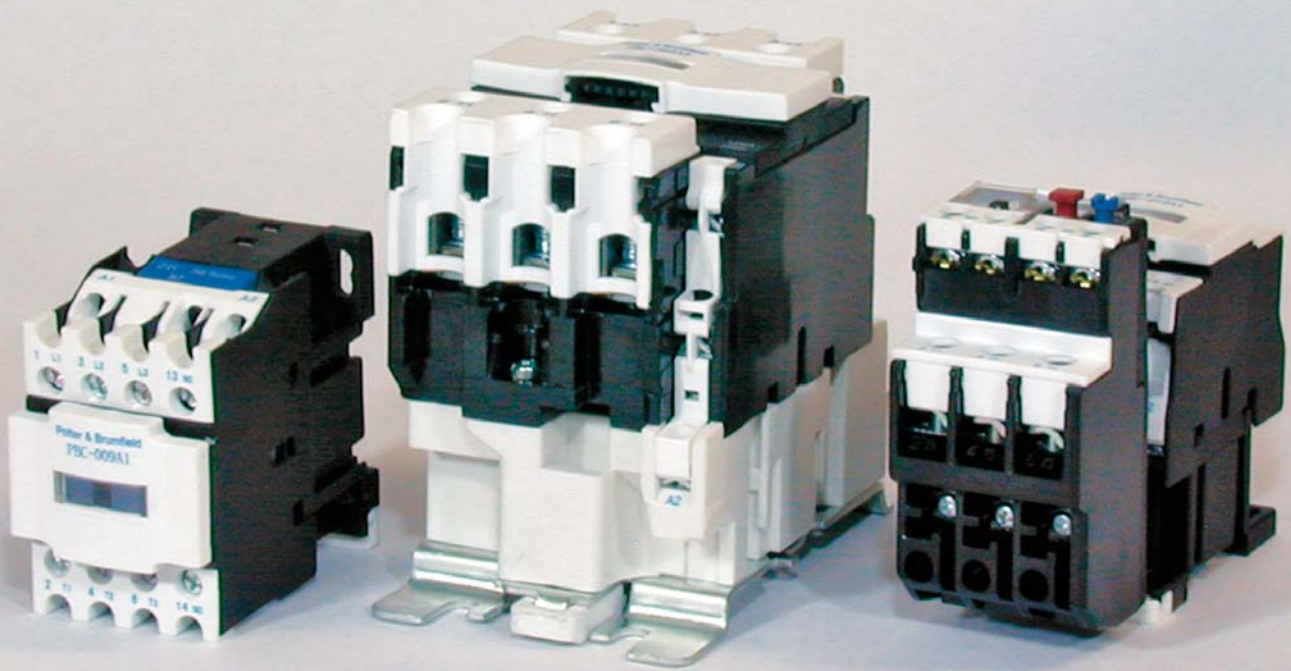




## Introducing P&B PBC series IEC-Type Contactors and Accessories

**THIS DATA IS FOR  
REFERENCE ONLY**  
This product family is  
being discontinued.

# P&B PBC Series IEC-Type Contactors and Accessories



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## KEY FEATURES

Contactors offer three pole switching (main contacts) plus integral auxiliary contacts

Designed to snap onto DIN rail (35mm or 75mm) or mount directly to a panel with screws

Efficient 50/60 Hz. coils (50 or 60 Hz coils optional)

Finger-safe (IP 20) terminals

Modular design allows accessories and contactors to snap together

Bimetallic thermal overload relay can be added to create a starter

Coil termination permits either same side or diagonal wiring



## DESCRIPTION

Compact AC coil contactors in three frame widths offer ratings from 9 amps to 80 amps (AC-3 per IEC 947-4). Available accessories include auxiliary contact blocks for side or front mounting, thermal overload relays, timer blocks for front mounting, mechanical interlocks and more.

## APPLICATIONS

AC motor control in industrial machinery, HVAC equipment, elevators and other systems.

