236
台灣 新北市
土城區中興路13號
翔光工業股份有限公司
JASON CHUA

SZNT.S36277 - Releasing Devices

Releasing Devices

See General Information for Releasing Devices

GIANNI INDUSTRIES INC S36277
13 ZHONG SING RD
TU-CHENG INDUSTRIAL ZONE
TU-CHENG DISTRICT
NEW TAIPEI, 236 TAIWAN
Electromagnetic Lock Model(s) 10001, 10010-254

Trademark and/or Tradename: "GIANNI INDUSTRIES INC"

Last Updated on 2020-04-13

JASON CHUA
GIANNI INDUSTRIES INC
13 ZHONG SING RD
TU-CHENG INDUSTRIAL ZONE
TU-CHENG DISTRICT
NEW TAIPEI 236
NEW TAIPEI 236 TAIWAN TAIWAN

Date:	2020/04/13
Subscriber:	439618001
PartySite:	555697
File No:	S36277
Project No:	4788940320
PD No:	20017926
Type:	R
PO Number:	

Subject: **Initial Production Inspection**

PLEASE NOTE: YOU ARE NOT AUTHORIZED TO SHIP ANY PRODUCTS BEARING ANY UL MARKS UNTIL THE INITIAL PRODUCTION INSPECTION HAS BEEN SUCCESSFULLY CONDUCTED BY THE UL FIELD REPRESENTATIVE.

An Initial Production Inspection (IPI) is an inspection that must be conducted prior to the first shipment of products bearing the UL Mark. This is to ensure that products being manufactured are in accordance with UL's requirements including the Follow-Up Service Procedure. After the UL Representative has verified compliance of your product(s), authorization will be granted for shipment of product(s) bearing the appropriate UL Marks as denoted in the Procedure.

Inspections at your plant will be conducted under the supervision of CHEVY CHEN, UL INSPECTION CENTER LINKOU, UL INTERNATIONAL SERVICE LTD, 260 DA-YEH RD, 4TH FL, PEI TOU DISTRICT, TAIPEI, Taiwan, 112., PHONE: 2-28967790, FAX: 2-28917644, EMAIL: chevy.chen@ul.com

Marks as needed may be obtained from UL LABEL CENTER TAIWAN HEADOFFICE, UL INTERNATIONAL SERVICES LTD, 260 DA-YEH RD, 1ST FL, PEITOU, TAIPEI CITY, Taiwan, 112. PHONE: 2-2896-7790, FAX: 2-2890-7454, EMAIL: LABELCENTER.TPI@ul.com, ATTN: IRENE HUANG

Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

Please review this material and report any inaccuracies to UL's Customer Service Professionals. Contact information for all of UL's global offices can be found at http://ul.com/aboutul/locations.

If you'd like to receive updated materials FASTER, UL offers electronic access and/or delivery of this material. For more details, contact UL's Customer Service Professionals as shown above., referring to the above Project and/or PD Numbers.

This material is provided on behalf of UL LLC(UL) or any authorized licensee of UL.

TPI File

UL INSPECTION CENTER 408

Production Date:	UNKNOWN
Contact:	JIANG YI-YAN
Phone:	02-2267-9133
EMail:	hitomo@gianni.com.tw

ADDENDUM TO TRANSMITTAL LETTER

JASON CHUA
GIANNI INDUSTRIES INC
13 ZHONG SING RD
TU-CHENG INDUSTRIAL ZONE
TU-CHENG DISTRICT
NEW TAIPEI 236
NEW TAIPEI 236 TAIWAN TAIWAN

Date: 2020/04/13
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PartySite: 555697
File No: S36277
Project No: 4788940320
PD No: 20O17926
Type: R
PO Number:

Subject: **Initial Production Inspection**

The following material resulting from the investigation under the above numbers is enclosed.

Issue Date	Vol	Sec	Pages	Revised Date
2020/04/06	1	1	Cert of Compliance	
2020/04/06	1	1	Add New Volume	

***
If there are illegible image in this package legible image may be found online Via My Home@UL under My UL reports/CDA".

Follow-Up Service Procedure

DO NOT DISCARD THIS PAGE

It is important to keep UL Procedures and Test Reports up-to-date as new or revised pages are received.
Correct maintenance will decrease the amount of time the UL Representative spends when visiting your facility.

UL LLC offers MyHome @UL, a dedicated website providing secure access to online tools and databases that can help simplify your compliance activities. You can customize your personal MyHome @UL page to include the content needed most, including timely information about certification updates and links to other Web sites you visit regularly. Visit http://my.home.ul.com/ to sign up today!

PAGES (in content order)	FUNCTION	HOW TO UPDATE
Authorization Page	Displays the Product Category, the type of Follow-Up Service (Type R=Reexamination / Type L=Label), the File Number and the Volume Number associated with each Applicant's, Manufacturer's and Listee's company name and address.	Replace existing page by matching the UL File Number and Volume Number. Discard the older page (refer to "Issued" or "Revised" date).
Addendum to Authorization Page*	Lists the additional names and addresses of manufacturing locations, when multiple locations exist	Replace existing page by matching the UL File Number and Volume Number. Discard the older page (refer to "Issued" or "Revised" date).
Listing Mark Data (LMD), Classification Mark Data (CMD) or Recognized Component Mark Data (RCMD) Pages* #	Used only for products covered under Type R Service. Displays the correct LMD, CMD, or RCMD Mark, the Control Number for Listed and Classified categories and additional information regarding minimum size, application, procurement, and any other optional markings, in addition to the UL Mark.	Replace existing page by matching the UL File Number and Volume Number. Discard the older page (refer to "Issued" or "Revised" date).
Multiple Listing (ML) Correlation Sheet*	Correlates product model numbers between those products made by a Manufacturer for the Basic Applicant and those supplied to another company, the Multiple Listee.	Replace, add or delete page(s) with most current "Issued" or "Revised" date.
Index*	Catalogs the contents of the Procedure by some logical means, i.e. Section Number, Report Reference Number, or Issue Date.	Replace present page by matching the UL File Number, Volume Number, Page Number and most current "Revised" date.
Appendices* # (App.)	Contains instructions for the Manufacturer and UL Representative concerning specific responsibilities and required periodic tests. May also outline tests to be conducted on samples to be forwarded to UL's facilities.	Replace present page by matching the UL File Number, Volume Number, Appendix letter (eg. App. A), Page Number and most current "Revised" date.
	Standardized Appendix Pages are the same for all manufacturers within a particular product category.	Replace present page by matching the Appendix letter (eg. App. A), Page Number and most current "Revised" date.
Follow-Up Inspection Instructions (FUII) Pages*	Contains information similar to that in the Appendices. FUII Pages are issued as part of the Procedure when a UL Standard is used in conjunction with the Procedure, and are the same for all manufacturers within a particular category.	Replace present pages by matching the Page Number and most current "Issued" or "Revised" date.
Section General* # (Sec. Gen.)	Contains description, requirements, identifications and/or specifications that are common to all products covered by the entire volume and supplements the information provided in the Description Section.	Replace present page by matching the UL File Number, Volume Number, Page Number and most current "Revised" date.
Description, or Section (Sec.)*	Contains the specific description of one or more products or systems. This includes written text supplemented by photographs, drawings, etc., as necessary, to define features that affect compliance with the applicable requirements.	Replace present page by matching the UL File Number, Volume Number, Section Number, Page Number and most current "Issued" date.

***** The above page(s) may not appear in all UL Follow-Up Service Procedures; UL's Conformity Assessment Services staff determines their inclusion.
# These pages are combined in the **Generic Inspection Instructions** for International Style Reports, identified, as example by Vol. X1, X2, etc.

PLEASE NOTIFY YOUR LOCAL UL OFFICE OF ANY CHANGES IN CONTACT NAME, COMPANY NAME OR ADDRESS, SO THIS MATERIAL AND IMPORTANT INFORMATION CONTINUES TO BE DELIVERED TO YOUR FACILITY WITHOUT INTERRUPTION.

FOLLOW-UP SERVICE PROCEDURE
(TYPE R)

RELEASING DEVICES
(SZNT)

Manufacturer: SEE ADDENDUM FOR MANUFACTURER LOCATIONS

555697 (Party Site)
Applicant: GIANNI INDUSTRIES INC
(439618-001) 13 ZHONG SING RD
TU-CHENG INDUSTRIAL ZONE
TU-CHENG DISTRICT
NEW TAIPEI
236 TAIWAN

555697 (Party Site)
Listee: SAME AS APPLICANT
(439618-001)

Use of the Mark

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party. The UL Contracting Party for Follow-Up Services is listed in the addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

It is the responsibility of the Applicant, Manufacturer(s), and Listee/Classified Co. to make sure that only the products meeting the aforementioned requirements bear the authorized Marks of UL LLC, or any authorized licensee of UL LLC.

Additional Responsibilities

Additional responsibilities, duties and requirements for the Applicant and Manufacturers are defined under Additional Resources at the following web-site: http://www.ul.com/fus . Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the Follow-Up Service Terms referenced below, please contact UL's Customer Service at http://www.ul.com/aboutul/locations/ , select a location and enter your request, or call the number listed for that location.

Acceptance of Follow-Up Services

The Applicant and the specified Manufacturer(s) and any Listee/Classified Co. in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable service agreement is a Global Services Agreement ("GSA"), the Applicant, the specified Manufacturer(s) and any Listee/Classified Co. will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of a) use of the prescribed UL Mark, b) acceptance of the factory inspection, or c) payment of the Follow-Up Service fees. The Service Agreement incorporates such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking the following link: http://services.ul.com/fus-service-terms. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.

Use and Ownership of the Follow-Up Service Procedure

This Follow-Up Service Procedure, and any subsequent revisions, is the property of UL and is not transferable. This Follow-Up Service Procedure contains confidential information for use only by the Applicant, the specified Manufacturer(s), and representatives of UL and is not to be used for any other purpose. It is provided to the Subscribers with the understanding that it is not to be copied, either wholly or in part unless specifically allowed, and that it will be returned to UL, upon request.

Definition of Terms

Capitalized terms used but not defined herein have the meanings set forth in the GSA and the applicable Service Terms or any other applicable UL service agreement.

No Third Party Liability

UL shall not incur any obligation or liability for any loss, expense or damages, including incidental, consequential or punitive damages arising out of or in connection with the use or reliance upon this Follow-Up Service Procedure to anyone other than the above Manufacturer(s) as provided in the agreement between UL LLC or an authorized licensee of UL LLC, including UL Contracting Party, and the Manufacturer(s).

Certification Body

UL LLC has signed below solely in its capacity as the certification body to indicate that this Follow-Up Service Procedure fulfills the requirements for certification documentation issued by the certification body.

Bruce A. Mahrenholz
Director
Conformity Assessment Programs (CPO)
UL LLC

LOCATION

555697 (Party Site)
(439618-001) GIANNI INDUSTRIES INC
13 ZHONG SING RD
TU-CHENG INDUSTRIAL ZONE
TU-CHENG DISTRICT
NEW TAIPEI
236 TAIWAN
Factory ID: None
UL Contracting Party for above site is: UL GmbH

Fire Alarm Equipment Listing Mark Data Page

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

FIRE ALARM EQUIPMENT LISTING MARK

The Fire Alarm Equipment Listing Mark consists of four elements placed in close proximity and shall appear on Listed products only. Minimum size is not specified, as long as the Listing Mark is legible. The following is suggested.

XXXX = The control number assigned by UL, S36277

The minimum height of the registered trademark symbol ® shall be 3/64 of an inch. When the overall diameter of the UL Mark is less than 3/8 of an inch, the trademark symbol may be omitted if it is not legible to the naked eye.

The product identity is: "FIRE ALARM EQUIPMENT" or "FIRE ALARM SUBASSEMBLY"

When applicable, the Listing Mark for Signal System Control Units shall include the designation "_____ of _____". The first space represents the position that the panel occupies in a series of panels constituting the signal system control unit. The second space represents the total number of units in the signal system control unit.

PRODUCTS ALSO LISTED TO SIGNALING, ENERGY MANAGEMENT, ITE, OR TELEPHONE

Products that are also Listed by UL to other Signaling, Energy Management, Information Technology, or Telephone requirements must include a product identity "HOSPITAL SIGNALING AND NURSE CALL," "GENERAL SIGNALING," "EMERGENCY SIGNALING," "ENCLOSED ENERGY MANAGEMENT," "INFORMATION TECHNOLOGY," or "TELEPHONE" as appropriate, followed by "EQUIPMENT" or "SUBASSEMBLY" as appropriate. Multiple product identities shall be separated by commas, the last two shall be separated by the word "AND".

PRODUCTS ALSO LISTED TO SECURITY REQUIREMENTS

Products that are also Listed by UL to Security requirements shall substitute the logo above with one that incorporates reference to both Security and Signaling as shown below. However, the appropriate product identity for the Security application must be included as part of the Mark.

Fire Alarm Equipment Listing Mark Data Page

The product identity for Security is "SECURITY EQUIPMENT" or "SECURITY SUBASSEMBLY" as appropriate. Multiple product identities shall be separated by commas, the last two shall be separated by the word "AND".

ALTERNATIVE MARKING METHODS

The complete Listing Mark may appear on the smallest unit container in which the product is packaged when the product is of such a size, shape, material or surface texture that makes it impossible to incorporate the complete Listing Mark on the product.

The product identity may be abbreviated by a Type designation as shown below. The word "TYPE:" followed by the appropriate Type designation will be required to appear adjacent to the UL Mark. Multiple Type designations shall be separated by a comma. The Type designation shall be followed by the word "SUBASSEMBLY" as appropriate.

TYPE	
S	Security Equipment
F	Fire Alarm Equipment
HN	Hospital Signaling and Nurse Call Equipment
G	General Signaling Equipment
E	Emergency Signaling Equipment
EM	Enclosed Energy Management Equipment
IT	Information Technology Equipment
T	Telephone Equipment

PROCUREMENT

The manufacturer may reproduce the Mark or obtain it from a UL authorized supplier. The list of UL authorized label suppliers can be found on UL's online directory at www.ul.com.

MODELS	SECTION	UL or cUL
Releasing Devices, Electromagnetic Lock, Models 10001 and 10010-254.	1	UL

GENERAL

FIELD REPRESENTATIVE:

GENERAL

Except where specifically indicated, inspection and test sections apply to all Listed units.

SAMPLES FOR REGULAR INSPECTION

The number of samples selected for examination will vary with such conditions as volume of factory output, frequency of inspections, results obtained in previous tests, etc. In general, it is expected that inspections will be so conducted that the Field Representative will examine and test such a percentage of the output either in the completed state or at some point in the process of manufacture that will, in his opinion, insure that the run of assembled devices and parts at the factory conform in all respects to the requirements of this Report.

PROCEDURE IN CASE OF FAILURE:

Any unit failing to meet the requirements specified for visual examination and tests shall be rejected and the label removed.

LISTING MARKS:

The following units shall bear the UL Listing Mark identified in the respective LMDP that corresponds with the Product Covered.

Model Number
10001 and 10010-254

CONSTRUCTION DETAILS

General - Refer to each section's photographs, associated descriptive pages, and illustrations for further details.

Spacings - The following spacings are to be maintained. Not less than:

Point of Application	Operating Voltage	Through Air (in.)	Through Air (mm)	Over Surface (in.)	Over Surface (mm)
To walls of enclosure:					
Cast metal enclosures	0-300	1/4	6.4	1/4	6.4
Sheet metal enclosures	Power or non-Power limited 0-50	1/4	6.4	1/4	6.4
	Power limited 51-300	1/4	6.4	1/4	6.4
	Non-power limited 51-150	1/2	12.7	1/2	12.7
	Non-power limited 300-600	1/2	12.7	1/2	12.7
Installation wiring terminals:					
With barriers	0-30	1/8	3.2	3/16	4.8
	31-150	1/8	3.2	1/4	6.4
	151-300	1/4	6.4	3/8	9.5
Without barriers	0-30	3/16	4.8	3/16	4.8
	31-150	1/4	6.4	1/4	6.4
	151-300	1/4	6.4	3/8	9.5
Rigidly clamped assemblies[b]:					
Class 2, Power Limited	0-30	-	-	-	-
Non Class 2, Power Limited	0-30	3/64	1.2	3.64	1.2
	31-150	1/16	1.6	1/16	1.6
	300-600	3/8	9.5	1/2	12.7
Other parts:	0-30	1/16	1.6	1/8	3.2
	31-150	1.8	3.2	1/4	6.4
	151-300	1/4	6.4	3/8	9.5
	300-600	3/8	9.5	1/2	12.7

[b] Rigidly clamped assemblies include parts such as contact springs on relays or cam switches, printed-wiring boards, and the like.

Corrosion Protection - All iron and steel parts are suitably painted, plated or the equivalent to resist corrosion.

Internal Wiring - All internal wiring is labeled appliance wiring material with thermoplastic insulation rated for the application.

Solder Connections - All solder connections are made mechanically secure before soldering.

Printed Circuit Boards - All printed wiring material shall be Recognized Components (ZPMV2 or ZPMV8) having a minimum operating temperature rating of 105°C. If an automatic solder process is employed, the maximum solder bath temperature and exposure time shall not exceed the limits published in the Recognized Component Directory. All printed circuit boards shall have a flame rating of 94V-1 or better for products bearing either the ULC or CUL Listing Mark, or 94V-2 or better for products bearing only the UL Listing Mark. All printed wiring boards shall be rated for direct support of current carrying parts as indicated on the respective Listing card in the column titled "Meets UL796 DSR" (identified with a triangle or "All").

Connectors - All connectors utilized in this product for circuits involving potentials less than 30 V rms (42.4 V peak or DC) shall be fabricated of phenolic, nylon, or R/C (QMFZ2) bodies containing nonferrous current-carrying parts. Unless otherwise specified all connectors in low-voltage secondary circuits consist of R/C (RTRT2).

Headers - Unless other specified, all headers in low-voltage secondary circuits consist of R/C (RTRT2).

Marking Methods - Required markings other than Listing Marks shall be silk-screened, ink-stamped, printed, molded, hot-stamped, or provided on adhesive-backed labels. All adhesive-backed labels shall be R/C (PGDQ2) or printed on (PGJI2) Component Printing Materials, suitable for the mounting surface.

ACCEPTABLE PRODUCT VARIATIONS:

To permit a reasonable degree of flexibility selection of certain components, the guidelines included in the following paragraphs shall be employed in conducting an examination of the units included in this Report.

Component Interchange

Equivalent components may be employed using the following indicated guidelines. This includes also those components where reference has been made in the description to a specific manufacturer and model number.

A. Resistors - Wire-wound substituted for carbon resistors of equivalent rating in ohms and tolerance with the same or higher wattage rating is acceptable.

   Carbon resistors substituted for carbon resistors of equivalent rating in ohms and tolerance with the same or higher wattage rating is acceptable. Use of carbon in lieu of wire-wound resistors requires clearance by Conformity Assessment services.

B. Capacitors - Ordinary capacitors and electrolytics of other than Military grade type (indicated as such in description) may be interchanged provided the same or higher voltage, capacitance rating, temperature (when indicated), and composition are employed. The use of Military grade and other reliable capacitors is required to be cleared by Conformity Assessment services.

C. Internal Connections - Listed wire connectors or Component Recognized tape shall be used to make Splices and internal factory wiring connections.

D. Wiring - Listed wire of a different conductor size and insulation thickness may be employed if suitable for the current and voltage involved. If a high temperature wire is changed, a Listed wire with an equivalent or higher temperature rating may be used.

DESCRIPTION

PRODUCT COVERED:

UL, Fire Alarm Equipment: Magnetic Locks, Model 10001 and 10010-254.

COMPLIANCE

The product described herein has been investigated to, and found to be in compliance with:

UL 864 - Control Units and Accessories for Fire Alarm Systems

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Model Differences - Model 10001 is similar to Model 10010-254, except for the enclosure size and the turns of the coils.

Installation - These products are intended to be installed in accordance with the following:

A. NFPA 70 - National Electrical Code.
B. NFPA 72 - National Fire Alarm Code.
C. Local Authority having Jurisdiction.
D. Manufacturer's installation instructions provided with each unit.

The following documents must be provided with the products:

Model	ILL. No.	Description	Drawing No.	Ver./ Revision date
10001 and 10010-254	1	Electromagnetic Lock Installation Instruction	P-MU-AM-EM0110	Ver. G/ 2020.03.03

CONSTRUCTION DETAILS:

Refer to the following photographs, associated descriptive pages and illustrations. The general design, shape and arrangement shall be shown, unless described otherwise.

Model:

Ratings - The field wiring circuits are rated as follows:

Model	Current (mA)	Voltage (VDC)
10001	500 mA 250 mA	12VDC 24VDC
10010-254	500 mA 250 mA	12VDC 24VDC

MARKING:

General - All markings shall be silk-screened, ink-stamped, printed, molded or provided on adhesive backed labels. All adhesive backed labels shall be Recognized Marking and Labeling Systems (PGJI2 or PGDQ2), suitable for adhesion to the type of surface and intended temperature. All markings are plainly and permanently applied to a location readily visible after installation.

Each product shall be marked with the following:

a. Listee's Name or Trademark or authorized company identification.
b. Model number designation
c. Use of Product - "Magnetic Lock"
d. "For Indoor Dry Use Only"
e. Reference to the installation instructions that are being shipped by the specific part number and revision date or level.

Refer to ILL. 26 (Model 10001) and ILL. 27 (Model 10010-254) for UL Listing Mark text. Note to Field Representative – only confirm the content. Content can be configured in various arrangements

INSTALLATION INSTRUCTIONS:

Installation Instructions/Wiring Diagram - The installation instructions indicated below shall be shipped with the indicated product.

Model	ILL. No.	Part No.	Rev Level/Date
10001 10010-254	1	P-MU-AM-EM0110	Ver. G/ 2020.03.03

ENCLOSURE of Model 10001 - FIG. 1

General- The construction in FIG. 1 represents Model 10001.

1. Exploded view and parts list - Refer to ILL. 2 for details.

2. Housing - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 5 for details.

Minimum Material Thickness mm	Length	Width	Depth
1 mm	250 mm	42.5 mm	25 mm

3. Mounting plate - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 3 for details.

Length	Width	Depth
250 mm	25 mm	5 mm

4. End caps - Constructed of aluminum alloy. Two provided. Refer to ILL. 4 for details.

5. Magnet - Refer to ILL. 6 for details.

Length	Width	Depth
182 mm	38 mm	24.5 mm

6. Cover Plate - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 7 for details.

Length	Width	Depth
61.5 mm	38 mm	2 mm

7. Armature Plate – Constructed of a kick-off button, spring, screw, and a steel plate. Refer to ILL. 8 for details.
   - Anti-residual magnetism kick-off button: stainless steel.
   - Spring: stainless steel, 9 mm O.D, 7.2 mm I.D., 0.9 mm in diameter, 11 mm in length, 4 turns.
   - Steel plate: carbon steel, approximately 185 mm long by 42 mm width by 16 mm depth.

Magnet Assembly of Model 10001 - FIG. 2.

General- Magnet Assembly of Model 10001 is shown FIG.2 and the mechanical drawing in ILL.6.

1. E-shape core - Constructed of an E-shaped silicon steel with overall approximate dimensions as shown in the table below. Refer to ILL. 9 for dimension drawing.

Length	Width	Depth
157 mm	35 mm	25.5 mm

2. Encapsulating material – Constructed of Recognized Component (QMFZ2), FLYING DRAGONS MATERIAL IND CO.LTD, part no: P-EX and P-EX-1 UL file no. E101381. Epoxy resin adhesive, type FLYGON 5940AS. Curing agent for epoxy resin, type 5940BHK. Flame rated UL94 V-0 at a min. thickness 3.0 mm. Rated temperature 90°C.

3. Bobbin – Constructed of Recognized Component plastic (QMFZ2), minimum flame rating UL94 HB with overall approximate dimensions as shown in the table below. Part no.: P-BI-01-SM-3. Refer to ILL. 10 for dimension drawing.

Minimum Material Thickness mm	Length	Width	Depth
1 mm	171.5 mm	24.2 mm	17.2 mm

4. Magnet coils - Constructed of Recognized Component (OBMW2). Part no.: P-GW-0.28-YL-3UE and P-GW-0.28-RE-3UE. Double coils, 470 turns for each coil, 0.28 mm in diameter, temperature class 130°C.

5. Insulating tape (Green) - Constructed of Recognized Component (OANZ2). Part no.: P-TE-01 (17x66)-GE. Polyester adhesive tape, 1.5 layers warped around the magnet coils and secured by an acetate adhesive tape.

6. Internal wiring - Constructed of Recognized Component (AVLV2). Part no. P-LW-SM-1A. Four conductors, 24AWG minimum, type AWM, rated 80 °C min., one end connected to magnet coils and the other end connected to a 4-pin connector.

7. Connector - Constructed of Recognized Component (ECBT2). 10.6 mm in width, 14 mm in length and 2.54 in thickness. Rated 85°C. One end connected to internal wiring and the other end connected to the pins on PCB

Internal view of Model 10001 - FIG. 3

General- The internal view including double-sided tape and PCB which is shown in FIG.3.

1. Printed Circuit Board – Refer to Billofmaterial-1 for PCB bill of materials and ComponentLayout-1 for component layout and trace layout.

2. Printed wire board – Constructed by Recognized Component (ZPMV2), Part no. P-CM-01, Flame rated a minimum of 94V-0, 130°C. The board is spaced a minimum of 1/2 in. off the enclosure.

3. Terminal Blocks – The following FW-2 rated Recognized Component (XCFR2) terminal blocks are employed:

Component ID(s)	Manufacturer	Part No.	Requires Mult. Conductor
P1	HEAVY POWER CO LTD	PA001	N

Any FW-2 rated Recognized Component terminal block (XCFR2) may be substituted if the following ratings can be verified:

Component ID(s)	Minimum Range (AWG)	Minimum Voltage Rating (V)	Minimum Current Rating (A)	Suitable for Mult. Conductor
P1	14-26	300	1	N

4. MOVs – The following Recognized Component transient suppression components (VZCA2) are employed:

Component ID(s)	Manufacturer	Part No.
TNR1/TNR2	CENTRA SCIENCE CORP	P-VS-07D180K

5. Double-sided tape – Secure PCB to enclosure. Constructed of tapes and a foam. Refer to ILL. 11 for the dimension drawing.

- Tape: Constructed of Recognized Component (QOQW2), mfg: KK ENTERPRISE CO LTD, Part no. P-FO-25x35x3-BA, UL file no. E101165, dsg. DT#17, min temp=0°C, Max. Temp= 80°C, used on aluminum surface.

- Foam: Constructed of Recognized Component (QMFZ8) with minimum flame rating UL94 HF-1. INOAC CORP, Part no.: P-FO-25x35x3-BA. UL file no. E58579, dsg. C4305, min Thk= 1 mm.

Mounting accessories - FIG. 4A and FIG. 4B.

General - Two types of mounting accessories which are L bracket and L-Z bracket.

1. L bracket - Refer to ILL. 12 for overall dimensions.

2. L-Z bracket - Refer to ILL. 13 for overall dimensions.

ENCLOSURE of Model 10010-254 - FIG. 5

General- The construction in FIG. 5 represents Model 10010-254.

1. Exploded view and parts list - Refer to ILL. 14 for details.

2. Housing - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 17 for details.

Minimum Material Thickness mm	Length	Width	Depth
3 mm	267 mm	67 mm	40 mm

3. Mounting plate - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 16 for details.

Length	Width	Depth
267 mm	6 mm	40 mm

4. End caps - Constructed of aluminum alloy. Two provided. Refer to ILL. 16 for details.

5. Magnet - Refer to ILL. 18 for details.

Length	Width	Depth
190 mm	61 mm	38 mm

6. Cover Plate - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 7 for details.

Length	Width	Depth
64 mm	60.5 mm	3 mm

7. Armature Plate – Constructed of a kick-off button, spring, screw, and a steel plate. Refer to ILL. 8 for details.
   - Anti-residual magnetism kick-off button: stainless steel.
   - Spring: stainless steel, 9 mm O.D, 7.2 mm I.D., 0.9 mm in diameter, 11 mm in length, 4 turns.
   - Steel plate: carbon steel, approximately 185 mm long by 61 mm width by 16 mm depth.

Magnet Assembly of Model 10010-254 - FIG. 6.

General- Magnet Assembly of Model 10010-254 is shown FIG.6 and the mechanical drawing in ILL.6.

1. E-shape core - Constructed of an E-shaped silicon steel with overall approximate dimensions as shown in the table below. Refer to ILL. 21 for dimension drawing.

Length	Width	Depth
159 mm	57 mm	38 mm

2. Encapsulating material – Constructed of Recognized Component (QMFZ2), FLYING DRAGONS MATERIAL IND CO.LTD, part no: P-EX and P-EX-1 UL file no. E101381. Epoxy resin adhesive, type FLYGON 5940AS. Curing agent for epoxy resin, type 5940BHK. Flame rated UL94 V-0 at a min. thickness 3.0 mm. Rated temperature 90°C.

3. Bobbin – Constructed of Recognized Component plastic (QMFZ2), minimum flame rating UL94 HB with overall approximate dimensions as shown in the table below. Part no. P-BI-10-LG-1-N. Refer to ILL. 22 for dimension drawing.

Minimum Material Thickness mm	Length	Width	Depth
1 mm	179 mm	38 mm	25 mm

4. Magnet coils - Constructed of Recognized Component (OBMW2). Part no.: P-GW-0.32-YL-3UE and and P-GW-0.32-RE-3UE Double coils, 570 turns for each coil, 0.32 mm in diameter, temperature class 130°C.

5. Insulating tape (Green) - Constructed of Recognized Component (OANZ2). Part no.: P-TE-10 (25x66)-GE. Polyester adhesive tape, 1.5 layers warped around the magnet coils and secured by an acetate adhesive tape.

6. Internal wiring - Constructed of Recognized Component (AVLV2). Part no. P-LW-SM-1A. Four conductors, 24AWG minimum, type AWM, rated 80 °C min. One end connected to magnet coils and the other end connected to a 4-pin connector.

7. Connector - Constructed of Recognized Component (ECBT2). 10.6 mm in width, 14 mm in length and 2.54 in thickness. Rated 85°C. One end connected to internal wiring and the other end connected to the pins on PCB

Internal view of Model 10010-254 - FIG. 7

General- The internal view including double-sided tape and PCB which is shown in FIG.6.

1. Printed Circuit Board – Refer to Billofmaterial-1 for PCB bill of materials and Componentlayout-1 for component layout and trace layout.

2. Printed wire board – Constructed by Recognized Component (ZPMV2), Part no. P-CM-01, Flame rated a minimum of 94V-0, 130°C. The board is spaced a minimum of 1/2 in. off the enclosure.

3. Terminal Blocks – The following FW-2 rated Recognized Component (XCFR2) terminal blocks are employed:

Component ID(s)	Manufacturer	Part No.	Requires Mult. Conductor
P1	HEAVY POWER CO LTD	PA001	N

Any FW-2 rated Recognized Component terminal block (XCFR2) may be substituted if the following ratings can be verified:

Component ID(s)	Minimum Range (AWG)	Minimum Voltage Rating (V)	Minimum Current Rating (A)	Suitable for Mult. Conductor
P1	14-26	300	1	N

4. MOVs – The following Recognized Component transient suppression components (VZCA2) are employed:

Component ID(s)	Manufacturer	Part No.
TNR1/TNR2	CENTRA SCIENCE CORP	P-VS-07D180K

5. Double-sided tape – Secure PCB to enclosure. Constructed of tapes and a foam. Refer to ILL. 11 for the dimension drawing.

