COMMERCIAL ITEM DESCRIPTION

RELAYS, ELECTROMAGNETIC, GENERAL PURPOSE
10 AMPERES, 1-3PDT, AC AND DC COILS, SOCKET MOUNT

The General Services Administration has authorized the use of this
commercial item description (CID) for all federal agencies.

1. SCOPE. This CID covers the general requirements for socket mount 10 ampere relays. Socket mount 10 ampere relays covered by this CID are intended for commercial, industrial, and ground support applications.

2. CLASSIFICATION. This CID uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example (see 7.1).
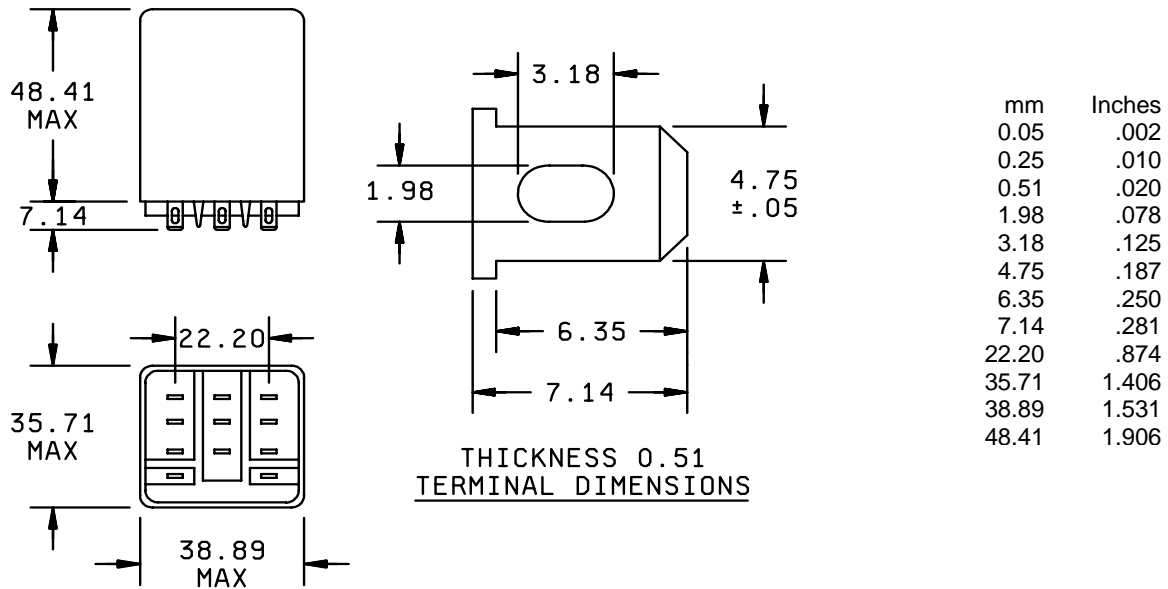
<pre>
    AA55143   /1   -01
      | | |
      | | |
  CID number   CID sheet   Dash number
</pre>

3. SALIENT CHARACTERISTICS.

3.1 Interface and physical dimensions. Socket mount 10 ampere relays supplied to this CID shall be as specified herein (see figure 1 and figure 2).

AMSC N/A   FSC 5945

A-A-55143/1C

mm	Inches
0.05	.002
0.25	.010
0.51	.020
1.98	.078
3.18	.125
4.75	.187
6.35	.250
7.14	.281
22.20	.874
35.71	1.406
38.89	1.531
48.41	1.906

48.41 MAX

7.14

22.20

35.71 MAX

38.89 MAX

3.18

1.98

4.75 ±.05

6.35

7.14

THICKNESS 0.51
TERMINAL DIMENSIONS

NOTES:
1. Dimensions are in millimeters.
2. Tolerance is ± 0.25 millimeter (.010 inch).
3. The US government preferred system of measurement is the metric SI system. However, this item was originally designed using inch-pound units of measurement. In the event of conflict between the metric and inch-pound units, the inch-pound units shall take precedence.

