

Lighting and Heating Control

Electrically Held Lighting Contactors, Class LC

Features

Class LC lighting contactors deliver unprecedented versatility in application, simplicity in configuration and performance in operation. Ingenious design, rugged construction and a host

of truly useful features make them uniquely appealing to all those who use them.

Convenient side access for field power wiring.

Contact position indication – when button protrudes, contact is closed

A simple kit easily converts electrically held units to mechanically held and includes a 2- or 3-wire control module.

Power poles can easily be added at any time based on changing needs. Furthermore, they may be converted from NO to NC (or vice versa) simply by repositioning.

Plug-in auxiliary contacts are NO when installed on the left side of the contactor, NC on the right.

Standard base enables contactor to be field expandable for flexibility and future needs.

Finger and back-of-hand safe terminals.

- Used in all applications where either electrically or mechanically held contactors are specifically suited and also ideal for maximum flexibility and future expansion
- Rated for tungsten lighting (incandescent filament), ballast lighting (fluorescent, HID, metal halide, mercury vapor, quartz halogen and sodium-lamp), resistive and general use loads
- Contacts are rated up to 30 amps at 600 volts
- Up to 12 poles (maximum of 8 normally closed)
- Wide range of coil voltages from 24 to 600 VAC 50/60Hz

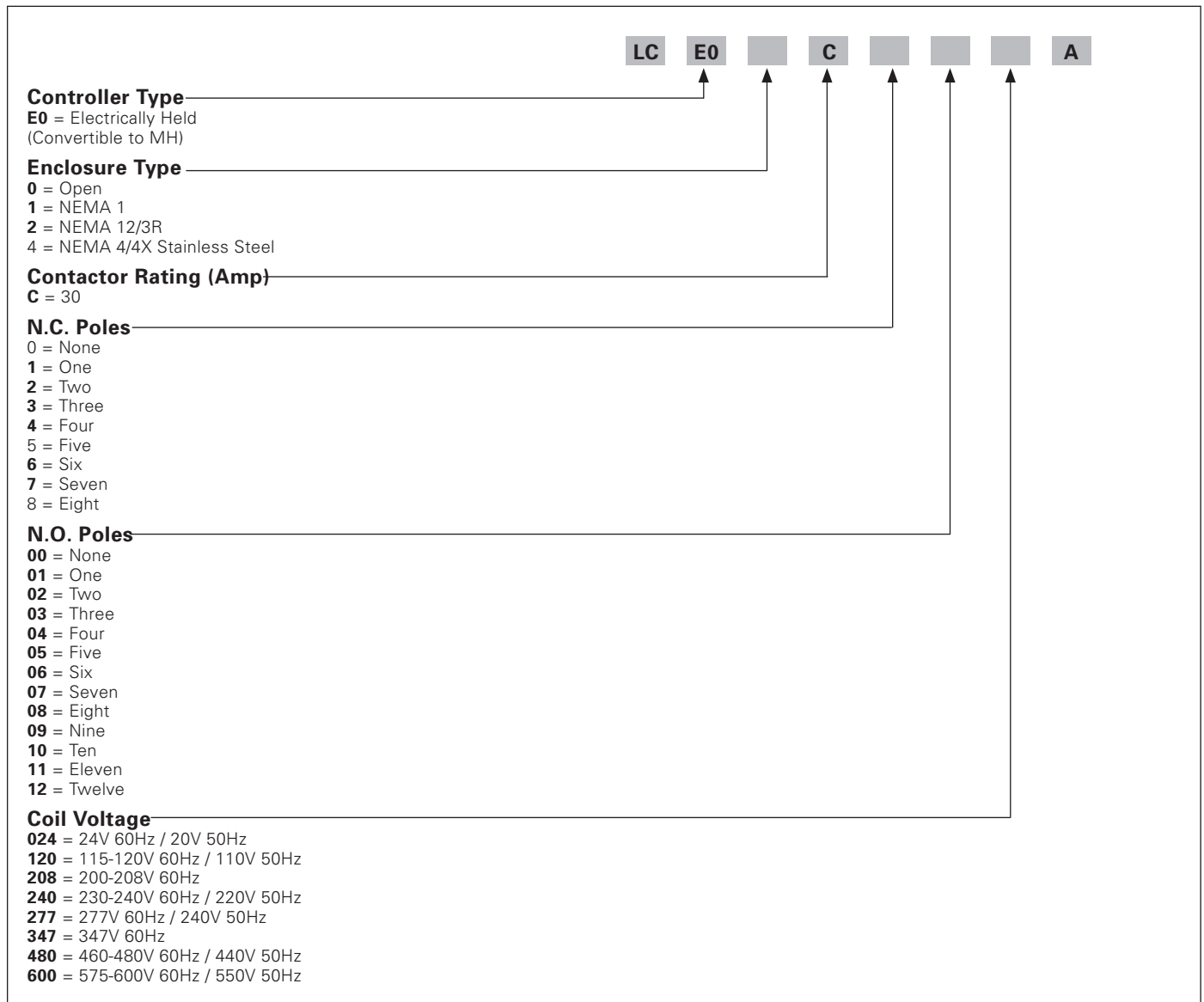
- Can be ordered as either electrically or mechanically held and can also be converted from electrically to mechanically held in the field with a simple conversion kit
- Modular design enables you to stock the building block components to assemble all configurations of both the electrically and mechanically held contactors thus dramatically reducing inventory
- Full line of enclosures including NEMA 1, 3/3R, 4, 4/4X stainless steel and 12
- Full line of factory and field modifications

