

# BDA24050Y1

Circuit breaker, PowerPacT B, 50A, 2 pole,  
480Y/277VAC, 18kA, I-Line, thermal magnetic,  
80%, AB



## Main

|                           |                 |
|---------------------------|-----------------|
| Range                     | PowerPact       |
| Product name              | PowerPact B     |
| Device short name         | BD 050          |
| Product or Component Type | Circuit breaker |
| Device Application        | Distribution    |

## Complementary

|                                        |                                                                                                                                                                                                                              |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Line Rated Current                     | 50 A                                                                                                                                                                                                                         |
| Number of Poles                        | 2P                                                                                                                                                                                                                           |
| Control type                           | Toggle                                                                                                                                                                                                                       |
| Breaking capacity code                 | D                                                                                                                                                                                                                            |
| Breaking capacity                      | 25 KA 208Y/120 V AC 50/60 Hz UL 489<br>25 KA 240 V AC 50/60 Hz UL 489<br>18 KA 480/277 V AC 50/60 Hz UL 489<br>18 KA 480 V AC 50/60 Hz UL 489<br>10 kA 600Y/347 V AC 50/60 Hz UL 489                                         |
| [Ue] rated operational voltage         | 525 V AC 50/60 Hz UL 489                                                                                                                                                                                                     |
| Network Frequency                      | 50/60 Hz                                                                                                                                                                                                                     |
| [Ics] rated service breaking capacity  | 25 KA 220...240 V AC 50/60 Hz IEC 60947-2<br>18 KA 500...525 V AC 50/60 Hz IEC 60947-2<br>25 KA 380...415 V AC 50/60 Hz IEC 60947-2<br>18 kA 440 V AC 50/60 Hz IEC 60947-2                                                   |
| [Uimp] rated impulse withstand voltage | 8 kV IEC 60947-2                                                                                                                                                                                                             |
| Trip unit technology                   | Thermal-magnetic                                                                                                                                                                                                             |
| Continuous current rating              | 80 %                                                                                                                                                                                                                         |
| [Ui] rated insulation voltage          | 800 V IEC 60947-2                                                                                                                                                                                                            |
| Suitability for isolation              | Yes IEC 60947-2                                                                                                                                                                                                              |
| Utilisation category                   | Category A                                                                                                                                                                                                                   |
| Mechanical durability                  | 20000 cycles IEC 947-1 Annex K ed 5.2                                                                                                                                                                                        |
| Electrical durability                  | 10000 cycles IEC 947-1 Annex K ed 5.2 440 V In                                                                                                                                                                               |
| Connection pitch                       | 1.06 in (27 mm)                                                                                                                                                                                                              |
| AWG gauge                              | AWG 14...AWG 2/0 aluminium/copper                                                                                                                                                                                            |
| Local signalling                       | Presence of auxiliary contacts flag green)                                                                                                                                                                                   |
| Mounting mode                          | I-Line                                                                                                                                                                                                                       |
| Electrical connection                  | I-Line connection, line<br>Lugs, load                                                                                                                                                                                        |
| Mounting height                        | 3.00 in (76.2 mm)                                                                                                                                                                                                            |
| Tightening torque                      | 31.86...38.94 Lbf.in (3.6...4.4 N.m) 0.00...0.01 in <sup>2</sup> (2.5...6 mm <sup>2</sup> ) (AWG 14...AWG 10)<br>44.25...54.87 lbf.in (5...6.2 N.m) 0.02...0.11 in <sup>2</sup> (10...70 mm <sup>2</sup> ) (AWG 8...AWG 2/0) |
| Number of slots                        | 1 auxiliary switch OF plug-in)[RETURN]1 voltage release MN or MX plug-in)                                                                                                                                                    |
| Power wire stripping length            | 0.79 in (20 mm)                                                                                                                                                                                                              |

|                             |                        |
|-----------------------------|------------------------|
| Color                       | Gray RAL 7016)         |
| 9 mm pitches                | 6                      |
| Height                      | 5.39 in (137 mm)       |
| Width                       | 2.13 in (54 mm)        |
| Depth                       | 3.50 in (89 mm)        |
| Net Weight                  | 2.10 lb(US) (0.952 kg) |
| Quantity per Set            | Set of 1               |
| Phase connection            | AB                     |
| Circuit breaker application | HACR rated             |

## Environment

|                                       |                                                                                                       |
|---------------------------------------|-------------------------------------------------------------------------------------------------------|
| Quality labels                        | CE                                                                                                    |
| Standards                             | EN/IEC 60947-2<br>GB 14048.2<br>CSA C22.2 No 5<br>NEMA AB1<br>EN/IEC 60947-5-1<br>NMX J-266<br>UL 489 |
| Product certifications                | UL[RETURN]IEC[RETURN]CCC[RETURN]EAC[RETURN]CSA[RETURN]NOM                                             |
| IP degree of protection               | Front cover IP40 IEC 60529                                                                            |
| IK degree of protection               | IK07 IEC 62262                                                                                        |
| Pollution degree                      | 3 IEC 60947-1                                                                                         |
| Ambient air temperature for operation | -13...158 °F (-25...70 °C)                                                                            |
| Ambient Air Temperature for Storage   | -58...185 °F (-50...85 °C)                                                                            |
| Operating altitude                    | < 6561.68 ft (2000 m) without derating<br>5000 m with derating                                        |

## Ordering and shipping details

|                   |                          |
|-------------------|--------------------------|
| Category          | 01133-BDA I-LINE BREAKER |
| Discount Schedule | DE2                      |
| GTIN              | 3606481151858            |
| Returnability     | Yes                      |
| Country of origin | MX                       |

## Packing Units

|                              |                       |
|------------------------------|-----------------------|
| Unit Type of Package 1       | PCE                   |
| Number of Units in Package 1 | 1                     |
| Package 1 Height             | 4.80 in (12.192 cm)   |
| Package 1 Width              | 7.90 in (20.066 cm)   |
| Package 1 Length             | 11.80 in (29.972 cm)  |
| Package 1 Weight             | 2.91 lb(US) (1.32 kg) |

## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                                                                    |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                                                              |
| California proposition 65  | WARNING: This product can expose you to chemicals including: DINP, which is known to the State of California to cause cancer, and DIDP, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           |  <a href="#">REACH Declaration</a>                                                                                                                                                                                                              |
| EU RoHS Directive          | Compliant  <a href="#">EU RoHS Declaration</a>                                                                                                                                                                                                  |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                                                                |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>                                                                                                                                                                                                         |
| RoHS exemption information |  <a href="#">Yes</a>                                                                                                                                                                                                                            |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                  |

|                             |                                                                                                                              |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------|
| WEEE                        | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
| PVC free                    | Yes                                                                                                                          |
| Halogen content performance | Halogen free product                                                                                                         |