

POWER BLOCK, FLEXIBAR-2 CABLES, 800 A IEC, ALUMINUM

CATALOG NUMBER

SBF2C630AL



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

Finish: Tinned Typical Application Current Rating, IEC: 800A Material: Auminum; Thermoplastic Line Side Max Conductor Size, IEC: 240 mm ³ Load Side Max Conductor Size, IEC: 240 mm ³ Short Term Withstand Current (Icw) 1s: 60kA Max Current Rating, Insulated Power Braid, IEC: 910A Max Current Rating, UL/CSA: 760A Peak Short Circuit Current (Icw): 52kA Rated Conditional Short-Circuit Current (Icc): 24.8kA Short Circuit Current Rating (SCCR): 100kA Max Working Voltage, IEC (U): 1000; 1500 Max Working Voltage, IEC (U): 1000; 1500 Line Side Insulated Power Braid Cross Section: 240mm ³ Line Side Number of Connections: 1 Line Side Insulated Power Braid Cross Section: 240mm ³ Line Side Number of Connections: 1 Line Side Insulated Power Braid Cross Section: 240mm ³ Line Side Insulated Power Braid Cross Section: 240mm ³ Line Side Insulated Power Braid Cross Section: 240mm ³ Line Side Insulated Power Braid Cross Section: 240mm ³ Line Side Insulated Power Braid Cross Section: 240mm ³ Line Side Insulated Power Braid Cross Section: 240mm ³ Line Side Insulated Wire Size: (2) 35 - 240 mm ³ Line Side Insulated Wire Size: (2) 35 - 240 mm ³ Line Side Wire	Article Number: 561173
Typical Application Current Rating, IEC: 800A Material: Aluminum; Thermoplastic Line Side Max Conductor Size, IEC: 240 mm ⁹ Load Side Max Conductor Size, IEC: 240 mm ⁹ Short Term Withstand Current (lew) 1s: 60kA Max Current Rating, Insulated Power Braid, IEC: 910A Max Current Rating, Nent ERFLEX Flexibar, IEC: 930A Max Current Rating, UL/CSA: 760A Peak Short Circuit Current (lpk): 52kA Rated Conditional Short-Circuit Current (lcc): 24.8kA Short Circuit Current Rating (SCCR): 100kA Max Working Valtage, IEC (U): 1000; 1500 Max Working Valtage, IEC (U): 1000; 1500 Max Working Valtage, UL (Vin). 1000 Line Side Insulated Power Braid Cross Section: 240mm ³ Line Side Insulated Power Braid Cross Section: 240mm ³ Line Side Number of Connections: 1 Line Side ONpact Stranded Wire Size: (2) 35 - 240 mm ³ Load Side Ornaect Ornaections: 2 Load Side Wire Size: + Ferrule: (2) 35 - 240 mm ³ Load Side Wire Size: (2) 42 - 500 kcmil Load Side Wire Size: (2) 42 - 500 kcmil Load Side Wire Size: (2) 42 - 500 kcmil Load Side Wire Size: (2) 42 - 500 kcmil Load Side Wire Size: (2) 42 - 500 kcmil Load Side Wire Size: (2) 42 -	Finish: Tinned
Material Auminum; Thermoplastic Line Side Max Conductor Size, IEC: 240 mm³ Load Side Max Conductor Size, IEC: 240 mm³ Short Term Withstand Current (low) 1s: 60kA Max Current Rating, Insulated Power Braid, IEC: 910A Max Current Rating, Insulated Power Braid, IEC: 910A Max Current Rating, UL/CSA: 760A Peak Short Circuit Current (lick): 52kA Rated Conditional Short-Circuit Current (licc): 24.8kA Short Circuit Current Rating (SCCR): 100kA Max Working Voltage, IEC (U): 1000; 1500 Max Working Voltage, IEC (U): 1000; 1500 Max Working Voltage, UL (Vin): 1000 Line Side Insulated Power Braid Cross Section: 240mm? Line Side Insulated Power Braid Cross Section: 240mm? Line Side Compact Stranded Wire Size: (2) 35 - 240 mm² Load Side Compact Stranded Wire Size: (2) 35 - 240 mm² Load Side Stranded Wire Size: (2) 35 - 240 mm² Load Side Stranded Wire Size: (2) 35 - 240 mm² Load Side Stranded Wire Size: (2) 35 - 240 mm² Load Side Wire Size: (2) #2 - 500 kcmil Depth (D): 103mm Height (H): 191mm Width (W): 54mm Unit Weight: 0. 68kg Certification Details: ULØ 1953 Complies With: IECØ 60947-71 Enclosuu	Type: Flexibar-2 Cables
