

Standard Single Point Power

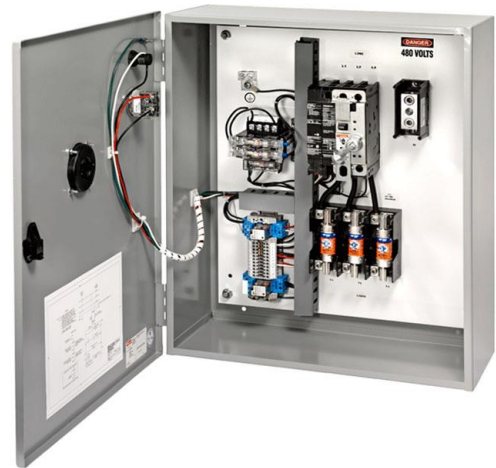
Single Point Power with 25kA – 65kA Breaker Disconnect

Standard Single Point Power Disconnects Include The Following

Branch Circuit Protection

Molded Case Circuit Breakers (MCCB's) are industrial-grade circuit protectors that offer thermal and magnetic protection with high interrupt ratings up to 100kA. These circuit breakers are fully-enclosed and able to be independently installed with the need for a panel board. MCCB feature fixed and adjustable trip unit options, can be reset manually after tripping, and do not require immediate replacement. 15 – 1200 Amp Range.

All disconnects come with a LS Industrial UT Series externally mounted pistol grip disconnect handle and extended rotary mechanism. UL Type 3/4/4X. Rotary handle is equipped for lockout devices.



Environmental Type 3R, 4, 12 Electrical Enclosure

Complies with IP 66 TYPE 3R, 4, and 12, For outdoor use. Hinged door with slotted latch and molded gasket. RAL 7035 structured powder coating. The panel door will be fitted with a single LED indicator light that is lit when the circuit is live.

Power Distribution and Circuit Protection

For single point power a touch safe power distribution block is used to distribute power to a total of 8 circuits up to 40 amps each. Aside from branch circuit protection each circuit will be individually fuse protected according to its application.

Control Voltage Transformer

A 100VA, 24V Transformer is installed to provide auxiliary control voltage. 24V Points are landed on a clearly labeled terminal block for quick and secure connections. All transformers have primary and secondary fuse protection.

Stand Variations and Specifications

3-phase supply voltage 208/230V or 460. Power ratings are valid at nominal voltage 120V 1-Phase.

Circuit Protection and Power Distribution:	Amps Range:	SCCR:	Max Qty.
Molded Case Circuit Breaker (MCCB)	15A – 1200A	25 – 65kA	1
Manual Motor Starter Protector	0.10A – 100A	50kA Max	6
Power Distribution Block	175A – 1060A	100kA Max	1
Circuit Protection UL Class J Fuse	1A – 60A	65kA Max	4
Circuit Protection UL Class CC Fuse	1A – 30A	65kA Max	6
Control Transformer:	VA Range:	Secondary Volts:	Max Qty.
Control Transformer	50VA – 350VA	24V, 120V, 230V	1
Power Transformer	250VA – 600VA	120V, 230V	1
Enclosure:	Environmental Range:	Material/Finish	Material
Non-Ventilated	Type 1, 3R, 4, 12	Powder Coated Steel	Steel Only
Power Ventilated *Enclosure AC Available on Type 4X	Type 1, 3R, 4, 4X, 12	Steel, Stainless Steel	Steel/SS

Green Innovators of Innovation

www.lsis.com



Susol
Super Solution

UL Molded Case Circuit Breakers

LSIS



Super Solution for Protection

The new series Susol with thermal-magnetic or electronic circuit breakers are designed to protect low voltage electrical systems from damage caused by overloads and short circuits.

■ FOR POWER DISTRIBUTION

- High breaking capacity
- Optimum coordination technique
- Powerful engineering tools
- Reverse feeding

■ FOR PROTECTION OF MOTORS AND THEIR CONTROL DEVICES

- Optimal overload protection
- Guaranteed Short Circuit Current Ratings

■ FOR CONTROLLING AND DISCONNECTING CIRCUITS

■ FOR EXTENSIVE APPLICATIONS

- Wide range of optimized auxiliaries and accessories

SUSOL MCCBS AT A GLANCE.

1 FOR POWER DISTRIBUTION

- High breaking capacity
- Optimum coordination technique
- Powerful engineering tools
- Reverse feeding

2 FOR PROTECTION OF MOTORS AND THEIR CONTROL DEVICES

- Optimal overload protection
- Guaranteed Short Circuit Current Ratings

3 FOR EXTENSIVE APPLICATIONS

- Wide range of optimized auxiliaries and accessories

4 FOR CONTROLLING AND DISCONNECTING CIRCUITS



UTE100

UTS150

UTS250

UTS400

SIMPLIFIED PRODUCT RANGE

- **AF:** 100AF, 150AF, 250AF, 400AF, 600AF, 800AF, 1200AF
- **Ampere Range:** 15A ~ 1200A
- **Pole:** 2P, 3P

VARIABLE ACCESSORIES

- Electrical auxiliaries[AX, AL, UVT, SHT]
- Extended and direct mount rotary handle
- Flange handle with flexible cable and linkage
- Variable depth mechanism
- Locking devices
- LUG for CU/AL cable with UL486

HIGH PERFORMANCE

- Ultimate breaking capacity (kA rms)
- Max 100kA @480VAC and 50kA @600V

STANDARDS

- World class with UL489
 - UL489
 - UL508
 - NOM ANCE

VARIOUS TRIP UNITS

- **ATU:** Adjustable thermal & magnetic unit
- **FMU:** Adjustable thermal, fixed magnetic unit
- **FTU:** Fixed thermal & magnetic unit
- **OCR:** Electronic trip unit

MCP CHARACTERISTIC

- Simplified product range
 - **AF:** 150AF, 250AF, 400AF, 600AF, 800AF, 1200AF
 - **Ampere Range:** 1.6A ~ 1200A Only 3 Pole use
- **Standards**
 - Instantaneous circuit breaker with UL489
 - Motor protector with MC and Relay with UL508

MCS CHARACTERISTIC

- Simplified product range
 - **AF:** 100AF, 150AF, 250AF, 400AF, 600AF, 800AF, 1200AF
 - **Ampere Range:** 100A ~ 1200A
 - **Pole:** 2P, 3P
- **Standards**
 - World class with UL489



UTS600

UTS800

UTS1200

Engineered for Optimal Protection

SUSOL SERIES OFFER VARIOUS TRIP UNITS :

- **ATU** (Adjustable thermal & magnetic unit)
- **FMU** (Adjustable thermal, fixed magnetic unit)
- **FTU** (Fixed thermal & magnetic unit)
- **OCR** (Electronic trip unit)

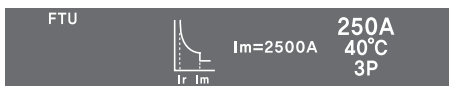


THERMAL MAGNETIC TRIP UNITS

- UTE100...UTS600 Frame
- 15-600 Amperes
- Factory-installed
- Several versions by rated current and function

FTU

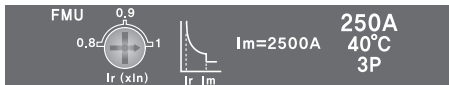
- Fixed Thermal. 15A~600A
- Fixed Magnetic. 400A~6000A



