









**Auxiliary Contacts (For 100-C09...C85 contactors)\***

	Description	 		For Use With	Cat. No. †		
		N.O.	N.C.				
 <p><b>Auxiliary Contact Blocks for Front Mounting</b>            2- and 4-pole            Quick and easy mounting without tools            Electronic-compatible contacts down to 17V, 5 mA            Mechanically linked performance between N.O. and N.C. poles and to the main contactor poles (except for L types)</p>	0 2	0	2	100-C all	100-FA02		
				C30⊗00...C85⊗00	100-FB02		
		1	1	100-C all	100-FA11		
				C30⊗00...C85⊗00	100-FB11		
	2	0	100-C all	100-FA20			
			C30⊗00...C85⊗00	100-FB20			
	1L	1L	C30⊗00...C85⊗00	100-FAL11			
			C30⊗00...C85⊗00	100-FBL11			
	 <p>Models with equal function with several terminal numbering choices            1L = Late break N.C./early make N.O.            Bifurcated version for switching down to 5V, 3 mA ‡</p>	0	4	100-C all	100-FA04		
		1	3	100-C all	100-FA13		
2		2	100-C all	100-FA22			
			C30⊗00...C85⊗00	100-FB22			
			C09⊗10...C23⊗10	100-FC22			
3		1	100-C all	100-FA31			
			C09⊗10...C23⊗10	100-FC31			
4		0	100-C all	100-FA40			
1+1L		1+1L	100-C all	100-FAL22			

	Description	 		For Use With	Cat. No.		
		N.O.	N.C.				
 <p><b>Auxiliary Contact Blocks for Side Mounting with Sequence Terminal Designations</b>            1- and 2-pole            Two-way numbering for right or left mounting on the contactor</p>	0	1	100-C	⊗	100-SB01		
	1	0	100-C ‡	⊗	100-SB10		
	0	2	100-C ‡	⊗	100-SB02		
 <p>Quick and easy mounting without tools            Electronic-compatible contacts down to 17V, 10 mA            Mirror contact performance to the main contactor poles            1L = Late break N.C./early make N.O.</p>	1	1	100-C ‡	⊗	100-SB11		
	2	0	100-C ‡	⊗	100-SB20		
	1L	1L	100-C ‡	⊗	100-SBL11		

\* Max. number of auxiliary contacts that may be mounted:

AC coil contactors — max. 4 N.O. contacts on the front of the contactor, 2 N.O. contacts on the side, 4 N.C. front or side, 6 total.

DC coil contactors — max. 4 N.O. contacts on the front of the contactor or max 2 N.O. contacts on the side, 4 N.C. front or side, 4 total.





⊗ May be ordered in package quantities of 10. Add letter **M** to the end of the cat. no. Example: **100-SB01M**).

‡ Double numbering — Left-side mounting only is recommended for **cat. no. 100-C09...100-C23** due to double numbering.





# Contactors

## Accessories

### Control Modules (For 100-C09...C85 contactors)

	Description	For Use With	Cat. No.		
	<b>Pneumatic Timing Modules</b> Pneumatic timing element contacts switch after the delay time. The contacts on the main control relay continue to operate without delay.	<b>On-Delay</b> 0.3...30 s Range 1.8...180 s Range	100-C with AC coils, 700-CF all	100-FPTA30 100-FPTA180	
		<b>Off-Delay</b> 0.3...30 s Range 1.8...180 s Range	100-C all, 700-CF all	100-FPTB30 100-FPTB180	
	<b>Electronic Timing Modules – On-Delay</b> Delay of the contactor or control relay solenoid. The contactor or control relay is energized at the end of the delay time.	<b>On-Delay</b> 0.1...3 s Range 1...30 s Range 10...180 s Range 110...240V, 50/60 Hz 110...250V DC	100-C (all), 700-CF 110...240V 50/60 Hz 110...250V DC	100-ETA3 100-ETA30 100-ETA180	
		<b>On-Delay</b> 0.1...3 s Range 1...30 s Range 10...180 s Range 24...48V DC	100-C with DC coils, 700-CF with DC coils	100-ETAZJ3 100-ETAZJ30 100-ETAZJ180	
	<b>Electronic Timing Modules – Off-Delay</b> Delay of the contactor or control relay solenoid. After interruption of the control signal, the contactor or control relay is de-energized at the end of the delay time.	<b>Off-Delay</b> 0.3...3 s Range 1...30 s Range 10...180 s Range 110...240V, 50/60 Hz	100-C with AC coils, 700-CF with AC coils	100-ETB3 100-ETB30 100-ETB180	
		<b>Off-Delay</b> 0.3...3 s Range 1...30 s Range 10...180 s Range 24V, 50/60 Hz	100-C with AC coils, 700-CF with AC coils	100-ETBKJ3 100-ETBKJ30 100-ETBKJ180	
	<b>Electronic Timing Modules – 100-ETY</b> Delay of the contactor solenoid. Contactor K 3 (Y) is de-energized (off) and K 2 (D) is energized (on) after the end of the set Y end time. (Switching delay at 50 ms.) Continuous adjustment range High repeat accuracy	<b>Transition Time Y Contactor</b> 1...30 s Range 110...240V, 50/60 Hz	100-C with AC coils	100-ETY30	

