



Figure similar

Mechanically held lighting contactor, Contactor amp rating 20A, 0 N.C. / 4 N.O. poles, Non-combination type, Enclosure NEMA type 12, Dust/drip proof for indoors

|                                                                   |                                      |
|-------------------------------------------------------------------|--------------------------------------|
| 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]                                                       | 8 lb                                 |
| Height x Width x Depth [in]                                       | 16 × 13 × 6 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                           | 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                     |
| <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 V·A                              |

|                                                                                                                                                            |                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| apparent holding power of magnet coil at AC                                                                                                                | 6 V·A                                 |
| 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 12 enclosure                     |
| design of the housing                                                                                                                                      | Dust tight and drip proof for indoors |
| <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) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul> | 5 kA<br>5 kA<br>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,...)**

[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:CLM2B04120>

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

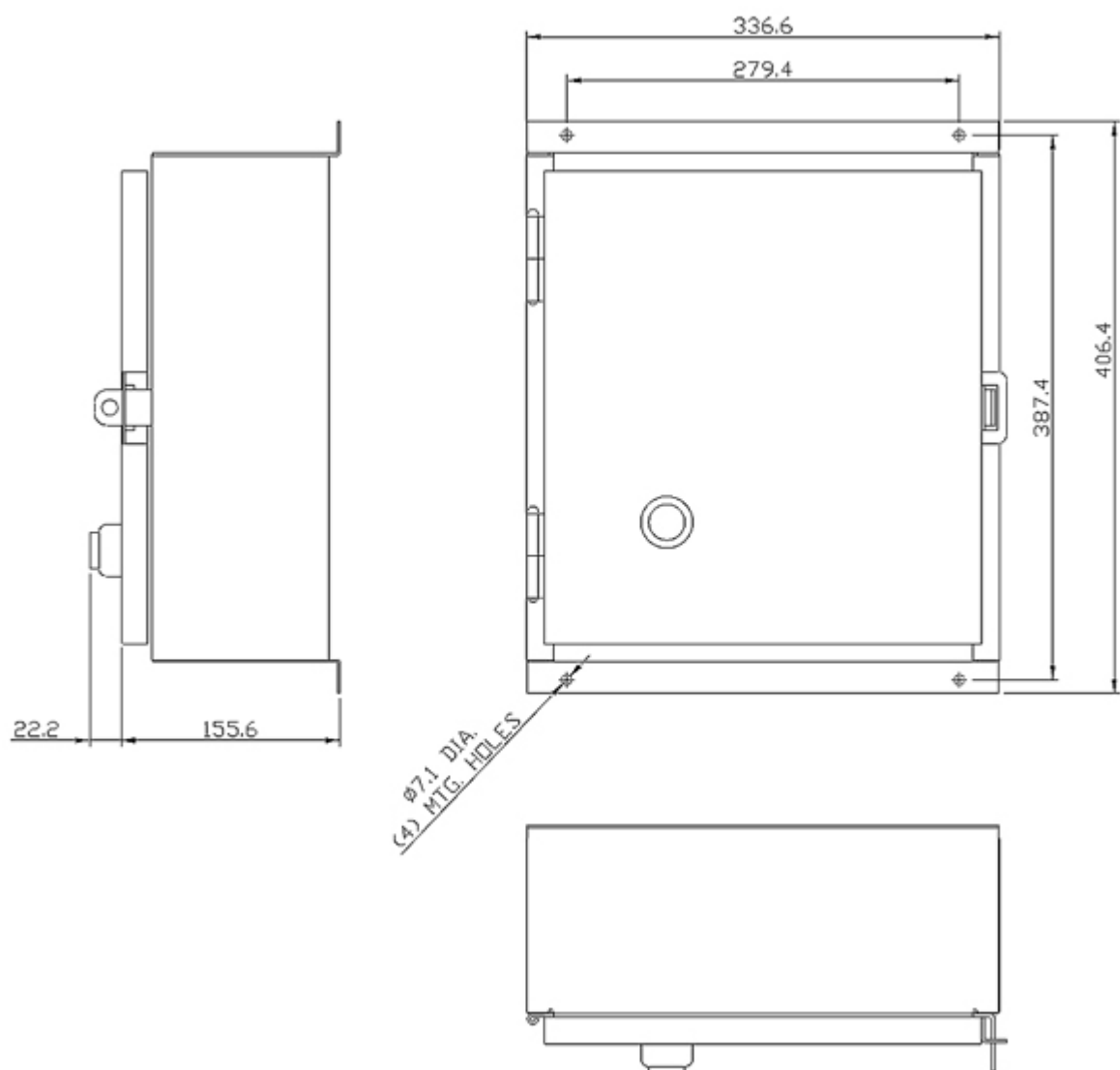
<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM2B04120>