- Tape: Constructed of Recognized Component (QOQW2), mfg: KK ENTERPRISE CO LTD, Part no. P-FO-25x35x3-BA, UL file no. E101165, dsg. DT#17, min temp=0°C, Max. Temp= 80°C, used on aluminum surface.

- Foam: Constructed of Recognized Component (QMFZ8) with minimum flame rating UL94 HF-1. INOAC CORP, Part no.: P-FO-25x35x3-BA. UL file no. E58579, dsg. C4305, min Thk= 1 mm.

Mounting accessories - FIG. 8A and FIG. 8B.

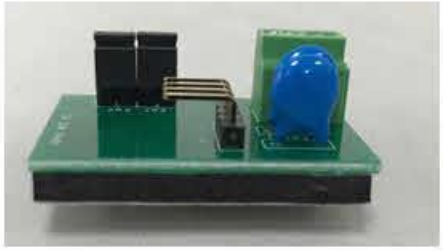
General - Two types of mounting accessories which are L bracket and L-Z bracket.

1. L bracket - Refer to ILL. 23 for overall dimensions.

2. L-Z bracket - Refer to ILL. 24 for overall dimensions.

N202092772

N202092773



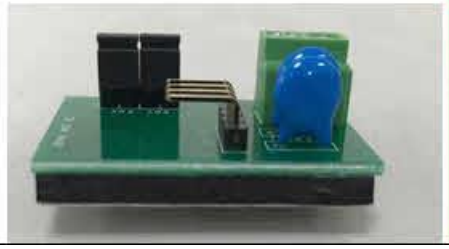

+
−
P1
JP2 JP3
TNR1
TNR2
CH 23A 94V0

N202092775

N202092776

N202092777

N202092778




+
−
P1
JP2 JP3
TNR1
TNR2
CH 23A 94V0

N202092781

N202092783

10001 & 10010-254 Series

Electromagnetic Lock Installation Instruction (Indoor Series)

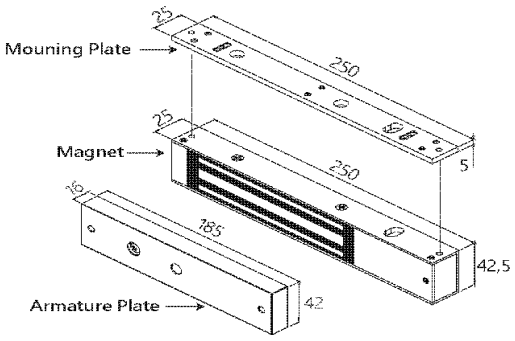
A Technical Specification

Specification		Model	UL1034 Rating	UL294 Performance Level
Operating Voltage	12/24VDC			
Current Draw	500mA/12VDC 250mA/24VDC	10001	Static force: 500 lbs Dynamic force: 50 ft-lb Endurance: 250,000 Cycles	Destructive Attack: Level I Line Security: Level I Standby Power: Level I Endurance: Level IV
Operating Temperature	32° to +120.2°F (0° to +49°C)	10010-254	Static force: 1000 lbs Dynamic force: 70 ft-lb Endurance: 250,000 Cycles	
Holding Force	600 lbs for 10001 1200 lbs for 10010-254	UL Requirements		
Lock Surface Temperature	≤ Ambient temperature ± 20°C			
Lifetime Test	—	• UL1034/UL294 indoor use, UL864 indoor dry use. • The power for the 10001/10010-254 Series is to be provided by a Listed (UL 294, UL 603 and CAN/ULC-S533, also UL 864 or UL 1481 for standalone power supply) Class 2 Power Supply. • The 10001/10010-254 Series is intended to be used in combination with access control and/or commercial fire alarm panel, which are installed in accordance with the manufacturer' s Installation and operation instructions, ANSI/NFPA 70 & NFPA 72 and the local authority having jurisdiction.		
Waterproof Grade	—			
Humidity	0 to 93% Non-condensing			
Finish	Magnet Surface : Galvanized Housing : Brushed stainless steel(US32D)			

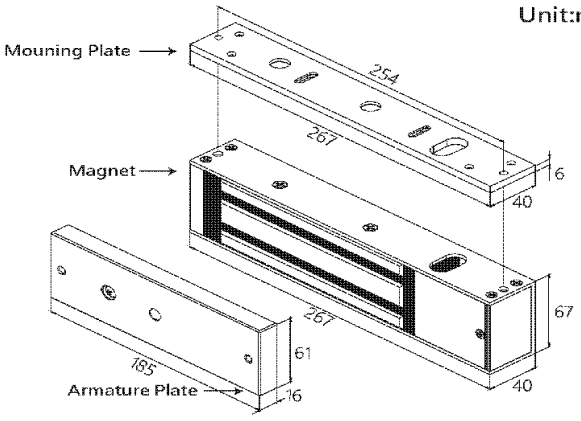
"The products shall not impair the intended operation of an emergency exit or panic hardware mounted on the door."

B Dimension & Accessories

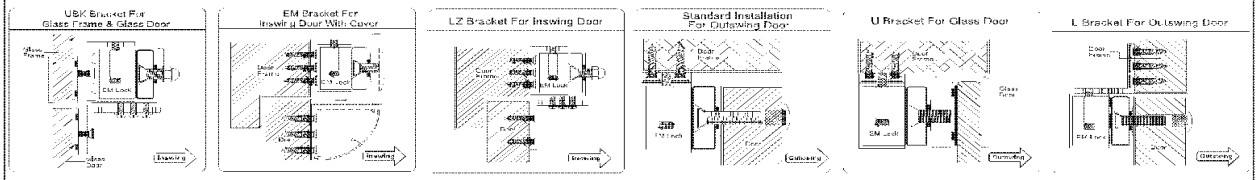
Unit:mm



10001 Series

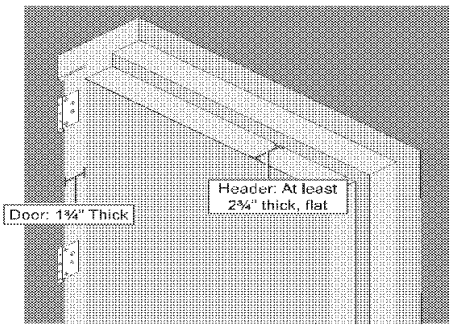


10010-254 Series

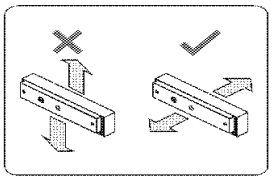


C Pre-Installation Considerations

- Use ONLY the hardware provided for mounting this product (NOTE: Non-standard Door thickness may require different sex nut Hardware – see specific instructions for required hardware).
- Follow the installation procedure as described in this manual.
- Check door thickness. If the door is not 1 3/4" thick, a different sex nut Will be required.
- Check door header. A minimum 2 3/4" thick, flat surface is needed to Securely mount all screws for the magnet. If you do not have the Required surface, you will need filler plates and/or angle brackets to Properly mount the magnet.

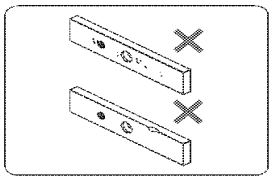


D Important Notes

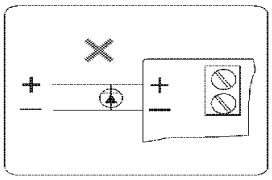


⚠ CAUTION

The electromagnet lock requires a face-to-face fitting as shown in Figure otherwise, the holding force will be greatly decreased (direction of hydraulic press pull must be collinear).

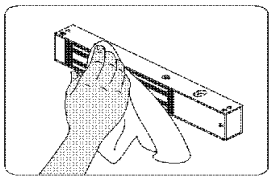


Make sure the contact area of the electromagnetic lock and the armature plate are clean.



⚠ CAUTION

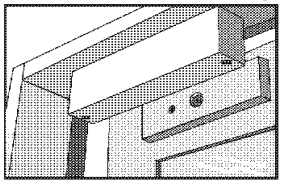
Remove any diode installed across the magnetic lock for spike suppression. The magnet is fitted with a metal oxide varistor to prevent back EMF.



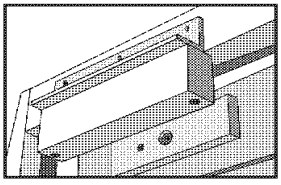
Wipe the surface of magnet lock with anti-rust oil regularly.

E Optional Bracket

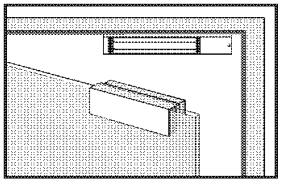
Brackets installation are according to door swing direction and door frame type , e.g. narrow frame door , frameless glass door , inswing door , etc.



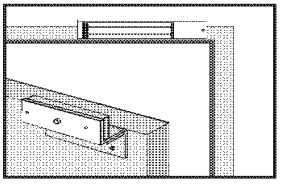
Regular Installation
(outswing door)



L-bracket for
narrow frames (optional)



U-bracket for frameless
glass doors (optional)
only outswing door.



LZ-bracket for
inswing doors (optional)

⚠ WARNING

Warnings indicate potentially hazardous conditions, which if not avoided or corrected, may cause death or serious injury.

⚠ CAUTION

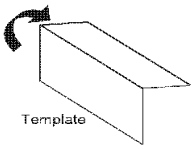
Cautions indicate potentially hazardous conditions, which if not avoided or corrected, may cause minor or moderate injury. Cautions may also warn against unsafe practices.

NOTICE

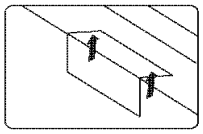
Notices indicate a condition that may cause equipment or property damage only.

F Regular Installation

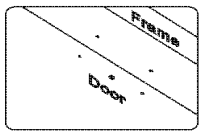
① Fold the mounting template 90°



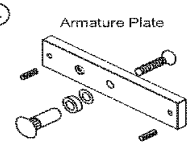
② Place the template to the proper position of the door and frame. Mark the hole positions of the template on the door and frame.



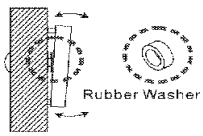
③ Drill the holes according to the marks.



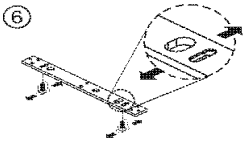
④ Please install the armature plate as illustrated here. (Dimensions of the holes depend on the door types illustrated below.)



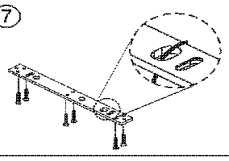
⑤ The rubber washer makes the surface of the armature plate adjustable in order to completely fit the surface of magnetic lock.



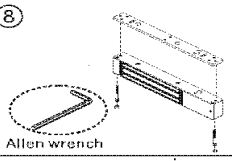
⑥ Fasten the mounting plate with the mounting screws. The position of the mounting plate should be adjustable.



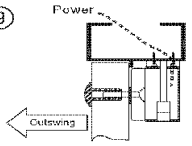
⑦ Fix the mounting plate on the door with mounting screws

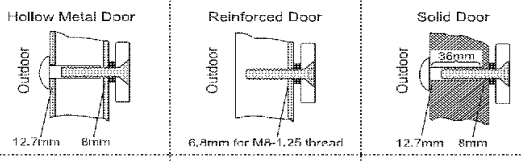


⑧ Use the Allen wrench and fixing bolts to tighten the electromagnetic lock to mounting plate



⑨ Connect the power and test the unit.





Recommendation:
For Mini EM-locks (Model 1800), maximum thickness of door is 50 mm.
For Maxi EM-locks (Model 1800-384), maximum thickness of door is 46 mm.

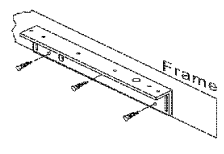
Drill a Ø8mm hole through door, on closing side.Enlarge to Ø12.7mm by a sexnut blot on the opening side.

Drill a Ø6.8mm hole and tap on closing side a M8x1.25 thread.

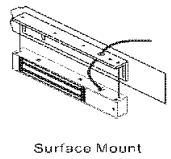
Drill a Ø8mm hole through door on closing side.Enlarge to Ø12.7mm by a sexnut blot on the opening side. The depth is 36mm.

G LZ or Z bracket for inswing doors

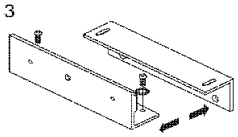
1 Find a mounting position on the door frame for the L bracket. Make sure that the door can still be closed.



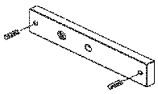
2 Use the fixing bolts to tighten the magnet on L bracket.



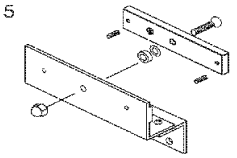
3 Assemble the Z bracket and make sure that the Z bracket is adjustable.



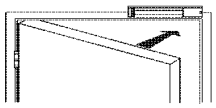
4 Insert the guide pins into the armature plate.



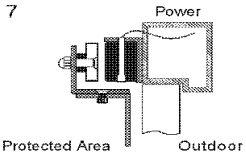
5 Attach the armature plate and washers to the Z bracket assembly.



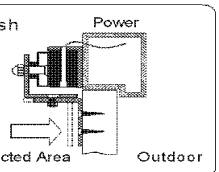
6 Close the door and connect the power.



7 After the magnet attracts the armature plate, adjust the Z bracket to fit the door.



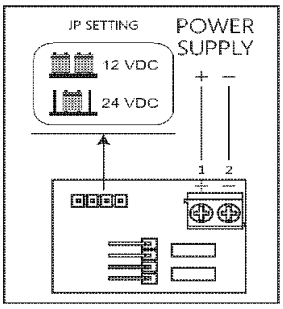
Finish Fasten the Z bracket to the door.



Connecting Diagram

POWER SUPPLY

The product must be powered from a UL-listed, regulated, power-limited, power supply.
If power switch is not wired between DC source voltage(+) and magnet, it will take a longer time to de-energize the magnet simulating residual magnetism.
The minimum permissible wire size to be used shall not be less than 22 AWG.



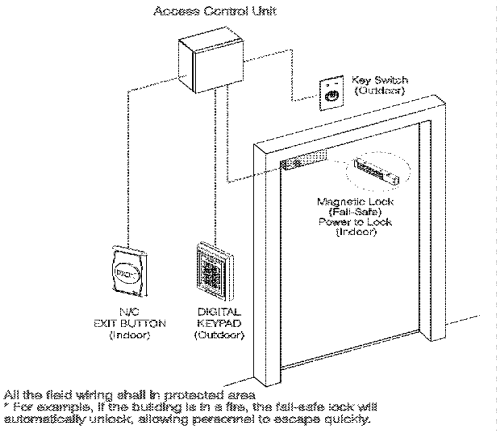
12VDC INPUT

- Required power: 500mA
- Connect positive (+) lead from a 12 VDC power source to Terminal 1.
- Connect negative (-) lead from a 12 VDC power source to Terminal 2.
- Check jumper for 12 VDC operation.

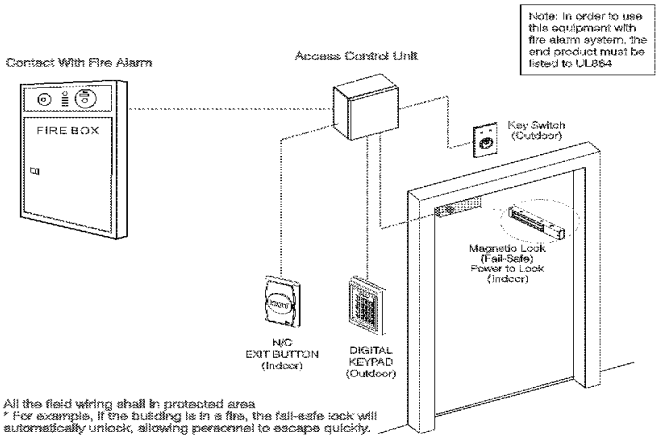
24VDC INPUT

- Required power: 250mA
- Connect positive (+) lead from a 24 VDC power source to Terminal 1.
- Connect negative (-) lead from a 24 VDC power source to Terminal 2.
- Check jumper for 24 VDC operation.

Wiring Diagram - Sample wiring and applications



All the field wiring shall in protected area
* For example, if the building is in a fire, the fail-safe lock will automatically unlock, allowing personnel to escape quickly.

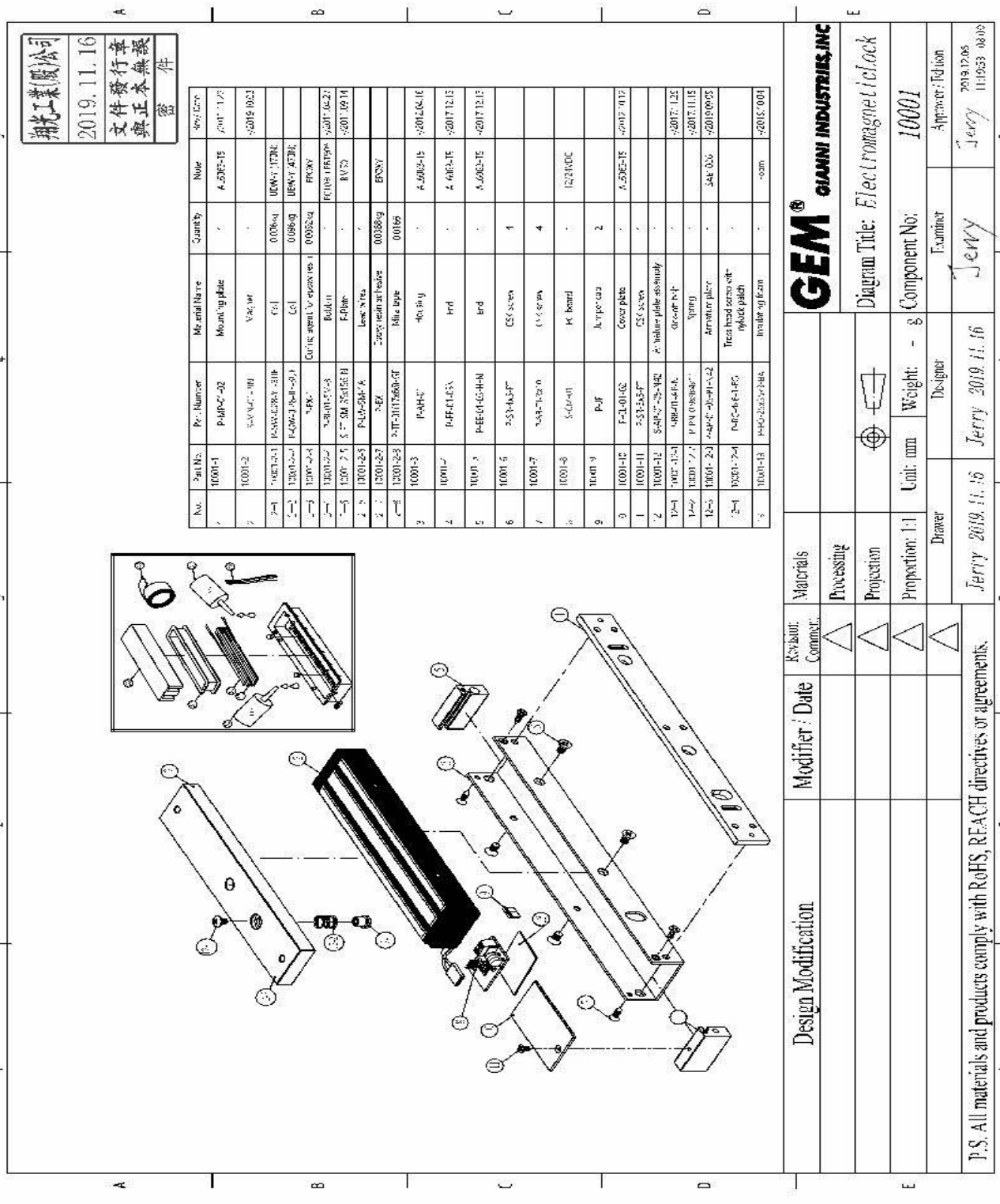


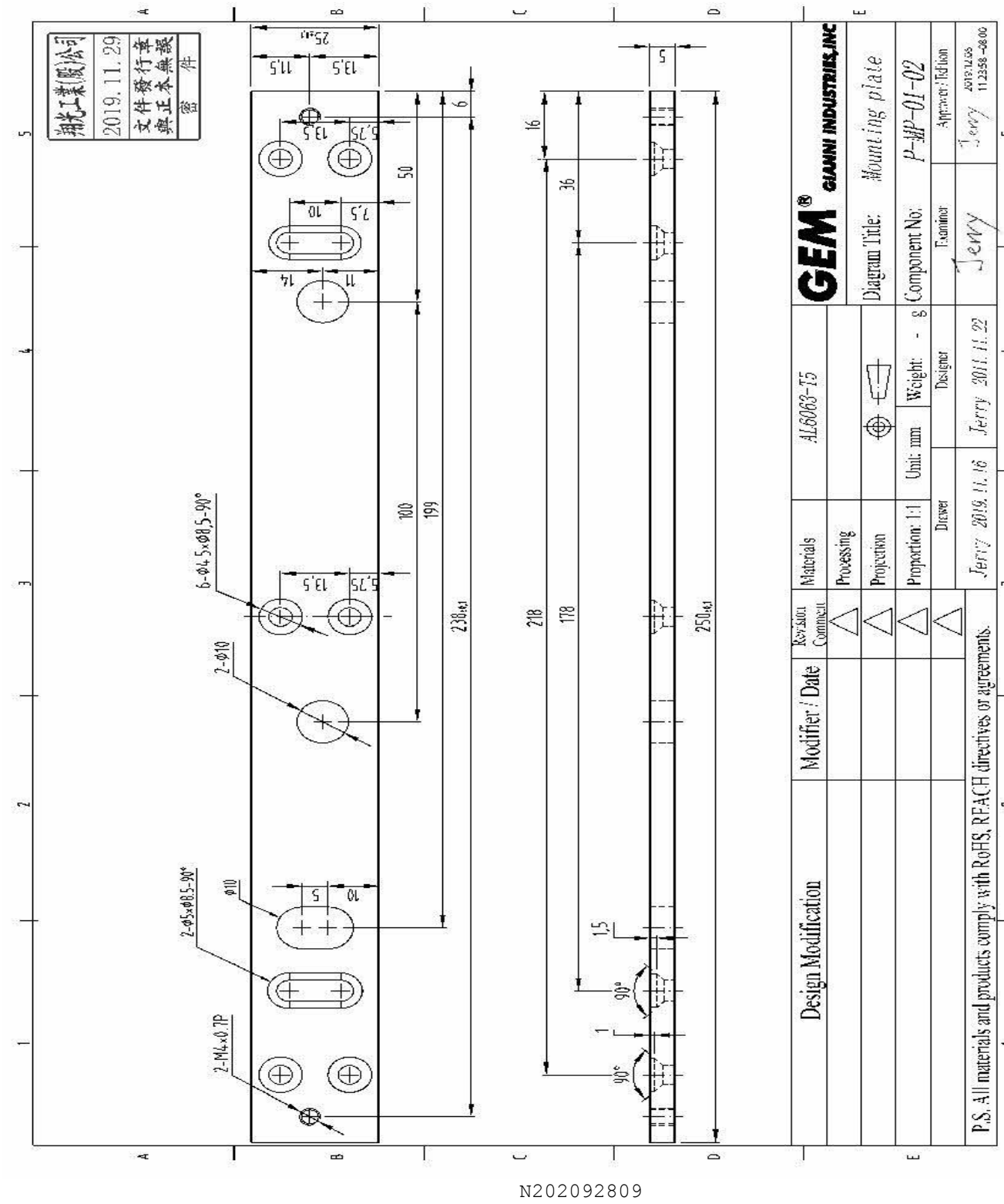
All the field wiring shall in protected area
* For example, if the building is in a fire, the fail-safe lock will automatically unlock, allowing personnel to escape quickly.

Trouble Shooting

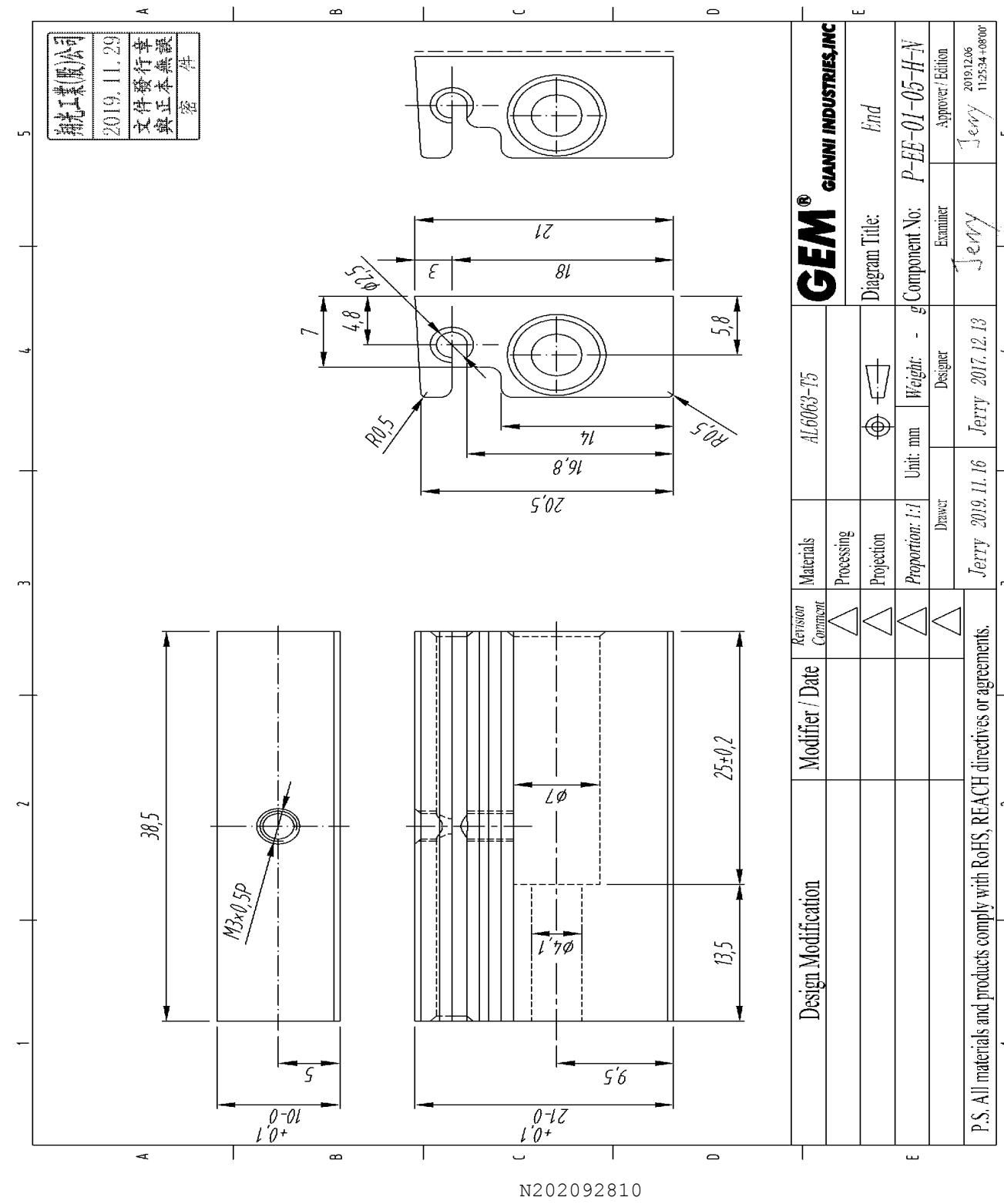
Problem	Possible Cause	Solution
Door does not lock	No power	Make sure the wires are connected properly Check that the power supply is connected and working properly Make sure the lock switch is wired correctly
Low holding force	Poor contact between electromagnet and armature plate	Check if the armature plate is deformed? Make sure if the rubber washer was used between magnet lock and armature plate. Make sure the contact surfaces of the electromagnet and armature plate are clean and free from dust and foreign material.
	Low voltage or incorrect voltage setting	Ensure the electromagnet lock is set for the correct voltage. Check for proper voltage at the electromagnet locks input. If low determine if the correct wire gauge is being used to prevent excessive voltage drop.

GEM
GIANNI INDUSTRIES, INC.