7951 1172 065

FMU

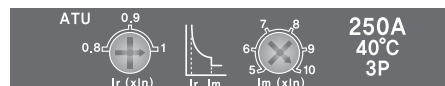
- Adjustable Thermal. 25A~600A(0.8-1 x In)
- Fixed Magnetic. 400A~6000A



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ATU

- Adjustable Thermal. 100A~600A(0.8~1 x In)
- Adjustable Magnetic. 500A~6000A(5~10 x In)



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MCP

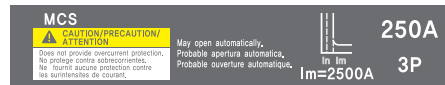
- Adjustable Magnetic. 10A~6000A



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MCS

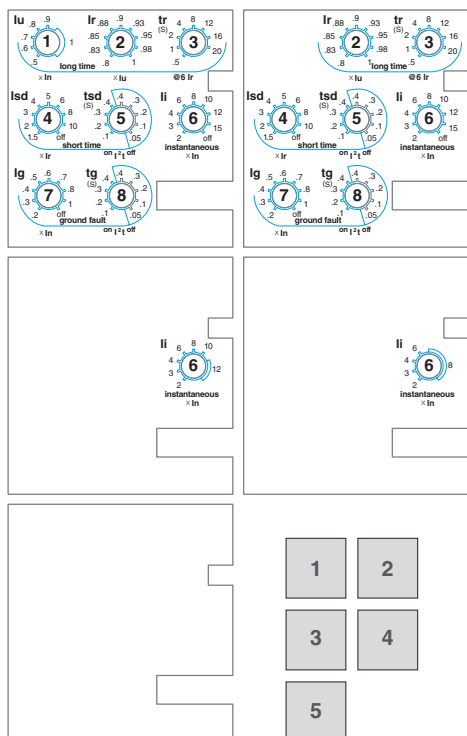
- Fixed Magnetic. 1000A~6000A



7951 1172 094

ELECTRONIC TRIP UNITS

- UTS800, UTS1200 Frame
- 400-1200 Amperes
- Factory-installed internal trip units.
- Several versions by rated current and function



1. N, A type Knob information
2. P, S type Knob information
3. MCP800 type Knob information
4. MCP1200 type Knob information
5. MCS800/1200 type Knob information

Series Overview



FRAME		UTE100		UTE100		UTS150			UTS250		
MAXIMUM RATED CURRENT		100A		100A		150A			250A		
NUMBER OF POLES		2		3		2, 3			2, 3		
BREAKER TYPE		E	N	E	N	N	H	L	N	H	L
INTERRUPTING CAPACITY (KA RMS) AC(50/60HZ) NEMA, UL	120/240V	50	65	50	65	-	-	-	-	-	-
	240V	50	65	50	65	65	100	150	65	100	150
	480V	25	35	25	35	35	65	100	35	65	100
	600V	-	-	-	-	18	35	50	18	35	50
	600Y347V	14	18	14	18	-	-	-	-	-	-
TRIP UNITS*	AMPERES	15-100A		15-100A		40-150A			150-250A		
	THERMAL MAGNETIC	ATU	-	-	-	●	-	-	●	-	-
	FMU	-	-	●	-	●	-	-	●	-	-
	FTU	●	-	●	-	●	-	-	●	-	-
	ELECTRONIC	OCR	-	-	-	-	-	-	-	-	-
MCP*	AMPERES	-	-	-	-	1.6-60A, 100A, 150A			220A		
	MCP	-	-	-	-	●	-	-	●	-	-
MCS*	AMPERES	100A	100A	100A	100A	150A			175A, 250A		
	MCS	●	-	●	-	●	-	-	●	-	-
UNIT MOUNTED		●	-	●	-	●	-	-	●	-	-
MECHANICAL LUGS		●	-	●	-	●	-	-	●	-	-
BUSBAR CONNECTORS		●	-	●	-	●	-	-	●	-	-
CONTROL WIRE TERMINAL KIT		-	-	-	-	●	-	-	●	-	-
TERMINAL SHIELDS		-	-	-	-	-	-	-	-	-	-
INTERPHASE BARRIERS		●	-	●	-	●	-	-	●	-	-
SHUNT TRIP		●	-	●	-	●	-	-	●	-	-
UNDERVOLTAGE TRIP		●	-	●	-	●	-	-	●	-	-
AUXILIARY SWITCH		●	-	●	-	●	-	-	●	-	-
ALARM SWITCH		●	-	●	-	●	-	-	●	-	-
FLANGE CABLE HANDLE		-	-	●	-	●	-	-	●	-	-
FLANGE VARIABLE-DEPTH MECHANISM		-	-	●	-	●	-	-	●	-	-
DIRECTLY-MOUNTED ROTARY OPERATING HANDLE		-	-	●	-	●	-	-	●	-	-
NEMA-DOOR-MOUNTED OPERATING MECHANISMS		●	-	●	-	●	-	-	●	-	-
IEC-DOOR-MOUNTED OPERATING MECHANISMS		●	-	●	-	●	-	-	●	-	-
MECHANICAL INTERLOCKS		-	-	●	-	●	-	-	●	-	-
HANDLE PADLOCK ATTACHMENT		●	-	●	-	●	-	-	●	-	-
DIMENSIONS Inches(mm)		W	H	D		W	H	D	W	H	D
	2-POLE	2.01(51)	5.12(130)	3.44(875)		4.13(105)	6.46(165)	3.44(875)	4.13(105)	7.48(190)	3.44(875)
	3-POLE	2.99(76)	5.12(130)	3.44(875)		4.13(105)	6.46(165)	3.44(875)	4.13(105)	7.48(190)	3.44(875)



UTS400			UTS600		
400A			600A		
2, 3			2, 3		
N	H	L	N	H	L
-	-	-	-	-	-
65	100	150	65	100	150
35	65	100	35	65	100
18	35	50	18	35	50
-	-	-	-	-	-
250-400A			500-600A		
●			●		
●			●		
●			●		
-			-		
320A			500A		
●			●		
400A			600A		
●			●		
●			●		
●			●		
●			●		
-			-		
●			●		
●			●		
●			●		
●			●		
●			●		
●			●		
●			●		
●			●		
●			●		
●			●		
●			●		
●			●		
W	H	D	W	H	D
5.51(140)	11.42(290)	4.33(110)	5.51(140)	13.39(340)	4.33(110)
5.51(140)	11.42(290)	4.33(110)	5.51(140)	13.39(340)	4.33(110)

UTS800			UTS1200			
800A			1200A			
3			3			
N	H	L	N	H	P	L
-	-	-	-	-	-	-
65	100	150	65	100	65	150
35	65	100	35	65	50	100
18	35	50	18	25	50	35
-	-	-	-	-	-	-
400-800A			800-1200A			
-			-			
-			-			
-			-			
●			●			
800A			1200A			
●			●			
800A			1200A			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
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●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
●			●			
W	H	D	W	H	D	
-	-	-	-	-	-	
8.27(210)	13(330)	6(152.5)	8.7(210)	16.26(413)	6(152.5)	

WeatherFlo™ Type 3R Vented Enclosure with Fan and Technical Information



Application

This enclosure has a forced-air ventilation system for cooling drives or other high-heat producing control equipment in applications that require outdoor protection. Ideal for use in irrigation, wastewater, and HVAC motor speed control for air-handling equipment and pumps. The environment control system of the WeatherFlo enclosure uses TempGuard™ Cooling Technology.

