



AEROSPACE STANDARD	AS58091™	REV. B
	Issued 1999-08 Revised 2023-07	
	Superseding AS58091A	
(R) Circuit Breakers, Trip Free, Aircraft, General Specification for		

RATIONALE

This revision includes clarification of how to set up the vibration tests, information on how to test circuit breakers with spade blades and how to test the strength of the blade terminal, and performance output clarifications.

1. SCOPE

1.1 Scope

The primary function of this specification is to cover the general requirements of one-, two-, and three-phase (often referred to as poles) trip-free circuit breakers for use in aircraft electric systems conforming to MIL-STD-704. As a secondary function, this specification may possibly cover the general requirements of one-, two- and three-phase circuit breakers for use in primary vehicles, other than aircraft, when mounted directly to the structure.

1.2 Classification

Circuit breakers shall be classified into types and styles. Variations from the basic style of each circuit breaker shall be indicated by the part number from the appropriate detail specification (see [3.1](#)).

1.2.1 Types

Circuit breakers shall be of the following types as specified (see [6.2](#)).

Type I - Thermal type.
Type II - Magnetic type.

1.2.2 Styles

A style of circuit breakers shall consist of all part numbers covered by one SAE Aerospace Standard (AS) detail specification. For example:

- All part numbers of AS25244 shall be the same style.
- All part numbers of AS22073 shall be the same style.

The same style classification applies to all detail specification.

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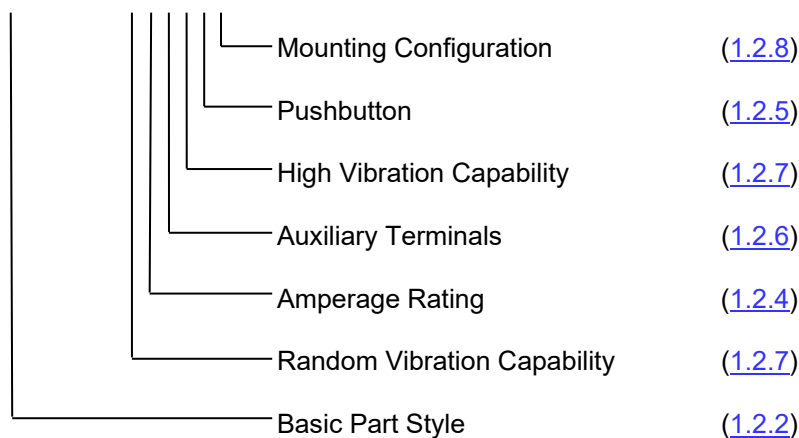
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1.2.3 Part Numbers

The part numbers for circuit breakers in accordance with this specification shall conform to the example below. Alpha numeric characters shall be used to designate variations from the basic style of each circuit breaker.

MS3320 - D5AVLM



When a designator for a variation is not applicable, it shall be omitted from the part number. Specific part numbering can be found in detail specifications.

1.2.4 Amperage Ratings

The amperage rating designator shall be a number specified in each detail specification to indicate the nominal amperage rating.

1.2.5 Pushbuttons

The circuit breaker pushbutton shall be designated as follows. Standard length pushbutton, as specified in the detail specification, shall have no designator letter.

L - Extra length pushbutton

1.2.6 Auxiliary Terminals

The use of auxiliary terminals when allowed by the detail specification shall be designated as follows. Circuit breakers with standard terminals only, as specified in the detail specification, shall have no designator letter.

A - Auxiliary terminals.

1.2.7 Vibration Level

The vibration level of the circuit breaker shall be specified in the detail specification and shall be indicated in the part number by one or more of the following designators. Standard sine vibration capabilities shall have no designator (see [4.7.11.2](#)).

V - High Level Sine capabilities (see [4.7.11.2](#)).

C through K - Random vibration capabilities (see [4.7.11.1](#)).

1.2.8 Mounting Configurations

Unless otherwise specified, the circuit breakers mounting configurations shall be designated as follows. Standard threaded bushing mounted circuit breakers shall have no designator.

P - Cover-plate mount.

M - Conical bushing mount.

