

DETAIL SPECIFICATION SHEET

FUSE BOXES, FEEDER JUNCTION, SUBMERSIBLE, (15 FEET),
250 VOLTS, ALTERNATING CURRENT, FEED THROUGH TWIN CONDUCTORS, SINGLE
AND THREE PHASE BUSES, SINGLE AND THREE PHASE BRANCHES,
0-30 AND 31-60 AMPERE FUSES,
SYMBOLS 685.1, 686.1, 691.1, AND 692.1

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](#).

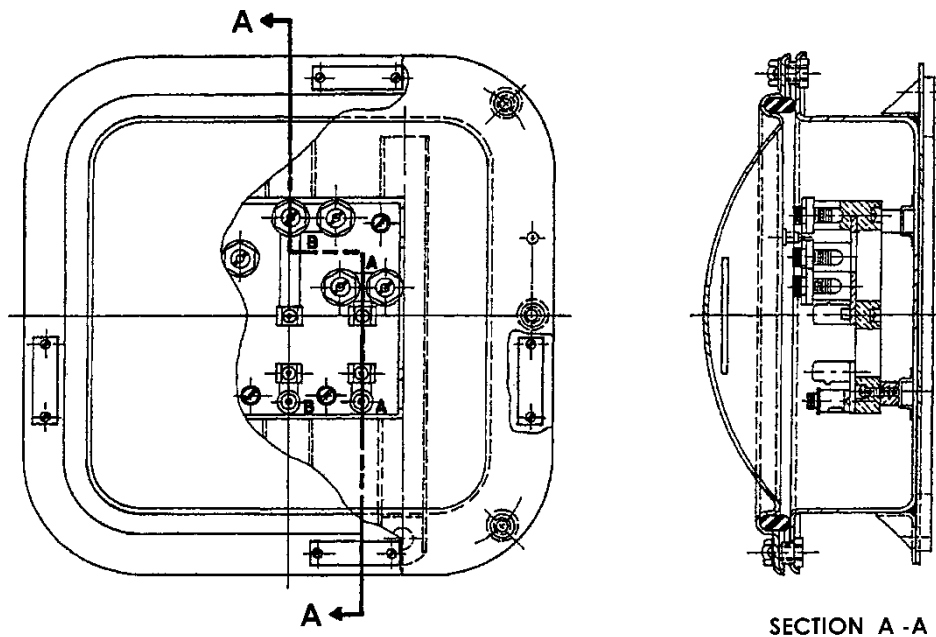


FIGURE 1. Fuse box assembly, typical. Item No. 01, 02, 03, 04
(Symbol 691.1 shown)

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.

