1.0 Reference and Address			
Report Number	103484990LAX-001	Original Issued: 22-May-2018	Revised: 15-Jun-2024
Standard(s)	Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels [UL 2703:2015 Ed.1+R:24Mar2021] PV Module and Panel Racking Mounting System and Accessories [CSA T.I.L. A-40:2020]		

Applicant	Cambria County Association for the Blind and Handicapped	Manufacturer	**Cambria County Association for the Blind and Handicapped**
Address	175 Industrial Park Rad, Ebensburg, PA 15931	Address	175 Industrial Park Road Ebensburg, PA 15931
Country	USA	Country	USA
Contact	Beth Burkett Jason Martinage	Contact	Beth Burkett Jason Martinage
Phone	(814) 472- 5077	Phone	(814) 472- 5077
FAX	(814) 472- 7179	FAX	(814) 472- 7179
Email	bburkett@cabproducts.com jmartinage@cabproducts.com,	Email	bburkett@cabproducts.com jmartinage@cabproducts.com,

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CONFIDENTIAL PROTECTIVE ORDER MATERIAL

CAB, EX2043
Case No. IPR2024-00139
1 of 50

2.0 Product Description	
Product	Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 01-28-2022
Brand name	CAB Solar Integrated Grounding System
Description	The product covered by this report is the CAB Solar Grounding Device Kit (Mid Pier Kit) that is intended to provide grounding of racking system by creating an electrical connection between the galvanized steel PV racking posts and the supplied ground lug. This report covers several CAB Mid Pier Kit with different brackets. The Kit includes L bracket, Washer, Carriage Bolts, Hex Nut, and Grounding Lug (Includes: Lug, Lock Washer, Hex Nut, Bolt) The Mid Pier Kit is secured by bolted connections to the PV racking post [redacted] and ground the system via [redacted] ground lug. All Mid Pier Kit components are Galvanized and the grounding lug is [redacted] UL 467 recognized. The overall grounding of the entire racking systems is to be designed and investigated to the edition of the National Electrical Code, NEC, to Article 690: Solar Photovoltaic Systems and Article 250: Grounding and Bonding in effect in the jurisdiction in which the project resides. The earthing clamps/ground lug is in direct contact with the post and to be installed based on the requirements of a grounding electrode per Article 250 and the installation manual. Any local electrical codes must be adhered in addition to the national electrical codes. This product investigation was performed only with respect to specific properties, a limited range of hazards, or suitability for use under limited or special conditions. The following risks and other properties of this product have not been evaluated: The Mechanical Loading Test, mechanical strength of materials, flammability, electric shock, Ultraviolet light exposure, fire resistance class ratings as a roof covering (e.g. Class A, B, or C Film) material.
Models	[redacted] and [redacted]
Model Similarity	All models are identical in material and finish. They used [redacted]. The difference between models are dimensions of L-bracket. Model [redacted] uses [redacted] The Mid-pier L-Bracket installation can be done [redacted].
Ratings	N/A
Other Ratings	N/A

3.0 Product Photographs

Photo 1 - Mid Pier Kit overview

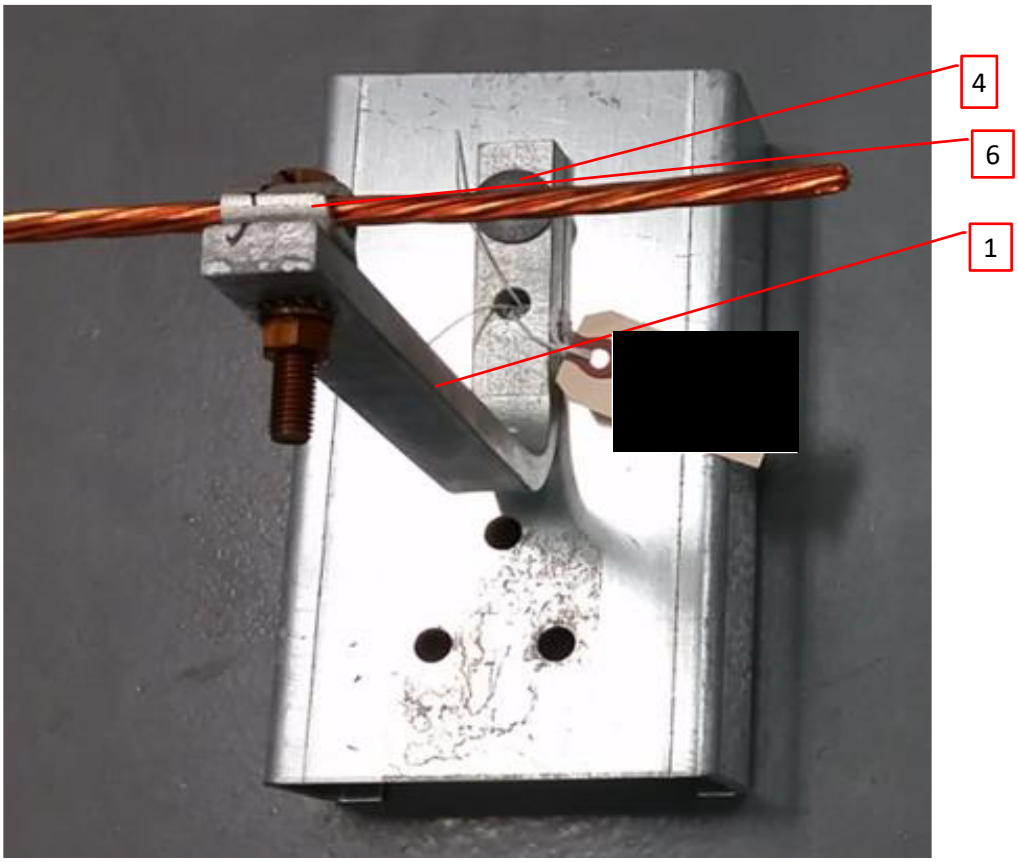
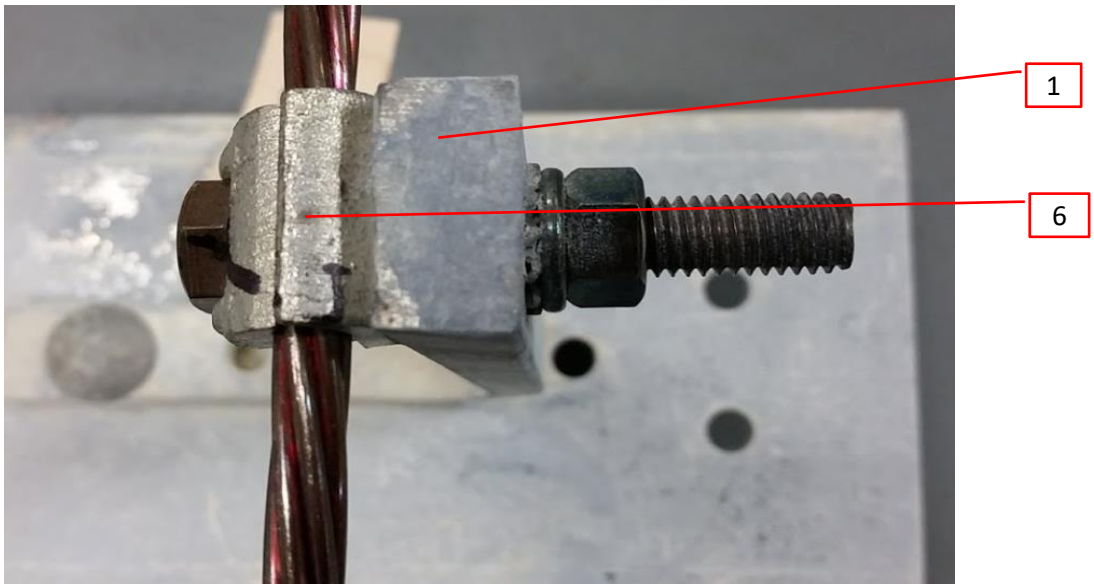


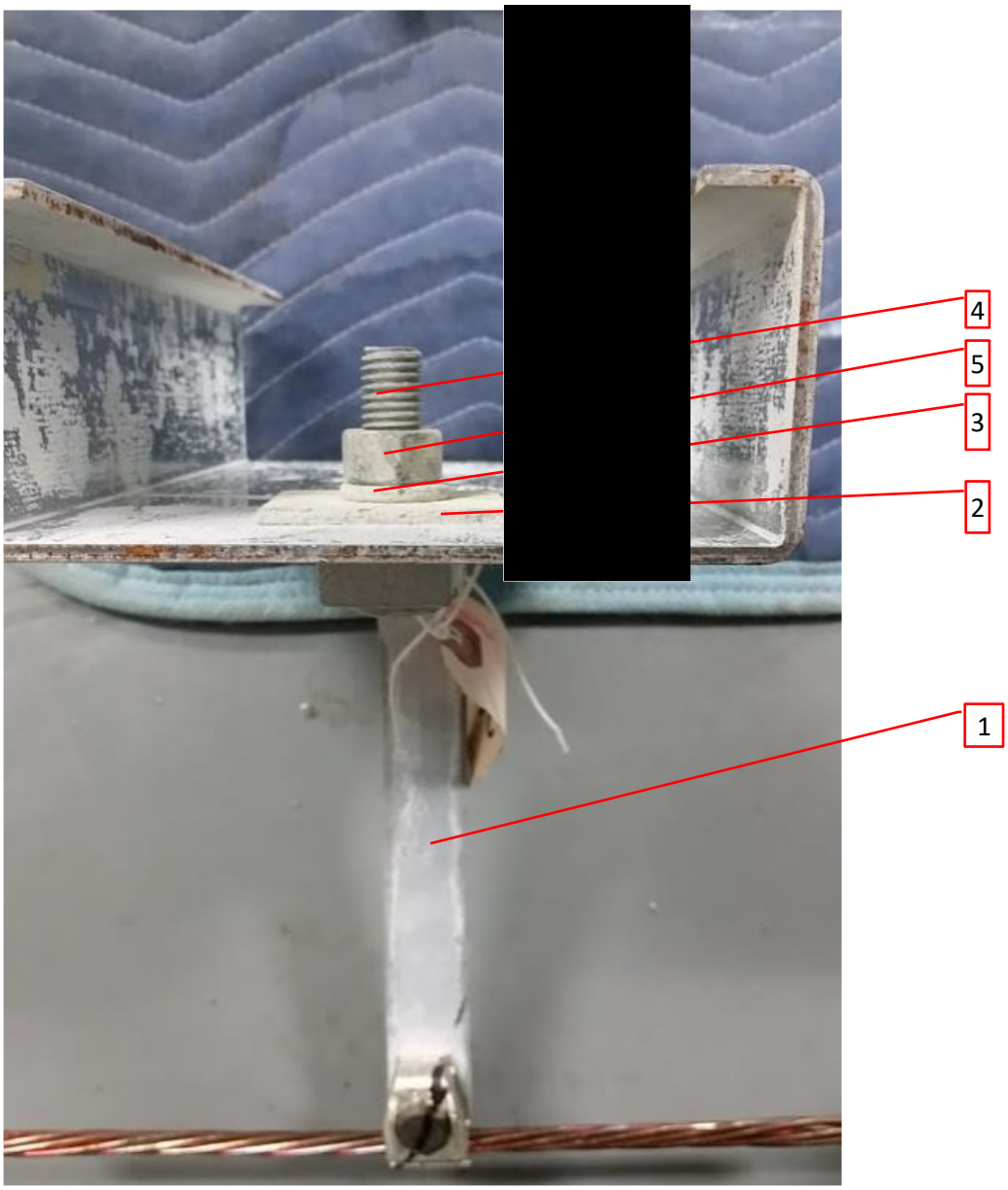
Photo 2 - Ground Lug



Petitioner Mandatory

3.0 Product Photographs

Photo 3 - Overal CAB KIT back view



3.0 Product Photographs

Photo 4 - Groung Lug (Front view)

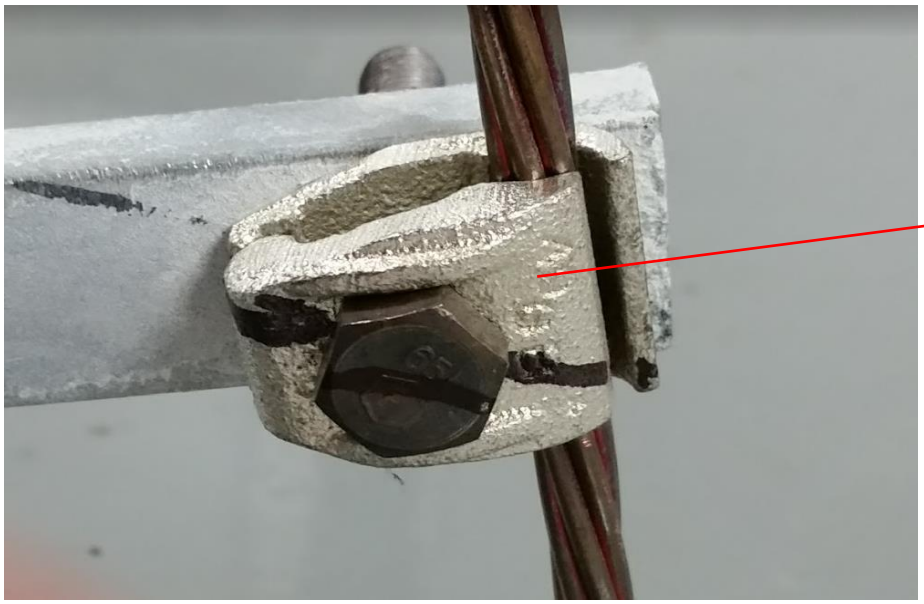


Photo 5 - L Bracket [redacted]

4.0 Critical Components

Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
1,2, 3,5	1	L Bracket	Cambria County Association for the Blind and Handicapped	[redacted]	Dimension: [redacted] Finish: [redacted]. Used in [redacted] KIT. See illustration 1 for details.	NR
				[redacted]	Dimension: [redacted] Finish: [redacted]. Used in [redacted] KIT. See illustration 2 for details.	
				[redacted]	Dimension: [redacted] Finish: [redacted]. Used in [redacted] KIT. See illustration 3 for details.	
				[redacted]	Dimension: [redacted] Finish: [redacted]. Used in [redacted] KIT. See illustration 4 for details.	
				[redacted]	Dimension: [redacted] Finish: [redacted] Used in [redacted] KIT. See illustration 5 for details.	
				[redacted]	Dimension: [redacted] Finish: [redacted] Used in [redacted] KIT. See illustration 6 and 15 for details.	
				[redacted]	Dimension: [redacted] Finish: [redacted] Used in [redacted] KIT. See illustration 7 for details.	
				[redacted]	Dimension: [redacted] Hot Dip [redacted]. Used in [redacted] KIT. See illustration 8 for details.	
				[redacted]	Dimension: [redacted] Hot Dip [redacted]. Used in [redacted] KIT. See illustration 9 for details.	
				[redacted]	Dimension: [redacted] Hot Dip [redacted] Used in [redacted] KIT. See illustration 12 for details.	
				[redacted]	Dimension: [redacted]2". Hot Dip [redacted]. Used in [redacted] KIT. See illustration 17 for details.	
				[redacted]	Dimension: [redacted]8". Hot Dip [redacted]. Used in [redacted] KIT. See illustration 18 for details.	