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1.1 SAE International

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AS7928	Terminals, Lug: Splices, Conductor: Crimp Style, Copper, General Specification for
AS14105*	Circuit Breaker - Aircraft, Trip Free, Push-Pull, 25 thru 35 Amps, Type I, -55 to 121 °C
AS14153*	Circuit Breaker - Aircraft, Trip Free, Push-Pull, 3 Phase, 1 thru 35 Amps, Type I
AS14154*	Circuit Breaker - Aircraft, Trip Free, Push-Pull, 3 Phase, 1 thru 20 Amps, Type I
AS21984*	Circuit Breaker-Aircraft, Trip Free, Push-Pull, 3-Phase, 5 thru 60 Amps, Type I
AS22073*	Circuit Breaker, Trip Free, Push-Pull, 1/2 thru 20 Amps, Type I
AS22074*	Circuit Breaker, Recycling, Trip Free, Push-Pull, 1/2 thru 5 Amperes, Type I
AS22759	Wire, Electrical, Fluoropolymer-Insulated, Copper or Copper Alloy
AS24509*	Circuit Breaker - Aircraft, Trip Free, Toggle, 5 thru 15 Amps, Type I
AS24510*	Circuit Breaker - Aircraft, Trip Free, Push-Pull, 5 thru 15 Amps, Type I
AS25036	Terminal, Lug, Crimp Style, Copper, Insulated, Ring Tongue, Bell-Mouthed, Type II, Class 1 (for 105 °C Total Conductor Temperature)
AS25244*	Circuit Breaker, Trip Free, Push-Pull, 5 thru 50 Amps, Type I
AS25337*	Circuit Breaker, Aircraft, Trip Free, Toggle, 5 thru 50 Amps
AS25361*	Circuit Breaker - Aircraft, Trip Free, Push-Pull, 50 thru 100 Amps, Type I
AS26574*	Circuit Breaker - Trip Free, Push-Pull, 1/2 thru 20 Amps, Type I
AS33201*	Circuit Breaker - Aircraft, Trip Free, Push-Pull, 1/2 thru 20 Amps, Type I, -55 thru +121 °C
AS33202*	Circuit Breaker - Aircraft, Trip Free, Push-Pull, Blade Terminal, 1 thru 25 Amps, Type I, -55 thru +121 °C

AS14154*	Circuit Breaker - Aircraft, Trip Free, Blade Terminal, 3 Phase, 1 thru 25 Amps, Type I
AS50861	Wire, Electric, Polyvinyl Chloride Insulated, Copper or Copper Alloy
AS58091/1	Circuit Breaker, Aircraft, Trip Free, Push-Pull, Type I, Dual Safety, -55 thru +121 °C
AS81044	Wire, Electrical, Crosslinked Polyalkene, Crosslinked Alkane-Imide Polymer, or Polyarylene Insulated, Copper or Copper Alloy

*AS58091 detail specification.

2.1.2 U.S. Government Publications

Copies of these documents are available online at <https://quicksearch.dla.mil>.

SD-6	Provisions Governing Qualification
MIL-STD-104	Limit for Electrical Insulation Color
MIL-STD-202	Test Methods for Electronic and Electrical Component Parts
MIL-HDBK-454	Standard General Requirements for Electronic Equipment
MIL-STD-704	Aircraft Electric Power Characteristics
MIL-STD-889	Dissimilar Metals
MIL-STD-1285	Marking of Electrical and Electronic Parts
MIL-S-7742	Screw Threads, Standard, Optimum Selected Series, General Specification for
MIL-E-17555	Electronic and Electrical Equipment, Accessories, and Provisioned Items (Repair Parts); Packaging of
MIL-I-24768	Plastic Sheet, Laminated, Thermosetting, and General Specification for
MIL-I-24768/17	Insulation, Plastic, Laminated, Thermosetting, Glass-Cloth, Silicone-Resin (GSG)
MIL-P-15037	Plastic Sheet, Laminated, Thermosetting, Glass-Cloth Melamine-Resin

2.1.3 NAS Publications

Available from Aerospace Industries Association, 1000 Wilson Boulevard, Suite 1700, Arlington, VA 22209-3928, Tel: 703-358-1000, www.aia-aerospace.org.

NASM25027	Nut, Self-Locking, 250 Deg. F, 450 Deg. F, and 800 Deg. F
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2.1.4 ASME Publications

Available from ASME, P.O. Box 2900, 22 Law Drive, Fairfield, NJ 07007-2900, Tel: 800-843-2763 (U.S./Canada), 001-800-843-2763 (Mexico), 973-882-1170 (outside North America), www.asme.org.

