

PERFORMANCE SPECIFICATION SHEET

CIRCUIT BREAKERS, MAGNETIC, PANEL SEAL,  
TRIP-FREE, SERIES TRIP, SINGLE POLE  
(0.2 TO 30 AMPERES)

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-PRF-55629](#).

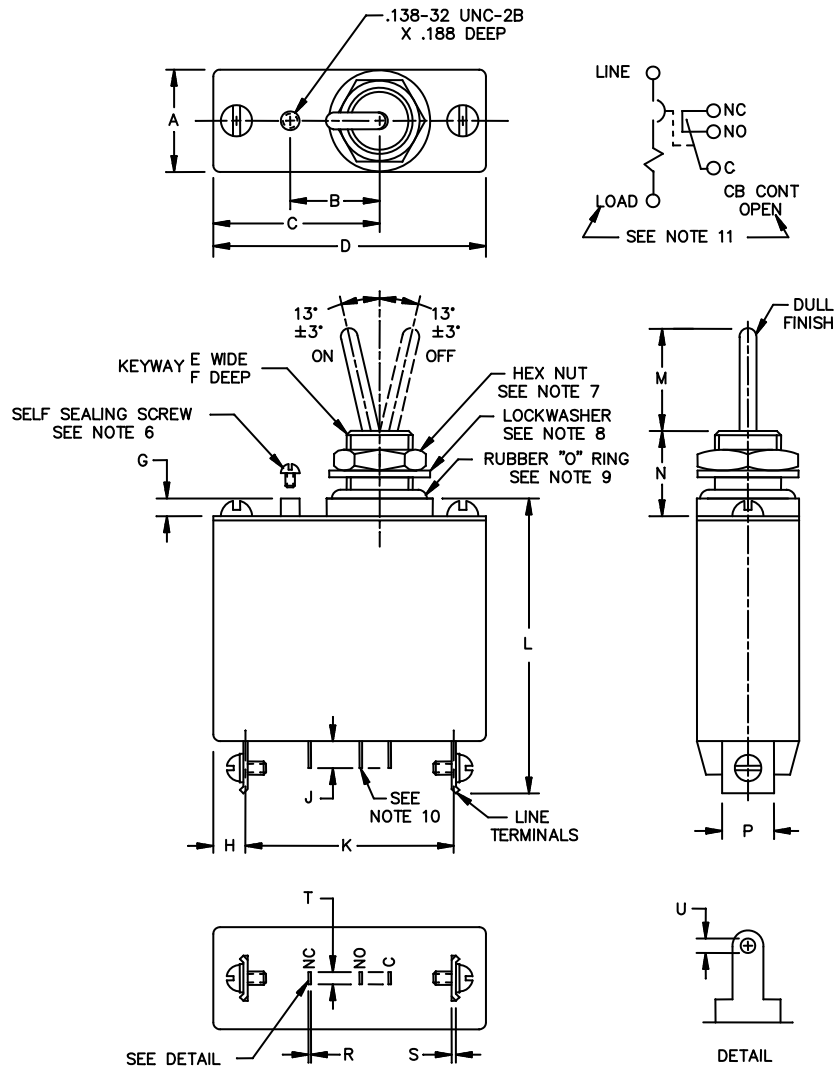


FIGURE 1. Dimensions and configurations (configuration 1).

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| Ltr | Inches   |          | mm       |          |
|-----|----------|----------|----------|----------|
|     | Min      | Max      | Min      | Max      |
| A   | .735     | .765     | 18.67    | 19.43    |
| B   | .641     | .671     | 16.28    | 17.04    |
| C   | 1.189    | 1.251    | 30.20    | 31.78    |
| D   | 1.969    | 2.031    | 50.01    | 51.59    |
| E   | .060     | .065     | 1.52     | 1.65     |
| F   | .030     | .035     | 0.76     | 0.89     |
| G   | .115     | .145     | 2.92     | 3.68     |
| H   | .199     | .261     | 5.05     | 6.63     |
| J   | .312 REF | .374 REF | 7.92 REF | 9.50 REF |
| K   | 1.499    | 1.561    | 38.07    | 39.65    |
| L   | ---      | 2.232    | ---      | 56.69    |
| M   | .719     | .781     | 18.26    | 19.84    |
| N   | .594     | .656     | 15.09    | 16.66    |
| P   | .365     | .395     | 9.27     | 10.03    |
| R   | .019 REF | .021 REF | 0.48 REF | 0.53 REF |
| S   | .030     | .035     | 0.76     | 0.89     |
| T   | .079 REF | .141 REF | 2.01 REF | 3.58 REF |
| U   | .019 REF | .081 REF | 0.48 REF | 2.06 REF |

