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Contactors — Non-reversing and Reversing

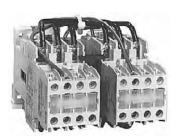
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Note: For more information, see CA03402001E.



DC Magnet Coils 34-313

IEC Size B Cat. No. CE15BNS3AB



IEC Size D Cat. No. CE55DN3AB

Product Description

Non-reversing

Contactors are most commonly used to switch motor loads in applications where running over current protection is either not required or is provided separately. Contactors consist of a magnetically actuated switch which can be remotely operated by a pushbutton station or pilot device such as a proximity switch, limit switch, float switch, auxiliary contacts, etc.

Reversing

Reversing contactors are used primarily for reversing single- or three-phase motors in applications where running over current protection is either not required or is provided separately. They consist of two contactors mechanically and electrically interlocked to prevent line shorts and energization of both contactors simultaneously.

Features

- EN60947-4-1 IEC 947-4-1 Compliance new International Standard for low voltage switchgear and control devices.
- Long life twin break, silver cadmium oxide contacts — provide excellent conductivity and superior resistance to welding and arc erosion.
- Designed to 2,000,000 electrical and 20,000,000 mechanical operations at maximum hp ratings through 20 hp at 460V. Adequate for most general duty control applications.

Non-reversing

- UL listed and CSA certified.
- Highest horsepower rating in a compact, space-saving design, 45 mm frame rated maximum 20 hp at 460V, 65 mm frame rated maximum 50 hp, 90 mm frame rated 100 hp, 180 mm frame rated 200 hp, 220 mm frame rated 350 hp, 280 mm frame rated 600 hp, and 334 mm frame rated 900 hp.
- 45 mm open contactors, Sizes A F, have DIN rail or universal base mounting, 65 mm open contactors have molded feet for panel mounting, and 90 mm to 334 mm have steel mounting plates (optional on smaller sizes).
- DIN rail release mechanism conveniently located on line side of contactor.

- IP20 finger protection shields available.
- Contactor and terminal markings conform to CENELEC EN50011.
- Holding circuit contact(s) supplied as standard:
 - Sizes A N have a NO auxiliary contact block mounted on right hand side (on Sizes A – C, contact occupies 4th power pole position — no increase in width).
 - □ Sizes P S have a NO-NC contact block mounted on the left hand side.
 - □ Sizes T Z have a 2NO-2NC contact block mounted on the top left between arc chutes.
- Lugs supplied standard on Sizes
 A S. On Sizes T Z, lugs must be ordered separately.

Reversing

- Highest horsepower rating in a compact, space-saving design, 45 mm frame rated maximum 20 hp, 65 mm frame rated maximum 50 hp and 90 mm frame rated maximum 75 hp at 460V. If larger devices are required, order components.
- 45 mm open type reversing contactors, Sizes A F, have DIN rail or panel mounting capability. DIN rail release mechanism conveniently located on line side of contactor. A steel mounting plate is optional.
- 65 mm reversing contactors, Sizes G - K and 90 mm Sizes L - N are supplied with steel mounting plate as standard.
- Sizes A K have a wired NC top mounted electrical interlock on each contactor. Sizes L – N have one NO-NC side mounted electrical interlock on each contactor.



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IEC Contactors & Starters

Freedom

Product Selection — 3-Pole Contactors

When Ordering Specify

- Select required contactor by Catalog Number and replace the magnet coil alpha designation in the Catalog Number (_) with the proper Code Suffix from Tables 34-369 and 34-371, on Page 34-299.
- For Sizes A K, the magnet coil alpha designation is the second-tolast digit of the Catalog Number. Example: for a 240V/60 Hz coil, order CE15ANS3BB.



