



Mechanically held lighting contactor, Contactor amp rating 20A, 0 N.C. / 4 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]	2 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	4
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	
• at tungsten (1 pole per 1 phase) rated value	20A @250V 1p 1ph
• at tungsten (2 poles per 1 phase) rated value	20A @250V 2p 1ph
• at tungsten (3 poles per 3 phases) rated value	20A @250V 3p 3ph
• at ballast (1 pole per 1 phase) rated value	20A @347V 1p 1ph
• at ballast (2 poles per 1 phase) rated value	20A @600V 2p 1ph
• at ballast (3 poles per 3 phases) rated value	20A @600V 3p 3ph
• at resistive load (1 pole per 1 phase) rated value	30A @347V 1p 1ph
• at resistive load (2 poles per 1 phase) rated value	30A @600V 2p 1ph
• at resistive load (3 poles per 3 phases) rated value	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	
• at AC at 50 Hz rated value	110 ... 120 V
• at AC at 60 Hz rated value	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 of magnet coil	0.85 ... 1.1
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 for 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 for 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 for 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
maximum short-circuit current breaking capacity (Icu) • at 240 V • at 480 V • at 600 V	5 kA 5 kA 5 kA
certificate of suitability	NEMA ICS 2; UL 508; CSA 22.2, No. 14
Approvals Certificates	
Test Certificates	



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:CLM42031>

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

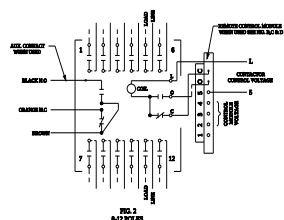
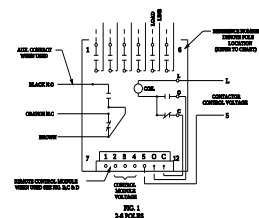
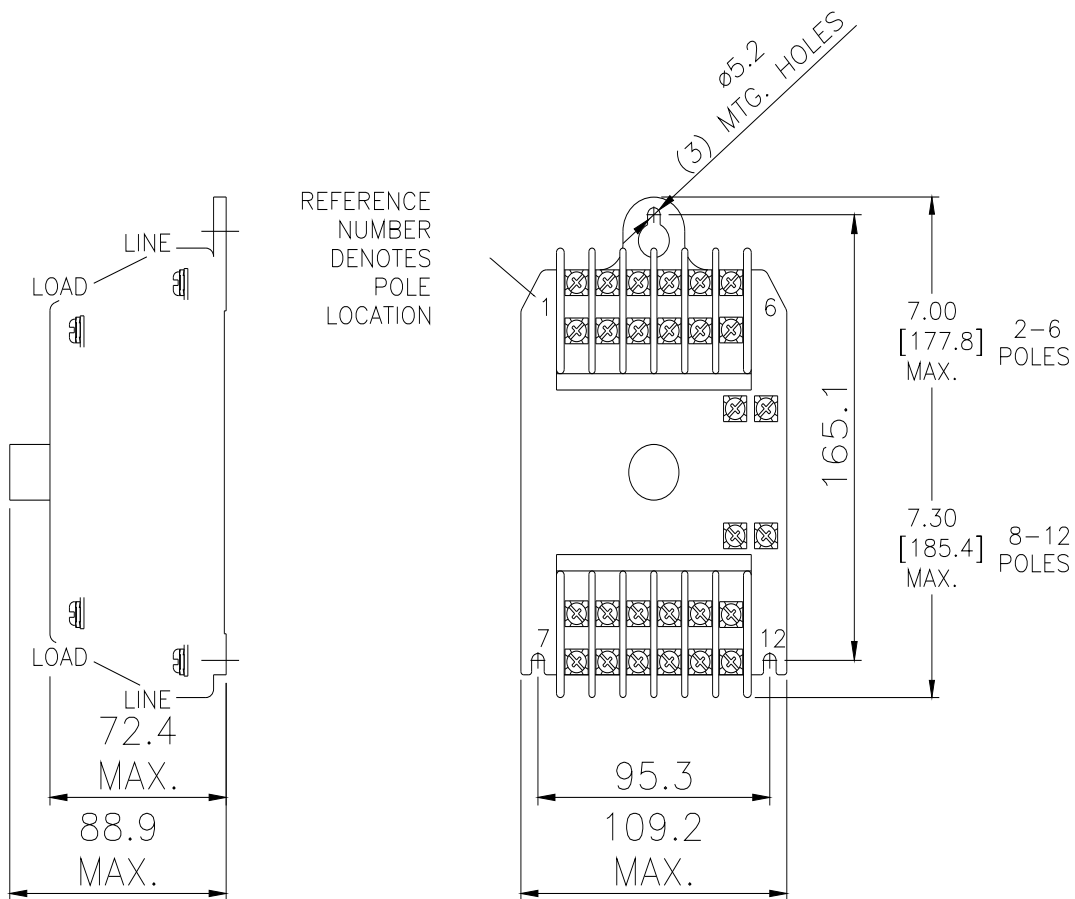
<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM42031>