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is  $\pm 0.031$  (0.79 mm).
4. Lockwasher, split, No. 8 [NASM35338-137](#) or equivalent.
5. Terminal screw, No. 8, .164-32 UNC-2A, .187  $\pm$  .015 long, material: Brass, tin plated ([ASTM-B545](#) or equivalent).
6. Passivated - corrosion resisting steel screw, slotted head with integral O-ring, may be replaced by the [NASM3212-12](#) with cross-recessed head or equivalent.
7. Hex mounting nut .500 - 32 UNF-2B thread, .625  $\pm$  .010 across flats, .120/.125 thick, brass nickel plated, [SAE-AMS-QQ-N-290](#) nonglare or equivalent; may be replaced with [MS25082-B22](#) or equivalent.
8. Internal tooth lockwasher, .625  $\pm$  .005 O.D., .510  $\pm$  .005 I.D., .028  $\pm$  .005 thick, stainless steel.
9. O-ring, material: Material shall be selected to enable the O-ring to meet the performance requirements of this specification. Butadiene acrylonitrile has been successfully used in the past and should be considered for meeting the O-ring requirements of the specification.
10. Auxiliary switch terminals shall provide for soldered connections.
11. Physical item marking of the words "LOAD" and "CB CONT OPEN" is optional.

FIGURE 1. Dimensions and configurations (configuration 1) - Continued.

