

DETAIL SPECIFICATION SHEET

FUSE BOXES, FEEDER DISTRIBUTION, TOTALLY ENCLOSED,
450 VOLTS, ALTERNATING CURRENT, THREE PHASE BUSES,
SINGLE AND THREE PHASE BRANCHES, 0-30 AND 31-60 AMPERE FUSES,
SYMBOLS 543, 544, 545, 546 AND 547

This specification is approved for use by all Departments
and Agencies of the Department of Defense.

The requirements for acquiring the product described herein
shall consist of this specification sheet and [MIL-DTL-24646](#).

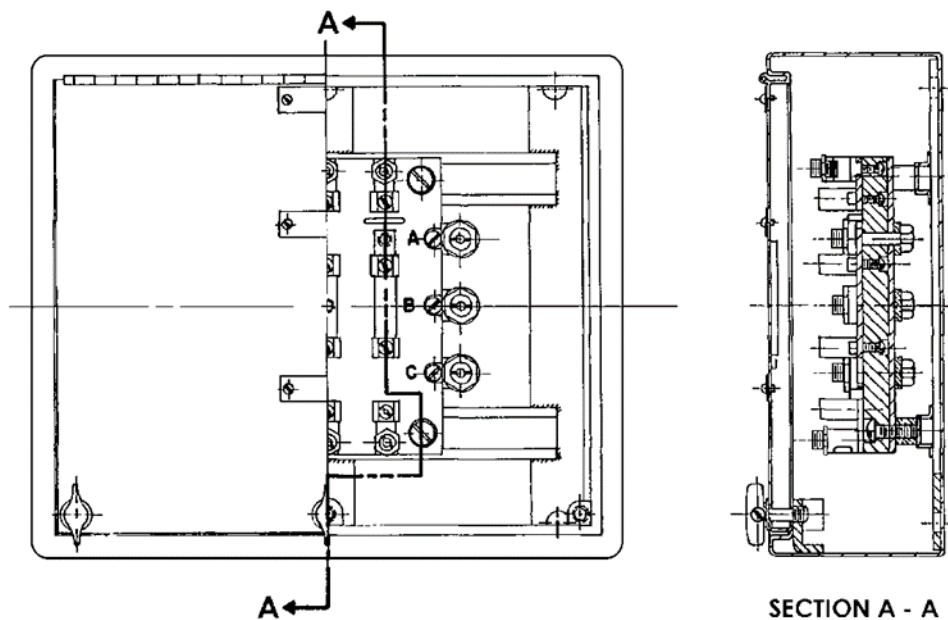


FIGURE 1. Fuse box assembly, typical. Item No. 01, 02, 03, 04, 05
(Symbol 543 shown)

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified herein, tolerances shall be as follows:
Two place decimals - plus or minus 0.02.
Three place decimals - plus or minus 0.005.