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
				[redacted]	Dimension: [redacted] Used in [redacted] KIT. See illustration 19 for details.	
				[redacted]	Dimension: [redacted]. Used in [redacted] KIT. See illustration 20 for details.	
				[redacted]	Dimension: [redacted]3. Used in [redacted] KIT. See illustration 21 for details.	
				[redacted]	Dimension: [redacted] Hot Dip [redacted]. Used in [redacted] KIT. See illustration 22 for details.	
				[redacted]	Dimension: [redacted]". [redacted] Used in [redacted] KIT. See illustration 23 for details.	
				[redacted]	Dimension: [redacted] Used in [redacted] KIT. See illustration 24 for details.	
				[redacted]	Dimension: [redacted]. Used in [redacted] KIT. See illustration 25 for details.	
3	2	Flat Washer	Various	Various	Not required for all KITS. See illustration 1 to 9 and 13 for details. Finish: [redacted].	NR
3	3	Split Lock Washer	Cambria County Association for the Blind and Handicapped	[redacted]	Used in all KITS. See illustration 1 to 9 for details. Finish: [redacted]	NR
1,3	4	Carriage Bolt	Cambria County Association for the Blind and Handicapped	[redacted]	Used in all KITS. See illustration 1 to 9 for details. Finish: [redacted]. Torque Value: [redacted] lbs	NR
3	5	Hex Nut	Cambria County Association for the Blind and Handicapped	[redacted]	Used in all KITS. See illustration 1 to 9 for details. Finish: [redacted]. Torque Value: [redacted] lbs	NR

4.0 Critical Components

Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
1,2, 4	6	Ground Lug	[redacted]	[redacted]	[redacted] material: [redacted]	cULus
1	7	Label (not shown)	[redacted]	[redacted]	UL 969 reconized. See illustration 4 for label example	UL

NOTES:

1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.

2) “Various“ means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.

3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.

5.0 Critical Unlisted CEC Components

No Unlisted CEC components are used in this report.

6.0 Critical Features

Recognized Component - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1 Mechanical Assembly - [redacted]

Torque value: Ground lug: [redacted]
Torque value: L bracket to Post: [redacted]

2 Corrosion Protection - All ferrous metal parts are protected against corrosion by galvanization.

3 Grounding - Grounding Lug is UL 467 recognized and rated to maximum [redacted] copper conductor.

For projects designed in accordance with the National Electrical Code: Installer is responsible for and shall provide an appropriate method of direct-to-earth grounding according to the latest edition of the National Electrical Code, including NEC 250: Grounding and Bonding, and NEC 690: Solar Photovoltaic Systems.

For projects designed in accordance with the Canadian Electrical Code: Installer is responsible for and shall provide an appropriate method of direct to- earth grounding according to the latest edition of the Canadian Electrical Code, including Sections 10: Grounding and Bonding, Section 36: High-Voltage Installations, Section 64: Renewable Energy Systems, Energy Production Systems, and Energy Storage Systems.

6.0 Critical Features

4 Markings -
A rack mounting system shall have a plain, legible, permanent marking that includes:
a) The manufacturer's name, trademark, or other descriptive marking by which the organization responsible for the product can be identified;
b) The model number
c) The load rating, see 24.1; and
d) The date or other dating period of manufacture not exceeding any three consecutive months.

5 Installation, Operating and Safety Instructions -Refer to Sec 2, Product for specific version required to be included with the product. Instructions for installation and use of this product in regards to the bonding and grounding methods involved in this report are provided by the manufacturer.
a) Torque requirements:

Torque value: Ground lug: [redacted]
Torque value: L bracket to Post: [redacted]
For all other torque setting, please reference installation manual.

b) Instructions for installation and use of this product are provided by the manufacturer. Instructions shall include the following:
1) Installation instructions describing the methods of installation. Verify the installation instructions on site for the order in which components are connected, and the respective torque values for each component.
2) Assembly instructions shall be provided with a product shipped in subassemblies and shall be detailed to facilitate total assembly of the product.
3) The mounting instructions furnished with the rack mounting device shall specify mounting hardware that is readily available commercially.
4) The following statement or equivalent must appear in the completed installation manuals in regards to grounding the racking systems: "Installer is responsible for and shall provide an appropriate method of direct to- earth grounding according to the latest edition of the National Electrical Code, including NEC 250: Grounding and Bonding, and NEC 690: Solar Photovoltaic Systems."

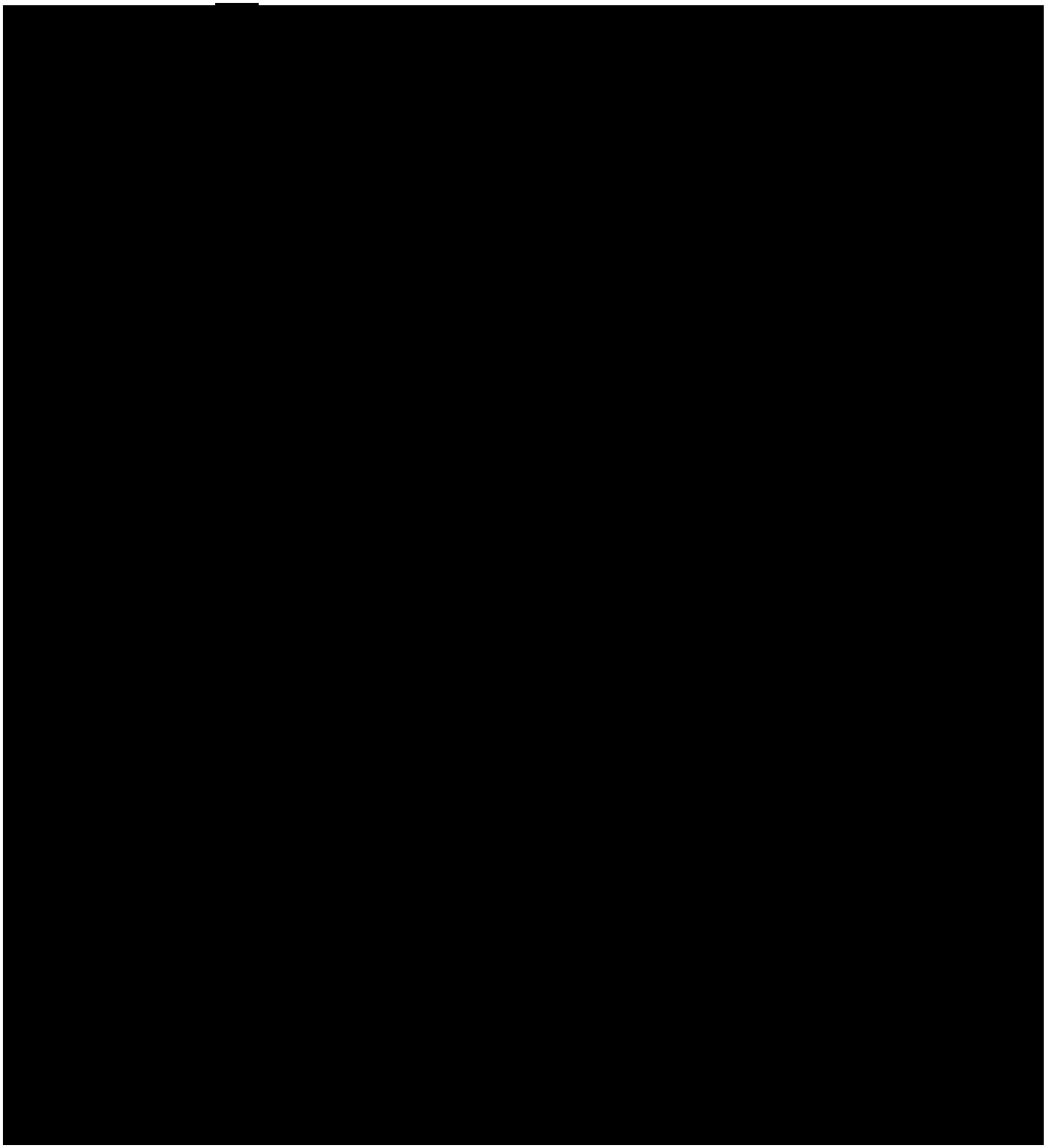
c) Installed on [redacted].

d) Additional testing may be required when used with other racking systems that have a different coating designation or material stated in section c) [redacted]

e) Critical grounding for the L-bracket is considered to be the carriage bolt, a lock washer, and a Hex nut.

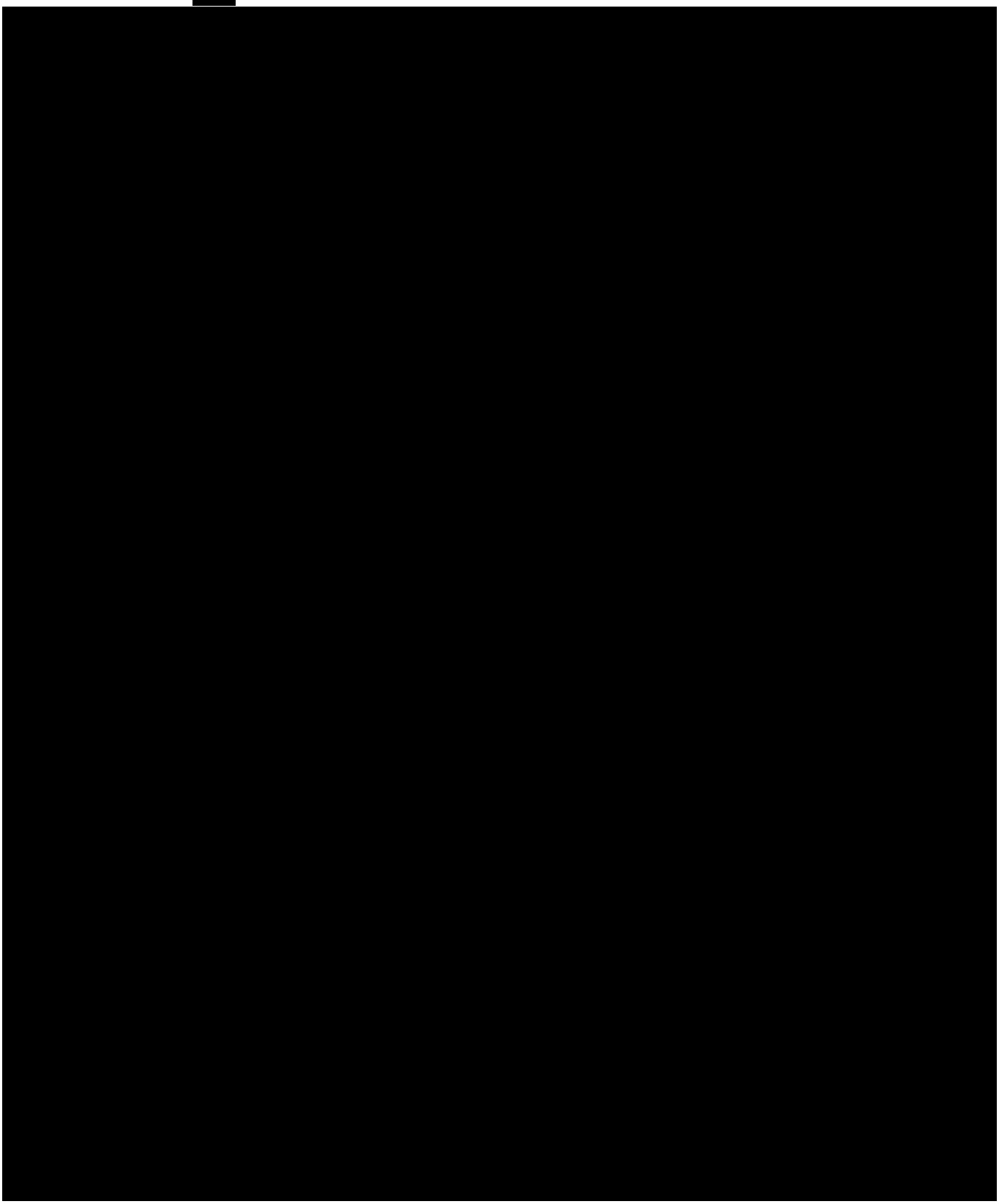
6 Certification Marking – If the application of a certification mark has been authorized by evidence of a valid ATM the mark will only be applied to item 1 (L-bracket) of section 4 of this report. The format can be verified by evidence of the approved artwork provided by the certification body. Note only items bearing the mark will be available for inspection at the locations indicated on the ATM.

