

**DESCRIPTION/APPLICATION**

This Ultra Heavy Duty line includes two series. The 400 series is rated up to 270 A; the 444 series is rated up to 455 A.

**DESIGN ADVANTAGES**

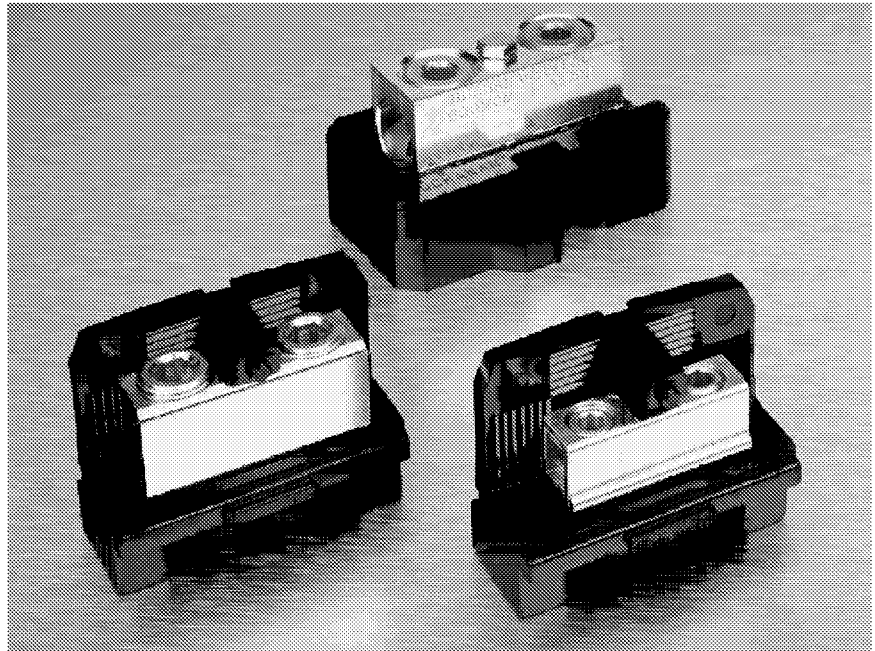
**400 Series**

- Compact 2/0 or 250 kcmil (MCM) block - at least 57 circuits per 6 foot length, 1-3/16" center-to-center spacing.
- High current capacity snap-fit sectional block— tubular contacts accept single or combinations of wire sizes as large as 250 kcmil (MCM).
- Two contact styles available; rated up to 270 amperes for copper wire.
- Allen head screws allow maximum torque when using large wire sizes.
- Withstand voltages in excess of IEEE switchgear standards for 750 volts. Meet clearance and creepage spacing specified in UL, CSA, and NEMA Industrial Control Standards for 600 volts.
- Same block directly mounts on surface or channel mounts.
- Only one end section needed per block assembly.
- Readily identify circuits—order blocks with painted marking area or use removable vinyl marking strip. Preprinted marking strips are also available.
- Factory assembled blocks available.
- Ultra Heavy Duty phenolic block sections do not snap-fit with other block styles.

**444 Series**

- Massive block for extraordinarily heavy duty applications—use AWG wire sizes #4 thru 600 kcmil (MCM).

# 400 SERIES ULTRA HEAVY DUTY



- Allen head screws allow maximum torque on large wire sizes.
- Withstand voltages in excess of IEEE switchgear standards for 2,000 volts.
- Conservatively rated at 455 amperes for copper wire, 370 amperes for aluminum wire.
- Housing design permits mounting adjacent blocks with common hardware — may be ganged for multiple circuit requirements maintaining centerlines.
- No end sections needed — each circuit is totally self-contained. Reduces inventory requirements.