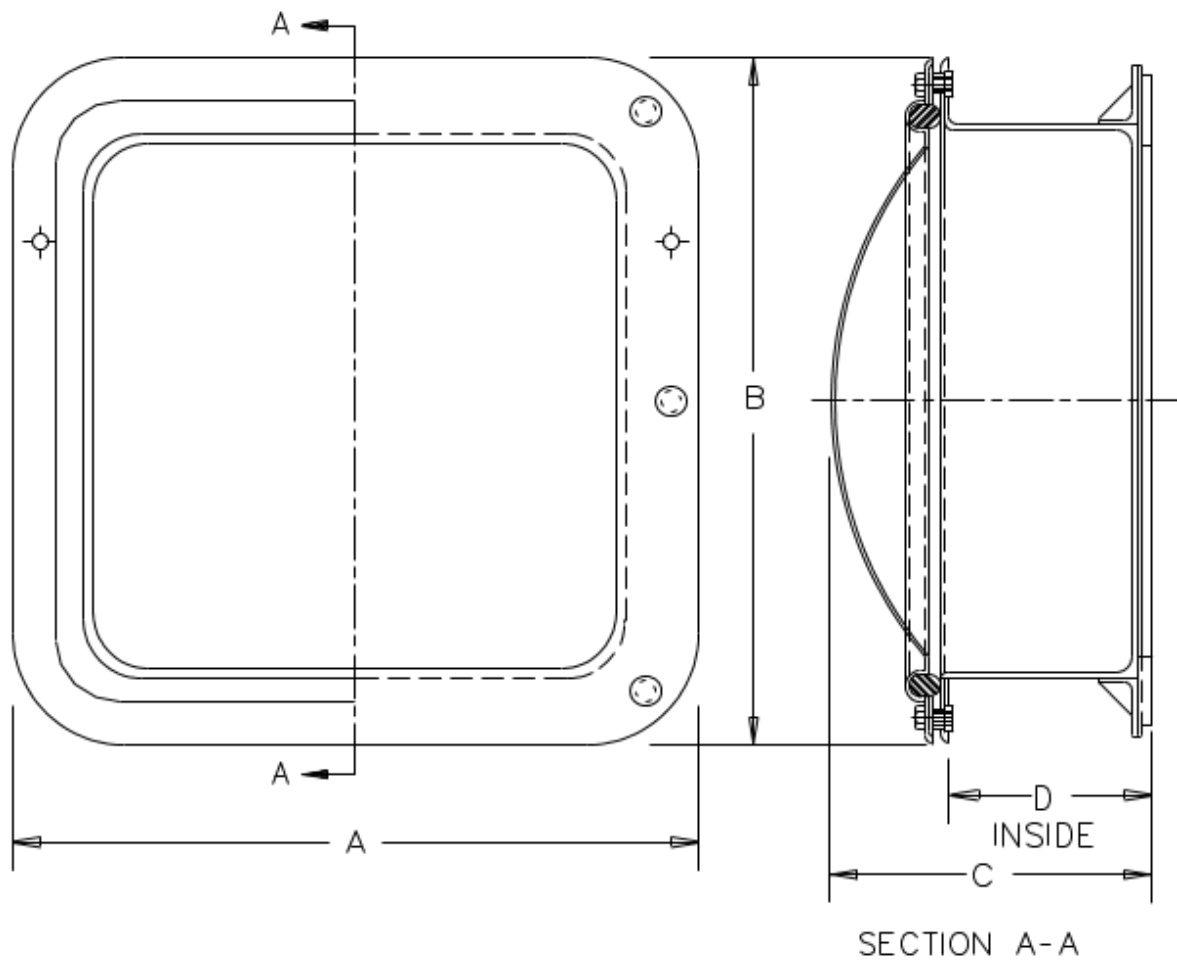
AMSC N/A

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

FSC 5920



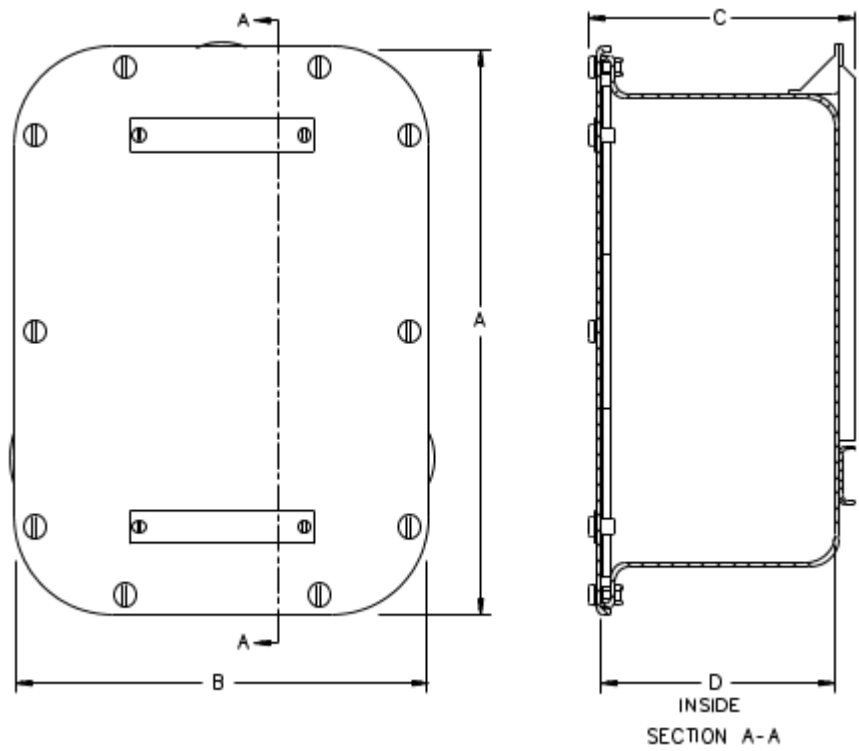
MIL-DTL-24646/15C
w/AMENDMENT 1



(Symbols 691.1, 692.1)