7.0 Illustrations



7.0 Illustrations

Illustration 2 - CAB [redacted] Datasheet



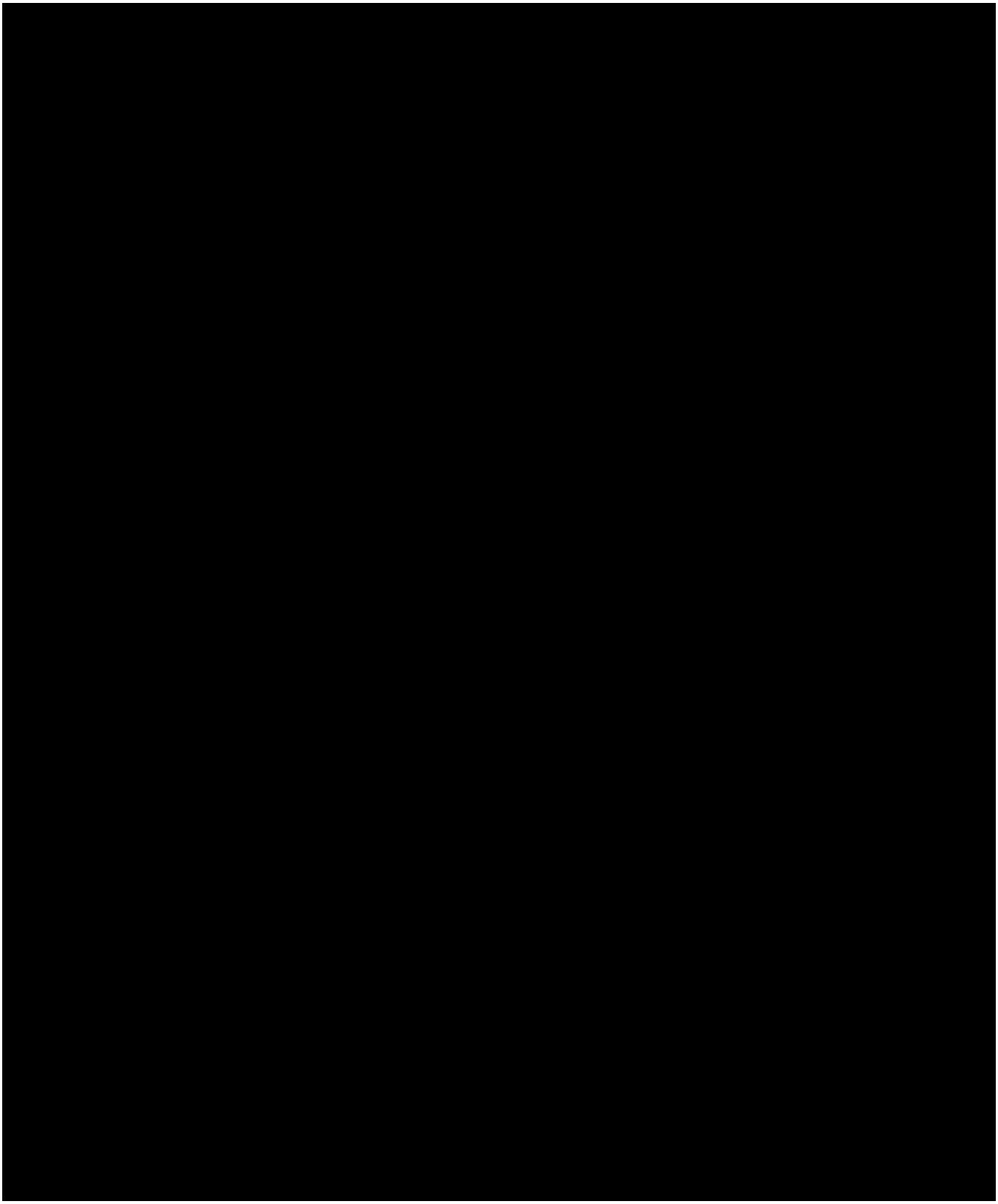
7.0 Illustrations

Illustration 3 - CAB [redacted] Datasheet

[redacted]

7.0 Illustrations

Illustration 4 - CAB [redacted] Datasheet



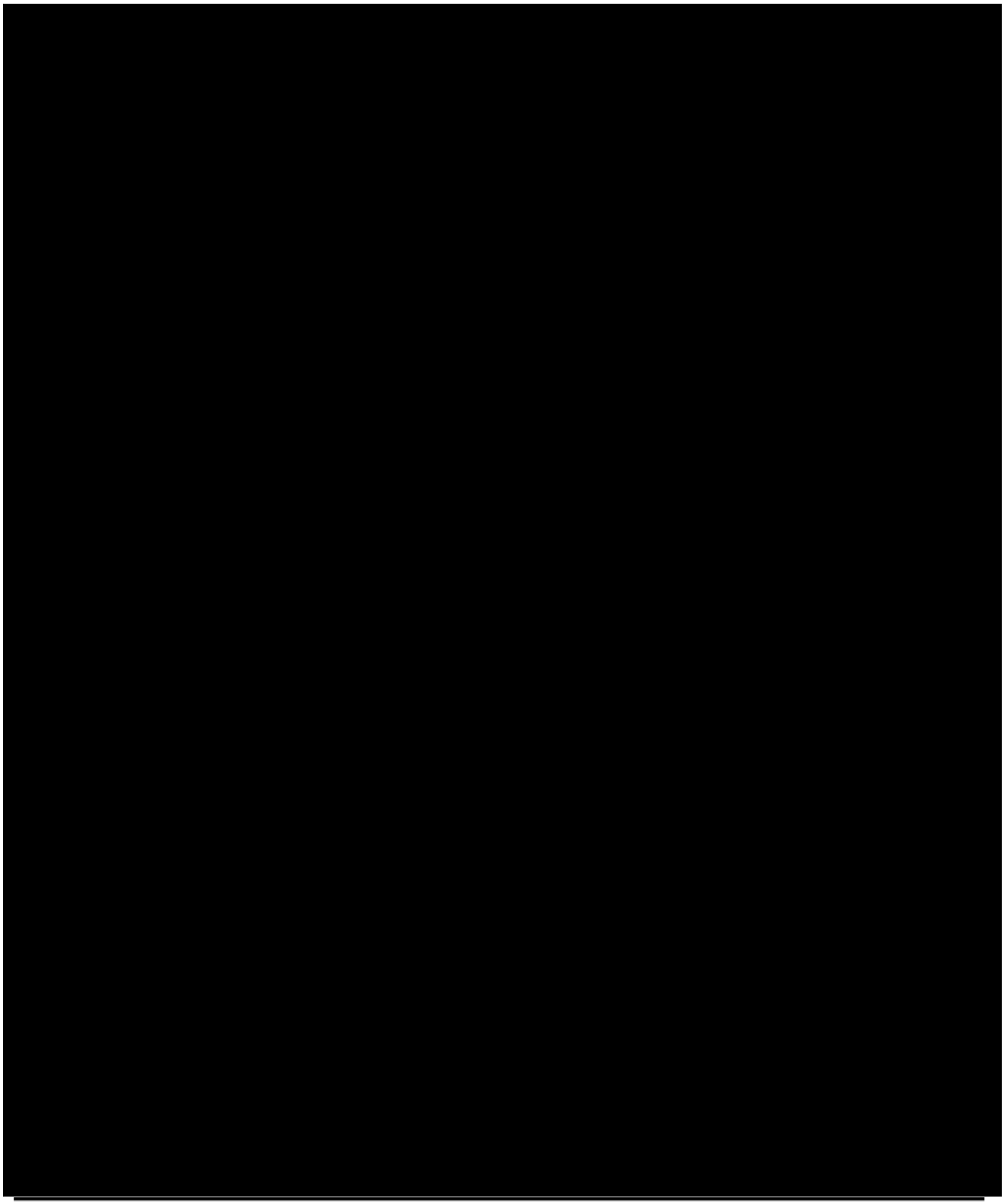
7.0 Illustrations

Illustration 5 - CAB [redacted] Datasheet

[redacted]

