

SPLICE BLOCK, CABLE-CABLE, 85 A UL, ALUMINUM

CATALOG NUMBER

SB80AL



nVent ERIFLEX Power Blocks are the main DIN mounted output/input devices for connection between primary and secondary switchboard, or main input/output connection for machine or industrial equipment (such as invertor, air conditioning machines, etc.). The high short circuit rated large cross section blocks offer time savings and reliability in every panel configuration. The complete Power Blocks range offers multiple connection types with up to four cables, nVent ERIFLEX Flexibar Advanced, or IBS/IBSB Advanced power braids.

CERTIFICATIONS



FEATURES

Can be connected with round cross section cable or flat connection system like nVent ERIFLEX Flexibar Advanced or IBS/IBSB Advanced Insulated Braided Conductor

Compact power block with high short circuit current rating

Tinned copper or aluminum block allows for copper or aluminum conductor direct connections, or using ferrule

Screw retaining cover is hinged and removable

Design allows for visual inspection of conductor and confirmation of connection

Modular snap-together blocks for building multi-pole power blocks

Easily clips onto DIN rail or mounts to panel with screws

Voltage detection and measurement connection

95% fill ratio

RoHS compliant

Conforms to EN 45545 obtaining an HL3 classification for chapter R23 and HL2 classification for chapter R22

