

nVent ERIFLEX Advanced Technology

POWER AND DISTRIBUTION BLOCKS

INTRODUCTION TO THE ADVANCED TECHNOLOGY:

The Advanced Technology is a high-resistance low smoke, halogen-free and flame retardant material (LSHFRR).

nVent ERIFLEX Power Blocks and Distribution Blocks does not generate corrosive gases and produces a relatively low smoke opacity in case of fire. The low smoke characteristic improves visibility conditions to easily locate the emergency exit and allows rescue workers to better assess an emergency. Advanced Technology means enhanced safety for individuals, less damage for your electrical equipment and less environmental impact.

The halogen-free feature enables a reduction in the quantity of toxic smoke. nVent ERIFLEX Power Blocks and Distribution Blocks does not contain any halogens, minimizing toxicity and making it the ideal product for use in enclosed spaces such as data centers, rail properties and infrastructures and places where people are present such as hospitals and schools. These also facilitate the use of blocks in specific applications such as marine and offshore applications, switchboards and other enclosed environments that require a low emissions solution.

In addition to the above features, blocks are compliant with the UL 94-V0 testing standard and Glow wire test 960°C. The flame retardant portion of the test illustrates the self-extinguish feature. In case of a fire, blocks generates a limited quantity of smoke that is less damaging to your electrical equipment.

nVent ERIFLEX Blocks are low smoke (LS):



- Improved visibility conditions in case of fire due to lower density of smoke
- Ability to easily locate the emergency exit
- Rescue workers the ability to assess an emergency situation
- Less damage to electrical equipment



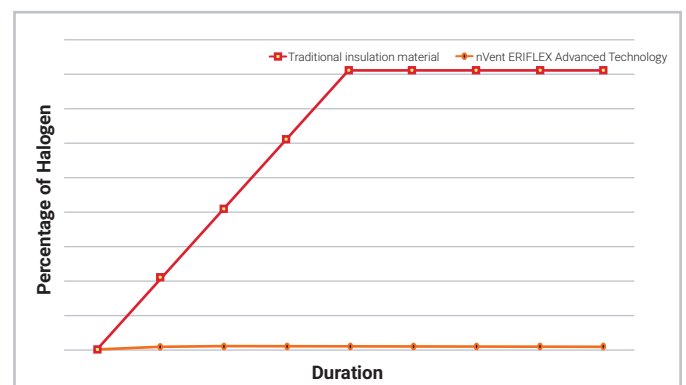
nVent ERIFLEX Blocks are Halogen-Free (HF):



Advanced technology contains halogen-free materials and offers better protection for people's safety and your electrical installation by reducing corrosion and smoke generation.

Halogen Free (HF) material means that does not contain:

- Fluorine
- Chlorine => (used for PVC)
- Bromine
- Iodine
- Astatine



nVent ERIFLEX Advanced Technology

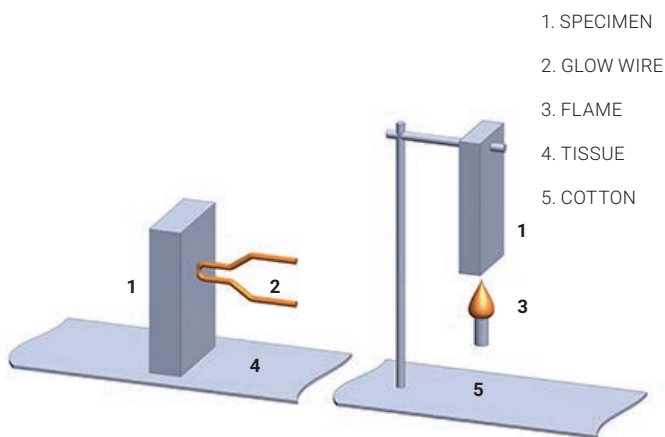
POWER AND DISTRIBUTION BLOCKS

nVent ERIFLEX Blocks are Flame Retardant (FR):



Flame Retardant (FR) material, also called Self Extinguishing material, has the effect of slowing down the spread of fire and according to the international standards such as:

- UL 94V-0
- IEC 60695-2 (Glow Wire test)



1. SPECIMEN
2. GLOW WIRE
3. FLAME
4. TISSUE
5. COTTON



Flame retardant feature, Advanced technology is compliant to UL 94-V0 and IEC 60695-2-11 Glow Wire test 960°C. The flame retardant portion of the test illustrates the self-extinguishing feature and reducing the risk of the spread of fire and less damage to your electrical installation. It also reduces the damage on electrical installations.