TempGuard innovative cooling technology provides a predictable climate control solution for harsh outdoor environments:

- White polyester powder finish with low solar absorption reduces the solar heat load 55-70 percent compared to traditional gray or green outdoor enclosure finishes
- Integrated solar shield top and intake cover provide an additional 25 percent solar reduction
- Fan and vent placement optimizes heat removal by drawing ambient air into the bottom of the enclosure and exhausting at the top, making the entire enclosure an air duct
- Gasket and filter protect against contaminants entering the enclosure
- Adjustable thermostat (70°-140°F) allows the fan to operate only when needed

Features

- Active cooling ventilation system with factory-installed fan and filter (115 VAC)
- Multiple enclosure sizes with airflow designed for nominal horsepower ratings
- Terminal power connection for fan
- Easy access washable expanded metal filter
- Top front hood exhaust and door intake minimize footprint
- Lift-off hinged door for easy configuration of components
- Quarter-turn latch for easy access with padlock for security
- External mounting brackets
- Collar studs provided to mount the optional panel

- Largest two sizes constructed of aluminum to provide approximately 100-pound weight reduction
- Grounding provision on door and body

Construction

- 16 and 14 gauge galvanized steel
- Largest two sizes constructed of aluminum
- Door gasket

Finish

RAL 9003 white polyester powder texturized finish inside and out.

Industry Standards

UL 508A, File Number E61997: Type 3R
cUL C22.2 No. 94, File Number E61997: Type 3R
NEMA/EEMAC Type 3R
IEC 60529, IP32

Accessories

See attached tables for accessory information.

Door Stop (ADSTOPK)

Fans

Filter

Heater

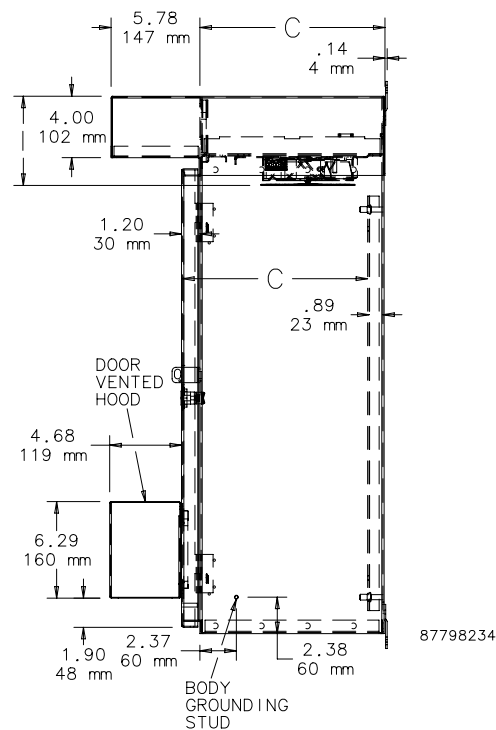
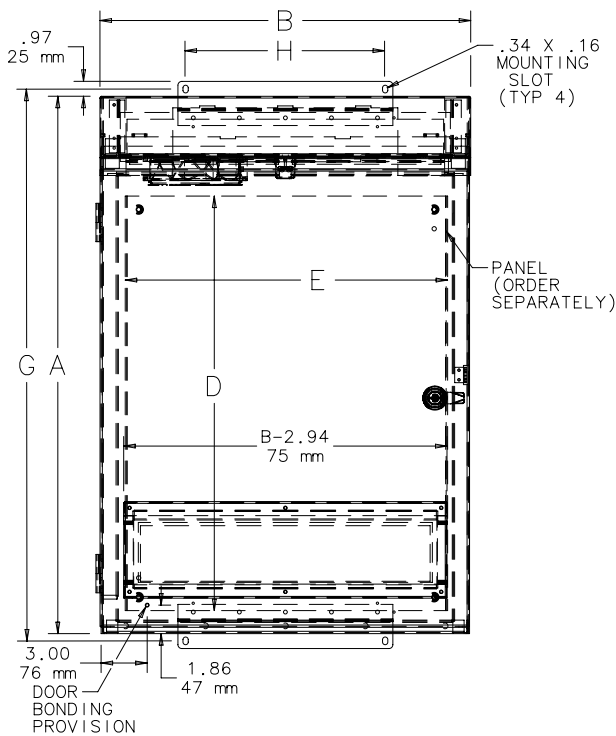
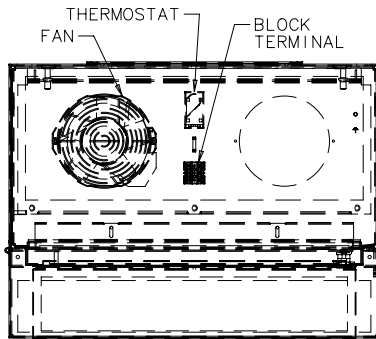
Panel

Swing-Out Panel Kit (ANADFK) Purchase aluminum panels for use as swing-out panels in models WF75LP and WF100LP.

WeatherFlo™ Type 3R Vented Enclosure with Fan and Technical Information

Standard Sizes WeatherFlo Type 3R Vented Enclosure with Fan

Catalog Number	Drive Horsepower	Enclosure Size A x B x C (in.)	Enclosure Size A x B x C (mm)	Panel Catalog Number	Panel Size D x E (in.)	Panel Size D x E (mm)	Mounting Holes G x H (in.)	Mounting Holes G x H (mm)	I (in.)	I (mm)
WF3LP	3	29.00 x 24.00 x 12.00	737 x 610 x 305	A24P24	21.00 x 21.00	533 x 533	29.94 x 13.00	760 x 330	5.59	142
WF10LP	10	35.00 x 24.00 x 12.00	889 x 610 x 305	A30P24	27.00 x 21.00	686 x 533	35.94 x 13.00	913 x 330	5.81	148
WF25LP	25	41.00 x 24.00 x 12.00	1041 x 610 x 305	A36P24	33.00 x 21.00	838 x 533	41.94 x 13.00	1065 x 330	5.81	148
WF40LP	40	47.00 x 24.00 x 14.00	1194 x 610 x 356	A42P24	39.00 x 21.00	991 x 533	47.94 x 13.00	1218 x 330	5.81	148
WF75LP	75	55.00 x 36.00 x 16.00	1397 x 914 x 406	A48P36	45.00 x 33.00	1143 x 838	55.94 x 27.00	1421 x 686	7.43	189
WF100LP	100	67.00 x 36.00 x 16.00	1702 x 914 x 706	A60P36	57.00 x 33.00	1448 x 838	67.94 x 27.00	1726 x 686	7.43	189



