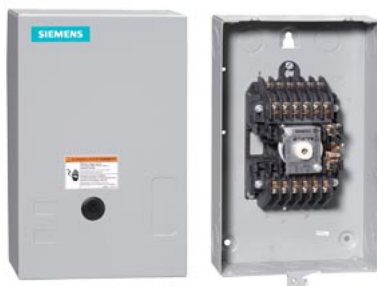
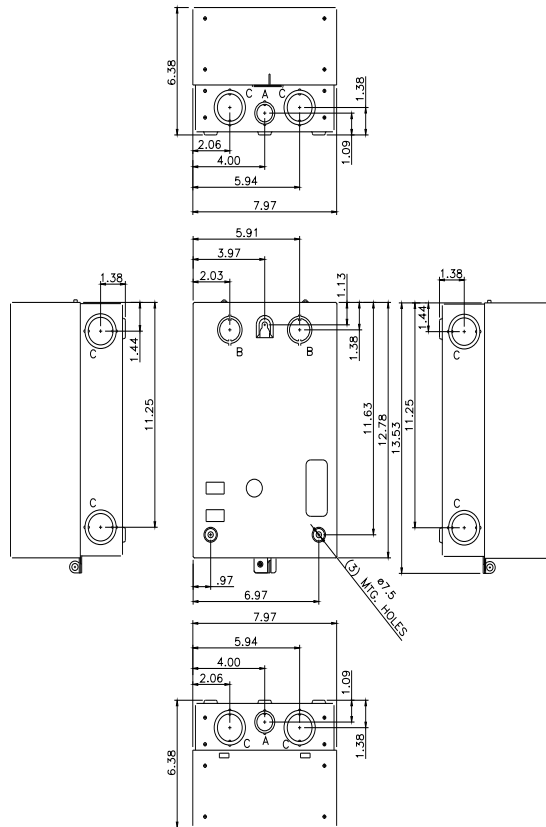


Mechanically held lighting contactor, Contactor amp rating 20A, 0 N.C. / 8 N.O. poles, Non-combination type, Enclosure NEMA type 1, Indoor general purpose use

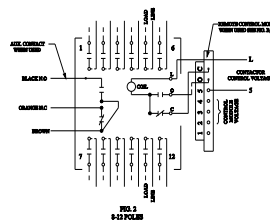
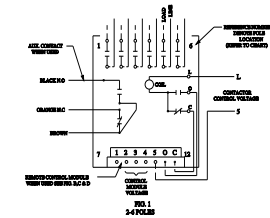


product brand name	Class CLM
design of the product	Mechanically held lighting contactor
special product feature	Energy efficient; Quiet operation
<b>General technical data</b>	
weight [lb]	9 lb
Height x Width x Depth [in]	14 × 8 × 7 in
touch protection against electrical shock	NA for enclosed products
installation altitude [ft] at height above sea level maximum	6560 ft
country of origin	USA
<b>Contactor</b>	
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	
• 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
<b>Auxiliary contact</b>	
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
<b>Coil</b>	
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
<b>Enclosure</b>	
degree of protection NEMA rating of the enclosure	NEMA 1 enclosure

design of the housing	indoors, usable on a general basis
<b>Mounting/wiring</b>	
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
<b>Short-circuit current rating</b>	
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
<b>Further information</b>	
Industrial Controls - Product Overview (Catalogs, Brochures,...)	
<a href="http://www.usa.siemens.com/iccatalog">www.usa.siemens.com/iccatalog</a>	
Industry Mall (Online ordering system)	
<a href="https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:CLM1B08120">https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:CLM1B08120</a>	
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)	
<a href="https://support.industry.siemens.com/cs/US/en/ps/US2:CLM1B08120">https://support.industry.siemens.com/cs/US/en/ps/US2:CLM1B08120</a>	
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)	
<a href="http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:CLM1B08120&amp;lang=en">http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:CLM1B08120&amp;lang=en</a>	
Certificates/approvals	
<a href="https://support.industry.siemens.com/cs/US/en/ps/US2:CLM1B08120/certificate">https://support.industry.siemens.com/cs/US/en/ps/US2:CLM1B08120/certificate</a>	



