	1	$14.00	HDTB-6	1	$20.00	HDTB-12	1	$38.00
ACCESSORIES (see page 8)	**CAT. NO.**	**PCS./PKG.**	**LIST/PC.**	**CAT. NO.**	**PCS./PKG.**	**LIST/PC.**	**CAT. NO.**	**PCS./PKG.**	**LIST/PC.**
Marking Strips	HDTB-M4	10	$ 0.85	HDTB-M6	10	$ 1.00	HDTB-M6	10	$ 1.00
Plated Steel Mounting Rail, DIN									
35mm x 7.5mm - Slotted - 1 Meter	DRMR3	1	$ 9.70	DRMR3	1	$ 9.70	DRMR3	1	$ 9.70
35mm x 7.5mm - Slotted - 2 Meters	DRMR6	10	$19.20	DRMR6	10	$19.20	DRMR6	10	$19.20
Aluminum Mounting Rail, DIN									
35mm x 7.5mm - Slotted - 1 Meter	DRMR3A	1	$16.80	DRMR3A	1	$16.80	DRMR3A	1	$16.80

HIGH DENSITY TERMINAL BLOCKS

c3controls' line of High Density Terminal Blocks are rated 600 volts, 30 amperes continuous service and will accommodate #18 to #10 AWG (0.34 - 4mm^2) stranded or solid copper wire, single or parallel conductors of same size and type (stranded/ stranded or solid/solid only) per terminal and include captive wire clamps for use with wire or ring type connectors, as standard. Available panel mounting or DIN rail mounting (35mm x 7.5mm x 35mm x 15mm), any combination of High Density Terminal Blocks may be assembled next to one another on the same mounting rail. Individual blocks can quickly and easily be inserted or removed without disturbing adjacent blocks. Only a screwdriver is required for removal.

SPECIAL FEATURES
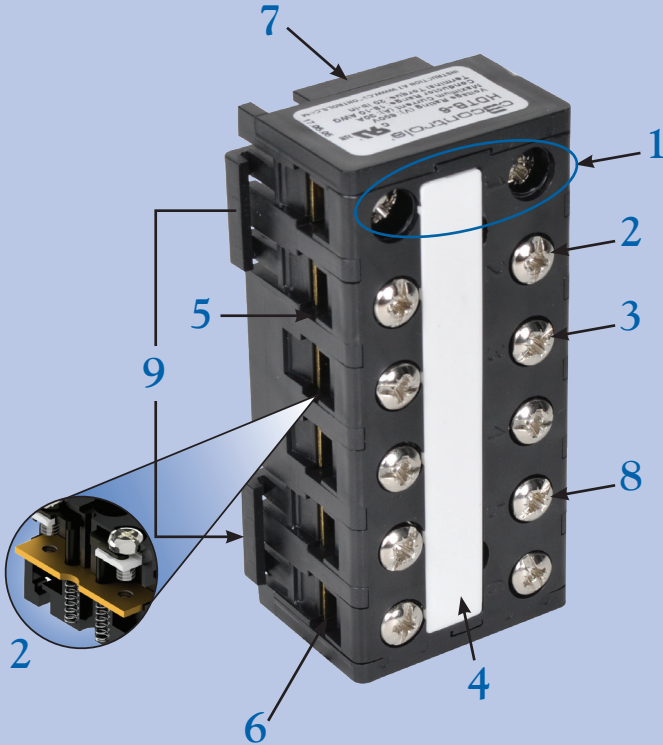
1. Construction provides IP20 protection to guard against accidental contact with live parts.

2. Out of the box and ready to install! Integral captive terminal screws and clamps come in the backed-out position with convenient spring-return open terminals for easy wiring.

3. Combination head terminal screws allow the use of straight, phillips, or posidrive screwdrivers, making it easy to apply the proper terminal tightening torque for a more secure, quick, and easy installation.

4. Marking system allows for fast and easy circuit identification. Blank and custom markers are available.

5. Wiring to the terminal blocks is made easy by unobstructed access to terminals. Accommodates #18 to #10 AWG (0.34 - 4mm^2) stranded or solid copper wire, single or parallel conductors of same size and type.