Commercial Boxes
and Enclosures

WeatherFlo™ Type 3R Vented Enclosure with Fan and Technical Information

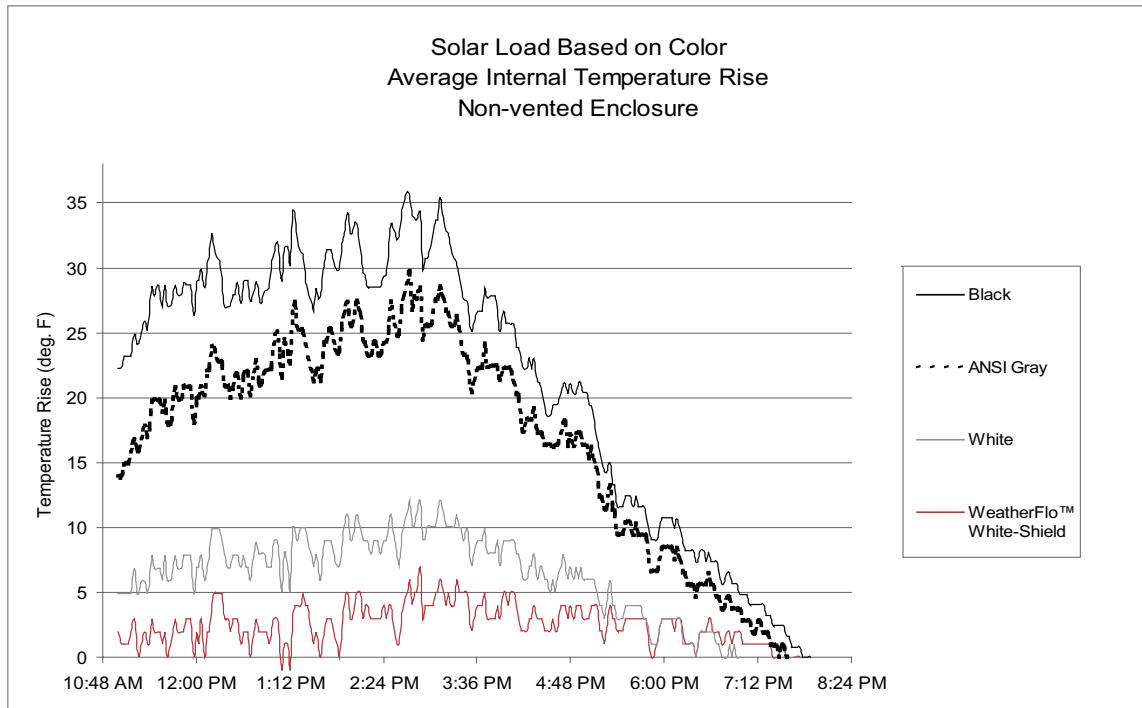
Technical Information

This information is for guidance only; user is responsible for load values to evaluate the system.

Catalog Number	Drive Horsepower	Fan Catalog Number	Fan Size	Fan VAC	Fan Amps 50/60 Hz	System CFM	Replacement Filter Catalog Number
WF3LP	3	A4AXFN	4 inch	115	.26/.21	75	WFF1
WF10LP	10	A6AXFN	6 inch	115	.45/.36	160	WFF1
WF25LP	25	A6AXFN	6 inch	115	.45/.36	160	WFF1
WF40LP	40	A6AXFN	6 inch (2x)	115	.90/.72	200	WFF1
WF75LP	75	A10EFN	10 inch	115	.58/.70	400	WFF2
WF100LP	100	A10EFN	10 inch (2x)	115	1.16/1.40	500	WFF2

Solar Consideration

The WeatherFlo enclosure's glossy white finish and solar shield top shroud minimize the heat load caused by the sun. If the allowable temperature rise is greater than 5°F, the solar load can be neglected because the transmitted load of the illuminated sides would be equal to the energy dissipated on the sides not exposed to the sun.



WeatherFlo™ Type 3R Vented Enclosure with Fan and Technical Information

Critical Parameters (upper temperature limit)

	Variables	Typical Values
Maximum ambient temperature	T _{amb}	104°F
Maximum internal temperature	T _{int}	122°F
Typical temperature rise	(T _{int} -T _{amb})	15°F
Full-load drive power	HP	—
Motor efficiency*	E _M	.80-.96
Drive efficiency*	E _D	.96-.98
Drive heat loss	W _D	—
Total heat loss	W _T	—
Required airflow	CFM	—

* Use full-load efficiency. Motor and drive efficiency will vary based on HP and voltage.

Enclosure Heat Load Calculations

Drive heat:

$$W_D = \frac{HP \times (745.7 \text{ Watts/HP})}{E_M} \times (1 - E_D) \text{ [Watts]}$$

Total heat:

Estimate an additional 25%^a for wire connections and other components.

$$W_T = W_D \times 1.25^a \text{ [Watts]}$$

Required airflow:

$$CFM = \frac{W_T \times 3.16}{T_{int} - T_{amb}} \text{ [Ft}^3 \text{ / Min]}$$

Sample Values

Drive Horsepower [hp]	Typical Full Load Rating		Drive Heat Loss W _D [Watts]	Additional Heat Loss ^a [Watts]	Total Heat Loss W _T [Watts]	Airflow when T _{int} -T _{amb} = 15°F [CFM]
	Motor Efficiency	Drive Efficiency				
3	.86	.97	78	20	98	21
10	.90	.97	249	62	311	65
25	.91	.97	615	154	768	162
40	.92	.98	648	162	811	171
75	.93	.98	1203	301	1503	317
100	.94	.98	1587	397	1983	418

^a This is an estimated factor. Further investigation is necessary to obtain actual total heat dissipated in enclosure.

Critical Parameters (lower temperature limits)

Determine the ambient operating temperature range of the drive. A typical operating range is from 14° to 122°F (-10° to 50°C). For outdoor assemblies in northern climates, the lower operating temperature may be below the lower temperature limit. To ensure that cold starts are not below the low limit temperature, the addition of a heater is recommended.

Hoffman has 100, 200, 400, and 800 Watt heaters available with adjustable thermostats from 0°-100°F. For additional information, see the Thermal Management section of the Hoffman Specifier's Guide.



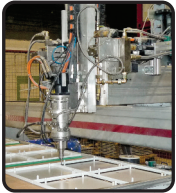
WeatherFlo Catalog Number	Recommended Heater Catalog Number		Heater Size [Watts]	Estimated Temperature Rise Above Ambient [°F]
	115 VAC	230 VAC		
WF3LP	DAH2001A	DAH2002A	200	55
WF10LP	DAH2001A	DAH2002A	200	46
WF25LP	DAH2001A	DAH2002A	200	40
WF40LP	DAH2001A	DAH2002A	200	33
WF75LP	DAH4001A	DAH4002A	400	41
WF100LP	DAH4001A	DAH4002A	400	34



MUS/MUD STEEL ENCLOSURES

POURED-IN-PLACE GASKET

guarantees IP66, Type 4 protection.



GROUNDING STUDS

for PE connections both sides of body and door.



CONCEALED DRIP SHIELD/CHANNEL

drains water away from enclosure entry even when door is open. UL Type 3R without dripshield.



MOUNTING PROFILES

serve as door stiffeners and allow for mounting accessories to the back of the door. They are



standard on 600mm width and above enclosures and optional on smaller enclosures.

SLOTTED LOCK

for ease of opening with a screwdriver.



TEXTURED POWDER COAT

on the outside of enclosure and on the inside for durable long-lasting finish (RAL 7035).

130° LEFT SIDE HINGED DOOR OPENING

open 130° and can be easily removed.



MOUNTING PANEL

optional galvanized or white powder-coated subpanels.



DESIGNED FOR U.S. MARKET!

MOUNTING HOLES

for direct mounting or use with optional wall mounting brackets.



MANY ACCESSORY OPTIONS!

