

# Product data sheet

Specifications



Circuit breaker, PowerPacT B, 20A, 4 pole, 600Y/347VAC, 14kA, lugs, thermal magnetic, 80%, control wire ON end

BDL46020LU

Product availability: Non-Stock - Not normally stocked in distribution facility

## Main

|                           |                 |
|---------------------------|-----------------|
| Range                     | PowerPact       |
| Product name              | PowerPact B     |
| Device short name         | BD 020          |
| Product or Component Type | Circuit breaker |
| Device Application        | Distribution    |

## Complementary

|                                        |                                                                                                                                                                                                                                             |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Line Rated Current                     | 20 A                                                                                                                                                                                                                                        |
| Number of Poles                        | 4P                                                                                                                                                                                                                                          |
| Protected poles description            | 4t                                                                                                                                                                                                                                          |
| Control Type                           | Toggle                                                                                                                                                                                                                                      |
| Breaking capacity code                 | D                                                                                                                                                                                                                                           |
| Breaking capacity                      | 25 kA 208Y/120 V AC 50/60 Hz UL 489<br>18 kA 240 V AC 50/60 Hz UL 489<br>Icu 25 kA 480/277 V AC 50/60 Hz UL 489<br>Icu 14 kA 480 V AC 50/60 Hz UL 489<br>18 kA 600Y/347 V AC 50/60 Hz UL 489<br>14 kA 250 V DC UL 489<br>25 kA<br>Icu 18 kA |
| [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-magneticTM-D,                                                                                                                                                                                                                       |
| Continuous current rating              | 80 %                                                                                                                                                                                                                                        |
| [Ui] rated insulation voltage          | 800 V IEC 60947-2                                                                                                                                                                                                                           |
| Trip unit name                         | TM-D                                                                                                                                                                                                                                        |
| Suitability for isolation              | Yes IEC 60947-2                                                                                                                                                                                                                             |
| Utilisation category                   | Category A                                                                                                                                                                                                                                  |
| Mechanical durability                  | 15000 cycles IEC 947-1 Annex K ed 5.2                                                                                                                                                                                                       |
| Electrical durability                  | 10000 cycles IEC 947-1 Annex K ed 5.2 440 V In                                                                                                                                                                                              |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                             |                                                                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Connection pitch            | 1.06 in (27 mm)                                                                                                                            |
| AWG gauge                   | 6 AWG...2/0 AWG fine stranded aluminium/copper<br>14 AWG...3/0 AWG rigid or stranded aluminium/copper                                      |
| Local signalling            | Presence of auxiliary contacts flag green)                                                                                                 |
| Mounting mode               | Clip-on 35 mm symmetrical DIN rail)<br>By screws plate)                                                                                    |
| Electrical connection       | Everlink lug, line<br>Everlink lug, load                                                                                                   |
| Tightening torque           | 44.3 lbf.in (5 N.m) 0.004...0.02 in² (2.5...16 mm²) (14 AWG...4 AWG)<br>79.7 lbf.in (9 N.m) 0.04...0.1 in² (25...95 mm²) (3 AWG...3/0 AWG) |
| Number of slots             | 1 auxiliary switch OF plug-in)<br>1 voltage release MN or MX plug-in)<br>1 alarm switch SD plug-in)                                        |
| Power wire stripping length | 0.8 in (20 mm)                                                                                                                             |
| Color                       | Gray RAL 7016)                                                                                                                             |
| 9 mm pitches                | 12                                                                                                                                         |
| Height                      | 5.4 in (137 mm)                                                                                                                            |
| Width                       | 4.3 in (108 mm)                                                                                                                            |
| Depth                       | 3.1 in (80 mm)                                                                                                                             |
| Product Weight              | 3.177 lb(US) (1.441 kg)                                                                                                                    |
| Quantity per Set            | Set of 1                                                                                                                                   |
| Circuit breaker application | HACR rated                                                                                                                                 |

## Environment

|                                       |                                                                                                       |
|---------------------------------------|-------------------------------------------------------------------------------------------------------|
| Quality labels                        | CE                                                                                                    |
| Standards                             | NMX J-266<br>EN/IEC 60947-5-1<br>CSA C22.2 No 5<br>GB 14048.2<br>UL 489<br>NEMA AB1<br>EN/IEC 60947-2 |
| Product certifications                | UL<br>IEC<br>CCC<br>EAC<br>CSA<br>NOM                                                                 |
| IP degree of protection               | Front cover IP40 IEC 60529                                                                            |
| IK degree of protection               | IK07 conforming to 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

|               |               |
|---------------|---------------|
| GTIN          | 3606481149961 |
| Returnability | No            |

## Packing Units

|                        |                         |
|------------------------|-------------------------|
| Unit Type of Package 1 | PCE                     |
| Nbr. of units in pkg.  | 1                       |
| Package 1 Height       | 4.50 in (11.43 cm)      |
| Package 1 Width        | 5.0 in (12.7 cm)        |
| Package 1 Length       | 8.00 in (20.32 cm)      |
| Package weight(Lbs)    | 3.999 lb(US) (1.814 kg) |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



### Environmental footprint

|                                                        |                                               |
|--------------------------------------------------------|-----------------------------------------------|
| Total lifecycle Carbon footprint                       | 187 kg CO2 eq.                                |
| Carbon footprint of the manufacturing phase [A1 to A3] | 7 kg CO2 eq.                                  |
| Carbon footprint of the distribution phase [A4]        | 0 kg CO2 eq.                                  |
| Carbon footprint of the installation phase [A5]        | 0.4 kg CO2 eq.                                |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 177 kg CO2 eq.                                |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 2 kg CO2 eq.                                  |
| Environmental Disclosure                               | <a href="#">Product Environmental Profile</a> |

## Use Better



### Materials and Substances

|                                        |                                                                                                            |
|----------------------------------------|------------------------------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                                                                        |
| Packaging without single use plastic   | Yes                                                                                                        |
| SCIP Number                            | 42816a74-6c29-4456-9183-8c3fa59a5a4c                                                                       |
| EU RoHS Directive                      | <a href="#">Compliant By Exemption</a>                                                                     |
| REACH Regulation                       | <a href="#">Reference contains Substances of Very High Concern above the threshold</a>                     |
| California proposition 65              | WARNING: Cancer and Reproductive Harm - <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| Halogen content performance            | Halogen free product                                                                                       |
| PVC free                               | Yes                                                                                                        |

## Use Longer



### Lifetime extension

|        |    |
|--------|----|
| Repair | No |
|--------|----|

## Use Again



### Repack and remanufacture

|                               |                                                                                                                                                                                                                  |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclability potential, in % | 55                                                                                                                                                                                                               |
| Circularity Profile           | No need of specific recycling operations                                                                                                                                                                         |
| Take-back                     | No                                                                                                                                                                                                               |
| WEEE Label                    |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |