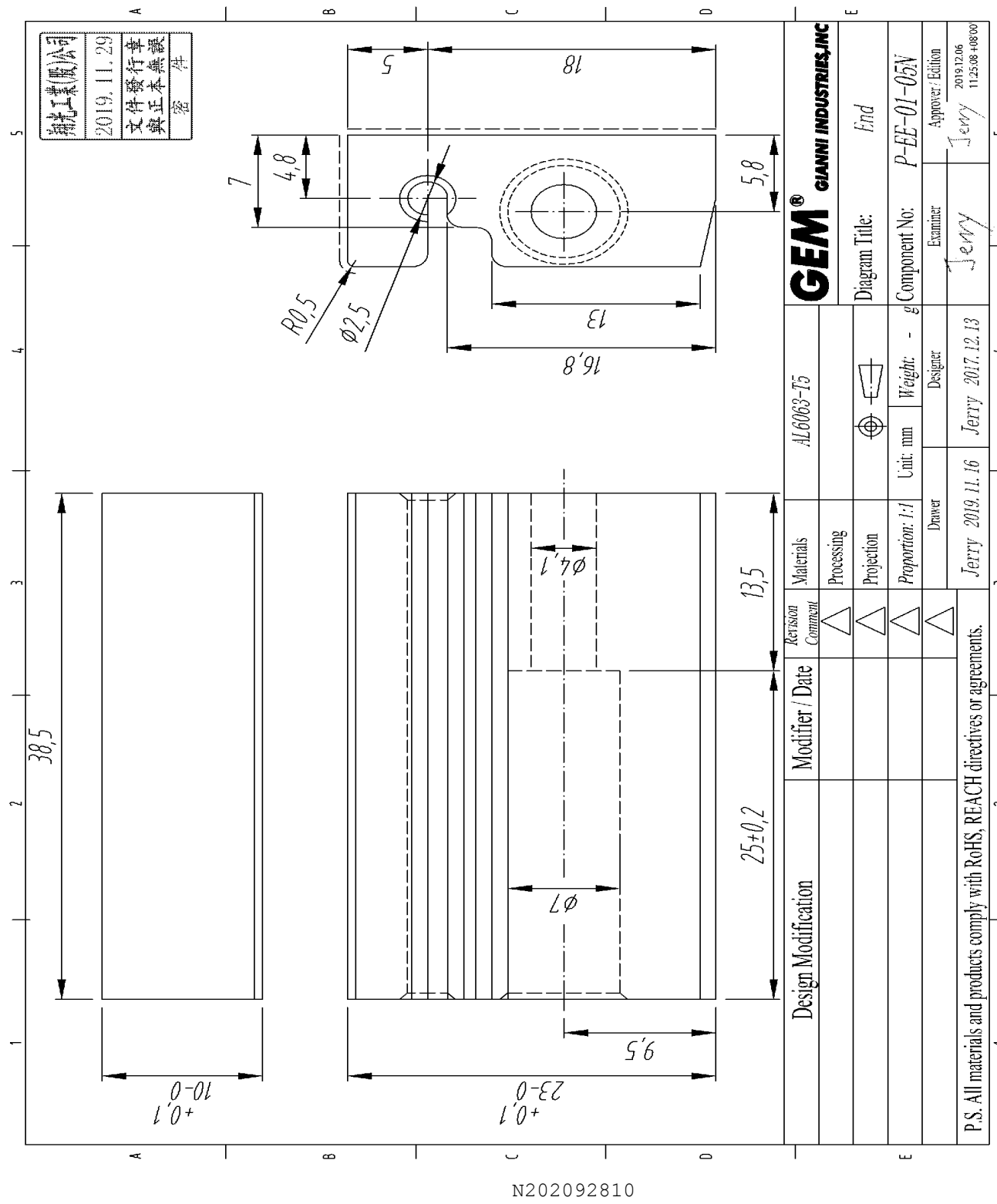

GEM GIANNI INDUSTRIES,INC
Diagram Title: Electromagnetic lock
Component No: 10001
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Jerry 2019.11.16
Examiner
Approver: Felicia
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.16
文件發行章與正本無誤
密件

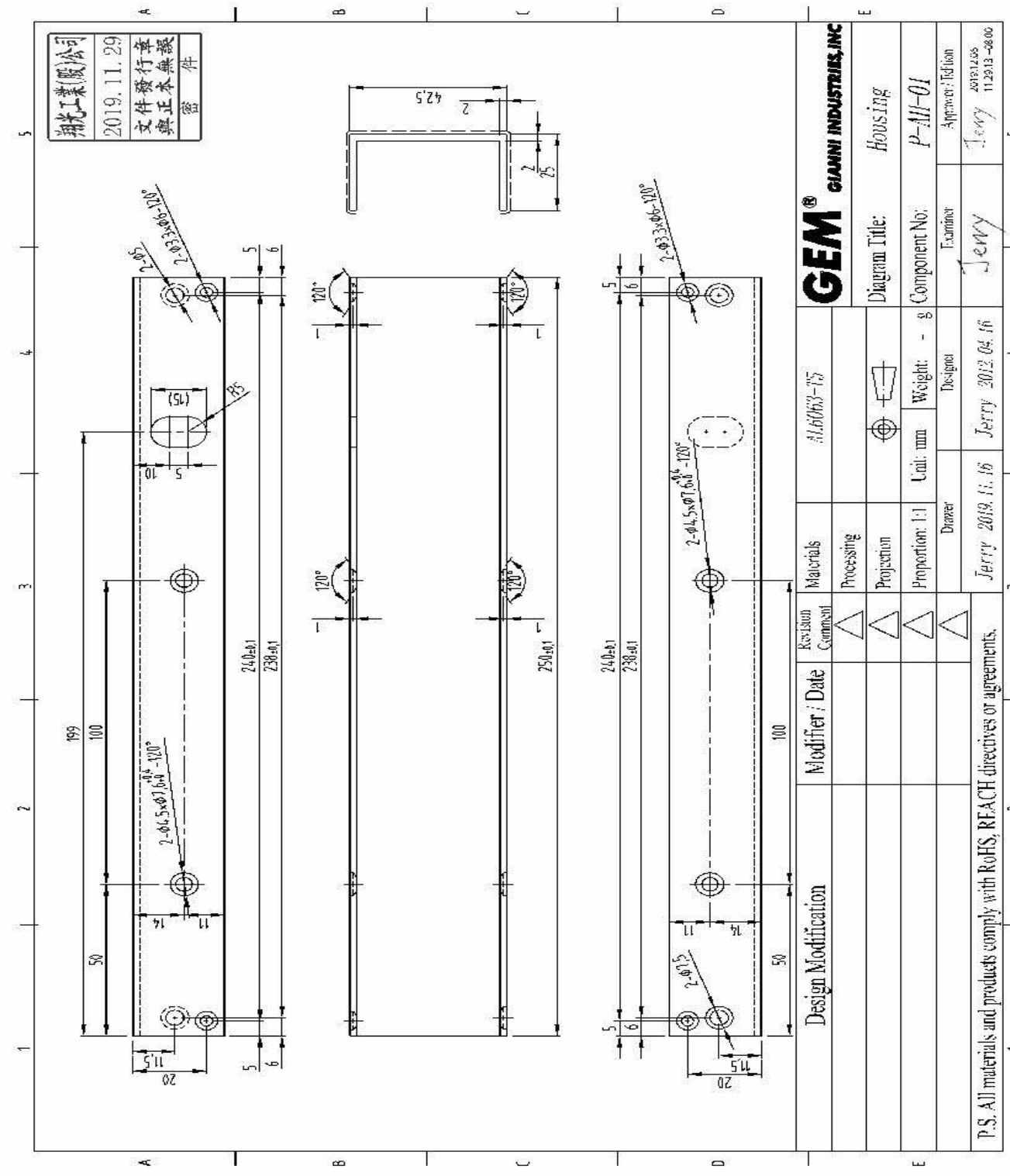

GEM GIANNI INDUSTRIES,INC
Diagram Title: Mounting plate
Component No: P-MP-01-02
AL6063-T5
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Designer
Examiner
Approver
Jerry 2019.11.22
Jerry 2019.11.16
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
6-Φ4.5×Φ8.5-90°
2-Φ10
2-Φ5×Φ8.5-90°
2-M4×0.7P
238±0.1
250±0.1
218
178
199
100
50
36
16
1.5
90°

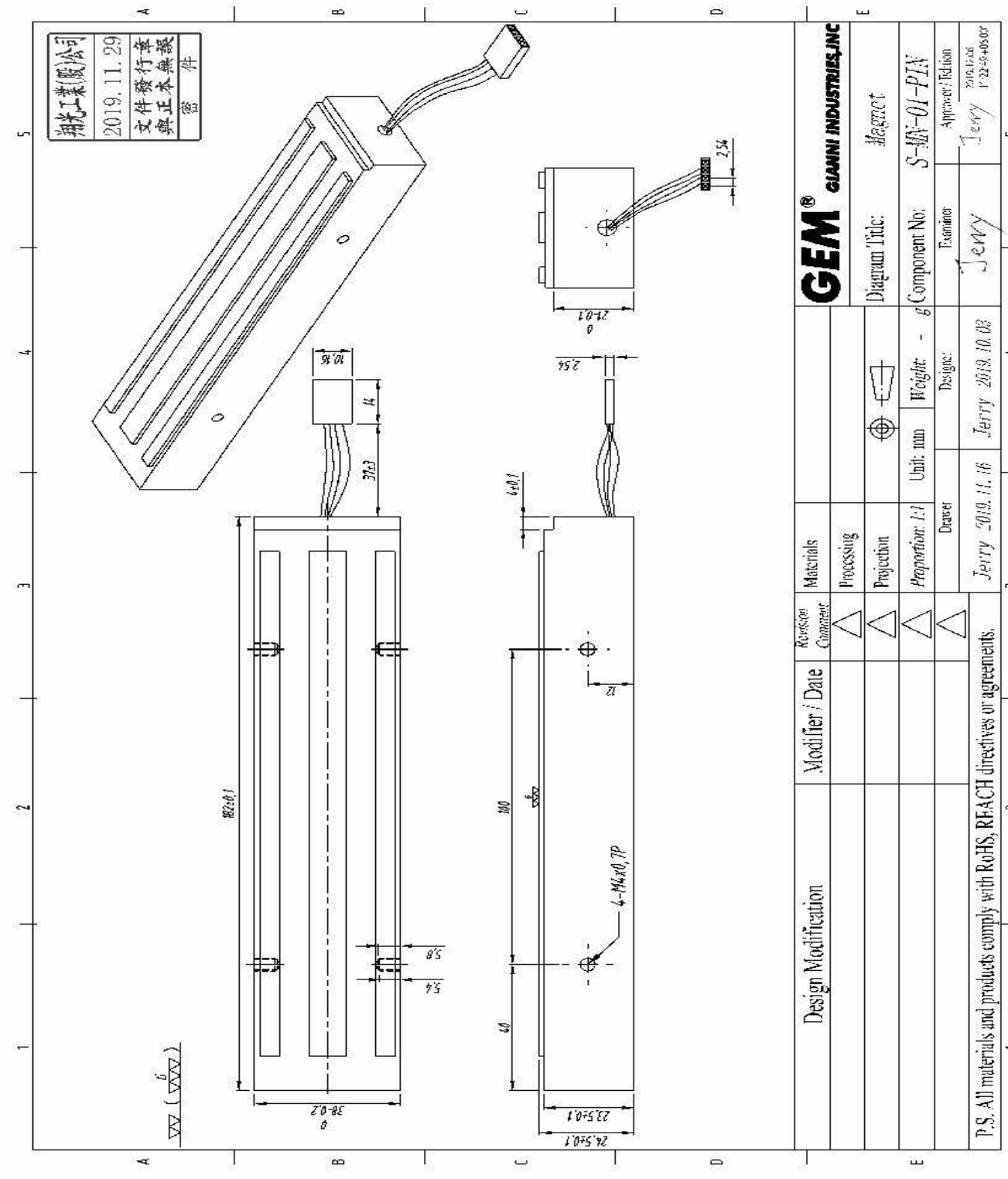
N202092809


2019.11.29
文件發行章
與正本無誤
客戶
GEM GIANNI INDUSTRIES,INC
AL6063-T5
Materials
Processing
Projection
Diagram Title:
Kind
Component No:
P-EE-01-05-H-N
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
Jerry 2017.12.13
Jerry
2019.12.06 11:25:34 +08'00'
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
38,5
M3x0,5P
5
10-0,1
Ø7
Ø4,1
25±0,2
13,5
9,5
21-0,1
20,5
16,8
14
R0,5
R0,5
4,8
7
Ø3,5
3
18
21
5,8

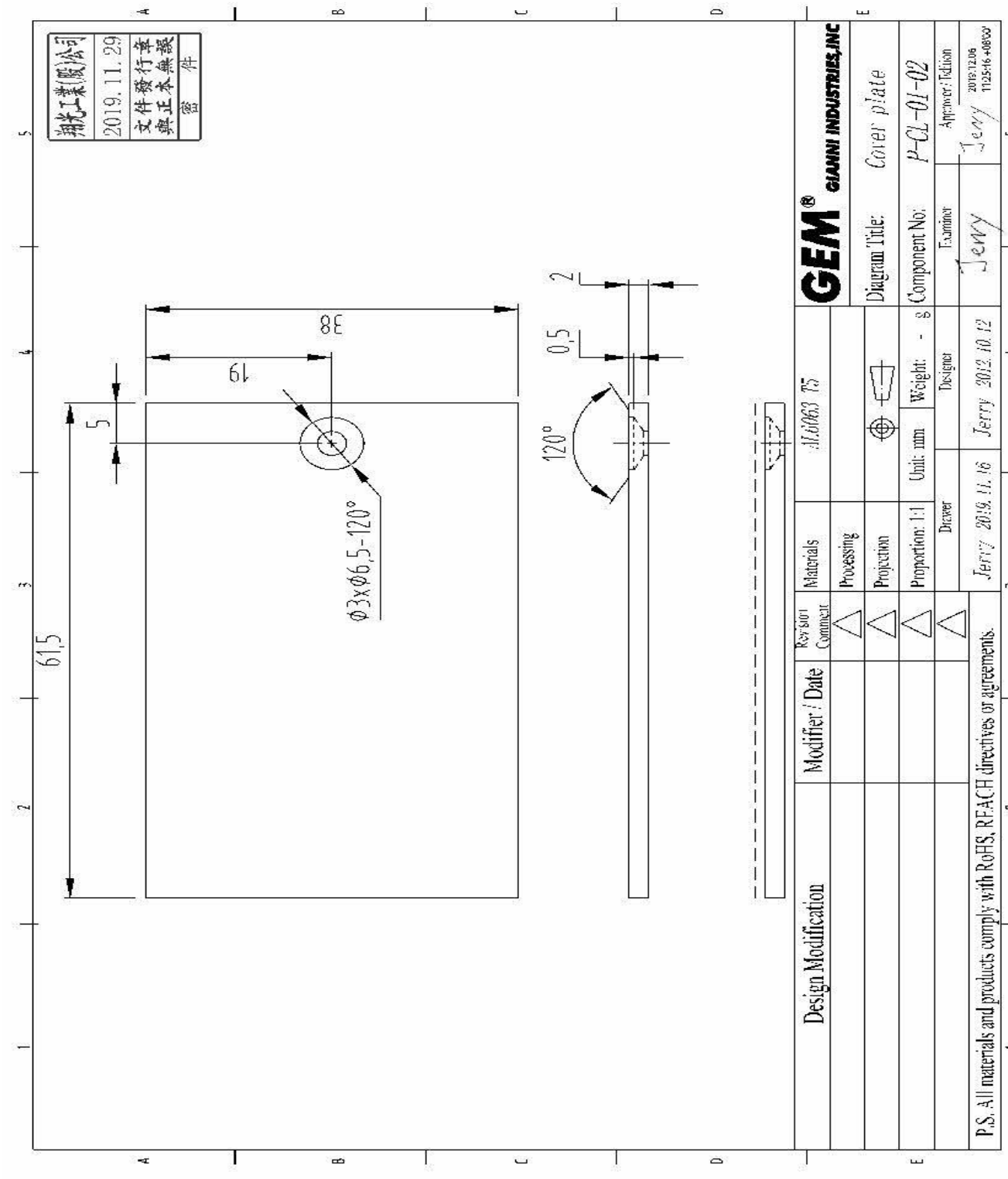
N202092810


GEM GIANNI INDUSTRIES,INC
Diagram Title: End
Component No: P-EE-01-05N
Material: AL6063-T5
Unit: mm
Weight: - g
Proportion: 1:1
Drawer
Designer
Examiner
Approver / Edition
Jerry 2017.12.13
Jerry 2019.11.16
Jerry 2019.12.06
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
P.S. All materials and products comply with RoHS, REACH directives or agreements.
38,5
25±0,2
13,5
18
5
7
4,8
5,8
13
16,8
R0,5
Ø2,5
Ø4,1
Ø7
9,5
10-0,1
23-0,1

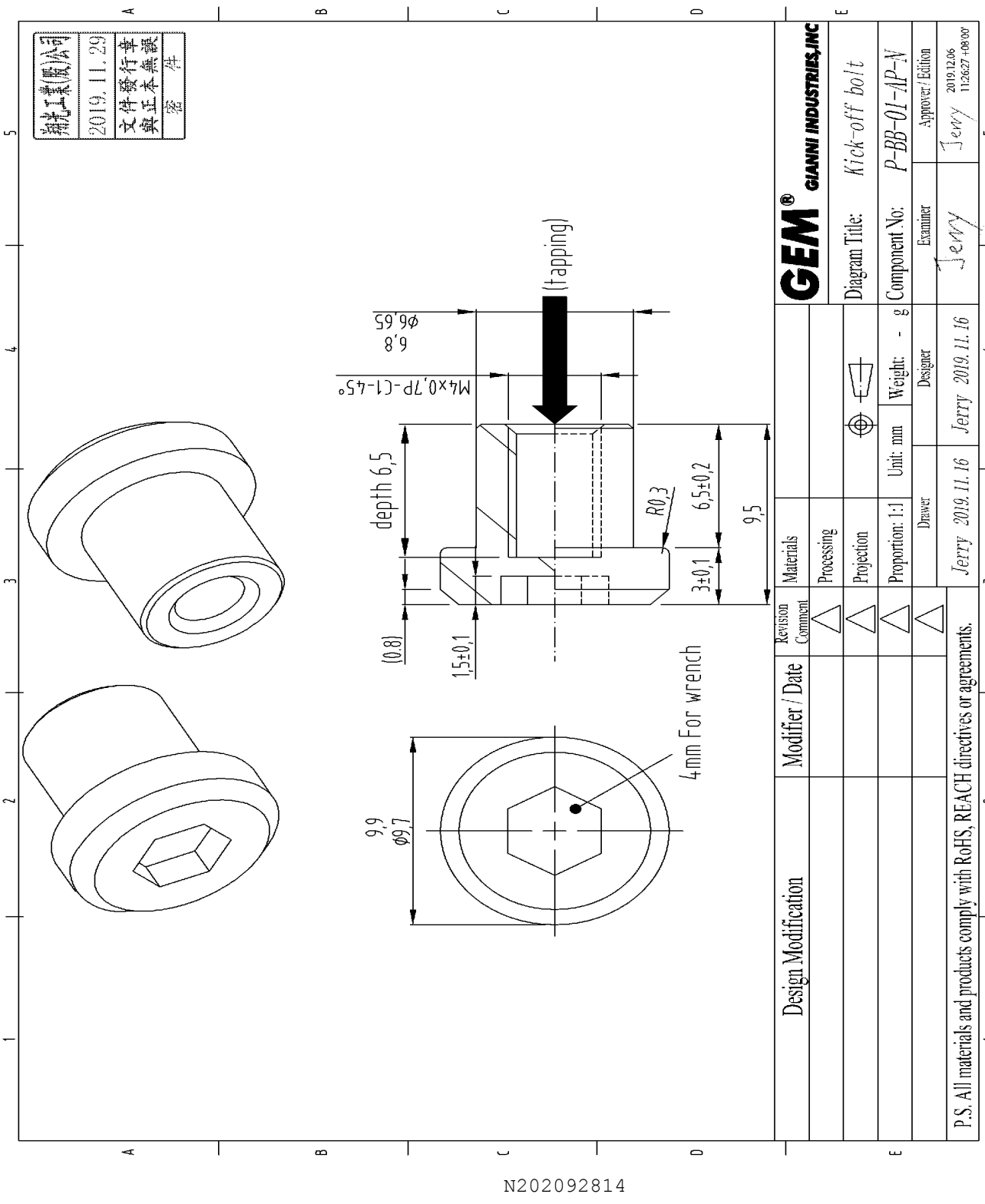

GEM GIANNI INDUSTRIES,INC
Diagram Title: Housing
Component No: P-III-01
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designed
Examiner
Approved
Design Modification
Modifier / Date
Revision Comment
Jerry 2019.11.16
Jerry 2012.04.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.


GEM GIANNI INDUSTRIES,INC
Diagram Title: Magnet
Component No: S-MN-01-PIN
Material: Iron
Weight: -
Unit: mm
Proportion: 1:1
Drawer
Designer: Jerry 2019.10.03
Examiner
Approver: Edison
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
P.S. All materials and products comply with RoHS, REACH directives or agreements.
4-M4x0.7P
2.54
37±0.3
14
10.16
5.8
5.4
60
100
12
6±0.1
2019.11.29
文件發行章與正本無誤
密件

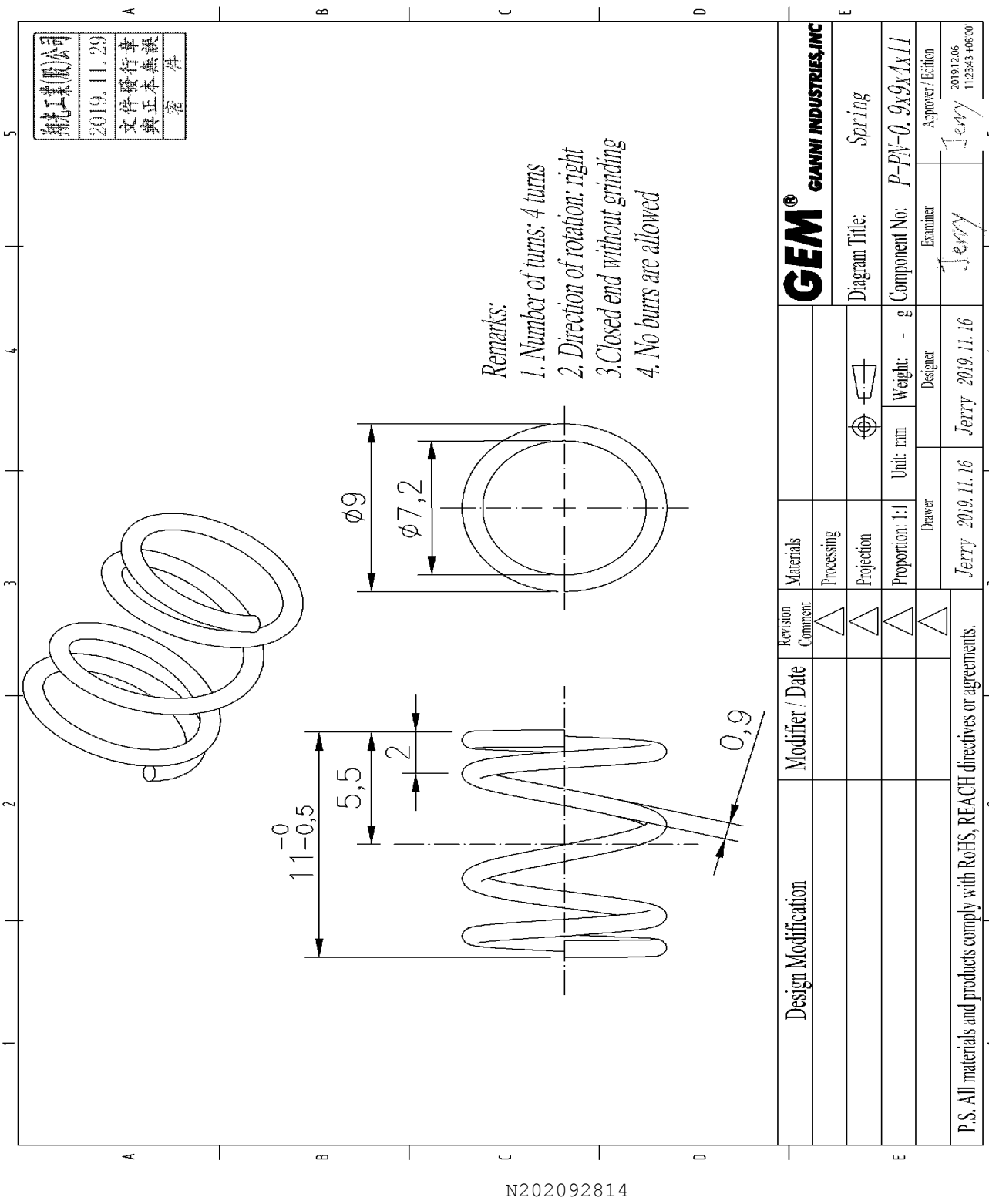
N202092812


38
19
5
61,5
Φ3xΦ6,5-120°
120°
0,5
2
GEM GIANNI INDUSTRIES,INC
Diagram Title: Cover plate
Component No: P-CL-01-02
Examiner: Jerry
Approver: Edition
Jerry 2019.12.06 11:25:16 +08'00'
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Jerry 2016.11.16
Jerry 2012.10.12
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
文件發行章與正本無誤
密件

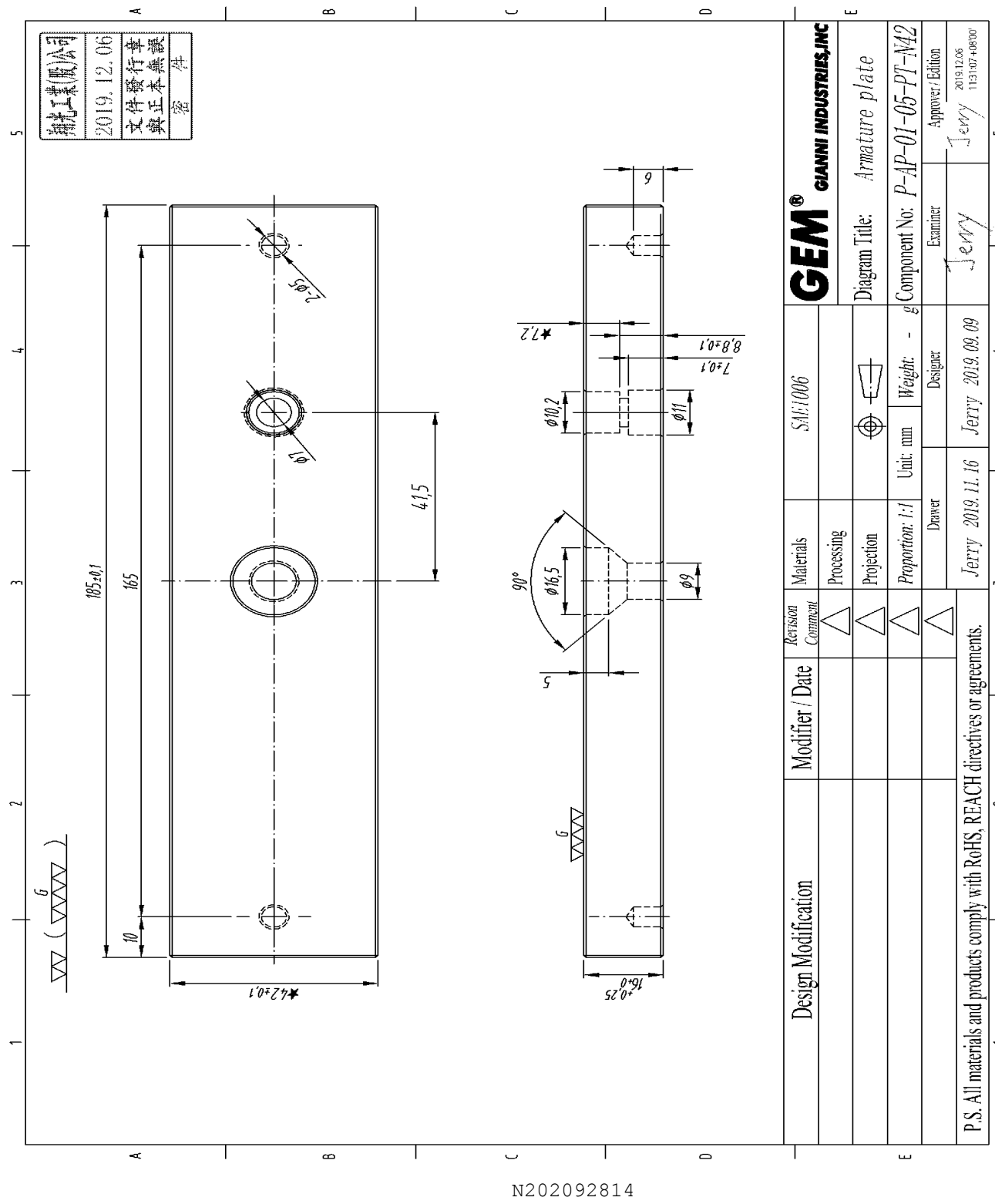
N202092813


(tapping)
M4x0.7P-C1-45°
depth 6,5
(0.8)
1,5±0,1
3±0,1
6,5±0,2
9,5
R0,3
4mm For wrench
9,9
Φ9,7
GEM GIANNI INDUSTRIES,INC
Diagram Title: Kick-off bolt
Component No: P-BB-01-AP-N
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.

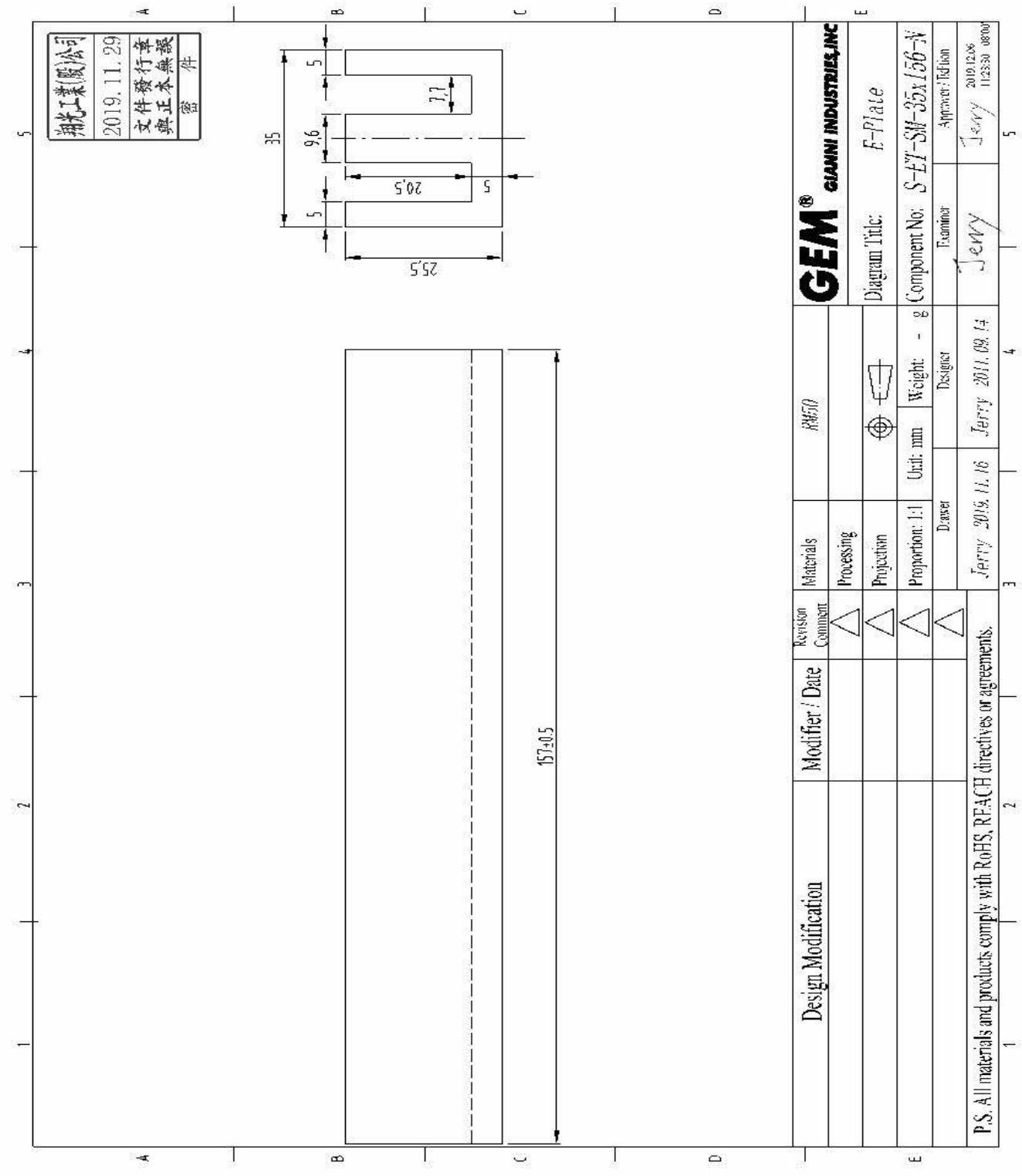
N202092814


Remarks:
1. Number of turns: 4 turns
2. Direction of rotation: right
3.Closed end without grinding
4. No burrs are allowed
ø9
ø7,2
11-0,5
-0
5,5
2
0,9
GEM GIANNI INDUSTRIES,INC
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Diagram Title: Spring
Component No: P-PN-0.9x9x4x11
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.