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### 400 SERIES ULTRA HEAVY DUTY 600V, 1.19" PITCH

#### PHYSICAL PROPERTIES

##### Housing:

HOUSING MATERIAL: Phenolic, filled flame retardant  
FLAMMABILITY: UL94V-1  
COLOR: Black

##### Contacts:

MATERIAL: Electrical grade copper conductor;  
plated steel screws resist corrosion  
TUBULAR SCREW TYPE:  
Small: 1/2" - 13 Hex  
Large: 3/4" - 16 Hex socket set screw

##### Mechanical:

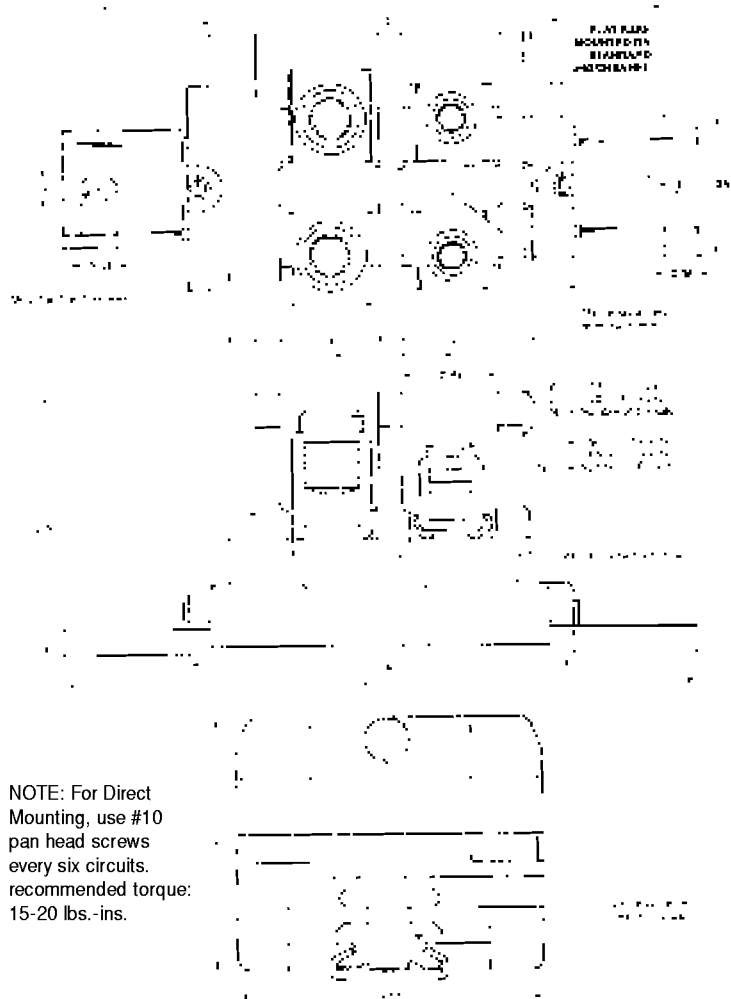
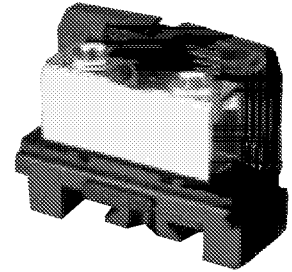
PITCH (TERMINAL SPACING): 1.19"; 9 circuits/foot  
WIRE STRIP LENGTH:  
Tubular Screw (small): 1"  
Tubular Screw (large): 1"

#### ELECTRICAL PROPERTIES

MAXIMUM CURRENT: 255A for a single 250MCM wire  
OPERATING VOLTAGE: Blocks meet 600V creepage and clearance requirements; withstand voltage greatly exceeds standards for 750V  
WIRE RANGE: Tubular Screw (small): #12-#2/0 AWG solid or stranded; Tubular Screw (large) #6 AWG-250 kcmil (MCM) solid or stranded  
DIELECTRIC STRENGTH (RH 40% @ SEA LEVEL): 300 V/mil thickness per ASTM D149  
BREAKDOWN VOLTAGE, AC, 60HZ:  
Contact to Contact: 10,000V  
Contact to Ground: 10,000V  
UL HIGH VOLTAGE ARC TRACKING (IN./MIN.): .49-.58

#### ENVIRONMENTAL PROPERTIES

MAX. CONTINUOUS TEMPERATURE: 150° C (302° F)  
WATER ABSORPTION (24HRS. % WT. GAIN): .45% per ASTM D149  
CHEMICAL RESISTANCE: Resistant to acids, alkalis, and aliphatic hydrocarbons and ketones per ASTM D543  
RADIATION RESISTANCE (ERGS G<sup>-1</sup> (C): 2.7 x 10<sup>8</sup>



NOTE: For Direct Mounting, use #10 pan head screws every six circuits. recommended torque: 15-20 lbs.-ins.