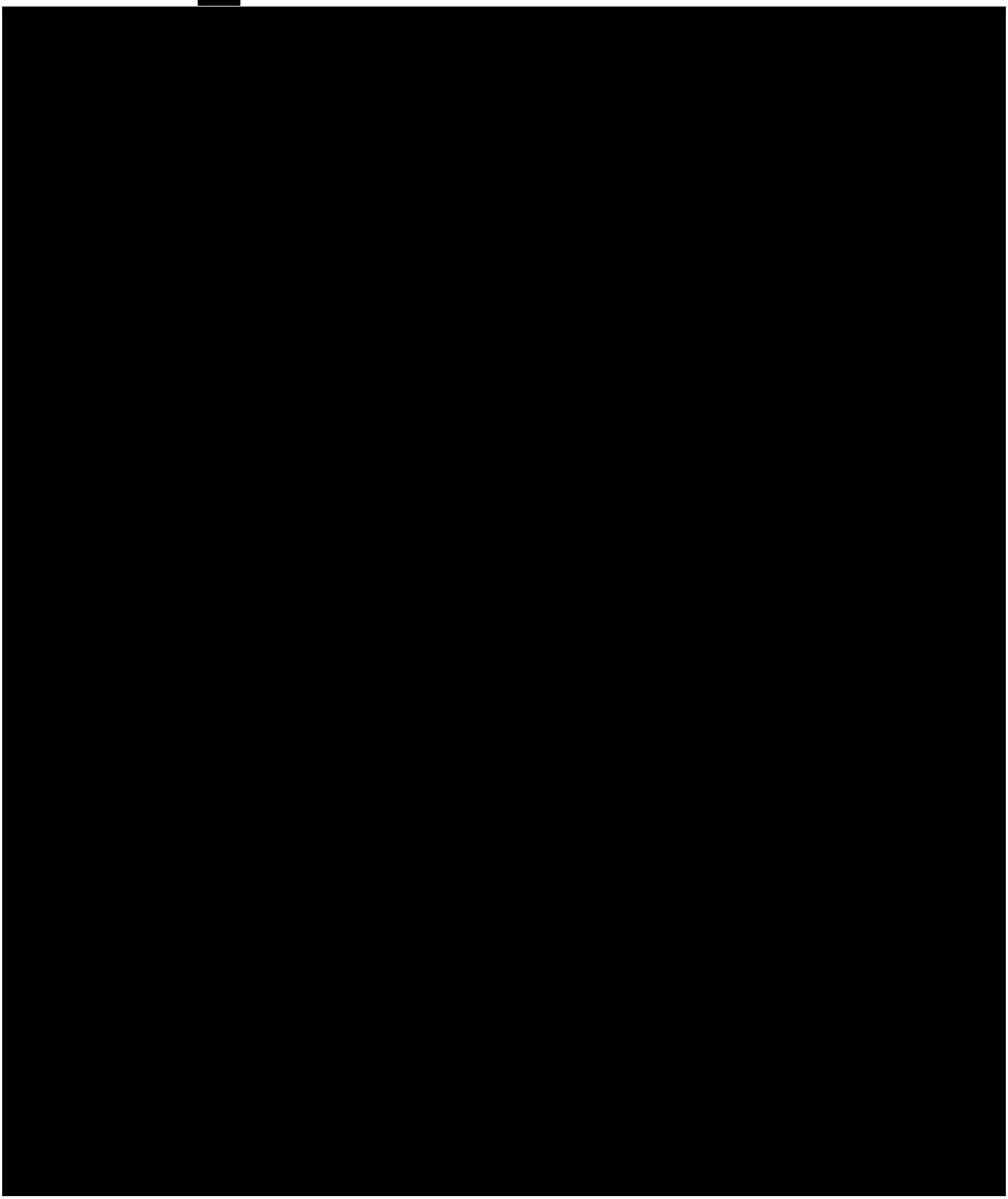
7.0 Illustrations

Illustration 6 - CAB [redacted] Datasheet



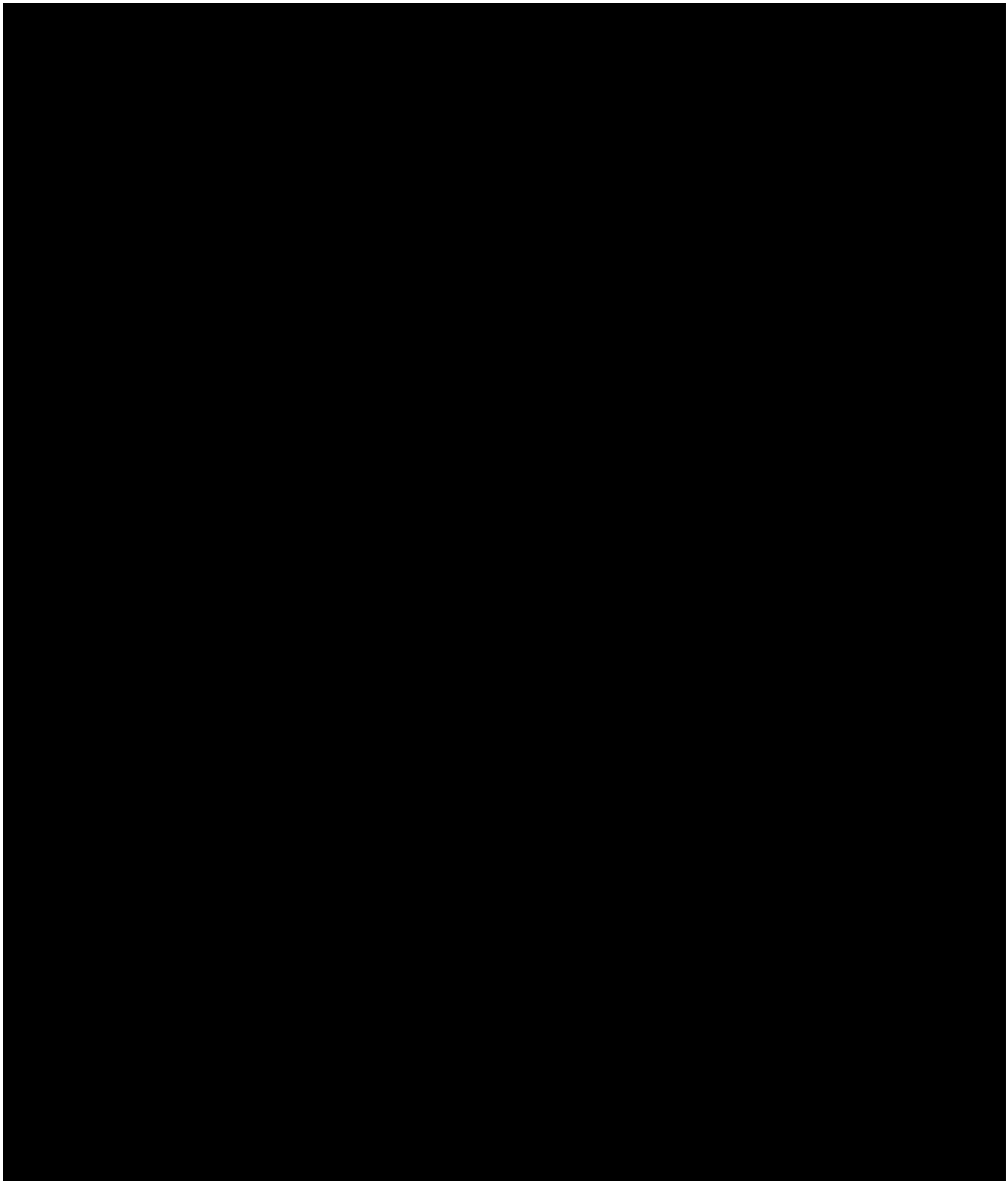
7.0 Illustrations

Illustration 7 - CAB [redacted] Datasheet



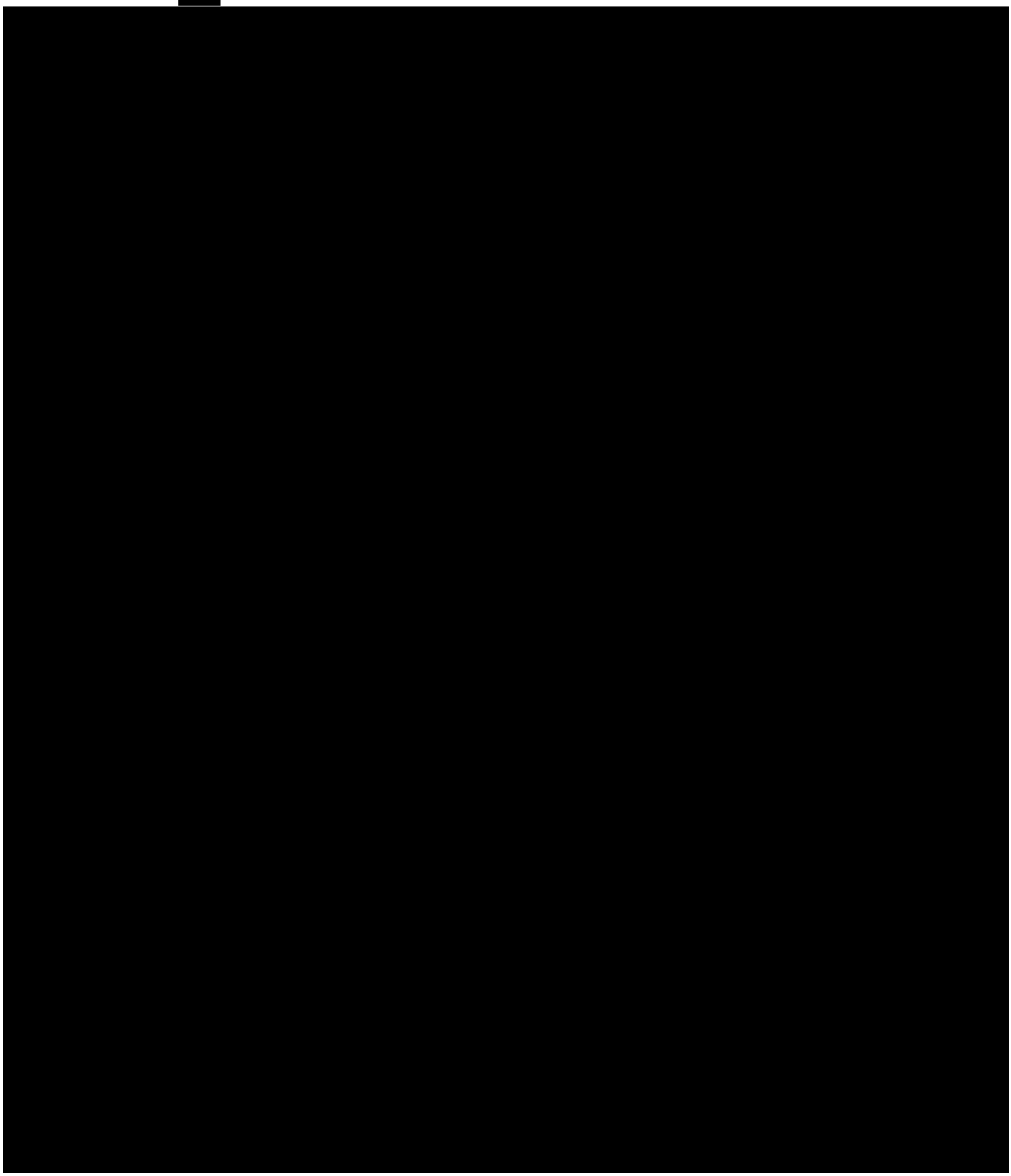
7.0 Illustrations

Illustration 8 - CAB [redacted] Datasheet



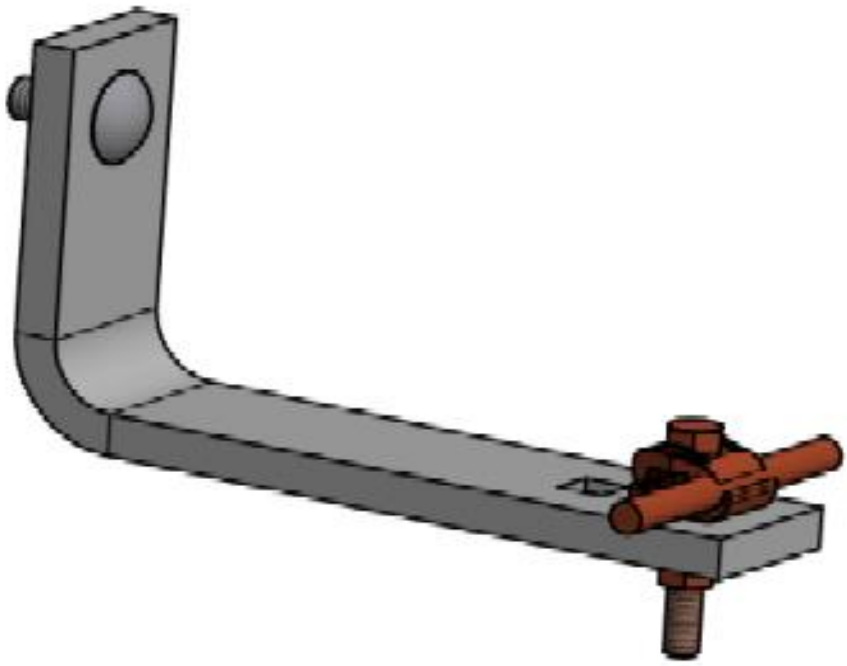
7.0 Illustrations

Illustration 9 - CAB [redacted] Datasheet



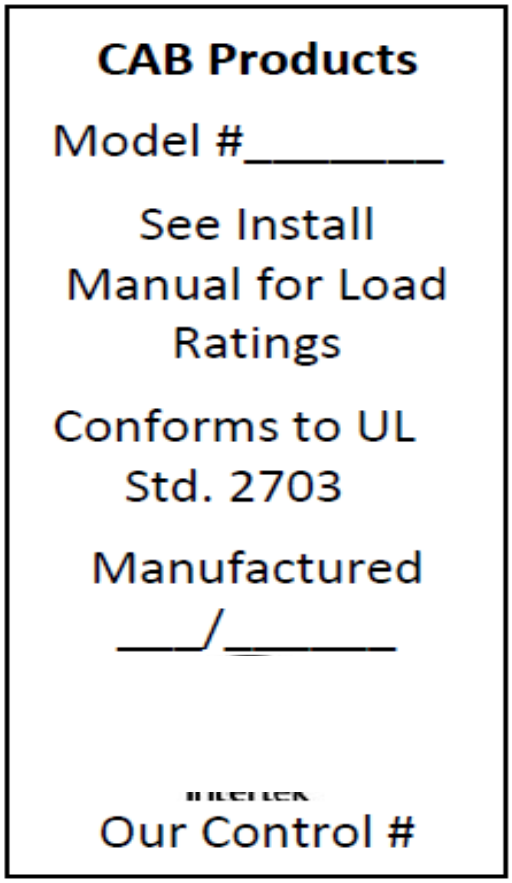
7.0 Illustrations

Illustration 10- CAB Kit Drawing Overview



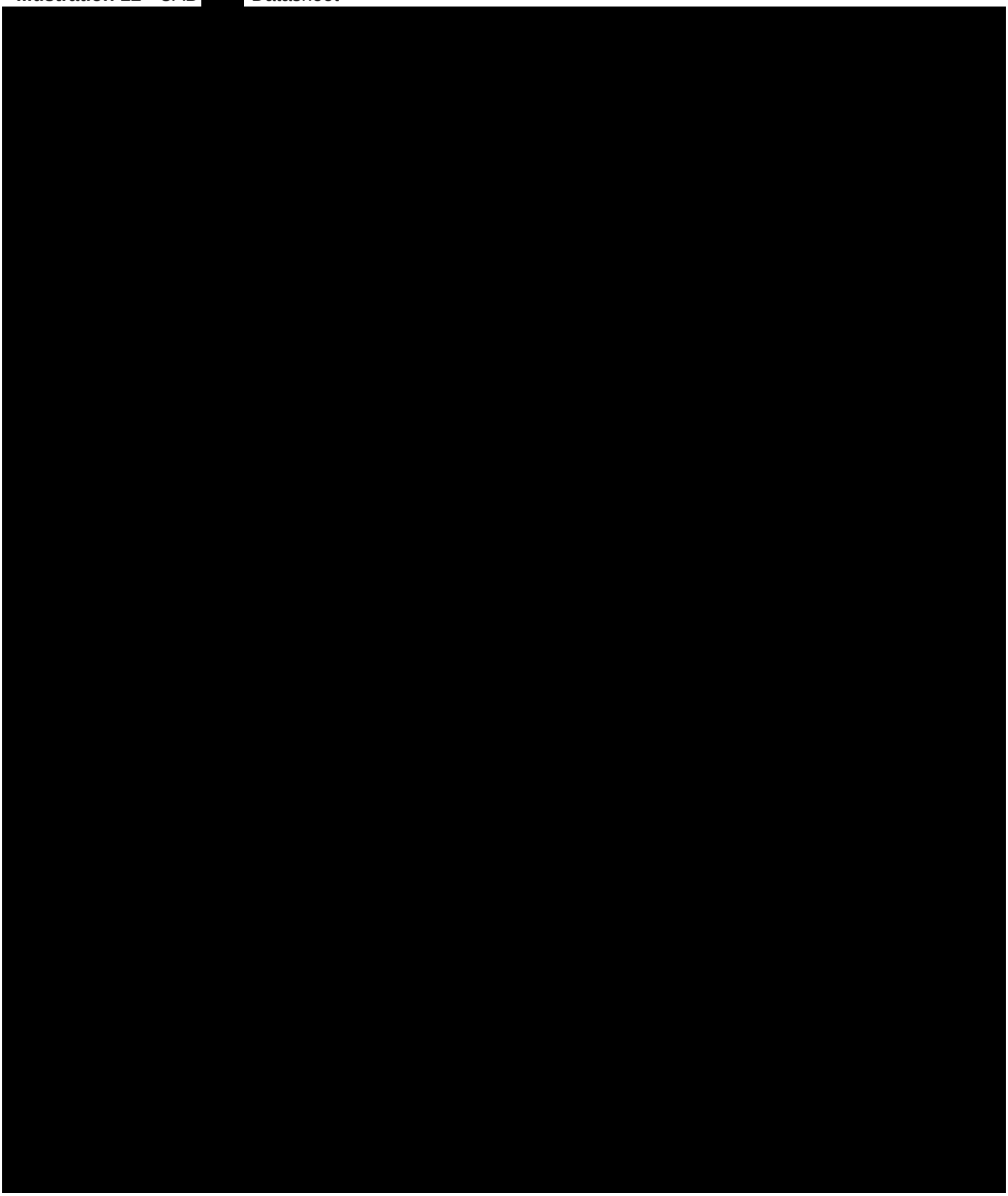
7.0 Illustrations

Illustration 11 - Marking Example

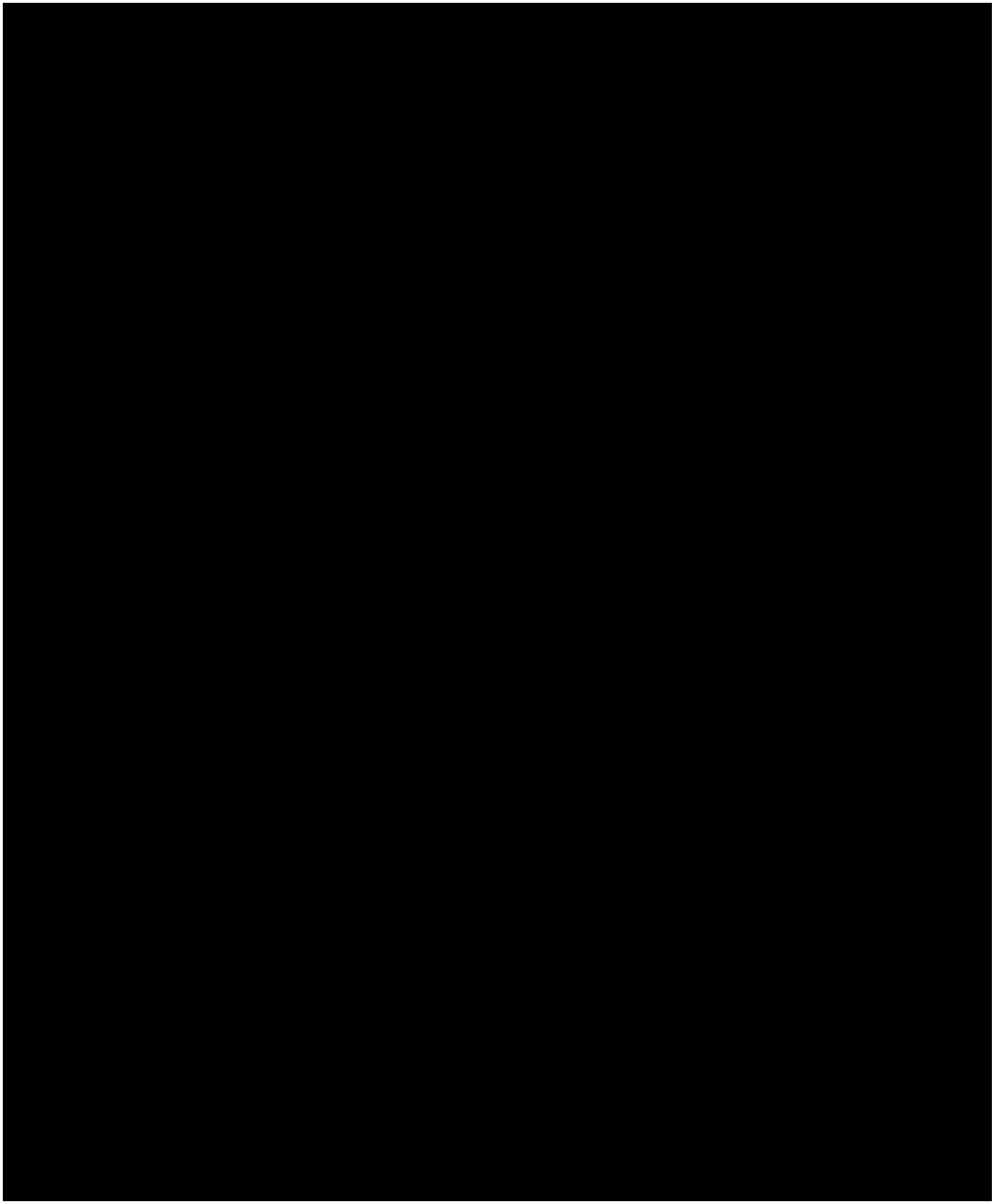


7.0 Illustrations

Illustration 12 - CAB [redacted] Datasheet

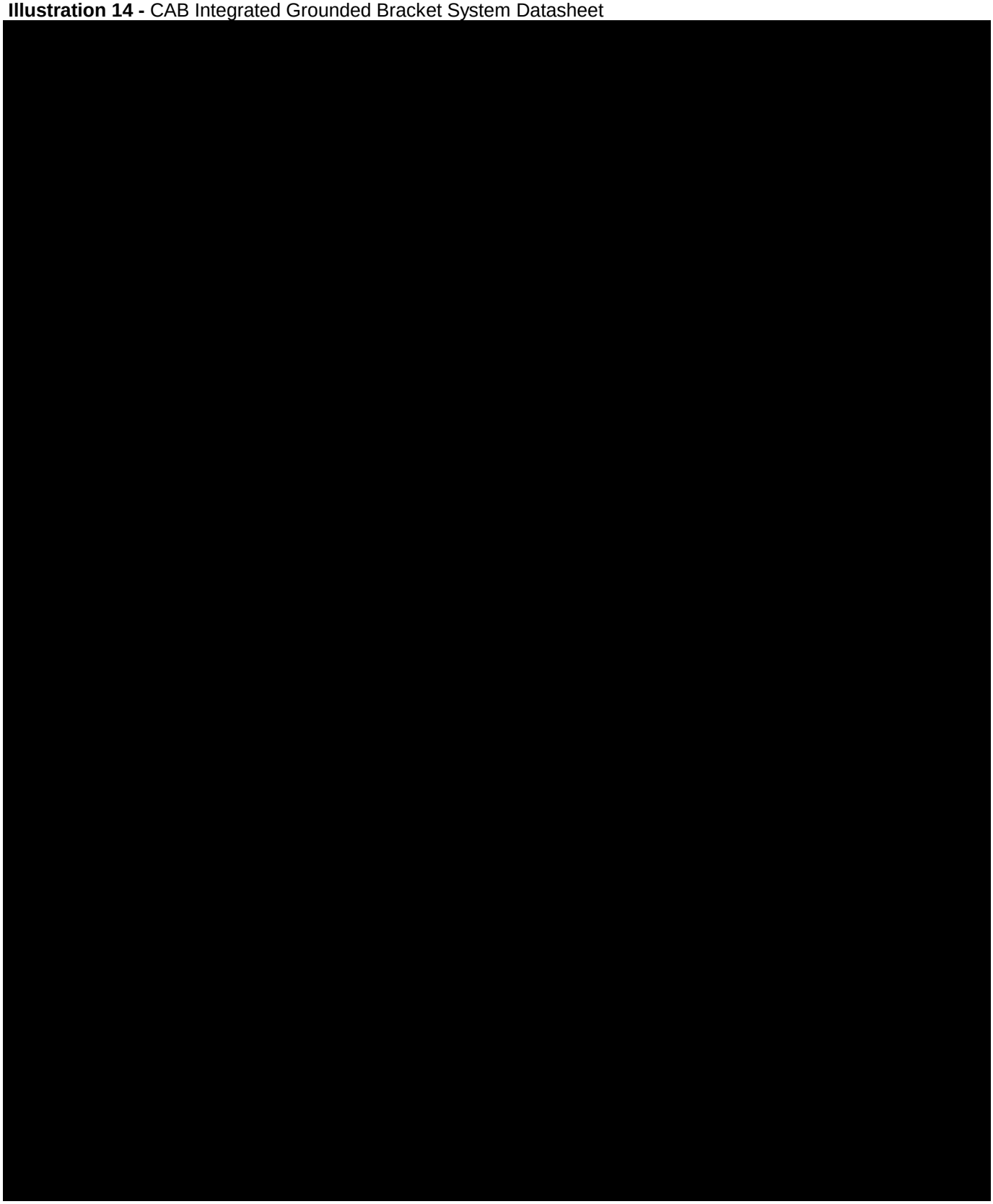


7.0 Illustrations



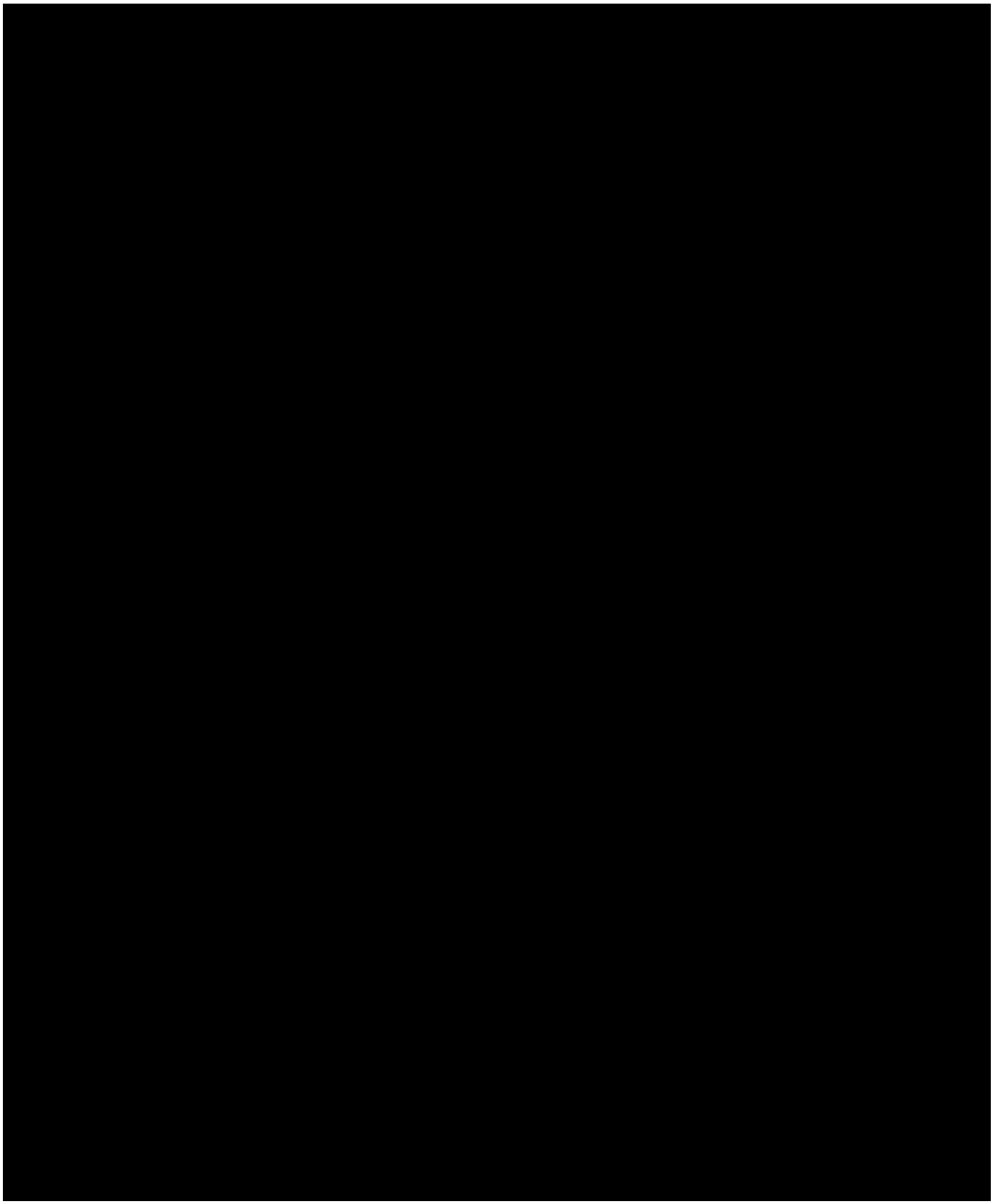
7.0 Illustrations

Illustration 14 - CAB Integrated Grounded Bracket System Datasheet



7.0 Illustrations

Illustration 15 - CAB Double Sided Bracket



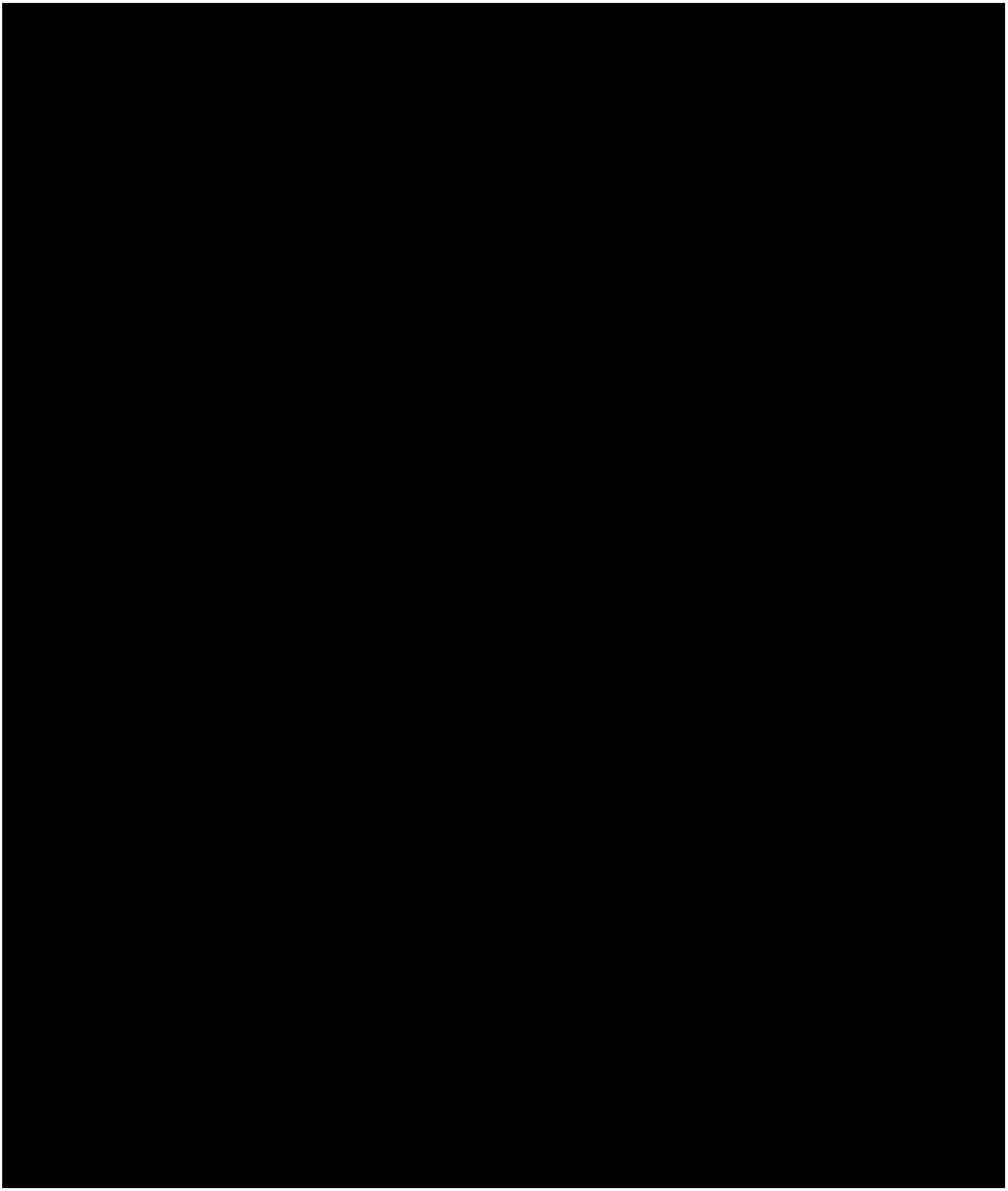
7.0 Illustrations

Illustration 16 - Table of controlled documents that must be available at the factory during inspections.

Item Number	Document Title	Document Number	Rev Level	To be Verified:
1	Installation Manual	CAB Solar Cable Management Installation Guide	Revised 01-28-2021	Revision
2	CAB [redacted] Datasheet	CAB [redacted] Rev.H	Rev. H	Revision