## MECHANICAL

9A and 12A models measure approximately 47mm wide x 75mm tall x 82mm deep, mount on 35mm DIN rail  
18A models measure approximately 47mm wide x 76mm tall x 87mm deep, mount on 35mm DIN rail  
25A models measure approximately 59mm wide x 86mm tall x 97mm deep, mount on 35mm DIN rail  
32A models measure approximately 59mm wide x 86mm tall x 102mm deep, mount on 35mm DIN rail  
40A, 50A and 65A models measure approximately 79mm wide x 128mm tall x 116mm deep, mount on 75mm DIN rail  
80A models measure approximately 87mm wide x 128mm tall x 127mm deep, mount on 75mm DIN rail

## STANDARDS AND SPECS

Designed to comply with IEC EN60947-4-1 and EN60947-5-1; UL508; CSA C22.2 No. 14  
UL Listed for the US and Canada, File E38802 (PBC series) and File E60363 (PBO series).  
Note: 18A models of the PBC series and some models of the PBO series (PBO-32A2836, PBO-65A4865, PBO-65A5570 and PBO-80A6380) are still to be submitted for UL evaluation.  
CE marked

## ELECTRICAL

| Contactor                           | 9A Model                   | 12A Model           | 18A Model           | 25A Model           | 32A Model           | 40A Model                   | 50A Model           | 65A Model           | 80A Model           |
|-------------------------------------|----------------------------|---------------------|---------------------|---------------------|---------------------|-----------------------------|---------------------|---------------------|---------------------|
| Contact Arrangement                 | 3PST-NO-DM + NO or NC aux. |                     |                     |                     |                     | 3PST-NO-DM + NO and NC aux. |                     |                     |                     |
| Main Contact Rating (AC-3) @ 380VAC | 9A                         | 12A                 | 18A                 | 25A                 | 32A                 | 40A                         | 50A                 | 65A                 | 80A                 |
| Auxiliary Contact Rating @ 240VAC   | 10A                        | 10A                 | 10A                 | 10A                 | 10A                 | 10A                         | 10A                 | 10A                 | 10A                 |
| Expected Electrical Life            | 1 x 10 <sup>6</sup>        | 1 x 10 <sup>6</sup> | 1 x 10 <sup>6</sup> | 1 x 10 <sup>6</sup> | 8 x 10 <sup>5</sup> | 8 x 10 <sup>5</sup>         | 6 x 10 <sup>5</sup> | 6 x 10 <sup>5</sup> | 6 x 10 <sup>5</sup> |
| Nominal Coil Power                  | 9.4VA                      | 9.4VA               | 9.4VA               | 11VA                | 11VA                | 32VA                        | 32VA                | 32VA                | 32VA                |

## PRODUCT OFFERING

Product offering includes PBC series contactors, PBO series overload relays and PBA series auxiliary switch blocks for side or front mounting, PBT series timer blocks for front mounting, mechanical interlocks and more.

# P&B PBC Series IEC-Type Contactors and Accessories

## PBC SERIES CONTACTORS

| Typical Part Number >                   |  | PBC                                                                                                                                                                                                                                               | — 009 | A | 1 | — B7 |
|-----------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---|---|------|
| Series:                                 |  | PBC = IEC Contactors with Integral Auxiliary Switch                                                                                                                                                                                               |       |   |   |      |
| Main Contact Rating (AC-3):             |  | 009 = 9A    012 = 12A    018 = 18A    025 = 25A    032 = 32 A<br>040 = 40A    050 = 50A    065 = 65A    080 = 80A                                                                                                                                 |       |   |   |      |
| Main Contact Arrangement & Termination: |  | A = 3 Form X (3PST-NO-DM) with screw clamps                                                                                                                                                                                                       |       |   |   |      |
| Integral Auxiliary Switch Form:         |  | 1 = 1 NO (9-32A models only)    2 = 1 NC (9-32A models only)    3 = 1 NO + 1 NC (40-65A models only)                                                                                                                                              |       |   |   |      |
| Coil Voltage:                           |  | B7 = 24V 50/60 Hz    E7 = 48V 50/60 Hz    F = 110V 50 / 120V 60 Hz (40-80A models)<br>F7 = 110-120V 50/60Hz (9-32A models)    M = 220V 50 Hz / 240V 60 Hz (40-80A models)    M7 = 220-240V 50/60 Hz (9-32A models)<br>Q = 380V 50 HZ / 415V 60 Hz |       |   |   |      |