ASME Y14.100	Engineering Drawing Practices
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2.1.5 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM D635 Plastics, Rate of Burning and/or Extent and Time of Burning of Self Supporting Plastics in a Horizontal Position

2.1.6 ASQ Publications

Available from American Society for Quality, 600 North Plankinton Avenue, Milwaukee, WI 53203, Tel: 800-248-1946 (United States or Canada), 001-800-514-1564 (Mexico), or +1-414-272-8575 (all other locations), www.asq.org.

ANSI/ASQ Z1.4 Sampling Procedures and Tables for Inspection by Attributes

2.1.7 National Conference of Standards Laboratories (NCSL) Publications

Available from NCSL International, 2995 Wilderness Place, Suite 107, Boulder, CO 80301, Tel: 303-440-3339, www.ncsli.org.

NCSL Z540-1 General Requirements for Calibration Laboratories and Measuring and Test Equipment

2.1.8 IEC Publications

Available from IEC Central Office, 3, rue de Varembe, P.O. Box 131, CH-1211 Geneva 20, Switzerland, Tel: +41 22 919 02 11, www.iec.ch.

IEC 60934 Circuit-breakers for equipment (CBE)

2.1.9 TE Publications

Copies of these documents are available at <https://www.te.com/>.

640903-1 TE Connectivity - RECEPT, PIDG FASTON 22-18 250

640905-1 TE Connectivity - RECEPT, PIDG FASTON 16-14 250

640907-1 TE Connectivity - RECEPT, PIDG FASTON 12-10 250

2.2 Definitions

AVAILABLE SHORT CIRCUIT AND CLOSE IN INTERRUPTING CAPACITY TESTS: These tests use a voltage regulated circuit in which the calibrated fault current is obtained after the regulator has provided maximum excitation.

CRITICAL DEFECTS: A critical defect is a defect that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining, or depending upon the product, or a defect that judgment and experience indicate is likely to prevent performance of the actual function of a major end item such as a ship, aircraft, tank, missile, or space vehicle.

DEFECT: A defect is any nonconformance of the unit of product with specified requirements.

EXTRA-LENGTH PUSHBUTTON: Unless otherwise specified, a push-pull actuated circuit breaker with a pushbutton nominally 0.375 inch longer than the standard-length pushbutton is designated as an extra-length pushbutton circuit breaker. The standard and extra length of pushbutton for each style circuit breaker is shown in each individual detail specification.

INTERRUPTING CAPACITY: Former revisions referred to this parameter as "rupture capacity." Interrupting capacity is the maximum potential short circuit current at rated voltage which a circuit breaker is required to interrupt under the operating duty specified and with a normal frequency recovery voltage not less than rated voltage.

LINE TERMINAL: The terminal attached to the isolated stationary contact, with the circuit breaker in the open or tripped position, is considered as the line terminal. When both contacts of a circuit are isolated, only one terminal shall be designated the line terminal.

MAJOR DEFECT: A major defect is a defect, other than critical, that is likely to result in failure, or to reduce the usability of the unit of product for its intended purpose.

MINOR DEFECT: A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

MULTIPHASE CIRCUIT BREAKER: A multiphase circuit breaker has two or more phases controlled by a single actuating member. Separately operable breakers in a common case will not be considered as multiphase breakers, but will be treated throughout as single-phase breakers.

NONRECYCLING TRIP-FREE: A circuit breaker so designed that after tripping with the actuator held in a closed position, the breaker will not automatically reclose.

PUSH-PULL CIRCUIT BREAKER: Push-pull circuit breakers are those which can be manually actuated by an actuator moving in a direction perpendicular to the plane of the mounting plate.

RECYCLING TRIP FREE: A circuit breaker so designed that the circuit will automatically recycle, open, and momentarily close, as long as the actuator is maintained in a closed position.

SEPARABLE LINK: A mechanism designed such that it shall be able to open a circuit under current overload condition if the normal tripping mechanism malfunctions.

TOGGLE CIRCUIT BREAKER: Toggle circuit breakers are those circuit breakers which can be manually actuated by an actuator which pivots about a point on or within the breaker.

TRIP FREE: A circuit breaker so designed that the circuit cannot be maintained closed and cannot be held against a fault when any phase is carrying overload currents that would automatically trip the breaker to the open position.

ULTIMATE TRIP CURRENT: Ultimate trip current is the smallest value of current that will cause tripping of the circuit breaker under a given set of ambient conditions.

