



Mechanically held lighting contactor. Contactor amp rating 20Amp 0NC _ 8NO poles, 208-240V 50/60HZ coil, 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 |
| General technical data | |
| weight [lb] | 9 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 |
| Contactors | |
| 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 |
| 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 | 208 ... 240 V |
| • at AC at 60 Hz rated value | 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 of magnet coil | 0.85 ... 1.1 |
| Enclosure | |
| degree of protection NEMA rating of the enclosure | NEMA 12 enclosure |

| | |
|--|---|
| design of the housing | dustproof and drip-proof for indoor use |
| 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:CLM2B08240>

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

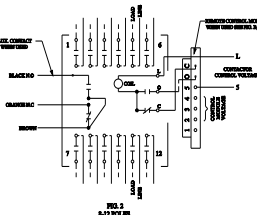
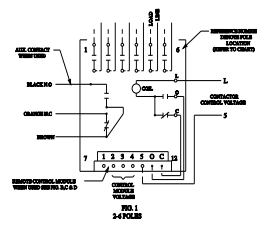
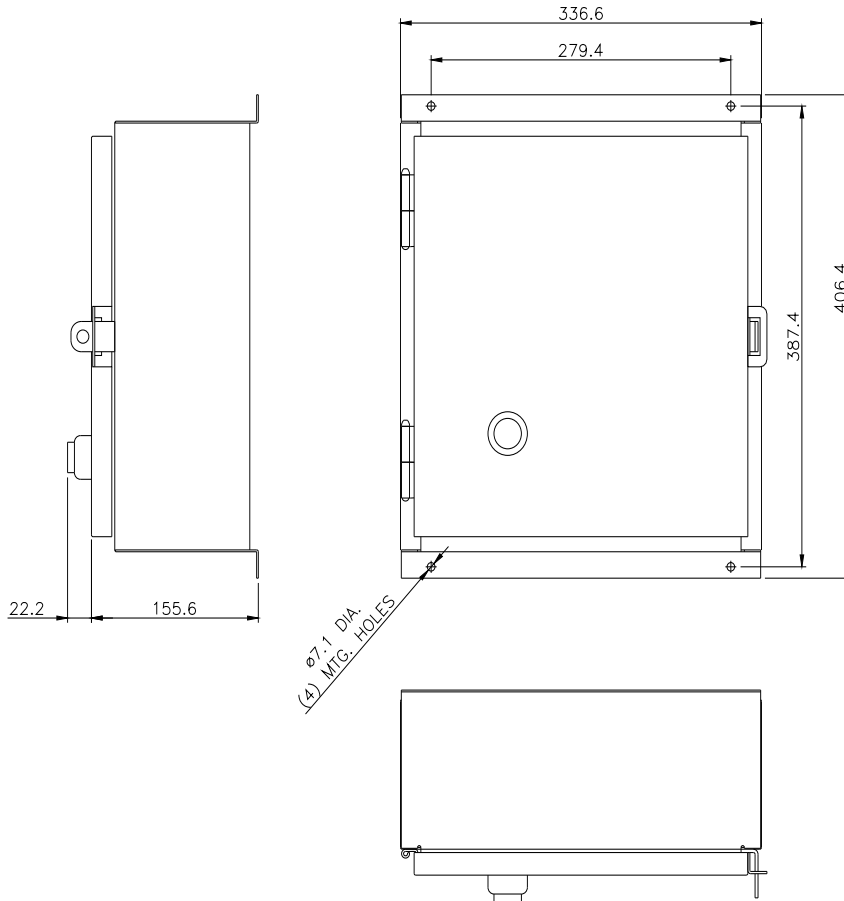
<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM2B08240>

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:CLM2B08240&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM2B08240/certificate>



CONTACT POLES LOCATION CHART

| POLES | LOCATION |
|-------|----------------|
| 2 | 2, 6, 2 |
| 3 | 2, 3, 8, 5 |
| 4 | 2, 3, 4, 8, 5 |
| 6 | 1-6 |
| 8 | 1-6, 8, 11 |
| 10 | 1-6, 8, 10, 11 |
| 12 | 1-12 |

