

# **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 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 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	Туре	Typical Application Current Rating, IEC		Line Side Max Conductor Size, IEC	Load Side Max Conductor Size, IEC	
SB125AL	561161	Cable-Cable	180A	Aluminum, Thermoplastic	35 mm²	35 mm²	
SB80	561150	Cable-Cable	100A	Copper, Thermoplastic	16 mm²	16 mm²	
SB80AL	561160	Cable-Cable	100A	Aluminum, Thermoplastic	16 mm²	16 mm²	
SB125	561158	Cable-Cable	170A	Copper, Thermoplastic	35 mm²	35 mm²	
SB160AL	561162	Cable-Cable	230A	Aluminum, Thermoplastic	70 mm²	70 mm²	
SB250AL	561163	Cable-Cable	400A	Aluminum, Thermoplastic	120 mm²	120 mm²	
SB160	561151	Cable-Cable	250A	Copper, Thermoplastic	70 mm²	70 mm²	
SB400AL	561164	Cable-Cable	500A	Aluminum, Thermoplastic	240 mm²	240 mm²	
SBF250	561171	Flexibar-Cable	250A	Copper, Thermoplastic	70 mm²	120 mm²	
SBF400AL	561165	Flexibar-Cable	400A	Aluminum, Thermoplastic	100 mm²	240 mm²	
SB250	561159	Cable-Cable	400A	Copper, Thermoplastic	120 mm²	120 mm²	
SB2C400AL	561166	Cable-2 Cables	400A	Aluminum, Thermoplastic	240 mm²	(2) 120 mm <sup>2</sup>	
SBF2C400AL	561167	Flexibar-2 Cables	400A	Aluminum, Thermoplastic	100 mm²	(2) 120 mm <sup>2</sup>	
SB2C250	561170	Cable-2 Cables	400A	Copper, Thermoplastic	120 mm²	(2) 120 mm <sup>2</sup>	

CatalogNumber	Article Number	Туре	Typical Application Current Rating, IEC	Material	Line Side Max ConductorSize, IEC	Load Side Max ConductorSize, IEC	
SBF2C250	561172	Flexibar-2 Cables	400A	Copper, Thermoplastic	70 mm²	(2) 120 mm <sup>2</sup>	
SB400	561152	Cable-Cable	500A	Copper, Thermoplastic	240 mm²	240 mm²	
SBF400	561153	Flexibar-Cable	400A	Copper, Thermoplastic	100 mm²	240 mm²	
SB630AL	561168	Cable-Cable	630A	Aluminum, Thermoplastic	500 mm²	500 mm²	
SBF630AL	561169	Flexibar-Cable	630A	Aluminum, Thermoplastic	240 mm²	500 mm²	
SBF2C630AL	561173	Flexibar-2 Cables	800A	Aluminum, Thermoplastic	240 mm²	240 mm²	
SB2C2C1000AL	561175	2 Cables-2 Cables	1000A	Aluminum, Thermoplastic	(2) 300 mm <sup>2</sup>	(2) 300 mm <sup>2</sup>	
SB2C400	561154	Cable-2 Cables	400A	Copper, Thermoplastic	240 mm²	(2) 120 mm <sup>2</sup>	
SB2C1000AL	561174	Cable-2 Cables	1000A	Aluminum, Thermoplastic	500 mm²	(2) 300 mm <sup>2</sup>	
SBF2C400	561155	Flexibar-2 Cables	400A	Copper, Thermoplastic	100 mm²	(2) 120 mm <sup>2</sup>	
SBF3C1000AL	561176	Flexibar-3 Cables	1000A	Aluminum, Thermoplastic 500 mm²		(3) 300 mm <sup>2</sup>	
SB630	561156	Cable-Cable	630A	Copper, Thermoplastic	500 mm²	500 mm²	
SBF4C1600AL	561177	Flexibar-4 Cables	1600A	Aluminum, Thermoplastic	800 mm²	(4) 300 mm <sup>2</sup>	
SBF630	561157	Flexibar-Cable	630A	Copper, Thermoplastic	240 mm²	500 mm²	