6. Accepts ring type connectors, including installation of two (2) ring conductors, up to 12-10AWG ring lug.

7. Housing is molded out of an unbreakable, high quality thermoplastic.

8. Zinc plated screws and electrolytic brass for excellent conductivity and to minimize corrosion.

9. Panel mounting or DIN rail mounting (35mm x 7.5mm or 35mm x 15mm), any combination of High Density Terminal Blocks may be assembled next to one another on the same mounting rail.

HIGH DENSITY SHORTING TERMINAL BLOCK

NEW

DISCOUNT SCHEDULE G

HDTB-SB-6			
SPECIFICATIONS	**6 CIRCUIT TERMINAL BLOCK**		
Certifications	c ᴿᵁ us UL 1059 File #: E531447		
Voltage Rating (V)	600V		
Maximum Current (A)	60A (prepared wire)		
Wire Range	#18 to #10 AWG (unprepared wire) #18 to #4 AWG (prepared wire)		
Wire Strip Length	5/16"		
Tightening Torque	23 lb-in. (2.6 Nm)		
ROHS COMPLIANCE	For RoHS compliance documentation by product, refer to www.c3controls.com		
TERMINAL BLOCKS	**CAT. NO.**	**PCS./PKG.**	**LIST/PC.**
Black	HDTB-SB-6	1	$40.00
ACCESSORIES (see page 8)	**CAT. NO.**	**PCS./PKG.**	**LIST/PC.**
Transparent Cover	HDTB-SBC-6	1	$10.00
Marking Strip*	HDTB-M4	10	$ 0.85
Plated Steel Mounting Rail, DIN			
35mm x 7.5mm - Slotted - 1 Meter	DRMR3	1	$ 9.70
35mm x 7.5mm - Slotted - 2 Meters	DRMR6	10	$19.20
Aluminum Mounting Rail, DIN			
35mm x 7.5mm - Slotted - 1 Meter	DRMR3A	1	$16.80

*NOTE: Two HDTB-M4 marking strips are needed per shorting terminal block. Transparent cover is required to mount marking strip.

HIGH DENSITY SHORTING TERMINAL BLOCK

c3controls' new High Density Shorting Terminal Block is an addition to our popular line of innovative and user-friendly High Density Terminal Blocks (HDTB). Expanding upon our feature rich HDTB, the Shorting Block provides ease of connecting systems to applications such as current transformers, switchgear, and tap points.

Product features include:

- Rated 600 volts, 30A (unprepared wire) and 60A (prepared wire).

- Optional panel mounting or DIN rail mounting (35mm x 7.5mm x 35mm x 15mm).

- Shorting Block may be assembled with any combination of High Density Terminal Blocks next to one another on the same mounting rail.

NEW
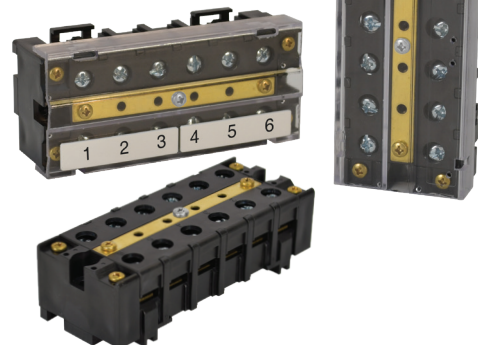
SPECIAL FEATURES
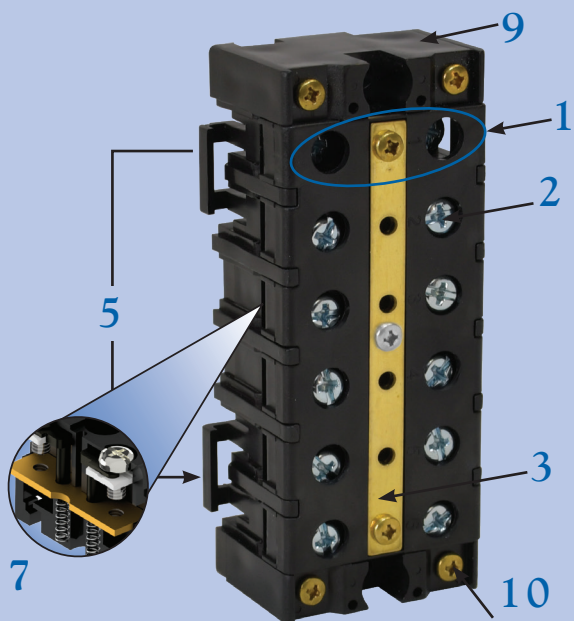
1. Out of the box and ready to install! Screws come in the backed-out position with convenient spring-return open terminals for easy wiring.