Single Pole Distribution Blocks

MAIN FEATURES

Economical Solution in a Compact Footprint



Line side connection with one cable, two cables or flat conductor (nVent ERIFLEX Flexibar Advanced or ready-to-use power braid IBS/IBSB Advanced) in function of the model

Patented design includes screw retaining, transparent blue cover

Hinged or removable cover

IP 20 finger safe

High Fill Ratio (> 95%) allows conductor connection with or without ferrule

Modular snap-together blocks to build multi-pole blocks

Easy fixing: clip on DIN Rail or mount to panel with screws

Tinned copper or tinned aluminum block allows for copper or aluminum conductor direct connections, or using ferrule.

AL suffix on Part Nr means Tinned Aluminium Block.

Patented unique design. Allows for visual inspection of wire and confirmation of connection

IP20 Slider: ensures to keep IP20 finger safe feature with any of the listed conductor sizes. Ensures the proper positioning of small conductor size, aligned to the center of the block, for optimized mechanical and electrical contact.

- UL 1059 Recognized or UL 1953 Listed in function of the model
- CSA® C22.2 NO. 158 in function of the model
- Tested and certified according to IEC 60947-7-1
- Short Circuit Current Rated up to 100 kA – See UL file E198301
- $U_i = 1000V$ AC/DC IEC minimum 600 V UL or 1000V UL in function of the model
- Halogen-free
- Flammability Rating: UL 94V-0
- RoHS Compliant



Single Pole Distribution Blocks – Quick Selection Guide

SINGLE POLE DISTRIBUTION BLOCKS (UD SERIES) – QUICK SELECTION GUIDE

Part number	Article number	Typical IEC Current	Max UL Current	Line side: Nbre of connection	Line side Min and Max conductor size	Load side: Nbre of connection	Load side Min and Max conductor size	Max working voltage IEC	Max working voltage UL
UD-80A	569010	80 A	85 A	 1 Cable	6–16 mm ² #16–# 4 AWG	 6 Cables	2.5–16 mm ² #16–# 4 AWG	1,000 VAC/DC	600 VAC/DC
UDJ-125A	569020	125 A	150 A	 1 Cable	10–35 mm ² #8–1/0 AWG	 7 Cables	2.5–16 mm ² #14–# 4 AWG	1,000 VAC/DC	600 VAC/DC
UDJ-160A	569030	160 A	200 A	 1 Cable	10–70 mm ² #8–3/0 AWG	 7 Cables	2.5–16 mm ² #14–# 4 AWG	1,000 VAC/DC	600 VAC/DC
UD-250A	569040	250 A	255 A	 1 Cable	35–120 mm ² #6 AWG–250 kcmil	 11 Cables	2.5–35 mm ² #14–# 1 AWG	1,000 VAC/DC	600 VAC/DC
UDF-250A	569041	250 A	255 A	 Flat Conductor	Flexibar 3X9X0.8– 6x15.5x0.8	 6 Cables	2.5–16 mm ² #14–# 4 AWG	1,000 VAC/DC	600 VAC/DC
UD-400112AL	569252	400 A	335 A	 1 Cable	95–185 mm ² 3/0 AWG–400 kcmil	 12 Cables	2.5–10 mm ² # 14–# 6 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UD-400112CU	569052	400 A	335 A	 1 Cable	96–185 mm ² 3/0 AWG–400 kcmil	 12 Cables	2.5–10 mm ² # 14–# 6 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UD-400212AL	569251	400 A	400 A	 2 Cables	35–95 mm ² #8–3/0 AWG	 12 Cables	2.5–10 mm ² # 14–# 6 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UD-400212CU	569051	400 A	400 A	 2 Cables	35–95 mm ² #8–3/0 AWG	 12 Cables	2.5–10 mm ² # 14–# 6 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UD-400A	569050	400 A	335 A	 1 Cable	95–185 mm ² 3/0 AWG–400 kcmil	 11 Cables	2.5–35 mm ² #14–# 1 AWG	1,000 VAC/DC	600 VAC/DC
UDF-500A	569060	500 A	335 A	 Flat Conductor	Flexibar 4x15.5x0.8– 8x24x1	 11 Cables	2.5–35 mm ² #14–# 1 AWG	1,000 VAC/DC	600 VAC/DC
UD6C500AL	569201	500 A	380 A	 1 Cable	95–240 mm ² 3/0AWG- 500 kcmil	 6 Cables	10–50 mm ² #8–1/0 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UDF6C500AL	569202	500 A	475 A	 Flat Conductor	Flexibar 2x20x1– 10x24x1 IBS/IBSB 50–100 mm ²	 6 Cables	10–50 mm ² #8–1/0 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UDF9C500AL	569204	500 A	490 A	 Flat Conductor	Flexibar 2x20x1– 10x24x1 IBS/IBSB 50–100 mm ²	 9 Cables	4–25 mm ² #12–# 4 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UDF12C500AL	569206	500 A	500 A	 Flat Conductor	Flexibar 2x20x1– 10x24x1 IBS/IBSB 50–100 mm ²	 12 Cables	4–25 mm ² #12–# 4 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UD9C630AL	569203	630 A	420 A	 1 Cable	120–300 mm ² 4/0 AWG- 600 kcmil	 9 Cables	4–25 mm ² #12–# 4 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UD2C12C630AL	569205	630 A	670 A	 2 Cables	95–185 mm ² 3/0 AWG–400 kcmil	 12 Cables	4–25 mm ² #12–# 4 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UDF12C800AL	569208	800 A	670 A	 Flat Conductor	Flexibar 2x20x1– 10x32x1 IBS/IBSB 50–240 mm ²	 12 Cables	4–25 mm ² #12–# 4 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UD2C12C1000AL	569207	1000 A	760 A	 2 Cables	35–240 mm ² 2 AWG–500 kcmil	 12 Cables	4–25 mm ² #12–# 4 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UDF9C1000AL	569210	1000 A	840 A	 Flat Conductor	Flexibar 6x24x1– 10x50x1 IBS/IBSB 120–240 mm ²	 9 Cables	10–95 mm ² #8–3/0 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC
UD2C9C1250AL	569209	1250 A	950 A	 2 Cables	185–400 mm ² 400 kcmil–750 kcmil	 9 Cables	10–95 mm ² #8–3/0 AWG	1,000 VAC, 1,500 VDC	1,000 VAC/DC