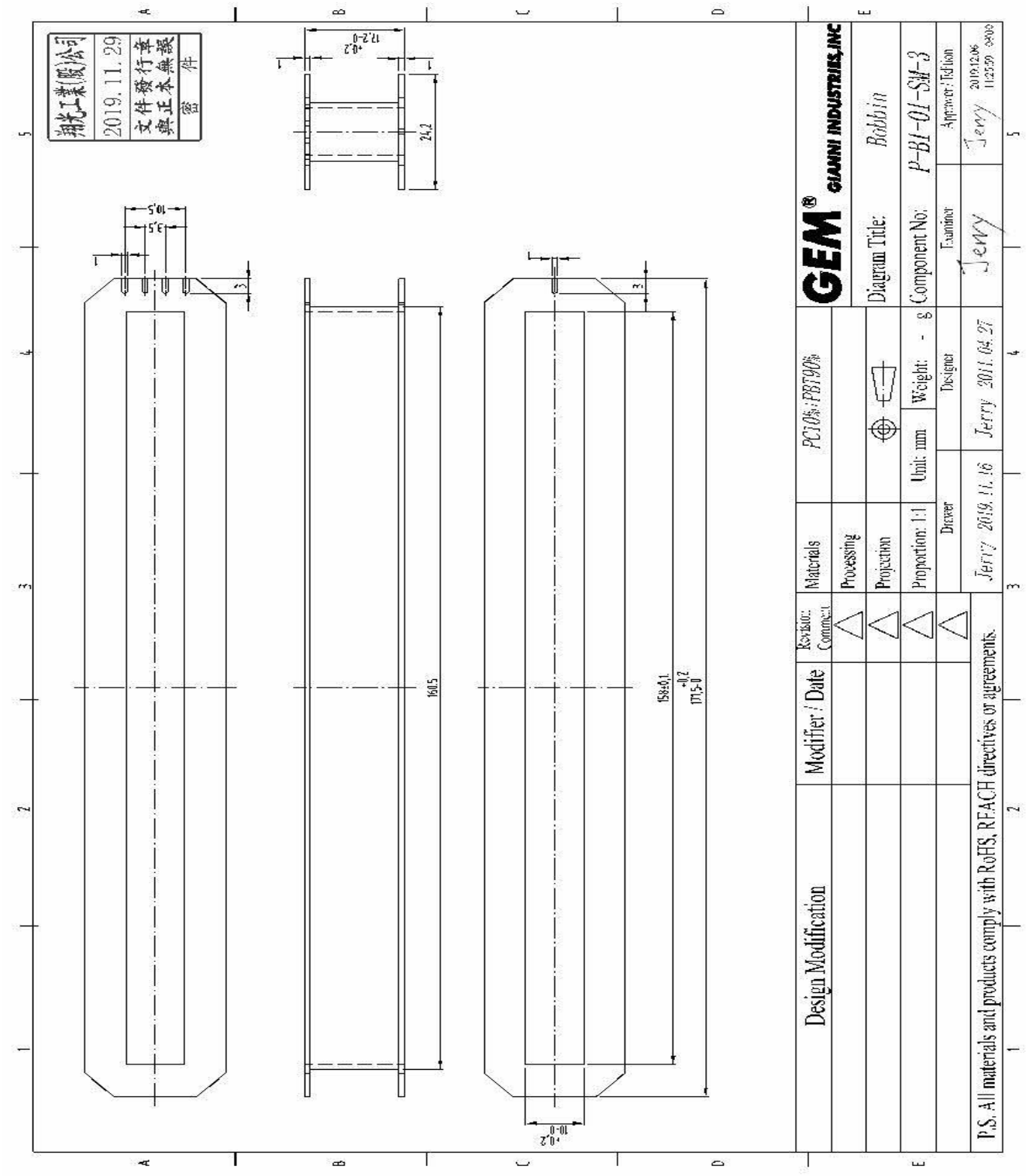
N202092814


GEM GIANNI INDUSTRIES,INC
Diagram Title: Armature plate
Component No: P-AP-01-05-PT-N42
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
SAE1006
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019. 11. 16
Jerry 2019. 09. 09
Jerry 2019.12.06 113107+0800
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019. 12. 06
185±0.1
165
41.5
10
42±0.1
16+0.25 0
7.2
8.8±0.1
7±0.1
ø10.2
ø11
ø16.5
ø9
90°
5
9
6

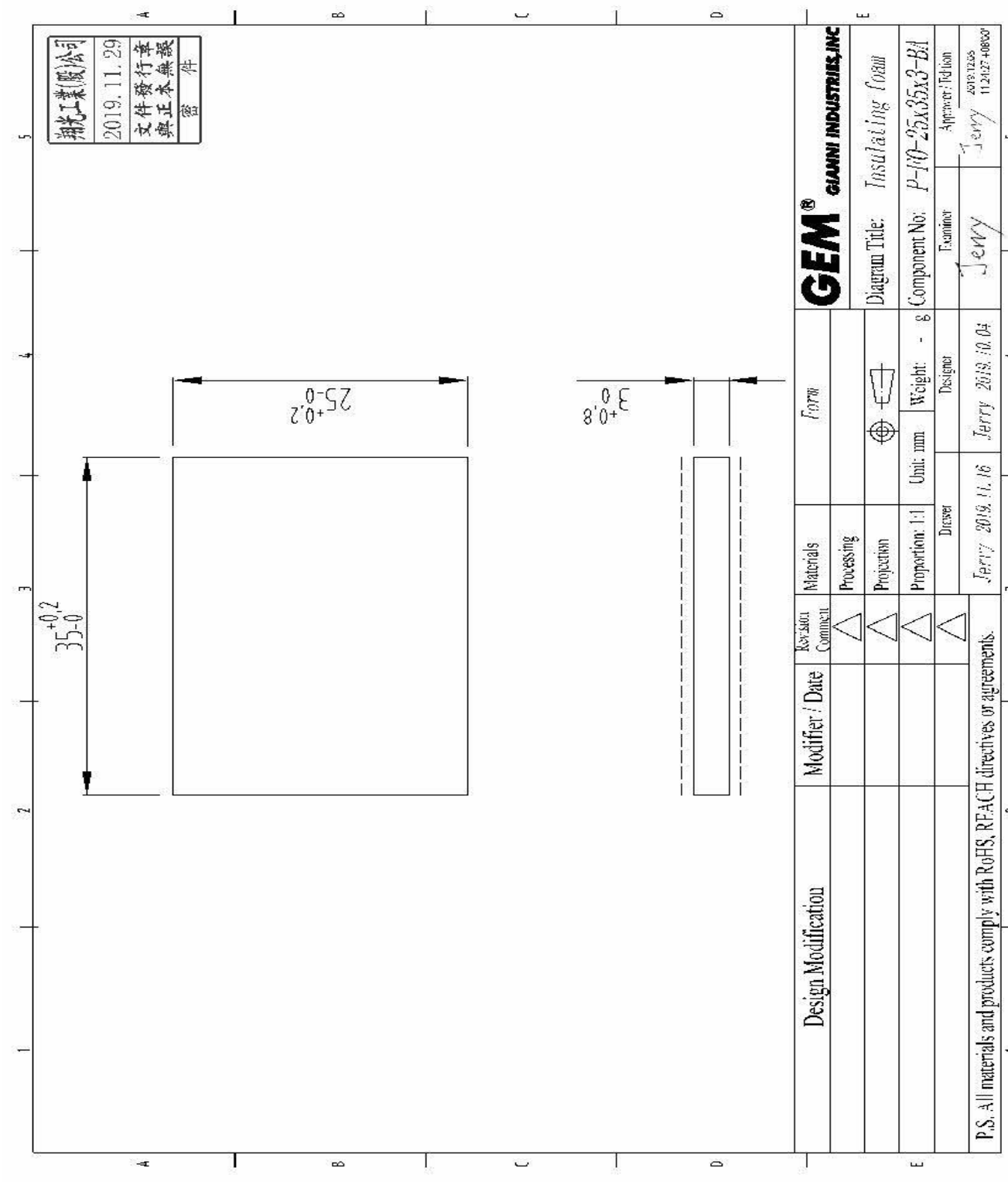
N202092814

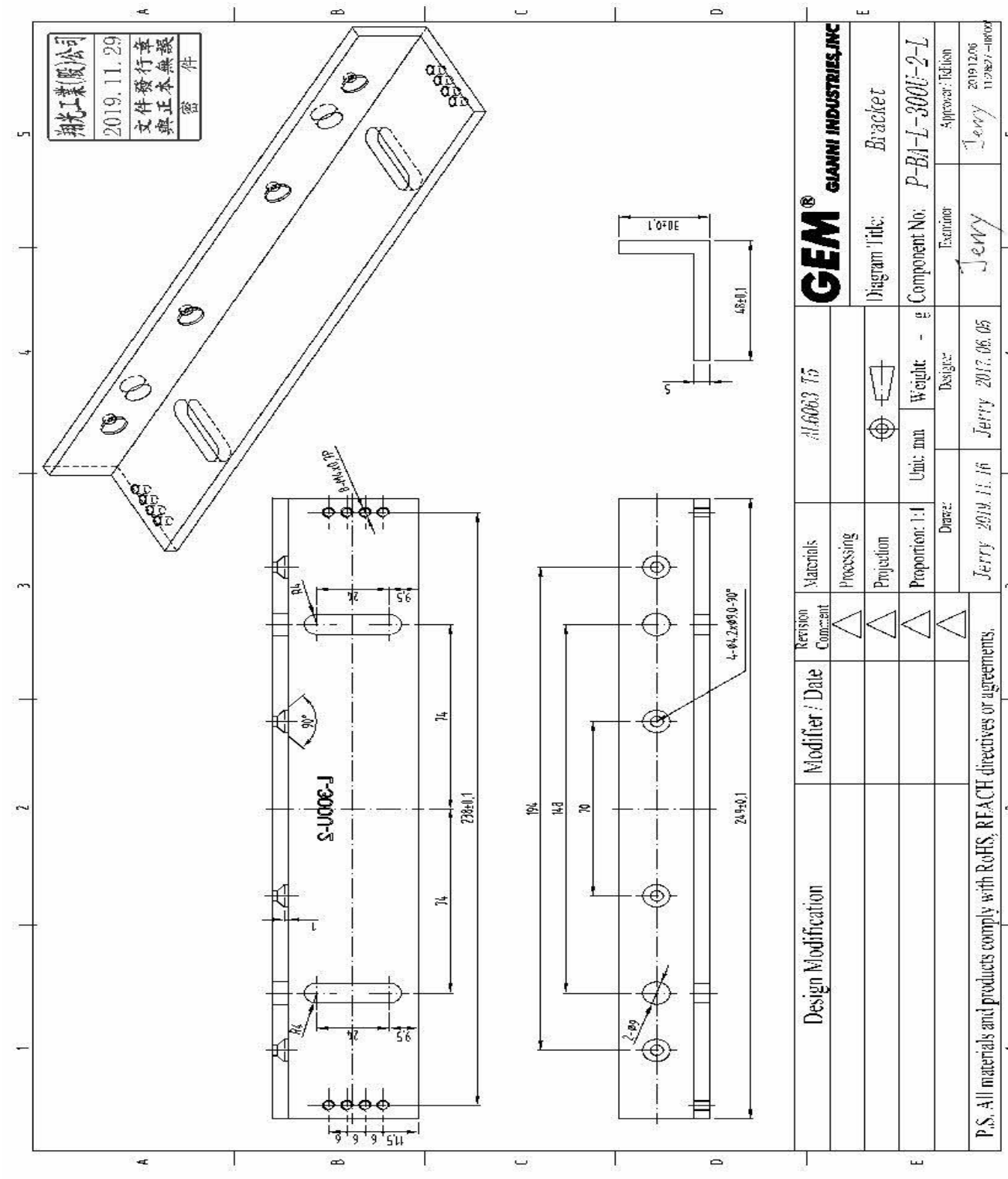

2019.11.29
35
9.6
5
5
20.5
5
7.1
25.5
157±0.5
GEM GIANNI INDUSTRIES,INC
Diagram Title: E-Plate
Component No: S-ET-SM-35x156-N
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.12.06 11:23:50 08:00
Jerry 2019.11.16
Jerry 2011.09.14
P.S. All materials and products comply with RoHS, REACH directives or agreements.

N202092815

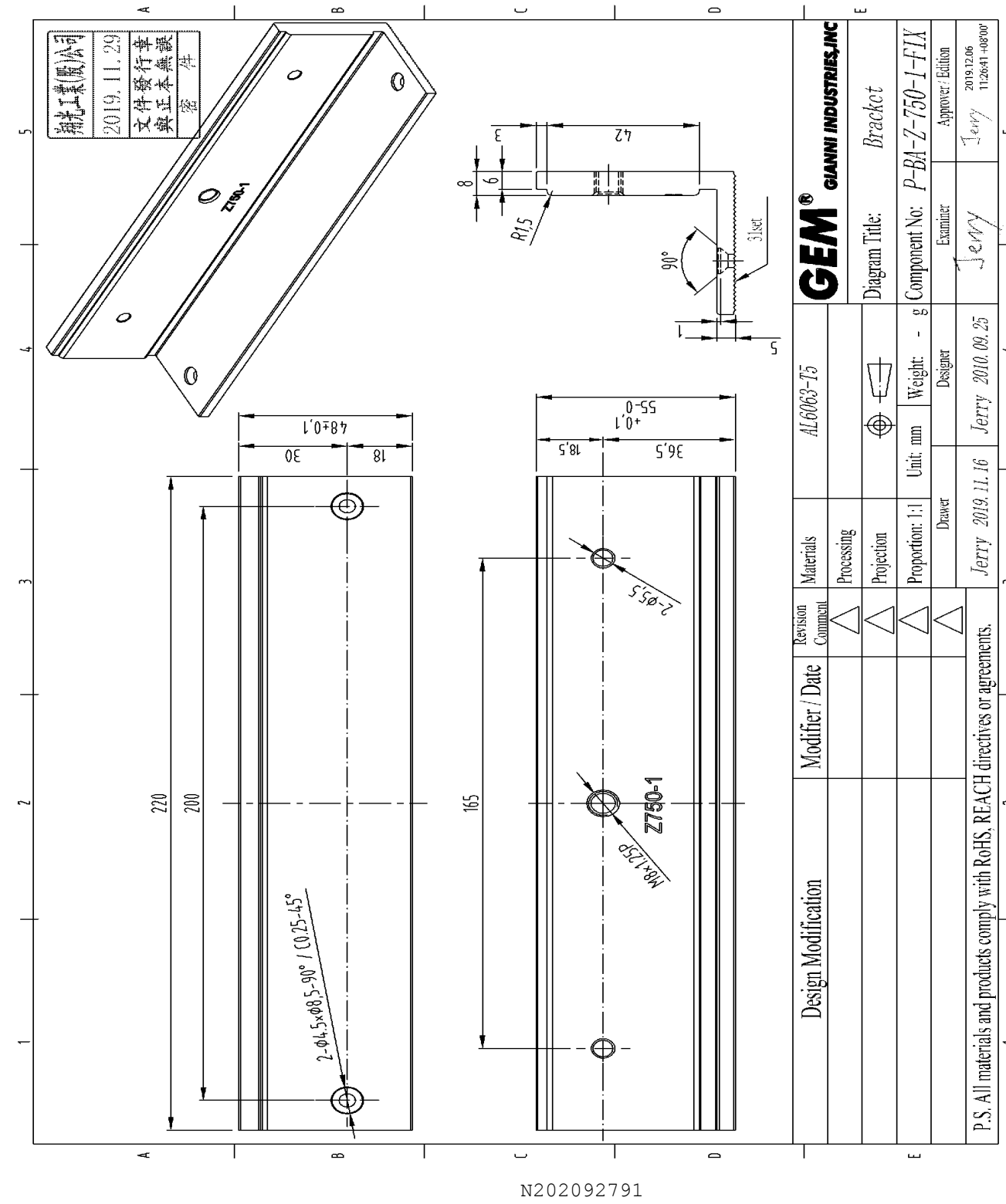

GEM GIANNI INDUSTRIES,INC
Diagram Title: Bobbin
Component No: P-B1-01-SH-3
Material: PC/ABS+PBT/GF%
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver
Jerry 2019.11.16
Jerry 2011.04.27
Jerry
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
160.5
158±0.1
171.5-0.2
10-0.2
12.2-0.2
24.2
3
3.5
10.5

N202092788

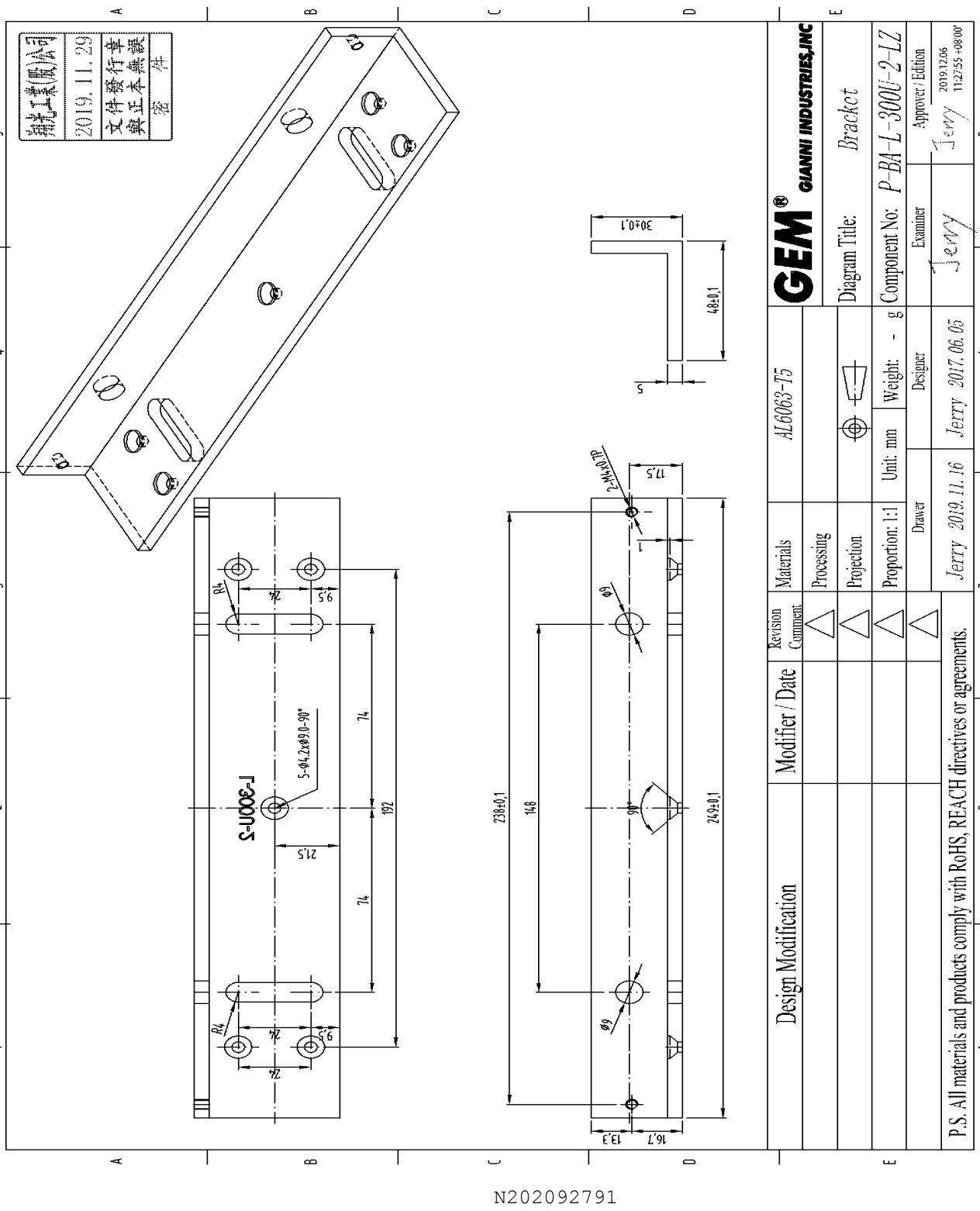

2019.11.29
35+0.2 0
25+0.2 0
3+0.8 0
GEM GIANNI INDUSTRIES,INC
Diagram Title: Insulating foam
Component No: P-HP-25x35x3-Bl
Design Modification
Modifier / Date
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver
Jerry 2019.10.04
Jerry 2019.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.


GEM GIANNI INDUSTRIES,INC
Diagram Title: Bracket
Component No: P-BI-L-300U-2-L
Material: AL6063 T5
Weight: - g
Unit: mm
Proportion: 1:1
Designer
Examiner
Approver
Jerry 2017.06.05
Jerry 2019.11.16
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
8-M4x0.7P
4-Φ4.2xΦ8.0-90°
2-Φ9
P-300U-2
238±0.1
249±0.1
48±0.1
194
143
70
74
115
L'O'FDE

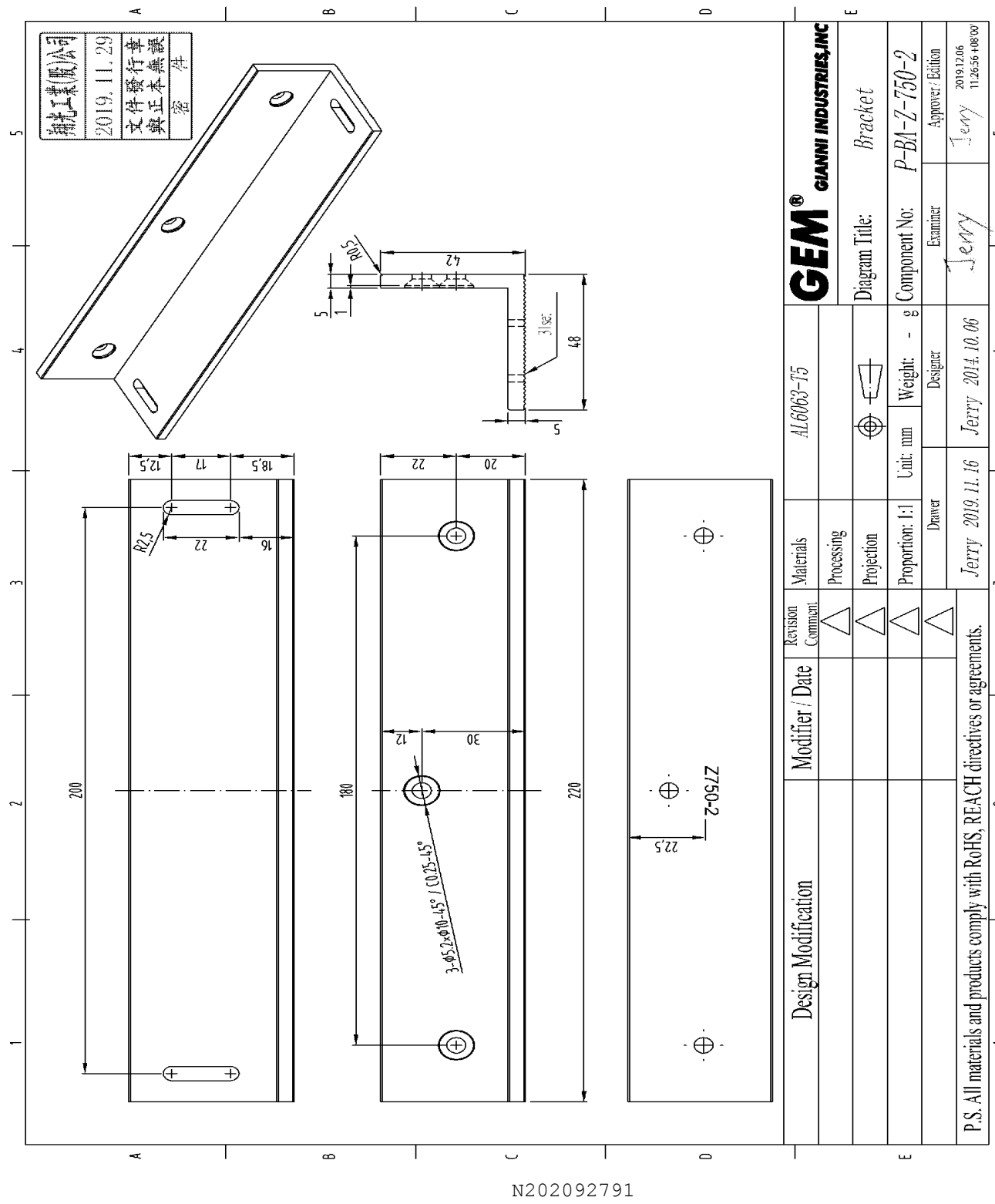
N202092790

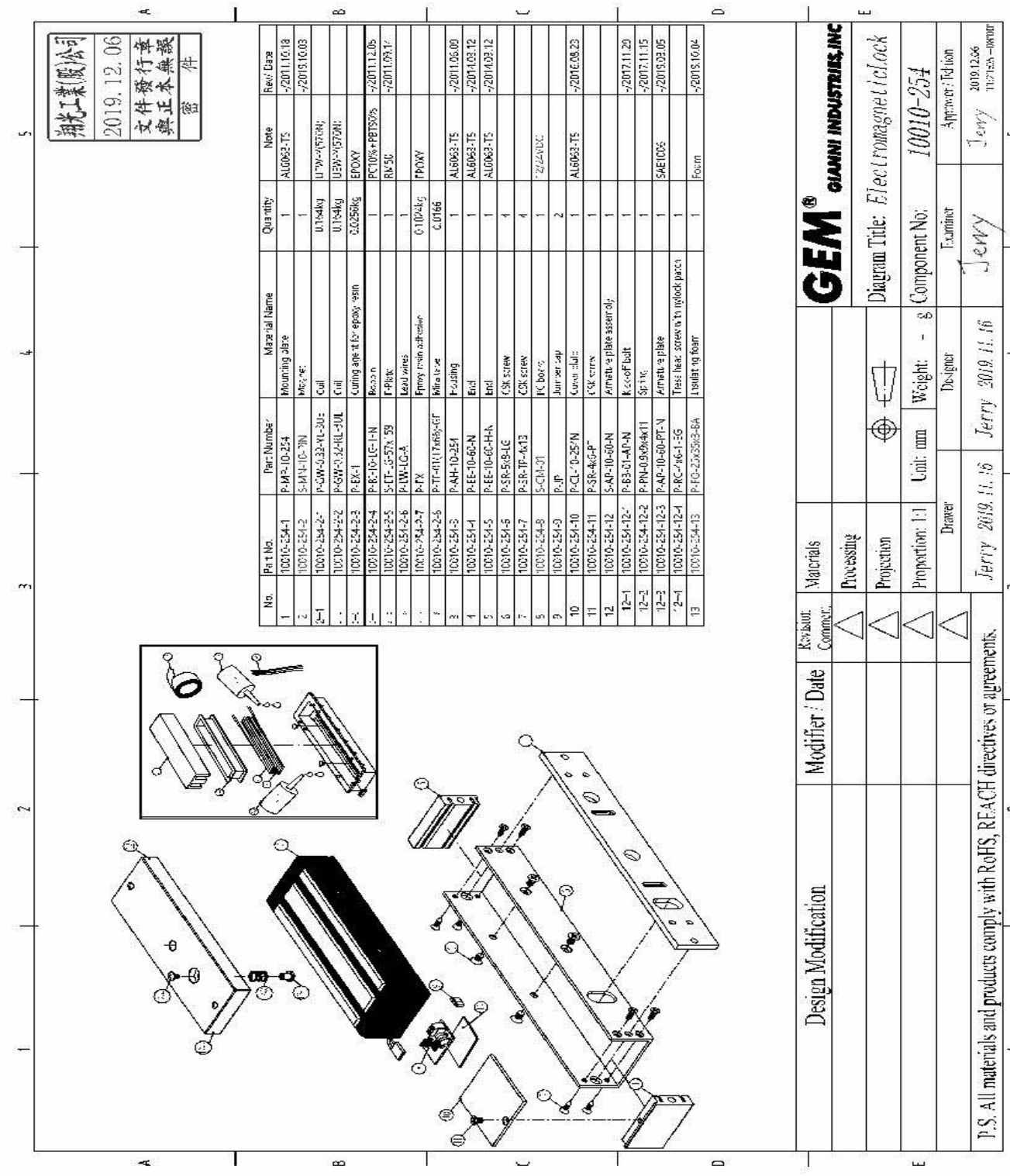

GEM GIANNI INDUSTRIES,INC
Diagram Title: Bracket
Component No: P-BA-Z-750-1-FIX
Materials AL6063-T5
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Designer
Examiner
Approver/ Edition
Drawer
Jerry 2019.11.16
Jerry 2010.09.25
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
220
200
165
48±0.1
30
18
36.5
18.5
55-0 +0.1
2-Φ4.5×Φ8.5-90° / C0.25-45°
2-Φ5.5
M8×1.25P
Z750-1
42
3
6
8
R1.5
90°
3.5±1
5

N202092791


GEM GIANNI INDUSTRIES,INC
Diagram Title: Bracket
Component No: P-BA-L-300i-2-LZ
AL6063-T5
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
Jerry 2017.06.05
Jerry
2019.12.06 11:27:55 +08'00'
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
5-Φ4.2xΦ9.0-90°
2-M4x0.7P
Φ9
Φ9
R4
R4
9.5
9.5
74
74
74
192
21.5
17.5
30±0.1
48±0.1
5
230±0.1
148
249±0.1
13.3
16.7
90°

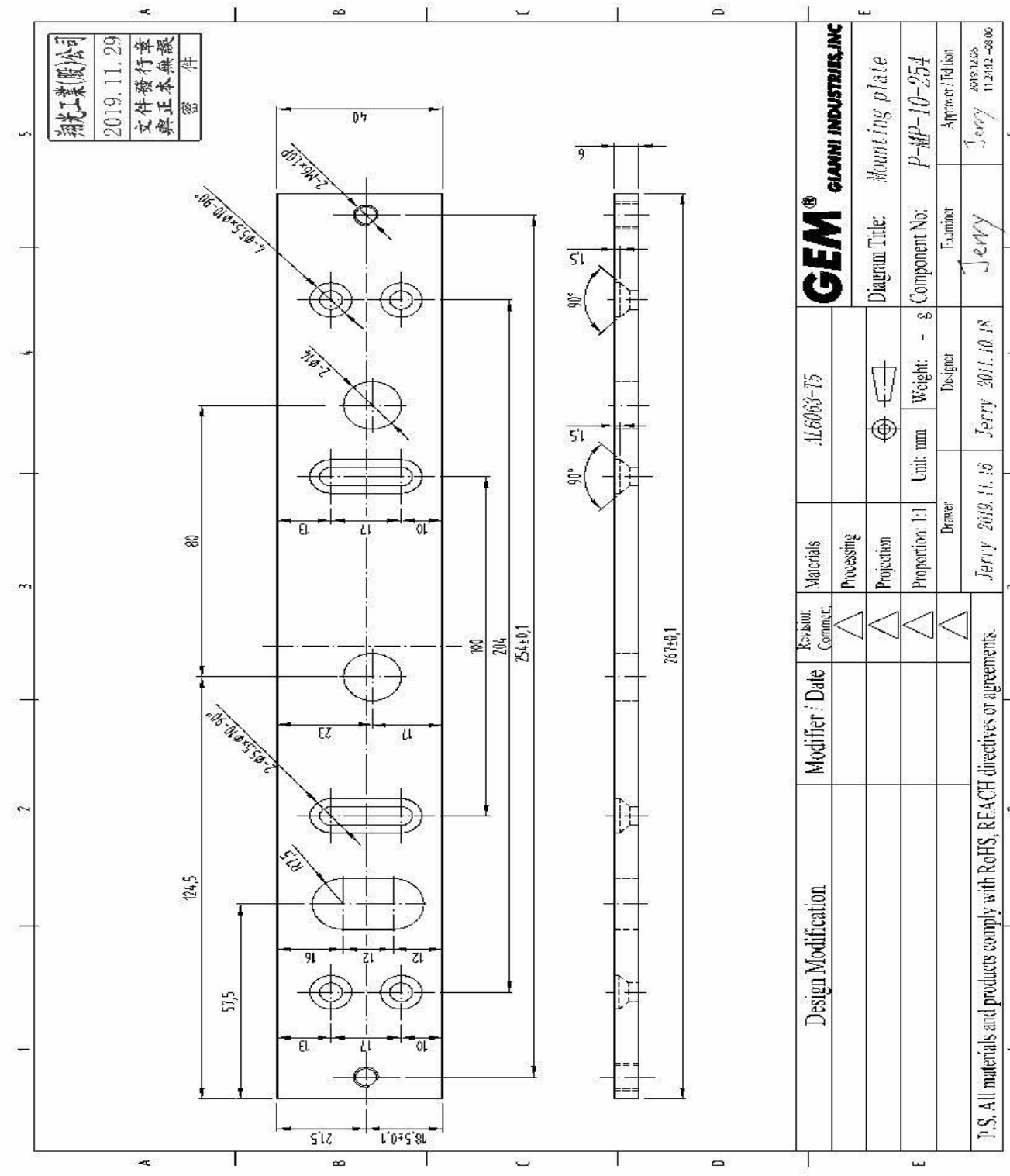
N202092791


2019.11.29
文件發行章
與正本無誤
GEM GIANNI INDUSTRIES,INC
Diagram Title: Bracket
Component No: P-BA-Z-750-2
Materials AL6063-T5
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer Jerry 2014.10.06
Examiner Jerry
Approver / Edition Jerry 2019.12.06
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
Jerry 2019.11.16
Z750-2
200
180
220
42
48
5
1
R0.5
3-Φ5.2×Φ10-45° / C0.25-45°
R2.5
12.5
17
18.5
16
22
20
30
12
22.5