Line Side Max Conductor Size, IEC: 240 mm ⁴ Load Side Max Conductor Size, IEC: 240 mm ⁴ Short Term Withstand Current (icw) 1s: 60kA Max Current Rating, Insulated Power Braid, IEC: 910A Max Current Rating, UL/CSA: 760A Peak Short Circuit Current (ipk): 52kA Rated Conditional Short-Circuit Current (icc): 24.8kA Short Circuit Current Rating (SCCR): 100kA Max Working Voltage, IEC (UI): 1000, 1500 Max Working Voltage, IEC (UI): 1000 Line Side Number of Connections: 1 Line Side Insulated Power Braid Cross Section: 240mm ⁹ Line Side nVent ERIFLEX Flexibar Size: 2x20x1 - 8x32x1 Line Side Orgen Stranded Wire Size: (2) 35 - 240 mm ⁹ Load Side Compact Stranded Wire Size: (2) 35 - 240 mm ⁹ Load Side Stranded Wire Size (2) 35 - 240 mm ⁹ Load Side Stranded Wire Size (2) 35 - 240 mm ⁹ Load Side Stranded Wire Size (2) 35 - 240 mm ⁹ Load Side Stranded Wire Size (2) 35 - 240 mm ⁹ Load Side Stranded Wire Size (2) 35 - 240 mm ⁹ Load Side Stranded Wire Size (2) 42 - 500 komil Depth (D): 103mm Height (H): 191 mm Width (W): 54mm Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947.7.1 Enclosure Rating: IP 20	Typical Application Current Rating, IEC: 800A
Load Side Max Conductor Size, IEC: 240 mm²Short Term Withstand Current (Icw) 1s: 60kAMax Current Rating, Insulated Power Braid, IEC: 910AMax Current Rating, NULCSA: 760APeak Short Circuit Current (Ipk): 52kARated Conditional Short-Circuit Current (Icc): 24.8kAShort Circuit Current Rating (SCCR): 100kAMax Working Voltage, IEC (U): 1000; 1500Max Working Voltage, UL (Vin): 1000Line Side Insulated Power Braid (Toss Section: 240mm²Line Side Number of Connections: 1Line Side Number of Connections: 2Lad Side Owner Size: 2x20x1 · 8x32x1Line Side Number of Connections: 2Load Side Stranded Wire Size · 52.00 kcmilLeegth (D): 103mmHeight (H): 191mmWidth (W): 54mmUnit Weight: 0.68kgCertification Details: UL® 1953Complies With: IEC® 60947-7.1Enclosure Rating: IP 20	Material: Aluminum; Thermoplastic
Short Term Withstand Current (Icw) 1s: 60kAMax Current Rating, Insulated Power Braid, IEC: 910AMax Current Rating, Nvent ERIFLEX Flexibar, IEC: 930AMax Current Rating, UL/CSA: 760APeak Short Circuit Current (Ipk): 52kARated Conditional Short-Circuit Current (Icc): 24.8kAShort Circuit Current Rating (SCCR): 100kAMax Working Voltage, IEC (UI): 1000Max Working Voltage, IEC (UI): 1000Line Side Number of Connections: 1Line Side Insulated Power Braid Cross Section: 240mm²Line Side Competer Strahed Wire Size: (2) 35 - 240 mm²Load Side Competer Strahed Wire Size: (2) 35 - 240 mm²Load Side Wire Size: (2) #2 - 500 kcmilPepth (D): 103mmHeight (H): 191mmWidt (W): 54mmUnit Weight: 0.68kgCertification Details: UL® 1953Complies With: IEC® 60947-7-1Enclosure Rating: IP 20	Line Side Max Conductor Size, IEC: 240 mm ²