2. Combination head terminal screws allow the use of straight, phillips, or posidrive screwdrivers, making it easy to apply the proper terminal tightening torque for a more secure, quick, and easy installation.

3. Brass shorting strip to easily short terminals. Terminals can be shorted as per customer requirement.

4. Space provided to keep shorting terminal screws when not in use.

5. Integrated 35mm DIN Rail snap and panel mounting geometry.

6. Individual blocks can be quickly added or removed without disturbing adjacent blocks. Only a screwdriver is required.

7. Wiring is made easy by unobstructed access to terminals. Accommodates #18 to #10 AWG (unprepared) and #18 to #4 AWG (prepared) — up to two (2) ring lugs.
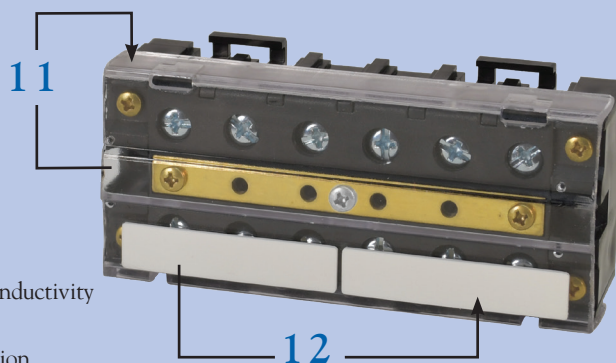

8. Integrated IP20 guards prevent accidental contact.

9. Housing is molded out of an unbreakable, high-quality thermoplastic.

10. Zinc plated screws and electrolytic brass for excellent conductivity and to minimize corrosion.

11. Transparent cover available for added safety and protection (required to mount marking strip).

12. Large marking strip available that can be hand marked or custom printed.

13. Directly interchangeable with GE EB27B06S terminal blocks.

MARKERS
FOR USE WITH TERMINAL BLOCKS AND SHORTING BLOCK

MARKER ORIENTATION

HORIZONTAL

VERTICAL

UPPERCASE

LOWERCASE
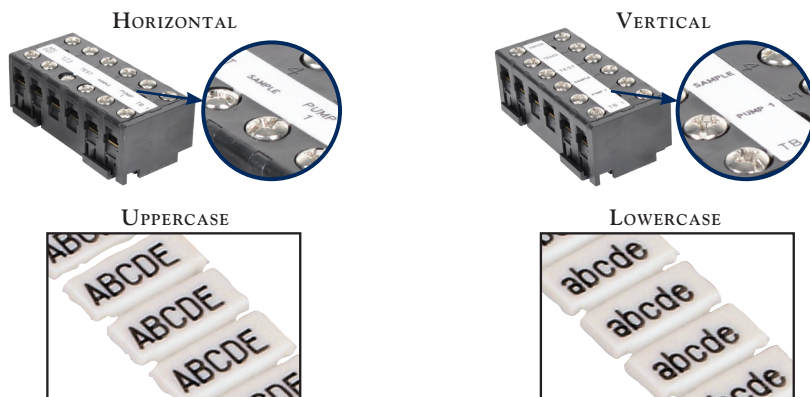
QUICK MARKER STRIPS

Custom printed or blank, the HDTB-M quick marker strips are ideally designed to fit blocks of certain widths. An entire strip of markers can be installed at the same time without having to separate the markers, reducing labor and installation time. The Quick Marker Strip Product Guide is below to help match the appropriate marker to each terminal block.

QUICK MARKER STRIP PRODUCT GUIDE			
CAT. NO.	**FOR USE WITH**	**PCS./PKG.**	**LIST/PC.**
HDTB-M4	HDTB-4 & HDTB-SB-6*	10	$ 0.85
HDTB-M6	HDTB-6 & HDTB-12 (2 per Block)	10	$ 1.00

*NOTE: Two HDTB-M4 marker strips are needed per shorting terminal block.

