[INCH-POUND] A-A-59886/1 12 August 2011

COMMERCIAL ITEM DESCRIPTION SPECIFICATION SHEET

CIRCUIT BREAKERS, MINIATURE, THERMAL MAGNETIC, SHOCK ENHANCED, TRIP-FREE, SERIES TRIP, HIGH DENS ITY DESIGN, 35 MM DIN CHANNEL MOUNT, ONE POLE, 0.2 TO 30 AMPERES (A)

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

The complete requirements for procuring the circuit breakers described herein shall consist of this document and the issue in effect of CID A-A-59886.

CLASSIFICATION/PART OR IDENTIFICATION NUMBER (PIN). This commercial item description (CID) specification sheet uses a classification system which is included in the PIN as shown in the following example (see NOTES).



SALIENT CHARACTERISTICS.

<u>Interface and physical dimensions</u>. Circuit breakers supplied to this CID specification sheet shall be as specified herein and shall meet the requirements of UL 1077 and CSA C22.2 Number 235 for supplementary protectors and EN/IEC 60934 for circuit breakers for equipment (CBE) (see figure 1).

Maximum voltage and frequency rating. The maximum voltage and frequency rating shall be 480V ac/ 277 V ac at 50/60 Hertz, 65 V dc.

Current rating. The current rating shall be in accordance with table I.

Calibration (Time delay). Calibration (time delay) shall be in accordance with table II.

Temperature range. The temperature range shall be -40°F to 149°F (-40°C to 65°C) non-condensing.

<u>Operating life</u>. The operating life shall be 6,000 operations at rated current.

Housing material. The housing material shall be glass-filled Polyamide 6.6.

Shock. The shock shall be 25 G, 11 ms duration.

Terminal type. The terminal type shall be tubular screw with self-lifting box lug.

Wire size. The wire size shall be number 22 to number 10 AWG.





Ltr	Inches		mm	
	Min	Max	Min	Max
Α	3.475	3.485	88.27	88.52
В	3.145	3.155	80.01	80.14
С	3.475	3.485	88.27	88.52
D	.405	0.415	10.29	10.54
E	.505	0.515	12.83	13.08
F	.485	0.495	12.32	12.57

NOTES:

- 1. Dimensions are in inches.
- 2. Metric equivalents are given for general information only.
- 3. Unless otherwise specified, tolerance is \pm .005 (0.13 mm).

FIGURE 1. Interface and physical dimensions.

CID dash number AA59886/01-	Current rating (Amperes)	CID dash number AA59886/01-	Current rating (Amperes)
001	0.2	011	5.0
002	0.5	012	6.0
003	0.8	013	7.0
004	1.0	014	8.0
005	1.2	015	10.0
006	1.5	016	12.0
007	2.0	017	15.0
008	2.5	018	16.0
009	3.0	019	20.0
010	4.0	020	25.0

TABLE I. PIN dash number parameters.

TABLE II. Calibration (time delay) in seconds.

Tripping-time delay at +21.1°C (70°F) (tripping time in seconds)								
Time delay Percent rated current	100 p	ercent	200 p	ercent	300 p	ercent	400 p	ercent
Tripping times (seconds)	Max	Min	Max	Min	Max	Min	Max	Min
	No trip		40	10	18	3	9	1.5
Time delay Percent rated current	500 percent		600 percent		1000 percent		2000 percent greater	
Tripping times	Max	Min	Max	Min	Max	Min	Max	Min
(seconds)	6	0.8	4	0.003	2	0.009	0.02	n/a

<u>Recommended wire strip length</u>. The recommended wire strip length shall be .51 inch (13 mm) for the main terminal and .41 inch (10.4 mm) for the auxiliary terminal.

Terminal torque. 0.656 Newton meters (N m) (5 pounds (lb) inch)

Auxiliary contacts (N.O. or N.C.). Contact capacity shall be 1.0 amperes ac or dc (Resistive load).

NOTES.

<u>PIN</u>. The PIN should be used for Government purposes to buy commercial products to this CID specification sheet. See the classification information for PIN format example.

Source of documents.

Other Publications

CANADIAN STANDARDS ASSOCIATION (CSA)

CSA C22.2 NO 235 - Supplementary Protectors.

(Copies of this document is available online at <u>http://www.csa.ca/</u> or from the Canadian Standards Association, 8501 East Pleasant Valley Road, Cleveland, Ohio 44131-5575.)

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)

EN/IEC 60934 - Circuit Breakers for Equipment (CBE).

(Copies of this document is available online at <u>http://www.iec.ch/</u> or from the International Electrotechnical Commission , 446 Main Street, 16th Floor, Worcester, MA 01608.)

UNDERWRITERS LABORATORIES, INCORPORATED (UL)

UL 1077 - Supplementary Protectors for Use in Electrical Equipment, Standard For Safety.

(Copies of this document is available online at <u>http://www.ul.com/</u> or from the Underwriters Laboratories, Incorporated, 333 Pfingsten Road, Northbrook, IL 60062-2096.)

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

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

MFR's CAGE	MFR's name and address
4H047	Rockwell Automation, Incorporated 1 Allen-Bradley Drive Mayfield Heights, OH 44124-6118 Phone number: (440) 646-5000 Facsimile number: (440) 646-3138 E-mail: <u>RAGov@ra.rockwell.com</u> Uniform Resource Locator (URL): <u>www.rockwellautomation.com</u>

<u>Part number (P/N) supersession data</u>. These CID specification sheet PINs supersede the following MFR's P/N's as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

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CID dash number (see table I)	MFR's CAGE 4H047	CID dash number (see table I)	MFR's CAGE 4H047
AA59886/01-	MFR's P/N <u>1</u> /	AA59886/01-	MFR's P/N <u>1</u> /
001	1492-GS1G002	001A	1492-GS1G002H1
002	1492-GS1G005	002A	1492-GS1G005H1
003	1492-GS1G008	003A	1492-GS1G008H1
004	1492-GS1G0010	004A	1492-GS1G0010H1
005	1492-GS1G0012	005A	1492-GS1G0012H1
006	1492-GS1G0015	006A	1492-GS1G0015H1
007	1492-GS1G0020	007A	1492-GS1G0020H1
008	1492-GS1G0025	008A	1492-GS1G0025H1
009	1492-GS1G0030	009A	1492-GS1G0030H1
010	1492-GS1G0040	010A	1492-GS1G0040H1
011	1492-GS1G0050	011A	1492-GS1G0050H1
012	1492-GS1G0060	012A	1492-GS1G0060H1
013	1492-GS1G0070	013A	1492-GS1G0070H1
014	1492-GS1G0080	014A	1492-GS1G0080H1
015	1492-GS1G0100	015A	1492-GS1G0100H1
016	1492-GS1G0120	016A	1492-GS1G0120H1
017	1492-GS1G0150	017A	1492-GS1G0150H1
018	1492-GS1G0160	018A	1492-GS1G0160H1
019	1492-GS1G0200	019A	1492-GS1G0200H1
020	1492-GS1G0250	020A	1492-GS1G0250H1

TABLE I. P/N supersession data.

<u>1</u>/ The manufacturer's P/N shall not be used for acquisition 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. For actual part marking requirements see the marking paragraph of A-A-59886.

MILITARY INTERESTS:

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FAS

Preparing activity:

DLA-CC

Project 5925-2011-019

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.

Custodians: Navy - EC

DLA - CC