Single Pole Distribution Blocks



UD 400 A



FLG 400

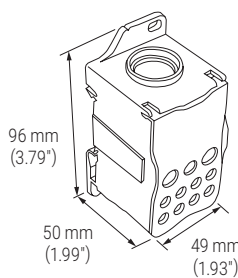
Allows Flexibar Advanced connection.



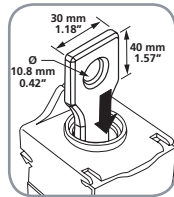
UDF 500A

UD-400 A
400 A – IEC
335 A – cRU^{US} SB[®]
Cable to eleven cables

- Icw kA rms 1s: 24.5
- Ipk kA: 51
- Ui: 1000 VAC/DC IEC
- Vin: 600 VAC/DC UL



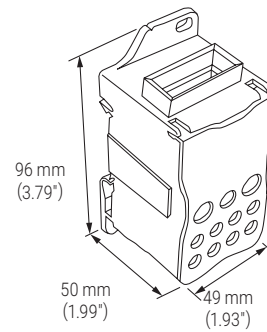
DIRECT FLG 400: WITH Flexibar



Direct link between the block and a switch

UDF-500A
500 A – IEC
335 A – cRU^{US}
Flat conductor to eleven cables

- Icw kA rms 1s: 24.5
- Ipk kA: 51
- Ui: 1000 VAC/DC IEC
- Vin: 600 VAC/DC UL



Metric				
No. Terminals	Conductor	Size mm ²	Ø mm	
x1			95–185	19
x11			6–25 (x2) / 6–35 (x2)	9
			2.5–16 (x5)	6.8
			2.5–10 (x4)	6.1

Imperial				
No. Terminals	Conductor	Size AWG	Ø in	
x1			3/0–400 kcmil	0.748
x11			#10–#1 (x2)	0.354
			#14–#4 (x5)	0.27
			#14–#6 (x4)	0.24

- Rigid stranded cable
- Flexible stranded cable

Art. Nr.	Description		kg/lbs
569050	UD-400A	1	0.4/0.89
569170	FLG400*	10	0.05 / 0.12

* Not UL recognized and not IP20

Metric				
No. Terminals	Conductor	Size mm ²	Ø mm	
x1		Flexibar Advanced	4x15.5x0.8–8x24x1	N/A
x11			2.5–16 (x5)	6.8
			2.5–10 (x4)	6.1
			6–25 (x2)	9

Imperial				
No. Terminals	Conductor	Size AWG	Ø in	
x1		Flexibar Advanced	4x15.5x0.8–8x24x1	N/A
x11			#14–#4 (x5)	0.27
			#14–#6 (x4)	0.24
			#10–#1 (x2)	0.354

- Rigid stranded cable
- Flexible stranded cable

Art. Nr.	Description		kg/lbs
569060	UDF-500A	1	0.37 / 0.82