

Product data sheet

Specifications



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

BDA24050Y1

Product availability: Stock - Normally stocked in distribution facility

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 25 kA 240 V AC 50/60 Hz UL 489 18 kA 480/277 V AC 50/60 Hz UL 489 18 kA 480 V AC 50/60 Hz UL 489 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 14 kA 500...525 V AC 50/60 Hz IEC 60947-2 18 kA 380...415 V AC 50/60 Hz IEC 60947-2 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

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

Electrical connection	I-Line connection, line Lugs, load
Mounting Height	3.0 in (76.2 mm)
Tightening torque	31.9...38.9 lbf.in (3.6...4.4 N.m) 0.004...0.009 in² (2.5...6 mm²) (AWG 14...AWG 10) 44.3...54.9 lbf.in (5...6.2 N.m) 0.02...0.1 in² (10...70 mm²) (AWG 8...AWG 2/0)
Number of slots	1 auxiliary switch OF plug-in) 1 voltage release MN or MX plug-in)
Power wire stripping length	0.8 in (20 mm)
Color	Gray RAL 7016)
9 mm pitches	6
Height	5.4 in (137 mm)
Width	2.1 in (54 mm)
Depth	3.5 in (89 mm)
Product Weight	2.099 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 GB 14048.2 CSA C22.2 No 5 NEMA AB1 EN/IEC 60947-5-1 NMX J-266 UL 489
Product certifications	UL IEC CCC EAC CSA 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 5000 m with derating

Ordering and shipping details

Category	US10DE201133
Discount Schedule	0DE2
GTIN	3606481151858
Returnability	Yes
Country of origin	MX

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	4.800 in (12.192 cm)
Package 1 Width	7.900 in (20.066 cm)
Package 1 Length	11.800 in (29.972 cm)
Package weight(Lbs)	2.91 lb(US) (1.32 kg)

Contractual warranty

Warranty (in months)	18
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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	142 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]	132 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	2 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

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	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
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 www.P65Warnings.ca.gov
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

Technical Illustration

Dimensions