3	CAB [redacted] Datasheet	CAB [redacted] Rev.G	Rev. G	Revision
4	CAB [redacted] Datasheet	CAB [redacted] Rev.H	Rev. H	Revision
5	CAB [redacted] Datasheet	CAB [redacted] Rev.H	Rev. H	Revision
6	CAB [redacted] Datasheet	CAB [redacted] Rev.G	Rev. G	Revision
7	CAB [redacted] Datasheet	CAB [redacted] Rev.G	Rev. G	Revision
8	CAB [redacted] Datasheet	CAB [redacted] Rev.G	Rev. G	Revision
9	CAB [redacted] Datasheet	CAB [redacted] Rev.G	Rev. G	Revision
10	CAB [redacted] Datasheet	CAB [redacted] Rev.G	Rev. G	Revision
11	CAB [redacted] Datasheet	CAB [redacted] Rev.E	Rev. E	Revision
12	CAB Solar Washer Datasheet	CAB Washer Drawing	10/6/2021	Revision
13	CAB Integrated Grounded Bracket System Datasheet	Intertek Bracket Drawing	Rev. A	Revision
14	CAB 2-Sided Bracket Datasheet	CAB Double Sided Bracket	1/4/2021	Revision
15	CAB [redacted] Datasheet	CAB [redacted]	11/10/2022	Revision
16	CAB [redacted] Datasheet	CAB [redacted]	Rev. C	Revision
17	CAB [redacted] Datasheet	CAB [redacted]	Rev. A	Revision
18	CAB [redacted] Datasheet	CAB [redacted]	Rev. A	Revision
19	CAB [redacted] Datasheet	CAB [redacted]	3/16/2023	Revision
20	CAB [redacted] Datasheet	CAB [redacted]	Rev. A	Revision
21	CAB [redacted] Datasheet	CAB [redacted]	12/7/2021	Revision
22	CAB [redacted] Datasheet	CAB [redacted]	3/14/2022	Revision
23	CAB [redacted] Datasheet	CAB [redacted]	3/16/2023	Revision