- Powder-coated mounting panel
- Doors with windows
- Hinged inner panels
- Key and latch options
- Depth adjustment kits
- Lights and switches
- Mounting brackets
- Plinths, floor stands
- Fans, vents, heaters

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INDUSTRIAL CONTROL PRODUCTS





MUS/MUD STEEL ENCLOSURES



MUS Enclosures

UL/cUL Type 1, 3R, 4, 12, 13, Single Door

Part Number	Nominal Dimensions (HxWxD)	Enclosure Dimensions		
		H	W	D
MUS0202015PER5	8"x8"x6"	7.87"	7.87"	6.1"
MUS0252015PER5	10"x8"x6"	9.84"	7.87"	6.1"
MUS0252515PER5	10"x10"x6"	9.84"	9.84"	6.1"
MUS0302515PER5	12"x10"x6"	11.81"	9.84"	6.1"
MUS0302521PER5	12"x10"x8"	11.81"	9.84"	8.27"
MUS0303015PER5	12"x12"x6"	11.81"	11.81"	6.1"
MUS0303021PER5	12"x12"x8"	11.81"	11.81"	8.27"
MUS0352515PER5	14"x10"x6"	13.77"	9.84"	6.1"
MUS0403015PER5	16"x12"x6"	15.74"	11.81"	6.1"
MUS0403021PER5	16"x12"x8"	15.74"	11.81"	8.27"
MUS0404021PER5	16"x16"x8"	15.74"	15.74"	8.27"
MUS0405021PER5	16"x20"x8"	15.74"	19.68"	8.27"
MUS0406021PER5	16"x24"x8"	15.74"	23.62"	8.27"
MUS0503021PER5	20"x12"x8"	19.68"	11.81"	8.27"
MUS0504015PER5	20"x16"x6"	19.68"	15.74"	6.1"
MUS0504021PER5	20"x16"x8"	19.68"	15.74"	8.27"
MUS0504026PER5	20"x16"x10"	19.68"	15.74"	10.23"
MUS0504030PER5	20"x16"x12"	19.68"	15.74"	11.81"
MUS0505021PER5	20"x20"x8"	19.68"	19.68"	8.27"
MUS0505030PER5	20"x20"x12"	19.68"	19.68"	11.81"
MUS0604015PER5	24"x16"x6"	23.62"	15.74"	6.1"
MUS0604021PER5	24"x16"x8"	23.62"	15.74"	8.27"
MUS0604026PER5	24"x16"x10"	23.62"	15.74"	10.23"
MUS0604030PER5	24"x16"x12"	23.62"	15.74"	11.81"
MUS0605015PER5	24"x20"x6"	23.62"	19.68"	6.1"
MUS0605021PER5	24"x20"x8"	23.62"	19.68"	8.27"
MUS0605026PER5	24"x20"x10"	23.62"	19.68"	10.23"
MUS0605030PER5	24"x20"x12"	23.62"	19.68"	11.81"
MUS0606021PER5	24"x24"x8"	23.62"	23.62"	8.27"
MUS0606030PER5	24"x24"x12"	23.62"	23.62"	11.81"
MUS0606040PER5	24"x24"x16"	23.62"	23.62"	15.74"
MUS0608030PER5	24"x31"x12"	23.62"	31.5"	11.81"
MUS0705021PER5	28"x20"x8"	27.55"	19.69"	8.27"
MUS0705026PER5	28"x20"x10"	27.55"	19.68"	10.23"
MUS0804030PER5	31"x16"x12"	31.5"	15.74"	11.81"
MUS0806021PER5	31"x24"x8"	31.5"	23.62"	8.27"
MUS0806026PER5	31"x24"x10"	31.5"	23.62"	10.23"
MUS0806030PER5	31"x24"x12"	31.5"	23.62"	11.81"
MUS0806040PER5	31"x24"x16"	31.5"	23.62"	15.74"
MUS0808021PER5	31"x31"x8"	31.5"	31.5"	8.27"
MUS0808030PER5	31"x31"x12"	31.5"	31.5"	11.81"
MUS0808040PER5	31"x31"x16"	31.5"	31.5"	15.74"
MUS0908021PER5	35"x31"x8"	35.43"	31.5"	8.27"
MUS0908030PER5	35"x31"x12"	35.43"	31.5"	11.81"
MUS0909021PER5	35"x35"x8"	35.43"	35.43"	8.27"
MUS0909030PER5	35"x35"x12"	35.43"	35.43"	11.81"
MUS1006026PER5	39"x24"x10"	39.37"	23.62"	10.23"
MUS1006030PER5	39"x24"x12"	39.37"	23.62"	11.81"
MUS1008026PER5	39"x31"x10"	39.37"	31.5"	10.23"
MUS1008030PER5	39"x31"x12"	39.37"	31.5"	11.81"
MUS1009030PER5	39"x35"x12"	39.37"	35.43"	11.81"
MUS1008040PER5	39"x31"x16"	39.37"	31.5"	15.74"
MUS1206030PER5	47"x24"x12"	47.24"	23.62"	11.81"
MUS1208030PER5	47"x31"x12"	47.24"	31.5"	11.81"
MUS1208040PER5	47"x31"x16"	47.24"	31.5"	15.74"

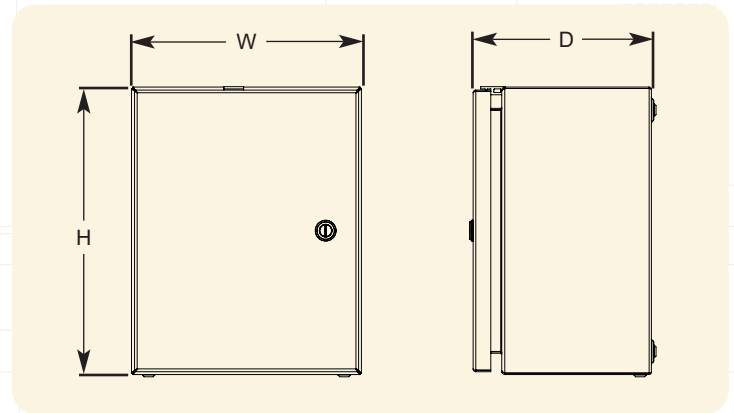


MUD Enclosures

UL/cUL Type 1, 3R, 12, 13 Double Door

Part Number	Nominal Dimensions (HxWxD)	Enclosure Dimensions		
		H	W	D
MUD0608030PER5	24"x31"x12"	23.62"	31.50"	11.81"
MUD0801230PER5	31"x47"x12"	31.50"	47.24"	11.81"
MUD1001030PER5	39"x39"x12"	39.37"	39.37"	11.81"
MUD1201030PER5	47"x39"x12"	47.24"	39.37"	11.81"
MUD1401030PER5	47"x47"x12"	47.24"	47.24"	11.81"

Dimensions



CONTACT US:

Call Toll-Free:
1-800-972-0436
 M-F 8:30am-7:00pm ET
 — OR —

Go Online:
www.factorymation.com
 24 hours a day,
 7 days a week

MPDB Series

Open-Style Power Distribution Blocks

POWER DISTRIBUTION BLOCKS

THE NEXT GENERATION
POWER DISTRIBUTION BLOCK (PDB)



Mersen power distribution blocks provide a safe and easy method of splicing cables, splitting primary power into secondary circuits and fulfilling requirements for fixed junction tap-off points. Unless noted otherwise, all blocks are UL and CSA approved while meeting spacing requirements for feeder and branch circuits in conjunction with UL508A and the National Electrical Code®. PDB options include single or dual conductor primary inputs and up to 30 secondary outputs. Specialty blocks are available allowing for up to 7 primary inputs. The MPDB series is offered in three size categories: miniature (MPDB62 and MPDB63 series), intermediate (MPDB66 and MPDB67 series), and large (MPDB68 and MPDB69 series), in both aluminum and copper.