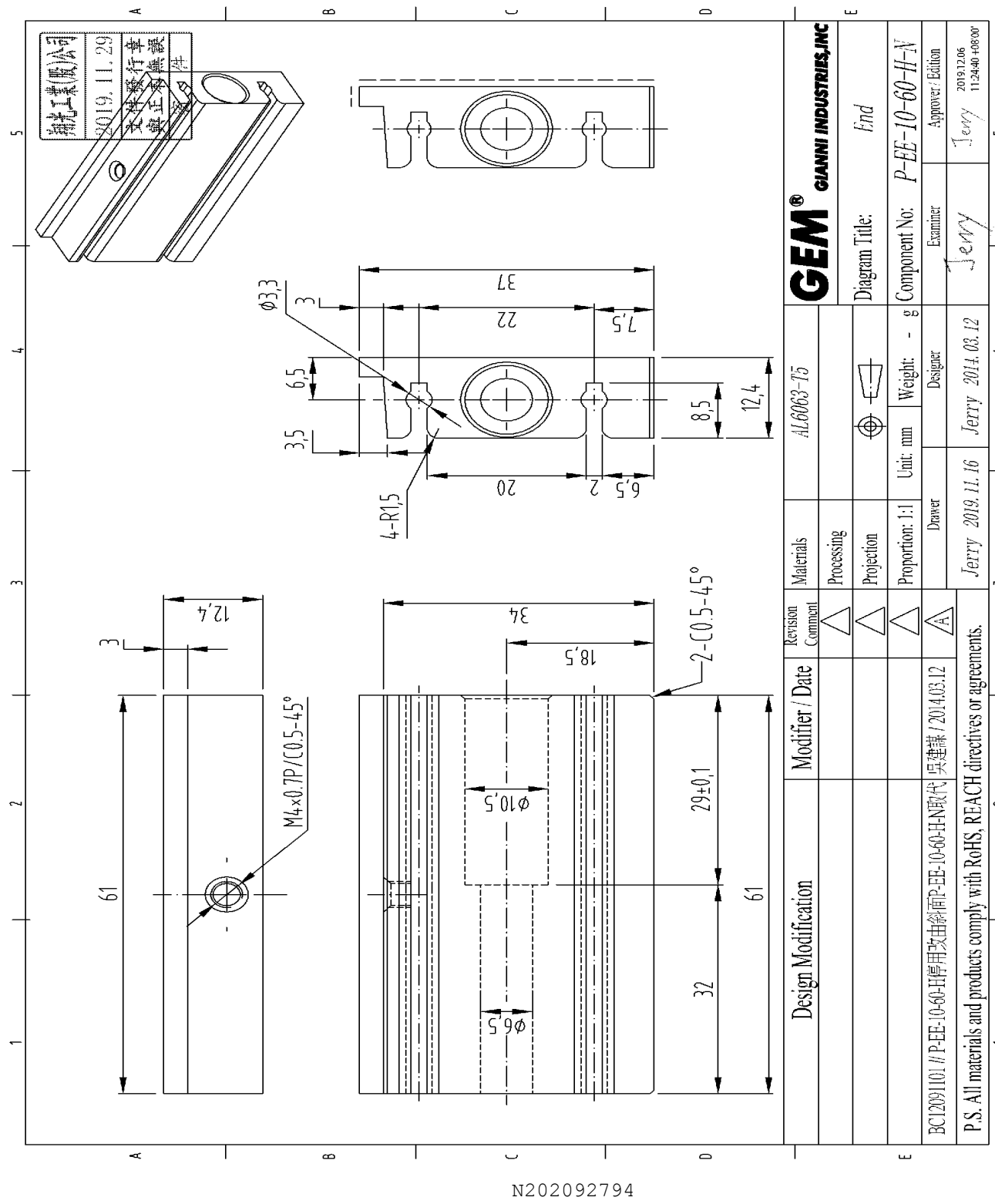


No.	Part No.	Part Number	Material Name	Quantity	Note	Revi Date
1	10010-254-1	P-MP-10-254	Mounting plate	1	AL6063-T5	-/2011.10.18
2	10010-254-2	S-M4-10-3N	Washer	1		-/2019.10.03
2-1	10010-254-2-1	P-CW-0.32-YL-30±	Coil	U.1644kg	U.TW-0.45/YL/N	
-	10010-254-2-2	P-CW-0.32-RL-30±	Coil	U.164kg	U.RW-0.45/RL/N	
-	10010-254-2-3	P-EX-1	Curing agent for epoxy resin	0.02568kg	EPOXY	
-	10010-254-2-4	P-BC-10-LC-1-N	Bobbin	1	PC10%+PBT90%	-/2011.12.05
-	10010-254-2-5	S-CT-...-57± 59	T-Plate	1	RW-5C	-/2011.09.17
-	10010-251-2-6	P-LW-LC-A	Lead wires	1		
-	10010-254-2-7	P-FX	Epoxy resin adhesive	0.1024kg	EPOXY	
-	10010-254-2-8	P-TF-01/17x68-6F	Mica sheet	0.0166		
3	10010-251-3	P-AH-10-251	H-Casing	1	AL6063-T5	-/2011.06.09
4	10010-251-4	P-EE-10-60-N	End	1	AL6063-T5	-/2011.03.12
5	10010-254-5	P-EE-10-60-HA	End	1	AL6063-T5	-/2011.03.12
6	10010-251-6	P-SR-5x8-LE	CSK screw	4		
7	10010-251-7	P-SR-TP-4x13	CSK screw	4		
8	10010-254-8	S-CM-01	PC board	1	ZY1240DC	
9	10010-254-9	P-JP	Jumper cap	2		
10	10010-251-10	P-CL-...0-25?N	Curved slut	1	AL6063-T5	-/2016.08.23
11	10010-254-11	P-SR-4x6-PT	CSK screw	1		
12	10010-251-12	S-AP-10-60-N	Armature plate assembly	1		
12-1	10010-251-12-1	P-B3-01-AT-N	Rubber Butt	1		-/2017.11.20
12-2	10010-254-12-2	P-PN-0.9x9x11	Spring	1		-/2017.11.15
12-3	10010-254-12-3	P-AP-10-60-PT-N	Armature plate	1	SAE1005	-/2019.03.05
12-4	10010-254-12-4	P-RC-...x6-1-55	Trasc head screw with nylock patch	1		
13	10010-254-13	P-FO-20x35x3-BA	Insulating foam	1	Foam	-/2019.10.04

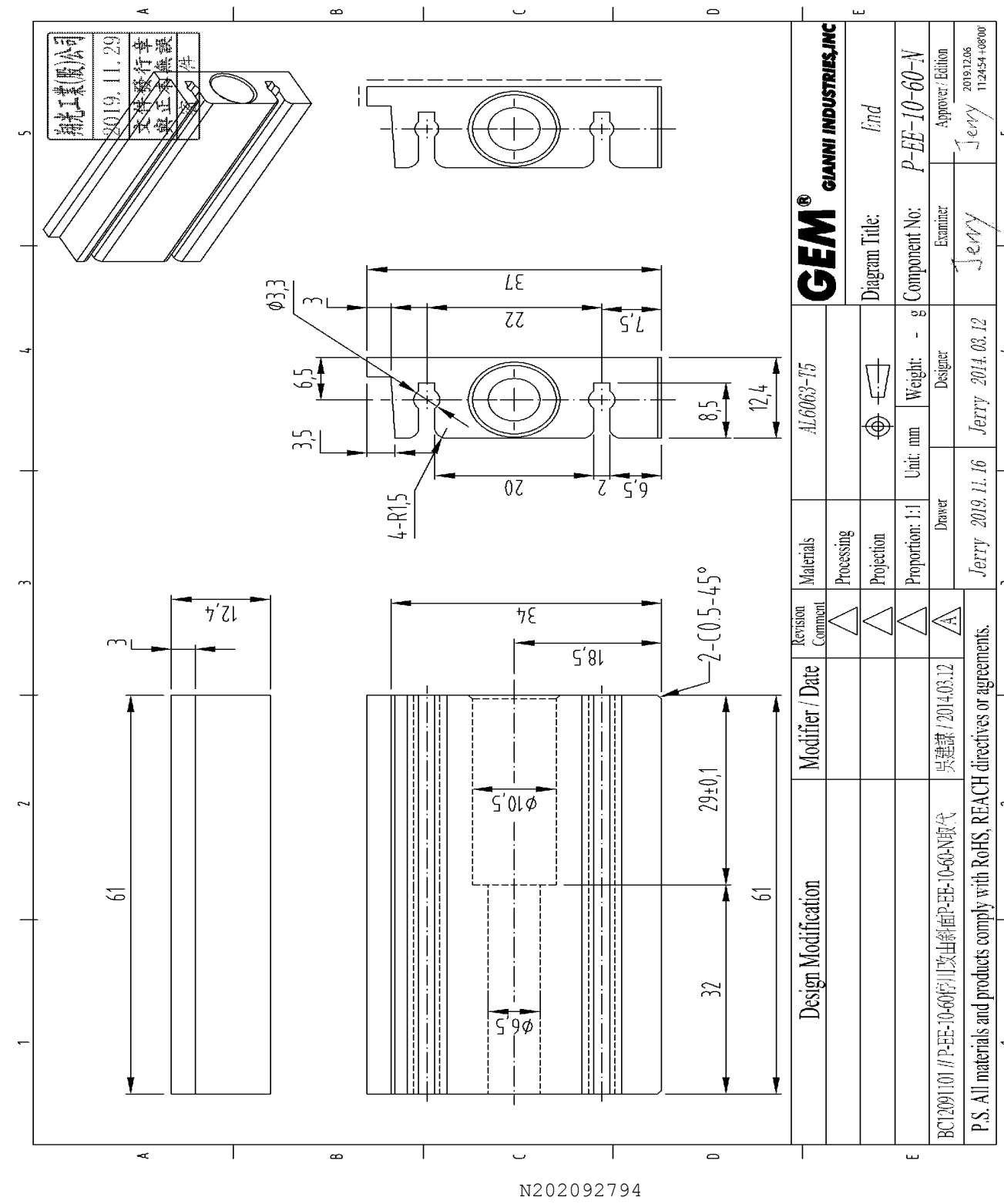
N202092792


GEM GIANNI INDUSTRIES,INC
Diagram Title: Mounting plate
Component No: P-MP-10-254
Material: AL6063-T5
Weight: - g
Unit: mm
Proportion: 1:1
Design Modification
Modifier / Date
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
文件發行章與正本無誤
密件

N202092793


GEM GIANNI INDUSTRIES,INC
Diagram Title: End
Component No: P-EE-10-60-H-N
Materials AL6063-T5
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer Jerry 2014.03.12
Examiner Jerry
Approver/ Edition Jerry 2019.12.06
Design Modification
Modifier / Date
Revision Comment
BC12091101 // P-EE-10-60-H停用改由斜面P-EE-10-60-H-N取代 吳建謀 / 2014.03.12
P.S. All materials and products comply with RoHS, REACH directives or agreements.
M4x0.7P/C0.5-45°
2-C0.5-45°
4-R1,5
Ø3,3
Ø10,5
Ø6,5
12,4
3
61
34
18,5
29±0,1
32
37
22
7,5
6,5
3,5
20
2
6,5
8,5

N202092794


GEM GIANNI INDUSTRIES,INC
Diagram Title: Find
Component No: P-EE-10-60-N
Material: AL6063-T5
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Designer
Examiner
Approver/ Edition
Drawer
Jerry 2019.11.16
Jerry 2014.03.12
Jerry 2019.12.06
Design Modification
Modifier / Date
Revision Comment
BC12091101 // P-EE-10-60外川改由斜面P-EE-10-60-N版令
吴建赋 / 2014.03.12
P.S. All materials and products comply with RoHS, REACH directives or agreements.
37
22
7,5
3
Φ3,3
6,5
3,5
4-R1,5
20
2
6,5
8,5
12,4
34
18,5
2-C0.5-45°
12,4
3
61
Φ10,5
29±0,1
61
32
Φ6,5

N202092794

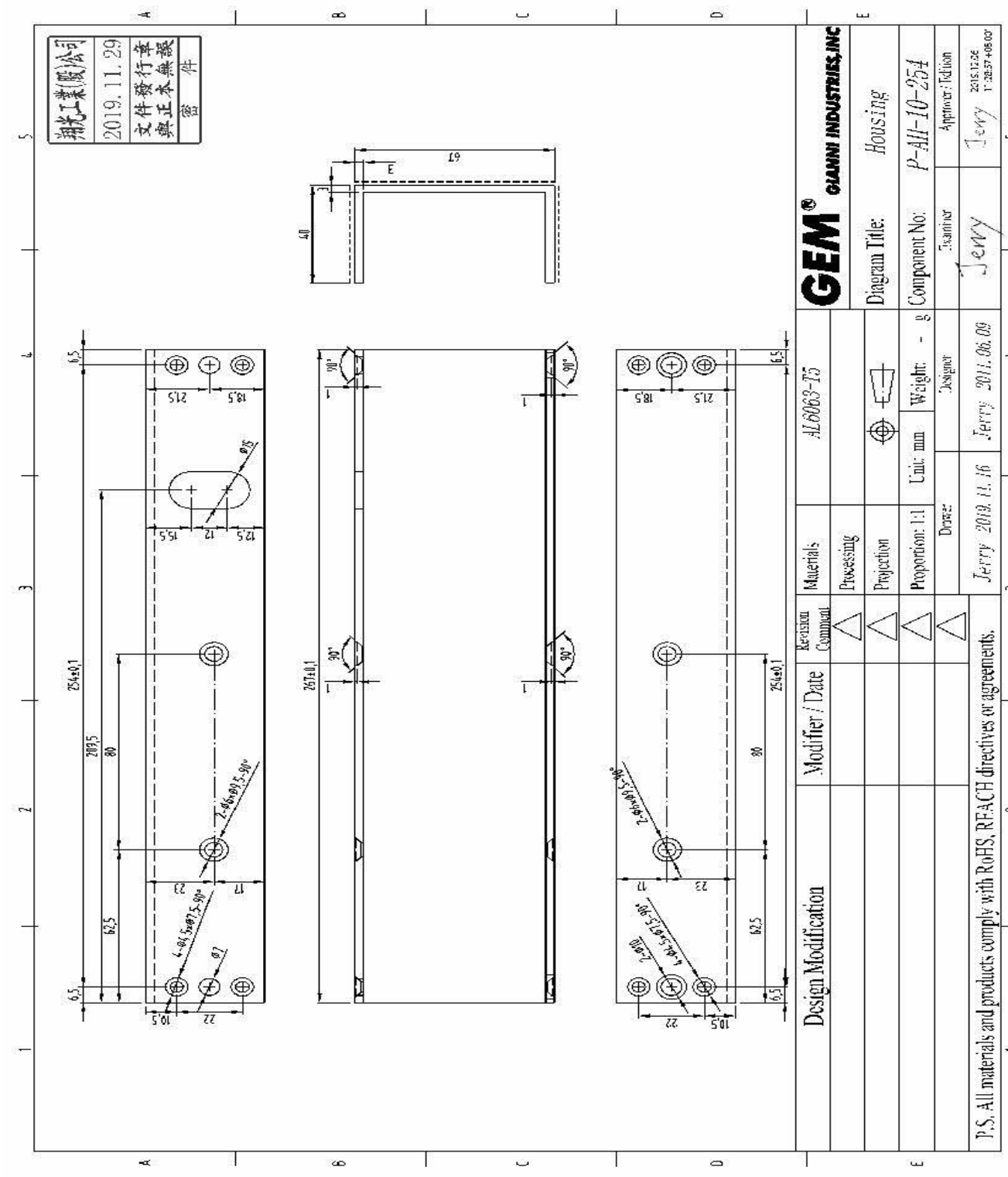

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Diagram Title: Housing
Component No: P-AH-10-254
Material: AL6063-T5
Weight: - g
Unit: mm
Proportion: 1:1
Projection
Designer
Drawer
Jerry 2019.11.16
Jerry 2011.06.09
Design Modification
Modifier / Date
Revision Command
P.S. All materials and products comply with RoHS, REACH directives or agreements.

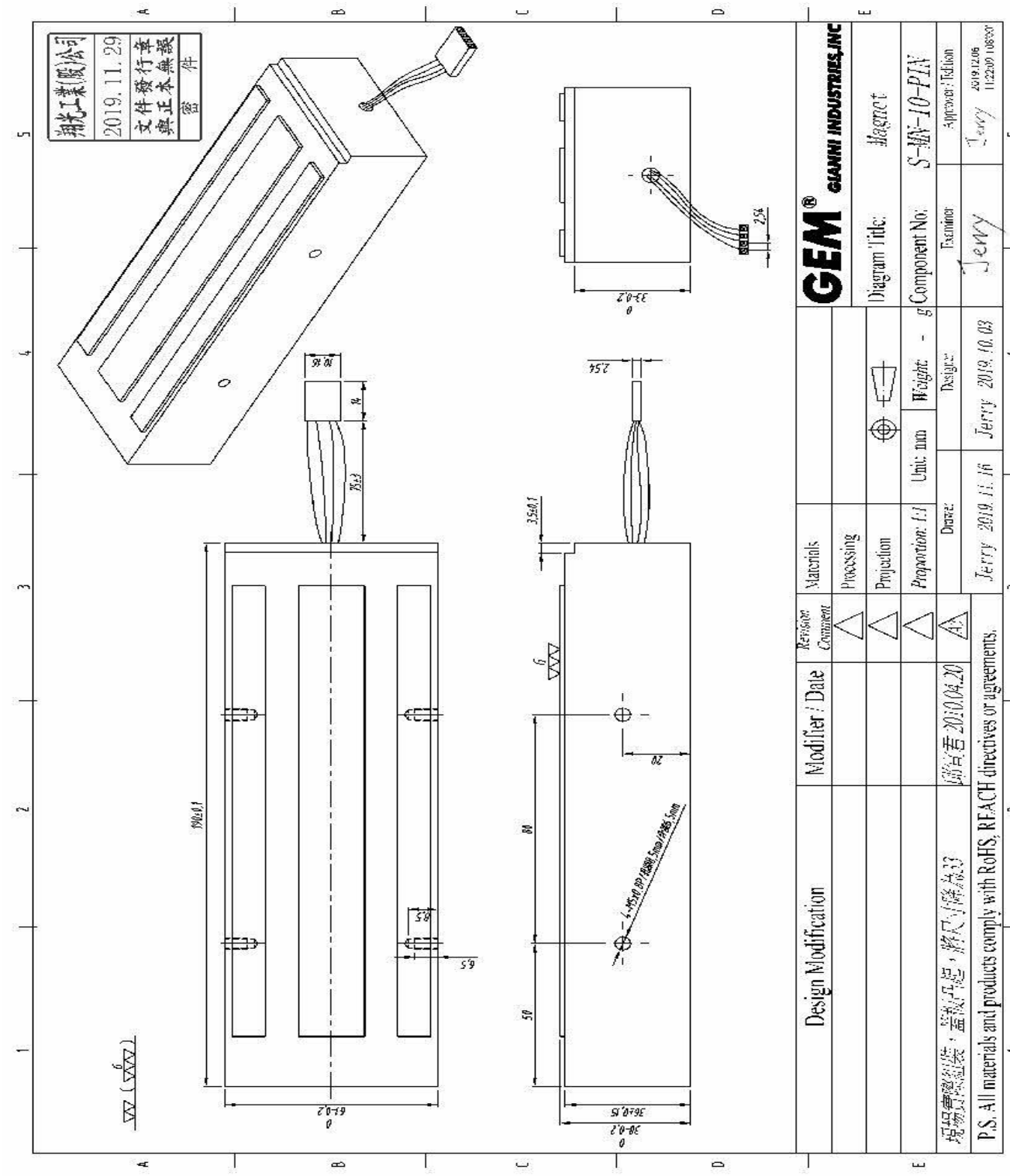
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Diagram Title: Magnet
Component No: S-MW-10-PIN
Material
Processing
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Proportion: 1:1
Unit: mm
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Designer
Examiner
Approver / Edition
Jerry 2019.10.03
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Design Modification
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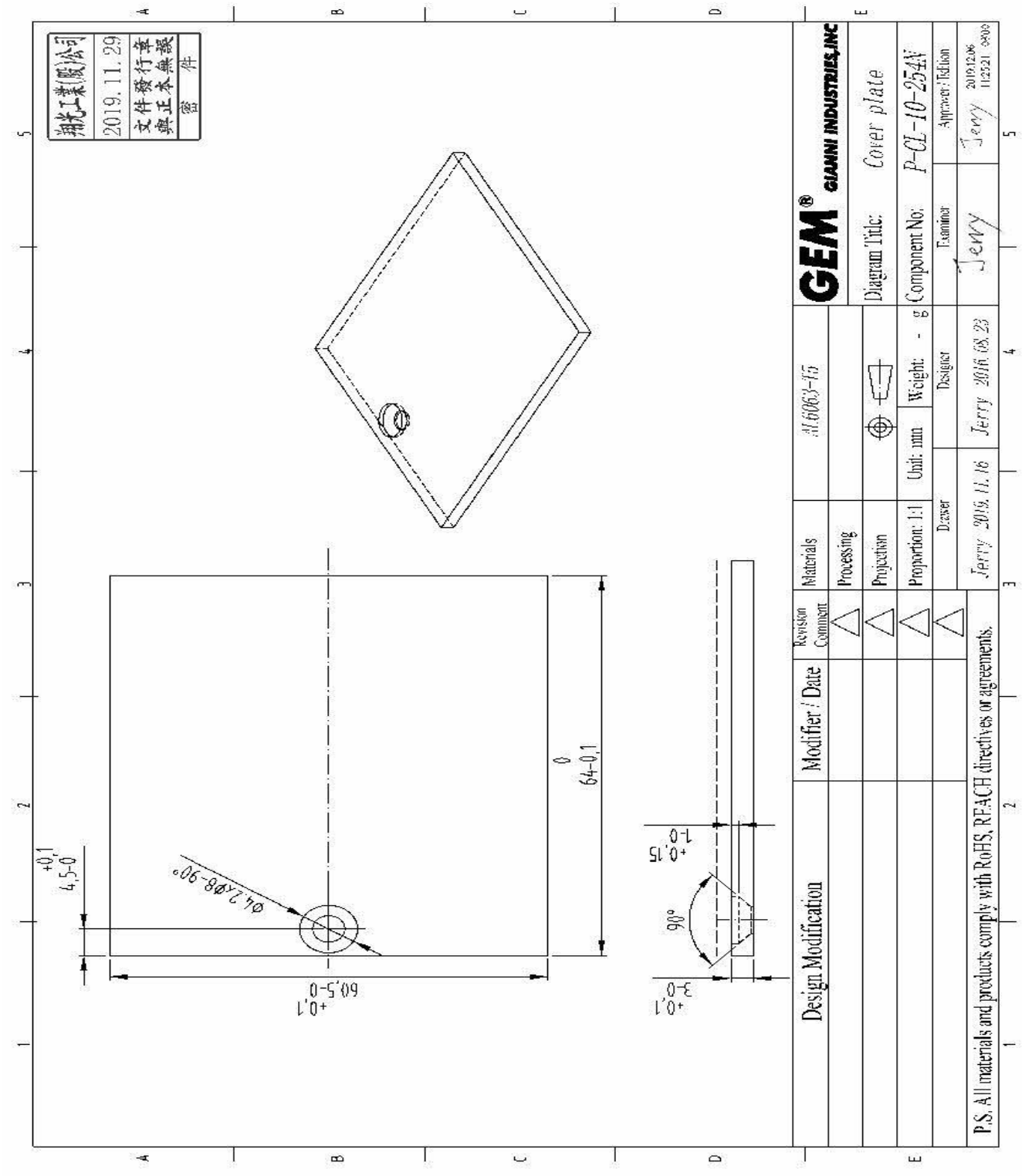
Revision Comment
All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29

N202092796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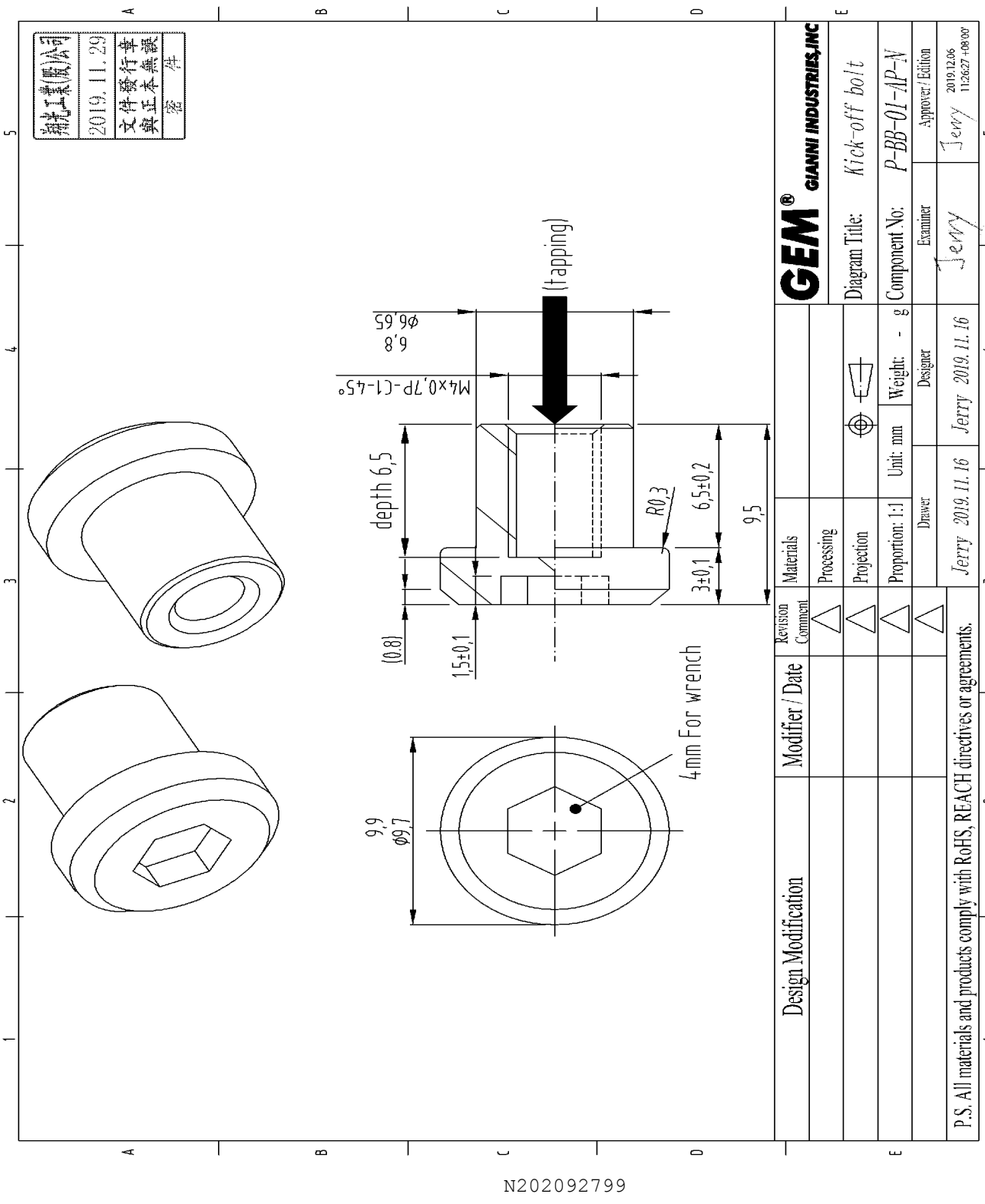
Material: AL6063-T5
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2016.05.23
Jerry 2016.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
Ø64-0,1
90°
Ø4,2x08-90°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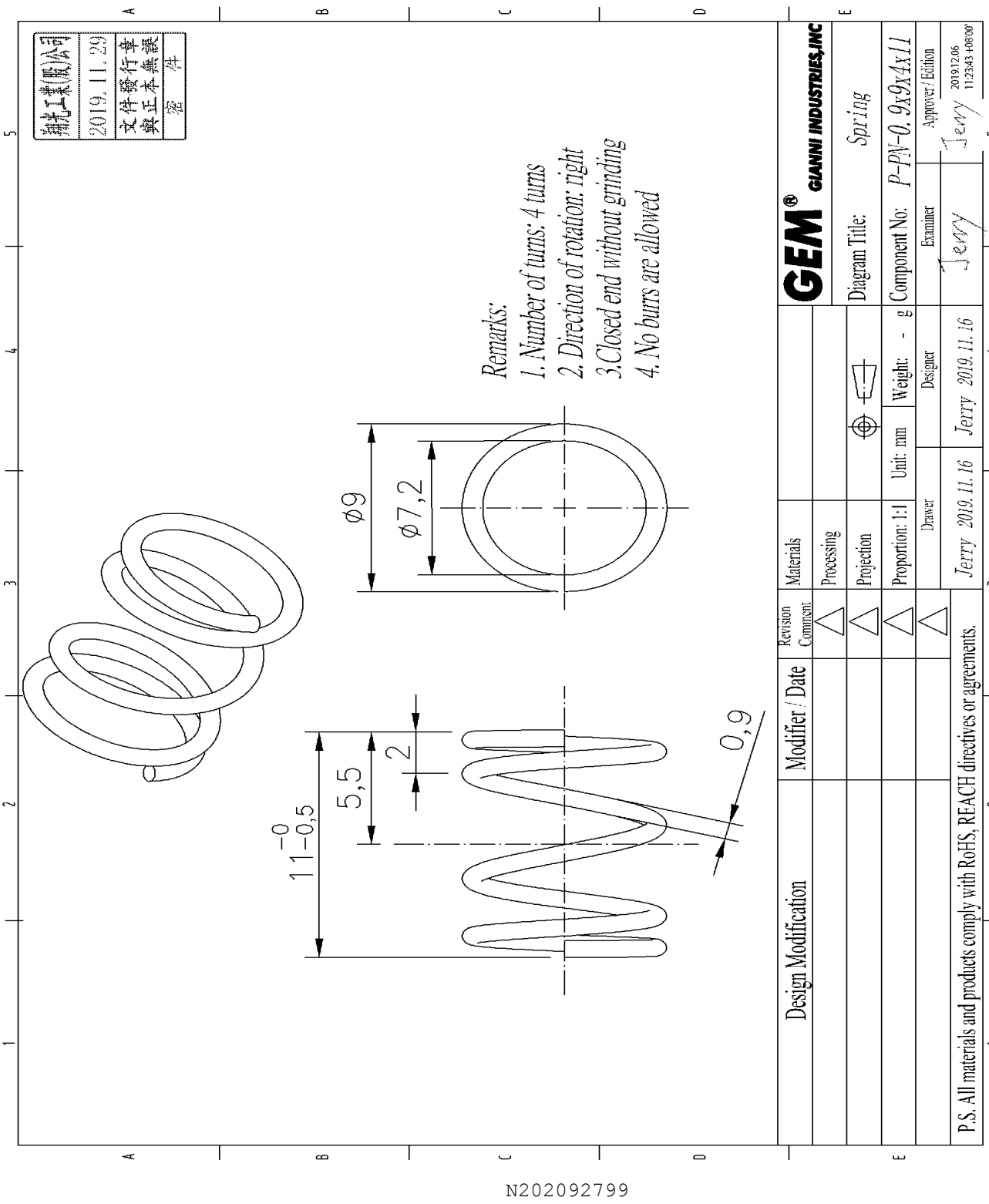
M4x0.7P-C1-45°
6.8
ϕ6.65
depth 6,5
(0.8)
1,5±0,1
R0.3
3±0,1
6,5±0,2
9,5
9,9
ϕ9,7
4mm For wrench
GEM GIANNI INDUSTRIES,INC
Diagram Title: Kick-off bolt
Component No: P-BB-01-AP-N
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
Jerry 2019.12.06 11:26:27 +08'00'
P.S. All materials and products comply with RoHS, REACH directives or agreements.

