



Figure similar

Mechanically held lighting contactor, Contactor amp rating 20A, 0 N.C. / 10 N.O. poles, Non-combination type, Enclosure NEMA type (open), No enclosure

product brand name	Class CLM
design of the product	Mechanically held lighting contactor
special product feature	Energy efficient; Quiet operation
General technical data	
weight [lb]	3 lb
Height x Width x Depth [in]	7.3 × 4.3 × 3.5 in
touch protection against electrical shock	Not finger-safe
installation altitude [ft] at height above sea level maximum	6560 ft
country of origin	Mexico
Contactor	
size of contactor	20 Amp
number of NO contacts for main contacts	10
number of NC contacts for main contacts	0
operating voltage for main current circuit at AC at 60 Hz maximum	600 V
contact rating of the main contacts of lighting contactor	
<ul style="list-style-type: none"> • at tungsten (1 pole per 1 phase) rated value • at tungsten (2 poles per 1 phase) rated value • at tungsten (3 poles per 3 phases) rated value • at ballast (1 pole per 1 phase) rated value • at ballast (2 poles per 1 phase) rated value • at ballast (3 poles per 3 phases) rated value • at resistive load (1 pole per 1 phase) rated value • at resistive load (2 poles per 1 phase) rated value • at resistive load (3 poles per 3 phases) rated value 	20A @250V 1p 1ph 20A @250V 2p 1ph 20A @250V 3p 3ph 20A @347V 1p 1ph 20A @600V 2p 1ph 20A @600V 3p 3ph 30A @347V 1p 1ph 30A @600V 2p 1ph 30A @600V 3p 3ph
Auxiliary contact	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
number of total auxiliary contacts maximum	4
contact rating of auxiliary contacts of contactor according to UL	NA
Coil	
type of voltage of the control supply voltage	AC
control supply voltage	
<ul style="list-style-type: none"> • at AC at 50 Hz rated value • at AC at 60 Hz rated value 	265 ... 277 V 265 ... 277 V
apparent pick-up power of magnet coil at AC	600 VA
apparent holding power of magnet coil at AC	6 VA
operating range factor control supply voltage rated value	0.85 ... 1.1

of magnet coil	
Enclosure	
degree of protection NEMA rating of the enclosure	Open device (no enclosure)
design of the housing	NA
Mounting/wiring	
mounting position	Vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Screw-type terminals
tightening torque [lbf-in] for supply	18 ... 18 lbf-in
type of connectable conductor cross-sections at line-side at AWG cables single or multi-stranded	2x (18 ... 10 AWG)
temperature of the conductor for supply maximum permissible	75 °C
material of the conductor for supply	CU
type of electrical connection for load-side outgoing feeder	Screw-type terminals
tightening torque [lbf-in] for load-side outgoing feeder	18 ... 18 lbf-in
type of connectable conductor cross-sections at AWG cables for load-side outgoing feeder single or multi-stranded	2x (18 ... 10 AWG)
temperature of the conductor for load-side outgoing feeder maximum permissible	75 °C
material of the conductor for load-side outgoing feeder	CU
type of electrical connection of magnet coil	Screw-type terminals
tightening torque [lbf-in] at magnet coil	18 ... 18 lbf-in
type of connectable conductor cross-sections of magnet coil at AWG cables single or multi-stranded	2x (18 ... 10 AWG)
temperature of the conductor at magnet coil maximum permissible	75 °C
material of the conductor at magnet coil	CU
Short-circuit current rating	
design of the fuse link for short-circuit protection of the main circuit required	none
design of the short-circuit trip	Thermal magnetic circuit breaker
breaking capacity maximum short-circuit current (Icu)	
• at 240 V	5 kA
• at 480 V	5 kA
• at 600 V	5 kA
certificate of suitability	NEMA ICS 2; UL 508; CSA 22.2, No. 14

Further information

Industrial Controls - Product Overview (Catalogs, Brochures,...)

