

INCH-POUND

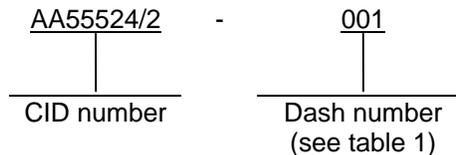
A-A-55524/2A  
31 January 2003  
SUPERSEDING  
A-A-55524/2  
17 October 1997

## COMMERCIAL ITEM DESCRIPTION

### SHUNT, INSTRUMENT (EXTERNAL, 50 MILLIVOLT, 170 THROUGH 600 AMPERES [A] LIGHTWEIGHT TYPE)

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

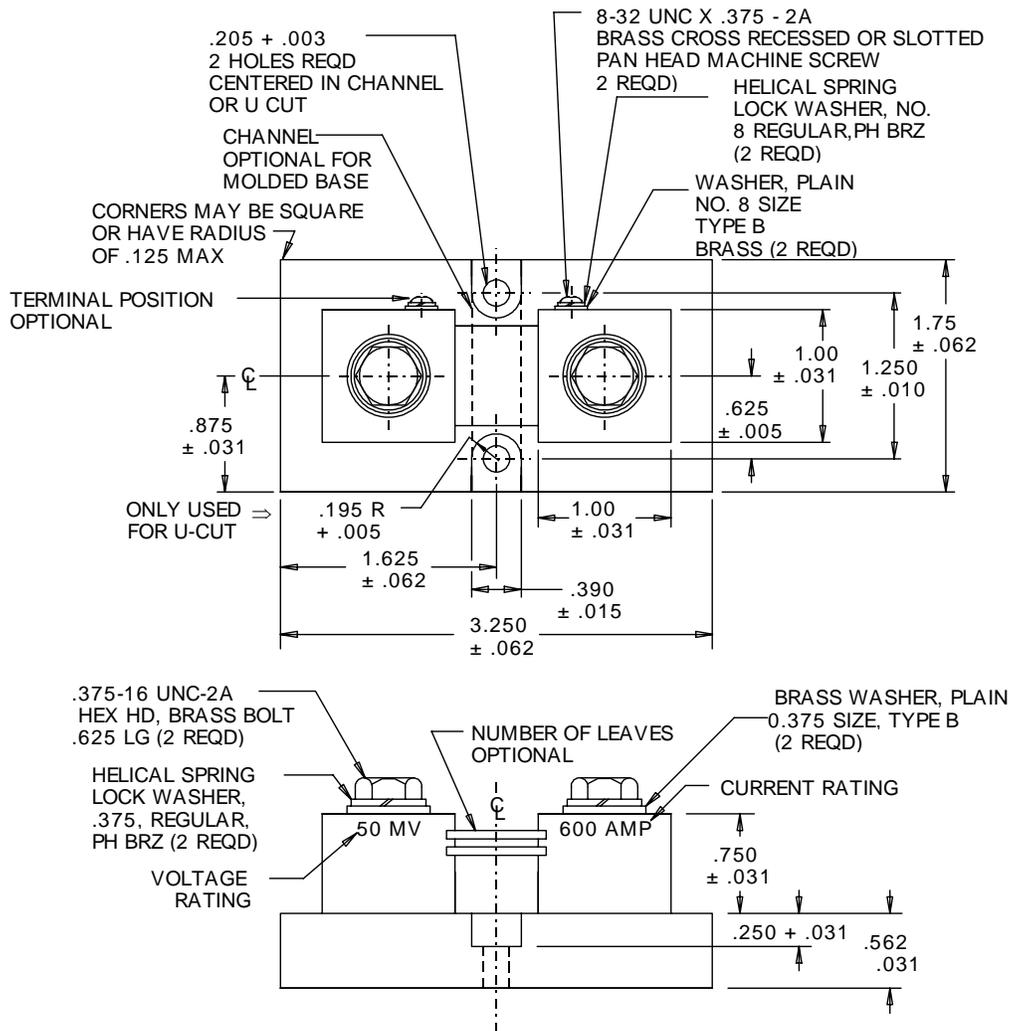
1. **SCOPE.** This CID covers the general requirements for 170 through 600 amperes (A) lightweight type, 50 millivolt (mV) external, instrument shunts. Shunts covered by this CID are intended for commercial/industrial applications.
2. **CLASSIFICATION.** This CID uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example (see 6.1).



### 3. SALIENT CHARACTERISTICS.

- 3.1 Interface and physical dimensions. The shunt supplied to this CID shall be as specified herein (see figure 1).
- 3.2 Configurations and dimensions. Configurations and dimensions shall be specified in figure 1.
  - 3.2.1 Mounting Hardware. Mounting hardware, screws and washers, shall be ANSI/ASME or equivalent.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: Defense Supply Center, Columbus, ATTN: DSCC-VAM, Post Office Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-0559, or facsimile (FAX) (614) 692-6939.



inches	mm	inches	mm
0.125	3.18	0.625	15.88
0.195	4.95	0.750	19.05
0.205	5.21	0.875	22.23
0.250	6.35	1.000	25.40
0.390	9.91	1.250	31.75
0.500	12.70	1.625	41.28
0.562	14.27	1.750	44.45
		3.250	82.55

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is ±0.005 inch (0.13mm).
3. The US government preferred system of measurement is the metric SI system. However, since 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. Configuration and dimensions.

3.3 Ampere rating. The ampere rating shall be specified in table 1.

3.4 Voltage rating. The voltage rating shall be 50 mV  $\pm$  0.3 mV.

3.5 Terminal block material. The terminal block material shall be brass.

3.6 Shunt resistance blade material. The resistance blade strip material shall be Manganin or an alloy having an equivalent temperature coefficient of resistance at any temperature within the working range of the shunt.