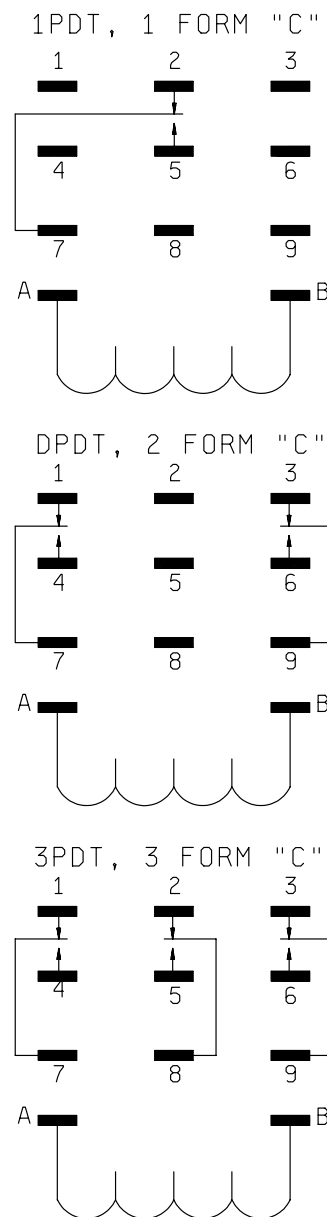FIGURE 1. Dimensions and configurations.

A-A-55143/1C

1PDT, 1 FORM "C"

DPDT, 2 FORM "C"

3PDT, 3 FORM "C"

FIGURE 2. Circuit diagrams (terminal view).

3

3.2 <u>Contact data</u>.

3.2.1 <u>Contact arrangements</u>. This CID covers relays with 1 form C to 3 form C contacts.

3.2.2 <u>Contact material</u>. The relay contact material shall be Ag alloy or AgCaO.

3.2.3 <u>Contact ratings</u>.

   a.   1PDT and 2PDT: 10 amperes at 28 V dc or 240 V ac; 1/3 Hp at 120 V ac; 1/2 Hp at 240 V ac.

   b.   3PDT: 10 amperes at 28 V dc or 120 V ac; 6 amperes at 240 V ac.

3.3 <u>Coil data</u>.

3.3.1 <u>Rated coil voltage</u>. See table I.

A-A-55143/1C

TABLE I. Dash numbers and characteristics.

Dash number AA55143/1-	Contact config- uration	Coil voltage		Coil res. ohms ±10%
		V ac	V dc	
01	1PDT	6		6
02	1PDT	12		24
03	1PDT	24		85
04	1PDT	48		
05	1PDT	120		2250
06	1PDT	240		9110
07	1PDT		6	32
08	1PDT		12	120
09	1PDT		24	470
10	1PDT		48	1800
11	1PDT		110	10000
12	2PDT	6		6
13	2PDT	12		24
14	2PDT	24		85
15	2PDT	48		
16	2PDT	120		2250
17	2PDT	240		9110
18	2PDT		6	32
19	2PDT		12	120
20	2PDT		24	470
21	2PDT		48	1800
22	2PDT		110	10000
23	3PDT	6		4.2
24	3PDT	12		18
25	3PDT	24		72
26	3PDT	48		
27	3PDT	120		1700
28	3PDT	240		7200
29	3PDT		6	32
30	3PDT		12	120
31	3PDT		24	470
32	3PDT		48	1800
33	3PDT		110	10000

5

A-A-55143/1C

3.3.2 <u>Rated coil power</u>. The rated coil power shall be 1.2 W (dc), 2 to 2.75 VA (ac).

3.3.3 <u>Operate time</u>. The operate time shall be 25 ms maximum with rated coil voltage.

3.3.4 <u>Release time</u>. The release time shall be 25 ms maximum from rated coil voltage.

3.4 <u>Ambient temperature</u>. The minimum temperature range shall be –30°C to +40°C (ac), -30°C to +65°C (dc).

3.5 <u>Enclosure material</u>. The relay enclosure material shall be clear polycarbonate.

3.6 <u>Weight</u>. The relay weight shall be 100 grams (3.5 ounces) maximum.

3.7 <u>Seal</u>. Nonhermetic.

3.8 <u>Marking</u>. Socket mount 10 ampere relays supplied to this CID shall be marked with the manufacturer's (MFR's) standard commercial PIN.

4. REGULATORY REQUIREMENTS. This section is not applicable to this CID sheet.

5. QUALITY ASSURANCE PROVISIONS. Quality assurance provisions shall be as specified in A-A-55143.

6. PACKAGING. Packaging shall be as specified in A-A-55143.

7. NOTES.

7.1 <u>PIN</u>. The PIN should be used for Government purposes to buy commercial products to this CID. See section 2 for PIN format example.

