

EHDB Improvements!

EHDB Improvements!

Increased electrical &

Increased endurance

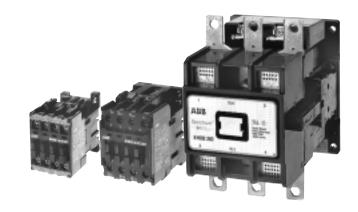
mechanical endurance with

mechanical endurance

pole with

mechanic braking pole ratings

increased current ratings



#### Description

BHD & EHDB are ABB Control's new offering of high quality, Spectrum Drive Contactors for variable speed DC drive applications. This line supersedes the highly-accepted and well-respected EFLG and EHD line. The new line offers a broader range featuring both smaller (15 amp) and larger (650, 800 and 960 amp) contactors as well as additional midrange sizes.

#### Type BHD

- 15, 30 & 60 amps in three sizes
- 500 volt DC ratings
- 160 and 300 volt DC normal closed ratings for dynamic braking
- Low energy auxiliary contacts available (17V, 5mA)
- Mechanically interlocked version available for reversing applications
- · Small compact design
- 2 pole (2 N.O.) and
- 3 pole (2 N.O. & 1 N.C.) available
- Additional auxiliary contact blocks available
- · Fast, snap-on DIN rail mounting
- · Double break contact design
- · Captive terminal screws
- Touch-safe design: all connection terminals are protected against accidental touch
- Terminals supplied open for ease of wiring
- Operates over an extended voltage range of 85% to 100% of rated control voltage
- N.C. dynamic braking pole is easily added to two pole contactors
- Screwdriver guide holes
- · Snap-on front mounted accessories
- UL and CSA approved

#### Type EHDB

- 75 amps to 960 amps in ten sizes
- 2 pole (2 N.O.) and
   3 pole (2 N.O. & 1 N.C.)
   power poles available
- 600 VDC making capacity: 300 VDC breaking capacity
- Auxiliary contacts suitable for low energy applications are standard (17V, 5mA)
- 1 N.O. & 1 N.C. auxiliary contacts are standard and up to six additional auxiliary contacts may be added to provide a total of 8 (4 N.O. & 4 N.C.)
- Early make & late break auxiliary contacts available
- Auxiliary contacts available to meet EN 81 standards
- EHDB 220, 280 & 360 contactors have withdrawable coils
- Mechanically interlocked contactors available for reversing applications
- Double break contact design with magnetic arc chamber extinguishes arc in shortest possible time
- · High temperature encapsulated coil
- Easy removal of arc chute for quick inspection and change of contacts
- Operates over an extended voltage range of 85% to 110% of rated control voltage
- DC control operation available
- UL & CSA approved UL File # E36583 CSA File # LR19700

This catalog is published for information purposes only and is not all inclusive. For additional information on products or technical information, consult ABB Control Inc. The installation and use of ABB Control Inc. products should be in accordance with the provisions of the U.S. National Electrical Code and/or other local codes or industry standards that are pertinent to the particular end use. Installation or use not in accordance with these codes and standards could be hazardous to personnel and/or equipment.

ABB Control Inc. 4/13/00 Proof

## **Drive contactors**

# Type EHDB 75 to 960 Amps







EHDB280C-1L

EHDB280M-1L

2 & 3 pole — 600 volt N.O. ratings with 300 volt N.C. dynamic braking rating ©

Thermal amp rating 600 volts	Maximum amp rating N.C. contact		Auxiliary contacts included		2 pole (2 N.O.)		3 pole (2 N.O. & 1 N.C.)		
	Make 300 VDC	Break 160 VDC	N.O.	N.C.	Catalog number	List price	Catalog number	List price	
130	260	171	1	1	EHDB130C2P-1L	\$ 450	EHDB130C-1L	\$ 575	
220	450	285	1	1	EHDB220C2P-1L	465	EHDB220C-1L	665	
280	565	363	1	1	EHDB280C2P-1L	630	EHDB280C-1L	860	
380	728	472	1	1	EHDB360C2P-1L	1300	EHDB360C-1L	1880	
520	1040	680	1	1	EHDB520C2P-1L	1500	EHDB520C-1L	2250	
650	1300	850	1	1	EHDB650C2P-1L	2635	EHDB650C-1L	3100	
800	1600	1050	1	1	EHDB800C2P-1L	3230	EHDB800C-1L	3800	
950	1920	1250	1	1	EHDB960C2P-1L	4080	EHDB960C-1L	4800	

#### **Description**

EHDB drive contactors are specifically designed for use with solid state D.C. adjustable speed drive systems. In drive applications, the contactor is not required to make or break the load during normal operation. The N.C. contact is used for dynamic braking applications.