ULTIMATE TRIP LIMITS: The specified limits of ultimate trip current are maximum ultimate trip current and minimum ultimate trip current. At the maximum specified ultimate trip current the breaker will open within the specified time, and at the minimum specified ultimate trip current the breaker will not open.

3. REQUIREMENTS

3.1 Detail Specification

The individual item requirements shall be as specified herein and in accordance with the applicable detail specification. In the event of any conflict between the requirements of this specification and the detail specification, the latter shall govern.

3.2 Qualification

The circuit breakers furnished under this specification shall be products which are authorized by the qualifying activity for listing on the applicable qualified products list (QPL) (see [4.5](#) and [6.3](#)).

3.3 Materials

Materials shall be as specified herein. However, when a definite material is not specified, a suitable material shall be used that will enable the circuit breakers to conform to the performance requirements of this specification. Acceptance or approval of any constituent material shall not be construed as a guarantee of the acceptance of the finished product.

3.3.1 Fungus

Materials shall be used which are not nutrients for fungus as specified in MIL-HDBK-454.

3.3.2 Metal

All metals used in the construction of circuit breakers shall be corrosion resistant or shall be suitably protected to resist corrosion. The use of dissimilar metals, especially contacts between brass, copper, or steel and aluminum or magnesium alloys, shall be avoided. Where contact between dissimilar metals is unavoidable, the metals shall be protected against electrolytic corrosion. Dissimilar metals are defined on MIL-STD-889. When thermostatic bimetals and trimetals are used, corrosion resulting from tests specified herein shall not adversely affect the performance of the breaker.

3.3.3 Plastics

Plastic materials used in the housing, insulator base, and any internal parts exposed to arcing or surface creepage shall conform to MIL-I-24768/17 or MIL-P-15037. Other types of plastic materials may be used provided the manufacturer submits satisfactory evidence to the activity responsible for qualification that the materials are suitable for the purpose intended. The plastic materials used shall neither support combustion nor give off noxious gases when subjected to arcs, such as those caused by interrupting heavy short circuit currents, or explosions of gaseous vapors to which the materials may be subjected in service. Plastic materials with cellulose fillers will not be permitted in parts that may be subjected to arcing or surface creepage. Plastic materials used shall be certified to exhibit a minimum ignition time of 90 seconds and a maximum extinguishing time of 90 seconds when tested for flammability in accordance with ASTM D635.

3.3.4 Protective Treatment

The use of any protective coating that will crack, chip, or scale will not be permitted.

3.3.5 Cleaning

Prior to final assembly, the circuit breaker shall be thoroughly cleaned of loose, spattered, or excess solder, metal chips, and other foreign material. Burrs, sharp edges, and resin flash shall be removed.

3.4 Design and Construction

3.4.1 General

Circuit breakers shall conform to the applicable detail specification.

3.4.2 Mounting Means

The circuit breaker shall be provided with a suitable mounting means as shown on the applicable detail specification. If self-locking nuts are used, they shall meet the performance requirements of NASM25027.

3.4.3 Actuator of Push-Pull Circuit Breakers

The portion of the actuator visible when the circuit breaker is in closed position shall be black and shall expose a white band when in the open or tripped position. The exterior portion of the actuator shall be insulated from all current-carrying parts. The actuator shall not work out to an intermediate position, give a false trip indication, or be removable from the breaker.

3.4.3.1 Manual Circuit Opening

Push-pull circuit breakers shall be designed to permit manual opening of the circuit by pulling out the actuator.

3.4.4 Toggle Circuit Breakers with Metal Actuators

The exposed portion of the actuator shall be provided with a non-glaring finish and shall be insulated from all current-carrying parts. There shall be a groove in the ball tip of the toggle breaker actuators to identify trip-free breakers.

3.4.5 Terminals

Terminal construction shall be as specified on the applicable detail specification and shall be designed for use with terminal lugs conforming to AS25036 and AS7928. Blade-style terminals shall comply with IEC 60934.

3.4.5.1 Terminal Hardware

Lock washers captive to the terminal screws shall be supplied only when specified in the detail specification.

3.4.6 Housing

The circuit-breaker mechanism shall be enclosed in a housing securely attached to the insulator base and to the mounting plate when one is used. The housing may be integral with the insulator base.

3.4.7 Ratings

The ratings of push-pull and toggle circuit breakers shall be as specified on the applicable detail specification.