Table 2/2							
Catalog Number	Article Number	Short Term Withstand Current (Icw) 1s	Certifications				
SB125AL	561161	6kA	UR, RoHS, CE, ERIFLEX SB, cUR				
SB80	561150	3kA	RoHS, UR, CE, ERIFLEX SB				

Catalog Number	Article Number	Short Term Withstand Current (Icw) 1s	Certifications		
SB80AL	561160	3kA	RoHS, UR, cUR, CE, ERIFLEX SB		
SB125	561158	6kA	CE, ERIFLEX SB, UR, RoHS		
SB160AL	561162	14.4kA	UR, cUR, RoHS, CE, ERIFLEX SB		
SB250AL	561163	14.4kA	cUR, UR, RoHS, CE, ERIFLEX SB		
SB160	561151	14.4kA	RoHS, CE, ERIFLEX SB, UR		
SB400AL	561164	28.8kA	UR, CE, ERIFLEX SB, cUR, RoHS		
SBF250	561171	14.4kA	UL, UR, cUL, QPQS7.E497276, CE, ERIFLEX SB, RoHS		
SBF400AL	561165	28.8kA	RoHS, CE, ERIFLEX SB, UR, cUR		
SB250	561159	14.4kA	UR, RoHS, CE, ERIFLEX SB		
SB2C400AL	561166	28.8kA	cUR, RoHS, UR, CE, ERIFLEX SB		
SBF2C400AL	561167	28.8kA	cUR, UR, RoHS, CE, ERIFLEX SB		
SB2C250	561170	14.4kA	RoHS, CE, ERIFLEX SB, UL, cUL, QPQS7.E497276		
SBF2C250	561172	14.4kA	RoHS, UL, cUL, QPQS7.E497276, CE, ERIFLEX SB		
SB400	561152	28.8kA	RoHS, UR, CE, ERIFLEX SB		
SBF400	561153	28.8kA	RoHS, CE, ERIFLEX SB, UR		
SB630AL	561168	60kA	RoHS, UR, CE, ERIFLEX SB, cUR		
SBF630AL	561169	60kA	CE, ERIFLEX SB, cUR, UR, RoHS		
SBF2C630AL	561173	60kA	UL, cUL, QPQS7.E497276, RoHS, CE, ERIFLEX SB		

Catalog Number	Article Number	Short Term Withstand Current (Icw) 1s	Certifications
SB2C2C1000AL	561175	72kA	UL, cUL, QPQS7.E497276, RoHS, CE, ERIFLEX SB
SB2C400	561154	28.8kA	RoHS, UR, CE, ERIFLEX SB
SB2C1000AL	561174	72kA	UL, cUL, QPQS7.E497276, RoHS, CE, ERIFLEX SB
SBF2C400	561155	28.8kA	RoHS, CE, ERIFLEX SB, UR
SBF3C1000AL	561176	72kA	CE, ERIFLEX SB, UL, cUL, QPQS7.E497276, RoHS
SB630	561156	60kA	RoHS, UR, CE, ERIFLEX SB
SBF4C1600AL	561177	96kA	UL, cUL, QPQS7.E497276, RoHS, CE, ERIFLEX SB
SBF630	561157	60kA	RoHS, CE, ERIFLEX SB, UR

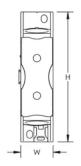
### ADDITIONAL PRODUCT DETAILS

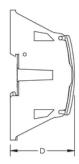
 $SBF250 is \ UL \$ \ 1953 \ Listed \ when \ used \ with \ SB250 SPCR. \ Max \ Working \ Voltage \ for \ UL \ 1953 \ applications \ is \ 1250 \ VAC/DC.$ 

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 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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