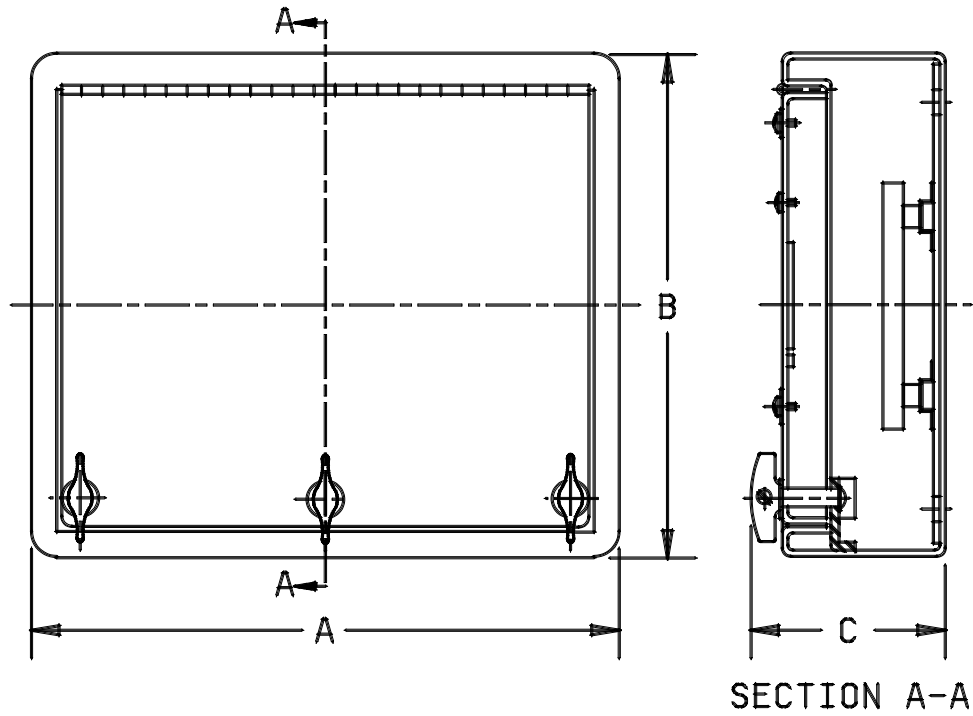
AMSC N/A

FSC 5920

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.



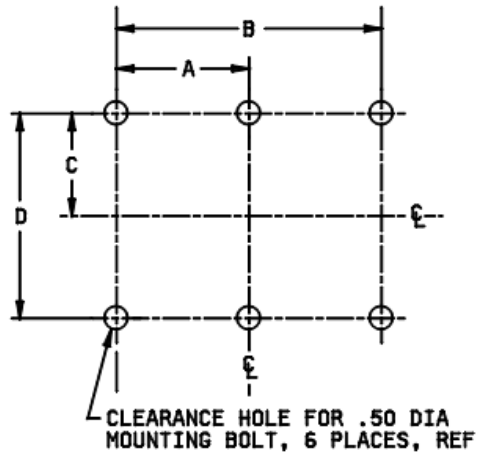
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SYMBOL	DIMENSIONS (REF)		
	A	B	C
543	14.16	12.16	4.75
544	18.16	12.16	4.75
545	22.16	12.16	4.75
546	16.16	14.16	4.75
547	22.16	14.16	4.75

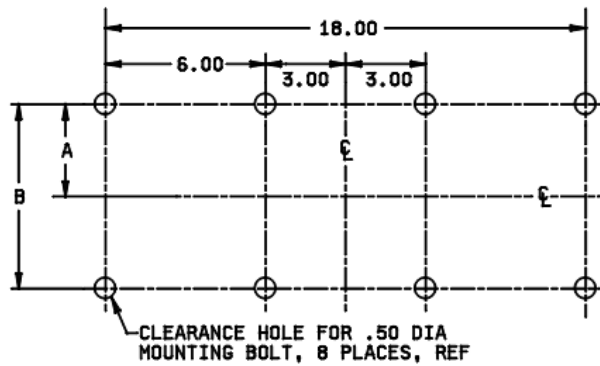
FIGURE 2. Enclosure, overall dimensions. Item No. 06, 07, 08, 09, 10
(Symbols 543, 544, 545, 546 and 547)

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A. Symbols 543, 544 and 546.

