

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



Figure similar

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	
<ul style="list-style-type: none"> <li>● at tungsten (1 pole per 1 phase) rated value</li> <li>● at tungsten (2 poles per 1 phase) rated value</li> <li>● at tungsten (3 poles per 3 phases) rated value</li> <li>● at ballast (1 pole per 1 phase) rated value</li> <li>● at ballast (2 poles per 1 phase) rated value</li> <li>● at ballast (3 poles per 3 phases) rated value</li> <li>● at resistive load (1 pole per 1 phase) rated value</li> <li>● at resistive load (2 poles per 1 phase) rated value</li> <li>● at resistive load (3 poles per 3 phases) rated value</li> </ul>	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
<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	
<ul style="list-style-type: none"> <li>● at AC at 50 Hz rated value</li> <li>● at AC at 60 Hz rated value</li> </ul>	208 ... 240 V 208 ... 240 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	
<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 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
<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
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](http://www.usa.siemens.com/iccatalog)

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:CLM1B08240>

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

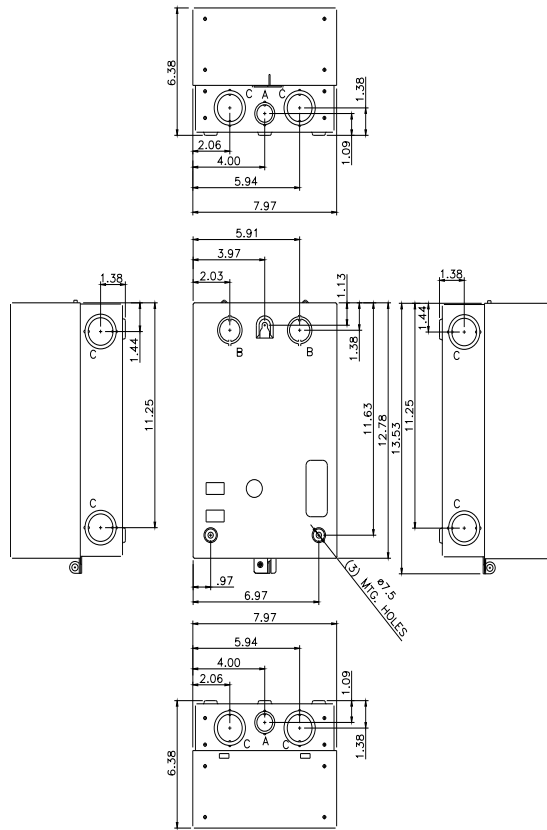
<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM1B08240>

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

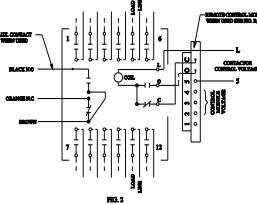
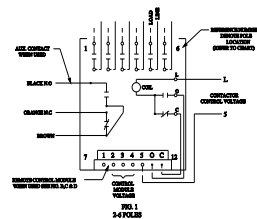
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:CLM1B08240&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:CLM1B08240&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM1B08240/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 & 31.6 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

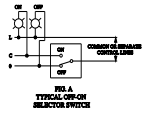
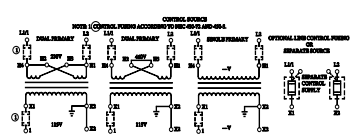
MAIN CONTACT MAXIMUM VOLTAGE RATINGS OPEN OR CLOSED		
POLES TO LOAD	3 FOR 1	AMPERE CONTINUOUS
20 AC	25 AC	TURBINE
27 AC	40 AC	BALLAST
29 AC	60 AC	GENERAL

30 AMP. DC 120V 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 MECHANICAL CURRENT AT THE MAXIMUM VOLTAGE RATING SHOWN. WHEN PROTECTED BY A 5 AMP. CIRCUIT BREAKER BY THE 10% INTERRUPTING RATING OF NOT LESS THAN VALUES SHOWN.

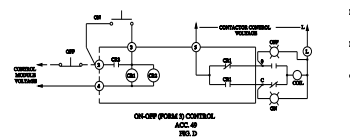
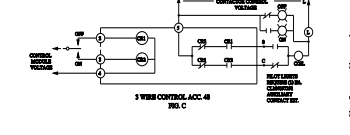
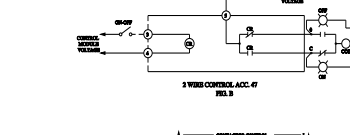
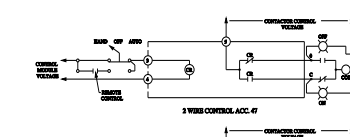
AMPERES	VOLTS
25,000	250
14,000	400
10,000	600

ATTRIBUTARY CONTACT RATING ACC. CLASSIFIER (ENVD)  
 ACC. CLASSIFIER (ENVD)  
 IMA, I2 IP  
 27TVC  
 0.5A, 10TVC  
 0.5A, 10TVC



MODULE TERMINAL	CONNECT TO
1	NOT USED
2	CONT. STATION FOR ACC. #1 & #2
3	CONT. STATION FOR ACC. #1 & #2
4	MODULE CONTROL VOLTAGE*
5	MODULE CONTROL VOLTAGE
O	TERMINAL O OF CONTACTOR
C	TERMINAL C OF CONTACTOR

\* FOR 10 CONTROL MODULES CONNECT TERMINAL 4 TO TERMINAL 5



- GENERAL NOTES**
- WIRE CONTACTOR & LINE VOLTAGE ARE THE SAME. THE CONTACTOR CONTROL VOLTAGE CAN BE DERIVED FROM THE LINE POLES OF THE CONTACTOR DEVICE.
  - MAIN CONTACTS ARE SHOWN IN OPEN POSITION WITH CONTROL LINES UNBROKEN. SEE TABLE BELOW. (SWITCHES SHOWN WITH CONTACTS CLOSED)
  - LINE & LOAD TERMINALS ARE REVERSIBLE.
  - CONTACTS ARE SINGLE THROW, DOUBLE BREAK, WITH UNIFORMITY OF BREAKING. SWELT COILS OPERATE MECHANICALLY TRIP IN BOTH OPEN & CLOSED POSITIONS.
  - CUSTOMER CONNECTIONS TO LINE & LOAD WILL ACCEPT NO. 10 AWG TO 10 AWG COPPER WIRE. TORQUE LINE POLE CONNECTION TO 18 lb. ft.
  - CUSTOMER CONNECTIONS TO ELECTRONIC MODULES (ACC. #1, #2, #3) WILL ACCEPT NO. 12 AWG TO 12 AWG COPPER WIRE. TORQUE CONTROL TERMINALS TO 13 lb. ft.
  - CONTROL MODULE VOLTAGE SUPPLIED BY CONTROLS.

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