FIGURE 2. Enclosure, overall dimensions. Item No. 05, 06, 07
(Symbols 685.1, 686.1, 691.1, and 692.1)

MIL-DTL-24646/15C
w/AMENDMENT 1

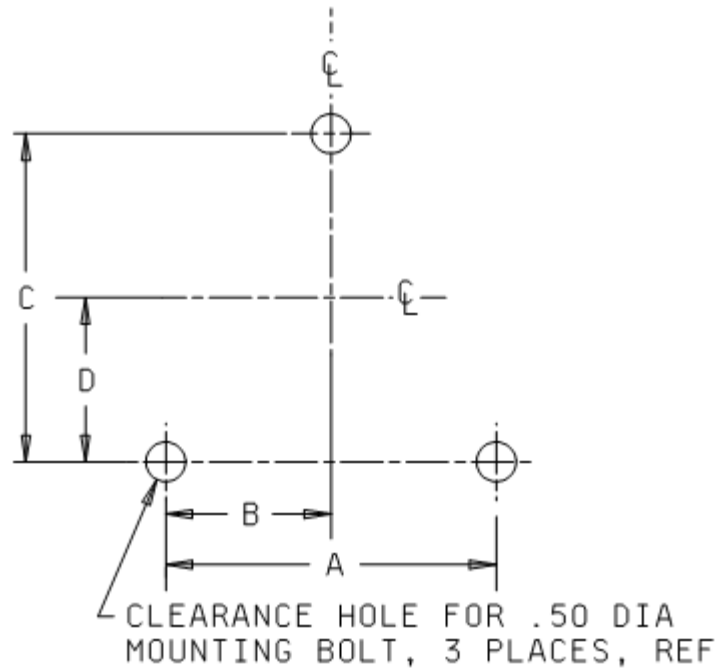


(Symbols 685.1, 686.1)

SYMBOL NO	DIMENSIONS (REF)			
	A	B	C	D
685.1	10.94	7.94	5.12	4.50
686.1	10.94	7.94	5.12	4.50
691.1	13.38	13.38	5.62	3.00
692.1	15.38	16.38	7.62	5.00

FIGURE 2. Enclosure, overall dimensions - continued. Item No. 05, 06, 07
(Symbols 685.1, 686.1, 691.1, and 692.1)

MIL-DTL-24646/15C
w/AMENDMENT 1

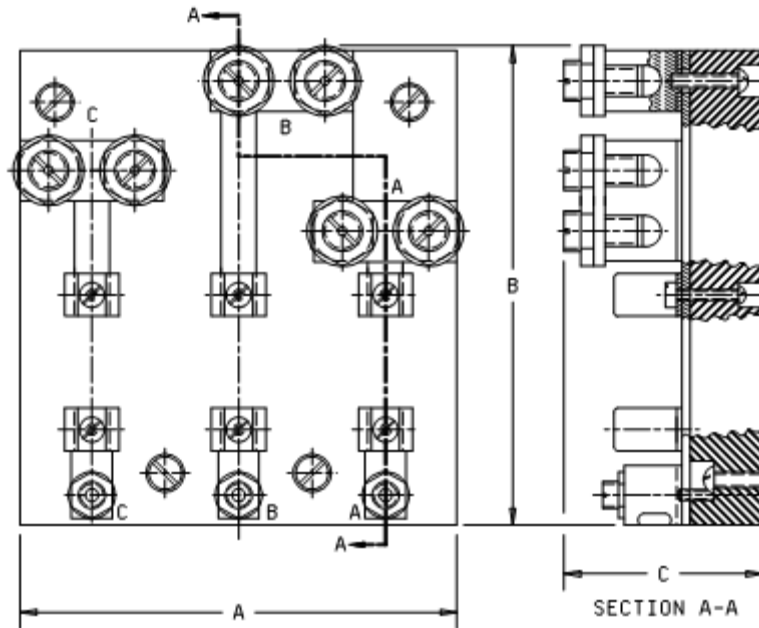


For symbols 691.1 and 692.1. For symbols 685.1 and 686.1
a clearance hole for .375 dia. mounting bolt is needed.