3.4.8 Trip Indication and Reset

The circuit breakers shall be so designed that when the breaker contacts open automatically on overload, the actuator shall indicate the operation by moving to the tripped position, as shown on the applicable MS. The white color specified on the applicable detail specification for the trip indicator on push button circuit breakers shall conform to Class 1 of MIL-STD-104. All phases of a multi-phase breaker shall trip free on a single phase fault or overload.

3.4.8.1 Reset Mechanism

The reset mechanism shall be so designed that retaining the actuator in the closed position after automatic tripping occurs shall not adversely affect subsequent performance of the circuit breaker.

3.4.9 Position

Circuit breakers shall operate satisfactorily when mounted in any orientation.

3.4.10 Mounting Screw Clearance

The mounting screws shall be capable of being screwed into the circuit breaker a minimum depth, as shown on the applicable detail specification. The mounting nuts shall be backed or provided with other means to prevent mounting screws of excess length from interfering with the operation of the breaker. Screws of excess length shall not fracture the housing or the explosion-preventive seal.

3.4.11 Creepage and Clearance Distance

The minimum creepage path and the minimum clearance between current-carrying parts and any part of the circuit breaker other than insulating material, and also between current-carrying parts of opposite polarity, shall be 3/16 inch and 1/8 inch, respectively.

3.4.12 Tamper-Proof Calibration

Breakers shall be so constructed that tampering with the calibration is not possible without dismantling the device or breaking a seal.

3.4.13 Ambient Temperature

Unless otherwise specified (see [3.1](#)), circuit breakers shall perform within one of the following ambient temperature conditions, as specified in the detail specification:

Condition A: -55 to 71 °C

Condition B: -55 to 121 °C

3.5 Interchangeability

All parts having the same manufacturer's part number shall be functionally and dimensionally interchangeable. The drawing number requirements of ASME 100 shall govern changes in the manufacturer's part numbers.

3.6 Screw Threads

Screw threads on removable or replaceable threaded parts shall be as specified in MIL-S-7742. Threading of removable or replaceable nonmetallic parts is not permitted.

3.7 Performance

The circuit breakers shall perform satisfactorily when subjected to tests specified in Section 4, and there shall be no breakage, malfunction, or evidence of any damage which would impair ability of the breakers to meet the requirements of subsequent tests.

Microcracks in the stycast are allowed as long as they do not propagate deep enough in order to jeopardize the electrical performance.

3.7.1 Examination of Product

The circuit breakers shall show no defects when examined in accordance with [4.7.1](#).

3.7.2 Dielectric Withstanding Voltage

The circuit breakers shall withstand the voltages impressed as called out in [4.7.2](#) with no evidence of breakdown or subsequent malfunction.

3.7.3 Insulation Resistance

Unless otherwise specified, the insulation resistance of circuit breakers shall not be less than 100 MΩ when tested in accordance with [4.7.3](#).

3.7.4 Strength of Actuator

Circuit breaker actuator shall not show evidence of breaking, cracking or jamming when tested in accordance with [4.7.4.1](#) and [4.7.4.2](#). The circuit breaker shall then meet the performance requirements defined when tested in accordance with [4.7.4.3](#).

3.7.5 Strength of Threaded Parts

The areas that are to be evaluated for damage are limited to the circuit breaker housing and the threaded components or terminals (the epoxy protective coating [stycast] can be altered cosmetically).

3.7.5.1 Surface Microcracks

Surface microcracks are acceptable on the casing if they do not propagate through the depth of the plastic case halves when the threaded parts are tested in accordance with [4.7.5](#).

3.7.5.2 Functional Performance

The functional performance of the product shall not be adversely affected after strength of threaded parts testing.

3.7.6 Operating Force

The minimum force necessary for operation of the circuit breaker, when tested in accordance with [4.7.6](#), shall not be less than 15% of the specified maximum value unless otherwise specified on the detail specification.

3.7.7 Calibration

The circuit breaker's performance shall be within the limits specified on the applicable detail specification when tested and calibrated in accordance with [4.7.7](#).

3.7.8 Endurance

The circuit breaker shall make and break the specified current without failure, when tested in accordance with [4.7.8](#) and the applicable detail specification.

3.7.9 Overload Cycling

The circuit breaker shall make and break the specified overload current without failure when tested in accordance with [4.7.9](#).

3.7.10 Reclosing

When tested in accordance with [4.7.10](#), manual reset circuit breakers shall show no electrical continuity.