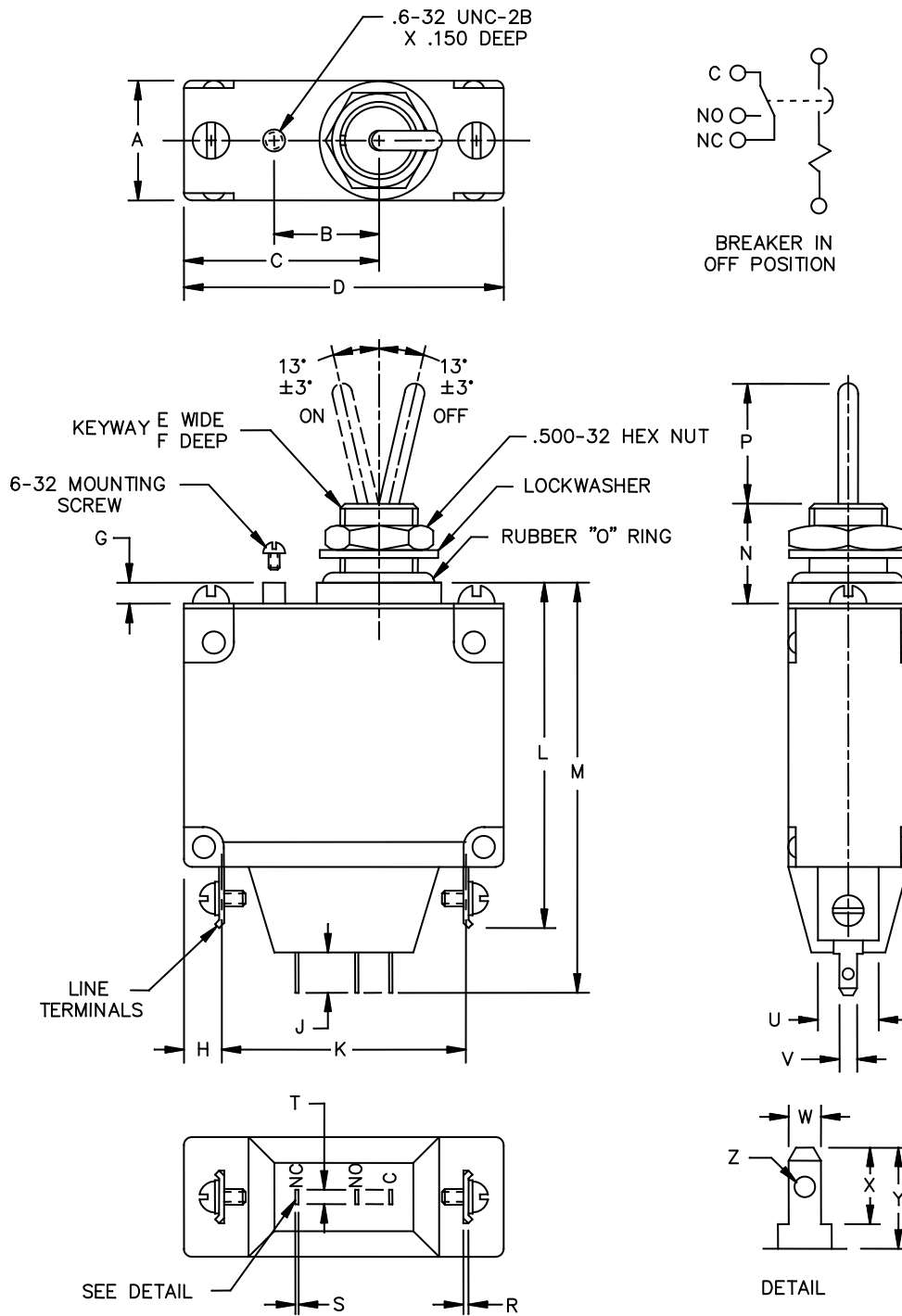


FIGURE 2. Dimensions and configurations (configuration 2) - Continued.

| Ltr | Inches   |          | mm       |          |
|-----|----------|----------|----------|----------|
|     | Min      | Max      | Min      | Max      |
| A   | .735     | .765     | 18.67    | 19.43    |
| B   | .641     | .671     | 16.28    | 17.04    |
| C   | 1.205    | 1.235    | 30.61    | 31.37    |
| D   | 1.985    | 2.015    | 50.42    | 51.18    |
| E   | .060     | .065     | 1.52     | 1.65     |
| F   | .030     | .035     | 0.76     | 0.89     |
| G   | .115     | .145     | 2.92     | 3.68     |
| H   | .215     | .245     | 5.46     | 6.22     |
| J   | .280     | .310     | 7.11     | 7.87     |
| K   | 1.515    | 1.545    | 38.48    | 39.24    |
| L   | ---      | 2.256    | ---      | 57.30    |
| M   | ---      | 2.620    | ---      | 66.55    |
| N   | .610     | .640     | 15.50    | 16.26    |
| P   | .735     | .765     | 18.67    | 19.43    |
| R   | .030     | .035     | 0.76     | 0.89     |
| S   | .019     | .021     | 0.48     | 0.53     |
| T   | .095 REF | .125 REF | 2.41 REF | 3.18 REF |
| U   | .360     | .390     | 9.14     | 9.91     |
| V   | .095     | .125     | 2.41     | 3.18     |
| W   | .095     | .125     | 2.41     | 3.18     |
| X   | .245     | .275     | 6.22     | 6.99     |
| Y   | .329     | .359     | 8.36     | 9.12     |
| Z   | .055     | .085     | 1.40     | 3.18     |

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is  $\pm .015$  (0.38 mm).
4. Lockwasher, split, No. 8 [NASM35338-137](#) or equivalent.
5. Terminal screw, No. 8, .164-32UNC-2A, .187  $\pm$ .015 long. Material: Brass, tin plated ([ASTM-B545](#) or equivalent).
6. Passivated - corrosion resisting steel screw - slotted head with integral O-ring, may be replaced by the [NASM3212-12](#) with cross-recessed head or equivalent.
7. Hex mounting nut: .500 - 32 UNF-2B thread, .625  $\pm$ .010 across flats, .120/.125 thick, brass nickel plated, [SAE-AMS-QQ-N-290](#) nonglare or equivalent; may be replaced with [MS25082-B22](#) or equivalent.
8. Internal tooth lockwasher, .625  $\pm$ .005 O.D., .510  $\pm$ .005 I.D., .028  $\pm$ .005 thick, stainless steel.
9. O-ring, material: Material shall be selected to enable the O-ring to meet the performance requirements of this specification. Butadiene acrylonitrile has been successfully used in the past and should be considered for meeting the O-ring requirements of the specification.
10. Auxiliary switch terminals shall provide for soldered connections.
11. Physical item marking of the words "LOAD" and "CB CONT OPEN" is optional.

FIGURE 2. Dimensions and configurations (configuration 2) - Continued.

REQUIREMENTS

Dimensions and configuration: See figure 1 and figure 2.

Current ratings: See table I.

High inrush: Applies unless otherwise specified. 1/

Voltage ratings: See table II. Ratings are maximum; the minimum operating voltage is limited by the internal resistance or impedance of the circuit breaker (see table I).

Auxiliary contacts:

Contact capacity shall be 10 amperes to 250 volts 60/400 Hz and 2 amperes resistive, 1 ampere inductive to 50 V dc.

Tripping-time delays: See table I and table II.

