## HIGH DENSITY TERMINAL BLOCKS



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).



#### Section 23

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## **PROVEN**



Conformity to Standards: High Density Terminal Blocks

CSA C22.2 No. 65, 188 IEC 60947-1, 60947-7

CSA C22.2 No. 65, 188 IEC 60947-1, 60947-7

/isit c3controls.com to download product certifications.

#### **Certifications:**

Ul File #: F145984 (Guide XCFR2 XCFR8)

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

UL File #: E145984

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



# 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 YOU	R MOST COMPLEX WIRING APPLICATIONS
<b>√</b> Proven	Our high density terminal blocks and shorting blocks meet UL and CSA standards, and are RoHS compliant.
✓ Multiple Wire Sizes	High density terminal blocks accommodate #18 to #10 AWG wires (0.34 – 4mm²).
✓ 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	Our HDTB-SB high-density CT shorting block is now available in 2, 4, and 6-point circuit configurations, and is designed to provide 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 blocks are 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.
<b>√</b> 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.
<b>✓ Guaranteed Same-Day Shipping*</b>	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.

<sup>\*</sup>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.

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HDTB-4 HDTB-6 HDTB-12 HDTB-SB-2 HDTB-SB-4 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 strips with Thumb screws for easy terminal shorting. Terminals can be shorted according to customer requirements.

#### TRANSPARENT COVER



Factory supplied Transparent cover along with Phillips screws version of high density shorting terminal block provides additional safety and protection.

# FIND IT High FAST

**High Density Terminal Blocks** 

- CertificationsSpecifications
  - Dimension Drawings
  - Installation Instructions
  - Easy To Buy

c3controls.com











		HDTB-4			HDTB-6			HDTB-12	2
SPECIFICATIONS		4 CIRCUIT			6 CIRCUIT		12 CIRCUIT		
Certifications	• <b>.541.</b> UL 1059 File #: E145984		• <b>.F.L</b> UL 1059 File #: E145984		والمعارف UL 1059 File #: E145984		4		
Voltage Rating (V)		600V			600V			600V	
Maximum Current (A)		30A			30A			30A	
Wire Range	#1	18 - #10 AW	G	#	18 - #10 AW	G	#	18 - #10 AW	G
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.)		20 lb-in.)		
Base Style - Mounting	Panel m	ount/ DIN ra	ail mount	Panel mount/ DIN rail mount		Panel mount/ DIN rail mount			
ROHS COMPLIANCE		For RoHS	complianc	e documentation by product, refer			to 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 9)	CAT. NO.	PCS./PKG.	LIST/PC.	CAT. NO.	PCS./PKG.	LIST/PC.	CAT. NO.	PCS./PKG.	LIST/PC.
2-Point Jumper	HDTB-J2	50	\$ 1.15	HDTB-J2	50	\$ 1.15	HDTB-J2	50	\$ 1.15
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

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#### 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 - 4mm²) 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 or 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



- Construction provides IP20 protection to guard against accidental contact with live parts.
- Out of the box and ready to install! Integral captive terminal screws and clamps come in the backed-out position with convenient springreturn open terminals for easy wiring.
- 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.
- 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 4mm²) 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.
- 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.



