

## Technical Bulletin (TB-0028C) 9-Lead Terminal Plates

Version 3, August 2016

On the top side of the terminal plate all posts have a set of brass washers and brass nut that should NEVER be removed or loosened. CE4 plates have an additional set of brass washers, nut, and plastic film on the bottom that should NEVER be removed or loosened.

NEVER REMOVE/LOOSEN

TOP:

Factory torqued to 7.5 ft lbs (10 Nm)





BOTTOM:

CE4/BE5/BE6 terminal plate Torque to 3.5 ft lbs (5 nm)

NEVER REMOVE/LOOSEN CE4 terminal plate Torque to 3.5 ft lbs (5 nm)



<u>Wires under the terminal plate</u> should not be tampered with unless the terminal plate is being installed in the field. The wires are numbered to match their posts. The numbers to the posts can be found on the top side of the terminal plate. Slide the bottom of the terminal plate post through the ring of the wire, attach a nut and torque it to 3.5 ft lbs(5Nm).



# ELECTRICAL CONNECTION KIT CONTENTS

BITZER U.S.: BITZER Canada: BITZER Mexico: Main Phone: 770-503-9226 514-697-3363 +52 (81)1522 4500

Web: www.bitzerus.com www.bitzer.ca www.bitzermexico.com Email: sales@bitzerus.com sales@bitzer.ca ventas@bitzermexico.com Additional BITZER U.S. Contact Info: techsupport@bitzerus.com customerservice@bitzerus.com 24 Hour Quickship Hotline: (888) 462-4893 **Dual Voltage Motors** have 9 lead terminal plates. On the terminal box, the following label shows how the terminal plate should be wired depending on a direct on line start or if using part winding.

#### For a direct on line start – 460v (Fig. 1):

- 1. Place brass washer on posts 4, 5, 6, 7, 8 & 9
- 2. Place the short connection bridges between posts 4-7, 5-8, and 6-9
- 3. Place brass washer on posts 4, 5, 6, 7, 8 & 9
- 4. Place a cable connecting lug on posts 1, 2 & 3
- 5. Place convex lock washer on each post
- 6. Screw a brass nut on to all posts and torque to 9 ft lbs (12 Nm)
- 7. Place black insulating wafer over post 7, 8 & 9
- 8. Screw a brass nut on to posts 8 and torque to 9 ft lbs (12 Nm)
- 9. Black isolating wafer is optional

### For a direct on line start – 230v (Fig. 2):

- 1. Place brass washer on posts 4, 5, 6, 7, 8 & 9
- 2. Place the long connection bridges between posts 4-5 and 5-6
- 3. Place the short connection bridges between posts 1-7, 2-8, and 3-9
- 4. Place a cable connecting lug on posts 1, 2 & 3
- 5. Place brass washer on posts 4, 5, 6, 7, 8 & 9
- 6. Place convex lock washer on each post
- 7. Screw a brass nut on each post and torque to 9 ft lbs (12 Nm)
- 8. Place black insulating wafer over post 7, 8 & 9
- 9. Screw a brass nut on to posts 8 and torque to 9 ft lbs (12 Nm)
- 10. Black isolating wafer is optional

#### For a part winding start – 230v (Fig. 3a):

- 1. Place brass washer on posts 4, 5 & 6
- 2. Place the long connection bridges between posts 4-5 and 5-6
- 3. Place brass washer on posts 4, 5 & 6
- 4. Place a cable connecting lug on posts 1, 2 & 3
- 5. Place convex lock washer on posts 1, 2, 3, 4, 5 & 6
- 6. Screw a brass nut on posts 1, 2, 3, 4, 5 & 6 and torque to 9 ft lbs (12 Nm)
- 7. Place black insulating wafer over post 7, 8 & 9 (Fig. 3b)
- 8. Screw a brass nut on each post and torque to 9 ft lbs (12 Nm)
- 9. Place a cable connecting lug on each post (Fig. 3c)
- 10. Place convex lock washer on each post
- 11. Screw a brass nut on to each post and torque to 9 ft lbs (12 Nm)



Fig. 3b - PW Start – 230v



#### Fig. 3c - PW Start – 230v

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Email: sales@bitzerus.com sales@bitzer.ca ventas@bitzermexico.com Additional BITZER U.S. Contact Info: techsupport@bitzerus.com customerservice@bitzerus.com 24 Hour Quickship Hotline: (888) 462-4893





Fig. 2 - DOL Start – 230v



Note: It is important to install jumpers, washers and nuts properly and torque to the 9 ft lbs (12 Nm) spec.

After the configuration is correct and the cable connectors are mounted, incoming power cabling can now be attached. Bitzer's cable lug is a 1/0. The following Fig 4a can be used to tighten the wire connection to the lug in inch pounds.

Fig 4a.

Tightening Torque Inch Pounds	
	CONNECTOR
AWG	SIZE 1/0
1/0	180
3-2-1	150
#4-#6	110
#8	75
#10-#14	35

**Note**: Since the connector cable lug is 1/0 the maximum amperage is limited to 150 amps. Any compressor with an MOA above this amperage is recommended to utilize the 230v PWS connections with or without the delay timer. See Fig 3a, 3b & 3c above. Part number 343430-06-PW electrical connection kit is available.

Reference: Panduit Catalog Connections and Tools.pdf.

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