FSPDB Finger-Safe 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.

- **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.

Ratings:

Volts : 600VAC/DC
Amps: : 175 to 840A
SCCR : 100kA with proper fuse.

Contact Technical Services for instruction sheet and/or DC Ratings.

Approvals:

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

FSPDB Finger-Safe Power Distribution Blocks

Catalog Numbers

Catalog Number		Ampere Rating (Based on NEC Table 310-16 for 75° C Cu wire only)	Line Wire Range			Load Wire Range			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)		AWG/	mm2	Openings	AWG/ kcmil	mm2			
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) #10 AWG	(2) #6 AWG	(2-4) #12 AWG
(2) #6 AWG	(2) #12 AWG	(2) #8 AWG	(2-4) #14 AWG
(2) #8 AWG	(2) #14 AWG	(2-4) #10 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

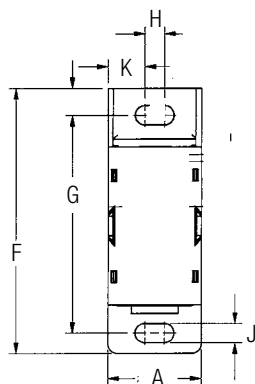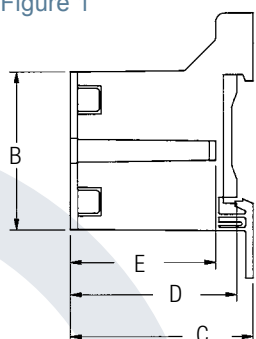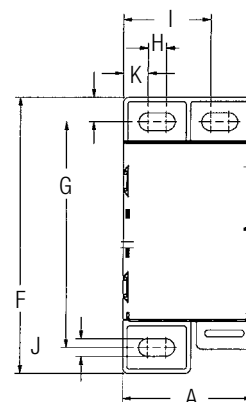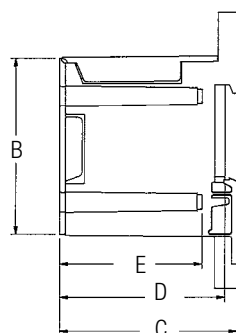| Catalog No.	Description
FSPIN1	Accessory pin to form multiple pole block
FSCIM1	Circuit identification marker for 2/0 & #2 max. conductors (Qty of 100)
FSCIM2	Circuit identification marker for 350, 400 & 600 kcmil max. conductors (Qty of 100)
FSCAP1	Cap plug for spare 2/0 openings
FSCAP2	Cap plug for spare 350 kcmil openings
FSCAP3	Cap plug for spare 600 kcmil opening
FSEA	Pair of end anchors

Figure 1

Figure 2

For the most current product performance data visit ep-us.mersen.com and use catalog search.