



Bulletin 100

- 15 Sizes, 9...600A
- Guarded Terminals
Dual Terminal Markings
- DC Control Option
through 180A
- Wide Range of
Accessories
 - Top and Side
Mounting Auxiliary
Contacts
 - Timers
 - Latches
 - Surge Suppressors
 - Mechanical/Electrical
Interlocks

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Description

Bulletin 100 Modular Line of contactors, when combined with the Bulletin 193 SMP or Bimetallic overload relays, auxiliary contacts, timers, interlocks, suppressors, and DIN mounting rail provides a highly flexible grouping of world acceptable devices.

Conformity to Standards:

IEC 947-4

BS 5424

VDE 0660

IEC 947-4 Type 2 Co-ordination
(UL and ASTA Certified)

Approvals Pending:

DEMKO — Denmark

NEMKO — Netherlands

SEMKO — Sweden

SETI — Finland

Approvals:

CSA Certified (File No. LR1234)

UL Listed (File No. E3125;
Guide No. NLDX)

CE Marked (Per EU Low Voltage
Directive 73/23/EEC 93/68/EEC)

A-B EXPRESS Fast Shipment Program

- Fast Shipment of Bulletin 100 IEC Contactors to satisfy your unexpected demands.
- Make your selections from any of the Cat. Nos. printed in blue and identify your order as



Your order must include:

- Cat. No. of the contactor selected with coil voltage code.
- If required, Cat. No. of any accessories.
- If required, Cat. No. of replacement coils or contact kits.

Bulletin 100
IEC Contactors
Product Selection

AC Operated Contactors



Fast Shipment Program Cat. Nos. are printed in blue.



Cat. No. 100-A09...A30



Cat. No. 100-A38...A75



Cat. No. 100-B110...B600



Cat. No. 104-A09...A30

Max. Current (A)	Ratings (AC3, AC4)										Non-Reversing Contactors		Reversing Contactors	
	kW (50 Hz)					HP (60 Hz)								
	3Ø					1Ø		3Ø			Cat. No. ②③	*	Cat. No.	*
	220V	380V – 415V	500V	660V	115V	230V	200V	230V	460V	575V				
9 ①	2.2	4	5.5	5.5	1/3	1	2	2	5	7-1/2	100-A09N③	*	104-A09N③	*
12 ①	3	5.5	7.5	7.5	1/2	2	3	3	7-1/2	10	100-A12N③	*	104-A12N③	*
18 ①	4	7.5	11	11	1	3	5	5	10	15	100-A18N③	*	104-A18N③	*
24 ①	5.5	11	15	15	2	3	5	7-1/2	15	20	100-A24N③	*	104-A24N③	*
30	7.5	15	18.5	18.5	2	5	7-1/2	10	20	25	100-A30N③	*	104-A30N③	*
38	10	18.5	22	18.5	3	5	10	10	25	30	100-A38N③	*	104-A38N③	*
45	11	22	30	22	3	7-1/2	10	15	30	40	100-A45N③	*	104-A45N③	*
60	15	30	37	37	5	10	15	20	40	50	100-A60N③	*	104-A60N③	*
75	22	37	45	45	5	10	20	25	50	60	100-A75N③	*	104-A75N③	*
110	30	55	75	75	–	–	30	40	75	100	100-B110N③	*	104-B110N③	*
180	45	90	110	110	–	–	60	60	150	150	100-B180N③	*	104-B180N③	*
250	75	132	160	160	–	–	75	100	200	250	100-B250N③	*	104-B250N③	*
304	90	160	200	200	–	–	100	100	250	300	100-B300N③	*	104-B300N③	*
414 ④	120	220	280	280	–	–	125	150	350	400	100-B400N③	*	104-B400N③	*
608 ④	180	315	445	445	–	–	200	250	500	600	100-B600N③	*	104-B600N③	*

⊗ **Voltage Suffix Code**

The Cat. No. as listed is incomplete. Select a Voltage Suffix Code from the table below to complete the Cat. No. Example: **Cat. No. 100-A09N③** becomes **Cat. No. 100-A09NJ3**. For other voltages, consult Allen-Bradley Sales Office. **Note:** Coils below 110V are not available for **100-B400** and **100-B600** Contactors.