Terminal and mounting hardware: See figure 1.

Terminals: See figure 1. Solderability is applicable to auxiliary contact terminals.

Actuator strength: 25 pounds.

Actuator operating force: 4 pounds, maximum.

Terminal strength:

Applied load: 30 pounds.

Applied torque: 10 inch-pounds.

Interrupting capacities:

2,000 amperes at 50 V dc.

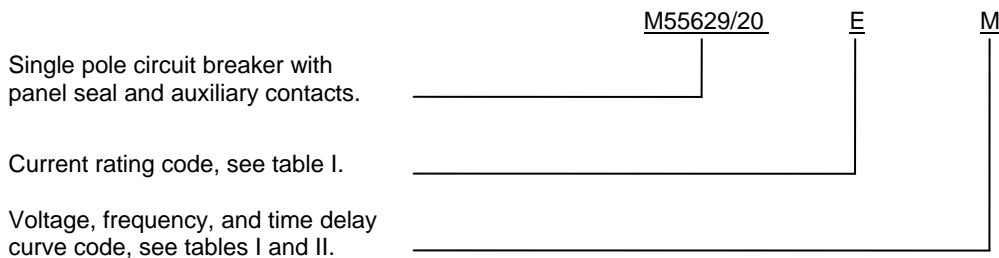
2,000 amperes at 120 V ac, 60 Hz.

1,500 amperes at 120 V ac, 400 Hz.

1,000 amperes at 240 V ac, 60 and 400 Hz.

Seal: Panel seal test applies.

Part or Identifying Number (PIN): The PIN to be cataloged and stocked by the Government consists of the prefix M55629/20 and two succeeding code letters as follows: 1/, 2/



1/ Special PINs for equipment manufacturers use only. Equipment manufacturers who do not require the high-inrush feature or auxiliary contacts in specific production applications may order circuit breakers without these features by modifying the prefix as follows: M55629/20XX: Replace slash with A for items without auxiliary contacts (M55629A20XX). Replace slash with B for items without the high-inrush feature (M55629B20XX). Replace slash with C for items without either the high-inrush feature or auxiliary contacts (M55629C20XX).

2/ Replace slash with D for items requiring configuration 2 (M55629D20XX). Replace slash with E for items requiring configuration 2 without auxiliary contacts (M55629E20XX). Replace slash with F for items requiring configuration 2 without the high-inrush feature (M55629F20XX). Replace slash with G for items requiring configuration 2 without the high-inrush feature or auxiliary contacts (M55629G20XX).

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When circuit breakers without auxiliary contacts are installed in new equipment, replacement spares should possess this feature since it is more economic for the DoD to stock one version of this item instead of two. Therefore, stock numbers should not be requested (or assigned) for this special PIN.

TABLE I. Circuit breaker dash numbers and applicable characteristics (configuration 1).