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:CLM42031&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM42031/certificate>



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

ALTERNATE CONTACT RATINGS
ACC. CLAMPING (100V)
ACC. CLAMPING (200V)

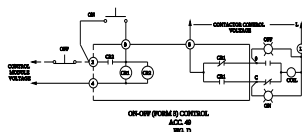
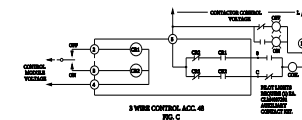
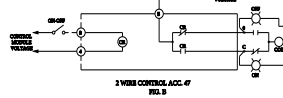
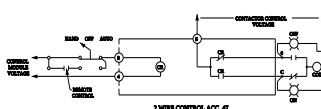
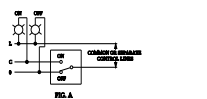
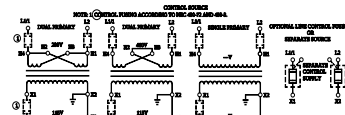
250 VAC
277 VAC
550 VAC
575 VAC

MAIN CONTACT MAXIMUM VOLTAGE BATTERY OR CHARGED		
POLES TO LOAD	2 POLE	AMPERE CAPACITY
250 AC	250 AC	20
277 AC	277 AC	20
550 AC	550 AC	10

30 AMP. DC
GENERAL
125V DC MAX. 3 POLES IN SERIES
250V DC MAX. 3 POLES IN SERIES

SWITCH IS SUITABLE FOR USE IN A CIRCUIT
CAPABLE OF DELIVERING NOT MORE THAN THE
RMS SYMMETRICAL CURRENT AT THE MAXIMUM
VOLTAGE SHOWN BELOW. WHEN PROTECTED BY
A 30 AMP. CIRCUIT BREAKER, THE MAXIMUM
VOLTAGE RATING OF NOT LESS THAN
VALUES SHOWN.

MAXIMUM RMS AMPERE	VOLTS
25,000	250
15,000	480
10,000	600



MODULE TERMINAL	CONNECT TO
1	NOT USED
2	CONTROL VOLTAGE FOR ACC. 4 & 6
3	CONTROL VOLTAGE FOR ACC. 4 & 6
4	CONTROL VOLTAGE
5	CONTROL VOLTAGE
6	TERMINAL OF ON CONTACTOR
7	TERMINAL OF ON CONTACTOR

* FOR 24 VDC CONTROL MODULES
CONNECT TERMINAL 4 TO NEGATIVE (-)

GENERAL NOTES

- WHEN CONTACTS ARE OPEN, THE MAIN CONTACTOR CONTROL VOLTAGE CAN BE DERIVED FROM THE LINE POLES OF THE CONTACTOR UNIT.
- MAIN CONTACTS ARE BROUGHT IN OPEN POSITION WITH CONTROL LINE IS SUPPLIED. SEE FIG. 10 BELOW. (SWITCH RELEASED WITH CONTACTS CLOSED)
- LINE & LOAD TERMINALS ARE REVERSIBLE.
- CONTACTS ARE BREAK-THE-THROW, DOUBLE BREAK, WITH MECHANICALLY INTERLOCKED DOUBLE COIL OPERATOR. MECHANICALLY HELD IN BOTH OPEN & CLOSED POSITIONS.
- TERMINAL CONNECTIONS TO LINE & LOAD WILL ACCEPT 30 AMP. TO 15 AMP. COILS. COIL OPERATOR POLE CONNECTION TO 15 AMP.
- TERMINAL CONNECTIONS TO ELECTRIC MODULES (ACC. 4, 6, 8, 10, 12) WILL ACCEPT NO. 22 AWG TO 18 AWG COPPER WIRE. TORQUE CONTROL TERMINALS TO 21 in. lb.
- CONTROL MODULE VOLTAGE SUPPLIED BY CUSTOMER.

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