Max Current Rating, Insulated Power Braid, IEC: 910AMax Current Rating, Nvent ERIFLEX Flexibar, IEC: 930AMax Current Rating, UL/CSA: 760APeak Short Circuit Current (Ipk): 52kARated Conditional Short-Circuit Current (Icc): 24.8kAShort Circuit Current Rating (SCCR): 100kAMax Working Voltage, IEC (UI): 1000: 1500Max Working Voltage, UL (Vin): 1000Line Side Number of Connections: 1Line Side Insulated Power Braid Cross Section: 240mm²Line Side DLO Wire Size: 22.2021 - 8x32x1Line Side DLO Wire Size: 22.2021 - 8x32x1Line Side Compact Stranded Wire Size: (2) 35 - 240 mm²Load Side Wire Size: (2) #2 - 500 kcmilDepth (D): 103mmHeight (H): 191mmWidth (W): 54mmUnit Weight: 0.68kgCertification Details: UL@ 1953Complies With: IEC@ 60947-7.1Enclosure Rating: IP 20	Load Side Max Conductor Size, IEC: 240 mm²
Max Current Rating, nVent ERIFLEX Flexibar, IEC: 930AMax Current Rating, UL/CSA: 760APeak Short Circuit Current (lpk): 52kARated Conditional Short-Circuit Current (lcc): 24.8kAShort Circuit Current Rating (SCCR): 100kAMax Working Voltage, IEC (UI): 1000; 1500Max Working Voltage, UL (Vin): 1000Line Side Number of Connections: 1Line Side Insulated Power Braid Cross Section: 240mm?Line Side Insulated Power Braid Cross Section: 240mm?Line Side DLO Wire Size: #2 - 262 kcmilLoad Side Compact Stranded Wire Size: (2) 35 - 240 mm?Load Side Stranded Wire Size: (2) 35 - 240 mm?Load Side Wire Size: (2) #2 - 500 kcmilDepth (D): 103mmHeight (H): 191mmWidth (W): 54mmUnit Weight: 0.68kgCertification Details: UL® 1953Complies With: IEC® 60947-7-1Enclosure Rating: IP 20	Short Term Withstand Current (Icw) 1s: 60kA
Max Current Rating, UL/CSA: 760APeak Short Circuit Current (lpk): 52kARated Conditional Short-Circuit Current (lcc): 24.8kAShort Circuit Current Rating (SCCR): 100kAMax Working Voltage, IEC (U): 1000; 1500Max Working Voltage, UL (Vin): 1000Line Side Number of Connections: 1Line Side Insulated Power Braid Cross Section: 240mm²Line Side Nvent ERIFLEX Flexibar Size: 2x20x1 - 8x32x1Line Side DLO Wire Size: #2 - 262 kcmilLoad Side Compact Stranded Wire Size: (2) 35 - 240 mm²Load Side Wire Size: (2) #2 - 500 kcmilDepth (D): 103mmHeight (H): 191mmWidth (W): 54mmUnit Weight: 0.68kgCorrification Details: UL@ 1953Corrification Details: UL@ 1953Corrification EI IP 20	Max Current Rating, Insulated Power Braid, IEC: 910A
Peak Short Circuit Current (lpk): 52kARated Conditional Short-Circuit Current (lcc): 24.8kAShort Circuit Current Rating (SCCR): 100kAMax Working Voltage, IEC (UI): 1000; 1500Max Working Voltage, UL (Vin): 1000Line Side Number of Connections: 1Line Side Insulated Power Braid Cross Section: 240mm²Line Side Nower Braid Cross Section: 240mm²Line Side DLO Wire Size: #2 - 262 kcmilLoad Side Compact Stranded Wire Size: (2) 35 - 240 mm²Load Side Number of Connections: 2Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm²Load Side Wire Size: (2) #2 - 500 kcmilDepth (D): 103mmHeight (H): 191mmWidth (W): 54mmUnit Weight: 0.68kgCertification Details: UL@ 1953Complies With: IEC@ 60947-7-1Enclosure Rating: IP 20	Max Current Rating, nVent ERIFLEX Flexibar, IEC: 930A
Rated Conditional Short-Circuit Current (Icc): 24.8kAShort Circuit Current Rating (SCCR): 100kAMax Working Voltage, IEC (U): 1000; 1500Max Working Voltage, UL (Vin): 1000Line Side Number of Connections: 1Line Side Insulated Power Braid Cross Section: 240mm²Line Side nVent ERIFLEX Flexibar Size: 2x20x1 - 8x32x1Line Side DLO Wire Size: #2 - 262 kcmilLoad Side Compact Stranded Wire Size: (2) 35 - 240 mm²Load Side Stranded Wire Size: (2) 35 - 240 mm²Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm²Load Side Kire - Ferrule: (2) 35 - 240 mm²Load Side Wire Size: (2) #2 - 500 kcmilDepth (D): 103mmHeight (H): 191mmWidth (W): 54mmUnit Weight: 0.68kgCertification Details: UL@ 1953Complies With: IEC@ 60947-7-1Enclosure Rating: IP 20	Max Current Rating, UL/CSA: 760A