| Current rating |             | Voltage frequency and tripping time delay code letter from table II | Resistance or impedance ohms (max) | Current rating |             | Voltage frequency and tripping time delay code letter from table II | Resistance or impedance ohms (max) |
|----------------|-------------|---|------------------------------------|----------------|-------------|---|------------------------------------|
| Amperes        | Code letter |   |                                    | Amperes        | Code letter |   |                                    |
| 0.1            | A           | K or L  | 120 at dc                          | 4.0            | K           | K or L  | .1 at dc                           |
| 0.1            | A           | M or N  | 120 at 60 Hz                       | 4.0            | K           | M or N  | .1 at 60 Hz                        |
| 0.1            | A           | P, R, or S  | 350 at 400 Hz                      | 4.0            | K           | P, R, or S  | .3 at 400 Hz                       |
| 0.250          | B           | K or L  | 21 at dc                           | 5.0            | L           | K or L  | .08 at dc                          |
| 0.250          | B           | M or N  | 23 at 60 Hz                        | 5.0            | L           | M or N  | .08 at 60 Hz                       |
| 0.250          | B           | P, R, or S  | 43 at 400 Hz                       | 5.0            | L           | P, R, or S  | .15 at 400 Hz                      |
| 0.35           | C           | K or L  | 12 at dc                           | 7.5            | M           | K or L  | .035 at dc                         |
| 0.35           | C           | M or N  | 12 at 60 Hz                        | 7.5            | M           | M or N  | .035 at 60 Hz                      |
| 0.35           | C           | P, R, or S  | 30 at 400 Hz                       | 7.5            | M           | P, R, or S  | .11 at 400 Hz                      |
| 0.5            | D           | K or L  | 6 at dc                            | 10.0           | N           | K or L  | .02 at dc                          |
| 0.5            | D           | M or N  | 6 at 60 Hz                         | 10.0           | N           | M or N  | .02 at 60 Hz                       |
| 0.5            | D           | P, R, or S  | 12 at 400 Hz                       | 10.0           | N           | P, R, or S  | .04 at 400 Hz                      |
| 0.75           | E           | K or L  | 3 at dc                            | 12.5           | P           | K or L  | .013 at dc                         |
| 0.75           | E           | M or N  | 3 at 60 Hz                         | 12.5           | P           | M or N  | .015 at 60 Hz                      |
| 0.75           | E           | P, R, or S  | 7 at 400 Hz                        | 12.5           | P           | P, R, or S  | .03 at 400 Hz                      |
| 1.0            | F           | K or L  | 2 at dc                            | 15.0           | R           | K or L  | .01 at dc                          |
| 1.0            | F           | M or N  | 2 at 60 Hz                         | 15.0           | R           | M or N  | .011 at 60 Hz                      |
| 1.0            | F           | P, R, or S  | 4 at 400 Hz                        | 15.0           | R           | P, R, or S  | .02 at 400 Hz                      |
| 1.75           | G           | K or L  | 0.9 at dc                          | 20.0           | S           | K or L  | .007 at dc                         |
| 1.75           | G           | M or N  | 0.9 at 60 Hz                       | 20.0           | S           | M or N  | .007 at 60 Hz                      |
| 1.75           | G           | P, R, or S  | 2 at 400 Hz                        | 20.0           | S           | P, R, or S  | .01 at 400 Hz                      |
| 2.5            | H           | K or L  | .35 at dc                          | 25.0           | T           | K or L  | .006 at dc                         |
| 2.5            | H           | M or N  | .35 at 60 Hz                       | 25.0           | T           | M or N  | .006 at 60 Hz                      |
| 2.5            | H           | P, R, or S  | .6 at 400 Hz                       | 25.0           | T           | P, R, or S  | .007 at 400 Hz                     |
| 3.0            | J           | K or L  | .3 at dc                           | 30.0           | U           | K or L  | .005 at dc                         |
| 3.0            | J           | M or N  | .3 at 60 Hz                        | 30.0           | U           | M or N  | .005 at 60 Hz                      |
| 3.0            | J           | P, R, or S  | .5 at 400 Hz                       | 30.0           | U           | P, R, or S  | .006 at 400 Hz                     |

TABLE II. Circuit breaker dash numbers and applicable characteristics (configuration 2).