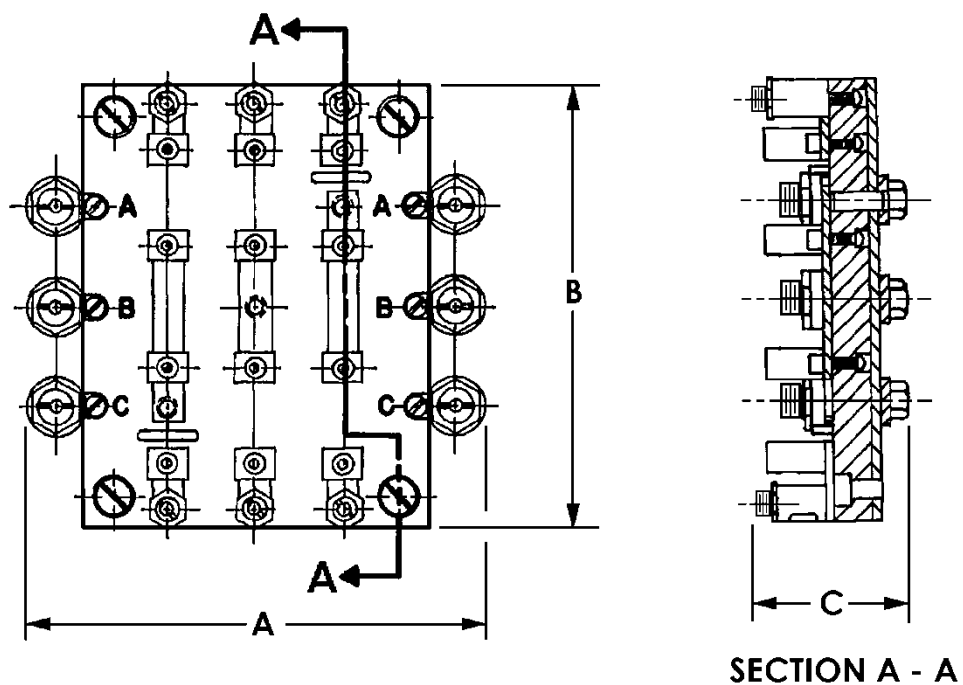
SYMBOL NO	DIMENSIONS			
	A	B	C	D
543	5.50	11.00	5.25	10.50
544	7.00	14.00	5.25	10.50
546	6.00	12.00	6.25	12.50



B. Symbols 545 and 547.

SYMBOL NO	DIMENSIONS	
	A	B
545	5.25	10.50
547	6.25	12.50

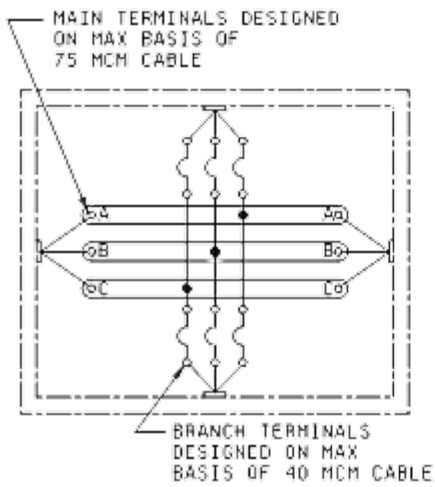
FIGURE 3. Mounting dimensions, ref.



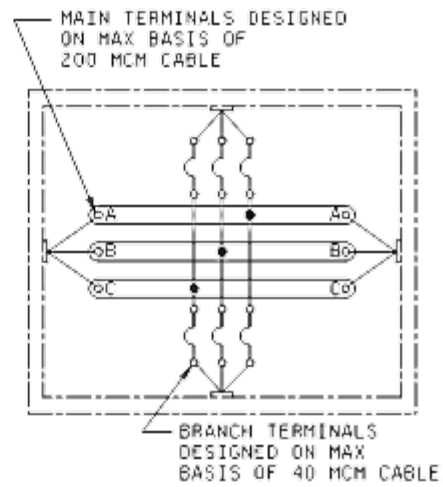
SYMBOL	DIMENSIONS (MAX)		
	A	B	C
NO			
543	7.87	7.12	2.80
544	11.87	7.12	2.80
545	16.37	7.12	2.70
546	8.87	8.38	2.80
547	14.37	8.38	2.80

FIGURE 4. Fuse block assembly, typical. Item No. 11, 12, 13, 14, 15
(Symbols 543, 544, 545, 546 and 547)