CUSTOM MARKER STRIPS

HDTB-M marking strips can be custom printed providing unique markers for any application. These markers are available in different sizes. Both alpha and numeric characters and symbols can be printed on the markers. Note: Custom markers are not available for same day shipping.

CUSTOM PRINTED MARKER STRIP PRODUCT GUIDE			
CAT. NO.	**FOR USE WITH**	**PCS./PKG.**	**LIST/PC.**
HDTB-CM-4	HDTB-4 & HDTB-SB-6*	100	$ 2.00
HDTB-CM-6	HDTB-6 & HDTB-12 (2 per Block)	100	$ 2.75

*NOTE: Two HDTB-M4 marker strips are needed per shorting terminal block.

CUSTOM PRINTING SET-UP FEES

Our plotter system and software have almost unlimited capabilities for printing custom terminal block markers. The user-friendly operator views work on a "what you see is what you get" principle. Meaning you can adjust character size and type, rotate characters, and plot symbols from Excel files, text files, database files, and CAD/CAE files.

There is an $18 set-up fee for c3controls to print custom markers. Submit an Excel file, text file, database file, or CAE/CAD file using your purchase order as the name of the file with the file type extension. If you do not have a file to submit and would prefer c3controls to create the marker file for you, then there is a $50 fee which includes the printing.

Following is the maximum number of markers in one file:
HDTB-M4, -M6   200 markers

If the number of markers you require exceeds the maximum number of markers in one file, you must submit multiple files. When submitting multiple files, use the following file naming convention (33601 represents your purchase order number, and -1, -2, -3 represents the number of files submitted).

33601-1.xls
33601-2.xls
33601-3.xls

If you have questions regarding custom printing, contact our customer first team at 724.775.7926.

ACCESSORIES

TRANSPARENT COVER
FOR USE WITH SHORTING BLOCK

Transparent cover provides added safety and protection for High Density Shorting Block, and is required to mount marking strip.

CODE	PCS./PKG	LIST
HDTB-SBC-6	1	$10.00

DIN RAIL
FOR USE WITH TERMINAL BLOCKS AND SHORTING TERMINAL BLOCK

We offer two types of 35mm symmetrical DIN rails; steel and aluminum. Our steel DIN rail is zinc with clear chromate plated and is available in either 1m (3.28ft.) or 2m (6.56ft.). The aluminum version is available in 1m (3.28ft.). Each simply fasten by screws to the mounting surface - no special brackets or hardware are needed. Terminal blocks easily snap on to rail.
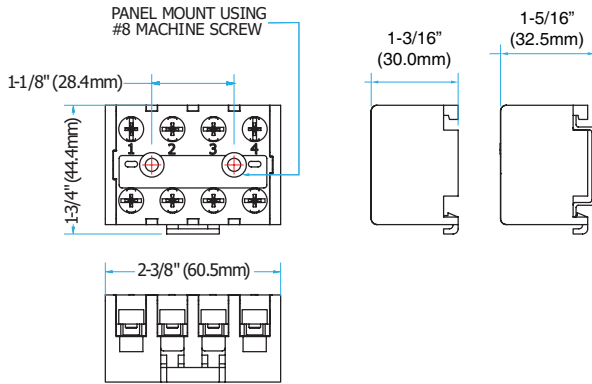
CODE	DESCRIPTION	PCS./PKG.	LIST/PC.
PLATED STEEL			
DRMR3	DIN Rail 1 Meter (35mm x 7.5mm)	1	$ 9.70
DRMR6	DIN Rail 2 Meters (35mm x 7.5mm)	10	$19.20
DRMR3D	DIN Rail 1 Meter (35mm x 15mm)	1	$14.40
DRMR6D	DIN Rail 2 Meters (35mm x 15mm)	1	$27.60
ALUMINUM			
DRMR3A	DIN Rail 1 Meter (35mm x 7.5mm)	1	$16.80

DISCOUNT SCHEDULE G

HIGH DENSITY TERMINAL BLOCKS

HDTB-4

PANEL MOUNT USING #8 MACHINE SCREW

1-1/8" (28.4mm)

1-3/4" (44.4mm)