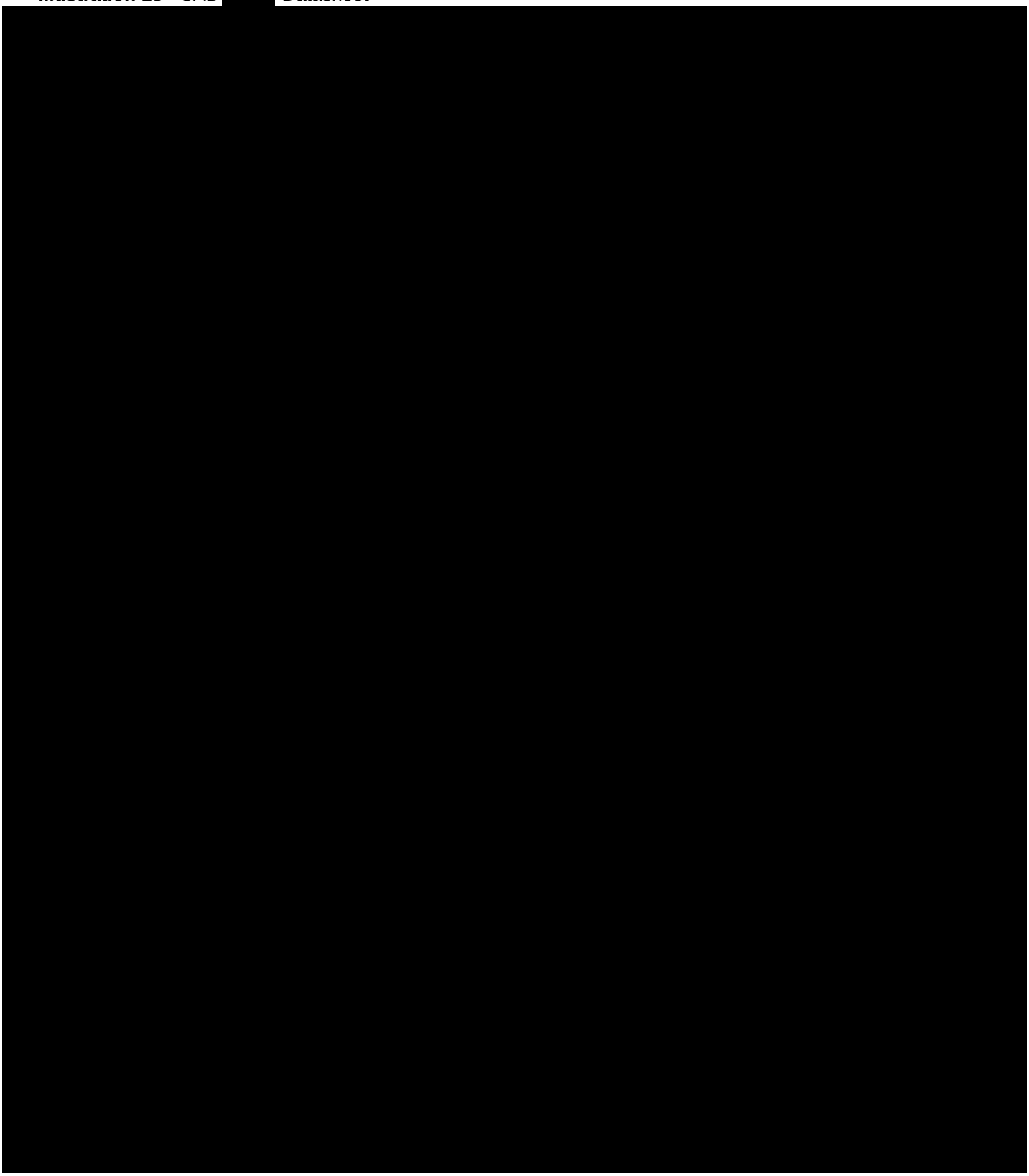
7.0 Illustrations

Illustration 17 - CAB [redacted] Datasheet



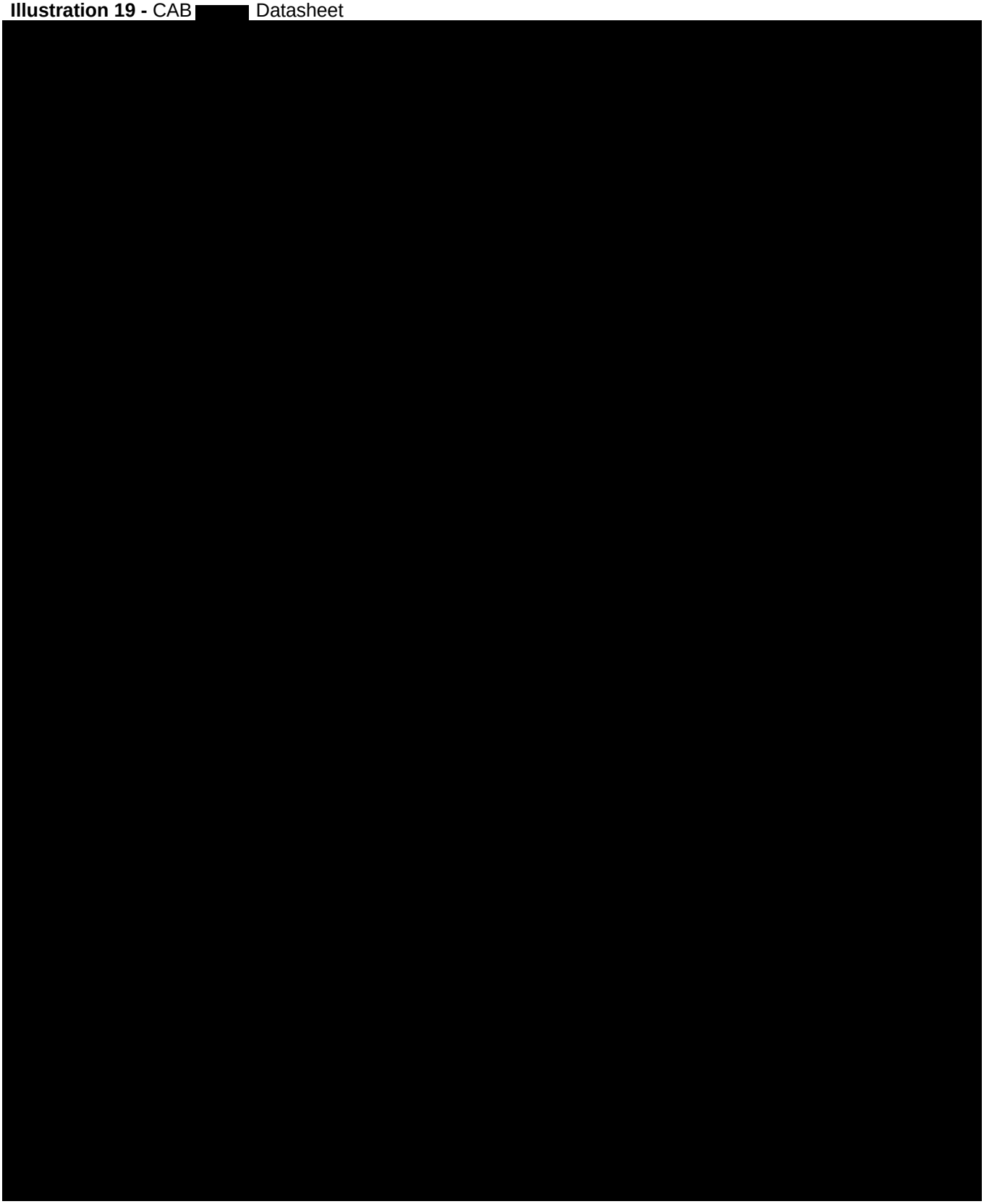
7.0 Illustrations

Illustration 18 - CAB [redacted] Datasheet



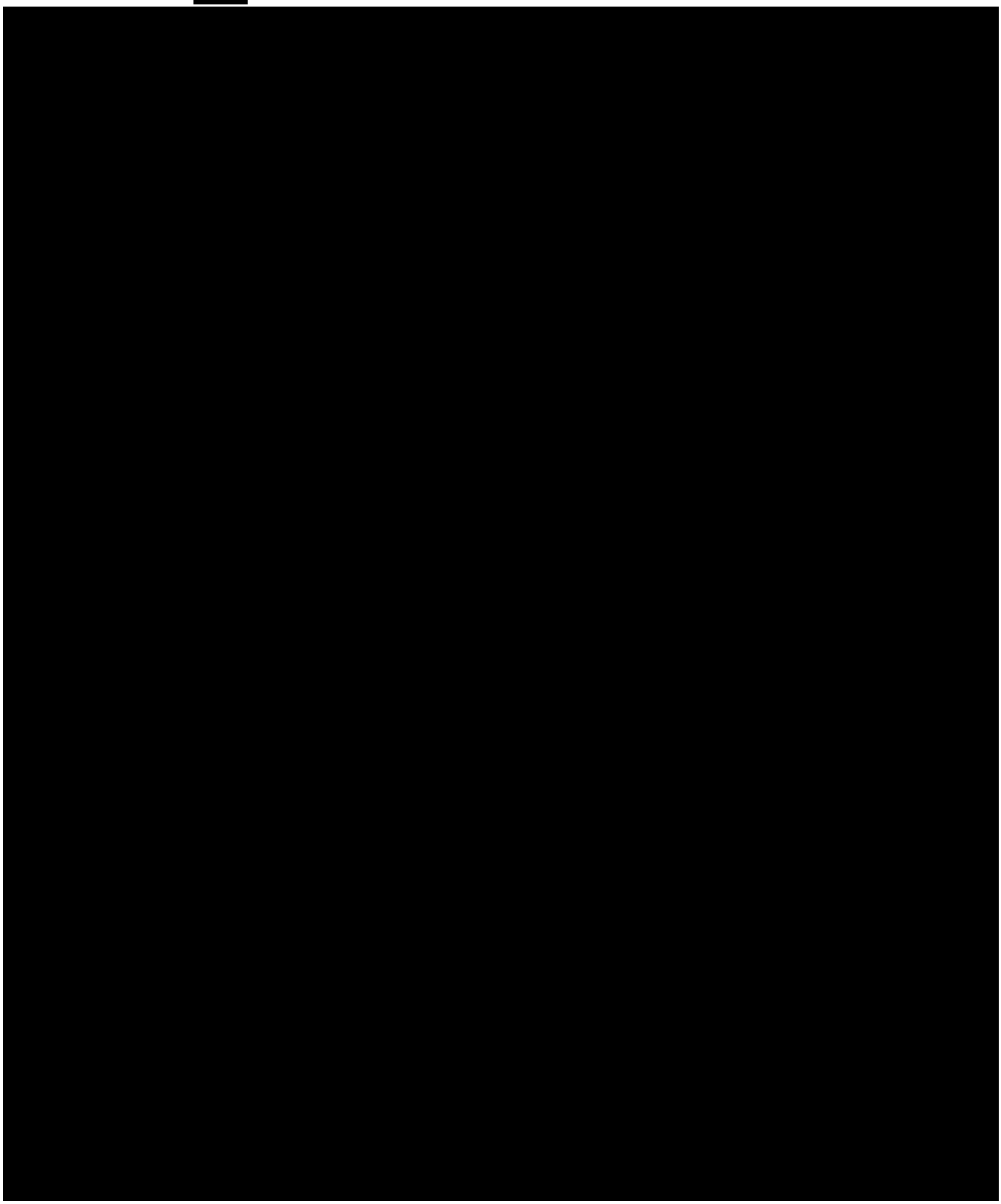
7.0 Illustrations

Illustration 19 - CAB [redacted] Datasheet



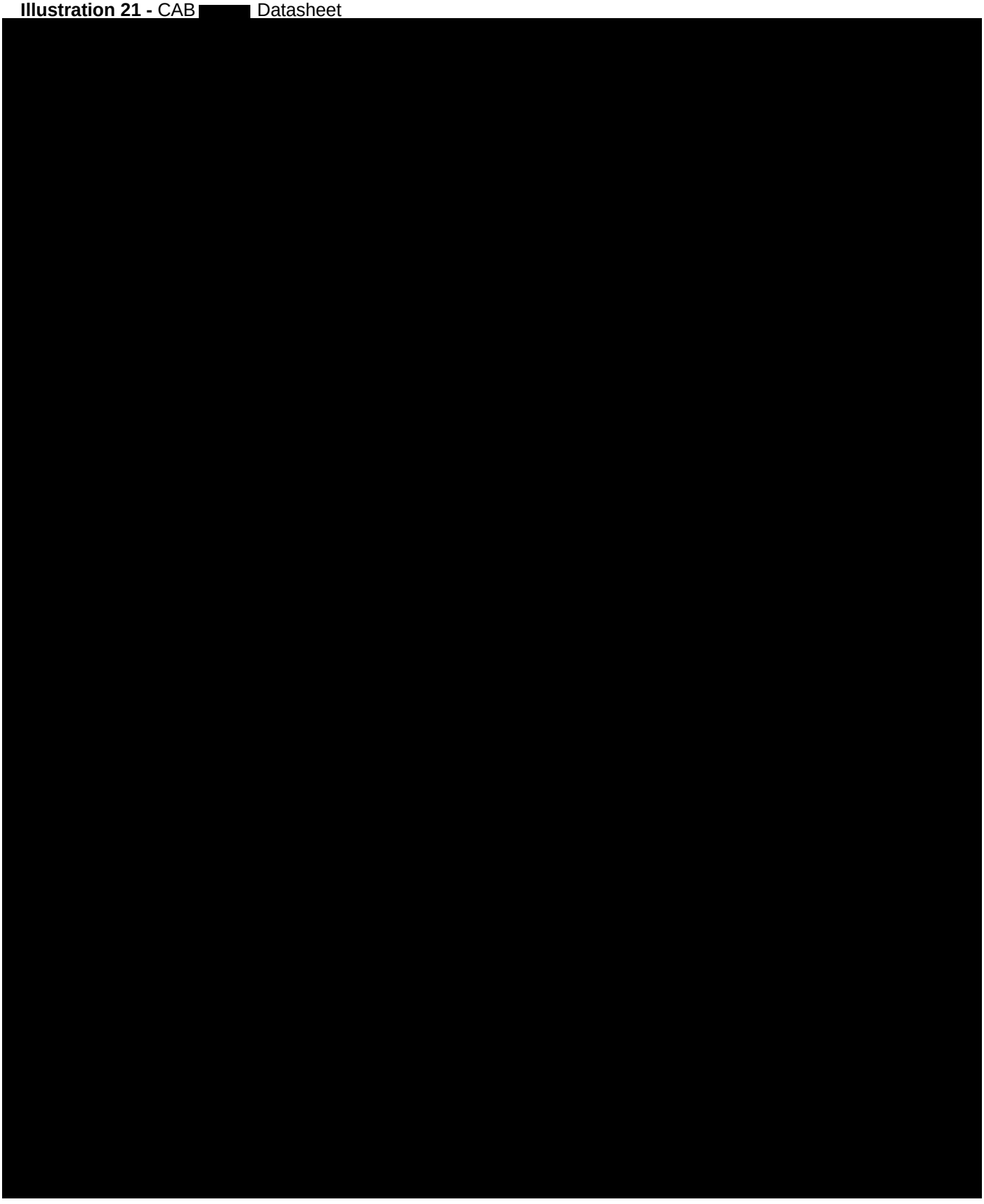
7.0 Illustrations

Illustration 20 - CAB [redacted] Datasheet



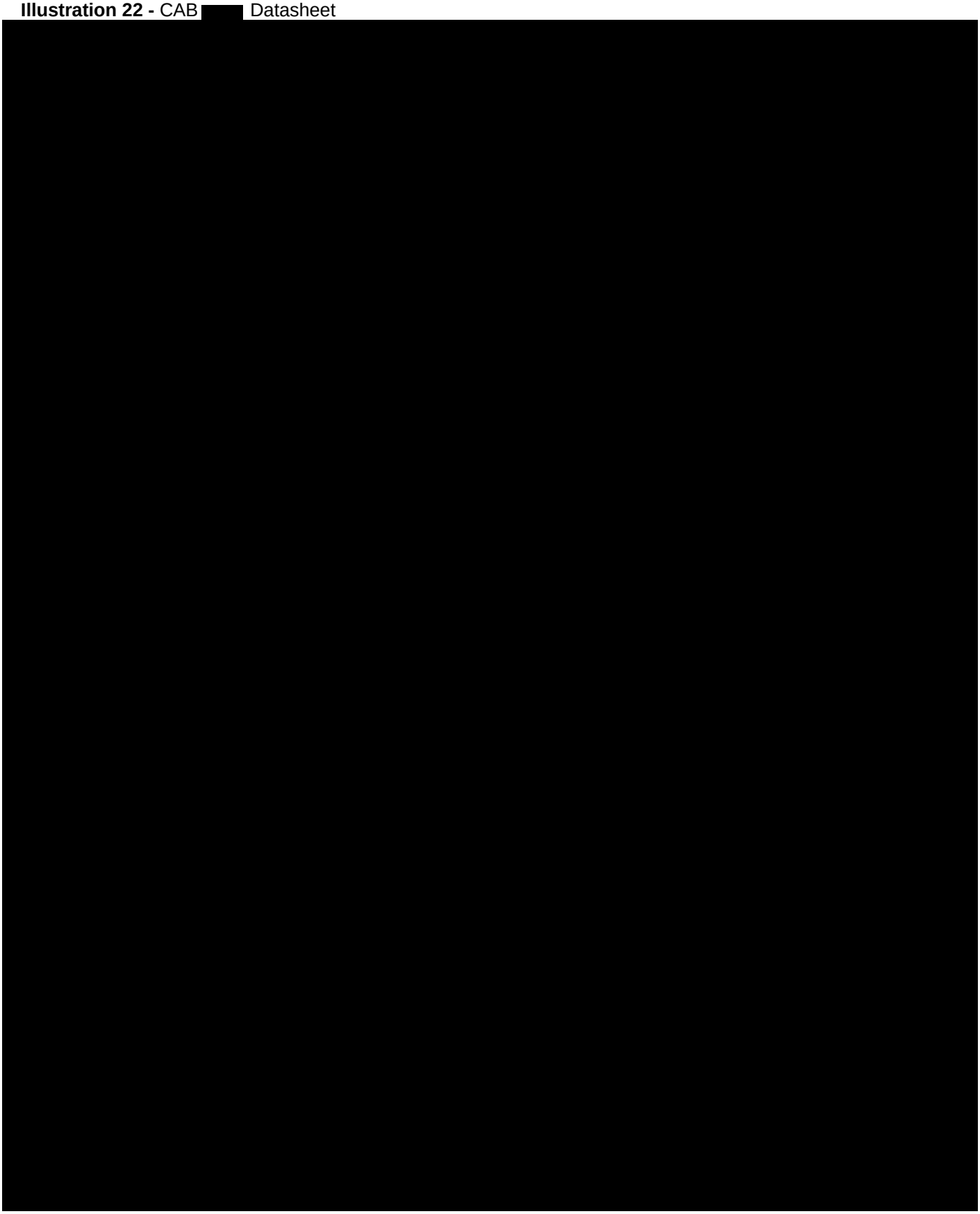
7.0 Illustrations

Illustration 21 - CAB [redacted] Datasheet



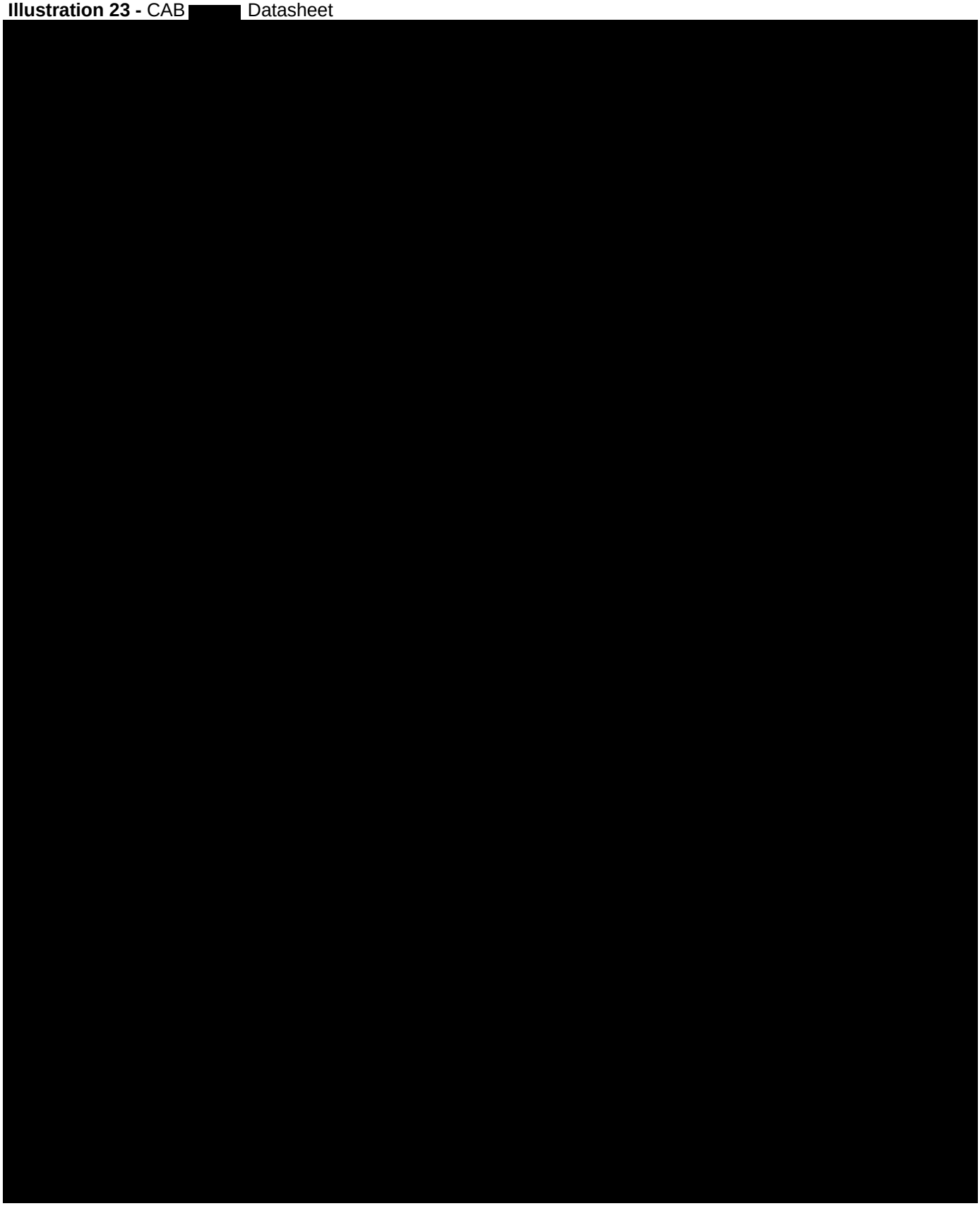
7.0 Illustrations

Illustration 22 - CAB [redacted] Datasheet



7.0 Illustrations

Illustration 23 - CAB [redacted] Datasheet



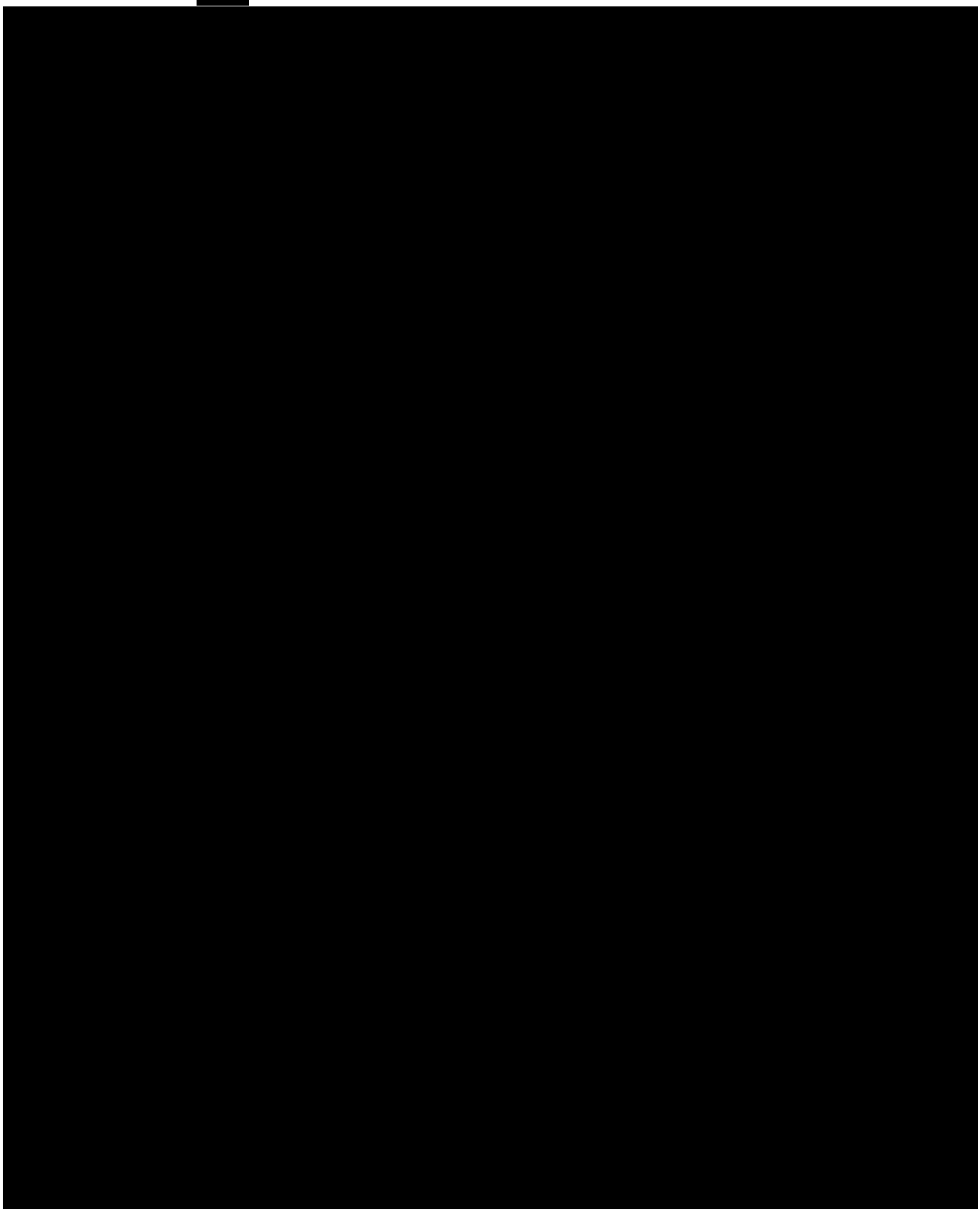
7.0 Illustrations

Illustration 24 - CAB [redacted] Datasheet

[redacted]

7.0 Illustrations

Illustration 25 - CAB [redacted] Datasheet



8.0 Test Summary					
Evaluation Period	3/1/2018 to 5/21/2018			Project No.	G103484990
Sample Rec. Date	10-Mar-2018	Condition	Production	Sample ID.	LAN1805241645-001
Test Location	25791 Commercentre Drive, Lake Forest, CA 92630 USA				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
The following tests were performed on CAB Solar Integrated Grounding System model [redacted] installed on piers/posts ([redacted]					
The following tests were performed:					
Test Description					UL 2703
[redacted]					[redacted]
[redacted]					[redacted]
[redacted]					[redacted]