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Catalog Numbering System





Ordering Information

- To order standard electrically held contactor, simply select catalog number from tables below.
- To order mechanically held contactor, select catalog number from tables below and specify conversion module from factory modification section from page 9/122.
- To convert standard electrically held contactor to mechanically held in the field, select catalog number from tables below and select conversion module kit from field modification section on page 9/106.
- Replace *** with a number from the coil table.
- Field Modification Kits see page 9/104.
- Factory Modifications see page 9/119.
- Dimensions see page 9/148 open, page 9/170 enclosed.
- Wiring Diagrams see page 9/188.
- Replacement Parts see page 9/134.

Coil Table

VAC 60Hz	***
24	024
120	120
208	208
240	240
277	277
347	347
480	480
600	600

Replace the (***) with a number from the coil table.

Non-Combination Contactor (30 Amp max.)

No. of Poles		Enclosure Type			
		Open	1	3/3R/12 ^①	4/4X 304 S.S.
N.C.	N.O.	Catalog Number			
2	0	LCE00C200***A	LCE01C200***A	LCE02C200***A	LCE04C200***A
3		LCE00C300***A	LCE01C300***A	LCE02C300***A	LCE04C300***A
4		LCE00C400***A	LCE01C400***A	LCE02C400***A	LCE04C400***A
5		LCE00C500***A	LCE01C500***A	LCE02C500***A	LCE04C500***A
6		LCE00C600***A	LCE01C600***A	LCE02C600***A	LCE04C600***A
7		LCE00C700***A	LCE01C700***A	LCE02C700***A	LCE04C700***A
8		LCE00C800***A	LCE01C800***A	LCE02C800***A	LCE04C800***A
1	1	LCE00C101***A	LCE01C101***A	LCE02C101***A	LCE04C101***A
2		LCE00C201***A	LCE01C201***A	LCE02C201***A	LCE04C201***A
3		LCE00C301***A	LCE01C301***A	LCE02C301***A	LCE04C301***A
4		LCE00C401***A	LCE01C401***A	LCE02C401***A	LCE04C401***A
5		LCE00C501***A	LCE01C501***A	LCE02C501***A	LCE04C501***A
6		LCE00C601***A	LCE01C601***A	LCE02C601***A	LCE04C601***A
7		LCE00C701***A	LCE01C701***A	LCE02C701***A	LCE04C701***A
8		LCE00C801***A	LCE01C801***A	LCE02C801***A	LCE04C801***A
0	2	LCE00C002***A	LCE01C002***A	LCE02C002***A	LCE04C002***A
1		LCE00C102***A	LCE01C102***A	LCE02C102***A	LCE04C102***A
2		LCE00C202***A	LCE01C202***A	LCE02C202***A	LCE04C202***A
3		LCE00C302***A	LCE01C302***A	LCE02C302***A	LCE04C302***A
4		LCE00C402***A	LCE01C402***A	LCE02C402***A	LCE04C402***A
5		LCE00C502***A	LCE01C502***A	LCE02C502***A	LCE04C502***A
6		LCE00C602***A	LCE01C602***A	LCE02C602***A	LCE04C602***A
7		LCE00C702***A	LCE01C702***A	LCE02C702***A	LCE04C702***A
8		LCE00C802***A	LCE01C802***A	LCE02C802***A	LCE04C802***A
0	3	LCE00C003***A	LCE01C003***A	LCE02C003***A	LCE04C003***A
1		LCE00C103***A	LCE01C103***A	LCE02C103***A	LCE04C103***A
2		LCE00C203***A	LCE01C203***A	LCE02C203***A	LCE04C203***A
3		LCE00C303***A	LCE01C303***A	LCE02C303***A	LCE04C303***A
4		LCE00C403***A	LCE01C403***A	LCE02C403***A	LCE04C403***A
5		LCE00C503***A	LCE01C503***A	LCE02C503***A	LCE04C503***A
6		LCE00C603***A	LCE01C603***A	LCE02C603***A	LCE04C603***A
7		LCE00C703***A	LCE01C703***A	LCE02C703***A	LCE04C703***A
8		LCE00C803***A	LCE01C803***A	LCE02C803***A	LCE04C803***A

