We connect and protect

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

Data Solutions

CATALOG NUMBER

SBF400AL

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: 561165

Finish: Tinned

Type: Flexibar-Cable

Typical Application Current Rating, IEC: 400A

Material: Aluminum; Thermoplastic

Line Side Max Conductor Size, IEC: 100 mm²

Load Side Max Conductor Size, IEC: 240 mm²

Short Term Withstand Current (Icw) 1s: 28.8kA

Max Current Rating, Insulated Power Braid, IEC: 450A

Max Current Rating, Insulated Power Braid, UL/CSA: 240A

Max Current Rating, nVent ERIFLEX Flexibar, IEC: 510A

Max Current Rating, nVent ERIFLEX Flexibar, UL/CSA: 335A

Peak Short Circuit Current (Ipk): 51kA

Rated Conditional Short-Circuit Current (Icc): 24.3kA

Short Circuit Current Rating (SCCR): 100kA

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

Max Working Voltage, UL (Vin): 1000

Line Side Number of Connections: 1

Line Side Insulated Power Braid Cross Section: 100mm²

Line Side nVent ERIFLEX Flexibar Size: 2x20x1 - 5x24x1

Load Side Compact Stranded Wire Size: 95 - 240 mm²

Load Side Number of Connections: 1

Load Side Wire Size: 3/0 – 400 kcmil

Depth (D): 82mm

Height (H): 146.4mm

Width (W): 41.5mm

Unit Weight: 0.27kg

Certification Details: UL® 1059

Complies With: IEC® 60947-7-1

Enclosure Rating: IP 20

Flammability Rating: UL® 94V-0

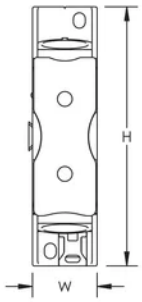
ADDITIONAL PRODUCT DETAILS

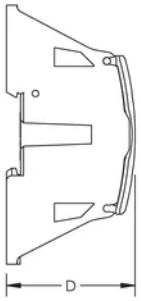
SBF250 is UL® 1953 Listed when used with SB250SPCR. Max Working Voltage for UL 1953 applications is 1250 VAC/DC.

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.

©2026 nVent. All nVent marks and logos are owned or licensed by nVent Services GmbH or its affiliates. All other trademarks are the property of their respective owners. nVent reserves the right to change specifications without notice.

This document is system-generated.