

# SINGLE POLE DIST. BLOCK, 500 A UL/CSA, FLAT COND. LINE, 12 CABLES LOAD, ALUMINUM

## CATALOG NUMBER

**UDF12C500AL**



## CERTIFICATIONS



## FEATURES

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

95% fill ratio

RoHS compliant

Conforms to EN 45545 obtaining an HL3 classification for chapter R23 and HL2 classification for chapter R22

Halogen free

## PRODUCT ATTRIBUTES

Article Number: 569206

Finish: Tinned

Max Current Rating, IEC: 500 A

Max Current Rating, UL/CSA: 500 A

Line Side Connection: Flat Conductor

Load Side Connection: 12 Cables

Material: Aluminum;Thermoplastic

Line Side Max Conductor Size, UL: 100 mm<sup>2</sup>

Load Side Max Conductor Size, UL: #4

Max Working Voltage, IEC (Ui): 1,000 VAC;1,500 VDC

Max Working Voltage, UL (Vin): 1,000 VAC/DC

Short Term Withstand Current (Icw) 1s: 34.3 kA

Peak Short Circuit Current (Ipk): 52.5 kA

Rated Conditional Short-Circuit Current (Icc): 25 kA

Short Circuit Current Rating (SCCR): 100 kA

Line Side Number of Connections: 1

Line Side Insulated Power Braid Cross Section: 50 mm<sup>2</sup>;70 mm<sup>2</sup>;100 mm<sup>2</sup>

Line Side nVent ERIFLEX Flexibar Size: 2x20x1 - 10x24x1

Load Side Number of Connections: 12

Load Side Compact Stranded Wire Size: 4 - 25 mm<sup>2</sup>

Load Side Stranded Wire Size - Ferrule: #12 - # 6

Load Side Wire Size: #12 - #4

Enclosure Rating: IP 20

Depth (D): 5"

Height (H): 3.070"

Width (W): 1.720"

Unit Weight: 0.800 lb

Certification Details: UL® 1953

Flammability Rating: UL® 94V-0

Complies With: IEC® 60947-7-1

## ADDITIONAL PRODUCT DETAILS

Increase the number of outputs with one input using a jumper on blocks with a Max Current Rating, IEC up to 160 A.

Blocks with 1,000 VAC/DC Max Working Voltage, UL are ideal for solar applications.

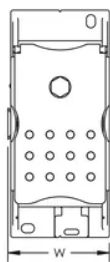
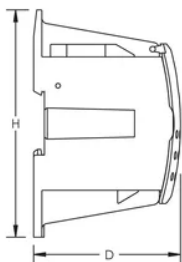
### Design Guideline for Distribution Blocks, Power Blocks and Power Terminals

Derating according to Ambient\* Temperature (°F) to maintain working temperature of 185°F

| Ambient Temperature (°F) | 86° | 95° | 104° | 113° | 122° | 131° | 140° | 149° | 158° | 167° |
|--------------------------|-----|-----|------|------|------|------|------|------|------|------|
| 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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