Short Circuit Current Rating (SCCR): 100kAMax Working Voltage, IEC (UI): 1000, 1500Max Working Voltage, UL (Vin): 1000Line Side Number of Connections: 1Line Side Insulated Power Braid Cross Section: 240mm²Line Side Insulated Power Braid Cross Section: 240mm²Line Side Nvent ERIFLEX Flexibar Size: 2x20x1 - 8x32x1Line Side DLO Wire Size: #2 - 262 kcmilLoad Side Compact Stranded Wire Size: (2) 35 - 240 mm²Load Side Compact Stranded Wire Size: (2) 35 - 240 mm²Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm²Load Side Wire Size: (2) #2 - 500 kcmilDepth (D): 103mmHeight (H): 191mmWidth (W): 54mmUnit Weight: 0.68kgCertification Details: UL® 1953Complies With: IEC® 60947-7-1Enclosure Rating: IP 20	Peak Short Circuit Current (Ipk): 52kA
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: 240mm ² Line Side nVent ERIFLEX Flexibar Size: 2x20x1 - 8x32x1 Line Side DLO Wire Size: #2 - 262 kcmil Load Side Compact Stranded Wire Size: (2) 35 - 240 mm ² Load Side Compact Stranded Wire Size: (2) 35 - 240 mm ² Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm ² Load Side Wire Size: (2) #2 - 500 kcmil Depth (D): 103mm Height (H): 191mm Width (W): 54mm Unit Weight: 0.68kg Certification Details: UL@ 1953 Complies With: IEC@ 60947-7-1 Enclosure Rating: IP 20	Rated Conditional Short-Circuit Current (Icc): 24.8kA
Max Working Voltage, UL (Vin): 1000Line Side Number of Connections: 1Line Side Insulated Power Braid Cross Section: 240mm²Line Side nVent ERIFLEX Flexibar Size: 2x20x1 - 8x32x1Line Side DLO Wire Size: #2 - 262 kcmilLoad Side Compact Stranded Wire Size: (2) 35 - 240 mm²Load Side Compact Stranded Wire Size: (2) 35 - 240 mm²Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm²Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm²Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm²Load Side Wire Size: (2) #2 - 500 kcmilDepth (D): 103mmHeight (H): 191mmWidth (W): 54mmUnit Weight: 0.68kgCertification Details: UL® 1953Complies With: IEC® 60947-7-1Enclosure Rating: IP 20	Short Circuit Current Rating (SCCR): 100kA
Line Side Number of Connections: 1 Line Side Insulated Power Braid Cross Section: 240mm ² Line Side nVent ERIFLEX Flexibar Size: 2x20x1 - 8x32x1 Line Side DLO Wire Size: #2 - 262 kcmil Load Side Compact Stranded Wire Size: (2) 35 - 240 mm ² Load Side Connections: 2 Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm ² Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm ² Load Side Wire Size: (2) #2 - 500 kcmil Depth (D): 103mm Height (H): 191mm Height (H): 191mm Unit Weight: 0.68kg Corrtification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Max Working Voltage, IEC (Ui): 1000; 1500
Line Side Insulated Power Braid Cross Section: 240mm ² Line Side nVent ERIFLEX Flexibar Size: 2x20x1 - 8x32x1 Line Side DLO Wire Size: #2 - 262 kcmil Load Side Compact Stranded Wire Size: (2) 35 - 240 mm ² Load Side Number of Connections: 2 Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm ² Load Side Wire Size: (2) #2 - 500 kcmil Depth (D): 103mm Height (H): 191mm Height (H): 191mm Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Max Working Voltage, UL (Vin): 1000