3.7 Shunt base mounting. The shunt-terminal blocks shall be mounted securely with screws of adequate size, and shall be made resistant to loosening. The heads of the screws shall be recessed in the base and properly protected with a good grade of insulating compound which shall not flow, crack, chip, pulverize, or otherwise deteriorate substantially.

3.8 Shunt base material. The shunt base material shall be molded or laminated plastic or equivalent.

3.9 Marking. Shunts supplied to this CID sheet shall be marked with the manufacturer's standard commercial PIN, mV rating, and current rating as specified in figure 1 and table 1.

4. QUALITY ASSURANCE PROVISIONS. Quality assurance provisions shall be as specified in A-A-55524.

5. PACKAGING.

5.1 Preservation, packing, and marking. Preservation, packing, and marking shall be as specified in the contract or order.

6. NOTES.

6.1 PIN. The PIN should be used for Government purposes to buy commercial products to this CID. See section 2 for PIN format example.

6.1.1 Standard requirements for testing. Recommended testing requirements can be found in Institute of Electrical and Electronics Engineers (IEEE) Standard 316.

6.1.2 Style and type designation cross-reference. Table 1 is for cross-reference only. Ordering is identified to the CID.

Table 1. Style and type designation cross-reference.

CID AA55524 /2	Current Rating (Amperes)	MS91587	MIL-S-61 Type & Style	AN3200
-001	170	-1	MSB171	-170
-002	200	-2	MSB201	***
-003	250	-3	MSB251	-250
-004	300	-4	MSB301	-300
-005	400	-5	MSB401	-400
-006	450	-6	MSB451	-450
-007	500	-7	MSB501	***
-008	600	-8	MSB601	-600

6.2 Commercial and Government Entity (CAGE) code. For ordering purposes, inventory control, and submission of these shunts to DSCC under the Military Parts Control Advisory Group (MPCAG) evaluation program, CAGE code 58536 should be used.

6.3 Source of documents.

Commercial Item Description

A-A-55524 - Shunts, Instrument (External, 50 Millivolt, Lightweight Type).

(Copies of CID's are available from the Defense Automated Printing Service, Bldg 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

6.4 Ordering data. Ordering data shall be as specified in A-A-55524.

6.5 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.)

<u>Manufacturer's CAGE</u>	<u>Manufacturer's name and address</u>
03030	Empro Manufacturing Co., Inc. PO. Box 26060 10920 East 59 <sup>th</sup> Street Indianapolis, IN 46226 Phone Number: 317-823-4478
59131	Electronic Precision Components 519 South 5 <sup>th</sup> Avenue Mount Vernon, NY 10550-4430 Phone Number: 914-664-2333
53498	Crompton Instruments, Inc. 1640 Airport Road Kennesaw, GA 30144 Phone Number: 770-425-8903
91812	Janco Corp. 3111 Winona Avenue Burbank, CA 91504-2543 Phone Number: 818-846-1800
99246	Ram Meter, Inc. 1903 Barrett Drive Troy, MI 48084-5396 Phone Number 248-362-0990

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

Dash Number (see table 1) AA55524/2-	Manufacturer CAGE	Manufacturer P/N <sup>1/</sup>	Manufacturer CAGE	Manufacturer P/N <sup>1/</sup>
001	03030	MLB-170-50	53498	872-92UU-RDEC
002	03030	MLB-200-50	53498	872-92UU-RLEC
003	03030	MLB-250-50	53498	872-92UU-RSEC
004	03030	MLB-300-50	53498	872-92UU-RXEC
005	03030	MLB-400-50	53498	872-92UU-SCEC
006	03030	MLB-450-50	53498	872-92UU-SDEC
007	03030	MLB-500-50	53498	872-92UU-SFEC
008	03030	MLB-600-50	53498	872-92UU-SJEC
001	59131	170-50	91812	8300-170
002	59131	200-50	91812	8300-200
003	59131	250-50	91812	8300-250
004	59131	300-50	91812	8300-300
005	59131	400-50	91812	8300-400
006	59131	450-50	91812	8300-450
007	59131	500-50	91812	8300-500
008	59131	600-50	91812	8300-600
001	99246	MSB171-170A50		
002	99246	MSB201-200A50		
003	99246	MSB251-250A50		
004	99246	MSB301-300A50		
005	99246	MSB401-400A50		
006	99246	MSB451-450A50		
007	99246	MSB501-500A50		
008	99246	MSB 601-600A50		

<sup>1/</sup> 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.

6.7 Government users. To acquire information on obtaining these shunts from the Government inventory system, contact Defense Supply Center, Columbus, ATTN: DSCC-CE, PO Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-7790.

6.7.1 National Stock Numbers (NSN's). The following is a list of NSN's assigned which correspond to this CID. The list is for information only and may not be indicative of all possible NSN's associated with the CID. For up to date information on assigned NSN's, please contact the Defense Supply Center, Columbus, ATTN: DSCC-CE, PO Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-7790.

Dash number (see table I) AA55524/2-	Current Rating (Amperes)	NSN
001	170	6625-01-322-1935
002	200	6625-00-166-1013
003	250	6625-00-818-3909
004	300	6625-00-166-1005
005	400	6625-00-720-2854
006	450	6625-00-555-2254
007	500	6625-00-555-2256
008	600	6625-01-086-0760 6625-00-166-1004

MILITARY INTERESTS:

Custodians:

- Army - CR
- Navy - EC
- Air Force - 82

Review activities:

- Army - AR, MI
- Air Force - 99

CIVIL AGENCY COORDINATING ACTIVITY:

GSA-7FXE

Preparing Activity:  
DLA - CC

(Project 6625-0912)