7.2 <u>Commercial and Government Entity (CAGE) code</u>. For ordering purposes, inventory control, and submission of these socket mount 10 ampere relays to DSCC under the Military Parts Control Advisory Group (MPCAG) evaluation program, CAGE code 58536 should be used.

7.3 <u>Source of documents</u>.

   Commercial Item Description

      A-A-55143   -   Relays, Electromagnetic, General Purpose General Requirements for.

   (Copies of federal specifications and standards are available from the Defense Automation and Production Service, Building 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.
   http://assist.daps.dla.mil/quicksearch/   )

7.4 <u>Ordering data</u>. Ordering data shall be as specified in A-A-55143.

A-A-55143/1C

7.5 Commercial products. As part of the market analysis and research effort, this CID was coordinated with the following manufacturers of commercial products. At the time of CID preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

MFR's CAGE	MFR's name and address
00213	Magnecraft 191 Waukegan Rd, Ste 206 Northfield, IL 60093-2743 (847) 441-2540 http://www.magnecraft.com/
00779	TYCO Electronics P.O. Box 3608 MS-38-77 Harrisburg, PA 17105-3608 (800) 806-0480 http://www.tycoelectronics.com/

7.6 Part number (P/N) supersession data. This CID supersedes the following manufacturer's P/N's as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

A-A-55143/1C

TABLE II. P/N suppersion data.

Dash number (see table I) AA55143/1-	MFR's CAGE	MFR's P/N 1/	MFR's CAGE	MFR's P/N 1/
01	77342		00213	A283XAXC-6A
02	77342		00213	A283XAXC-12A
03	77342		00213	A283XAXC-24A
04	77342		00213	A283XAXC-48A
05	77342		00213	A283XAXC-120A
06	77342		00213	A283XAXC-240A
07	77342		00213	A283XAXC-6D
08	77342		00213	A283XAXC-12D
09	77342		00213	A283XAXC-24D
10	77342		00213	A283XAXC-48D
11	77342		00213	A283XAXC-110D
12	77342	KUP-11A15-6	00213	A283XBXC-6A
13	77342	KUP-11A15-12	00213	A283XBXC-12A
14	77342	KUP-11A15-24	00213	A283XBXC-24A
15	77342		00213	A283XBXC-48A
16	77342	KUP-11A15-120	00213	A283XBXC-120A
17	77342	KUP-11A15-240	00213	A283XBXC-240A
18	77342		00213	A283XBXC-6D
19	77342	KUP-11D15-12	00213	A283XBXC-12D
20	77342	KUP-11D15-24	00213	A283XBXC-24D
21	77342	KUP-11D15-48	00213	A283XBXC-48D
22	77342	KUP-11D15-110	00213	A283XBXC-110D
23	77342		00213	A283XCXC-6A
24	77342	KUP-14A15-12	00213	A283XCXC-12A
25	77342	KUP-14A15-24	00213	A283XCXC-24A
26	77342		00213	A283XCXC-48A
27	77342	KUP-14A15-120	00213	A283XCXC-120A
28	77342	KUP-14A15-240	00213	A283XCXC-240A
29	77342	KUP-14D15-6	00213	A283XCXC-6D
30	77342	KUP-14D15-12	00213	A283XCXC-12D
31	77342	KUP-14D15-24	00213	A283XCXC-24D
32	77342	KUP-14D15-48	00213	A283XCXC-48D
33	77342	KUP-14D15-110	00213	A283XCXC-110D

1/ The manufacturer's P/N shall not be used for procurement to the requirements of this CID. At the time of preparation of this CID, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown.

8

A-A-55143/1C

7.7 Government users. To acquire information on obtaining these socket mount 10 ampere relays from the Government inventory system, contact Defense Supply Center, Columbus, ATTN: DSCC-CDC, Post Office Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-7884.

MILITARY INTERESTS: CIVIL AGENCY COORDINATING ACTIVITY:

Custodians: GSA - 7FSS

DLA - CC   Preparing Activity:

                                                                                DLA-CC

                                                                                Project 5945‑2006-014

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 http://assist.daps.dla.mil.

9