

Mechanically held lighting contactor, Contactor amp rating 20A, 0 N.C. / 6 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 |
| General technical data | |
| weight [lb] | 8 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 |
| Contactor | |
| size of contactor | 20 Amp |
| number of NO contacts for main contacts | 6 |
| 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"> • at tungsten (1 pole per 1 phase) rated value • at tungsten (2 poles per 1 phase) rated value • at tungsten (3 poles per 3 phases) rated value • at ballast (1 pole per 1 phase) rated value • at ballast (2 poles per 1 phase) rated value • at ballast (3 poles per 3 phases) rated value • at resistive load (1 pole per 1 phase) rated value • at resistive load (2 poles per 1 phase) rated value • at resistive load (3 poles per 3 phases) rated value | 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 |
| 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 | |
| <ul style="list-style-type: none"> • at AC at 50 Hz rated value • at AC at 60 Hz rated value | 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 | |
| Enclosure | |
| degree of protection NEMA rating of the enclosure | NEMA 1 enclosure |
| design of the housing | indoors, usable on a general basis |
| 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 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 |
| 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 |
| 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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=US2:CLM1B06240>

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

<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM1B06240>

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:CLM1B06240&lang=en

Certificates/approvals

<https://support.industry.siemens.com/cs/US/en/ps/US2:CLM1B06240/certificate>

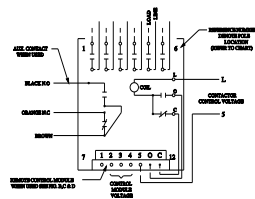


FIG. 1
24 POLES

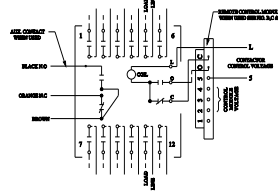


FIG. 2
8-12 POLES

CONTACT POLE LOCATION CHART

| POLES | LOCATION |
|-------|--------------------|
| 2 | 2 & 5 |
| 3 | 2, 3 & 5 |
| 4 | 2, 3, 4 & 5 |
| 6 | 1-4 |
| 8 | 1-6, 8 & 11 |
| 10 | 1-6, 8, 9, 10 & 11 |
| 12 | 1-12 |

AUXILIARY CONTACT RATING
 ACC. CLAMP/SPIN (SDT)
 ACC. CLAMP/SPIN (SDT)
 10A, 10 SP
 277VAC
 0.5A, 10VDC
 0.25A, 20VDC

MAIN CONTACT MAXIMUM VOLTAGE RATINGS OPEN OR CLOSED

| POLES TO LOAD | 1 POLE | NUMBER CONTACTS |
|---------------|---------|-----------------|
| FOR 1 | 3 POLES | |
| 250 AC | 250 AC | 30 TUNGSTEN |
| 375 AC | 400 AC | 30 BALLAST |
| 500 AC | 600 AC | 30 GENERAL |

30 AMP, 2VC
 GENERAL
 10VDC MAX. 5 POLES IN SERIES

NOTES: 1. NOT SUITABLE FOR USE IN A CIRCUIT CAPABLE OF DELIVERING SHORT CIRCUIT CURRENT AND SYNCHRONOUS CURRENT AT THE MAXIMUM VOLTAGE SHOWN BELOW. THESE PROTECTORS BY A 10 AMP CIRCUIT BREAKER BAYING AN INTERLOCKING BAYING OR POLE LINE TRIP VALVES SHOWN.

| MAXIMUM TIME | MAXIMUM AC |
|--------------|------------|
| AMPERES | VOLTS |
| 23,000 | 250 |
| 14,000 | 400 |
| 10,000 | 600 |

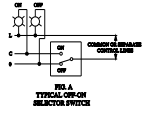
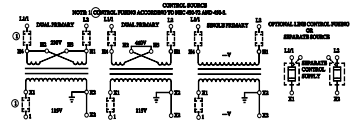
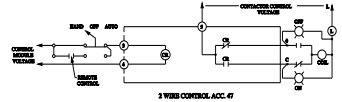
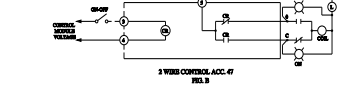


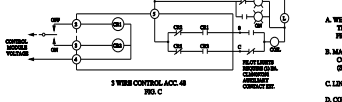
FIG. 4
TYPICAL ON-OFF SELECTOR SWITCH



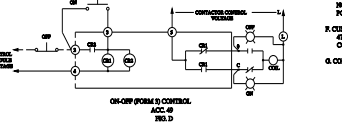
3 WIRE CONTROL, ACC. 47



3 WIRE CONTROL, ACC. 47



3 WIRE CONTROL, ACC. 48



ON-OFF FORM B CONTROL

CONNECTIONS TO CONTROL MODULES

| MODULE TERMINAL | CONNECT TO: |
|-----------------|--------------------------------|
| 1 | NOT USED |
| 2 | CONT. STATION FOR ACC. 46 & 49 |
| 3 | CONT. STATION FOR ACC. 47 & 48 |
| 4 | MIDDLE CONTROL VOLTAGE* |
| 5 | CONTRACTOR CONTROL VOLTAGE |
| 0 | TERMINAL OF CONTACTOR |
| C | TERMINAL OF CONTACTOR |

* FOR 120V CONTROL MODULES CONNECT TERMINAL TO NEUTRAL (N)

- GENERAL NOTES**
- 3 WIRE 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 LINES SHOWN. SEE RATINGS BELOW. SWITCHES SHOWN WITH CONTACTS CLOSED.
 - LINE & LOAD TERMINALS ARE INTERFERABLE.
 - CONTACTS ARE SINGLE THROW, DOUBLE BREAK, WITH MOMENTARILY FINISHED SINGLE COIL, OPERATE MECHANICALLY HELD BY FORCE OPEN & CLOSED POSITIONERS.
 - CUSTOMER CONNECTIONS TO LINE & LOAD WILL ACCEPT NO. 10 BAY TO 10 AWG COPPER WIRE. TORQUE LINE POLE CONNECTION TO 15 lb. ft.
 - CUSTOMER CONNECTIONS TO ELECTRONIC MODULES (ACC. 47, 48, 49) WILL ACCEPT NO. 22 AWG TO 10 AWG COPPER WIRE. TORQUE CONTACT TERMINALS TO 15 lb. ft.
 - CONTROL MODULE VOLTAGE SUPPLIED BY CUSTOMER.

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