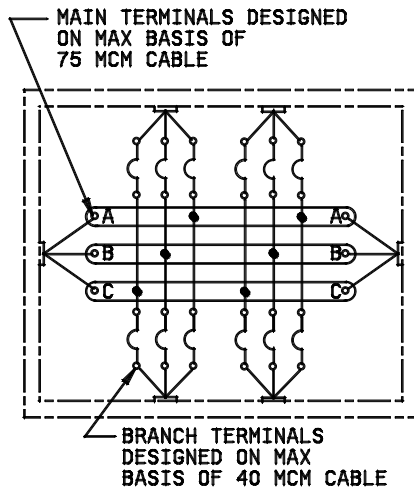
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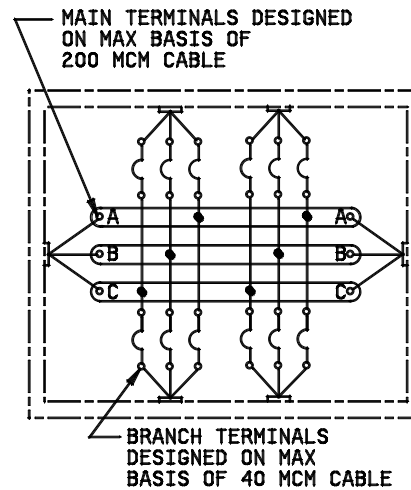
A. Two 3-phase branches
(Symbol 543)



B. Two 3-phase branches
(Symbol 546)

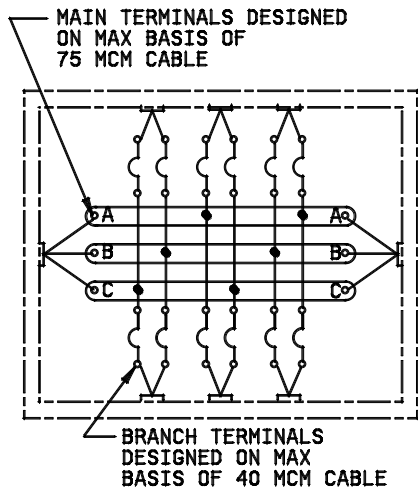


C. Four 3-phase branches
(Symbol 544)

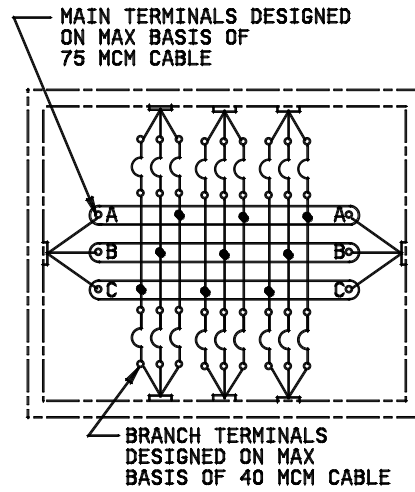


D. Four 3-phase branches
(Symbol 547)

FIGURE 5. Wiring diagrams. Item No. 16, 17, 18, 19, 20



E. Six single-phase branches
(Symbol 544)



F. Six 3-phase branches
(Symbol 545)

FIGURE 5. Wiring diagrams. Item No. 16, 17, 18, 19, 20 - Continued.

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REQUIREMENTS

Symbol numbers: See [table I](#).

Design:

Electrical rating: 450 volts alternating current, 0-30 and 31-60 ampere, 60 hertz.

Dimensions and configuration: See figures [1](#), [2](#), [3](#) and [4](#).

Wiring diagrams: See [figure 5](#).

Mounting dimensions: See [figure 3](#).

Degree of enclosure: Totally enclosed.

Designation and marking: See [MIL-DTL-24646](#).

Parts: The parts listed in table II and specified in [MIL-DTL-24646](#) shall be used in the construction of the fuse boxes specified herein.

General information:

Military part numbers and general information is as specified in [table I](#).

TABLE I. Military parts number and general information.