#### Ordering Information

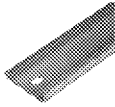

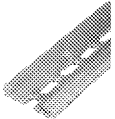
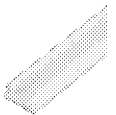



CATALOG #	DESCRIPTION	WIRE RANGE
416	Tubular Screw, Unpainted	#12-2/0
426-BU	Tubular Screw, Painted	#12-2/0
417	Tubular Screw, Painted	#6-250 Kcmil/MCM
427-BU	Tubular Screw, Unpainted	#6-250 Kcmil/MCM
430-BU	End Section	—


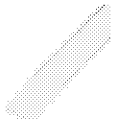
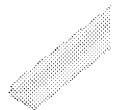


UL INDEPENDENT TESTING SERVICE RECOGNITIONS:  
TUBULAR SCREW: Catalog # 416 & 426-BU  
1 #2/0 AWG, 1 #1/0 AWG, 1 #1 AWG,  
1 or 2 #2 AWG, 1 to 3 #4 AWG, 1 to 3 #6 AWG,  
1 to 4 #8 AWG, 1 to 6 #10 AWG, 2 to 8 #12 AWG,  
TUBULAR SCREW: Catalog # 417 & 427-BU  
1 #250kcmil (MCM), 1 #4/0 AWG, 1 #3/0 AWG,  
1 or 2 #2/0 AWG, 1 or 2 #1/0 AWG, 1 or 2 #1 AWG,  
1 to 3 #2 AWG, 1 to 4 #4 AWG, 1 to 5 #6 AWG



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## 400 SERIES ULTRA HEAVY DUTY ACCESSORIES

MOUNTING CHANNEL				CHANNEL CLAMPS		
						
STEEL CHANNEL	BREAK AWAY STEEL	PRE-PUNCHED ALUMINUM CHANNEL	ELEVATED ALUMINUM CHANNEL	SCREW CHANNEL CLAMPS	UNIVERSAL CLAMPS	SNAP-IN CLAMPS
<b>Catalog Number</b>						
60 63-BU	60-B-36	64 67	60-SO	61	68	62
<b>Standard Package</b>						
6 feet 3 feet	3 feet	6 feet 3 feet	6 feet	100	100	100

MARKING ACCESSORIES				
				
PLASTIC CLOTH TAPE	VINYL MARKING STRIPS	ELEVATED MARKING STRIP	HOLDING SCREW	MARKING PEN
<b>Catalog Number</b>				
55-BU	50-BU	52-BU	53-BU	99-BU
<b>Standard Package</b>				
50 feet	25 feet	18 inches	1 Gross	12

**NOTES:**

For factory assembled blocks on channel, prefix catalog # with "0" and suffix with number of blocks desired. Without channel (maximum of 6 sections) delete "0".

Example: Ten tubular screw sections preassembled on channel = 041710

For unpainted factory assembled blocks supplied with a removable marking strip add -1 to catalog number.

For blocks with two or more different contact sections, imprinted marking strips or special features; consult factory.



### SERIES 444 ULTRA HEAVY DUTY — 600 MCM 600 V, 2.38" PITCH

#### PHYSICAL PROPERTIES

##### Housing:

HOUSING MATERIAL: Phenolic, filled flame retardant  
FLAMMABILITY: UL94V-1  
COLOR: Black

##### Contacts:

MATERIAL: Aluminum alloy electro-tin plated for compatibility with aluminum or copper conductors; tin plated brass screws  
SCREW TYPE: 15/16" — 16 Hex Socket Set Screw ("T" type allen wrench is recommended)