^① Type 12 field convertible to Type 3/3R.

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Selection

Non-Combination Contactor (30 Amp max.)

No. of Poles		Enclosure Type			
		Open	1	3/3R/12 ①	4/4X 304 S.S.
N.C.	N.O.	Catalog Number			
0	4	LCE00C004***A	LCE01C004***A	LCE02C004***A	LCE04C004***A
1		LCE00C104***A	LCE01C104***A	LCE02C104***A	LCE04C104***A
2		LCE00C204***A	LCE01C204***A	LCE02C204***A	LCE04C204***A
3		LCE00C304***A	LCE01C304***A	LCE02C304***A	LCE04C304***A
4		LCE00C404***A	LCE01C404***A	LCE02C404***A	LCE04C404***A
5		LCE00C504***A	LCE01C504***A	LCE02C504***A	LCE04C504***A
6		LCE00C604***A	LCE01C604***A	LCE02C604***A	LCE04C604***A
7		LCE00C704***A	LCE01C704***A	LCE02C704***A	LCE04C704***A
8		LCE00C804***A	LCE01C804***A	LCE02C804***A	LCE04C804***A
0	5	LCE00C005***A	LCE01C005***A	LCE02C005***A	LCE04C005***A
1		LCE00C105***A	LCE01C105***A	LCE02C105***A	LCE04C105***A
2		LCE00C205***A	LCE01C205***A	LCE02C205***A	LCE04C205***A
3		LCE00C305***A	LCE01C305***A	LCE02C305***A	LCE04C305***A
4		LCE00C405***A	LCE01C405***A	LCE02C405***A	LCE04C405***A
5		LCE00C505***A	LCE01C505***A	LCE02C505***A	LCE04C505***A
6		LCE00C605***A	LCE01C605***A	LCE02C605***A	LCE04C605***A
0	6	LCE00C006***A	LCE01C006***A	LCE02C006***A	LCE04C006***A
1		LCE00C106***A	LCE01C106***A	LCE02C106***A	LCE04C106***A
2		LCE00C206***A	LCE01C206***A	LCE02C206***A	LCE04C206***A
3		LCE00C306***A	LCE01C306***A	LCE02C306***A	LCE04C306***A
4		LCE00C406***A	LCE01C406***A	LCE02C406***A	LCE04C406***A
5		LCE00C506***A	LCE01C506***A	LCE02C506***A	LCE04C506***A
6		LCE00C606***A	LCE01C606***A	LCE02C606***A	LCE04C606***A
0	7	LCE00C007***A	LCE01C007***A	LCE02C007***A	LCE04C007***A
1		LCE00C107***A	LCE01C107***A	LCE02C107***A	LCE04C107***A
2		LCE00C207***A	LCE01C207***A	LCE02C207***A	LCE04C207***A
3		LCE00C307***A	LCE01C307***A	LCE02C307***A	LCE04C307***A
4		LCE00C407***A	LCE01C407***A	LCE02C407***A	LCE04C407***A
0	8	LCE00C008***A	LCE01C008***A	LCE02C008***A	LCE04C008***A
1		LCE00C108***A	LCE01C108***A	LCE02C108***A	LCE04C108***A
2		LCE00C208***A	LCE01C208***A	LCE02C208***A	LCE04C208***A
3		LCE00C308***A	LCE01C308***A	LCE02C308***A	LCE04C308***A
4		LCE00C408***A	LCE01C408***A	LCE02C408***A	LCE04C408***A
0	9	LCE00C009***A	LCE01C009***A	LCE02C009***A	LCE04C009***A
1		LCE00C109***A	LCE01C109***A	LCE02C109***A	LCE04C109***A
2		LCE00C209***A	LCE01C209***A	LCE02C209***A	LCE04C209***A
0	10	LCE00C010***A	LCE01C010***A	LCE02C010***A	LCE04C010***A
1		LCE00C110***A	LCE01C110***A	LCE02C110***A	LCE04C110***A
2		LCE00C210***A	LCE01C210***A	LCE02C210***A	LCE04C210***A
0	11	LCE00C011***A	LCE01C011***A	LCE02C011***A	LCE04C011***A
0	12	LCE00C012***A	LCE01C012***A	LCE02C012***A	LCE04C012***A