IEC Size E Cat. No. CE15ENS3AB



IEC Size N Cat. No. CE15NN3A

Table 34-367. Type CE15/CE55 IEC Product Selection — 3-Pole Contactors

| Max. UL AC-3 Amp. Rating 600V AC | IEC 947 AC-1 Thermal Current 600V | Maximum kW Rating | | | | Maximum UL Horsepower | | | | | | 3-Pole — Non-reversing ①② | | 3-Pole — Reversing ③ | | |
|--|---|-------------------|-------|------------|--------------|-----------------------|-------|---------|-------|-------|-------|------------------------------|------------|-------------------------|-----------|--------|
| | | 3-Phase | | | | 1-Phase | | 3-Phase | | | | Catalog | Price | Catalog | Price | |
| | | | 0001/ | 380V | 415/ 440V | 500/ 550V | 660V | 115V | 230V | 200V | 230V | 460V | 575V | Number | U.S. \$ | Number |
| 7 | 20 | 1.1 | 2.2 | 2.2 | 4 | 1.5 | 1/4 | 1/2 | 1-1/2 | 1-1/2 | 3 | 5 | CE15ANS3 B | | CE55AN3 B | |
| 10 | 20 | 1.5 | 4 | 4 | 5.5 | 2.2 | 1/2 | 1 | 2 | 2 | 5 | 7-1/2 | CE15BNS3 B | | CE55BN3 B | |
| 12 | 20 | 2.2 | 5.5 | 5.5 | 7.5 | 4 | 1/2 | 2 | 3 | 3 | 7-1/2 | 10 | CE15CNS3_B | | CE55CN3_B | |
| 18 | 32 | 4 | 7.5 | 7.5 | 11 | 5.5 | 1 | 3 | 5 | 5 | 10 | 15 | CE15DNS3_B | | CE55DN3_B | |
| 25 | 32 | 5.5 | 11 | 11 | 15 | 7.5 | 2 | 3 | 5 | 7-1/2 | 15 | 20 | CE15ENS3_B | | CE55EN3_B | |
| 32 | 32 | 7.5 | 15 | 15 | 18.5 | 10 | 2 | 5 | 7-1/2 | 10 | 20 | 25 | CE15FNS3_B | | CE55FN3_B | |
| 37 | 50 | — | 18.5 | 18.5 | 22 | 11 | 3 | 5 | 7-1/2 | 10 | 25 | 30 | CE15GNS3_B | | CE55GN3_B | |
| 44 | 60 | 11 | 22 | 22 | 30 | 15 | 3 | 7-1/2 | 10 | 15 | 30 | 40 | CE15HNS3_B | | CE55HN3_B | |
| 60 | 75 | 15 | 30 | 30 | 30 | 18.5 | 5 | 10 | 15 | 20 | 40 | 40 | CE15JNS3_B | | CE55JN3_B | |
| 73 | 80 | 18.5 | 37 | 37 | 37 | 22 | 5 | 10 | 20 | 25 | 50 | 50 | CE15KNS3_B | | CE55KN3_B | |
| 85 | 100 | 22 | 45 | 45 | 55 | 37 | 7-1/2 | 10 | 25 | 30 | 60 | 75 | CE15LN3_ | | CE55LN3_ | |
| 105 | 135 | 30 | 55 | 55 | 75 | 45 | 10 | 10 | 30 | 40 | 75 | 100 | CE15MN3_ | | CE55MN3_ | |
| 140 | 175 | 37 | 75 | 75 | 90 | 45 | 10 | 10 | 40 | 50 | 100 | 125 | CE15NN3_ | | CE55NN3_ | |
| 170 | 185 | 45 | 90 | 90 | 90 | 45 | _ | _ | 50 | 60 | 125 | 125 | CE15PN3_ | | - | |
| 200 | 220 | 55 | 110 | 110 | 110 | 55 | _ | _ | 60 | 75 | 150 | 150 | CE15RN3_ | | <u> </u> | |
| 300 | 315 | 90 | 160 | 160 | 160 | 75 | | _ | 75 | 100 | 200 | 200 | CE15SN3_ | | - | |
| 420 | 600 | 129 | 220 | 240 | 300 | 300 | | _ | 125 | 125 | 250 | 250 | CE15TN3_80 | | - | |
| 520 | 760 | 160 | 280 | 315 | 375 | 375 | | _ | 150 | 150 | 350 | 350 | CE15UN3_80 | | - | |
| 550 | 1000 | 220 | 375 | — | 500 | 500 | _ | _ | 150 | 200 | 400 | 400 | CE15VN3_80 | | - | |
| 700 | 1000 | 220 | 375 | _ | 500 | 500 | _ | _ | 200 | 250 | 500 | 500 | CE15WN3_80 | | - | |
| 810 | 1100 | 270 | 475 | _ | 600 | 600 | | _ | 250 | 300 | 600 | 600 | CE15XN3_80 | | | |
| 1215 | 1350 | 380 | 650 | | 840 | 840 | | _ | 450 | 450 | 900 | 900 | CE15ZN3_80 | | - | |

① IEC Sizes A - N are supplied with a NO auxiliary contact. On IEC Sizes A - C, the 4th power pole position is used as the auxiliary contact and adds no additional width. Open type Sizes A - K can be ordered with a top mounted auxiliary contact instead of a side mounted contact. To order, change the 7th digit of the listed Catalog Number from "S" to "T". Example: CE15ANT3AB. On open type Sizes A - K, if the NO auxiliary contact is not required, drop the "S" from the listed Catalog Number.

Accessories Pages 34-311 – 34-317 Discount Symbol 1CD7

CA08102001E

② Auxiliary contacts: Sizes P - S have 1NO-1NC, Sizes T - X have 2NO-2NC, Size Z has 2NO-1NC. Sizes T - Z are supplied without lugs — order appropriate lug kits from Table 34-370 on Page 34-299.

³ Sizes A - K IEC contactors do not include holding circuit contacts. For factory installed NO auxiliary contacts, insert "S" (side mounted) or "T" (top mounted) after 6th digit of listed Catalog Number. Example: Change CE55AN3AB to CE55ANS3AB. For "T", top mounted NC contact blocks are replaced with NO-NC blocks — for "S", they are replaced with NO-NC side mounted blocks.