We connect and protect

# Power Block, Cable-Cable, 400 A IEC, Aluminum

## Data Solutions

### CATALOG NUMBER

**SB250AL**

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

Halogen free plastic housing excluding the blue protection cover

## PRODUCT ATTRIBUTES

Article Number: 561163

Finish: Tinned

Type: Cable-Cable

Typical Application Current Rating, IEC: 400A

Material: Aluminum; Thermoplastic

Line Side Max Conductor Size, IEC: 120 mm²

Load Side Max Conductor Size, IEC: 120 mm²

Short Term Withstand Current (Icw) 1s: 14.4kA

Max Current Rating, IEC: 400A

Max Current Rating, UL/CSA: 255A

Peak Short Circuit Current (Ipk): 42kA

Rated Conditional Short-Circuit Current (Icc): 20kA

Short Circuit Current Rating (SCCR): 100kA

Max Working Voltage, IEC (Ui): 1000; 1500

Max Working Voltage, UL (Vin): 1250

Line Side Number of Connections: 1

Line Side Compact Stranded Wire Size: 35 - 120 mm²; #6 - 250 kcmil

Load Side Compact Stranded Wire Size: 35 - 120 mm²; #6 - 250 kcmil

Load Side Number of Connections: 1

Load Side Stranded Wire Size - Ferrule: 35 - 120 mm²

Depth (D): 58mm

Height (H): 111mm

Width (W): 31.5mm

Unit Weight: 0.13kg

Certification Details: UL® 1059

Complies With: IEC® 60947-7-1

Enclosure Rating: IP 20

Flammability Rating: UL® 94V-0

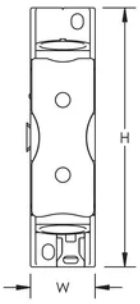
## ADDITIONAL PRODUCT DETAILS

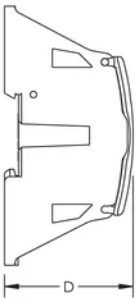
SBF250 is UL® 1953 Listed when used with SB250SPCR. Max Working Voltage for UL 1953 applications is 1250 VAC/DC.

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* 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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