##### Mechanical:

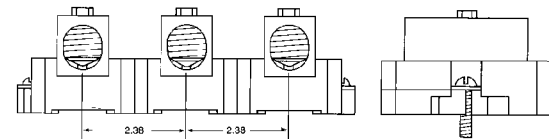
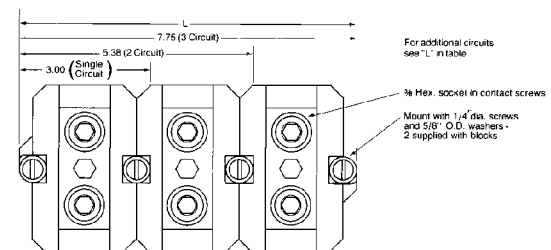
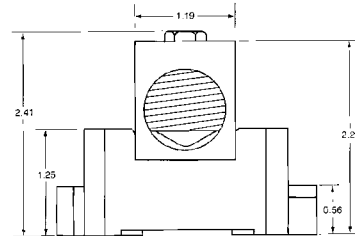
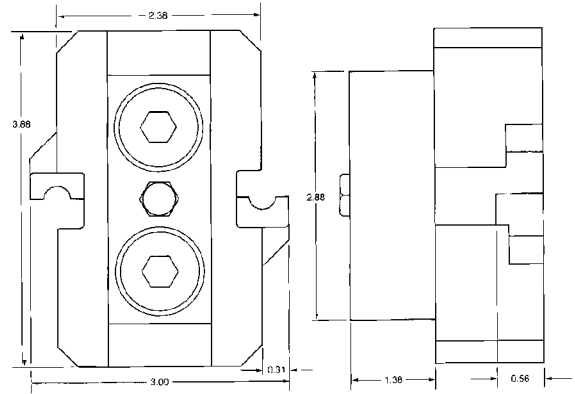
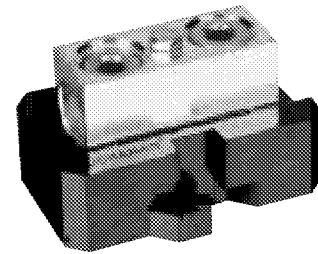
PITCH (TERMINAL SPACING): 2.38" (5 circuits per foot)  
WIRE STRIP LENGTH: 1-3/8"

#### ELECTRICAL PROPERTIES

MAXIMUM CURRENT: 455A (single 600 KCMil (MCM) copper wire)  
OPERATING VOLTAGE: Blocks meet 600V creepage and clearance requirements; withstand voltage greatly exceeds standards for 2000V  
WIRE RANGE: #4 AWG-600KCMil (MCM), solid or stranded, AL or CU  
DIELECTRIC STRENGTH (RH40% @SEA LEVEL): 300 volts/mil thickness per ASTM D149  
BREAKDOWN VOLTAGE, AC, 60HZ:  
    Contact to Contact: 10,000V  
    Contact to Ground: 10,000V  
UL HIGH VOLTAGE ARC TRACKING (IN./MIN.): .49-.58

#### ENVIRONMENTAL PROPERTIES

MAX. CONTINUOUS TEMPERATURE: 150° C (302° F)  
WATER ABSORPTION (24HRS. % WT. GAIN): .45% per ASTM D149  
CHEMICAL RESISTANCE: Resistant to acids, alkalis, and aliphatic hydrocarbons and ketones per ASTM D543  
RADIATION RESISTANCE (ERGS G<sup>-1</sup> (C)): 2.7 x 10<sup>8</sup>



#### Ordering Information

CATALOG #	DESCRIPTION
444	Tubular Screw

UL INDEPENDENT TESTING SERVICE RECOGNITIONS:  
WIRE SIZES, AL OR CU: 1 #600 kcmil (MCM), 1 #500 kcmil (MCM), 1 #400 kcmil (MCM), 1 #350 kcmil (MCM), 1 #300 kcmil (MCM), 1 #250 kcmil (MCM), 1 #4/0 AWG  
TUBULAR SCREW: 1 or 2 #3/0 AWG, 1 to 3 #2/0 AWG, 1 to 4 #1/0 AWG, 1 to 4 #1 AWG, 1 to 6 #2 AWG, 1 to 10 #4 AWG



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