FEATURES/BENEFITS:

- **Adder Poles:** All sizes have optional adder poles for increased flexibility and ease-of-use. Adder poles can be stacked to form multi-pole units in the field without the use of tools. Adder poles allow for customization of primary and secondary wire combinations. End barriers are also available for sale, catalog numbers can be found in the catalog number selection tables for each size block.
- **Wire Connectors:** Standard aluminum and copper wire connectors are available. Aluminum connectors accept both AL or CU wire while copper connectors accept CU wire only. Connectors are all 1-piece tin-plated. Many part numbers are rated to accept DLO-type fine-strand wire, allowing users to connect flexible conductors. (Continued on next page.)

RATINGS:

Volts: 1000VAC/DC

Amps: 65 to 2260A based on NEC table 310.15(B)(16) 75°C ampacities

SCCR: 100kA with properly sized fuse (See Mersen's PDB SCCR guide at ep.mersen.com or contact Mersen Technical Services)

APPROVALS:

- UL Listed to subject 1953, File E352417 unless noted otherwise
- CSA Certified Class 6228 01



FEATURES/BENEFITS (CONTINUED):

- **Insulators:** Insulators are virtually unbreakable, made of glass-filled polycarbonate. “See-through,” hinged safety covers are optional and provide a greater degree of safety and shock resistance where required. Hinged covers can be installed without tools.
- **Spacings:** 1 inch through air and 2 inches over surface between uninsulated live parts of opposite polarity meets requirements for feeder and branch circuit applications of UL508A.
- **Safety Covers:** Polycarbonate safety covers provide dead-front protection. One cover is needed for each pole. Each cover has a test probe hole in the center for circuit checking. Covers are optional accessories and catalog numbers can be found in the catalog selection tables for each size block.

ADDITIONAL SPECIFICATIONS:

- Wire Type:** Copper Blocks: 60/75°C Solid/Stranded CU; Aluminum Blocks: 60/75/90°C Solid/Stranded AL and CU
- Connector:** Copper Blocks: Highly conductive tin-plated copper; Aluminum Blocks: Highly conductive tin-plated aluminum
- Insulating Material:** Glass-filled polycarbonate with verified dielectric strength in excess of 2500V
- Flammability:** UL94-V0
- Mounting:** Direct panel mount
- Environmental:** RoHS compliant, Lead Free

PART SELECTION NOTES

MPDBs in each size category come in one, two, and three pole configurations (ending in -1, -2, and -3 accordingly). Users also have the ability to field install additional poles, end barriers, and safety covers.

Safety Cover
Optional, snap-on, hinged safety cover

MPDBC6263	Miniature Series
MPDBC6667	Intermediate Series
MPDBC6869	Large Series

End Barrier
Snap-on to Adder pole to complete assembly

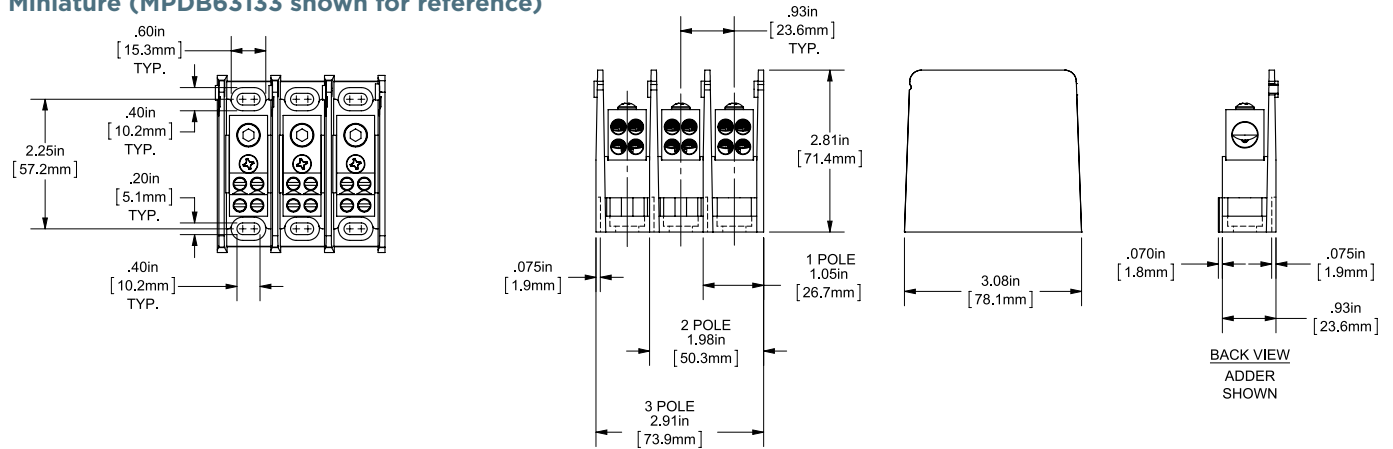
MPDBE6263	Miniature Series
MPDBE6667	Intermediate Series
MPDBE6869	Large Series

Adder Pole
Snap-on Adder poles to fully assembled units to add additional poles in the field. Adder pole catalog numbers in all.

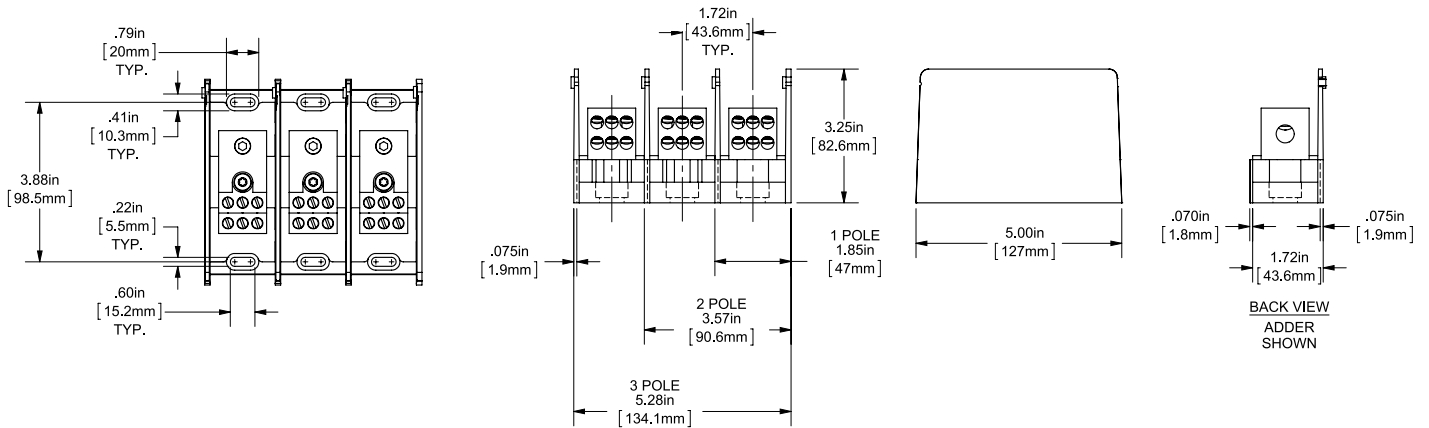
Adder Pole
Field assemble Adder poles to form multi-pole units.

