

# Power Block

## Data Solutions



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 inverter, 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 IBSB Advanced power braids.

### CERTIFICATIONS



### FEATURES

Can be connected with round cross section cable or flat connection system like nVent ERIFLEX Flexibar Advanced or 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

## SPECIFICATIONS

**Finish:** Tinned

Table 1/2

Catalog Number	Article Number	Type	Typical Application Current Rating, IEC	Material	Line Side Max Conductor Size, IEC	Load Side Max Conductor Size, IEC
SB2C1000AL	561174	Cable-2 Cables	1000A	Aluminum, Thermoplastic	500 mm <sup>2</sup>	(2) 300 mm <sup>2</sup>
SB630	561156	Cable-Cable	630A	Copper, Thermoplastic	500 mm <sup>2</sup>	500 mm <sup>2</sup>
SB630AL	561168	Cable-Cable	630A	Aluminum, Thermoplastic	500 mm <sup>2</sup>	500 mm <sup>2</sup>
SBF630AL	561169	Flexibar-Cable	630A	Aluminum, Thermoplastic	240 mm <sup>2</sup>	500 mm <sup>2</sup>
SBF630	561157	Flexibar-Cable	630A	Copper, Thermoplastic	240 mm <sup>2</sup>	500 mm <sup>2</sup>
SB125	561158	Cable-Cable	170A	Copper, Thermoplastic	35 mm <sup>2</sup>	35 mm <sup>2</sup>
SB125AL	561161	Cable-Cable	180A	Aluminum, Thermoplastic	35 mm <sup>2</sup>	35 mm <sup>2</sup>
SB2C2C1000AL	561175	2 Cables-2 Cables	1000A	Aluminum, Thermoplastic	(2) 300 mm <sup>2</sup>	(2) 300 mm <sup>2</sup>
SB80	561150	Cable-Cable	100A	Copper, Thermoplastic	16 mm <sup>2</sup>	16 mm <sup>2</sup>
SB80AL	561160	Cable-Cable	100A	Aluminum, Thermoplastic	16 mm <sup>2</sup>	16 mm <sup>2</sup>
SB160AL	561162	Cable-Cable	230A	Aluminum, Thermoplastic	70 mm <sup>2</sup>	70 mm <sup>2</sup>
SB160	561151	Cable-Cable	250A	Copper, Thermoplastic	70 mm <sup>2</sup>	70 mm <sup>2</sup>
SBF250	561171	Flexibar-Cable	250A	Copper, Thermoplastic	70 mm <sup>2</sup>	120 mm <sup>2</sup>
SB2C250	561170	Cable-2 Cables	400A	Copper, Thermoplastic	120 mm <sup>2</sup>	(2) 120 mm <sup>2</sup>
SB250AL	561163	Cable-Cable	400A	Aluminum, Thermoplastic	120 mm <sup>2</sup>	120 mm <sup>2</sup>
SB250	561159	Cable-Cable	400A	Copper, Thermoplastic	120 mm <sup>2</sup>	120 mm <sup>2</sup>

Catalog Number	Article Number	Type	Typical Application Current Rating, IEC	Material	Line Side Max Conductor Size, IEC	Load Side Max Conductor Size, IEC
SBF2C250	561172	Flexibar-2 Cables	400A	Copper, Thermoplastic	70 mm <sup>2</sup>	(2) 120 mm <sup>2</sup>
SBF2C400	561155	Flexibar-2 Cables	400A	Copper, Thermoplastic	100 mm <sup>2</sup>	(2) 120 mm <sup>2</sup>
SBF400AL	561165	Flexibar-Cable	400A	Aluminum, Thermoplastic	100 mm <sup>2</sup>	240 mm <sup>2</sup>
SB2C400	561154	Cable-2 Cables	400A	Copper, Thermoplastic	240 mm <sup>2</sup>	(2) 120 mm <sup>2</sup>

