C30CNM Mechanically and Electrically Held



Contents

Description	Page
C30CN Mechanically and Electrically Held	
Standards and Certifications	V5-T6-4
Instructional Leaflets	V5-T6-4
Product Selection	V5-T6-6
Components	V5-T6-10
Replacement Parts	V5-T6-11
Technical Data and Specifications	V5-T6-12
Wiring Diagrams	V5-T6-14
Dimensions	V5-T6-15
CN35 Electrically Held	V5-T6-16
A202 Magnetically Latched	V5-T6-23

C30CN Mechanically and Electrically Held

Product Description

The C30CNM 30A Mechanically Held Lighting Contactors from Eaton's Electrical Sector are designed for industrial, commercial and outdoor lighting applications where efficient control is required. The mechanically held operation ensures that the contactor will not switch to OFF during control power failure. It also ensures the removal of coil from the circuit for noise-free operation and the elimination of all coil losses after the contactor is latched. The control module microprocessor validates the control signal before operation, so it will not respond to momentary voltage spikes of noise. The operation command has a built-in 0.4 second delay to avoid multiple short-term commands that can cause contact fatigue or failure. Also, the feedback loop prevents the contactor from getting out of sequence with switches, even after power failures.

Application Description

The mechanically held lighting contactor provides effective control in applications such as office buildings, industrial plants, hospitals, stadiums, airports, and so on.

They are ideal for applications that require quiet, energy-efficient operation.

Designed to handle different load types:

- Tungsten (incandescent filament)
- Ballast (fluorescent and mercury arc)
- High intensity discharge (HID)
- Non-motor AC resistive
- Single- and three-phase motor ratings

Operation

Three-wire control is the choice for use with momentary devices allowing operation from multiple locations. A momentary pulse of energy operates the contactor while a second pulse on an alternate leg returns the contactor to its original state.

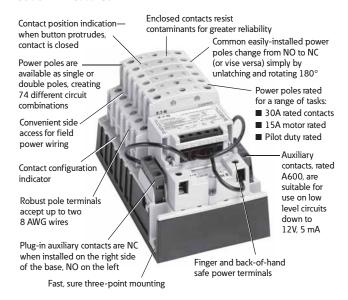
Two-wire control is the choice for single output automatic operation or for operation from single-pole devices. When voltage is applied to the input terminals the contactor is latched into position (coil is removed from the circuit while control voltage is continuously supplied). When control voltage is removed, the latch is disengaged and the contactor is returned to its original state.

Features

See figure below.

- 30A power pole rating
- Up to 12 poles maximum
- Power poles latch easily onto the base, and designating them as NO or NC is a simple matter of left or right positioning. Additional poles, either NO or NC, may be easily added at any time
- Low magnetic noise results in quiet operation
- Low input VA permits long wire runs
- Come in a wide range of input voltages and with coils from 24 Vac to 277 Vac and 12 Vac to 24 Vdc

C30CNM Features



Standards and Certifications

- UL listed File E1491, UL Category Code/ Guide NLDX/NLDX7
- cUL
- CE
- Designed and built to NEMA ICS-2 Standards







Instructional Leaflets

50765 C30CN Lighting Contactor Series

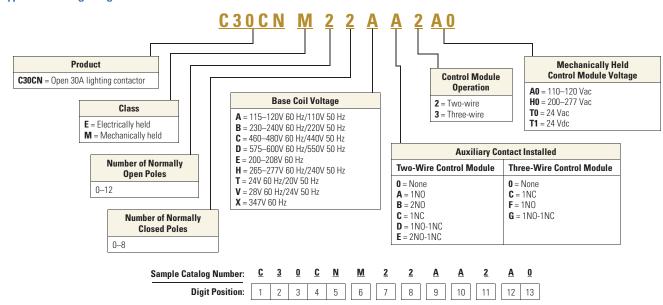
50766 Coil Kit for C30CN Lighting Contactors

50767 Power Pole Kit for C30CN Lighting Contactors

50768 Control Module Kit for C30CN Lighting Contactors

Catalog Number Selection

Type C30CN Lighting Contactors



Product Selection

Two-Wire Mechanically Held Lighting Contactors— Standard Assembled Forms

The Standard Assembled Forms in tables on **Pages V5-T6-6** and **V5-T6-7** are two-wire open mechanically held 30A lighting contactors with 120V 60 Hz/110V 50 Hz base coil voltage, 120V control module voltage, and no additional auxiliary contacts. To change the base coil voltage, auxiliary contact options or control module voltage, refer to tables on **Page V5-T6-7**.



Two-Wire Mechanically Held Lighting Contactors— Standard Assembled Forms



Number of Poles	NO	NC	Catalog Number 123
2	0	2	C30CNM02A02A0
	1	1	C30CNM11A02A0
	2	0	C30CNM20A02A0
3	0	3	C30CNM03A02A0
	1	2	C30CNM12A02A0
	2	1	C30CNM21A02A0
	3	0	C30CNM30A02A0
4	0	4	C30CNM04A02A0
	1	3	C30CNM13A02A0
	2	2	C30CNM22A02A0
	3	1	C30CNM31A02A0
	4	0	C30CNM40A02A0
5	0	5	C30CNM05A02A0
	1	4	C30CNM14A02A0
	2	3	C30CNM23A02A0
	3	2	C30CNM32A02A0
	4	1	C30CNM41A02A0
	5	0	C30CNM50A02A0
6	0	6	C30CNM06A02A0
	1	5	C30CNM15A02A0
	2	4	C30CNM24A02A0
	3	3	C30CNM33A02A0
	4	2	C30CNM42A02A0
	5	1	C30CNM51A02A0
	6	0	C30CNM60A02A0
7	0	7	C30CNM07A02A0
	1	6	C30CNM16A02A0
	2	5	C30CNM25A02A0
	3	4	C30CNM34A02A0
	4	3	C30CNM43A02A0
	5	2	C30CNM52A02A0
	6	1	C30CNM61A02A0
	7	0	C30CNM70A02A0
8	0	8	C30CNM08A02A0
	1	7	C30CNM17A02A0
	2	6	C30CNM26A02A0
	3	5	C30CNM35A02A0
	4	4	C30CNM44A02A0
	5	3	C30CNM53A02A0
	6	2	C30CNM62A02A0
	7	1	C30CNM71A02A0
	8	0	C30CNM80A02A0

Notes

- ① To change the base coil voltage, replace the content of Position 9 with the appropriate code suffix from the table on Page V5-T6-7.
- ② To change auxiliary contact options, replace the content of Position 10 with the appropriate code suffix from the table on Page V5-T6-7.
- ® To change the control module voltage, replace the content of Positions 12-13 with the appropriate code suffix from the table on Page V5-T6-7.