DIMENSIONS

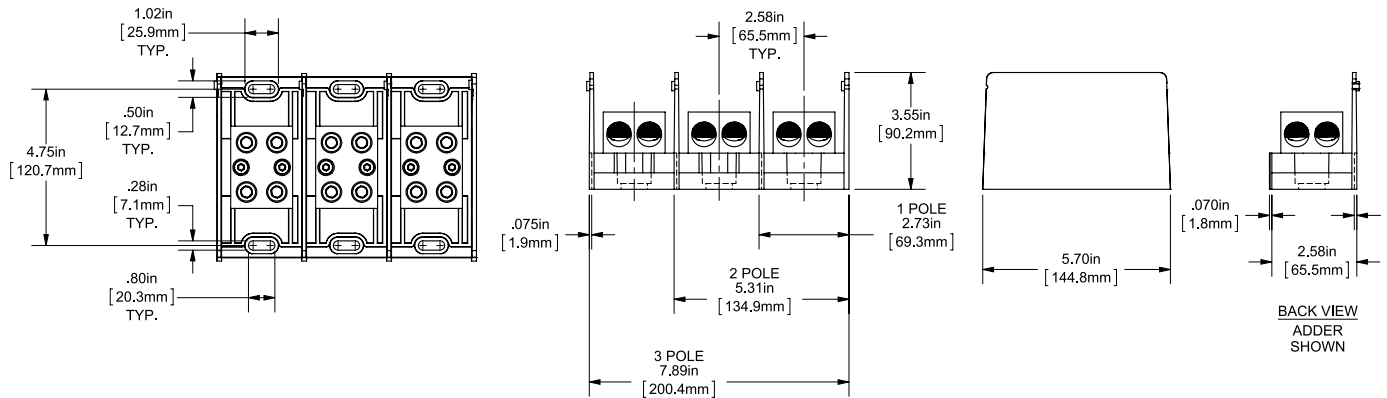
Miniature (MPDB63133 shown for reference)



Intermediate (MPDB67563 shown for reference)

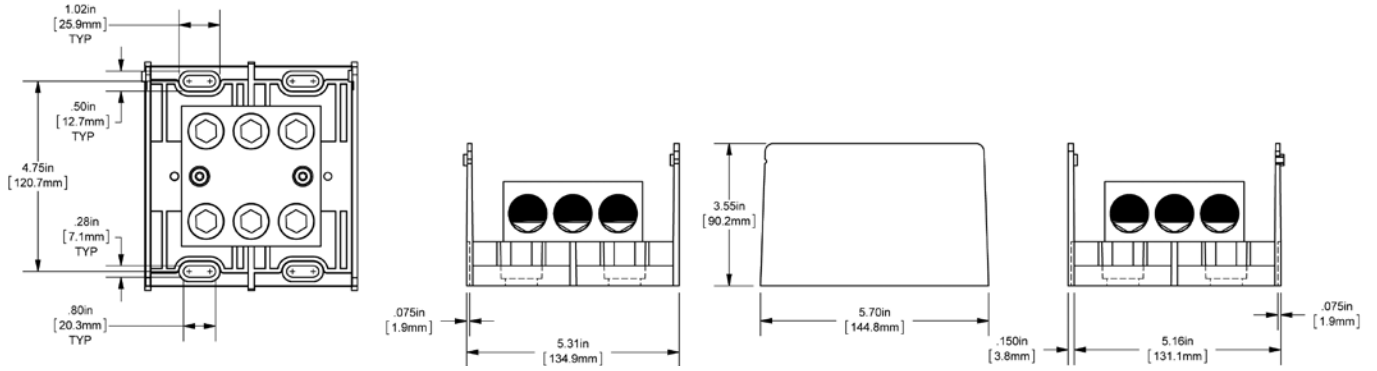


Large (MPDB69123 shown for reference)

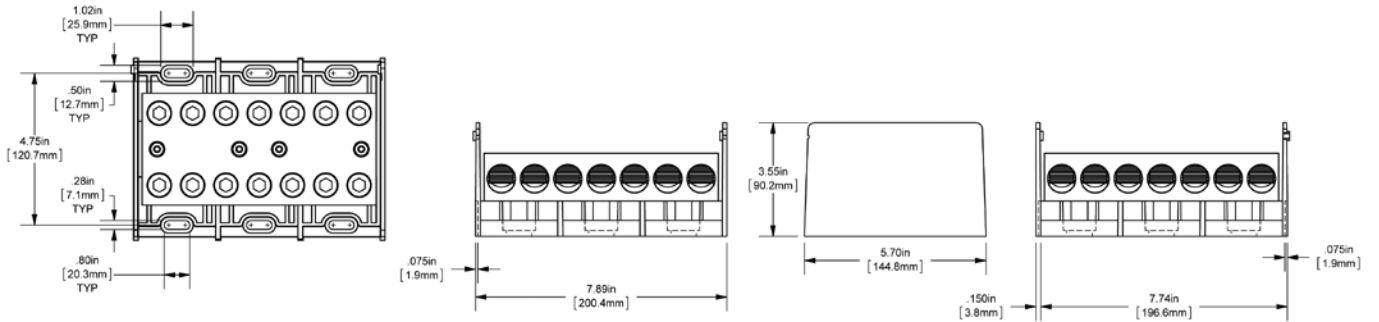


DIMENSIONS (CONTINUED)

Double-Wide (MPDB69331 shown for reference)



Triple-Wide (MPDB800061 shown for reference)



FSPDB

Finger-Safe Power Distribution Blocks

POWER DISTRIBUTION BLOCKS

SAFETY EVOLVING



Mersen FSPDBs introduce a new level of safety and ease for installing power distribution blocks. An IP20 level of finger-safe protection is achieved using FSPDBs, eliminating the need for special covers or custom Plexiglas sheets to protect your panels. FSPDBs (sizes 1 to 4) simply snap onto 35mm DIN rail to provide the quickest installation. Modular design also allows for multi pole applications by use of assembly pins. FSPDBs provide a safe, convenient way of splicing cables, splitting primary power into a variety of secondary circuits or providing a fixed junction tap-off point.

FEATURES/BENEFITS:

- **Finger-safe protection:** Fully insulated block ensures touch safe isolation of live parts. Recessed termination screws and wire openings provide IP20 grade protection and qualify as “finger-safe” per IEC 529.
- **Compact modularity:** Single or multiple pole configurations in the most compact footprint. Allows users to build smaller or higher density panels.
- **Snap on DIN-rail mounting:** Sizes 1 to 4 feature integral DIN rail adaptors allowing for quick and easy installations on 35mm DIN rail yielding lower installed costs.
- **Captive termination screws:** Unique channel design ensures captive metric wire termination screws. Screws can never be lost.
- **Available accessories:** For multi-pole panel mounting, simply snap in pins for rigid fit. Cap plugs provide the ability to maintain touch safety on unused openings. Circuit identification markers simply snap into blocks to ID circuits. End anchors provide rigid end stops. (Continued on next page.)

RATINGS:

Volts: FSPDB1,2,3—1500VAC/DC; FSPDB4,5—600VAC/DC

Amps: 175 to 840A

SCCR: 600V or less, 100kA with proper fuse; Over 600V, 10kA

Contact Technical Services for instruction sheet.