Voltage	24V	42V	48V	100V	100-110V	110V	120V	200V	208V	220V	240V	277V	347V	380V	415V	440V	480V	500V	550V	600V
50 Hz	K	W	Y	KF	–	D	KE	–	–	A	T	–	–	N	I	B	–	M	C	–
60 Hz	J	–	X	–	KF	–	D	–	H	L	A	F	KK	E	–	G	B	–	–	C
50/60 Hz	KD	–	KH	KF	–	S	–	KG	–	–	–	–	–	–	–	–	–	–	–	–

- ① 4 main poles of same rating. Right hand pole is normally used as auxiliary.
- ② **Power Terminal Lugs** — Contactor **Cat. Nos. 100-A09** through **100-A75** include wire terminal lugs. Contactor **Cat. No. 100-B110** through **100-B600** have terminal pads with a bolt and nut for connection of bus bars or crimp type connectors. If wire lugs are required for these devices, see Accessories on page 3-38.
- ③ **Auxiliary Contacts** — Contactor **Cat. Nos. 100-A09** through **100-A24** have a normally open auxiliary contact that has the same electrical ratings as the main power contacts. All other sizes have a normally open auxiliary contact rated specifically for auxiliary circuits. Contactor **Cat. Nos. 100-B400** and **100-B600** are furnished with one additional normally closed auxiliary contact. Example: **Cat. No. 100-A09N③ 31**.
- ④ Coils below 120V are not available for 400A through 600A devices due to high-inrush current, except for 110V 50Hz.

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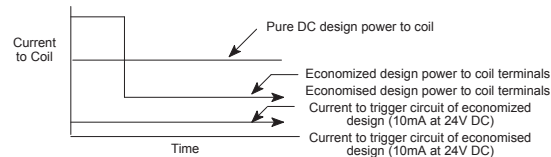
DC Operated Contactors



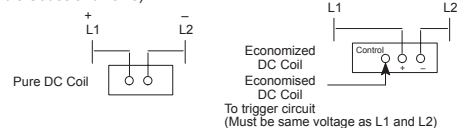
Fast Shipment Program Cat. Nos. are printed in blue.



Cat. No. 100-A09NZ...A30NZ



Typical Wiring Diagrams
 (See Applicable Codes and Laws)



Pure DC Coil Contactors

Max. le (A)	Ratings (AC3, AC4)										Non-Reversing Contactors		Reversing Contactors	
	kW (50 Hz)				HP (60 Hz)						Cat. No.	*	Cat. No.	*
	3∅				1∅		3∅							
	220V	380V – 415V	500V	660V	115V	230V	200V	230V	460V	575V				
9 ①	2.2	4	5.5	5.5	1/3	1	2	2	5	7-1/2	100-A09NZ⊗ 3		104-A09NZ⊗ 3	
12 ①	3	5.5	7.5	7.5	1/2	2	3	3	7-1/2	10	100-A12NZ⊗ 3		104-A12NZ⊗ 3	
18 ①	4	7.5	11	11	1	3	5	5	10	15	100-A18NZ⊗ 3		104-A18NZ⊗ 3	
24 ①	5.5	11	15	15	2	3	5	7-1/2	15	20	100-A24NZ⊗ 3		104-A24NZ⊗ 3	
30	7.5	15	18.5	18.5	2	5	7-1/2	10	20	25	100-A30NZ⊗ 3		104-A30NZ⊗ 3	
38	10	18.5	22	18.5	3	5	10	10	25	30	100-A38NZ⊗ 3		104-A38NZ⊗ 3	
45	11	22	30	22	3	7-1/2	10	15	30	40	100-A45NZ⊗ 3		104-A45NZ⊗ 3	
60	15	30	37	37	5	10	15	20	40	50	100-A60NZ⊗ 3		104-A60NZ⊗ 3	
75	22	37	45	45	5	10	20	25	50	60	100-A75NZ⊗ 3		104-A75NZ⊗ 3	
110	30	55	75	75	–	–	30	40	75	100	100-B110NZ⊗ 3		104-B110NZ⊗ 3	

DC Solid-State Economized Dual Wound Coil Contactors



Cat. No. 100-A38NE...A75NE

Max. le (A)	Ratings (AC3, AC4)										Non-Reversing Contactors	
	kW (50 Hz)				HP (60 Hz)						Cat. No.	*
	3∅				1∅		3∅					
	220V	380V – 415V	500V	660V	115V	230V	200V	230V	460V	575V		
38	10	18.5	22	18.5	3	5	10	10	25	30	100-A38NE⊗ 3	
45	11	22	30	22	3	7-1/2	10	15	30	40	100-A45NE⊗ 3	
60	15	30	37	37	5	10	15	20	40	50	100-A60NE⊗ 3	
75	22	37	45	45	5	10	20	25	50	60	100-A75NE⊗ 3	
110	30	55	75	75	–	–	30	40	75	100	100-B110NE⊗ 3	
180	45	90	110	110	–	–	60	60	150	150	100-B180NE⊗ 3	

⊗ **Voltage Suffix Code**

The Cat. No. as listed is incomplete. Select a Voltage Suffix Code from the table below to complete the Cat. No. Example: Cat. No. 100-A09NZ⊗3 becomes Cat. No. 100-A09NZ123. For other voltages, consult Allen-Bradley Sales Office.