① Type 12 field convertible to Type 3/3R.

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Technical Data

General technical data:	
Finger-safe (main circuit / control circuit)	yes / yes
Degree of pollution	3
Altitude (m)	2,000
Ambient storage temperature (°C)	-30 to 65
Ambient operating temperature (°C)	-25 to 40
Humidity (% non-condensing)	no data
Shock resistance at rectangular impulse (g/ms)	no data
Shock resistance at sine pulse (g/ms)	no data
Rated impulse voltage resistance (kV)	no data
Rated insulation voltage (V)	600
Mechanical operating cycles as operating time:	
of contactor	100,000
of contactor with additional aux contacts	100,000
Main circuit:	
Number of main contacts	2 - 12 (maximum of 8 NC)
Typical power loss per conductor (W)	no data
Off-load operating frequency (cycles per hour)	60 for continued operation
Current ratings:	
Tungsten (poles per phase)	20A @277V 1p 1ph 20A @480V 2p 1ph 20A @480V 3p 3ph
Ballast (poles per phase)	30A @347V 1p 1ph 30A @600V 2p 1ph 30A @600V 3p 3ph
General and resistive (poles per phase)	30A @600V 1p 1ph 30A @600V 2p 1ph 30A @600V 3p 3ph
Coil ratings:	
Nominal voltage	(refer to coil voltage table)
Inrush / sealed power (VA)	248 / 28
Coil voltage tolerance factor	0.85 - 1.1
External/optional auxiliary contact:	
Number of NC / NO auxiliary contacts	2NC / 2NO max
Rating	A600, 24VDC, 24VAC
Installation/mounting/dimensions:	
Mounting orientation	vertical
Type of mounting: screw / DIN rail	yes / no
Height x Width x Depth (mm)	188 x 106 x 98
Minimum clearance to sides (mm)	12.7
Minimum clearance to earthed parts (mm)	12.7
Connection type / torque:	
Main contact terminals	screw / 35 lb in
Coil terminals	screw / 15 lb in
Auxiliary contact terminals	screw / 7-12 lb in
Control module terminals	screw / 5 lb in
Solid and stranded conductors (AWG):	
Main contact terminals	1x(14-8), #8 solid or stranded 2x(14-8), #8 stranded only
Coil terminals	2x(18-14)
Auxiliary contact terminals	2x(22-12)
Control module terminals	1x(22-12)
Conductor type for main / control circuits	75°C CU / 60-75°C CU
Short circuit current rating of main circuit:	
Short circuit current rating	(see SCCR tables)
Certificates:	
cUL	

Coil voltages:

24V 60Hz / 20V 50Hz
115-120V 60Hz / 110V 50Hz
200-208V 60Hz
230-240V 60Hz / 220V 50Hz
277V 60Hz / 240V 50Hz
347V 60Hz
460-480V 60Hz / 440V 50Hz
575-600V 60Hz / 550V 50Hz

Short circuit current ratings with fuses:

Max. Volt.	Fuse	Max. Device Rating (Amps)	SCCR (kA)
600	RK fuse	60	5

Short circuit current ratings with circuit breakers:

Max. Volt.	Siemens Listed Circuit Breaker	Max. Device Rating (Amps)	SCCR (kA)
600	NGG3B040L	40	5
480	HEG3B040L	40	5
480	ED63B040L	40	5
480	NGG3B040L	40	5

Conversion module:

Input Volt. (AC)	Steady State Current @ Rated Volts (mA)	Max. VA
24	80	5
115-120	83	12
200-277	91	30

Conversion module:

Min. pulse duration (3-wire module)	250ms
Max. allowable leakage current	1.8 mA
EMI	35 V/m
Surge transient peak	6 kV
Frequency range	40-70 Hz