

## COMMERCIAL ITEM DESCRIPTION

### CIRCUIT BREAKER, AUTOMOTIVE BLADE TYPE, STANDARD SIZE, AUTOMATIC OR MODIFIED RESET, 7.5 AMPERES (A) TO 30A

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 standard size, automotive blade type, circuit breakers designed to protect wiring harnesses in 12 volt dc automotive systems. Circuit breakers 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 7.1).

AA59542/01	-	01	1	A
CID number		Dash number (see table I)	Reset type (1) Automatic reset, type I (see 3.4) (2) Modified reset, type II (see 3.5)	Terminal configuration and size (A) Terminal width .21 in. (5.2 mm). 0.37 inch between terminal centers. (B) Terminal width .11 in. (2.8 mm). 0.64 in. (16.2 mm) between terminal centers. (C) Terminal width .11 in. (2.8 mm). 0.32 in. (8.1 mm) between terminal centers.

### 3. SALIENT CHARACTERISTICS.

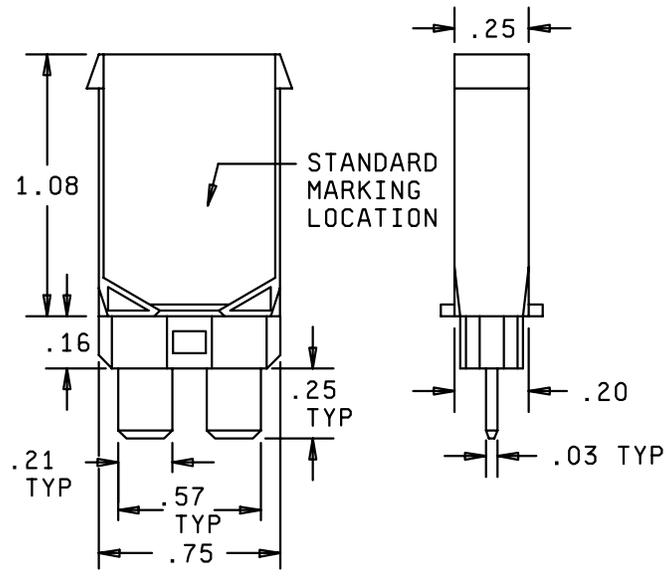
3.1 Interface and physical dimensions. Circuit breakers supplied to this CID shall be as specified herein, and shall meet the requirements of Society of Automotive Engineers (SAE) J553 for circuit breakers (see figure 1).

3.2 Ampere rating. The ampere rating shall be as specified in table I.

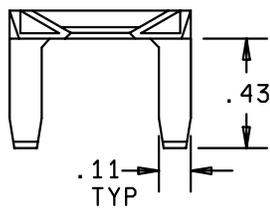
3.3 Voltage rating. The voltage rating shall be 12 V dc.

3.4 Automatic reset. Automatic reset type circuit breakers are identified by the number 1 and shall meet the requirements of SAE J553 for type I, automatic reset circuit breakers. Automatic reset circuit breakers are cycling or continuously self-resetting units which are opened by overcurrent.

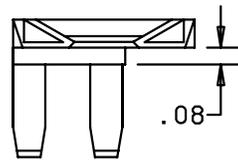
Beneficial comments (recommendations, additions, deletions, clarification, etc., and any data which may improve this document should be sent to: Defense Supply Center, Columbus, ATTN: DSCC-VAT, Post Office Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-0548, or facsimile (FAX) (614) 692-6939.



A-TERMINAL CONFIGURATION



B-TERMINAL CONFIGURATION



C-TERMINAL CONFIGURATION

Inches	mm	Inches	mm
.03	0.80	.25	6.35
.08	2.00	.43	11.00
.11	2.80	.57	14.50
.16	4.00	.75	19.00
.20	5.00	1.08	27.40
.21	5.25		

NOTES:

1. Dimensions are in millimeters.
2. Tolerance is  $\pm 0.254$  mm (0.01 inch), unless otherwise specified.
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. Configuration and dimensions.

TABLE I. Electrical characteristics.

AA59542/01-	Ampere rating
01	7.5
02	10
03	15
04	20
05	25
06	30

3.5 Modified reset. Modified reset circuit breakers are identified by the number 2 and shall meet the requirements of SAE J553 for type II, modified reset circuit breakers. Modified reset circuit breakers are units which are opened by overcurrents and remain open as long as the power is on or until the load is removed. A number of cycles may occur prior to achieving the steady-state open condition.

3.6 Operating temperature. -40°F (-40°C) to 185°F (85°C).

3.7 Storage temperature. -40°F (-40°C) to 260°F (125°C).

3.8 Recycled/recovered materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

3.9 Marking. Circuit breakers 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-59542.

6. PACKAGING. Packaging shall be as specified in A-A-59542.

7. NOTES.

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

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

7.3 Source of documents.

Commercial Item Description

A-A-59542 - Circuit Breaker, Automotive Blade Type, General Requirements for.

Other Publications

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)

J553 - Circuit Breaker, Surface Vehicle Standard.

(Application for copies should be addressed to the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale PA 15096-0001.)

(Industry association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

7.4 Ordering data. Ordering data shall be as specified in A-A-59542.

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.)

<u>MFR's CAGE</u>	<u>MFR's name and address</u>
11873	Cooper Bussmann - Chicago 7300 W. Wilson Avenue Chicago, IL 60706-4792 (708) 867-4600

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

TABLE II. P/N supersession data.

CID dash number (see table I)	MFR's CAGE	MFR's P/N <u>1/</u>	CID dash number (see table I)	MFR's CAGE	MFR's P/N <u>1/</u>
AA59542/01-			AA59542/01-		
011A	11873	22175-000	012A	11873	22275-000
011B	11873	22175-100	012B	11873	22275-100
011C	11873	22175-200	012C	11873	22275-200
021A	11873	22110-000	022A	11873	22210-000
021B	11873	22110-100	022B	11873	22210-100
021C	11873	22110-200	022C	11873	22210-200
031A	11873	22115-000	032A	11873	22215-000
031B	11873	22115-100	032B	11873	22215-100
031C	11873	22115-200	032C	11873	22215-200
041A	11873	22120-000	042A	11873	22220-000
041B	11873	22120-100	042B	11873	22220-100
041C	11873	22120-200	042C	11873	22220-200
051A	11873	22125-000	052A	11873	22225-000
051B	11873	22125-100	052B	11873	22225-100
051C	11873	22125-200	052C	11873	22225-200
061A	11873	22130-000	061A	11873	22230-000
061B	11873	22130-100	061B	11873	22230-100
061C	11873	22130-200	061C	11873	22230-200

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 P/N shown.

7.7 Government users. To acquire information on obtaining these circuit breakers from the Government inventory system, contact Defense Supply Center, Columbus, ATTN: DSCC-CS, Post Office Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-7600.

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE

Preparing Activity:

DLA-CC

Project 5925-0287-01