## SHORTING TERMINAL BLOCKS









	Н	DTB-SB-2		Н	DTB-SB-4		HL	OTB-SB-6		
SPECIFICATIONS	2 CIRCUIT			4 CIRCUIT		6 CIRCUIT				
Certifications	<b>∘.™</b> UL 1059 File #. E145984		s <b>.P.L</b> UL 1059 File #: E145984		UL 1059 File #: E145984					
Voltage Rating (V)		600V			600V			600V		
Maximum Current (A)	60A (prepared wire) 30A (unprepared wire)		60A (prepared wire) 30A (unprepared wire)		60A (prepared wire) 30A (unprepared wire)					
Wire Range	#18 to #10 AWG (unprepared wire) #18 to #6 AWG (prepared wire)		#18 to #10 AWG (unprepared wire) #18 to #6 AWG (prepared wire)		) #18 to #10 AWG (unprepared wir #18 to # 6 AWG (prepared wire					
Wire Strip Length	5/16"		5/16"		5/16"					
Tightening Torque	23	b-in. [2.6 Nn	n]	23 lb-in. [2.6 Nm]		23 lb-in. [2.6 Nm]		1]		
Shorting Screw Type	Th	umb screw		Thumb screw		Thumb screw				
Base Style - Mounting	Panel mou	ınt/ DIN rail	mount	Panel mount/ DIN rail mount		Panel mount/ DIN rail mount		l mount		
ROHS COMPLIANCE		For RoHS	compliance	e documenta	tion by proc	luct, refer to	fer to c3controls.com			
SHORTING BLOCKS	CAT. NO.	PCS./PKG.	LIST/PC.	CAT. NO.	PCS./PKG.	LIST/PC.	CAT. NO.	PCS./PKG.	LIST/PC.	
Black	HDTB-SB-2	1	\$20.00	HDTB-SB-4	1	\$27.00	HDTB-SB-6	1	\$40.00	
ACCESSORIES (see page 9)	CAT. NO.	PCS./PKG.	LIST/PC.	CAT. NO.	PCS./PKG.	LIST/PC.	CAT. NO.	PCS./PKG.	LIST/PC.	
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	

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#### SHORTING TERMINAL BLOCKS W/ COVER





COMING SOON

COMING SOON



	HDTB-SB-2-C		HDT	B-SB-4-C		HDTI	B-SB-6-C		
SPECIFICATIONS	2	CIRCUIT		4 (	4 CIRCUIT		6 CIRCUIT		
Certifications	c. <b>F.L</b> UL 1059 File #: E145984		<b>∘.⊊L</b> UL 1059 File #: E145984		<b>∘ ⋤\∟</b> UL 1059 File #: E145984				
Voltage Rating (V)		600V			600V		6	00V	
Maximum Current (A)		60A (prepared wire) 30A (unprepared wire)		60A (prepared wire) 30A (unprepared wire)		60A (prepared wire) 30A (unprepared wire)			
Wire Range	#18 to #10 AWG (unprepared wire) #18 to #6 AWG (prepared wire)		#18 to #10 AWG (unprepared wire) #18 to #6 AWG (prepared wire)		#18 to #10 AWG (unprepared wire) #18 to #6 AWG (prepared wire)				
Wire Strip Length		5/16"		5/16"		5/16"			
Tightening Torque	23 lb-	in. [2.6 Nm	]	23 lb-in. [2.6 Nm]		23 lb-in. [2.6 Nm]			
Shorting Screw Type	Phi	llips screw		Phillips screw		Phillips screw			
Transparent Cover	l:	ncluded		Included		Included			
Base Style - Mounting	Panel moun	t/ DIN rail ı	mount	Panel mount/ DIN rail mount		Panel mount/ DIN rail mount			
ROHS COMPLIANCE		For RoHS o	complianc	e documentation	n by produ	ct, refer t	o c3controls.co	m	
SHORTING BLOCKS	CAT. NO.	PCS./PKG.	LIST/PC.	CAT. NO.	PCS./PKG.	LIST/PC.	CAT. NO.	PCS./PKG.	LIST/PC.
Blac	k HDTB-SB-2-C	1	\$ 25.50	HDTB-SB-4-C	1	\$ 34.50	HDTB-SB-6-C	1	\$ 50.00
ACCESSORIES (see page 9)	CAT. NO.	PCS./PKG.	LIST/PC.	CAT. NO.	PCS./PKG.	LIST/PC.	CAT. NO.	PCS./PKG.	LIST/PC.
Marking Strips	HDTB-M2	10	\$ 0.65	HDTB-M2 (2 per block)	10	\$ 0.65	HDTB-M3 (2 per block)	10	\$ 0.85