3.7.11 Vibration

Circuit breakers shall be tested in accordance with [4.7.11](#) with the vibration levels and test conditions specified in the detail specification. If no vibration level is specified in the detail specification, the sine vibration with test condition A shall be performed (see [4.7.11.2](#)). The circuit breakers shall not trip or show any electrical discontinuity in excess of 10 μ s. After completion of vibration test circuit breakers shall show no evidence of physical damage and shall meet the requirements of the 200% overload calibration test performed at 25 °C $\pm$ 3 °C and the dielectric withstanding voltage tests in accordance with [4.7.7.3](#) and [4.7.2](#).

3.7.12 Mechanical Shock

The circuit breaker contacts shall remain in the proper position when tested in accordance with [4.7.12](#).

3.7.13 Acceleration

The circuit breaker contacts shall remain in the proper position when tested in accordance with [4.7.13](#).

3.7.14 Interrupting Capacity (Formerly "Rupture Capacity")

The circuit breaker performance shall be as specified in [4.7.14](#) when tested in accordance with [4.7.14](#).

3.7.15 Sand and Dust

The circuit breaker performance shall be as specified in [4.7.15](#) when tested in accordance with [4.7.15](#).

3.7.16 Corrosion

The circuit breaker performance shall be as specified in [4.7.16](#) when tested in accordance with [4.7.16](#).

3.7.17 Moisture Resistance

The circuit breaker performance shall be as specified in [4.7.17](#) when tested in accordance with [4.7.17](#).

3.7.18 Explosion

Ignition of the explosive mixture outside the circuit breaker shall constitute failure when tested in accordance with [4.7.18](#).

3.7.19 Voltage Drop

Voltage drop across the circuit breaker greater than that specified on the applicable detail specification shall constitute failure when tested in accordance with [4.7.19](#).

3.8 Markings

All circuit breakers shall be permanently and legibly marked as shown on the applicable detail specification. The markings shall remain legible during and after all the tests specified in this specification.

3.8.1 Push-Pull Actuators

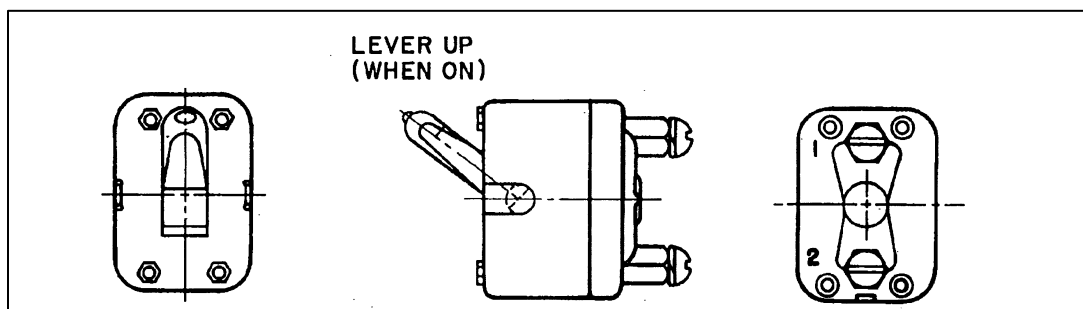
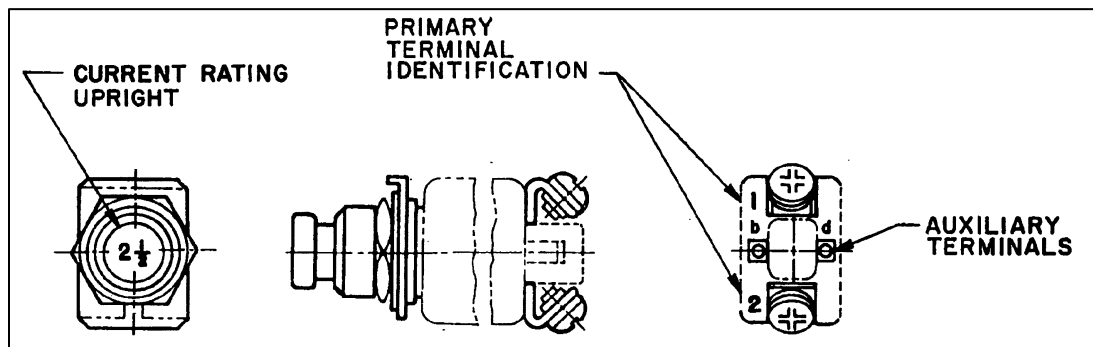
The exposed end of the push-pull actuator shall be marked with a white or silver, raised or depressed, number indicating the applicable current rating (detail specification dash number) of the breaker.