SYMBOL NO	DIMENSIONS			
	A	B	C	D
685.1	7.25	3.62	7.88	2.75
686.1	7.25	3.62	7.88	2.75
691.1	5.75	2.88	11.44	5.72
692.1	9.25	4.62	13.44	6.72

FIGURE 3. Mounting dimensions, ref.
(Symbols 685.1, 686.1, 691.1 and 692.1)

MIL-DTL-24646/15C
w/AMENDMENT 1

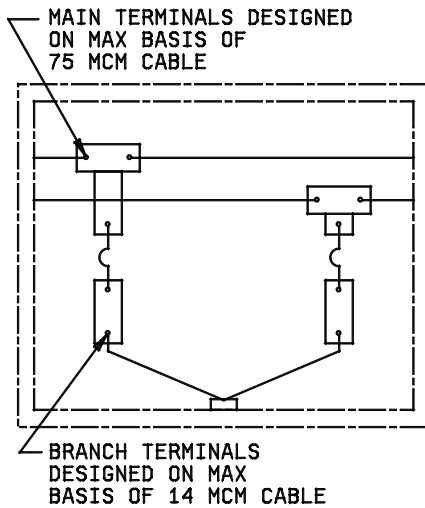


SYMBOL NO	DIMENSIONS (MAX)		
	A	B	C
685.1	6.25	4.63	2.06
686.1	6.25	4.63	2.06
691.1	5.50	5.63	2.50
692.1	8.38	6.88	2.50

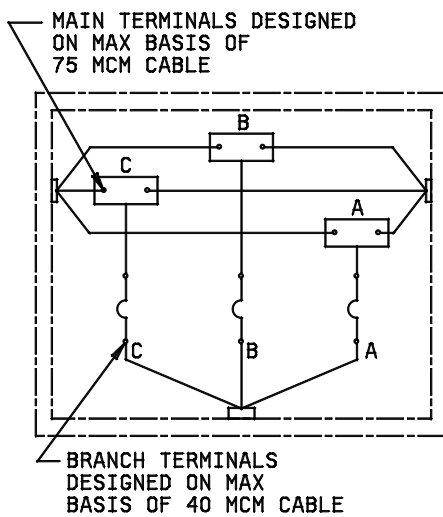
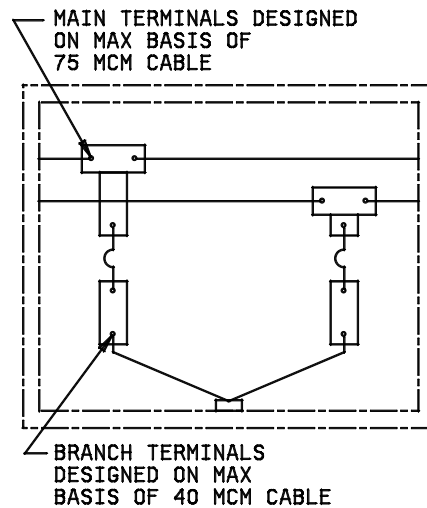
FIGURE 4. Fuse block assembly, typical. Item No. 08, 09, 10, 11
(Symbol 691.1 shown)

MIL-DTL-24646/15C
w/AMENDMENT 1

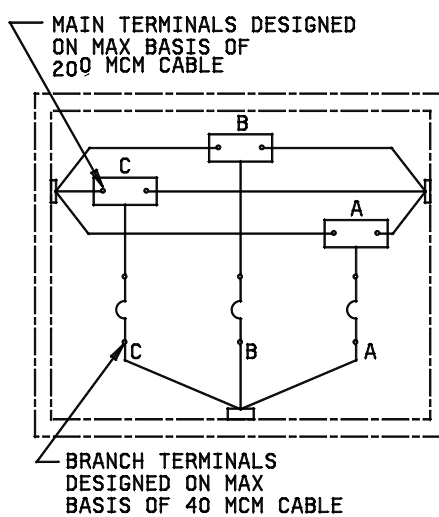
A. One single-phase branch
(Symbol 685.1)



B. One single-phase branch
(Symbol 686.1)



C. One 3-phase branch
(Symbol 691.1)



D. One 3-phase branch
(Symbol 692.1)

FIGURE 5. Wiring diagrams. 12, 13, 14, 15

MIL-DTL-24646/15C
w/AMENDMENT 1

REQUIREMENTS

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

Design:

Electrical rating: 250 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: Submersible (15 feet).