| Current rating |             | Voltage frequency and tripping time delay code letter from table II | Resistance or impedance ohms (max) | Current rating |             | Voltage frequency and tripping time delay code letter from table II | Resistance or impedance ohms (max) |
|----------------|-------------|---|------------------------------------|----------------|-------------|---|------------------------------------|
| Amperes        | Code letter |   |                                    | Amperes        | Code letter |   |                                    |
| 0.1            | A           | K or L  | 186 at dc                          | 4.0            | K           | K or L  | 0.113 at dc                        |
| 0.1            | A           | M or N  | 142 at 60 Hz                       | 4.0            | K           | M or N  | 0.1 at 60 Hz                       |
| 0.1            | A           | P, R, or S  | 350 at 400 Hz                      | 4.0            | K           | P, R, or S  | 0.3 at 400 Hz                      |
| 0.250          | B           | K or L  | 26.4 at dc                         | 5.0            | L           | K or L  | 0.08 at dc                         |
| 0.250          | B           | M or N  | 26.4 at 60 Hz                      | 5.0            | L           | M or N  | 0.08 at 60 Hz                      |
| 0.250          | B           | P, R, or S  | 60 at 400 Hz                       | 5.0            | L           | P, R, or S  | 0.175 at 400 Hz                    |
| 0.35           | C           | K or L  | 13.2 at dc                         | 7.5            | M           | K or L  | 0.035 at dc                        |
| 0.35           | C           | M or N  | 13.2 at 60 Hz                      | 7.5            | M           | M or N  | 0.035 at 60 Hz                     |
| 0.35           | C           | P, R, or S  | 30 at 400 Hz                       | 7.5            | M           | P, R, or S  | 0.11 at 400 Hz                     |
| 0.5            | D           | K or L  | 6 at dc                            | 10.0           | N           | K or L  | 0.02 at dc                         |
| 0.5            | D           | M or N  | 6.36 at 60 Hz                      | 10.0           | N           | M or N  | 0.02 at 60 Hz                      |
| 0.5            | D           | P, R, or S  | 13.2 at 400 Hz                     | 10.0           | N           | P, R, or S  | 0.04 at 400 Hz                     |
| 0.75           | E           | K or L  | 3 at dc                            | 12.5           | P           | K or L  | 0.016 at dc                        |
| 0.75           | E           | M or N  | 3 at 60 Hz                         | 12.5           | P           | M or N  | 0.015 at 60 Hz                     |
| 0.75           | E           | P, R, or S  | 7 at 400 Hz                        | 12.5           | P           | P, R, or S  | 0.03 at 400 Hz                     |
| 1.0            | F           | K or L  | 2 at dc                            | 15.0           | R           | K or L  | 0.012 at dc                        |
| 1.0            | F           | M or N  | 2 at 60 Hz                         | 15.0           | R           | M or N  | 0.011 at 60 Hz                     |
| 1.0            | F           | P, R, or S  | 4 at 400 Hz                        | 15.0           | R           | P, R, or S  | 0.02 at 400 Hz                     |
| 1.75           | G           | K or L  | 0.9 at dc                          | 20.0           | S           | K or L  | 0.0075 at dc                       |
| 1.75           | G           | M or N  | 0.9 at 60 Hz                       | 20.0           | S           | M or N  | 0.007 at 60 Hz                     |
| 1.75           | G           | P, R, or S  | 2 at 400 Hz                        | 20.0           | S           | P, R, or S  | 0.01 at 400 Hz                     |
| 2.5            | H           | K or L  | 0.35 at dc                         | 25.0           | T           | K or L  | 0.006 at dc                        |
| 2.5            | H           | M or N  | 0.35 at 60 Hz                      | 25.0           | T           | M or N  | 0.006 at 60 Hz                     |
| 2.5            | H           | P, R, or S  | 0.7 at 400 Hz                      | 25.0           | T           | P, R, or S  | 0.009 at 400 Hz                    |
| 3.0            | J           | K or L  | 0.3 at dc                          | 30.0           | U           | K or L  | 0.005 at dc                        |
| 3.0            | J           | M or N  | 0.3 at 60 Hz                       | 30.0           | U           | M or N  | 0.005 at 60 Hz                     |
| 3.0            | J           | P, R, or S  | 0.5 at 400 Hz                      | 30.0           | U           | P, R, or S  | 0.006 at 400 Hz                    |

TABLE III. Operating voltage, frequency, and tripping-time delay (configuration 1). 1/

| Time delay percent rated current | Tripping-time delay at 25°C ±2°C (tripping time in seconds) |      |                  |      |                  |      |                  |      |                  |      |                  |      |
|----------------------------------|---|------|------------------|------|------------------|------|------------------|------|------------------|------|------------------|------|
|                                  | 50 V dc   |      |                  |      | 240 V ac, 60 Hz  |      |                  |      | 240 V ac, 400 Hz |      |                  |      |
|                                  | K   |      | L                |      | M                |      | N                |      | P                |      | R                |      |
|                                  | Max   | Min  | Max              | Min  | Max              | Min  | Max              | Min  | Max              | Min  | Max              | Min  |
| 100                              | no trip one hour  |      | no trip one hour |      | no trip one hour |      | no trip one hour |      | no trip one hour |      | no trip one hour |      |
| 125                              | 100   | 10   | 12               | .5   | 120              | 10   | 18               | 1    | N/A              | N/A  | N/A              | N/A  |
| 150                              | N/A   | N/A  | N/A              | N/A  | N/A              | N/A  | N/A              | N/A  | 60               | 6    | 5.8              | .6   |
| 200                              | 20  | 2.5  | 1.5              | .13  | 20               | 3    | 1.6              | .16  | 20               | 2.1  | 2                | .2   |
| 400                              | 2   | .36  | .29              | .031 | 2.3              | .3   | .3               | .04  | 4                | .4   | .35              | .0   |
| 600                              | 1   | .13  | .15              | Inst | 1                | .13  | .17              | Inst | .6               | Inst | .125             | Inst |
| 800                              | .6  | Inst | .06              | Inst | .6               | Inst | .09              | Inst | .06              | Inst | .05              | Inst |
| 1,000                            | .29   | Inst | .05              | Inst | .29              | Inst | .043             | Inst | .045             | Inst | .036             | Inst |
| 1,800 2/                         | no trip   |      | no trip          |      | no trip          |      | no trip          |      | no trip          |      | no trip          |      |

See footnotes at end of table IV.