Military part no.	Symbol no.	Approx. weight in pounds ^{1/}	No. of circuits	Feeder MCM	Branch MCM	Fuse size	Bus bar size	Supersedes	
								Drawing no.	Type
M24646/4-001	543	22	2	75	40	0-30A	1.00 x 0.25	9-S-4875-L	-
M24646/4-002	544	29	4 6	75	40	0-30A 0-30A	.75 x .25	9-S-4876-L	-
M24646/4-003	545	34	6	75	40	0-30A	.75 x .19	9-S-4877-L	-
M24646/4-004	546	29	2	200	40	31-60A	1.00 x .25	9000-S-6202-73215	E E-1
M24646/4-005	547	41	4	200	40	31-60A	1.00 x .25	9000-S-6202-73216	-

^{1/} The weight of these fuse boxes may vary + or - 15 percent.

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TABLE II. Parts list.

Item no. 1/	Description	QTY M /-					Material/ specification	Remarks
		001	002	003	004	005		
01	Fuse box assembly (sym 543)	-					MIL-DTL-24646/4	See figure 1
02	Fuse box assembly (sym 544)		-				MIL-DTL-24646/4	See figure 1
03	Fuse box assembly (sym 545)			-			MIL-DTL-24646/4	See figure 1
04	Fuse box assembly (sym 546)				-		MIL-DTL-24646/4	See figure 1
05	Fuse box assembly (sym 547)					-	MIL-DTL-24646/4	See figure 1
06	Enclosure (12 x 14 x 4)	1					M24142/16-004 per MIL-E-24142/16	See figure 2
07	Enclosure (12 x 18 x 4)		1				M24142/16-006 per MIL-E-24142/16	See figure 2
08	Enclosure (12 x 22 x 4)			1			M24142/18-004 per MIL-E-24142/18	See figure 2
09	Enclosure (14 x 22 x 4)					1	M24142/18-005 per MIL-E-24142/18	See figure 2
10	Enclosure (14 x 16 x 4)				1		9-S-73408 Type E	See figure 4
11	Fuse block assembly	1					MIL-DTL-24646/4	See figure 4
12	Fuse block assembly		1				MIL-DTL-24646/4	See figure 4
13	Fuse block assembly			1			MIL-DTL-24646/4	See figure 4
14	Fuse block assembly				1		MIL-DTL-24646/4	See figure 4
15	Fuse block assembly					1	MIL-DTL-24646/4	See figure 4
16	Wiring diagram	1					MIL-DTL-2036	See figure 5
17 2/	Wiring diagram		2				MIL-DTL-2036	See figure 5
18	Wiring diagram			1			MIL-DTL-2036	See figure 5
19	Wiring diagram				1		MIL-DTL-2036	See figure 5
20	Wiring diagram					1	MIL-DTL-2036	See figure 5
21	Fuse clip (0-30A)	12	24	36	-	-	AA55507/1-06 per A-A-55507/1	N/A
22	Fuse clip (31-60A)	-	-	-	12	24	AA55507/1-08 per A-A-55507/1	N/A
23	Identification plate	1	1	1	1	1	Brass, ASTM B36/B36M or ASTM B121/B121M	N/A
24	Information plate	2	4	6	4	6	Brass, ASTM B36/B36M or ASTM B121/B121M	N/A

1/ Item numbers after the figure titles are the same as the item numbers shown in this table.

2/ Unless otherwise specified, both single phase and three phase wiring diagrams shall be furnished.

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Referenced documents. In addition to [MIL-DTL-24646](#), this document references the following:

[ASTM B36/B36M](#) [ASTM B121/B121M](#) [MIL-DTL-2036](#) [MIL-E-24142/16](#) [MIL-E-24142/18](#)
[A-A-55507/1](#)

Amendment notations. The margins of this specification sheet are marked with vertical line to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Custodian:
Navy - SH
DLA - CC

Preparing activity:
DLA - CC

(Project 5920-2023-020)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.