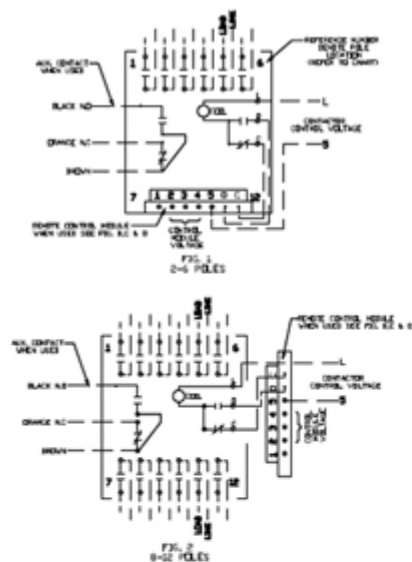
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:CLM2B04120&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:CLM2B04120&lang=en)

**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM2B04120/certificate>





**CONTACT POLE LOCATION CHART**

| 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, 9, 10 & 11 |
| 12    | 1 - 12               |

**MAIN CONTACT MAXIMUM VOLTAGE RATINGS OPEN OR CLOSED**

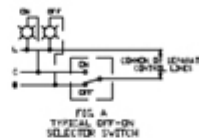
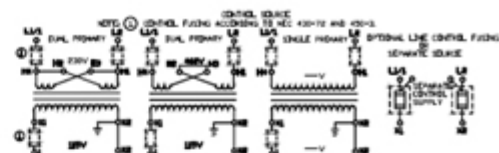
| POLES TO LINE | 2 FOR 1A | 3 FOR 3A | AMPERE CONTINUOUS |
|---------------|----------|----------|-------------------|
| 250 AC        | 250 AC   | 20       | TUNGSTEN          |
| 277 AC        | 480 AC   | 20       | BALLAST           |
| 347 AC        | 600 AC   | 30       | GENERAL           |

20 AMP. DC 125V DC MAX. 2 POLES IN SERIES  
GENERAL 125V 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 HAVING AN INTERRUPTING RATING OF NOT LESS THAN VALUES SHOWN

| MAXIMUM RMS AMPERES | MAXIMUM AC VOLTAGE |
|---------------------|--------------------|
| 20,000              | 250                |
| 14,000              | 480                |
| 10,000              | 600                |

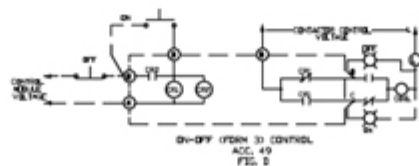
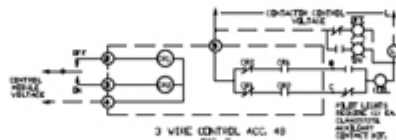
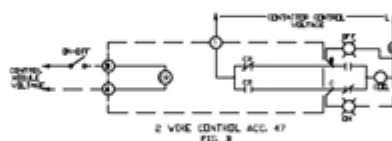
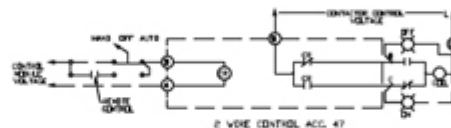
**AUXILIARY CONTACT RATING**  
ACC. CUMULATIVE (C/PST)  
ACC. CUMULATIVE (C/PST)  
10A, 1/2 HP  
277 VAC  
25A, 250VDC  
25A, 250VDC



**CONNECTIONS TO CONTROL MODULES**

| MODULE TERMINAL | CONNECT TO                        |
|-----------------|-----------------------------------|
| 1               | NOT USED                          |
| 2               | LINE STATION FOR ACC. 48 & 49     |
| 3               | LINE STATION FOR ACC. 47, 48 & 49 |
| 4               | MODULE CONTROL VOLTAGE *          |
| 5               | CONTACTOR CONTROL VOLTAGE         |
| 6               | TERMINAL 'D' ON CONTACTOR         |
| 7               | TERMINAL 'C' ON CONTACTOR         |

\* 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 POLES OF THE CONTACTOR SWITCH.
- MAIN CONTACTS ARE SHOWN IN OPEN POSITION WITH CONTROL LINE DE-ENERGIZED. SEE RATINGS BELOW. (SWITCH SHOWN WITH CONTACTS CLOSED)
- LINE & LOAD TERMINALS ARE REVERSIBLE.
- CONTACTS ARE SINGLE THROW, DOUBLE BREAK, WITH MOMENTARILY ENERGIZED SINGLE COIL OPERATOR MECHANICALLY HELD IN BOTH OPEN & CLOSED POSITIONS.
- CUSTOMER CONNECTIONS TO LINE & LOAD WILL ACCEPT NO. 10-18 TO 18 AWG COPPER WIRE. TONGUE LINE POLE CONNECTION TO 18 IN. IN.
- CUSTOMER CONNECTIONS TO ELECTRONIC MODULE (ACC. 47, 48, OR 49) WILL ACCEPT NO. 18-22 TO 22 AWG COPPER WIRE. TONGUE CONTROL TERMINALS TO 12 IN. IN.
- CONTROL MODULE VOLTAGE SUPPLIED BY CUSTOMER.

last modified:

4/27/2021