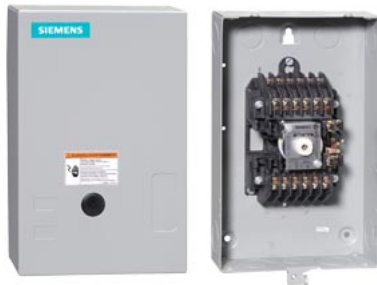
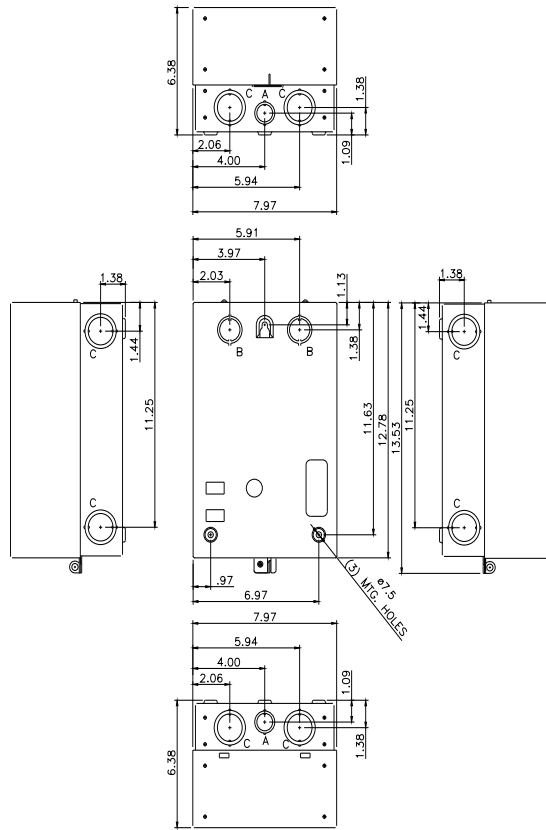


Mechanically held lighting contactor, Contactor amp rating 20A, 0 N.C. / 12 N.O. poles, Non-combination type, Enclosure NEMA type 1, Indoor general purpose use

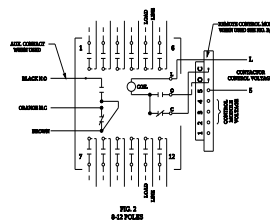
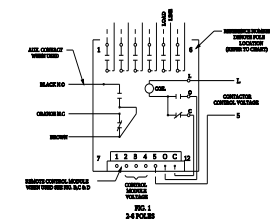


product brand name	Class CLM
design of the product	Mechanically held lighting contactor
special product feature	Energy efficient; Quiet operation
General technical data	
weight [lb]	9 lb
Height x Width x Depth [in]	14 × 8 × 7 in
touch protection against electrical shock	NA for enclosed products
installation altitude [ft] at height above sea level maximum	6560 ft
country of origin	USA
Contactor	
size of contactor	20 Amp
number of NO contacts for main contacts	12
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	NEMA 1 enclosure

design of the housing	indoors, usable on a general basis
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	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:CLM1B12120	
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)	
https://support.industry.siemens.com/cs/US/en/ps/US2:CLM1B12120	
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:CLM1B12120&lang=en	
Certificates/approvals	
https://support.industry.siemens.com/cs/US/en/ps/US2:CLM1B12120/certificate	



LETTER	KNOCKOUT & CONDUIT SIZE
A	ø22.2 X ø28.6 FOR 12.7 & 19 CONDUIT
B	ø28.6 X ø34.9 FOR 19 & 25.4 CONDUIT
C	ø34.9 X ø43.6 FOR 25.4 & 31.8 CONDUIT



POLES	LOCATION
2	2 & 3
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

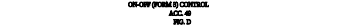
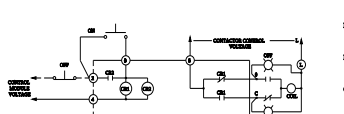
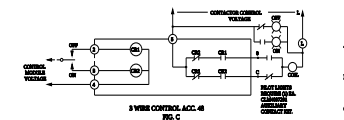
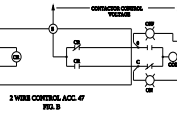
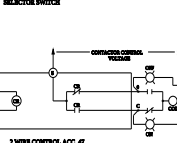
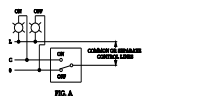
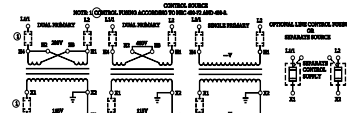
MAIN CONTACT MAXIMUM VOLTAGE BATTERY CONTROL OR CLOSED		
POLES TO LOAD	2 FOR 1	AMPERES CONTINUOUS
200 AC	200 AC	50
277 AC	400 AC	20
480 AC	800 AC	10
575 AC	800 AC	10

30 AMP. DC	150V DC MAX. 3 POLES IN SERIES
GENERAL	200V DC MAX. 3 POLES IN SERIES

SWITCH IS SUITABLE FOR USE IN A CIRCUIT CAPABLE OF DELIVERING NOT MORE THAN THE RATED ELECTRICAL CURRENT AT THE MAXIMUM VOLTAGE SHOWN BELOW. WHEN EXCEEDED BY A 30 AMP. CIRCUIT BREAKER, THE SWITCH IS NOT SUITABLE FOR USE IN A CIRCUIT.

MAXIMUM RATED AMPERES	MAXIMUM AC VOLTAGE
20,000	250
10,000	480
10,000	600

AUXILIARY CONTACT RATINGS	
ACC. CLASSIMFIB (SPST)	ACC. CLASSIMFIB (SPDT)
250V AC, 10A	277V AC, 5A
250V DC, 5A	250V DC, 5A



MODULE TERMINAL	CONNECTION TO
1	NOT USED
2	CONTROL STATION FOR ACC. 4 & 6
3	CONTROL STATION FOR ACC. 6 & 8
4	MODULE CONTROL VOLTAGE *
5	CONTACTOR CONTROL VOLTAGE
6	TERMINAL O OF CONTACTOR
7	TERMINAL C OF CONTACTOR

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

GENERAL NOTES

- VERIFY CONTACTOR & LINE VOLTAGE AND THE MAINS. THE CONTACTOR CONTROL VOLTAGE CAN BE DERIVED FROM THE LINE POLES OF THE CONTACTOR DEVICE.
- MAIN CONTACTS ARE SHOWN IN OPEN POSITION WITH CONTROL LINE DISCONNECTED. SEE FIG. 10 BELOW. (SWITCH SHOWN WITH CONTACTS CLOSED).
- LINE & LOAD TERMINALS ARE REVERSIBLE.
- CONTACTS ARE BREAK BEFORE MAKE WITH MECHANICALLY INTERLOCKED SINGLE COIL OPERATOR. MECHANICALLY HELD IN BOTH OPEN & CLOSED POSITIONS.
- TERMINAL CONNECTIONS TO LINE & LOAD WILL ACCEPT 30. AMP. TO 10 AMP. TORQUE. TORQUE LINE POLE CONNECTION TO 10 AMP.
- TERMINAL CONNECTIONS TO ELECTRICITY MODULES (ACC. 4, 6, 8, 10) WILL ACCEPT NO. 22 AWG TO 12 AWG COPPER WIRE. TORQUE CONTACT TERMINALS TO 21 AMP.
- CONTROL MODULE VOLTAGE SUPPLIED BY CUSTOMER.

24306100401

last modified:

1/25/2022