 $NOTE: Transparent \ cover\ is\ required\ to\ mount\ marking\ strip.\ See\ page\ 9\ for\ custom\ printed\ marking\ strip\ and\ accessories.$ 



# HIGH DENSITY SHORTING TERMINAL BLOCKS

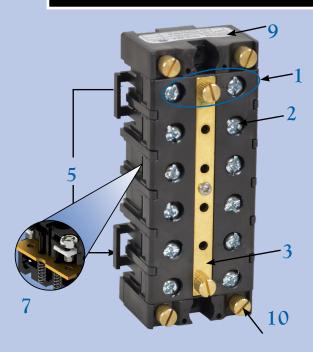
c3controls' new High Density Shorting Terminal Blocks are an addition to our popular line of innovative and user-friendly High Density Terminal Blocks (HDTB). Expanding upon our feature rich HDTB, the Current Transformer Shorting Block provides ease of connecting systems to applications such as current transformers, switchgear, and tap points. Shorting blocks are available in 2, 4 and 6 pole configurations and can be ordered with optional terminal covers and markers.

#### Product features include:

- Rated 600 volts, 30A (unprepared wire) and 60A (prepared wire).
- Optional panel mounting or DIN rail mounting (35mm x 7.5mm or 35mm x 15mm).
- Shorting Blocks may be assembled with any combination of High Density Terminal Blocks next to one another on the same mounting rail.

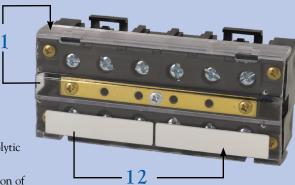


#### SPECIAL FEATURES



- 8. Integrated IP20 guards prevent accidental contact.
- Housing is molded out of an unbreakable, high-quality thermoplastic.
- 10. Both Phillips and Thumb screws are Zinc plated and electrolytic brass for excellent conductivity and to minimize corrosion.
- Factory supplied Transparent cover along with Phillips version of high-density shorting terminal block provides additional safety and protection.
- Large marking strip available that can be hand marked or custom printed.
- 13. Directly interchangeable with GE EB27B06S terminal blocks.

- Out of the box and ready to install! Screws come in the backedout position with convenient spring-return open terminals for easy wiring.
- 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.
- Brass shorting strip to easily short terminals. CT 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.
- 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 #6 AWG (prepared) up to two (2) ring lugs.





#### MARKER ORIENTATION









#### BLANK MARKER STRIPS

HDTB-M blank 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 Blank Marker Strip Product Guide is below to help match the appropriate marker to each

BLANK MARKER STRIP PRODUCT GUIDE						
CAT. NO.	FOR USE WITH	PCS./PKG.	LIST/PC.			
HDTB-M2	HDTB-SB-2-C & HDTB-SB-4-C (2 per block)	10	\$ 0.65			
HDTB-M3	HDTB-SB-6-C (2 per block)	10	\$ 0.85			
HDTB-M4	HDTB-4	10	\$ 0.85			
HDTB-M6	HDTB-6 & HDTB-12 (2 per block)	10	\$ 1.00			
	·					

#### CUSTOM MARKER STRIPS

HDTB-CM-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-M2	HDTB-SB-2-C & HDTB-SB-4-C (2 per block)	100	\$ 1.75			
HDTB-CM-M3	HDTB-SB-6-C (2 per block)	100	\$ 2.00			
HDTB-CM-M4	HDTB-4	100	\$ 2.00			
HDTB-CM-M6	HDTB-6 & HDTB-12 (2 per block)	100	\$ 2.75			

### 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.

The maximum number of markers in one file is 200.

Each custom marker package includes 100 pieces, allowing you to print up to 100 unique markings. See the image below for an example.