**Control Modules (For 100-C09...C85 contactors), continued**

	Description	For Use With	Cat. No.		
	<b>Electronic Star-Delta Timing Relay</b> Output Y picks up when the supply voltage is applied and resets again after time t. After a fixed changeover time tu, output relay Δ picks up and remains energized until the supply voltage is interrupted.	• 22.5 mm width <b>Supply Voltage (A1/A2)</b> U23 24...48V DC, 24...240V AC, 50/60 Hz A40 346...440V AC, 50/60 Hz	100-M, 100-C, 100-D	700-FSY2DU23	
			700-FSY2DU23		
	<b>Electronic Star-Delta Timing Relay</b> Output Y picks up when the supply voltage is applied and resets again after time t. After a fixed changeover time tu, output relay Δ picks up and remains energized until the supply voltage is interrupted.	• 17.5 mm width <b>Supply Voltage (A1/A2)</b> U23 24...48V DC 24...240V AC. 50/60 Hz	100-M, 100-C, 100-D	700-FEY2QU23	
	<b>Mechanical Interlocks</b> For interlocking of two contactors. Common interlock for all 100-C contactor sizes Interlocking of different sizes possible Mechanical and electrical interlocking possible in one module by means of integrated auxiliary contacts 9 mm dovetail connector included	Mechanical only Without auxiliary contacts	100-C (except 100-C40, -C90)	100-MCA00	
		Mechanical/ electrical With 2 N.C. auxiliary contacts		100-MCA02	
	<b>Mechanical Latch</b> Following contactor latching, the contactor coil is immediately de-energized (off) by the N.C. auxiliary contact (65-66). Electrical or manual release 1 N.O. + 1 N.C. auxiliary contacts Suitable for all 100-C contactor sizes, 9...85 A	100-C with AC coils	100-FL11⊗		

⊗ **Voltage Suffix Code for Mechanical Latch**

The cat. no. as listed is incomplete. Select a voltage suffix code from the table below to complete the cat. no. Example: 230V, 50/60 Hz: **Cat. no. 100-FL11⊗** becomes **cat. no. 100-FL11KF**.



AC Control	
Code	Description
KJ	24V 50/60 Hz
KY	48V 50/60 Hz
KD	110V 50/60 Hz
KF	230V 50/60 Hz
KN	400V 50/60 Hz
M	500V 50 Hz

For other AC voltages visit our website or consult your local sales office.

# Contactors



## Accessories

### Control Modules (For 100-C09...C85 contactors), continued

	Description	Voltage Range	For Use With	Cat. No.				
	<b>DC Interface</b> (electronic) Interface between the DC control signal (PLC) and the AC operating mechanism of the contactor. Requires no additional surge suppression on the relay coils	Input: 12V DC Output: 110...240V AC	100-C with AC coils 110...240V AC	100-JE12				
		Input: 18...30V DC Output: 110...240V AC		100-JE				
		Input: 48V DC Output: 110...240V AC		100-JE48				
	<b>Surge Suppressors</b> For limitation of coil switching transients. Plug-in, coil mounted Suitable for all 100-C contactor sizes, 9...85 A RC, Varistor and Diode Versions	<b>RC Module</b> AC Operating Mechanism	100-C with AC coils	*	100-FSC48			
				*	100-FSC280			
				*	100-FSC480			
		<b>Varistor Module</b> AC/DC Operating Mechanism	100-C	12...55V AC/ 12...77V DC	*	100-FSV55		
					*	100-FSV136		
					*	100-FSV277		
					*	100-FSV575		
<b>Diode Module</b> DC Operating Mechanism	12...250V DC	100-C with DC coils	*	100-FSD250				

\* May be ordered in package quantities of 10. Add letter **M** to the end of the cat. no. Example: **100-FSC48M**.

**Assembly Components (For 100-C09...C85 contactors)**

	Description	For Use With	PQ	Cat. No.			
	<b>Dovetail Connectors</b> For use in contactor and starter assemblies. Single Connector — 0 mm Spacing	100-C	10	100-S0			
	<b>Dovetail Connectors</b> For use in contactor and starter assemblies. Dual Connector — 9 mm Spacing			100-S9			
	<b>ECO Connecting Modules — 25 A</b> Eco-starters mount on single DIN Rail (140M on DIN Rail) Electrical and mechanical interconnection of 140M MPCB and 100-M (with AC or DC coils) or 100-C (with AC coils) contactors	140M-C to 100-C09...C23	*	140M-C-PEC23			
		140M-D to 100-C09...C23	*	140M-D-PEC23			
	<b>Connecting Modules — 25 A and 45 A</b> Contactor and MPCB <b>MUST BE</b> mounted separately on (2) DIN Rails Electrical interconnection between 140M MPCB and 100-C contactors (with AC coils)		140M-C to 100-C09...C23		140M-C-PNC23		
			140M-D to 100-C09...C23		140M-D-PNC23		
			140M-D to 100-C30...C37		140M-D-PNC37		
			140M-F to 100-C30...C37		140M-F-PNC37		
		140M-F to 100-C43		140M-F-PNC43			