Voltage	Type	12V	24V	48V	64V	80V	115V	125V	230V	250V
Coil Code	Pure DC	12	24	48	64	80	01	03	23	25
	Economized DC	–	24	48	–	–	01	–	23	–

① 4 main poles of same rating. Right hand pole is normally used as auxiliary.

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Welding Contactors



Cat. No. 100W-B180N⊗2



Cat. No. 100W-B600N⊗3

DESCRIPTION — These devices are designed for use on applications where a contactor is used to isolate the primary of a welding transformer from the supply power or where a contactor is used in series with the weld control SCR.

Normal applications require the contactor to carry the current without switching; therefore, the contactor has been assigned an intermittent rating which represents the short term current the contactor can successfully carry without exceeding its thermal capabilities.

Note: The average current during the operating cycle should not exceed the continuous rating of the contactor.

Continuous Rating	Intermittent Rating	Size	Number of Poles	Cat. No. ❶	*
135A	2600A	4	2	100W-B180N⊗2	
			3	100W-B180N⊗3	
270A	3000A	5	2	100W-B300N⊗2	
			3	100W-B300N⊗3	
540A	3200A	6	2	100W-B600N⊗2	
			3	100W-B600N⊗3	

⊗ **Voltage Suffix Code**

The Cat. No. as listed is incomplete. To complete the Cat. No., select a Voltage Suffix Code from the chart below and insert into the Cat. No.. Example: Cat. No. 100W-B180N⊗3 becomes Cat. No. 100W-B180ND3. For other voltages, consult Allen-Bradley Sales Office.

Voltage	24V	48V	110V	120V	208V	220V	240V	277V	380V	415V	440V	480V	500V	600V
60 Hz	J	X	–	D	H	L	A	F	–	–	G	B	–	C
50 Hz	K	Y	D	–	–	A	T	–	N	I	B	–	M	–

❶ When using Bulletin 199 terminal lug kits: Contactor Cat. Nos. 100W-B180N⊗2 and 100W-B180N⊗3 use Lug Kit Cat. No. 199-LF1, Contactor Cat. Nos. 100W-B300N⊗2 and 100W-B300N⊗3 use Lug Kit Cat. No. 199-LG1, and Cat. Nos. 100W-B600N⊗2 and 100W-B600N⊗3 use Lug Kit Cat. No. 199-LJ1.

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Wye-Delta Starter Kits

Wye-Delta Starter Kits have been designed to aid in the field assembly of open transition Wye-Delta starters using Bulletin 100 Contactors. These kits include power wiring, shorting straps, mechanical interlocks, incoming terminal blocks, and the necessary mounting plate. Assembling a complete Wye-Delta starter requires the use of the following additional components:

- Contactors
- Overload Relay
- On-Delay Timer:

For **199-YD1** through **199-YD4**, use **Cat. No. 196-FTA**

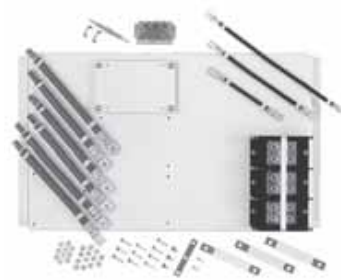
For **199-YD5** through **199-YD8**, use **Bulletin 700-F Control Relay** with **Cat. No. 196-FTA**

or

Use **Cat. No. 700-FSD45G**⊗ Electronic Timing Relay



Cat. No. 199-YD1



Cat. No. 199-YD7

Product Selection

Use the table below to select the proper Wye-Delta starter assembly kit for your application.

3∅ Ratings											Cat. No.	*
kW (50 Hz)				HP (60 Hz)				Use with Cat. No. 100- Ⓢ				
220V	380/ 415V	500V	660V	200V	230V	460V	575V	Delta		Wye		
								M1	M2	S1		
4.0	7.5	11	11	5	5	10	15	A09	A09	A09	199-YD1	
5.5	11	15	15	5	7-1/2	15	20	A12	A12	A09	199-YD1	
7.5	15	18.5	18.5	7-1/2	10	20	25	A18	A18	A12	199-YD2	
11	18.5	22	25	7-1/2	10	25	30	A24	A24	A12	199-YD2	
11	22	30	30	10	15	30	40	A30	A30	A18	199-YD3	
15	30	37	37	15	20	40	50	A38	A38	A24	199-YD4	
22	37	45	45	20	25	50	60	A45	A45	A30	199-YD4	
30	55	75	75	30	40	75	100	A60	A60	A38	199-YD5	
37	63	80	80	40	50	100	125	A75	A75	A45	199-YD5	
45	90	110	110	60	60	150	150	B110	B110	A75	199-YD6	
80	150	180	180	75	100	225	250	B180	B180	B110	199-YD7	
110	220	280	280	125	150	350	400	B250	B250	B180	199-YD8	
140	257	315	315	150	200	400	450	B300	B300	B180	199-YD8	

Ⓢ For use with AC operated contactors only.

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