HDTB-M4 Marker

2	3	4
b	С	d
22	33	44
Q	R	S
456	789	0
%	&	*
2b	3c	4d
	b 22 Q 456	b c 22 33 Q R 456 789

You can download the Marker Template file from our website, fill out the Questionnaire section along with your desired markings, and send it back to us. The naming convention for the Marker template file will be the PO number. For example: "33601-1.xls" (where 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

Note: It is necessary to submit the Marker Template file with all its tabs (Questionnaire tab and the Markings tab).

If you submit the Marker Template file with us, NO FEE will be charged. However, if you choose not to submit the file and request c3controls to generate the markings on your behalf, then there is a \$50 fee.

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







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)	10	\$27.60					
ALUMINUM								
DRMR3A	DIN Rail 1 Meter (35mm x 7.5mm)	1	\$16.80					

#### 2 POINT JUMPER







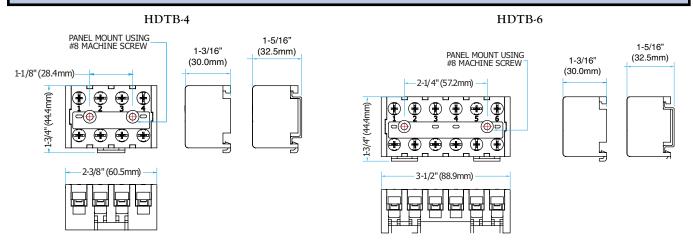
Our 2-Point Jumper connects two adjacent HDTB terminals, offering a durable and easy-to-install solution that simplifies wiring setups.

CODE	DESCRIPTION	PCS./PKG.	LIST/PC.
HDTB-J2	2 Point Jumper for Hight Density for Hight Density Terminal Block For Use with: HDTB-4, HDTB-6, HDTB-12	50	\$ 1.15

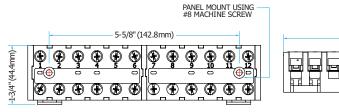


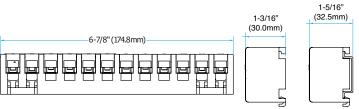




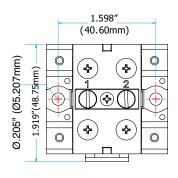


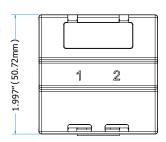
HDTB-12



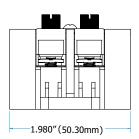


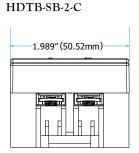
#### HIGH DENSITY SHORTING TERMINAL BLOCKS

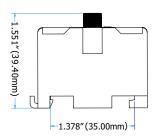


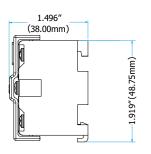


#### HDTB-SB-2





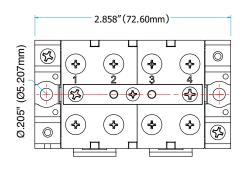


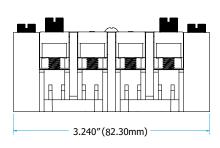


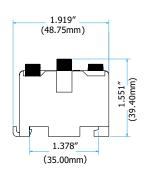


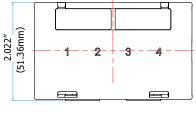
#### HDTB-SB-4

HDTB-SB-4-C

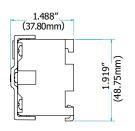




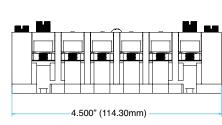


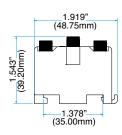






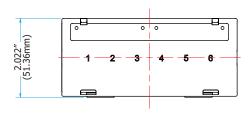
4.118" (104.60mm) Ø.205" (Ø5.207mm) **(**\*) 0 🕸 0 \* (**4**7) (4)

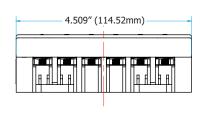


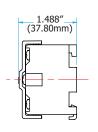


#### HDTB-SB-6-C

HDTB-SB-6







HDTB-M2 1-1/8" (29.0mm) 7/16" (10.78mm)

