

Mechanically held lighting contactor, Contactor amp rating 20Amp  
 0NC - 10NO poles, 110-120V 50/60HZ coil, Non-combination type,  
 Enclosure NEMA type 12, Dust/drip proof for indoors



Figure similar

General technical data	
Weight [lb]	9 lb
Height x Width x Depth [in]	16 × 13 × 6 in
Protection against electrical shock	NA for enclosed products
Installation altitude [ft] at height above sea level maximum	6560 ft
Country of origin	USA

Contactor	
Number of NO contacts for main contacts	10
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> </ul>	<p>20A @250V 1p 1ph</p> <p>20A @250V 2p 1ph</p> <p>20A @250V 3p 3ph</p>

• 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 DC rated value	0 ... 0 V
• at AC at 60 Hz rated value	110 ... 120 V
• at AC at 50 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

### Enclosure

Degree of protection NEMA rating of the enclosure	NEMA 12 enclosure
Design of the housing	Dust tight and drip proof for indoors

### Mounting/wiring

(mounting position)	Vertical
(mounting type)	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 conductors 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 conductors 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 conductors 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 (I <sub>cu</sub> )	
<ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul>	<p>5 kA</p> <p>5 kA</p> <p>5 kA</p>

#### 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:CLM2B10120>

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

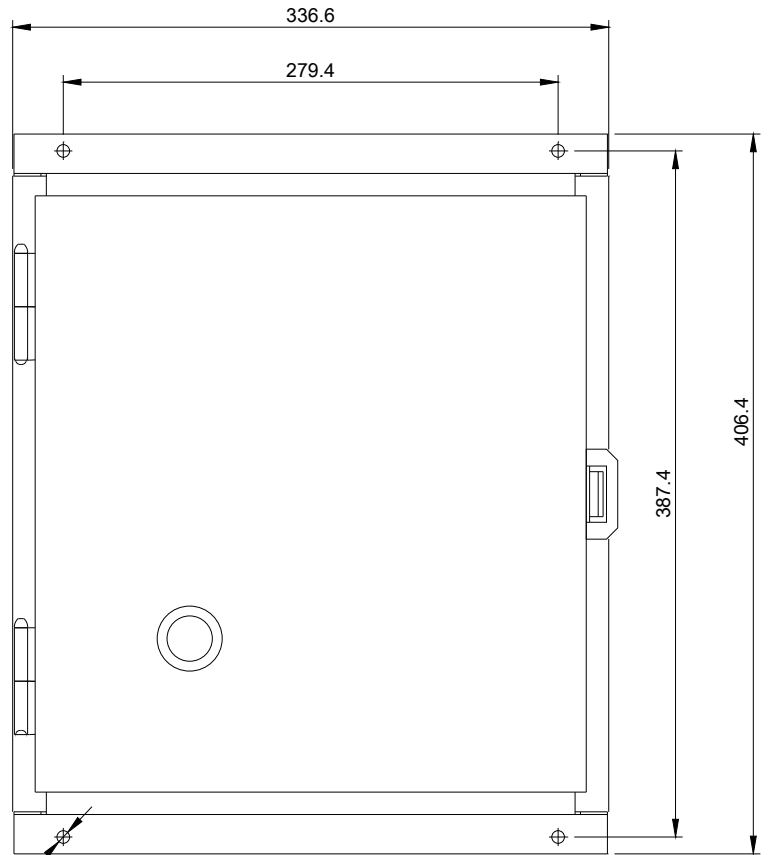
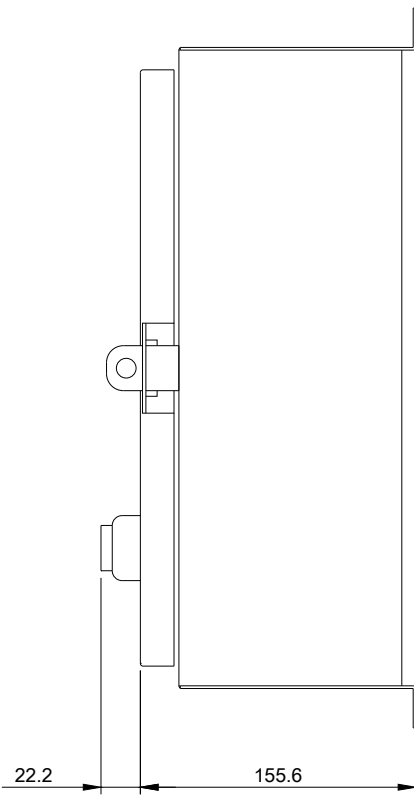
<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM2B10120>