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:CLM102071>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM102071>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:CLM102071&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM102071/certificate>

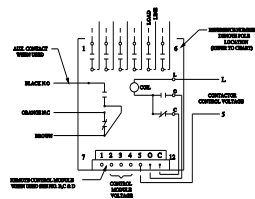


FIG. 1
2-4 POLES

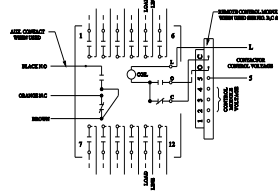


FIG. 2
8-12 POLES

CONTACT POLE LOCATION CHART

POLES	LOCATION
2	2 & 5
3	2, 3 & 5
4	2, 3, 4 & 5
6	1-4
8	1-4, 8 & 11
10	1-4, 5, 8 & 11
12	1-12

AUXILIARY CONTACT RATING
 ACC. CLAMPING (SDT)
 ACC. CLAMPING (SDT)
 10A, 10 1P
 277VAC
 65A, 10P/DC
 65A, 20V/DC

MAIN CONTACT MAXIMUM VOLTAGE RATINGS OPEN OR CLOSED

POLES TO LOAD	1 POLE	2 POLES	NUMBER CONTACTS
1 FOR 1	3P/3 L		
25 AC	25 AC	20	TRIP/STOP
37 AC	40 AC	20	BALLAST
97 AC	60 AC	20	GENERAL

10 AMP, 250V AC
 10P/DC MAX. 5 POLES IN SERIES
 GENERAL: 10P/DC MAX. 5 POLES IN SERIES

NOTES IN ADDITION TO THIS IN A CIRCUIT:
 CAPABLE OF WITHSTANDING SHORT CIRCUIT CURRENTS AND MECHANICAL CONTACT AT THE MAXIMUM VOLTAGE SHOWN BELOW. THESE PROTECTED BY A 10 AMP CIRCUIT BREAKER RATED AT THE INTERRUPTING RATING OF THE LINE TRIP VALUES SHOWN.

MAXIMUM TIME	MAXIMUM AC
AMPERES	VOLTS
23,000	250
14,000	400
10,000	400

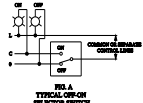
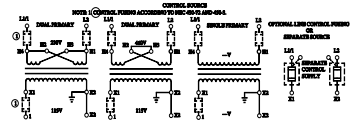
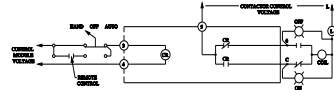
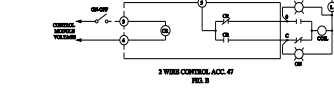


FIG. 4
TYPICAL ON-OFF SELECTOR SWITCH



3 WIRE CONTROL, ACC. 47



3 WIRE CONTROL, ACC. 47

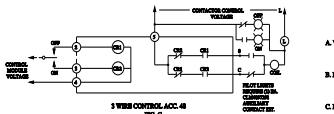


FIG. 7

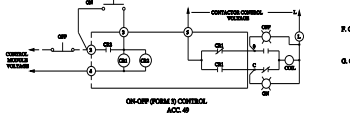


FIG. 8

CONNECTIONS TO CONTROL MODULES

MODULE TERMINAL	CONNECT TO:
1	NOT USED
2	CONTROL STATION FOR ACC. 48 & 49
3	CONTROL STATION FOR ACC. 47 & 48
4	MIDDLE CONTROL VOLTAGE*
5	CONTROL CONTROL VOLTAGE
0	TERMINAL OF CONTACTOR
C	TERMINAL OF CONTACTOR

* FOR 1P VDC CONTROL MODULES CONNECT TERMINAL TO NEGATIVE (-)

GENERAL NOTES

- A. WHEN CONTACTOR & LINE VOLTAGE ARE THE SAME, THE CONTACTOR CONTROL VOLTAGE CAN BE DERIVED FROM THE LINE POLES OF THE CONTACTOR SWITCH.
- B. MAIN CONTACTS ARE SHOWN IN OPEN POSITION WITH CONTROL LINES SHOWN. SEE RATINGS BELOW. SWITCHES SHOWN WITH CONTACTS CLOSED.
- C. LINE & LOAD TERMINALS ARE INTERFERABLE.
- D. CONTACTS ARE SINGLE THROW, DOUBLE BREAK, WITH MOMENTARILY FINISHED BRUSH COIL OPERATOR MECHANICALLY HELD IN BOTH OPEN & CLOSED POSITIONS.
- E. CUSTOMER CONNECTIONS TO LINE & LOAD WILL ACCEPT NO. 10 AWG TO 14 AWG COPPER WIRE. TORQUE LINE POLE CONNECTION TO 15 lb. ft.
- F. CUSTOMER CONNECTIONS TO ELECTRONIC MODULES (ACC. 47, 48, OR 49) WILL ACCEPT NO. 22 AWG TO 14 AWG COPPER WIRE. TORQUE CONTACT TERMINALS TO 15 lb. ft.
- G. CONTROL MODULE VOLTAGE SUPPLIED BY CUSTOMER.

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