## PBO SERIES THERMAL OVERLOAD RELAYS

| Typical Part Number >                                            |                                | PBO                  | — 09               | P1016               |
|------------------------------------------------------------------|--------------------------------|----------------------|--------------------|---------------------|
| Series:                                                          |                                |                      |                    |                     |
| PBO = Thermal Overload Relays for use with PBC Series Contactors |                                |                      |                    |                     |
| Contactor Size (Main Contact Rating of Contactor):               |                                |                      |                    |                     |
| 09 = 9 - 32A                                                     | 12 = 12 - 32A                  | 18 = 18 - 32A        | 25 = 25 - 32 A     | 32 = 32A            |
| 40 = 40 - 80A                                                    | 50 = 50 - 80A                  | 65 = 65 - 80A        | 80 = 80A           |                     |
| Overload Relay Rating (Amps):                                    |                                |                      |                    |                     |
| For this size...                                                 | These ratings are available... |                      |                    |                     |
| 9-32A contactors:                                                | P1016 = 0.1 to 0.16            | P4063 = 0.4 to 0.63  | D1625 = 1.6 to 2.5 | D5580 = 5.5 to 8.0  |
|                                                                  | P1625 = 0.16 to 0.5            | P6310 = 0.63 to 1.0  | D2540 = 2.5 to 4.0 | A0710 = 7.0 to 10.0 |
|                                                                  | P2540 = 0.25 to 0.4            | D1016 = 1.0 to 1.6   | D4060 = 4.0 to 6.0 | A0913 = 9.0 to 13.0 |
| 12-32A contactors:                                               | A0913 = 9.0 to 13.0            |                      |                    |                     |
| 18-32A contactors:                                               | A1218 = 12.0 to 18.0           |                      |                    |                     |
| 25-32A contactors:                                               | A1725 = 17.0 to 25.0           |                      |                    |                     |
| 32A contactors:                                                  | A2332 = 23.0 to 32.0           | A2836 = 28.0 to 36.0 |                    |                     |
| 40-80A contactors:                                               | A2332 = 23.0 to 32.0           | A3040 = 30.0 to 40.0 |                    |                     |
| 50-80A contactors:                                               | A3750 = 37.0 to 50.0           |                      |                    |                     |
| 65-80A contactors:                                               | A4865 = 48.0 to 65.0           | A5570 = 55.0 to 70.0 |                    |                     |
| 80A contactors:                                                  | A6380 = 63.0 to 80.0           |                      |                    |                     |

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All charts shown at right reflect our initial product offering. Please consult factory regarding other available options and accessories.

NOTE: All part numbers are RoHS compliant.

## PBA SERIES AUXILIARY SWITCH BLOCKS

| Part Number | Number of NO Contacts | Number of NC Contacts | Mounting Location  | Part Number | Number of NO Contacts | Number of NC Contacts | Mounting Location  |
|-------------|-----------------------|-----------------------|--------------------|-------------|-----------------------|-----------------------|--------------------|
| PBA-01A     | 0                     | 1                     | Front of Contactor | PBA-31A     | 3                     | 1                     | Front of Contactor |
| PBA-10A     | 1                     | 0                     | Front of Contactor | PBA-13A     | 1                     | 3                     | Front of Contactor |
| PBA-11A     | 1                     | 1                     | Front of Contactor | PBA-40A     | 4                     | 0                     | Front of Contactor |
| PBA-02A     | 0                     | 2                     | Front of Contactor | PBA-04A     | 0                     | 4                     | Front of Contactor |
| PBA-20A     | 2                     | 0                     | Front of Contactor | PBA-11B     | 1                     | 1                     | Side of Contactor  |
| PBA-22A     | 2                     | 2                     | Front of Contactor | PBA-20B     | 2                     | 0                     | Side of Contactor  |

## PBT SERIES TIMER BLOCKS

| Part Number | Timing Function | Timing Range | Part Number | Timing Function | Timing Range |
|-------------|-----------------|--------------|-------------|-----------------|--------------|
| PBT-220     | Delay on Make   | 0.1 - 3 sec  | PBT-320     | Delay on Break  | 0.1 - 3 sec  |
| PBT-222     | Delay on Make   | 0.1 - 30 sec | PBT-322     | Delay on Break  | 0.1 - 30 sec |
| PBA-11A     | Delay on Make   | 10 - 180 sec | PBT-324     | Delay on Break  | 10 - 180 sec |

Note: Specifications and availability are subject to change without notice. Consult data sheet 1-1773450-4 for detailed specifications.

## FOR MORE INFORMATION

### Technical Support

|                |                                                                                      |
|----------------|--------------------------------------------------------------------------------------|
| Internet:      | <a href="http://www.tycoelectronics.com">www.tycoelectronics.com</a>                 |
| E-mail:        | <a href="mailto:newproducts@tycoelectronics.com">newproducts@tycoelectronics.com</a> |
| USA:           | 1-800-522-6752                                                                       |
| Canada:        | 1-905-470-4425                                                                       |
| Mexico:        | 52-55-1106-0800                                                                      |
| C. America:    | 57-1-254-4444                                                                        |
| South America: | 55-11-2103-6000                                                                      |
| Hong Kong:     | 852-2735-1628                                                                        |
| Japan:         | 81-44-844-8013                                                                       |
| UK:            | 44-208-420-8341                                                                      |

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Harrisburg, PA

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