Halogen free plastic housing excluding the blue protection cover

PRODUCT ATTRIBUTES

Article Number: 561160

Type: CableTypical Application Current Rating, UL: 85 AMaterial: Aluminum; ThermoplasticLine Side Max Conductor Size, UL: #4Load Side Max Conductor Size, UL: #4Short Term Withstand Current (icw) 1s: 3 kAMax Current Rating, IEC: 105 AMax Current Rating, UL/CSA: 85 APeak Short Circuit Current (ipk): 22 kARated Conditional Short-Circuit Current (icc): 11 kAShort Circuit Current Rating (SCCR): 100 kAMax Working Voltage, IEC (U): 1000; 1500Max Working Voltage, UL (Yin): 1000Line Side Compact Stranded Wire Size: 6 - 16 mm?, #16 - #4Line Side Compact Stranded Wire Size: 6 - 16 mm?, #16 - #4Load Side Number of Connections: 1Load Side Solid Wire Size: 2.5 - 6 mm?, #16 - #10Load Side Solid Wire Size: 2.5 - 6 mm?, #16 - #14Load Side Solid Wire Size: 2.5 - 6 mm?, #16 - #14Load Side Solid Wire Size: 2.5 - 6 mm?, #16 - #10Load Side Stranded Wire Size: 6 - 16 mm²Load Side Stranded Wire Size: 6 - 16 mm²Height: 3.3'With: U.6.9'Line Side Solid Wire Size: 2.5 - 6 mm?, #16 - #10Load Side Stranded Wire Size: 6 - 16 mm²Load Side Stranded Wire Size: 6 - 16 mm²Line Side Solid Wire Size: 2.5 - 6 mm?, #16 - #10Load Side Solid Wire Size: 2.5 - 6 mm?, #16 - #10Load Side Solid Wire Size: 2.5 - 6 mm?, #16 - #10Load Side Solid Wire Size: 2.5 - 6 mm?, #16 - #10Load Side Solid Wire Size: 2.5 - 6 mm?, #16 - #10Load Side Solid Wire Size: 2.5 - 6 mm?, #16 - #10Load Side Solid Wire Size: 2.5 - 6 mm?, #16 - #10Line Side Solid Wire S	Finish: Tinned
Atternation Haterial: Aluminum; Thermoplastic Line Side Max Conductor Size, UL: #4 Short Term Withstand Current (Icw) 1s: 3 kA Max Current Rating, IEC: 105 A Max Current Rating, IEC: 201 A Rated Conditional Short-Circuit Current (Icc): 11 kA Short Circuit Current Rating (SCCR): 100 kA Max Working Voltage, IEC (UI): 1000; 1500 Max Working Voltage, UL (Vin): 1000 Line Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Line Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Load Side Solid Wire Size: 2.5 - 6 mm²; #16 - #10 Load Side Solid Wire Size - Ferrule: 6 - 16 mm² Height: 3.3' Widt: 0.68' Line Widt: 0.68 Ib	Type: Cable-Cable
Line Side Max Conductor Size, UL: #4 Load Side Max Conductor Size, UL: #4 Short Term Withstand Current (low) 1s: 3 kA Max Current Rating, IEC: 105 A Max Current Rating, UL/CSA: 85 A Peak Short Circuit Current (lpk): 22 kA Rated Conditional Short-Circuit Current (lcc): 11 kA Short Circuit Current Rating (SCCR): 100 kA Max Working Voltage, IEC (U): 1000; 1500 Max Working Voltage, IEC (U): 1000; 1500 Max Working Voltage, UL (Vin): 1000 Line Side Number of Connections: 1 Line Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Line Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Load Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Load Side Number of Connections: 1 Load Side Solid Wire Size: 2.5 - 6 mm²; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm²; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 0 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 0 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 0 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 0 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 0 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 0 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 0 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 0 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 0 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 0 mm?; #16 - #10 Load Side Solid Wire Size: 2.5 - 0 mm?; #16 - #10 Load Side Solid Wire Size: 3.5 - 0 mm?; #16 - #10 Load Side So	Typical Application Current Rating, UL: 85 A
Load Side Max Conductor Size, UL: #4 Short Term Withstand Current (icw) 1s: 3 kA Max Current Rating, IEC: 105 A Max Current Rating, UL/CSA: 85 A Peak Short Circuit Current (ipk): 22 kA Rated Conditional Short-Circuit Current (icc): 11 kA Short Circuit Current Rating (SCCR): 100 kA Max Working Voltage, IEC (U): 1000; 1500 Max Working Voltage, UL (Vin): 1000 Line Side Number of Connections: 1 Line Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Line Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Load Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Load Side Solid Wire Size: 2.5 - 6 mm²; #16 - #10 Load Side Solid Wire Size: 2.5 - 6 mm²; #16 - #10 Load Side Stranded Wire Size: 6 - 16 mm² Height: 3.3° Width: 0.68° Unit Weight: 0.68° Unit Weight: 0.08 lb Certification Details: UL® 1059 Complies With: IEC® 60947-7-1	Material: Aluminum; Thermoplastic
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Max Current Rating, IEC: 105 A Max Current Rating, UL/CSA: 85 A Peak Short Circuit Current (lpk): 22 kA Rated Conditional Short-Circuit Current (lcc): 11 kA Short Circuit Current Rating (SCCR): 100 kA Max Working Voltage, IEC (UI): 1000; 1500 Max Working Voltage, UL (Vin): 1000 Line Side Number of Connections: 1 Line Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Line Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Load Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Load Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Load Side Solid Wire Size: 2.5 - 6 mm²; #16 - #10 Load Side Stranded Wire Size: 6 - 16 mm²; #16 - #4 Load Side Stranded Wire Size: 5.5 - 6 mm²; #16 - #10 Load Side Stranded Wire Size: 5.5 - 6 mm²; #16 - #10 Load Side Stranded Wire Size: 5.5 - 6 mm²; #16 - #10 Load Side Stranded Wire Size: 6.6 - 16 mm² Width: 0.68' Width: 0.68' Unit Weight: 0.08 lb Certification Details: ULØ 1059 Complies With: IECØ 60947-71	Load Side Max Conductor Size, UL: #4