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 part numbers and general information.

Military Part no.	Symbol	Approx. Weight in pounds ^{1/}	No. of circuits	Feeder MCM	Branch MCM	Fuse size	Bus bar size	Supersedes	
								Drawing No.	Type
M24646/15-001	685.1	10.0	1	75	14	0-30A	0.75 x 0.12	9000-S-6202-74183	F-47A
M24646/15-002	686.1	10.0	1	75	40	31-60A	0.75 x 0.12	9000-S-6202-74185	F-48A
M24646/15-003	691.1	22.0	1	75	40	0-30A	0.75 x 0.12	9000-S-6202-74189	F-25A
M24646/15-004	692.1	30.0	1	200	40	31-60A	0.75 x 0.12	9000-S-6202-74190	F-27A

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

MIL-DTL-24646/15C
w/AMENDMENT 1

TABLE II. Parts list.

Item no. <u>1/</u>	Description	QTY M /-				Material/ specification	Remarks
		001	002	003	004		
01	Fuse box assembly (sym 685.1)	-				MIL-DTL-24646/15	See figure 1
02	Fuse box assembly (sym 686.1)		-			MIL-DTL-24646/15	See figure 1
03	Fuse box assembly (sym 691.1)			-		MIL-DTL-24646/15	See figure 1
04	Fuse box assembly (sym 692.1)				-	MIL-DTL-24646/15	See figure 1
05 <u>2/</u>	Enclosure (6 x 9 x 4.5)	1	1			M24142/3-001	See figure 2
06 <u>3/</u>	Enclosure (10 x 10 x 3)			1		M24142/6-003	See figure 2
07	Enclosure (12 x 13 x 5)				1	M24142/6-008	See figure 2
08	Fuse block assembly	1				MIL-DTL-24646/15	See figure 4
09	Fuse block assembly		1			MIL-DTL-24646/15	See figure 4
10	Fuse block assembly			1		MIL-DTL-24646/15	See figure 4
11	Fuse block assembly				1	MIL-DTL-24646/15	See figure 4
12	Wiring diagram	1				MIL-DTL-2036	See figure 5
13	Wiring diagram		1			MIL-DTL-2036	See figure 5
14	Wiring diagram			1		MIL-DTL-2036	See figure 5
15	Wiring diagram				1	MIL-DTL-2036	See figure 5
16	Fuse clip (0-30A)	4	-	6	-	A-A-55507/1-06	N/A
17	Fuse clip (31-60A)	-	4	-	6	A-A-55507/1-08	N/A
18	Main terminal assembly	2	2	3	3	NAVSEA/SHIPS 9000-S-6202-73246	N/A
19	Identification plate	1	1	1	1	Brass, ASTM B36/B36M B121/B121M	N/A
20	Information plate	1	1	3	3	Brass, ASTM B36/B36M B121/B121M	N/A

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

2/ Enclosure is same as [MIL-E-24142/3](#), except for inside depth.

3/ Enclosure is same as [MIL-E-24142/6](#), except for inside depth.

4/ A-A-55507/1-06 and A-A-55507/1-08 come from document A-A-55507/1

Referenced documents. In addition to [MIL-DTL-24646](#), this document references the following:
[MIL-DTL-2036](#) [MIL-E-24142/3](#) [MIL-E-24142/6](#) [ASTM B36/B36M](#) [ASTM B121/B121M](#)
 NAVSEA/SHIPS 9000-S-6202-73246

MIL-DTL-24646/15C
w/AMENDMENT 1

The margins of this specification 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 5920-2024-033)

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>.