APPROVALS:

- UL Recognized Component Guide XCFR2, File E73571
- CSA Certified: Class 6228, File 69363
- IEC-947-7-1, 529, 68-2-6, CE Marked



FEATURES/BENEFITS (CONTINUED):

- **Multiple wire ratings:** Provide users more versatility by offering capability of using multiple conductors in #2 and 2/0 openings.
- **AC & DC ratings:** FSPDB1, 2, and 3 have been evaluated for use at 1000V (AC or DC) provided they are installed on DIN-rails only and with barriers between poles of opposite polarity of sufficient size to maintain required spacings.

CATALOG NUMBERS

Catalog Number		Ampere Rating (Based on NEC Table 310-16 for 75° C Cu wire only)	Line			Load		Openings Per Pole	Short Circuit Current Rating
Aluminum (Connector rated for 90° C Cu/AL wire)	Copper (Connector rated for 75° C Cu wire only)		Wire Range		Openings	Wire Range			
			AWG/	mm ²		AWG/ kcmil	mm ²		
FSPDB1A	FSPDB1C	175	2/0-#14	70-2.5	1	2/0-#14	70-2.5	1	100kA•
FSPDB2A	FSPDB2C	175	2/0-#14	70-2.5	1	#2-#14	35-2.5	4	100kA•
FSPDB3A	FSPDB3C	310	350-#6	185-16	1	#8-#14	8-2.5	8	100kA•
			2/0-#14	70-2.5					
FSPDB4A	FSPDB4C	335	400-#6	185-16	1	400-#6	185-16	1	100kA•
FSPDB5A	FSPDB5C	840	600-#4	300-25	2	600-#4	300-25	2	100kA•

*Contact Mersen Technical Services at technicalservices.nby@mersen.com for fuse type and maximum ampere required.

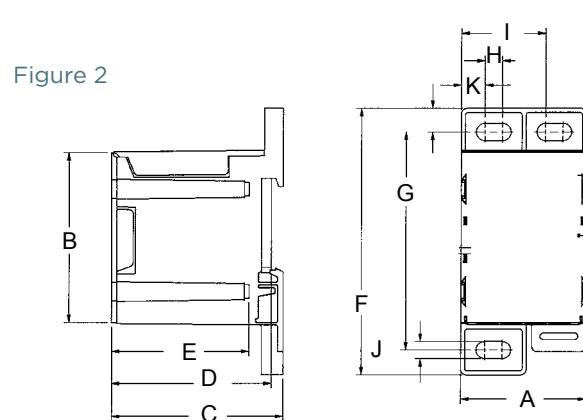
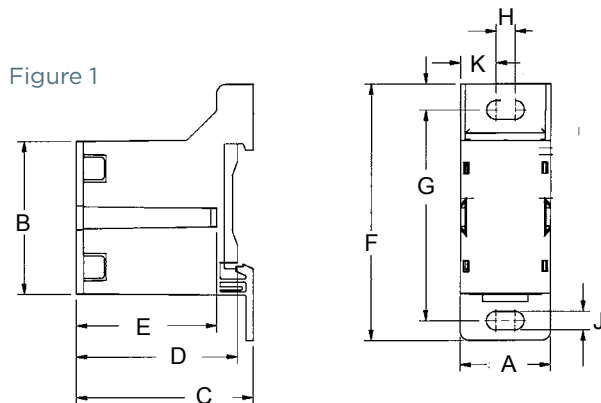
Multiple Wire Ratings (Same Size & Type Wires Only)					
2/0 Openings			#2 Openings		
(2) #4 AWG	(2) #8 AWG	(2) #12 AWG	(2) #6 AWG	(2-4) #10 AWG	(2-4) #14 AWG
(2) #6 AWG	(2) #10 AWG	(2) #14 AWG	(2) #8 AWG	(2-4) #12 AWG	

DIMENSIONS

Dimension	FSPDB1A FSPDB1C Figure 1		FSPDB2A FSPDB2C Figure 1		FSPDB3A FSPDB3C Figure 2		FSPDB4A FSPDB4C Figure 1		FSPDB5A FSPDB5C Figure 2	
	mm	in	mm	in	mm	in	mm	in	mm	in
A	25.4	1.00	28.4	1.12	46.9	1.85	39	1.54	72	2.84
B	43.3	1.70	57.8	2.28	64.3	2.53	108	4.25	91	3.58
C	49.5	1.95	56.0	2.21	64.3	2.53	80	3.15	80	3.15
D	45.1	1.78	51.6	2.03	59.8	2.36	75.5	2.97	-	-
E	39.4	1.55	39.4	1.55	51.5	2.03	50.1	1.97	50.1	1.97
F	72.6	2.86	87.7	3.45	100.8	3.97	145.5	5.73	145	5.71
G	59.6	2.35	74.6	2.94	82.4	3.24	120.6	4.75	127.5	5.02
H	5.3	0.21	5.1	0.20	6.5	0.26	7	0.28	3	0.12
I	-	-	-	-	31.5	1.24	-	-	52	2.04
J	5.3	0.21	6.4	0.25	6.5	0.26	6.5	0.26	6.5	0.26
K	10	0.40	11.7	0.46	8.9	0.35	16	0.63	8.5	0.34

ACCESSORIES

Catalog No.	Description
FSPIN1	Accessory pin to form multiple pole block
FSCIM1	Circuit identification marker for 2/0 & #2 max. conductors (80 per card)
FSCIM2	Circuit identification marker for 350, 400 & 600 kcmil max. conductors (56 per card)
FSCAP1	Cap plug for spare 2/0 openings
FSCAP2	Cap plug for spare 350 kcmil openings
FSCAP3	Cap plug for spare 600 kcmil opening
FSEA	Pair of end anchors



AE/CE Series Industrial Control Transformers



FEATURES & BENEFITS

- Epoxy encapsulated design protects core & coil assembly from potentially damaging contaminants.
- Integrally molded terminal blocks with isolation barriers to prevent arc over, terminal blocks allow full access for ring terminals for easy installation and solid termination.
- Heavy gauge steel mounting feet.
- Available factory or field installed fuse blocks provide integral fusing on the primary or primary and secondary.
- Dual labeling for easy product identification when equipped with a fuse block.
- 50-750 VA, 50/60 Hz.
- UL and cUL Listed, CE Marked (CE Series only).
- Ten-year limited warranty.
- 55°C Temperature Rise.
- 105°C Insulation Class.

CE Series for Global Applications

Acme's CE Series Encapsulated Industrial Control Transformers carry the CE mark, indicating it complies with the requirements established by the International Electrotechnical

Commission (IEC) for use of control circuit transformers in the countries of the European Union. Regulations that apply to control transformers include Low Voltage Directive 73/23/EEC and Electromagnetic Compatibility (EMC) Directive 89/336/EEC.



The Acme Electric AE and CE Series Industrial Control Transformers are designed specifically for machine tool control circuit applications. These transformers have the ability to handle potentially damaging high in-rush currents that occur when electromagnetic components are energized, without sacrificing the required stable output voltage. Designed to meet or exceed the demands of international standards, combined with the full breadth of product offering, the AE and CE Series Transformers from Acme Electric are the ideal solution for your industrial control applications.

Cooler. Cleaner. More Compact.

The AE and CE Series design improves the dissipation of the heat away from the core and coil assembly providing cooler operation. In addition, the AE and CE Series industrial control transformers seal the transformer's windings and internal terminations within an epoxy encapsulant encased in a durable thermoplastic end cap, protecting them from potentially damaging moisture, dirt and other ambient contaminants. Furthermore, Acme's compact design helps minimize the mounting footprint, providing more flexibility in applications where space is at a premium.