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Rated Conditional Short-Circuit Current (Icc): 11 kAShort Circuit Current Rating (SCCR): 100 kAMax Working Voltage, IEC (Ui): 1000; 1500Max Working Voltage, UL (Vin): 1000Line Side Number of Connections: 1Line Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4Load Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4Load Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4Load Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4Load Side Solid Wire Size: 2.5 - 6 mm²; #16 - #10Load Side Solid Wire Size: 2.5 - 6 mm²; #16 - #10Load Side Stranded Wire Size - Ferrule: 6 - 16 mm²Height: 3.3°Width: 0.68°Unit Weight: 0.08 lbCertification Details: UL® 1059Complies With: IEC@ 60947-7-1Enclosure Rating: IP 20	Max Current Rating, UL/CSA: 85 A
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Max Working Voltage, IEC (Ui): 1000; 1500 Max Working Voltage, UL (Vin): 1000 Line Side Number of Connections: 1 Line Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Line Side Solid Wire Size: 2.5 - 6 mm²; #16 - #10 Load Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4 Load Side Number of Connections: 1 Load Side Solid Wire Size: 2.5 - 6 mm²; #16 - #10 Load Side Stranded Wire Size: 2.5 - 6 mm²; #16 - #10 Load Side Stranded Wire Size: 5.5 - 6 mm²; #16 - #10 Load Side Stranded Wire Size: 5.5 - 6 mm²; #16 - #10 Load Side Stranded Wire Size: 6.16 mm² Height: 3.3° Width: 0.68° Unit Weight: 0.08 lb Certification Details: UL@ 1059 Complies With: IEC@ 60947-7-1 Enclosure Rating: IP 20	Rated Conditional Short-Circuit Current (Icc): 11 kA
Max Working Voltage, UL (Vin): 1000 Line Side Number of Connections: 1 Line Side Compact Stranded Wire Size: 6 - 16 mm ² ; #16 - #4 Line Side Solid Wire Size: 2.5 - 6 mm ² ; #16 - #10 Load Side Compact Stranded Wire Size: 6 - 16 mm ² ; #16 - #4 Load Side Solid Wire Size: 2.5 - 6 mm ² ; #16 - #10 Load Side Stranded Wire Size: 7 - 6 mm ² ; #16 - #10 Load Side Stranded Wire Size - Ferrule: 6 - 16 mm ² Depth: 1.65 [°] Height: 3.3 [°] Width: 0.68 [°] Unit Weight: 0.08 lb Certification Details: UL @ 1059 Complies With: IEC@ 60947-7-1	Short Circuit Current Rating (SCCR): 100 kA
Line Side Number of Connections: 1 Line Side Compact Stranded Wire Size: 6 - 16 mm ² ; #16 - #4 Line Side Solid Wire Size: 2.5 - 6 mm ² ; #16 - #10 Load Side Compact Stranded Wire Size: 6 - 16 mm ² ; #16 - #4 Load Side Solid Wire Size: 2.5 - 6 mm ² ; #16 - #10 Load Side Stranded Wire Size - Ferrule: 6 - 16 mm ² Depth: 1.65° Height: 3.3° Width: 0.68° Unit Weight: 0.08 lb Certification Details: UL® 1059 Complies With: IEC® 60947-7-1	Max Working Voltage, IEC (Ui): 1000; 1500
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Load Side Compact Stranded Wire Size: 6 - 16 mm ² ; #16 - #4 Load Side Number of Connections: 1 Load Side Solid Wire Size: 2.5 - 6 mm ² ; #16 - #10 Load Side Stranded Wire Size - Ferrule: 6 - 16 mm ² Depth: 1.65" Height: 3.3" Height: 3.3" Width: 0.68" Unit Weight: 0.08 lb Certification Details: UL® 1059 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Line Side Compact Stranded Wire Size: 6 - 16 mm²; #16 - #4
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Unit Weight: 0.08 lb Certification Details: UL® 1059 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Height: 3.3"
Certification Details: UL® 1059 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Width: 0.68"
Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Unit Weight: 0.08 lb
Enclosure Rating: IP 20	Certification Details: UL® 1059
-	Complies With: IEC® 60947-7-1
Flammability Rating: UL® 94V-0	Enclosure Rating: IP 20
	Flammability Rating: UL® 94V-0

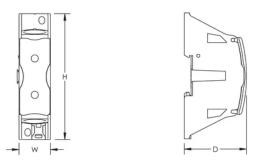
ADDITIONAL PRODUCT DETAILS

SBF250 is UL® 1953 Listed when used with SB250SPCR. Max Working Voltage for UL 1953 applications is 1250 VAC/DC.

Blue protection cover is less than 7% of the overall product weight.

Design Guideline for Distribution Blocks, Power Blocks and Power Terminals											
Derating according to Ambient* T	emperature	(°F) to mai	ntain workin	g temperati	ure of 185°F	;					
Ambient Temperature (°F)	86°	95°	104°	113°	122°	131°	140°	149°	158°	167°	
Derating Coefficient (d)	1	1	1	0.94	0.88	0.82	0.75	0.67	0.58	0.47	

DIAGRAMS



WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at www.nvent.com and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

North America

+1.800.753.9221 Option 1 - Customer Care Option 2 - Technical Support

Europe Netherlands: +31 800-0200135 France: +33 800 901 793

Europe

Germany: 800 1890272 Other Countries: +31 13 5835404

APAC

Shanghai: + 86 21 2412 1618/19 Sydney: +61 2 9751 8500



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nVent reserves the right to change specifications without notice.