A202 Magnetically Latched

Open Control

Lighting Contactors



60A Size

Product Description

The Cutler-Hammer® A202 Lighting Contactor from Eaton's electrical business provides a safe and convenient means for local or remote switching of relatively large tungsten, fluorescent or mercury arc lamp loads.

Application Description

- The Magnetically Latched Lighting Contactors are designed to withstand the large initial inrush currents of tungsten lamp loads without contact welding.
- The A202 Contactors are fully rated devices that do not require de-rating similar to standard motor control contactors.

The Magnetically Latched Lighting Contactor provides effective control in applications such as office buildings, industrial plants, hospitals, stadiums, airports, etc.

Features

- Designed and tested specifically for lighting and resistive loads
- Easy to install and maintain
- No control power necessary to maintain contact closure

Operation

A permanent magnet is built into the contactor structure that will maintain the contactor in its energized state indefinitely without using control power. When energized, a DC current is applied to the latch coil, producing a magnetic field that reinforces the polarity of the permanent magnet, pulling in the contactor. The coil clearing interlock disconnects the current to the coil. In order to drop out the contactor, it is necessary to apply a field through the STOP coil in the reverse direction to the permanent magnet. This momentarily cancels the magnetic attraction and the contactor drops out.

Instructional Leaflets

IL16965 30A (2, 3, 4, 5 Poles) IL16966 60 – 200A (2, 3, 4, 5 Poles)

Standards and Certifications

- UL Listed File # E44424, Guide NRNT
- CSA Certified File # LR39402, Class 3231-01





Technical Data and Specifications

- Terminals
 - □ All except 30A devices: Cu/Al
 - □ 30A devices: Cu only
- Ballast load: 600 AC, breaking all
- Tungsten lamp loads, maximum volts
 - □ Line-to-line: 480V AC
 - □ Line-to-neutral: 277V AC

Accessories

See A200 NEMA Contactor Accessories, Page 33-194 – 33-196.

Wiring Diagrams

The standard wiring of an A202 contactor can be controlled by a separate <u>customer supplied</u> single-pole double-throw controlling station.

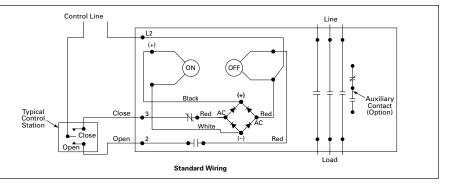


Figure 37-8. Standard Wiring

Two-wire control can be accomplished with a <u>customer supplied</u> relay with 1NO/1NC auxiliary contacts, wire as shown.

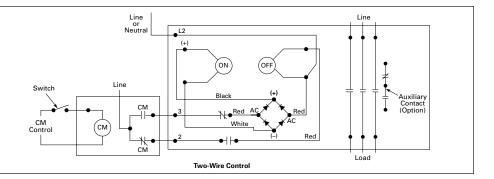


Figure 37-9. Two-Wire Control



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Dimensions

Table 37-39. Approximate Dimensions for Non-combination Open Lighting Contactors — 2- to 12-Pole

Continuous	Number of	Pole	Dimensions in Inches (mm) Open Type	
Amperes	Poles	Configuration		
			Wide A	High B
30	2 – 4		3.31 (84.1)	4.38 (111.3)
	5		4.19 (106.4)	4.38 (111.3)
	6	3 x 3	7.13 (181.1)	4.46 (113.3)
	8	4 x 4	7.13 (181.1)	4.46 (113.3)
	10	5 x 5	10.63 (270.0)	4.46 (113.3)
	12	4 x 4 x 4	12.38 (314.5)	6.88 (174.8)
60	2, 3		3.31 (84.1)	4.38 (111.3)
	4, 5		4.19 (106.4)	4.38 (111.3)
	6	3 x 3	7.13 (181.1)	4.46 (113.3)
	8	4 x 4	10.63 (270.0)	4.46 (113.3)
	10	5 x 5	10.63 (270.0)	4.46 (113.3)
	12	5 x 5 x 2	15.00 (381.0)	6.88 (174.8)
100	2, 3		4.63 (117.6)	6.63 (168.4)
	4, 5		7.25 (184.2)	6.63 (168.4)
	6	3 x 3	9.75 (247.7)	6.88 (174.8)
	8	5 x 3	12.38 (314.5)	6.88 (174.8)
	10	5 x 5	15.00 (381.0)	6.88 (174.8)
	12	5 x 5 x 2	34.13 (866.9)	27.50 (698.5)
200	2, 3		4.63 (117.6)	6.63 (168.4)
	4, 5		7.25 (184.2)	6.63 (168.4)
	6	3 x 3	9.75 (247.7)	6.88 (174.8)
	8	5 x 3	12.38 (314.5)	6.88 (174.8)
	10	5 x 5	15.00 (381.0)	6.88 (174.8)
	12	5 x 5 x 2	34.13 (866.9)	27.50 (698.5)

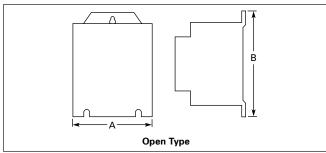


Figure 37-10. Approximate Dimensions

Product Selection

When Ordering Specify

- Catalog Number with Coil Suffix Code from the Magnet Coil Selection Table.
- Any required Accessories.

Table 37-40. Latched AC Lighting Contactors @@

Continuous	Number of	Open Type		
Amperes (Enclosed)	Poles	Catalog Number ^③	Price U.S. \$	
30	2 3 4 5	A202K1B_M A202K1C_M A202K1D_M A202K1E_M A202K1F_M		
	8 10 12	A202K1G_M A202K1H_M A202K1K_M		
60	2 3 4 5 6	A202K2B_M A202K2C_M A202K2D_M A202K2E_M A202K2F_M		
	8 10 12	A202K2G_M A202K2H_M A202K2K_M		
100	2 3 4 5 6	A202K3B_M A202K3C_M A202K3D_M A202K3E_M A202K3F_M		
	8 10 12	A202K3G_M A202K3H_M A202K3K_M		
200	2 3 4 5 6	A202K4B_M A202K4C_M A202K4D_M A202K4E_M A202K4F_M		
	8 10 12	A202K4G_M A202K4H_M A202K4K_M		
300	2 3	A202K5B_M A202K5C_M		
400	2 3	A202K6B_M A202K6C M		

- ① Lighting contactors are not available with DC coils.
- ② Contactors rated 300A and 400A are mechanically latched.
- Underscore (_) indicates missing Code letter for Magnet Coil Selection
 — see Magnet Coil Selection Table.

Table 37-41. Magnet Coil Selection

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Coil Voltage	Catalog Number Suffix
120V, 60 Hz	A
208V, 60 Hz	B
277V, 60 Hz	Z
440V/50, 480V/60	X
600V, 60 Hz	E
120V/60, 110V/50	A
220V/50, 240V/60	W
24V, 60 Hz	I ⊕

Available on 2- to 5-pole, 30 and 60A devices and on 2- to 3-pole 100 and 200A devices.

Discount Symbol 1CD-1C