#### Coil voltage selection

All catalog numbers include a 120V coil. To select other coil voltages, substitute the code from the coil voltage selection chart for the first digit after the dash in the catalog number.

#### Coil voltage selection chart

		Volts													
	24	48	110	120	125	208	220	240	277	380	415	440	480	500	600
60	F	G		1		В	2	2	С			3	4		6
50	N		1				J			3	4			6	
DC	Υ	W	Р		Q		R								

NOTE: DC coils are available for BHD60 contactors only.

#### **DC** operated contactors

EHDB130 - EHDB960

DC and AC operated contactors have the same magnet structure except the DC coil includes a resistor and a normally closed late break auxiliary interlock. To order, substitute the code from the coil voltage selection chart and refer to the DC magnet coils chart for the price adder.

DC operated contactors are supplied with 2 N.O. & 1 N.C. auxiliary contacts. One additional 1 N.O. & 1 N.C. auxiliary contact block can be mounted on the left side of the contactor.

#### DC magnet coils (per contactor)

Contactor	List		
size	price		
EHDB130	\$ 140		
EHDB220 – EHDB280	170		
EHDB360	190		
EHDB520	240		
EHDB650 – EHDB960	330		

#### **General information**

## Standard compliance and approvals

### Worldwide approvals<sup>®</sup>

VDE 0660 CELE C22.2 VDE 0660 CSA C22.2 VDE UL489 CSA C22 947 UL489 CSA IEC 947 UL489 120 IEC 947 UL NCF 120 IEC 9 BS4752 NCF 12 60947-2 BS4752



47 UL489 CSA IEC 947 UL489 CF 120 IEC 947 '52 NCF 120 IEC 3S4752 NCF 120 7-2 BS4752 NCF 60947-2 BS4752 CEI EN 60947-2 DE 0660 CEI EN :22.2 VDE 0660

#### The CE Mark

Within the European Union, EU, conformity of products and the proper application of the CE marking to machines and control equipment is necessary for marketing electrical equipment. The intent is to ensure compliance with all relevant EU Directives.

#### **ABB Low Voltage Apparatus**

ABB is a global group serving customers in electric power generation, transmission and distribution, industrial building systems, and rail transportation. ABB Low Voltage Apparatus develops, produces and markets low voltage products such as disconnect switches,



contactors, starters, pushbuttons, soft starters, arc guard systems, relays, minicontactors, manual motor starters, Isomax MCCBs, and

MCBs. With six manufacturing units within the European Union, we are ideally located to develop, manufacture and provide low voltage equipment to comply with the EU directive.

#### **Background**

The guarantee of free trade of goods within the Community is the most important objective. This will eliminate trade restrictions that result from different technical regulations in each individual member country. Harmonization of existing European standards and regulations, is being accomplished and already partially realized. Based on this goal, a new concept for creating directives was formed in 1985 by the European Community (EC) Commission to produce directives with a wide range of applications which contain only the most basic safety requirements.

#### The CE Mark

The CE mark is prescribed by law and assures the European free trade of goods. It is short for "Communauté Européen," and is displayed on goods and/or packaging which acts as an external symbol for the inspection of products. It also illustrates the manufacturer's responsibility to uphold the community's directives.

# ABB's commitment to the directives

ABB Low Voltage Apparatus producing companies will attach the CE mark in accordance with the product directives. Our products will conform as follows:

- Declarations of conformity for ABB products will be available when required by the relevant EU directives.
- Those products required to do so will bear CE marking as specified by the relevant EU directives and CE marking regulations.
- Necessary technical documentation will be on file and made available to authorized organizations upon written request.

15

① Approvals listed may not apply to products listed in this publication.