3.8.2 Toggle Actuators

The tip of actuator of toggle breakers shall be marked with a raised or depressed number indicating the applicable current rating (detail specification dash number).

3.8.3 Terminals

The line terminals shall be clearly and permanently marked "LINE" adjacent to the terminals, when shown on the applicable detail specification. Terminals shall be marked as described in [Figure 1](#) when shown on the applicable detail specification.



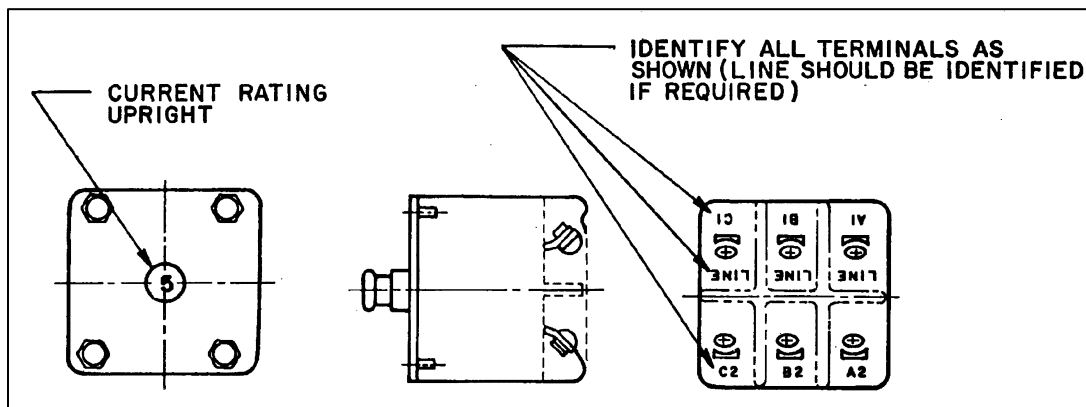


Figure 1C - Terminal identification rear view

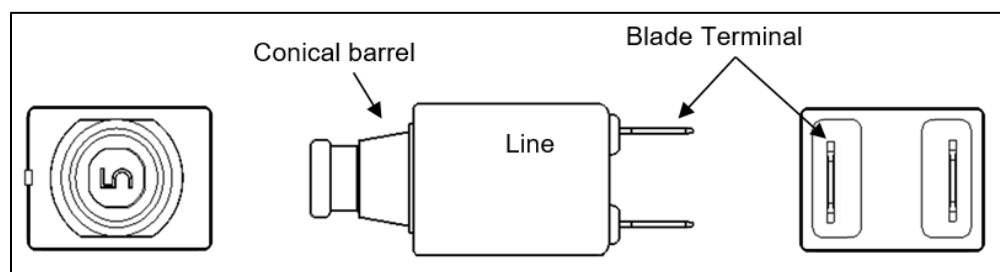


Figure 1D - Blade terminals

Figure 1 - Terminal identification

3.8.4 Multi-Phase Breakers

Primary terminal identification shall be the same as for single phase breakers, as identified above, except that the phase shall be identified by a letter prefix reading consecutively from right to left as viewed from the rear of the breaker (see [Figure 1C](#)).

3.9 Identification of Product

Each circuit breaker shall be permanently and legibly marked for identification in accordance with MIL-STD-1285 as follows:

Part No. (see [1.2.3](#))

Manufacturer's name or trademark and date code

3.10 Workmanship

The circuit breaker, including all parts and accessories, shall be constructed and finished in a careful and workmanlike manner in accordance with good design and sound practice. Particular attention shall be given to neatness and thoroughness of soldering, wiring, impregnation of coils, marking of parts and assemblies, welding and brazing, painting, riveting, machine screw assemblies, and freedom of parts from burrs and sharp edges (see [4.7.1](#)).

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for Inspection

Unless otherwise specified herein, the contract or purchase order, the manufacturer (supplier) is responsible for the performance of all contract inspection requirements. Except as otherwise specified herein, the contract or purchase order, the supplier may use any facilities suitable for the performance of the inspection requirements. The qualifying activity has the right to perform any of the inspections set forth in the standard where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.