MAIN CONTACT MAXIMUM VOLTAGE RANGES OR CIRCUIT

| POLES TO LOAD | 2 FOR 1 | AMPERES CONTINUOUS |
|---------------|---------|--------------------|
| 20 AC | 20 AC | 20 |
| 27 AC | 20 AC | 10 |
| 27 AC | 40 AC | 10 |
| 27 AC | 60 AC | 10 |

127V DC MAX. 3 POLES IN SERIES
20V DC MAX. 3 POLES IN SERIES

SWITCH IS SUITABLE FOR USE IN A CIRCUIT CAPABLE OF DELIVERING NOT MORE THAN THE RATED SHORT-CIRCUIT CURRENT AT THE MAXIMUM VOLTAGE LISTED BELOW. THIS IS LIMITED BY A 30 AMP CIRCUIT BREAKER. EXCEEDING THESE VALUES MAY BE DANGEROUS TO THE USER.

| MAXIMUM RMS AMPERES | MAXIMUM AC VOLTS |
|---------------------|------------------|
| 20 | 250 |
| 10 | 400 |
| 10 | 600 |

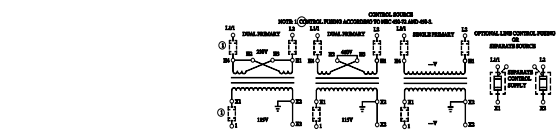
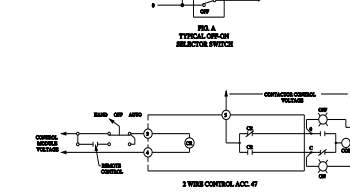
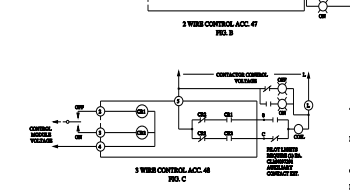


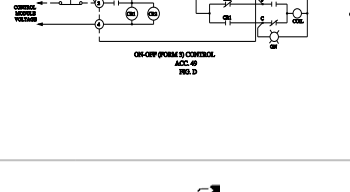
FIG. 3 TYPICAL ON-OFF SELECTOR SWITCH



2 WIRE CONTROL ACC. 47 FIG. 4



2 WIRE CONTROL ACC. 47 FIG. 5



ON-OFF FORM 9 CONTROL ACC. 49 FIG. 6

CONNECTIONS TO CONTROL MODULES

| 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 OF CONTRACTOR |
| 7 | TERMINAL C OF CONTRACTOR |

* FOR 24 VDC CONTROL MODULES CONNECT TERMINAL 4 TO TERMINAL 6

- GENERAL NOTES**
- WIRE CONTACTS & LINE VOLTAGE ARE THE SAME. THE CONTRACTOR CONTROL VOLTAGE CAN BE DERIVED FROM THE LINE POLES OF THE CONTACTOR FRAME.
 - MAIN CONTACTS ARE SHOWN BY CONDUCTIVITY WITH CONTROL LINES AS SHOWN. USE A TIGHT BENCH SWITCH (SWITCH SHIPPED WITH CONTACTS CLOSED).
 - LINE & LOAD TERMINALS ARE REVERSIBLE.
 - CONTACTS ARE BREAK BEFORE MAKE BEING WITH MECHANICALLY ENHANCED DOUBLE COIL OPERATOR CONNECTION TO 18 IN. IS.
 - CONTROL CONNECTIONS TO LINE & LOAD WILL ACCEPT NO. 18 AWG TO 14 AWG COPPER WIRE THROUGH LINE POLE CONNECTION TO 18 IN. IS.
 - CONTROL CONNECTIONS TO ELECTRONIC MODULES (ACC. 45, 46, 48, 49) WILL ACCEPT NO. 22 AWG TO 14 AWG COPPER WIRE THROUGH CONTACT TERMINALS TO 21 IN. IS.
 - CONTROL MODULE VOLTAGE SUPPLIED BY CUSTOMER.

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