



Figure similar

Mechanically held lighting contactor, Contactor amp rating 20A, 0 N.C. / 8 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	8
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 	110 ... 120 V 110 ... 120 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:CLM82031>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM82031>

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:CLM82031&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM82031/certificate>

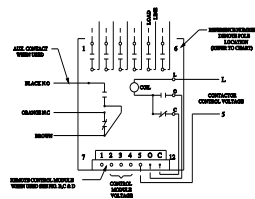


FIG. 1
24 POLES

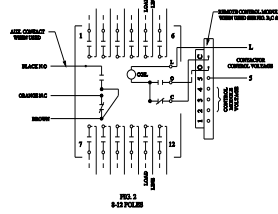


FIG. 2
8-12 POLES

CONTACT POLE LOCATION CHART

POLE	LOCATION
2	2 & 5
3	2, 3 & 5
4	2, 3, 4 & 5
6	1-4
8	1-6, 8 & 11
10	1-6, 8, 9, 10 & 11
12	1-12

AUXILIARY CONTACT RATING
 ACC. CLAMPING (SDT)
 ACC. CLAMPING (SDT)
 10A, 10 1P
 277VAC
 0.5A, 10VDC
 0.25A, 20VDC

MAIN CONTACT MAXIMUM VOLTAGE RATINGS OPEN OR CLOSED

POLES TO LOAD	1 POLE	NUMBER CONTACTS
1 FOR 1	3 POLE	
25 AC	25 AC	20
277 AC	480 AC	20
277 AC	480 AC	20
277 AC	480 AC	20
		GENERAL

20 AMP, 2VC
 GENERAL
 10VDC MAX. 5 POLES IN SERIES
 10VDC MAX. 5 POLES IN SERIES

NOTES: 1. NOT FOR USE IN A CIRCUIT CAPABLE OF DELIVERING MORE THAN THE AMPERAGE RATED AT THE MAXIMUM VOLTAGE SHOWN BELOW. THESE PROTECTIVE AMPERAGE RATINGS APPLY TO THE MAIN CONTACTS ONLY. THESE RATINGS DO NOT APPLY TO THE AUXILIARY CONTACTS.

MAXIMUM RMS	MAXIMUM AC
AMPERES	VOLTS
20.000	250
14.000	480
10.000	480

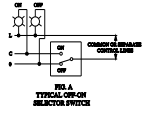
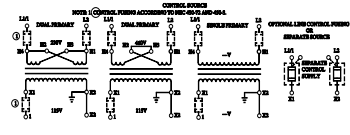
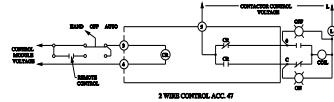
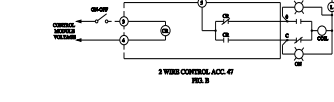


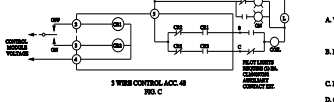
FIG. 4
TYPICAL ON-OFF SELECTOR SWITCH



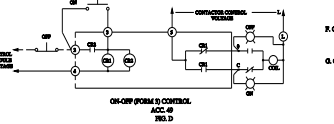
3 WIRE CONTROL, ACC. 47



3 WIRE CONTROL, ACC. 47



3 WIRE CONTROL, ACC. 48



ON-OFF FORM B CONTROL

CONNECTIONS TO CONTROL MODULES

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

* FOR 120V CONTROL MODULES CONNECT TERMINAL TO NEUTRAL (N)

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. SWITCH SHOWN WITH CONTACTS CLOSED.
- C. LINE & LOAD TERMINALS ARE INTERFERABLE.
- D. CONTACTS ARE SINGLE THROW, DOUBLE BREAK, WITH MOMENTARILY INTERRUPTED SINGLE COIL OPERATING MECHANICALLY HELD BY FORCE OF A CLOSED CONTACTOR.
- E. CUSTOMER CONNECTIONS TO LINE & LOAD WILL ACCEPT NO. 10 AWG TO 12 AWG COPPER WIRE. TORQUE LINE POLE CONNECTION TO 12 lb. ft.
- F. CUSTOMER CONNECTIONS TO ELECTRONIC MODULES (ACC. 47, 48, 49) WILL ACCEPT NO. 22 AWG TO 12 AWG COPPER WIRE. TORQUE CONTACT TERMINALS TO 12 lb. ft.
- G. CONTROL MODULE VOLTAGE SUPPLIED BY CUSTOMER.

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