TABLE IV. Operating voltage, frequency, and tripping-time delay (configuration 1) - Continued. 1/

| Time delay percent rated current | Tripping-time delay at high and low temperature °C (tripping time in seconds) 3/ |          |                  |          |                  |          |                  |          |                  |          |                  |          |
|----------------------------------|--|----------|------------------|----------|------------------|----------|------------------|----------|------------------|----------|------------------|----------|
|                                  | 50 V dc  |          |                  |          | 240 V 60 Hz      |          |                  |          | 240 V 400 Hz     |          |                  |          |
|                                  | K  |          | L                |          | M                |          | N                |          | P                |          | R                |          |
|                                  | -40° Max   | +85° Min | -40° Max         | +85° Min | -40° Max         | +85° Min | -40° Max         | +85° Min | -40° Max         | +85° Min | -40° Max         | +85° Min |
| 100                              | no trip one hour   |          | no trip one hour |          | no trip one hour |          | no trip one hour |          | no trip one hour |          | no trip one hour |          |
| 125                              | 500  | .5       | 100              | .1       | 500              | 1        | 100              | .1       | N/A              | N/A      | N/A              | N/A      |
| 150                              | N/A  | N/A      | N/A              | N/A      | N/A              | N/A      | N/A              | N/A      | 500              | .5       | 100              | .1       |
| 200                              | 100  | .1       | 10               | .05      | 100              | .05      | 10               | .05      | 100              | .1       | 10               | .05      |
| 400                              | 20   | Inst     | 3                | Inst     | 20               | Inst     | 3                | Inst     | 20               | Inst     | 3                | Inst     |
| 600                              | 5  | Inst     | 1                | Inst     | 5                | Inst     | 1                | Inst     | 5                | Inst     | 1                | Inst     |
| 800                              | 2  | Inst     | .5               | Inst     | .5               | Inst     | .5               | Inst     | .5               | Inst     | .5               | Inst     |

- 1/ Circuit breakers shall not trip at 100 percent rated current but must trip at 125 or 150 percent of rated current. Between 125 or 150 percent, they may trip. Instantaneous is defined as less than 15 milliseconds.
- 2/ Items without the high-inrush feature (for use in production only) are not subject to this requirement. High-inrush test shall use one alternation which has a peak value of 1800 percent of rated current. 400 Hz and dc delays shall be subjected to a 60 Hz waveform, 60 Hz delays shall be subjected to a 60 Hz waveform.
- 3/ High and low test temperature tolerances are  $\pm 2^{\circ}\text{C}$ .

TABLE V. Operating voltage, frequency, and tripping-time delay (configuration 2). 1/

| Time delay percent rated current | Tripping-time delay at 25°C ±2°C (tripping time in seconds) |      |                  |       |                  |      |                  |      |                  |      |                  |      |   |
|----------------------------------|---|------|------------------|-------|------------------|------|------------------|------|------------------|------|------------------|------|---|
|                                  | 50 V dc   |      |                  |       | 240 V ac, 60 Hz  |      |                  |      | 240 V ac, 400 Hz |      |                  |      |   |
|                                  | K   |      | L                |       | M                |      | N                |      | P                |      | R                |      |   |
|                                  | Max   | Min  | Max              | Min   | Max              | Min  | Max              | Min  | Max              | Min  | Max              | Min  |   |
| 100                              | no trip one hour  |      | no trip one hour |       | no trip one hour |      | no trip one hour |      | no trip one hour |      | no trip one hour |      |   |
| 125                              | 60  | 7    | 6.5              | 0.5   | 120              | 10   | 12               | 0.7  | N/A              | N/A  | N/A              | N/A  | N |
| 150                              | N/A   | N/A  | N/A              | N/A   | N/A              | N/A  | N/A              | N/A  | 70               | 5    | 8                | 0.5  | 4 |
| 200                              | 10  | 0.6  | 1.2              | 0.13  | 20               | 2.2  | 3                | 0.13 | 25               | 2.1  | 1.9              | 0.15 | 1 |
| 400                              | 2   | 0.15 | 0.5              | 0.031 | 3                | 0.3  | 1                | 0.03 | 5                | 0.4  | 0.4              | 0.02 |   |
| 600                              | 1   | Inst | 0.25             | Inst  | 2                | Inst | 0.3              | Inst | 2.4              | Inst | 0.25             | Inst |   |
| 800                              | 0.5   | Inst | 0.1              | Inst  | 0.8              | Inst | 0.15             | Inst | 1                | Inst | 0.1              | Inst |   |
| 1,000                            | 0.1   | Inst | Inst             | Inst  | 0.25             | Inst | 0.1              | Inst | 0.1              | Inst | 0.05             | Inst |   |
| 1,800 2/                         | no trip   |      | no trip          |       | no trip          |      | no trip          |      | no trip          |      | no trip          |      |   |

See footnotes at end of table VI.