Evaluation Period	09/01/2021 to 09/27/2021	Project No.	G104775905
Due to the previous testing performed and reported above no additional testing was necessary for [UL 2703:2015 Ed.1+R:24Mar2021].			

Evaluation Period	11/30/2021 to 01/28/2022			Project No.	G104864652
Sample Rec. Date	30-Nov-2021	Condition	Production	Sample ID.	LAN2111301322-001
Test Location	25791 Commercentre Drive, Lake Forest, CA 92630 USA				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
Due to the previous testing performed in project G103484990 and evaluation of standard requirements of conductive surfaces only the following testing were performed:					
Test Description					UL 2703 Clause
[redacted]					[redacted]
[redacted]					[redacted]

Evaluation Period	09/09/2022 to 2022/09/28			Project No.	G105031673
Sample Rec. Date	29-Aug-2022	Condition	Production	Sample ID.	LAN2208291704-001
Test Location	25791 Commercentre Drive, Lake Forest, CA 92630 USA				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
Due to the previous testing performed in project G103484990 and evaluation of standard requirements of conductive surfaces only the following testing were performed:					
Test Description					UL 2703 Clause
[redacted]					[redacted]
[redacted]					[redacted]

Evaluation Period	06/10/2024 to 06/14/2024	Project No.	G105610216CRT
No testing was required per the applicable requirements of PV Module and Panel Racking Mounting System and Accessories [CSA T.I.L. A-40:2020] in order to add this standard to the listing.			