N202092799


Remarks:
1. Number of turns: 4 turns
2. Direction of rotation: right
3.Closed end without grinding
4. No burns are allowed
ø9
ø7,2
11-0,5
5,5
2
0,9
GEM GIANNI INDUSTRIES,INC
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Diagram Title: Spring
Component No: P-PN-0.9x9x4x11
Proportion: 1:1
Unit: mm
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Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.

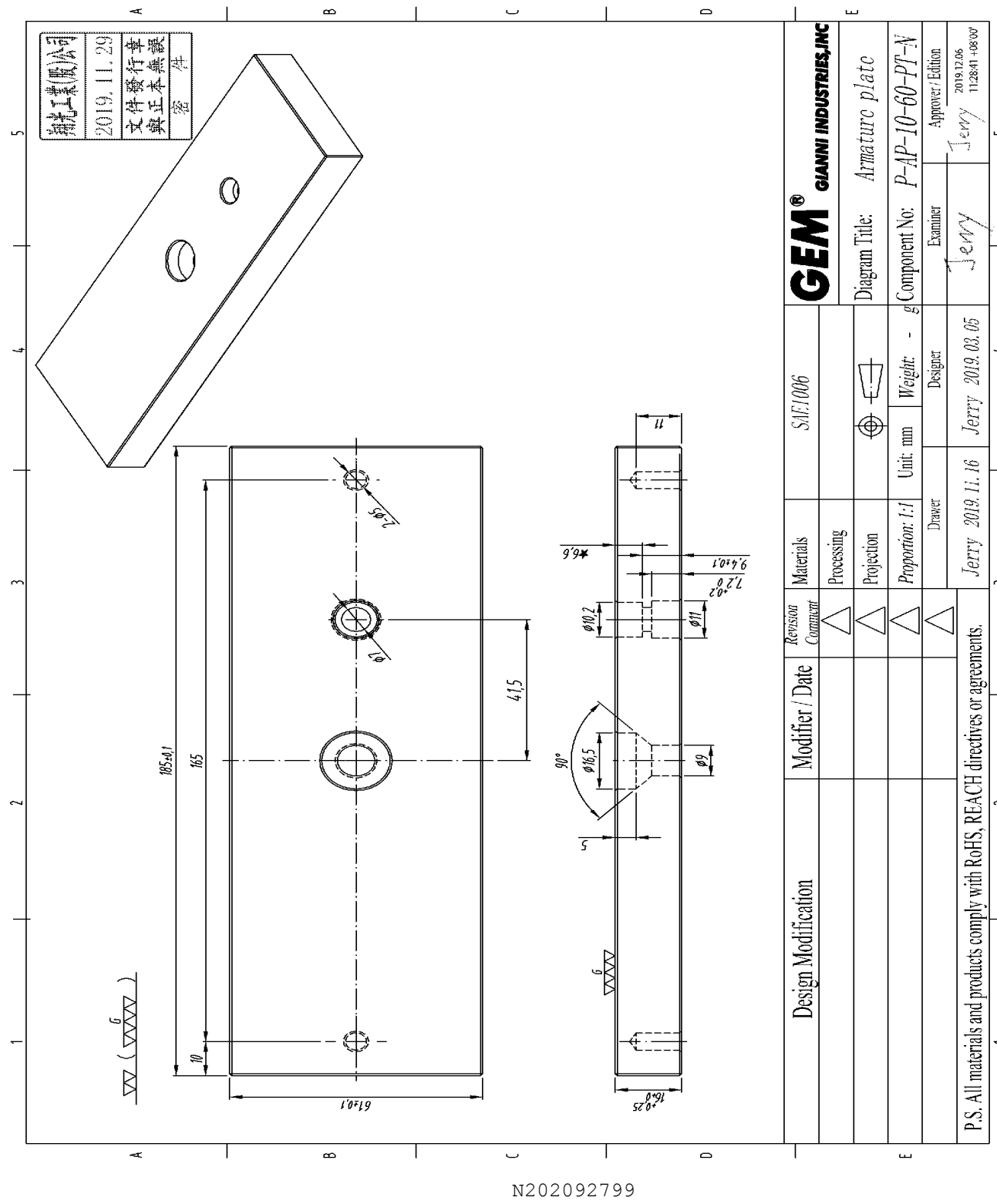
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Diagram Title: Armature plate
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SAE1006
Processing
Projection
Unit: mm
Weight: - g
Proportion: 1:1
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019. 03. 05
Jerry 2019. 11. 16
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019. 11. 29
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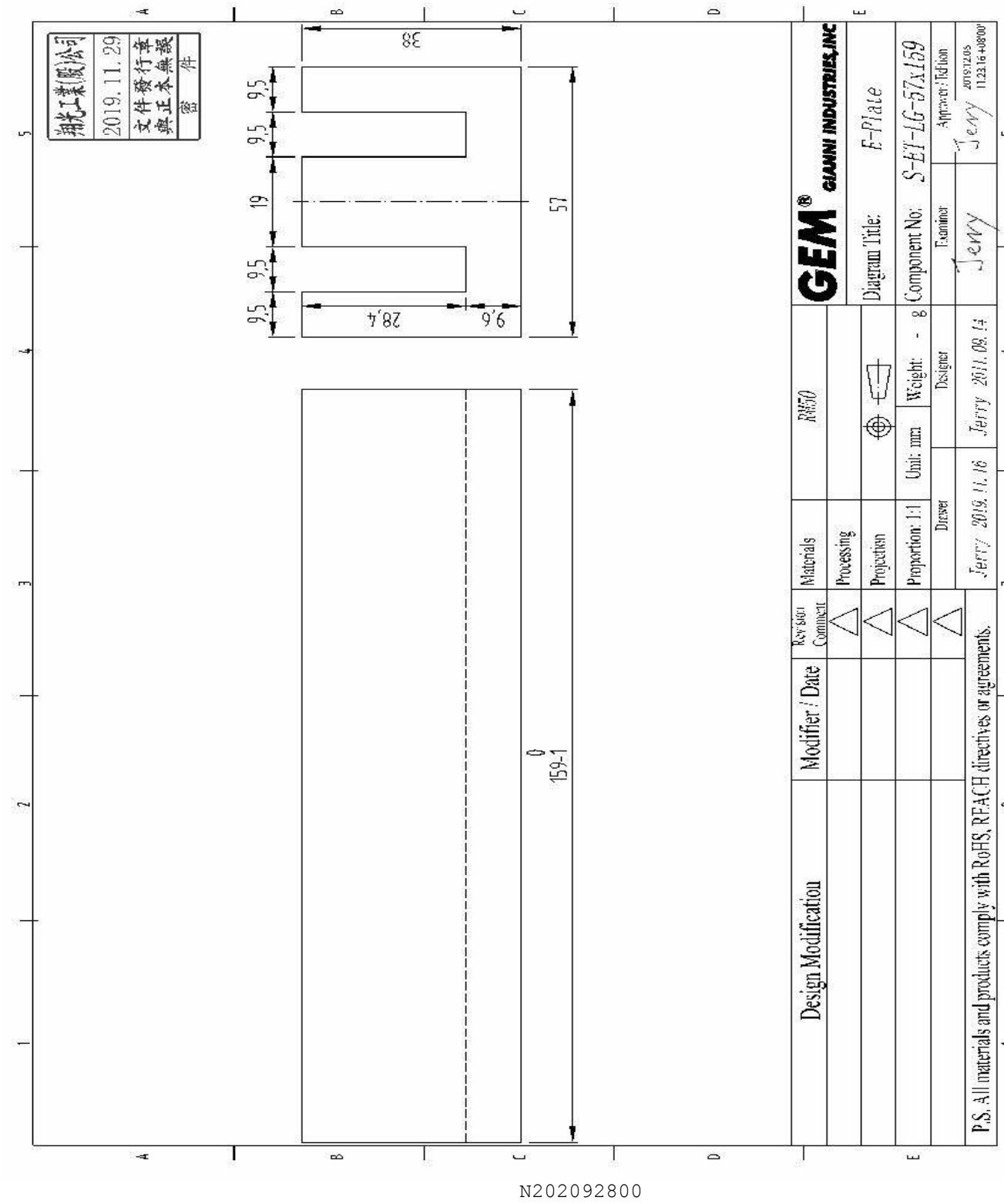
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9.6
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Diagram Title: E-Plate
Component No: S-EI-LG-57x159
Design Modification
Modifier / Date
Materials
Processing
Projection
Proportion: 1:1
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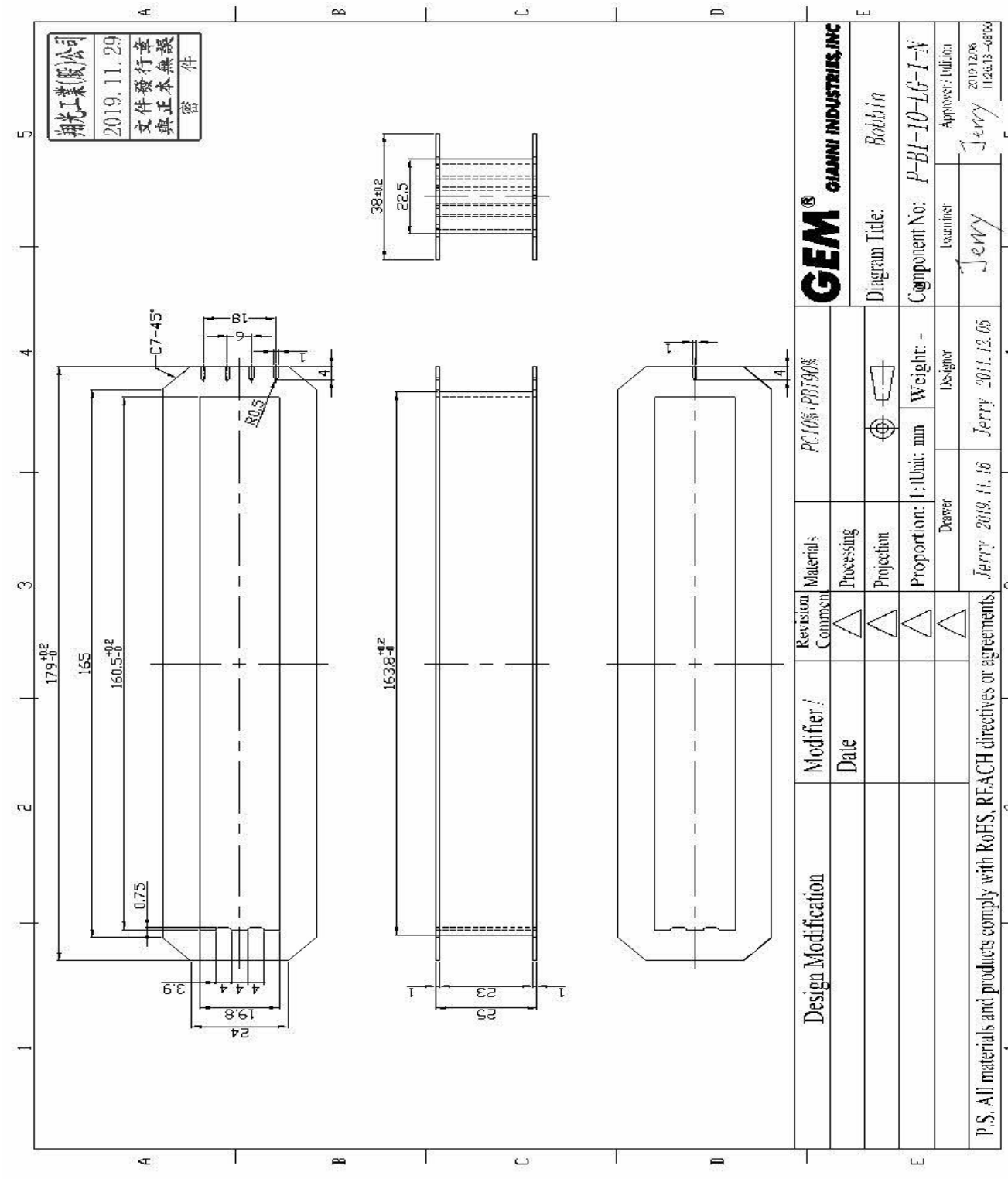
Weight: - g
Drawer
Designer
Examiner
Approver
P.S. All materials and products comply with RoHS, REACH directives or agreements.

N202092800


GEM GIANNI INDUSTRIES,INC
Diagram Title: Bobbin
Component No: P-B1-10-LG-1-N
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Proportion: 1:1Unit: mm
Design Modification
Modifier:
Date
Revision Comment
Materials
Processing
Projection
Drawer
Designer
Examiner
Approver: Edition
Jerry 2019.11.16
Jerry 2011.12.05
Jerry
2019/12/06
11:26:13 +08'00'
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
文件發行章
與正本無誤
密 件
C7-45°
R0.5
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179+0.2
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N202092801

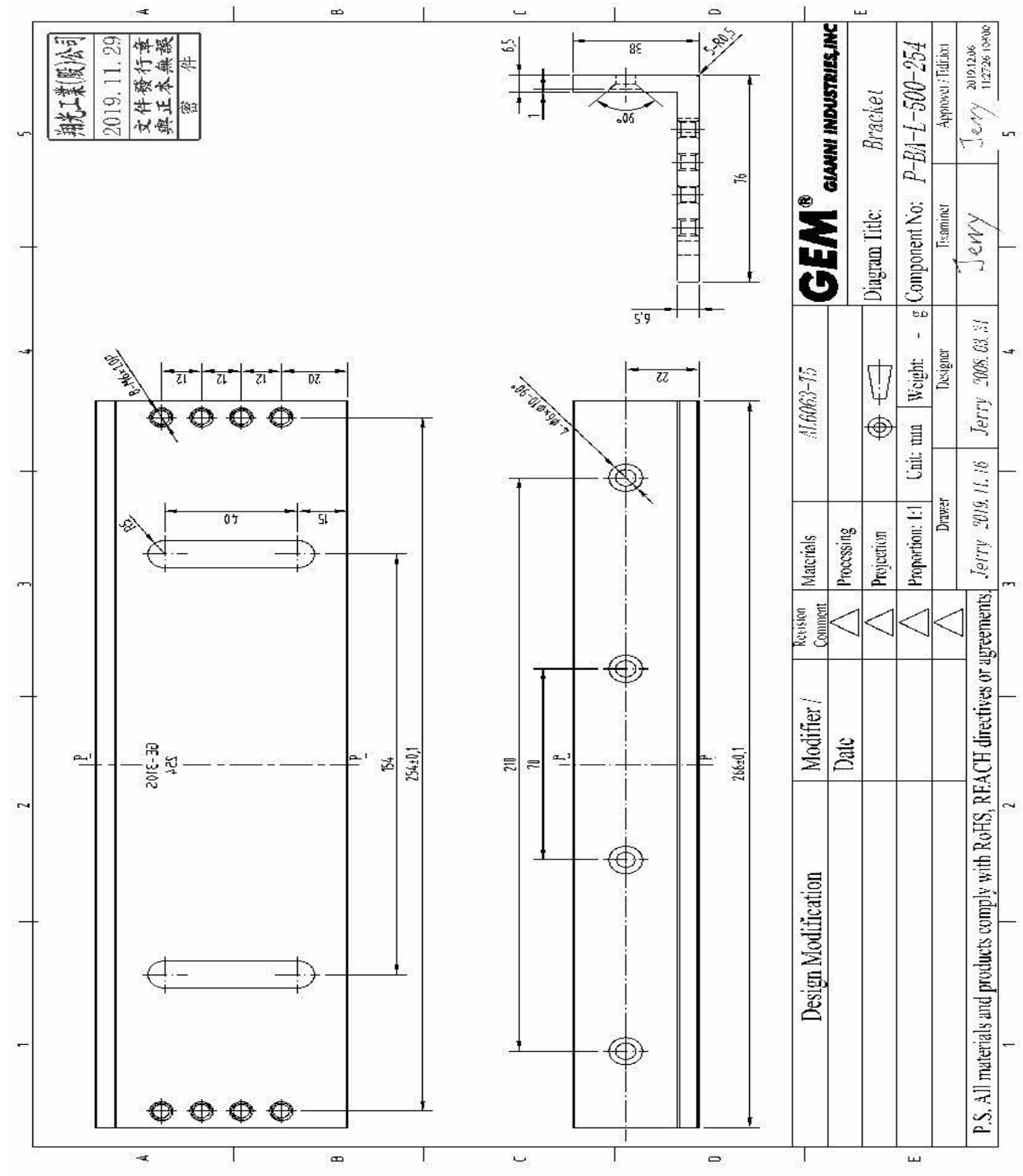
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Diagram Title: Bracket
Component No: P-BR-L-500-254
Material: AL6063-T5
Weight: - g
Unit: mm
Proportion: 1:1
Design Modification
Modifier /
Date
P.S. All materials and products comply with RoHS, REACH directives or agreements.
Jerry 2019.11.18
Jerry 2005.03.31
Jerry 2019.12.06
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216±0.1
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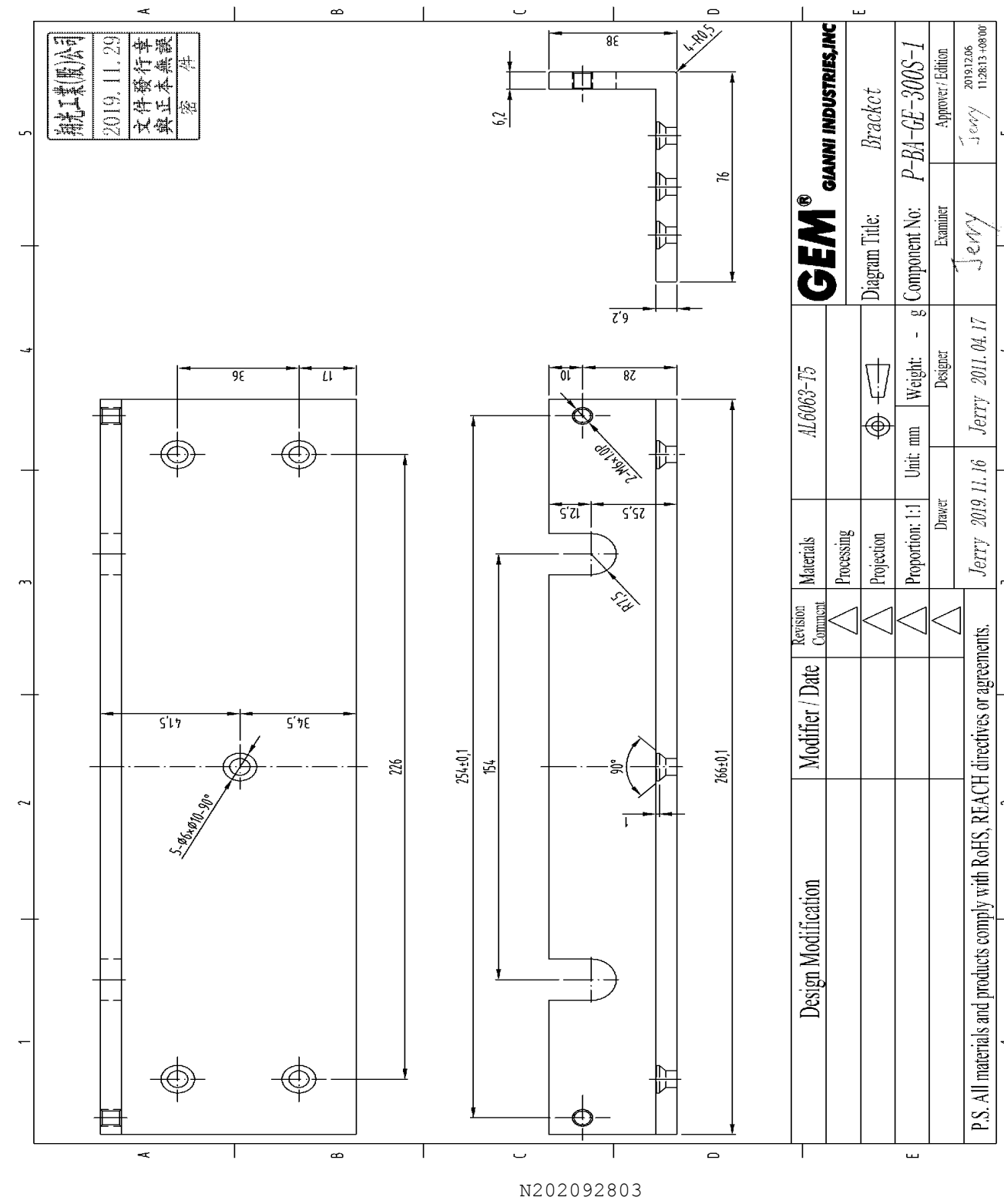
N202092802


2019.11.29
GEM GIANNI INDUSTRIES,INC
Diagram Title: Bracket
Component No: P-BA-GE-300S-1
Materials AL6063-T5
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer Jerry 2011.04.17
Examiner Jerry
Approver / Edition
2019.12.06 11:28:13 +08:00
Design Modification
Modifier / Date
Revision Comment
Jerry 2019.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.
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4-R0.5
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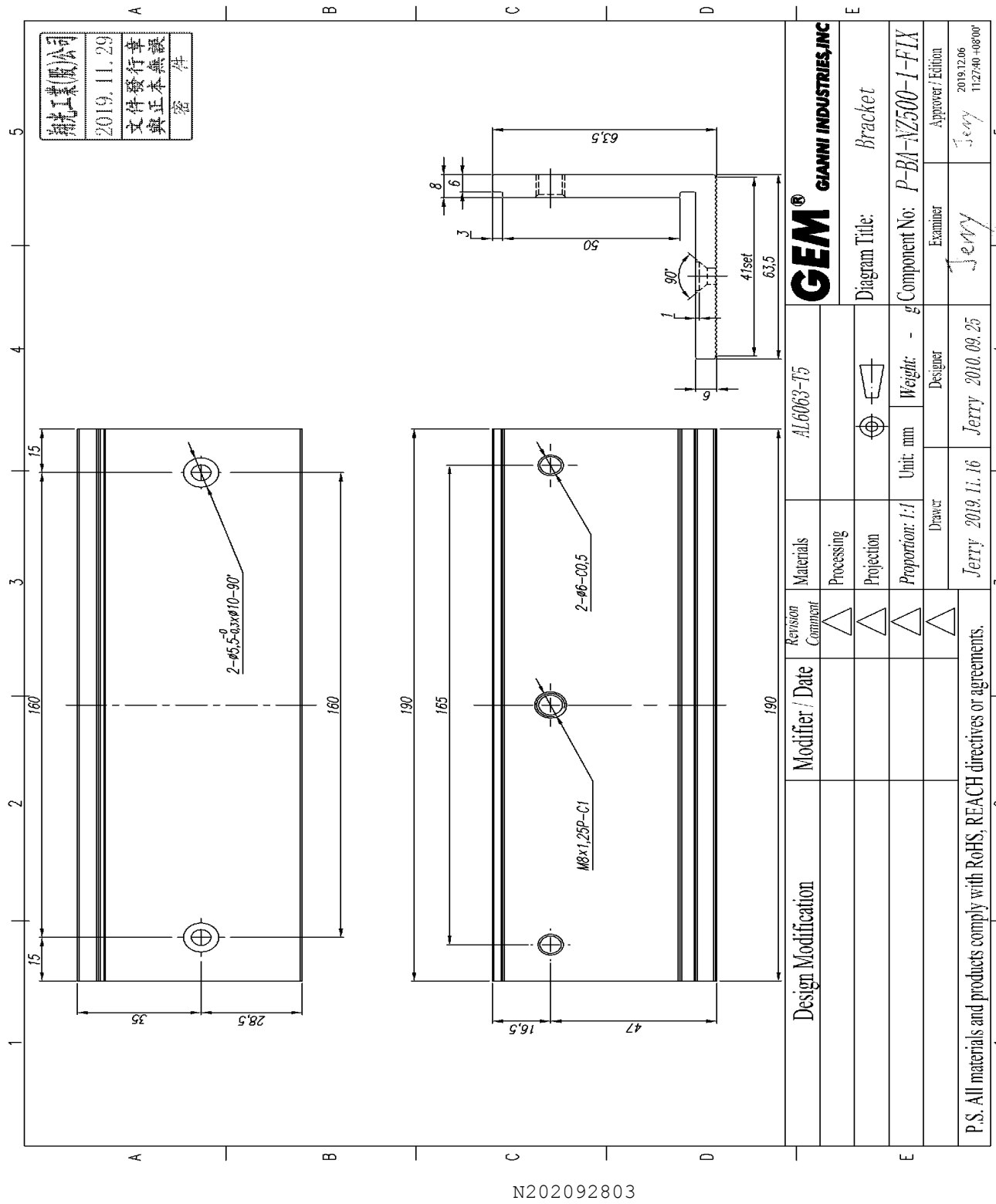
266±0.1
154
226
R7.5
90°

N202092803


2019.11.29
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宏 仲
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2-ø6-C0,5
M8x1,25P-C1
63,5
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90°
GEM GIANNI INDUSTRIES,INC
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
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Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Diagram Title: Bracket
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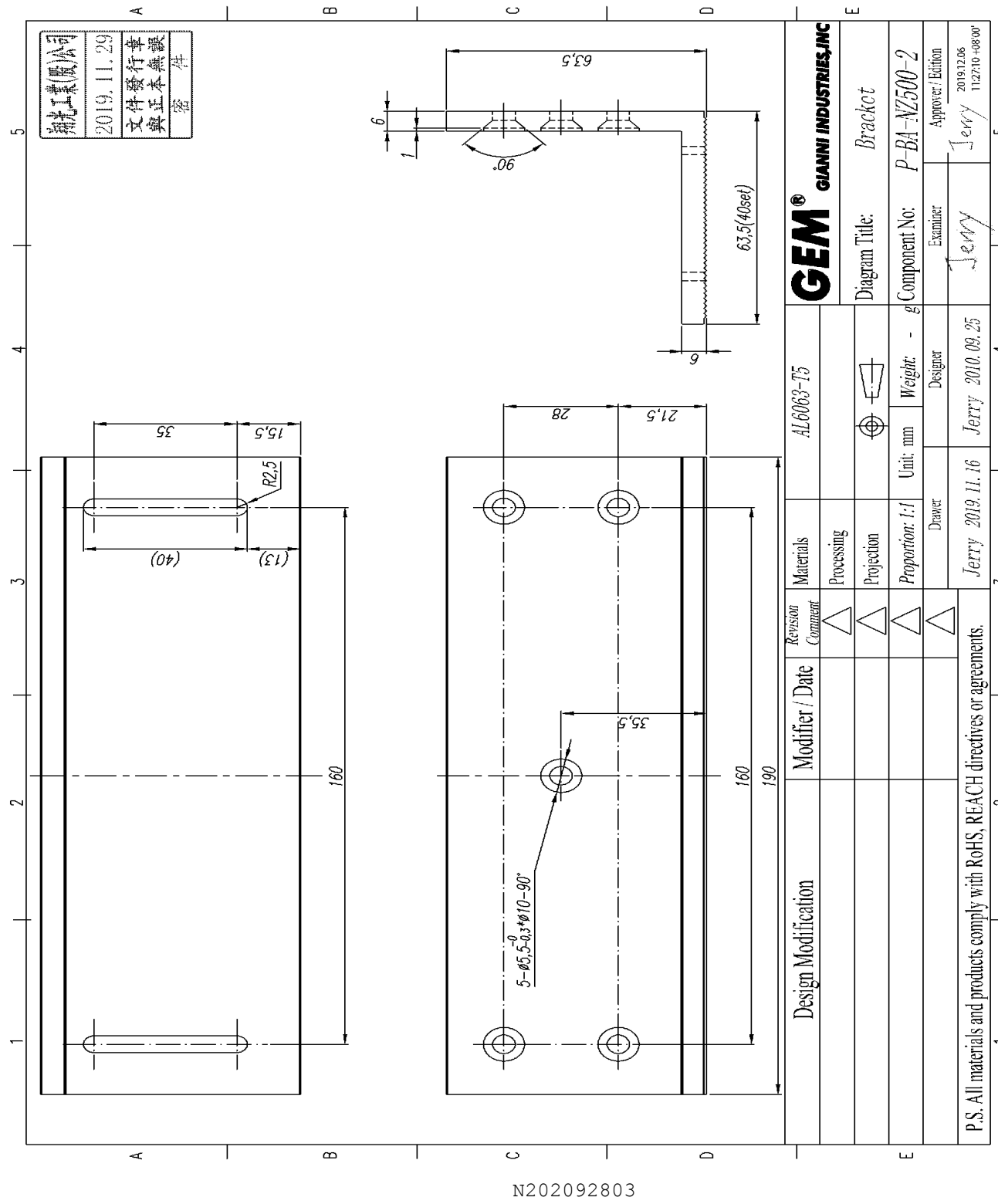
Jerry 2010.09.25
2019.12.06 11:27:40 +08'00'
P.S. All materials and products comply with RoHS, REACH directives or agreements.