TABLE VI. Operating voltage, frequency, and tripping-time delay (configuration 2) - Continued. 1/

| Time delay<br>percent<br>rated<br>current | Tripping-time delay at high and low temperature °C (tripping time in seconds) 3/ |              |                     |              |                     |              |                     |              |                     |              |                     |              |
|---|--|--------------|---------------------|--------------|---------------------|--------------|---------------------|--------------|---------------------|--------------|---------------------|--------------|
|   | 50 V dc  |              |                     |              | 240 V ac, 60 Hz     |              |                     |              | 240 V ac, 400 Hz    |              |                     |              |
|   | K  |              | L                   |              | M                   |              | N                   |              | P                   |              | R                   |              |
|   | -40°C<br>Max   | +85°C<br>Min | -40°C<br>Max        | +85°C<br>Min | -40°C<br>Max        | +85°C<br>Min | -40°C<br>Max        | +85°C<br>Min | -40°C<br>Max        | +85°C<br>Min | -40°C<br>Max        | +85°C<br>Min |
| 100                                       | no trip<br>one hour  |              | no trip<br>one hour |              | no trip<br>one hour |              | no trip<br>one hour |              | no trip<br>one hour |              | no trip<br>one hour |              |
| 125                                       | 500  | 5            | 100                 | 0.1          | 700                 | 1            | 100                 | 0.1          | N/A                 | N/A          | N/A                 | N/A          |
| 150                                       | N/A  | N/A          | N/A                 | N/A          | N/A                 | N/A          | N/A                 | N/A          | 600                 | 0.5          | 100                 | 0.1          |
| 200                                       | 100  | 0.1          | 10                  | 0.05         | 160                 | 0.05         | 10                  | 0.05         | 130                 | 0.1          | 10                  | 0.05         |
| 400                                       | 20   | Inst         | 3                   | Inst         | 26                  | Inst         | 3                   | Inst         | 32                  | Inst         | 3                   | Inst         |
| 600                                       | 5  | Inst         | 1                   | Inst         | 13                  | Inst         | 1                   | Inst         | 26                  | Inst         | 1                   | Inst         |
| 800                                       | 2  | Inst         | 0.5                 | Inst         | 2.8                 | Inst         | 0.5                 | Inst         | 8.4                 | Inst         | 0.5                 | Inst         |

1/ Circuit breakers shall not trip at 100 percent rated current but must trip at 125 or 150 percent of rated current. Between 100 percent and 125 or 150 percent, they may trip. Instantaneous is defined as less than 15 milliseconds.

2/ High-inrush test shall be performed using one alternation, which has a peak value of 1,800 percent of rated current. 400 Hz and dc delays shall be subjected to a 400 Hz waveform, 60 Hz delays shall be subjected to a 60 Hz waveform.

3/ High and low test temperature tolerances are  $\pm 2^\circ\text{C}$ .

Circuit breakers covered by this specification replace commercial types as specified in table III providing they have equivalent current, voltage, frequency, and time delay ratings.

Circuit breakers without either auxiliary contacts or the high-inrush feature should be replaced by equivalently rated military items with both of these features.

TABLE VII. Supersession and substitution data.

| Superseding military PIN | Superseded manufacturers PIN |            |
|--------------------------|------------------------------|------------|
|                          | CAGE 81541                   | CAGE 74193 |
| M55629/20XX              | Type APGN-6                  | Type JE1   |
|                          | UPGN-6<br>IEGN-6             |            |

Reference documents. In addition to [MIL-PRF-55629](#), this document references the following:

- [ASTM-B545](#)
- [MS25082](#)
- [NASM3212](#)
- [NASM35338](#)
- [SAE-AMS-QQ-N-290](#)

| The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. 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 and relationship to the last previous issue.

Custodians:  
 Army - CR  
 Navy - EC  
 Air Force - 85  
 DLA - CC

Preparing activity:  
 Army - CR  
 Agent:  
 DLA - CC

| Review activities:  
 Army - AV, CR4, MI  
 Navy - AS, MC, OS, SH  
 Air Force - 19, 99

(Project 5925-2010-020)

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.daps.dla.mil>.

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