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



POLAR	LOCATION
1	5 & 6
2	5 & 6 & 7
3	5, 6 & 7
4	5, 6 & 7
5	1-6
6	1-6 & 7
7	1-6, 8, 9 & 11
8	1-12

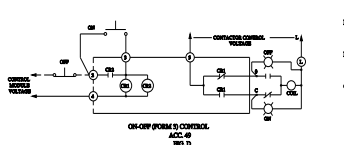
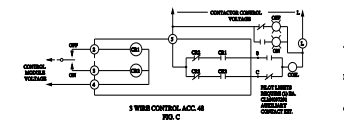
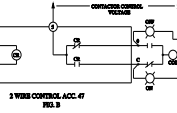
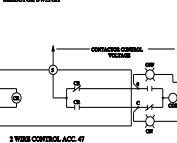
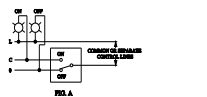
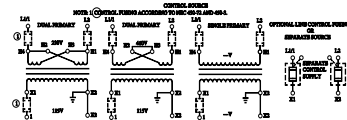
MAIN CONTACT MAXIMUM VOLTAGE RATINGS (VOLTAGE)		
POLAR TO LOAD	3 FOR 1	AMPERES CONTINUOUS
20 AC	20 AC	50
27 AC	27 AC	50
27 AC	27 AC	50

20 AMP. DC	127 VDC MAX. 1 POLAR IN SERIES
GENERAL	207 VDC MAX. 1 POLAR IN SERIES

SWITCH IS SUITABLE FOR USE IN A CIRCUIT  
CAPABLE OF DELIVERING NOT MORE THAN THE  
RMS SYMMETRICAL CURRENT AT THE MAXIMUM  
VOLTAGE INDICATED. WHEN FREQUENCY  
EXCEEDS 100 HZ, THE MAXIMUM RMS  
CURRENT RATING OF THE LINE SHALL  
BE REDUCED.

MAXIMUM TIME	MAXIMUM AC
ANYWHERE	VOLTS
25,000	250
15,000	400
10,000	600

ACCESSORY CONTACT RATINGS  
ACC. CLAMPING (100V)  
ACC. CLAMPING (200V)  
10A, 100V  
20V VAC  
5A, 100VDC  
5A, 100VDC



MODULE TERMINAL	CONNECT TO
1	NOT USED
2	CONT. STATION FOR ACC. 48 & 49
3	CONT. STATION FOR ACC. 48 & 49
4	MODULE CONTROL VOLTAGE *
5	CONTRACTOR CONTROL VOLTAGE
6	TERMINAL O OR CONTRACTOR
7	TERMINAL C OR CONTRACTOR

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

#### GENERAL NOTES

- WHEN CONTACTOR & LINE VOLTAGE ARE THE SAME,  
THE CONTACTOR CONTROL VOLTAGE CAN BE DERIVED  
FROM THE LINE POLAR OF THE CONTACTOR DEVICE.
- MAIN CONTACTS ARE SHOWN IN OPEN POSITION WITH  
CONTROL LINE DISCONNECTED. SEE BATTERY RELAY  
(SWITCH SHOWN WITH CONTACTS CLOSED).
- LINE & LOAD TERMINALS ARE REVERSIBLE.
- CONTACTS ARE BREAKER THROW, DOUBLE BREAK, WITH  
MOMENTARILY INTERRUPTED SINGLE COIL OPERATOR.  
MECHANICALLY HELD BY BITE WHEN A CLOSED POSITION.
- CONTROL CONNECTIONS TO LINE & LOAD WILL ACCEPT  
NO. 14 AWG TO 10 AWG COPPER WIRE. TORQUE LINE  
POLAR CONNECTION TO 18 IN. IN.
- CONTROL CONNECTIONS TO ELECTRONIC MODULES (ACC.  
48, 49, OR 49) WILL ACCEPT NO. 22 AWG TO 18 AWG  
COPPER WIRE. TORQUE CONTROL TERMINALS TO 21 IN. IN.
- CONTROL MODULE VOLTAGE SUPPLIED BY CUSTOMER.

24306100401

last modified:

1/25/2022