2019. 11. 29
63,5
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(40)
(13)
160
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160
190
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AL6063-T5
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
GEM GIANNI INDUSTRIES,INC
Diagram Title: Brackct
Component No: P-BA-NZ500-2
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Jerry 2019.11.16
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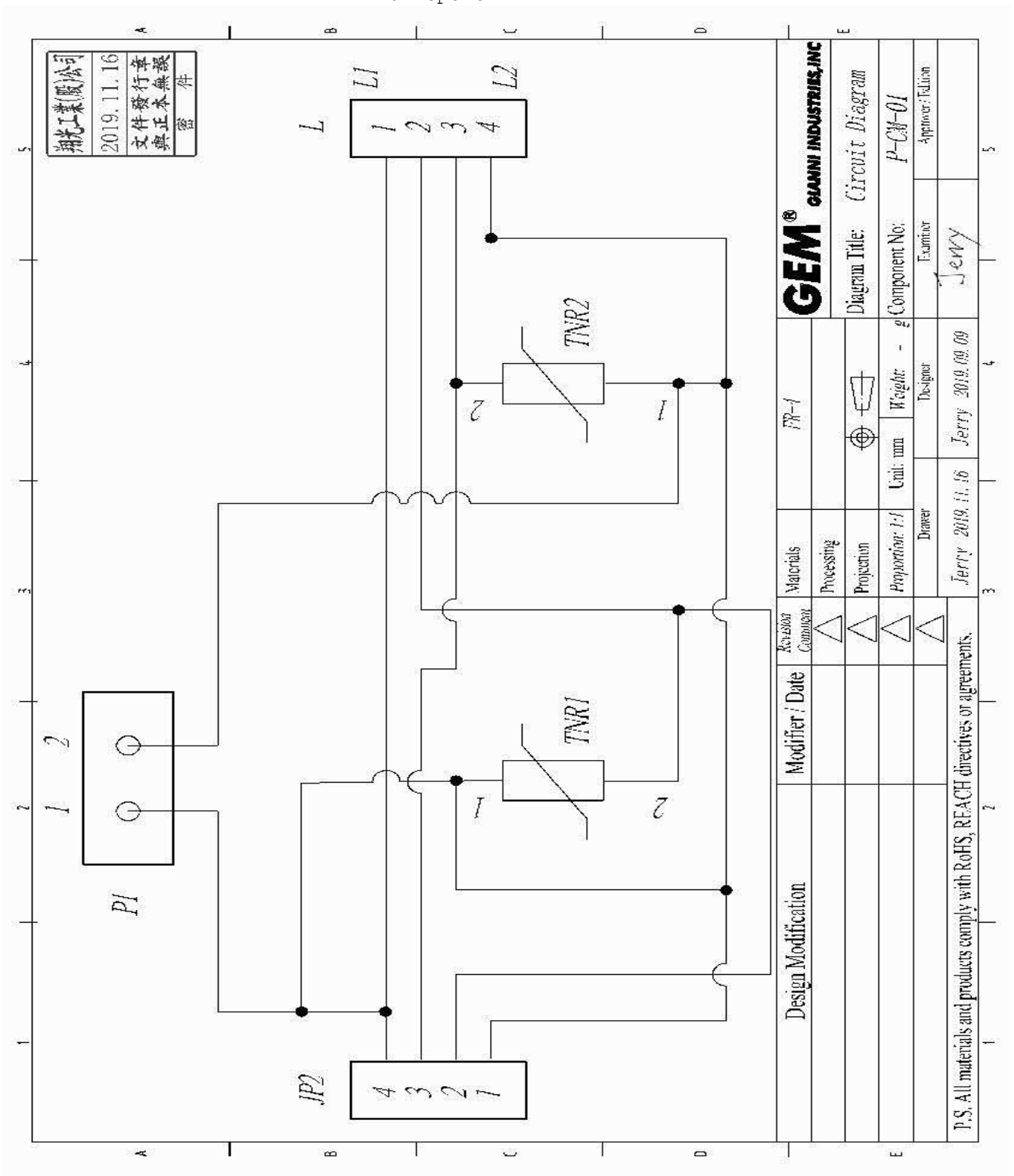
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.

N202092803


L
L1
L2
1
2
3
4
TNR2
TNR1
P1
JP2
GEM
GIANNI INDUSTRIES,INC
Diagram Title: Circuit Diagram
Component No: P-CM-01
FR-4
Design Modification
Modifier / Date
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
Jerry 2019.09.09
Jerry
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.16
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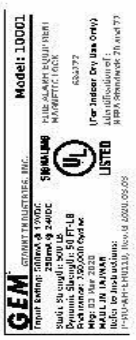
密件

N202092824


GEM
Model 10001
LISTED


GEM
Model: 10010-254
LISTED

CERTIFICATE OF COMPLIANCE

Certificate Number	S36277
Report Reference	S36277-20200406
Issue Date	2020-APRIL-13
Issued to:	GIANNI INDUSTRIES INC 13 ZHONG SING RD TU-CHENG INDUSTRIAL ZONE TU-CHENG DISTRICT NEW TAIPEI 236 TAIWAN
This certificate confirms that representative samples of	RELEASING DEVICES UL, Fire Alarm Equipment: Magnetic Locks, Model 10001 and 10010-254.
	Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	UL 864-Control Units and Accessories for Fire Alarm Systems
Additional Information:	See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

File S36277
Project: 4788940320

April 6, 2020

REPORT

on

RELEASING DEVICES (SZNT)

Applicant: GIANNI INDUSTRIES INC

TU-CHENG DISTRICT, TW

DESCRIPTION

PRODUCT COVERED:

UL, Fire Alarm Equipment: Magnetic Locks, Model 10001 and 10010-254.

COMPLIANCE

The product described herein has been investigated to, and found to be in compliance with:

UL 864 - Control Units and Accessories for Fire Alarm Systems

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Model Differences - Model 10001 is similar to Model 10010-254, except for the enclosure size and the turns of the coils.

Installation - These products are intended to be installed in accordance with the following:

A. NFPA 70 - National Electrical Code.
B. NFPA 72 - National Fire Alarm Code.
C. Local Authority having Jurisdiction.
D. Manufacturer's installation instructions provided with each unit.

The following documents must be provided with the products:

Model	ILL. No.	Description	Drawing No.	Ver./ Revision date
10001 and 10010-254	1	Electromagnetic Lock Installation Instruction	P-MU-AM-EM0110	Ver. G/ 2020.03.03

CONSTRUCTION DETAILS:

Refer to the following photographs, associated descriptive pages and illustrations. The general design, shape and arrangement shall be shown, unless described otherwise.

Model:

Ratings - The field wiring circuits are rated as follows:

Model	Current (mA)	Voltage (VDC)
10001	500 mA 250 mA	12VDC 24VDC
10010-254	500 mA 250 mA	12VDC 24VDC

MARKING:

General - All markings shall be silk-screened, ink-stamped, printed, molded or provided on adhesive backed labels. All adhesive backed labels shall be Recognized Marking and Labeling Systems (PGJI2 or PGDQ2), suitable for adhesion to the type of surface and intended temperature. All markings are plainly and permanently applied to a location readily visible after installation.

Each product shall be marked with the following:

a. Listee's Name or Trademark or authorized company identification.
b. Model number designation
c. Use of Product - "Magnetic Lock"
d. "For Indoor Dry Use Only"
e. Reference to the installation instructions that are being shipped by the specific part number and revision date or level.

Refer to ILL. 26 (Model 10001) and ILL. 27 (Model 10010-254) for UL Listing Mark text. Note to Field Representative – only confirm the content. Content can be configured in various arrangements

INSTALLATION INSTRUCTIONS:

Installation Instructions/Wiring Diagram - The installation instructions indicated below shall be shipped with the indicated product.

Model	ILL. No.	Part No.	Rev Level/Date
10001 10010-254	1	P-MU-AM-EM0110	Ver. G/ 2020.03.03

ENCLOSURE of Model 10001 - FIG. 1

General- The construction in FIG. 1 represents Model 10001.

1. Exploded view and parts list - Refer to ILL. 2 for details.

2. Housing - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 5 for details.

Minimum Material Thickness mm	Length	Width	Depth
1 mm	250 mm	42.5 mm	25 mm

3. Mounting plate - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 3 for details.

Length	Width	Depth
250 mm	25 mm	5 mm

4. End caps - Constructed of aluminum alloy. Two provided. Refer to ILL. 4 for details.

5. Magnet - Refer to ILL. 6 for details.

Length	Width	Depth
182 mm	38 mm	24.5 mm

6. Cover Plate - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 7 for details.

Length	Width	Depth
61.5 mm	38 mm	2 mm

7. Armature Plate – Constructed of a kick-off button, spring, screw, and a steel plate. Refer to ILL. 8 for details.
   - Anti-residual magnetism kick-off button: stainless steel.
   - Spring: stainless steel, 9 mm O.D, 7.2 mm I.D., 0.9 mm in diameter, 11 mm in length, 4 turns.
   - Steel plate: carbon steel, approximately 185 mm long by 42 mm width by 16 mm depth.

Magnet Assembly of Model 10001 - FIG. 2.

General- Magnet Assembly of Model 10001 is shown FIG.2 and the mechanical drawing in ILL.6.

1. E-shape core - Constructed of an E-shaped silicon steel with overall approximate dimensions as shown in the table below. Refer to ILL. 9 for dimension drawing.

Length	Width	Depth
157 mm	35 mm	25.5 mm

2. Encapsulating material – Constructed of Recognized Component (QMFZ2), FLYING DRAGONS MATERIAL IND CO.LTD, part no: P-EX and P-EX-1 UL file no. E101381. Epoxy resin adhesive, type FLYGON 5940AS. Curing agent for epoxy resin, type 5940BHK. Flame rated UL94 V-0 at a min. thickness 3.0 mm. Rated temperature 90°C.

3. Bobbin – Constructed of Recognized Component plastic (QMFZ2), minimum flame rating UL94 HB with overall approximate dimensions as shown in the table below. Part no.: P-BI-01-SM-3. Refer to ILL. 10 for dimension drawing.

Minimum Material Thickness mm	Length	Width	Depth
1 mm	171.5 mm	24.2 mm	17.2 mm

4. Magnet coils - Constructed of Recognized Component (OBMW2). Part no.: P-GW-0.28-YL-3UE and P-GW-0.28-RE-3UE. Double coils, 470 turns for each coil, 0.28 mm in diameter, temperature class 130°C.

5. Insulating tape (Green) - Constructed of Recognized Component (OANZ2). Part no.: P-TE-01 (17x66)-GE. Polyester adhesive tape, 1.5 layers warped around the magnet coils and secured by an acetate adhesive tape.

6. Internal wiring - Constructed of Recognized Component (AVLV2). Part no. P-LW-SM-1A. Four conductors, 24AWG minimum, type AWM, rated 80 °C min., one end connected to magnet coils and the other end connected to a 4-pin connector.

7. Connector - Constructed of Recognized Component (ECBT2). 10.6 mm in width, 14 mm in length and 2.54 in thickness. Rated 85°C. One end connected to internal wiring and the other end connected to the pins on PCB

Internal view of Model 10001 - FIG. 3

General- The internal view including double-sided tape and PCB which is shown in FIG.3.

1. Printed Circuit Board – Refer to Billofmaterial-1 for PCB bill of materials and ComponentLayout-1 for component layout and trace layout.

2. Printed wire board – Constructed by Recognized Component (ZPMV2), Part no. P-CM-01, Flame rated a minimum of 94V-0, 130°C. The board is spaced a minimum of 1/2 in. off the enclosure.

3. Terminal Blocks – The following FW-2 rated Recognized Component (XCFR2) terminal blocks are employed:

Component ID(s)	Manufacturer	Part No.	Requires Mult. Conductor
P1	HEAVY POWER CO LTD	PA001	N

Any FW-2 rated Recognized Component terminal block (XCFR2) may be substituted if the following ratings can be verified:

Component ID(s)	Minimum Range (AWG)	Minimum Voltage Rating (V)	Minimum Current Rating (A)	Suitable for Mult. Conductor
P1	14-26	300	1	N

4. MOVs – The following Recognized Component transient suppression components (VZCA2) are employed:

Component ID(s)	Manufacturer	Part No.
TNR1/TNR2	CENTRA SCIENCE CORP	P-VS-07D180K

5. Double-sided tape – Secure PCB to enclosure. Constructed of tapes and a foam. Refer to ILL. 11 for the dimension drawing.

- Tape: Constructed of Recognized Component (QOQW2), mfg: KK ENTERPRISE CO LTD, Part no. P-FO-25x35x3-BA, UL file no. E101165, dsg. DT#17, min temp=0°C, Max. Temp= 80°C, used on aluminum surface.

- Foam: Constructed of Recognized Component (QMFZ8) with minimum flame rating UL94 HF-1. INOAC CORP, Part no.: P-FO-25x35x3-BA. UL file no. E58579, dsg. C4305, min Thk= 1 mm.

Mounting accessories - FIG. 4A and FIG. 4B.

General - Two types of mounting accessories which are L bracket and L-Z bracket.

1. L bracket - Refer to ILL. 12 for overall dimensions.

2. L-Z bracket - Refer to ILL. 13 for overall dimensions.

ENCLOSURE of Model 10010-254 - FIG. 5

General- The construction in FIG. 5 represents Model 10010-254.

1. Exploded view and parts list - Refer to ILL. 14 for details.

2. Housing - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 17 for details.

Minimum Material Thickness mm	Length	Width	Depth
3 mm	267 mm	67 mm	40 mm

3. Mounting plate - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 16 for details.

Length	Width	Depth
267 mm	6 mm	40 mm

4. End caps - Constructed of aluminum alloy. Two provided. Refer to ILL. 16 for details.

5. Magnet - Refer to ILL. 18 for details.

Length	Width	Depth
190 mm	61 mm	38 mm

6. Cover Plate - Constructed of aluminum alloy with overall approximate dimensions as shown in the table below. Refer to ILL. 7 for details.

Length	Width	Depth
64 mm	60.5 mm	3 mm

7. Armature Plate – Constructed of a kick-off button, spring, screw, and a steel plate. Refer to ILL. 8 for details.
   - Anti-residual magnetism kick-off button: stainless steel.
   - Spring: stainless steel, 9 mm O.D, 7.2 mm I.D., 0.9 mm in diameter, 11 mm in length, 4 turns.
   - Steel plate: carbon steel, approximately 185 mm long by 61 mm width by 16 mm depth.

Magnet Assembly of Model 10010-254 - FIG. 6.

General- Magnet Assembly of Model 10010-254 is shown FIG.6 and the mechanical drawing in ILL.6.

1. E-shape core - Constructed of an E-shaped silicon steel with overall approximate dimensions as shown in the table below. Refer to ILL. 21 for dimension drawing.

Length	Width	Depth
159 mm	57 mm	38 mm

2. Encapsulating material – Constructed of Recognized Component (QMFZ2), FLYING DRAGONS MATERIAL IND CO.LTD, part no: P-EX and P-EX-1 UL file no. E101381. Epoxy resin adhesive, type FLYGON 5940AS. Curing agent for epoxy resin, type 5940BHK. Flame rated UL94 V-0 at a min. thickness 3.0 mm. Rated temperature 90°C.

3. Bobbin – Constructed of Recognized Component plastic (QMFZ2), minimum flame rating UL94 HB with overall approximate dimensions as shown in the table below. Part no. P-BI-10-LG-1-N. Refer to ILL. 22 for dimension drawing.

Minimum Material Thickness mm	Length	Width	Depth
1 mm	179 mm	38 mm	25 mm

4. Magnet coils - Constructed of Recognized Component (OBMW2). Part no.: P-GW-0.32-YL-3UE and and P-GW-0.32-RE-3UE Double coils, 570 turns for each coil, 0.32 mm in diameter, temperature class 130°C.

5. Insulating tape (Green) - Constructed of Recognized Component (OANZ2). Part no.: P-TE-10 (25x66)-GE. Polyester adhesive tape, 1.5 layers warped around the magnet coils and secured by an acetate adhesive tape.

6. Internal wiring - Constructed of Recognized Component (AVLV2). Part no. P-LW-SM-1A. Four conductors, 24AWG minimum, type AWM, rated 80 °C min. One end connected to magnet coils and the other end connected to a 4-pin connector.

7. Connector - Constructed of Recognized Component (ECBT2). 10.6 mm in width, 14 mm in length and 2.54 in thickness. Rated 85°C. One end connected to internal wiring and the other end connected to the pins on PCB

Internal view of Model 10010-254 - FIG. 7

General- The internal view including double-sided tape and PCB which is shown in FIG.6.

1. Printed Circuit Board – Refer to Billofmaterial-1 for PCB bill of materials and Componentlayout-1 for component layout and trace layout.

2. Printed wire board – Constructed by Recognized Component (ZPMV2), Part no. P-CM-01, Flame rated a minimum of 94V-0, 130°C. The board is spaced a minimum of 1/2 in. off the enclosure.

3. Terminal Blocks – The following FW-2 rated Recognized Component (XCFR2) terminal blocks are employed:

Component ID(s)	Manufacturer	Part No.	Requires Mult. Conductor
P1	HEAVY POWER CO LTD	PA001	N

Any FW-2 rated Recognized Component terminal block (XCFR2) may be substituted if the following ratings can be verified:

Component ID(s)	Minimum Range (AWG)	Minimum Voltage Rating (V)	Minimum Current Rating (A)	Suitable for Mult. Conductor
P1	14-26	300	1	N

4. MOVs – The following Recognized Component transient suppression components (VZCA2) are employed:

Component ID(s)	Manufacturer	Part No.
TNR1/TNR2	CENTRA SCIENCE CORP	P-VS-07D180K

5. Double-sided tape – Secure PCB to enclosure. Constructed of tapes and a foam. Refer to ILL. 11 for the dimension drawing.

- Tape: Constructed of Recognized Component (QOQW2), mfg: KK ENTERPRISE CO LTD, Part no. P-FO-25x35x3-BA, UL file no. E101165, dsg. DT#17, min temp=0°C, Max. Temp= 80°C, used on aluminum surface.

- Foam: Constructed of Recognized Component (QMFZ8) with minimum flame rating UL94 HF-1. INOAC CORP, Part no.: P-FO-25x35x3-BA. UL file no. E58579, dsg. C4305, min Thk= 1 mm.

Mounting accessories - FIG. 8A and FIG. 8B.

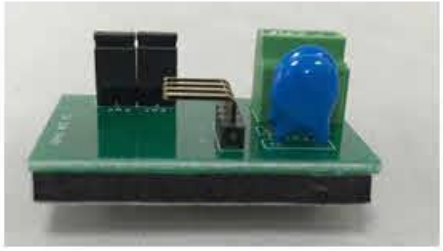
General - Two types of mounting accessories which are L bracket and L-Z bracket.

1. L bracket - Refer to ILL. 23 for overall dimensions.

2. L-Z bracket - Refer to ILL. 24 for overall dimensions.

N202092772

N202092773



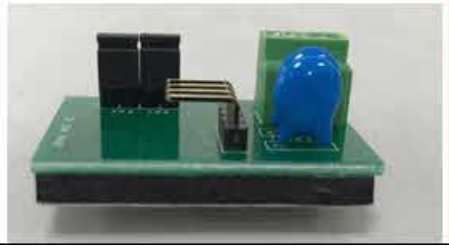

+
−
P1
JP2 JP3
TNR1
TNR2
CH 23A 94V0

N202092775

N202092776

N202092777

N202092778




+
−
P1
JP2 JP3
TNR1
TNR2
CH 23A 94V0

N202092781

N202092783

10001 & 10010-254 Series

Electromagnetic Lock Installation Instruction (Indoor Series)

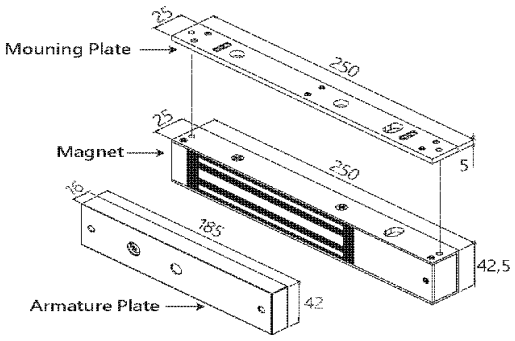
A Technical Specification

Specification		Model	UL1034 Rating	UL294 Performance Level
Operating Voltage	12/24VDC			
Current Draw	500mA/12VDC 250mA/24VDC	10001	Static force: 500 lbs Dynamic force: 50 ft-lb Endurance: 250,000 Cycles	Destructive Attack: Level I Line Security: Level I Standby Power: Level I Endurance: Level IV
Operating Temperature	32° to +120.2°F (0° to +49°C)	10010-254	Static force: 1000 lbs Dynamic force: 70 ft-lb Endurance: 250,000 Cycles	
Holding Force	600 lbs for 10001 1200 lbs for 10010-254	UL Requirements		
Lock Surface Temperature	≤ Ambient temperature ± 20°C			
Lifetime Test	—	• UL1034/UL294 indoor use, UL864 indoor dry use. • The power for the 10001/10010-254 Series is to be provided by a Listed (UL 294, UL 603 and CAN/ULC-S533, also UL 864 or UL 1481 for standalone power supply) Class 2 Power Supply. • The 10001/10010-254 Series is intended to be used in combination with access control and/or commercial fire alarm panel, which are installed in accordance with the manufacturer' s Installation and operation instructions, ANSI/NFPA 70 & NFPA 72 and the local authority having jurisdiction.		
Waterproof Grade	—			
Humidity	0 to 93% Non-condensing			
Finish	Magnet Surface : Galvanized Housing : Brushed stainless steel(US32D)			

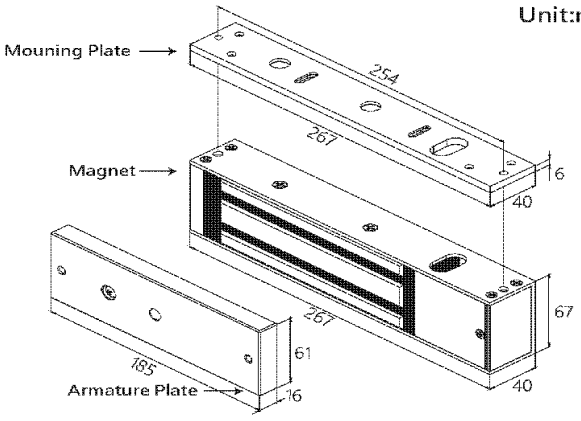
"The products shall not impair the intended operation of an emergency exit or panic hardware mounted on the door."

B Dimension & Accessories

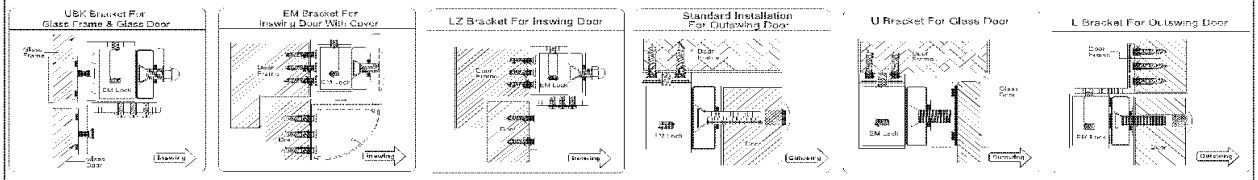
Unit:mm



10001 Series

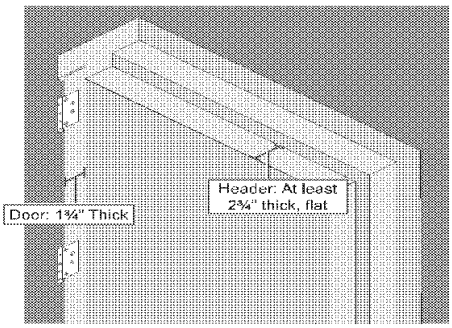


10010-254 Series

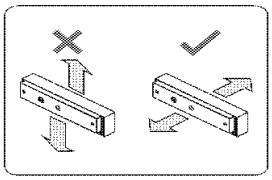


C Pre-Installation Considerations

- Use ONLY the hardware provided for mounting this product (NOTE: Non-standard Door thickness may require different sex nut Hardware – see specific instructions for required hardware).
- Follow the installation procedure as described in this manual.
- Check door thickness. If the door is not 1 3/4" thick, a different sex nut Will be required.
- Check door header. A minimum 2 3/4" thick, flat surface is needed to Securely mount all screws for the magnet. If you do not have the Required surface, you will need filler plates and/or angle brackets to Properly mount the magnet.

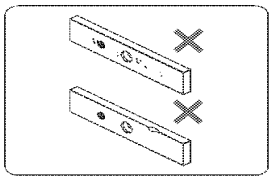


D Important Notes

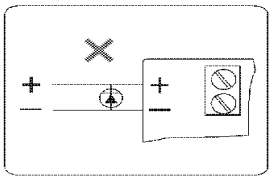


⚠ CAUTION

The electromagnet lock requires a face-to-face fitting as shown in Figure otherwise, the holding force will be greatly decreased (direction of hydraulic press pull must be collinear).

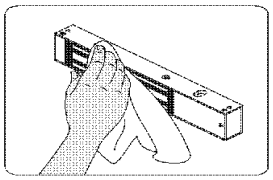


Make sure the contact area of the electromagnetic lock and the armature plate are clean.



⚠ CAUTION

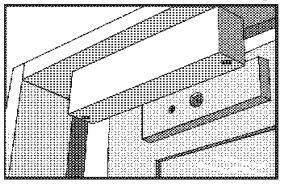
Remove any diode installed across the magnetic lock for spike suppression. The magnet is fitted with a metal oxide varistor to prevent back EMF.



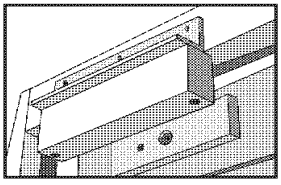
Wipe the surface of magnet lock with anti-rust oil regularly.

E Optional Bracket

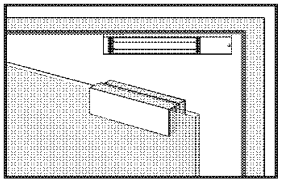
Brackets installation are according to door swing direction and door frame type , e.g. narrow frame door , frameless glass door , inswing door , etc.



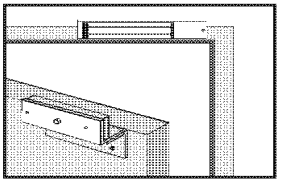
Regular Installation
(outswing door)



L-bracket for
narrow frames (optional)



U-bracket for frameless
glass doors (optional)
only outswing door.



LZ-bracket for
inswing doors (optional)

⚠ WARNING

Warnings indicate potentially hazardous conditions, which if not avoided or corrected, may cause death or serious injury.

⚠ CAUTION

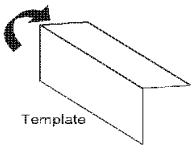
Cautions indicate potentially hazardous conditions, which if not avoided or corrected, may cause minor or moderate injury. Cautions may also warn against unsafe practices.

NOTICE

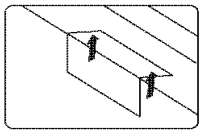
Notices indicate a condition that may cause equipment or property damage only.

F Regular Installation

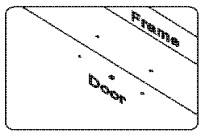
① Fold the mounting template 90°



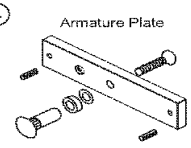
② Place the template to the proper position of the door and frame. Mark the hole positions of the template on the door and frame.



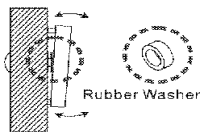
③ Drill the holes according to the marks.



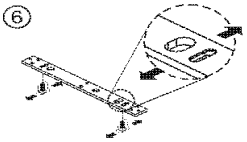
④ Please install the armature plate as illustrated here. (Dimensions of the holes depend on the door types illustrated below.)



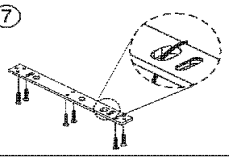
⑤ The rubber washer makes the surface of the armature plate adjustable in order to completely fit the surface of magnetic lock.



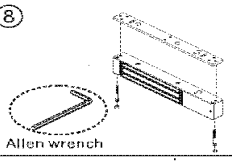
⑥ Fasten the mounting plate with the mounting screws. The position of the mounting plate should be adjustable.



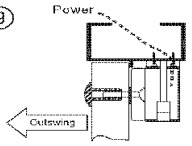
⑦ Fix the mounting plate on the door with mounting screws

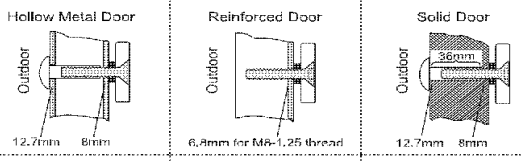


⑧ Use the Allen wrench and fixing bolts to tighten the electromagnetic lock to mounting plate



⑨ Connect the power and test the unit.





Recommendation:
For Mini EM-locks (Model 1800), maximum thickness of door is 50 mm.
For Maxi EM-locks (Model 1800-384), maximum thickness of door is 46 mm.

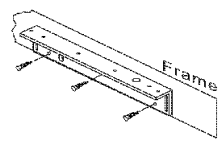
Drill a Ø8mm hole through door, on closing side.Enlarge to Ø12.7mm by a sexnut blot on the opening side.

Drill a Ø6.8mm hole and tap on closing side a M8x1.25 thread.

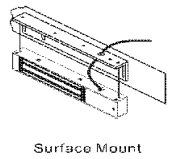
Drill a Ø8mm hole through door on closing side.Enlarge to Ø12.7mm by a sexnut blot on the opening side. The depth is 36mm.

G LZ or Z bracket for inswing doors

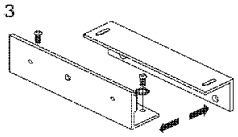
1 Find a mounting position on the door frame for the L bracket. Make sure that the door can still be closed.



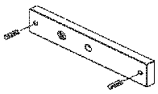
2 Use the fixing bolts to tighten the magnet on L bracket.



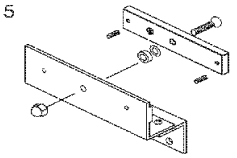
3 Assemble the Z bracket and make sure that the Z bracket is adjustable.



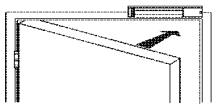
4 Insert the guide pins into the armature plate.



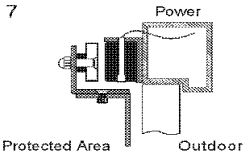
5 Attach the armature plate and washers to the Z bracket assembly.



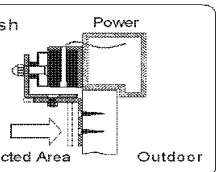
6 Close the door and connect the power.



7 After the magnet attracts the armature plate, adjust the Z bracket to fit the door.



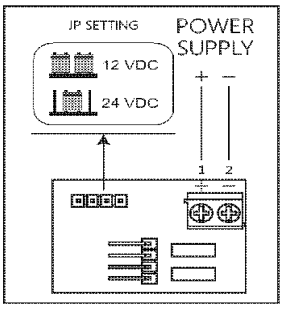
Finish Fasten the Z bracket to the door.



Connecting Diagram

POWER SUPPLY

The product must be powered from a UL-listed, regulated, power-limited, power supply.
If power switch is not wired between DC source voltage(+) and magnet, it will take a longer time to de-energize the magnet simulating residual magnetism.
The minimum permissible wire size to be used shall not be less than 22 AWG.