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

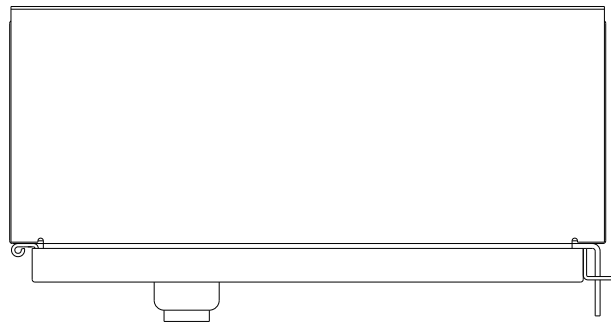
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=US2:CLM2B10120&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=US2:CLM2B10120&lang=en)

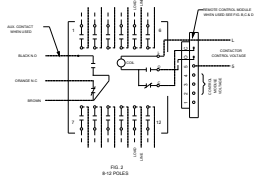
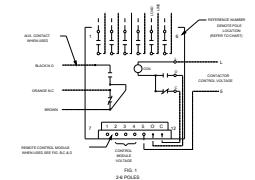
**Certificates/approvals**

<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM2B10120/certificate>



(4) M7C HOLES





**CONTACT PAIR LOCATION CHART**

PAIR	LOCATION
1	1 & 2
2	3 & 4
3	5 & 6
4	7 & 8
5	9 & 10
6	11 & 12

**AUXILIARY CONTACT RATINGS**  
 ACC. CUMMERBUYS (SPST)  
 ACC. CUMMERBUYS (SPDT)

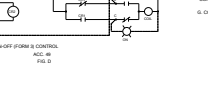
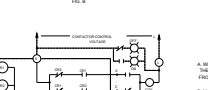
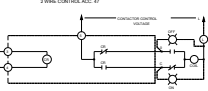
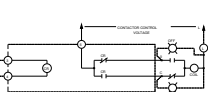
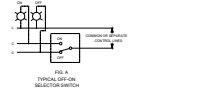
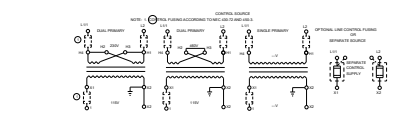
**MAIN CONTACT MAINLINE VOLTAGE RATINGS OPEN OR CLOSED**

POLES	1 FOR 1/2 AC	2 FOR 1/2 AC	3 FOR 1/2 AC	4 FOR 1/2 AC	5 FOR 1/2 AC	6 FOR 1/2 AC
250V AC	250V AC	250V AC	250V AC	250V AC	250V AC	250V AC
277V AC	277V AC	277V AC	277V AC	277V AC	277V AC	277V AC
380V AC	380V AC	380V AC	380V AC	380V AC	380V AC	380V AC

**20 AMP. DC GENERAL**  
 250V DC MAX. 2 POLES IN SERIES  
 250V DC MAX. 2 POLES IN SERIES

**SWITCH IS SUITABLE FOR USE IN A CIRCUIT**

OPERATING CURRENT	250V AC	277V AC	380V AC
20 AMP.	200	200	200
10 AMP.	400	400	400
5 AMP.	800	800	800



**CONNECTIONS TO CONTROL MODULES**

MODULE TERMINAL	CONNECT TO
1	NOT USED
2	CONTROL STATION FOR ACC. 47 & 49
3	CONTROL STATION FOR ACC. 47 & 49
4	MODULE CONTROL VOLTAGE
5	CONTROL STATION FOR ACC. 47 & 49
6	TERMINAL 1 OF CONTROL MODULE
7	TERMINAL 2 OF CONTROL MODULE
8	TERMINAL 3 OF CONTROL MODULE
9	TERMINAL 4 OF CONTROL MODULE
10	TERMINAL 5 OF CONTROL MODULE
11	TERMINAL 6 OF CONTROL MODULE
12	TERMINAL 7 OF CONTROL MODULE

- GENERAL NOTES**
- WHEN CONTACTOR & LINE VOLTAGE ARE THE SAME, THE CONTACTOR CONTROL VOLTAGE LINE SHOULD 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 (SHIPPED WITH CONTACTS CLOSED).
  - LINE & LINE TERMINALS ARE INTERCHANGEABLE.
  - CONTACTS ARE SINGLE THROW DOUBLE BREAK, WITH UNDESIRABLY ENERGIZED SINGLE COIL OPERATOR MECHANICALLY FULLY REPOSITIONS & CLOSED POSITION.
  - CUSTOMER CONNECTIONS TO LINE & LOAD WILL ACCEPT 90° BEND TO TERMINAL CONTACTS. TORQUE LINE POLE CONNECTION TO 18 IN. LB.
  - CUSTOMER CONNECTIONS TO ELECTRONIC MODULES (ACC. 47, 48, 49) WILL ACCEPT 90° BEND TO TORQUE COUPLER WIRE. TORQUE CONTROL TERMINALS TO 20 IN. LB.
  - CONTROL MODULE VOLTAGE SUPPLIED BY CUSTOMER.

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