1-3/16" (30.0mm)

1-5/16" (32.5mm)

2-3/8" (60.5mm)

HDTB-6

PANEL MOUNT USING #8 MACHINE SCREW

2-1/4" (57.2mm)

1-3/4" (44.4mm)

1-3/16" (30.0mm)

1-5/16" (32.5mm)

3-1/2" (88.9mm)

HDTB-12

PANEL MOUNT USING #8 MACHINE SCREW

5-5/8" (142.8mm)

1-3/4" (44.4mm)

1-3/16" (30.0mm)

1-5/16" (32.5mm)

6-7/8" (174.8mm)
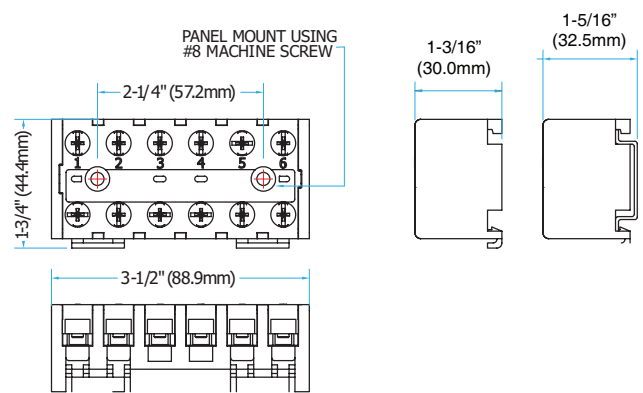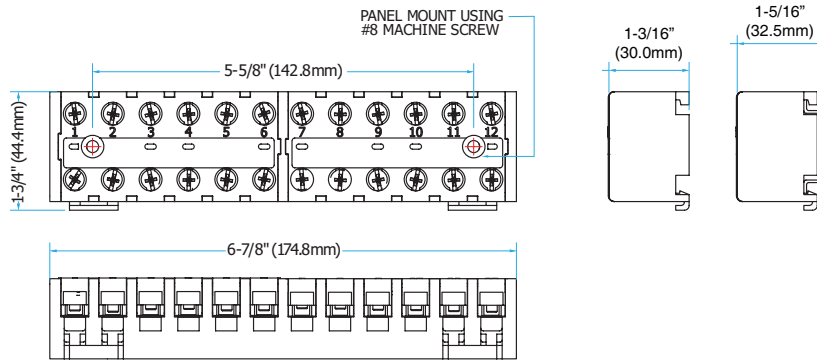
HIGH DENSITY SHORTING TERMINAL BLOCK

HDTB-SB-6

4.5" (114.30mm)

4.12" (104.60mm)

0.630" (16.00mm)

1.92" (48.75mm)

0.50" (12.70mm)

1.38" (35.13mm)

1.38" (35.13mm)

1.92" (48.75mm)

SECTION B-B
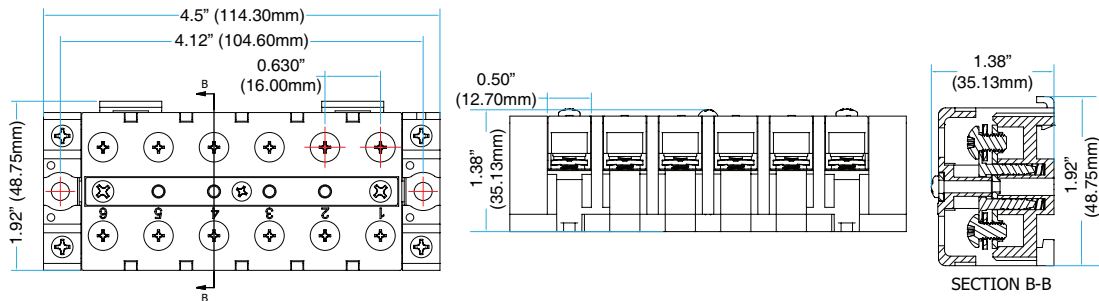
HIGH DENSITY TERMINAL BLOCK MARKERS

HDTB-M4

7/16" (10.8mm)

2" (50.5mm)

HDTB-M6

7/16" (10.8mm)

3-1/16" (78.2mm)

HIGH DENSITY TERMINAL BLOCKS