Table 2/2

Catalog Number	Article Number	Type	Typical Application Current Rating, IEC	Material	Line Side Max Conductor Size, IEC	Load Side Max Conductor Size, IEC
SBF2C400AL	561167	Flexibar-2 Cables	400A	Aluminum, Thermoplastic	100 mm <sup>2</sup>	(2) 120 mm <sup>2</sup>
SBF400	561153	Flexibar-Cable	400A	Copper, Thermoplastic	100 mm <sup>2</sup>	240 mm <sup>2</sup>
SB2C400AL	561166	Cable-2 Cables	400A	Aluminum, Thermoplastic	240 mm <sup>2</sup>	(2) 120 mm <sup>2</sup>
SB400	561152	Cable-Cable	500A	Copper, Thermoplastic	240 mm <sup>2</sup>	240 mm <sup>2</sup>
SB400AL	561164	Cable-Cable	500A	Aluminum, Thermoplastic	240 mm <sup>2</sup>	240 mm <sup>2</sup>
SBF2C630AL	561173	Flexibar-2 Cables	800A	Aluminum, Thermoplastic	240 mm <sup>2</sup>	240 mm <sup>2</sup>
SBF3C1000AL	561176	Flexibar-3 Cables	1000A	Aluminum, Thermoplastic	500 mm <sup>2</sup>	(3) 300 mm <sup>2</sup>
SBF4C1600AL	561177	Flexibar-4 Cables	1600A	Aluminum, Thermoplastic	800 mm <sup>2</sup>	(4) 300 mm <sup>2</sup>

Table 1/2

Catalog Number	Article Number	Short Term Withstand Current (I <sub>cw</sub> ) 1s	Certifications
SB2C1000AL	561174	72kA	RoHS, UL, cUL, QPQS7.E497276, CE, ERIFLEX SB
SB630	561156	60kA	CE, ERIFLEX SB, UR, RoHS

Catalog Number	Article Number	Short Term Withstand Current (Icw) 1s	Certifications
SB630AL	561168	60kA	RoHS, cUR, CE, ERIFLEX SB, UR
SBF630AL	561169	60kA	UR, CE, ERIFLEX SB, cUR, RoHS
SBF630	561157	60kA	UR, CE, ERIFLEX SB, RoHS
SB125	561158	6kA	UR, CE, ERIFLEX SB, RoHS
SB125AL	561161	6kA	RoHS, cUR, UR, CE, ERIFLEX SB
SB2C2C1000AL	561175	72kA	RoHS, UL, cUL, QPQS7.E497276, CE, ERIFLEX SB
SB80	561150	3kA	CE, ERIFLEX SB, UR, RoHS
SB80AL	561160	3kA	RoHS, CE, ERIFLEX SB, UR, cUR
SB160AL	561162	14.4kA	RoHS, CE, ERIFLEX SB, UR, cUR
SB160	561151	14.4kA	UR, CE, ERIFLEX SB, RoHS
SBF250	561171	14.4kA	cUL, QPQS7.E497276, UL, RoHS, CE, ERIFLEX SB, UR
SB2C250	561170	14.4kA	CE, ERIFLEX SB, cUL, QPQS7.E497276, RoHS, UL
SB250AL	561163	14.4kA	CE, ERIFLEX SB, UR, cUR, RoHS
SB250	561159	14.4kA	RoHS, CE, ERIFLEX SB, UR
SBF2C250	561172	14.4kA	CE, ERIFLEX SB, cUL, QPQS7.E497276, UL, RoHS
SBF2C400	561155	28.8kA	RoHS, UR, CE, ERIFLEX SB
SBF400AL	561165	28.8kA	RoHS, UR, CE, ERIFLEX SB, cUR
SB2C400	561154	28.8kA	UR, CE, ERIFLEX SB, RoHS

Table 2/2

Catalog Number	Article Number	Short Term Withstand Current (Icw) 1s	Certifications
SBF2C400AL	561167	28.8kA	RoHS, cUR, UR, CE, ERIFLEX SB
SBF400	561153	28.8kA	UR, CE, ERIFLEX SB, RoHS
SB2C400AL	561166	28.8kA	RoHS, UR, CE, ERIFLEX SB, cUR
SB400	561152	28.8kA	RoHS, CE, ERIFLEX SB, UR

Catalog Number	Article Number	Short Term Withstand Current (Icw) 1s	Certifications
SB400AL	561164	28.8kA	CE, ERIFLEX SB, UR, cUR, RoHS
SBF2C630AL	561173	60kA	CE, ERIFLEX SB, UL, RoHS, cUL, QPQS7.E497276
SBF3C1000AL	561176	72kA	cUL, QPQS7.E497276, UL, RoHS, CE, ERIFLEX SB
SBF4C1600AL	561177	96kA	UL, RoHS, cUL, QPQS7.E497276, CE, ERIFLEX SB

## 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* Temperature (°C) to maintain working temperature of 85°C										
Ambient Temperature (°C)	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°
Derating Coefficient (d)	1	1	1	0.94	0.88	0.82	0.75	0.67	0.58	0.47
*environment around the terminal blocks inside the enclosure										

## 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](http://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.



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