8.0 Test Summary			
8.1 Signatures			
A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0.			
Completed by:	Joshua O'Connor	Reviewed by:	Franco Ortega
Title:	Senior Project Engineer	Title:	Engineering Reviewer
Signature:		Signature:	

Mandatory

9.0 Correlation Page For Multiple Listings	
The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.	
BASIC LISTEE	Cambria County Association for the Blind and Handicapped
Address	175 Industrial Park Rad, Ebensburg, PA 15931
Country	USA
Product	Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 01-28-2022

MULTIPLE LISTEE 1	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 2	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 2 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 3	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 3 MODELS	BASIC LISTEE MODELS

10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or revisions.

LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"
2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
3) a control number issued by Intertek
4) a product descriptor that identifies the standards used for certification. Example:

For US standards, the words, “Conforms to” shall appear with the standard number along with the word, “Standard” or “Std.” Example: “Conforms to ANSI/UL Std. XX.”

For Canadian standards, the words “Certified to CAN/CSA Standard CXX No. XX.” shall be used, or abbreviated, “Cert. to CAN/CSA Std. CXX No. XX.”

Can be used together when both standards are used.

If all standards on the ATM have the same standard title, the shared title or its abbreviation may be used in place of the examples above. Example: "Medical Electrical Equipment" or "MEE"; "Information Technology Equipment" or "ITE"; "Audio/Video Information And Communication Technology Equipment" or "A/V ICTE".

Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use. The facsimile need not have a control number. A control number will be issued **after signed Certification Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.

10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

The Applicant will be notified, in writing, via the applicable contact methods, as defined in Section 1.0, when these components must be selected and sent to Component Evaluation Center (CEC) for re-evaluation.

Due to particular testing requirements, some components may be requested to be shipped to specific labs. Thus, specific shipment destination(s) for each sample will be provided in the written notification.

Managing CEC Location:
Intertek Testing Services NA Inc.
ETL Component Evaluation Center
1717 Arlingate Ln.
Columbus, Ohio 43228 USA
Attn: CEC Safety
Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

11.0 Manufacturing and Production Tests
The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified: **Required Tests** No testing is required

12.0 Revision Summary

The following changes are in compliance with the declaration of Section 8.1:

Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
23-Jul-2019	F. Ebneali	4	2	Updated from "Flat Lock Washer " to "Flat Washer"
		3	5	Added photo 5
G104010204lax	A. Muliawan	2	--	Updated from "All models are identical in material and finish. They used the same grounding lug. The difference between models are dimensions of L-bracket" to "All models are identical in material and finish. They used the same grounding lug. The difference between models are dimensions of L-bracket. The Mid-pier L-Bracket installation can be done without the Flat Washer when attached to the lip of the center structure"
		6	1	Removed "Spacing - - No verification of spacing required."
		6	4	Removed "Accessibility of Live Parts - NA"
		6	6	Removed "Polarized Connection - NA"
		6	7	Removed "Internal Wiring - NA"
		6	8	Removed "Schematics - NA"
		6	10	Removed "Cautionary Markings - NA"
		2	--	Updated from "Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 5/23/2018" to "Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 07122019"

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
22-Aug-2019	F. Ebneali	7	12	Added illustration 12
G104036312LAX		4	1	Added new part number [redacted]
		2	--	Updated "[redacted] and [redacted] " to "[redacted] and [redacted]
	A. Muliawan		--	Updated from "Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 07122019" to "Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 08222019"
23-Mar-2021	F.Ebneali	3	5	Removed photo 5
G104624125LAX		4	6	Updated from [redacted]. Used as a ground terminal for the copper clad steel conductor for up to [redacted] CU. Used in all KITS. Torque Value: [redacted]" to "[redacted]. Used as a ground terminal for the copper clad steel Solid or Str conductor for up to [redacted]U. Used in all KITS. Torque Value: [redacted]
	A. Prakash	2	-	Updated from "Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 08222019 " to "Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 02-24-2021"

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
27-Sep-2021	F. Ortega	1	-	Updated from "Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels [UL 2703:2015 Ed.1]" to "Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels [UL 2703:2015 Ed.1+R:24Mar2021]"
G104775905LAX	F.Ebneali	2	-	Updated Product from "Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 02-24-2021" to "Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 09-27-2021"
		6	5	Updated point "e" from "Minimum contact area shall not be smaller than the square washer used for installation on the post." to "Critical grounding for the L-bracket is considered to be the carriage bolt, a lock washer, and a Hex nut."
		4	2	Added additional part numbers: [redacted]
		7	5	Updated Illustration 5: CAB [redacted]
			13	Added Illustration 13: part number [redacted] [redacted]
		8	-	No testing required to update to [UL 2703:2015 Ed.1+R:24Mar2021].

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
12-Nov-2021	F. Ortega	4	2	Updated Item 2 manufacturer from "Cambria County Association for the Blind and Handicapped" to "Various"
G104775905LAX		4	2	Removed Type/Model '[redacted] and '[redacted] and added "Various"
		4	2	Updated description from "Used in all KITS. See illustration 1 to 9 for details. Finish: [redacted] to "Not required for all KITS. See illustration 1 to 9 and 13 for details. Finish: [redacted]
		6	1	Updated from "Mechanical Assembly - Mid Pier Kit is mounted to the mounting surfaces described in section 2.0 and install manual using Square Washer..." to "Mechanical Assembly - Mid Pier Kit is mounted to the mounting surfaces described in section 2.0 and install manual using Washer..."
	F.Ebneali	7	1	Updated Illustration 1 - CAB [redacted] Datasheet
			2	Updated Illustration 2 - CAB [redacted] Datasheet
			3	Updated Illustration 3 - CAB [redacted] Datasheet
			4	Updated Illustration 4 - CAB [redacted] Datasheet
			5	Updated Illustration 5 - CAB [redacted] Datasheet
			6	Updated Illustration 6 - CAB [redacted] Datasheet
			7	Updated Illustration 7 - CAB [redacted] Datasheet
			8	Updated Illustration 8 - CAB [redacted] Datasheet
			9	Updated Illustration 9 - CAB [redacted] Datasheet
			12	Updated Illustration 12 - CAB [redacted] Datasheet
			13	Updated from "Illustration 13 - CAB [redacted] Datasheet" to "Illustration 13 - Solar Washer Datasheet"
			13	Updated from Illustration 13 - Solar Washer Datasheet
			14	Added Illustration 14 - CAB Integrated Grounded Bracket System Datasheet
28-Jan-2022	F. Ortega	2	-	Updated Product from "Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 09-27-2021" to "Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 01-28-2021"
G104864652LAX	S. Doshi	4	1	Updated technical data of model [redacted] from "See illustration 6 for details." to "See illustration 6 and 15 for details."
			2	Updated technical data from "Finish: [redacted]
		7	15	Added Illustration 15 - CAB Double Sided Bracket
			16	Added Illustration 16 - Table of controlled documents that must be available at the factory during inspections.
		8	-	Added evaluation period "11/30/2021 to 01/28/2022"
28-Sep-2022			-	Updated Models From: '[redacted] and [redacted] To: '[redacted] and [redacted]

12.0 Revision Summary

The following changes are in compliance with the declaration of Section 8.1:

Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
G105031673LAX	F. Ortega A. Prakash	2	-	Updated Model Similarity From: "All models are identical in material and finish. They used the same grounding lug. The difference between models are dimensions of L-bracket. The Mid-pier L-Bracket installation can be done without the Flat Washer when attached to the lip of the center structure" To: "All models are identical in material and finish. They used the same grounding lug. The difference between models are dimensions of L-bracket. Model [redacted] The Mid-pier L-Bracket installation can be done without the Flat Washer when attached to the lip of the center structure."
		4	1	Added component [redacted] to Item 1
			1	Added component [redacted] to Item 1
			1	Added component [redacted] to Item 1
			1	Added component [redacted] to Item 1
		7	17	Illustration 17 - CAB [redacted] Datasheet
			18	Illustration 18 - CAB [redacted] Datasheet
			19	Illustration 19 - CAB [redacted] Datasheet
			20	Illustration 20 - CAB [redacted] Datasheet
		8	-	Added Evaluation period 09/09/2022 to 2022/09/28
8-Dec-2022	F. Ortega A. Prakash	1	-	Updated Applicants Contact information from: "Tim Wedding, Tara Bosserman" to: "Daron Daly, Tim Wedding". Updated Phone numbers from: "(814) 472- 5077" to: "(814) 472- 5077, (814) 536- 3531". Updated Email from: "twedding@cabproducts.com, tbosserman@ccabh.com" to: "ddaly@cabproducts.com, twedding@cabproducts.com"
G105257654LAX			-	Updated Manufacturer from: "Tim Wedding, Tara Bosserman" to: "Daron Daly, Tim Wedding". Updated Phone numbers from: "(814) 472- 5077" to: "(814) 472- 5077, (814) 536- 3531". Updated Email from: "twedding@cabproducts.com, tbosserman@ccabh.com" to: "ddaly@cabproducts.com, twedding@cabproducts.com"
		2	-	Updated Models FROM: [redacted] TO [redacted]
		4	1	Added "[redacted] to Item 1 "L Bracket"
		7	16	Updated Illustration 16 - Table of controlled documents that must be available at the factory during inspections.
			21	Updated Illustration 21 - CAB [redacted] Datasheet

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
28-Dec-2023	J. O'Connor	2	--	Added new model numbers to Models: '[redacted] '[redacted] '[redacted] and "20220"
G105610216CRT	A. Prakash	4	1	Added '[redacted] '[redacted] '[redacted] and '[redacted] to Item 1 "L Bracket"
		7	16	Updated Illustration 16 - Table of controlled documents that must be available at the factory during inspections.
		7	22	Added Illustration 22 - CAB [redacted] Datasheet.
		7	23	Added Illustration 23 - CAB [redacted] Datasheet.
		7	24	Added Illustration 24 - CAB [redacted] Datasheet.
		7	25	Added Illustration 25 - CAB [redacted] Datasheet.
11-Apr-2024	J. O'Connor	1	--	Updated applicant address. From: "211 Central Avenue Johnstown, PA 15902" To: "175 Industrial Park Rad, Ebensburg, PA 15931"
G105610216CRT	A. Prakash	1	--	Updated Applicant and Manufacturer Contacts. From: Daron Daly and Tim Wedding, (814) 472- 5077 and (814) 536- 3531, ddaly@cabproducts.com and twedding@cabproducts.com. To: Beth Burkette and Jason Martinage, (814) 472-5077 bburkett@cabproducts.com and jmartinage@cabproducts.com, respectively.
		2	--	Corrected typo in Models. From: '[redacted] to: '[redacted]
		2	--	Corrected info in Description. Ground lug model mentioned in paragraph 2 from "[redacted]
		4	6	Corrected Information in Type / Model of component and Technical data and securement means. From: [redacted]
		4	6 & 7	Corrected Mark of Conformity. From: "UR" to: "UL".
20-Apr-2024 G105610216CRT	J. O'Connor K. Riedl	1	--	Administrative Change. Corrected Typo in Contact Name for Applicant and Manufacturer. From: "Beth Burkette" To: "Beth Burkett"
		7	16	Administrative Change. Added missing drawing numbers to table: [redacted] [redacted] [redacted] [redacted]

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
15-Jun-2024 G105610216CRT	J. O'Connor F. Ortega	1	--	Added Standard to Standard(s): PV Module and Panel Racking Mounting System and Accessories [CSA T.I.L. A-40:2020]
		4	6	Updated Mark(s) of conformity. From: "UL" To: "cULus"
		6	3	Updated wording to add CEC information about installation. **From:** "Grounding - Grounding Lug is UL 467 recognized and rated to maximum [redacted] copper conductor. Installer is responsible for and shall provide an appropriate method of direct-to-earth grounding according to the latest edition of the National Electrical Code, including NEC 250: Grounding and Bonding, and NEC 690: Solar Photovoltaic Systems." **To:** "Grounding - Grounding Lug is UL 467 recognized and rated to maximum [redacted] copper conductor. For projects designed in accordance with the National Electrical Code: Installer is responsible for and shall provide an appropriate method of direct-to-earth grounding according to the latest edition of the National Electrical Code, including NEC 250: Grounding and Bonding, and NEC 690: Solar Photovoltaic Systems. For projects designed in accordance with the Canadian Electrical Code: Installer is responsible for and shall provide an appropriate method of direct to- earth grounding according to the latest edition of the Canadian Electrical Code, including Sections 10: Grounding and Bonding, Section 36: High-Voltage Installations, Section 64: Renewable Energy Systems, Energy Production Systems, and Energy Storage Systems. "
		8.0	--	Added test block to signify no testing required to add standard.
		8.1	--	Replaced Signatures F. Ortega and A. Prakash with J. O'Connor and F. Ortega, respectively.

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AUTHORIZATION TO MARK

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report. This authorization also applies to multiple listee model(s) identified on the correlation page of the Listing Report.

This document is the property of Intertek Testing Services and is not transferable. The certification mark(s) may be applied only at the location of the Party Authorized To Apply Mark.

Applicant:	Cambria County Association for the Blind and Handicapped	**Manufacturer:**	Cambria County Association for the Blind and Handicapped
Address:	211 Central Avenue Johnstown, PA 15902	**Address:**	175 Industrial Park Road Ebensburg, PA 15931
Country:	USA	**Country:**	USA
Contact:	Tim Wedding Tara Bosserman	**Contact:**	Tim Wedding Tara Bosserman
Phone:	(814) 472- 5077	**Phone:**	(814) 472- 5077
FAX:	(814) 472- 7179	**FAX:**	(814) 472- 7179
Email:	twedding@cabproducts.com tbosserman@ccabh.com	**Email:**	twedding@cabproducts.com tbosserman@ccabh.com

Party Authorized To Apply Mark: Same as Manufacturer
Report Issuing Office: Lake Forest, CA

Control Number: 5003404 **Authorized by:** for Dean Davidson, Certification Manager

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This document supersedes all previous Authorizations to Mark for the noted Report Number.

This Authorization to Mark is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Authorization to Mark. Only the Client is authorized to permit copying or distribution of this Authorization to Mark and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement and in this Authorization to Mark. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. Initial Factory Assessments and Follow up Services are for the purpose of assuring appropriate usage of the Certification mark in accordance with the agreement, they are not for the purposes of production quality control and do not relieve the Client of their obligations in this respect.

Intertek Testing Services NA Inc.
545 East Algonquin Road, Arlington Heights, IL 60005
Telephone 800-345-3851 or 847-439-5667 Fax 312-283-1672

Standard(s):	Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels [UL 2703:2015 Ed.1]
Product:	Ground Lug Device (CAB Solar Cable Management), Installed Using CAB Solar Cable Management Installation Guide Rev. Revised 5/23/2018
Brand Name:	CAB Solar Integrated Grounding System
Models:	[redacted]

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