\* May be ordered in package quantities of 20. Add letter **M** to the end of the cat. no. Example: **140M-C-PEM12M**.  
 PQ = Package Quantity

**DeviceNet Starter Auxiliary DSA I/O for Distributed Starters**

- Includes complete connector plug set
- Removable connectors
- Slender 22.5 mm wide profile
- Screw or DIN Rail mounting
- Rotary node address switches
- DeviceNet address settable via hardware or software — no need to adjust rotary node address switches
- DeviceLogix functionality

**Inputs from:**

- Contactor Aux
- Relay
- Pushbutton
- Proximity Switch
- Limit Switch

**Outputs to:**

- Contactor Coil
- Starter
- Relay
- Signal Lamp
- Valve



No. of Inputs	No. of Outputs	Cat. No.		
4 (120V AC)	2 Relay (250V rated)	100-DNY41R		
4 (24V DC)	2 Relay (250V rated)	100-DNY42R		
4 (24V DC)	2 Solid-State (24V DC)	100-DNY42S		

# Contactors

## Accessories

### Star-Delta Starter Kits

Power wiring kits were designed to aid in the field assembly of open-transition star-delta and reversing starters that use Bulletin 100-C contactors. These kits include line, load (and start-point) connections.



170-PW23



3-Phase Rating (50 Hz)				Use with Cat. No. 100-...			Cat. No.		
230V	380/415V	500V	690V	Delta		Star			
[kW]				1M	2M	1S			
5.5	8	8	8	C09	C09	C09	170-PW23		
7.5	11	11	11	C12	C12	C09			
10	14	15	14	C16	C16	C12			
14	21	21	19	C23	C23	C12			
18	28	28	28	C30	C30	C16	170-PW37		
19	35	35	32	C37	C37	C23			
23	40	40	41	C43	C43	C30	170-PW43		
33	58	60	56	C60	C60	C37	170-PW72		
39	69	67	70	C72	C72	C43			
47	82	82	81	C85	C85	C60	170-PW85		

### Reversing Starter Kits








Description	For Use With	Cat. No.		
<b>Reversing Power Wiring Kits</b> For reversing connection with a solid-state or thermal overload relay	100-C09...C23	105-PW23		
	100-C30...C37	105-PW37		
	100-C43	105-PW43		
	100-C60...85	105-PW85		

### Marking Systems

Description	PQ	Cat. No.		
 <b>Label Sheet</b> 10 sheets with 105 self-adhesive paper labels each, 6 x 17 mm	10	100-FMS		
 <b>Marking Tag Sheet</b> 10 sheets with 160 perforated paper labels each, 6 x 17 mm To be used with a transparent cover	10	100-FMP		
<b>Transparent Cover</b> 100 each To be used with marking tag sheets	100	100-FMC		

PQ = Package Quantity

**Enclosures**

	Description	For Use With	Cat. No.		
	<b>Plastic Enclosures for DOL Starters</b> For Bulletin 100-C09...C23 contactors with overload relays Bulletin 193-ED, -EE or -CT Protection class IP66 Prestampings for two pilot lights				
	Material: ABS V-0	With blue RESET push button	100-C09...C23 + 193-ED, -EE, -CT	198E-A0S1	
		With green START and raised red STOP/RESET push buttons, START contact kit included.		198E-A0S4	
	Material: PC V-0	With blue RESET push button	100-C09...C23 + 193-ED, -EE, -CT	198E-C0S1	
With green START and raised red STOP/RESET push buttons, START contact kit included.		198E-C0S4			
	<b>Pushbutton Latch</b> For maintained contact control, enclosures with START/STOP push buttons.	198E-A0S4, 198E-C0S4	198E-PLA		
	<b>Neutral Terminal</b>	198E-A..., 198E-C...	198E-PNT		
	<b>START Contact Kit</b> Included in the enclosure, as spare part only.	198E-A0S4, 198E-C0S4	198E-PCK		
	<b>Pilot Lights</b> Length of connection leads 180 mm, includes lamp, protection class IP54. *				
	Green	120V	198E-A..., 198E-C..., 140A-C-E...	140-LG120	
		240V		140-LG240	
		400V		140-LG400	
	Red	120V		140-LR120	
		240V		140-LR240	
		400V		140-LR400	
	White	120V		140-LW120	
		240V		140-LW240	
		400V		140-LW400	

\* For protection class IP66 use 800F pilot lights, see page 3-6