Line Side nVent ERIFLEX Flexibar Size: 2x20x1 - 8x32x1 Line Side DLO Wire Size: #2 - 262 kcmil Load Side Compact Stranded Wire Size: (2) 35 - 240 mm² Load Side Number of Connections: 2 Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm² Load Side Wire Size: (2) #2 - 500 kcmil Depth (D): 103mm Height (H): 191mm Height (H): 191mm Width (W): 54mm Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Line Side Number of Connections: 1
Line Side DLO Wire Size: #2 - 262 kcmil Load Side Compact Stranded Wire Size: (2) 35 - 240 mm ² Load Side Number of Connections: 2 Load Side Wire Size - Ferrule: (2) 35 - 240 mm ² Load Side Wire Size: (2) #2 - 500 kcmil Depth (D): 103mm Height (D): 103mm Height (H): 191mm Width (W): 54mm Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Line Side Insulated Power Braid Cross Section: 240mm ²
Load Side Compact Stranded Wire Size: (2) 35 - 240 mm² Load Side Number of Connections: 2 Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm² Load Side Wire Size: (2) #2 - 500 kcmil Depth (D): 103mm Height (D): 103mm Height (H): 191mm Width (W): 54mm Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Line Side nVent ERIFLEX Flexibar Size: 2x20x1 - 8x32x1
Load Side Number of Connections: 2 Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm ² Load Side Wire Size: (2) #2 - 500 kcmil Depth (D): 103mm Height (H): 191mm Width (W): 54mm Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Line Side DLO Wire Size: #2 - 262 kcmil
Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm² Load Side Wire Size: (2) #2 - 500 kcmil Depth (D): 103mm Height (H): 191mm Width (W): 54mm Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Load Side Compact Stranded Wire Size: (2) 35 - 240 mm²
Load Side Wire Size: (2) #2 - 500 kcmil Depth (D): 103mm Height (H): 191mm Width (W): 54mm Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Load Side Number of Connections: 2
Depth (D): 103mm Height (H): 191mm Width (W): 54mm Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Load Side Stranded Wire Size - Ferrule: (2) 35 - 240 mm²
Height (H): 191mm Width (W): 54mm Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Load Side Wire Size: (2) #2 - 500 kcmil
Width (W): 54mm Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Depth (D): 103mm
Unit Weight: 0.68kg Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Height (H): 191mm
Certification Details: UL® 1953 Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Width (W): 54mm
Complies With: IEC® 60947-7-1 Enclosure Rating: IP 20	Unit Weight: 0.68kg
Enclosure Rating: IP 20	Certification Details: UL® 1953
	Complies With: IEC® 60947-7-1
Flammability Rating: UL® 94V-0	Enclosure Rating: IP 20
	Flammability Rating: UL® 94V-0

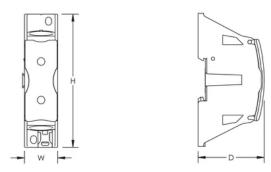
ADDITIONAL PRODUCT DETAILS

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	(°C) to maii	ntain workir	ng temperati	ure 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	

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.



Our powerful portfolio of brands: CADDY ERICO HOFFMAN nVent.com **RAYCHEM SCHROFF** TRACER

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