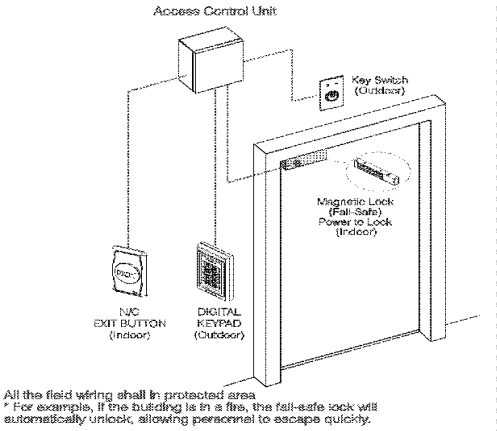
12VDC INPUT

- Required power: 500mA
- Connect positive (+) lead from a 12 VDC power source to Terminal 1.
- Connect negative (-) lead from a 12 VDC power source to Terminal 2.
- Check jumper for 12 VDC operation.

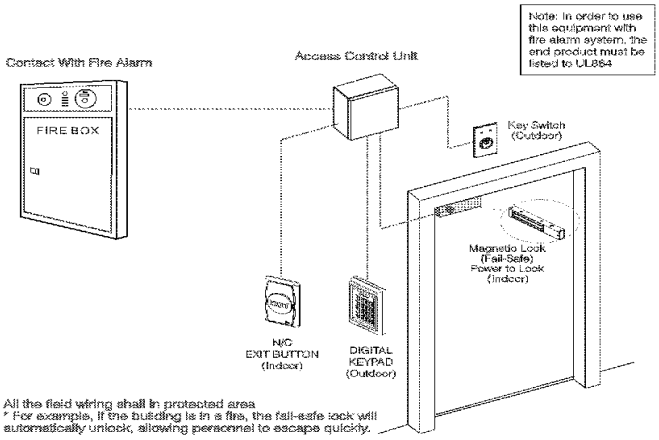
24VDC INPUT

- Required power: 250mA
- Connect positive (+) lead from a 24 VDC power source to Terminal 1.
- Connect negative (-) lead from a 24 VDC power source to Terminal 2.
- Check jumper for 24 VDC operation.

Wiring Diagram - Sample wiring and applications



All the field wiring shall in protected area
* For example, if the building is in a fire, the fail-safe lock will automatically unlock, allowing personnel to escape quickly.

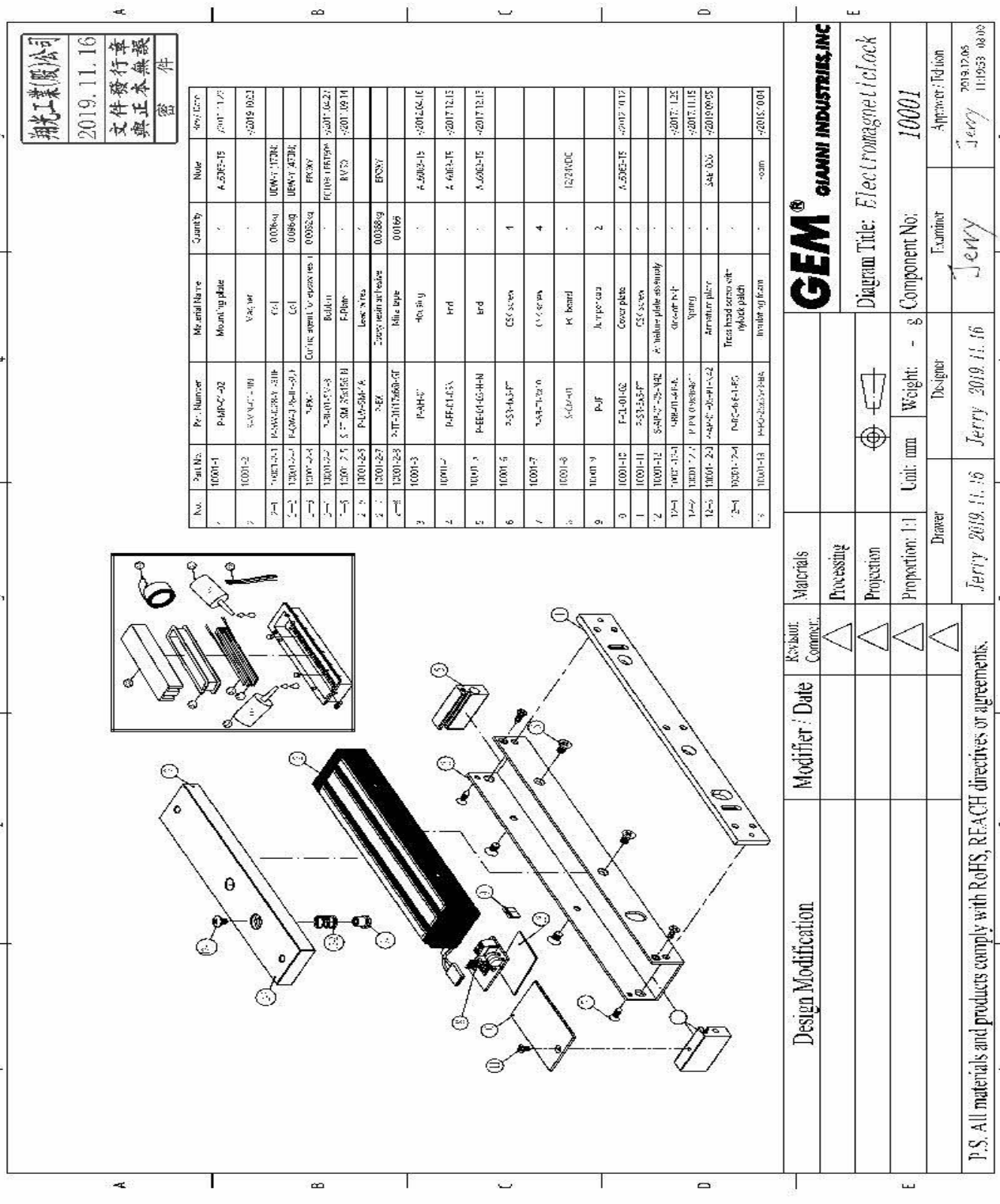


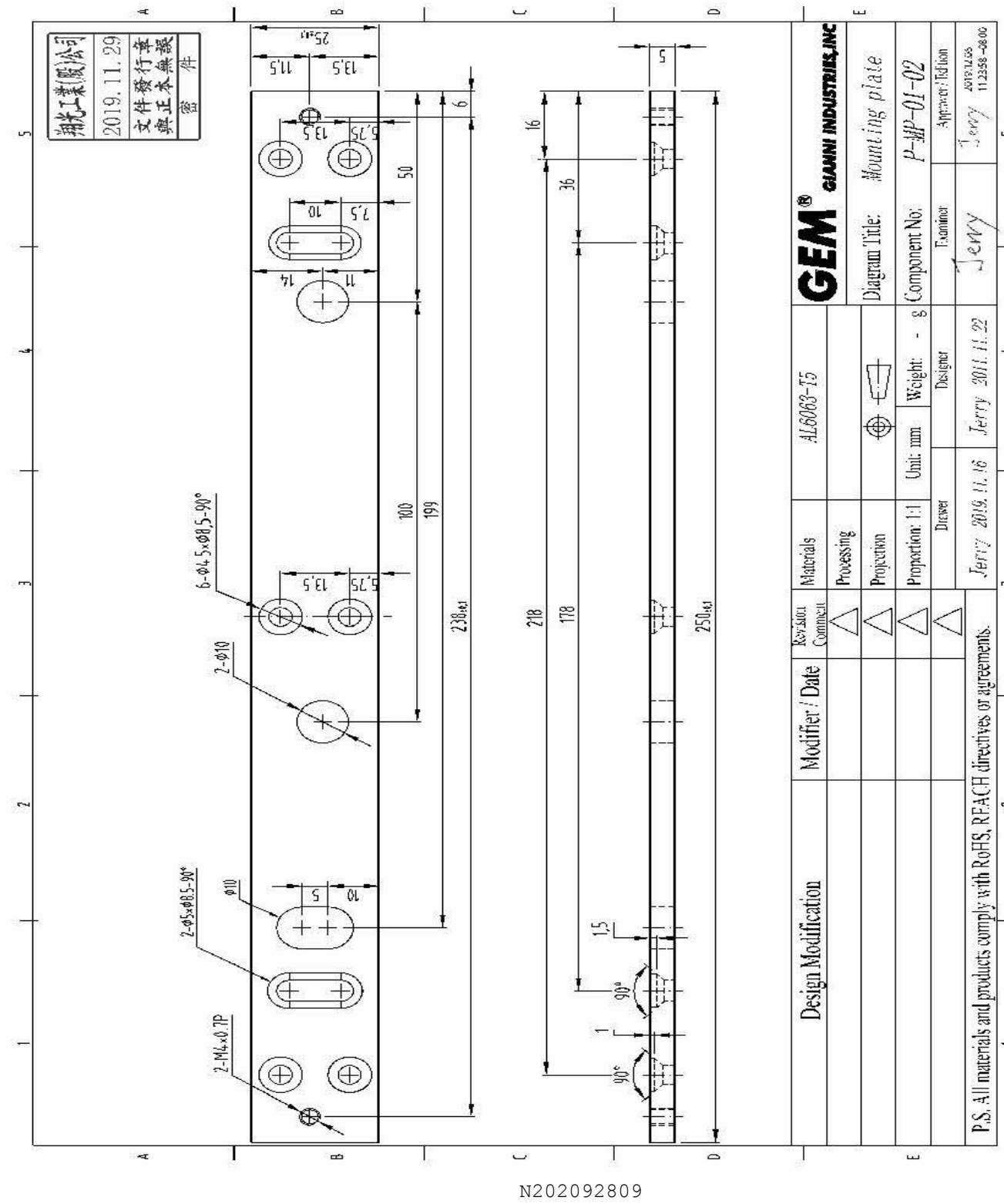
All the field wiring shall in protected area
* For example, if the building is in a fire, the fail-safe lock will automatically unlock, allowing personnel to escape quickly.

Trouble Shooting

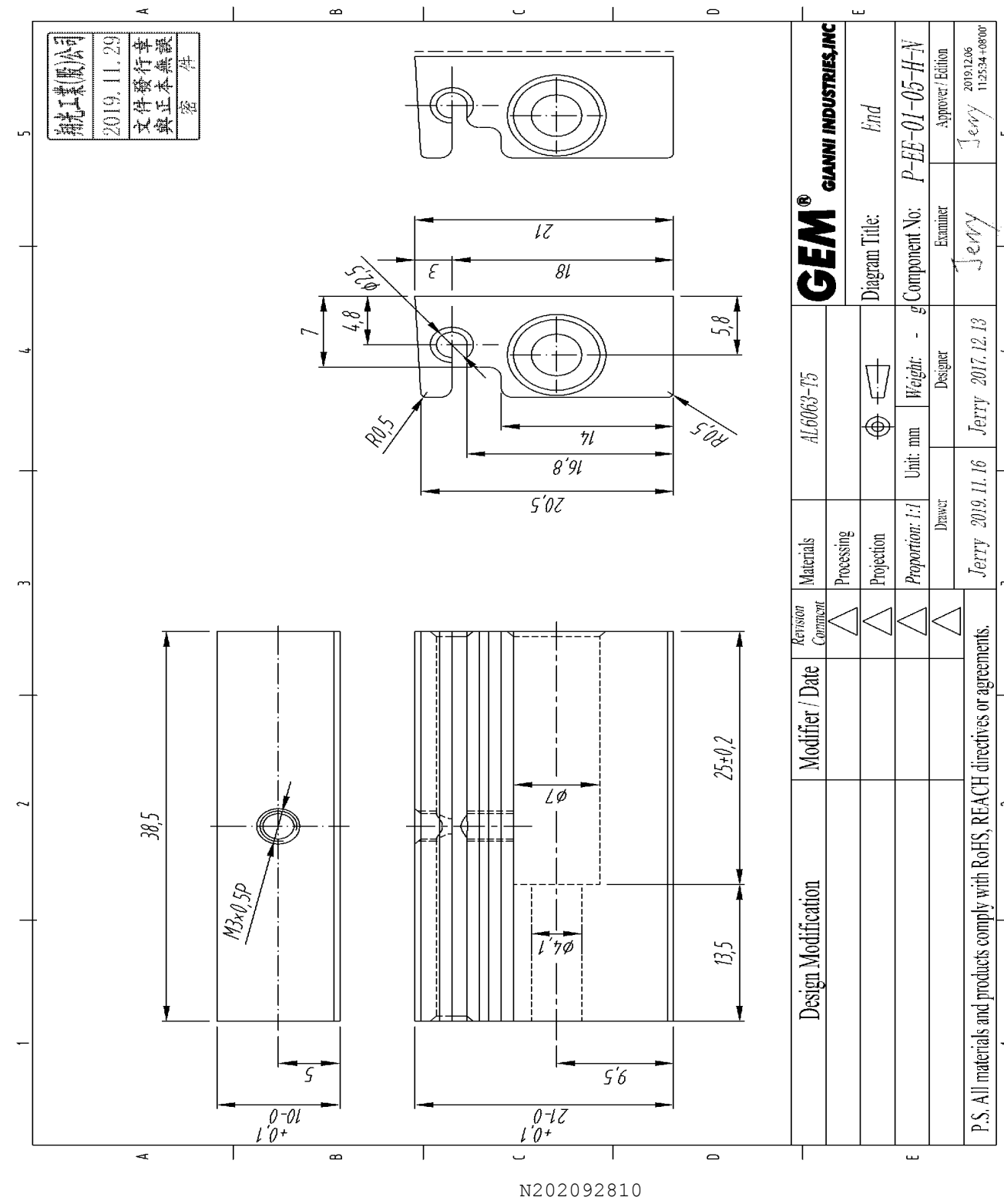
Problem	Possible Cause	Solution
Door does not lock	No power	Make sure the wires are connected properly Check that the power supply is connected and working properly Make sure the lock switch is wired correctly
Low holding force	Poor contact between electromagnet and armature plate	Check if the armature plate is deformed? Make sure if the rubber washer was used between magnet lock and armature plate. Make sure the contact surfaces of the electromagnet and armature plate are clean and free from dust and foreign material.
	Low voltage or incorrect voltage setting	Ensure the electromagnet lock is set for the correct voltage. Check for proper voltage at the electromagnet locks input. If low determine if the correct wire gauge is being used to prevent excessive voltage drop.

GEM
GIANNI INDUSTRIES, INC.

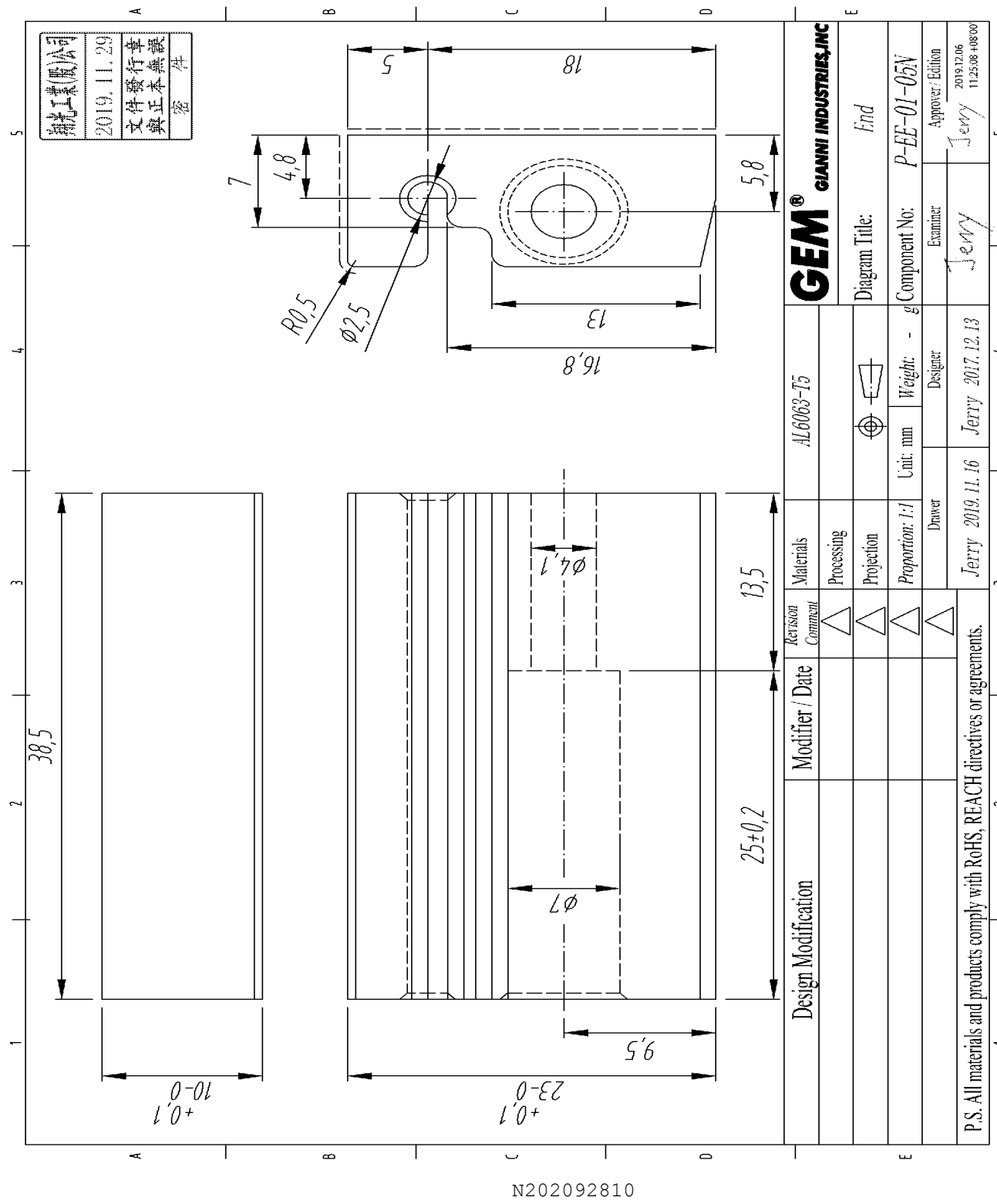

GEM GIANNI INDUSTRIES,INC
Diagram Title: Electromagnetic lock
Component No: 10001
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Jerry 2019.11.16
Examiner
Approver: Felicia
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.16
文件發行章與正本無誤
密件

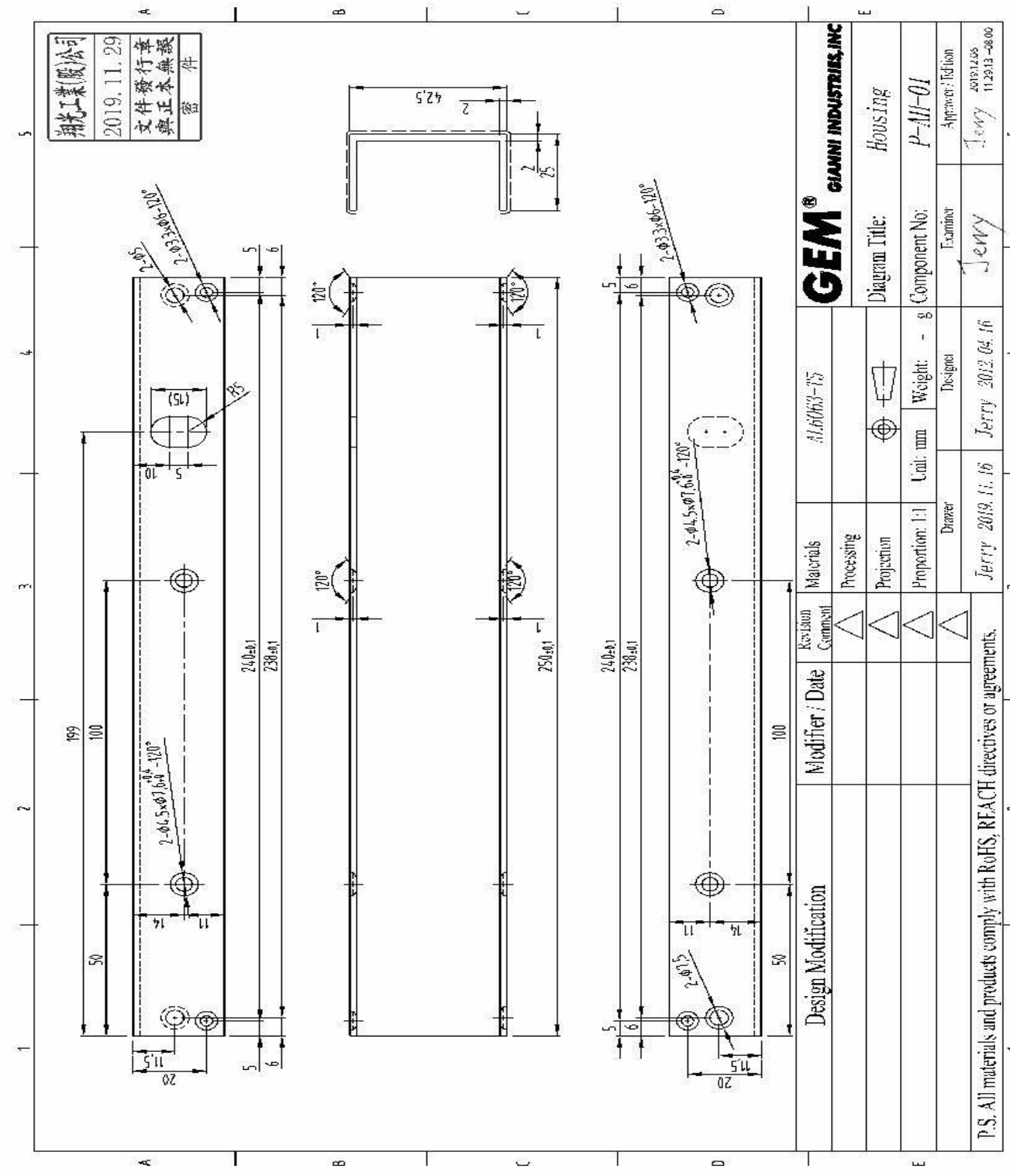

GEM GIANNI INDUSTRIES,INC
Diagram Title: Mounting plate
Component No: P-MP-01-02
AL6063-T5
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Designer
Examiner
Approver
Jerry 2019.11.22
Jerry 2019.11.16
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
6-Φ4.5×Φ8.5-90°
2-Φ10
2-Φ5×Φ8.5-90°
2-M4×0.7P
238±0.1
250±0.1
218
178
199
100
50
36
16
1.5
90°

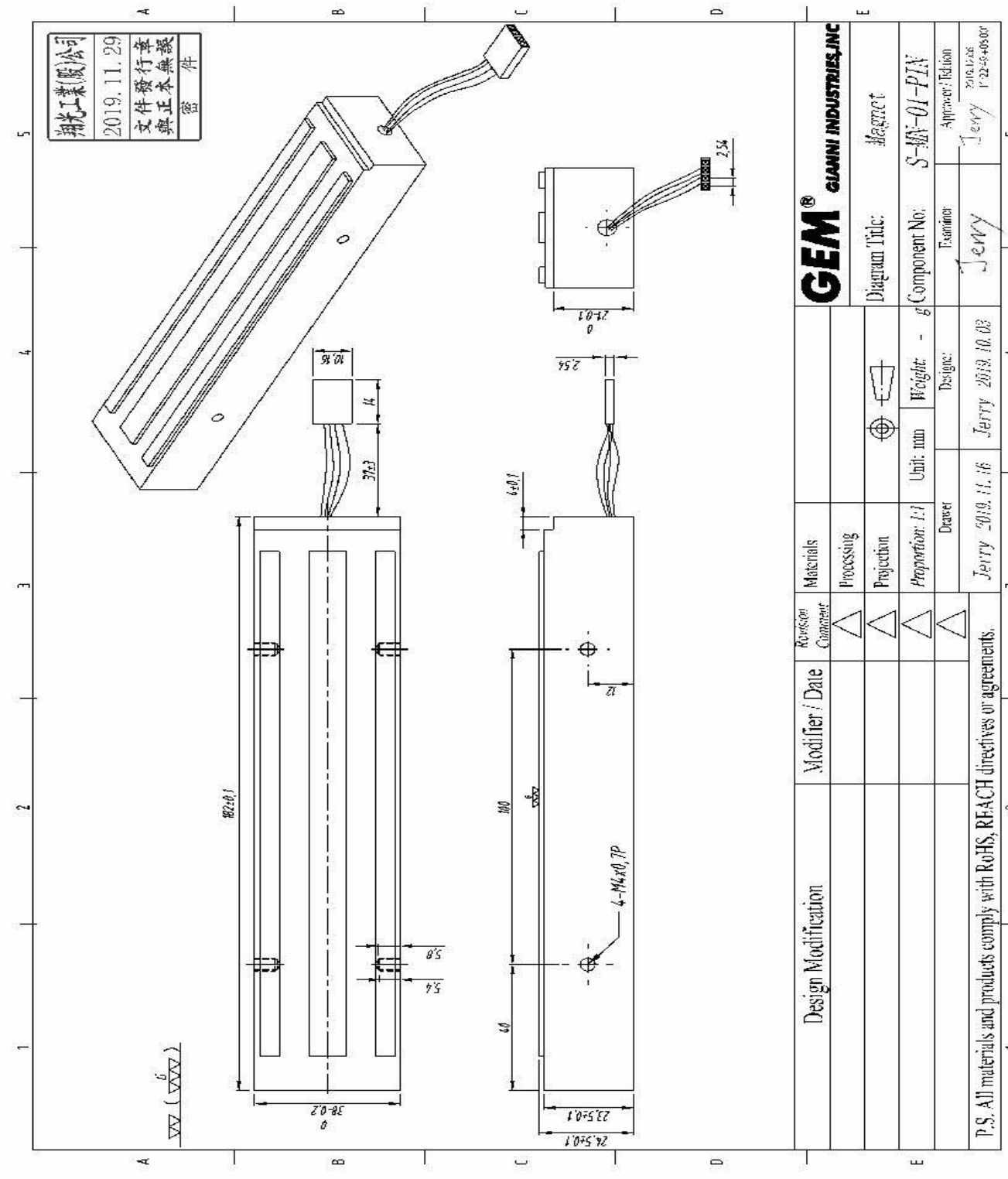
N202092809


2019.11.29
文件發行章
與正本無誤
客戶
GEM GIANNI INDUSTRIES,INC
AL6063-T5
Materials
Processing
Projection
Diagram Title:
Kind
Component No:
P-EE-01-05-H-N
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
Jerry 2017.12.13
Jerry
2019.12.06 11:25:34 +08'00'
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
38,5
M3x0,5P
5
10-0,1
Ø7
Ø4,1
25±0,2
13,5
9,5
21-0,1
20,5
16,8
14
R0,5
R0,5
4,8
7
Ø3,5
3
18
21
5,8

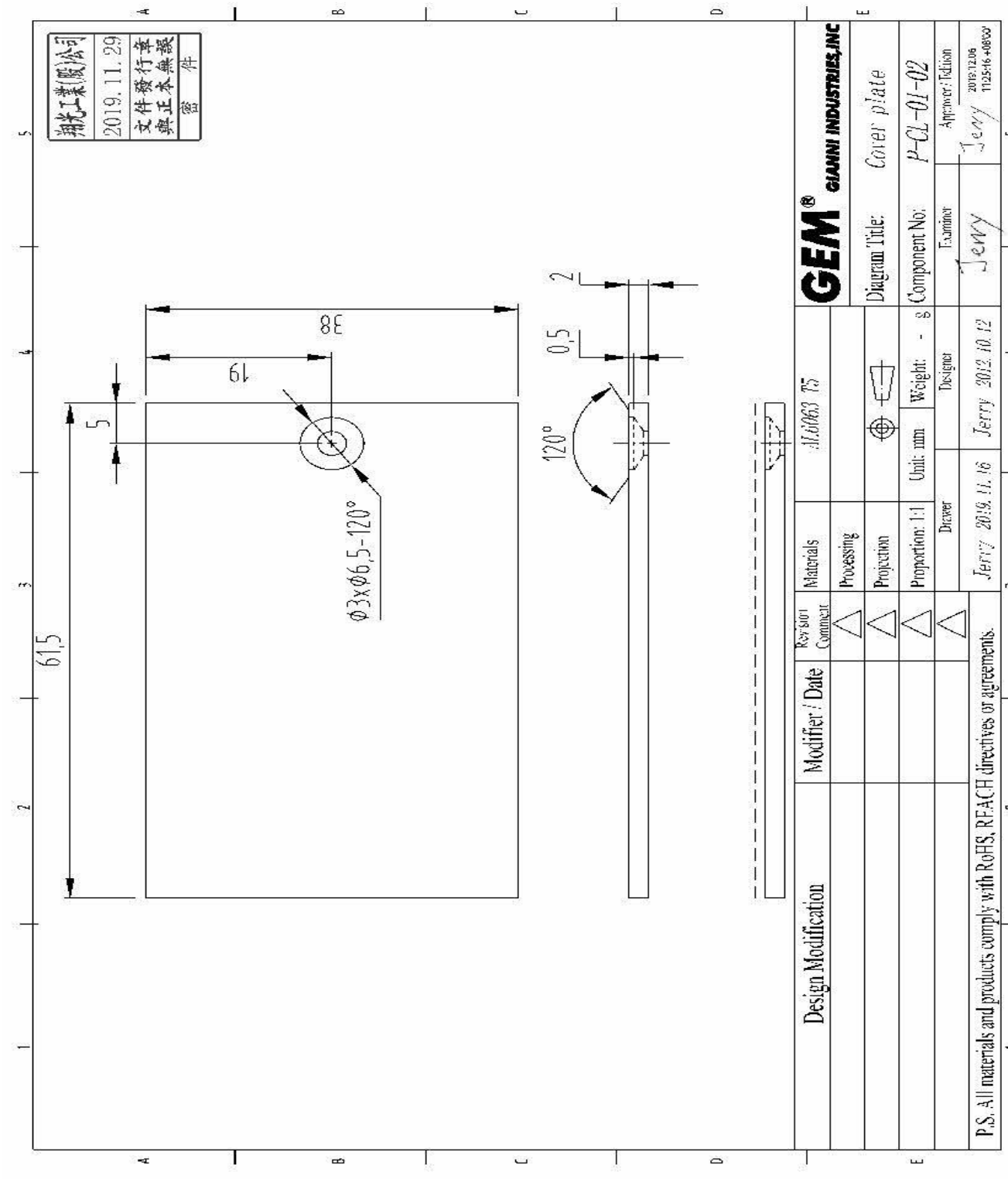
N202092810


GEM GIANNI INDUSTRIES,INC
Diagram Title: End
Component No: P-EE-01-05N
Material: AL6063-T5
Unit: mm
Weight: - g
Proportion: 1:1
Drawer
Designer
Examiner
Approver / Edition
Jerry 2017.12.13
Jerry 2019.11.16
Jerry 2019.12.06
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
P.S. All materials and products comply with RoHS, REACH directives or agreements.
38,5
25±0,2
13,5
18
5
7
4,8
5,8
13
16,8
R0,5
Ø2,5
Ø4,1
Ø7
9,5
10-0,1
23-0,1

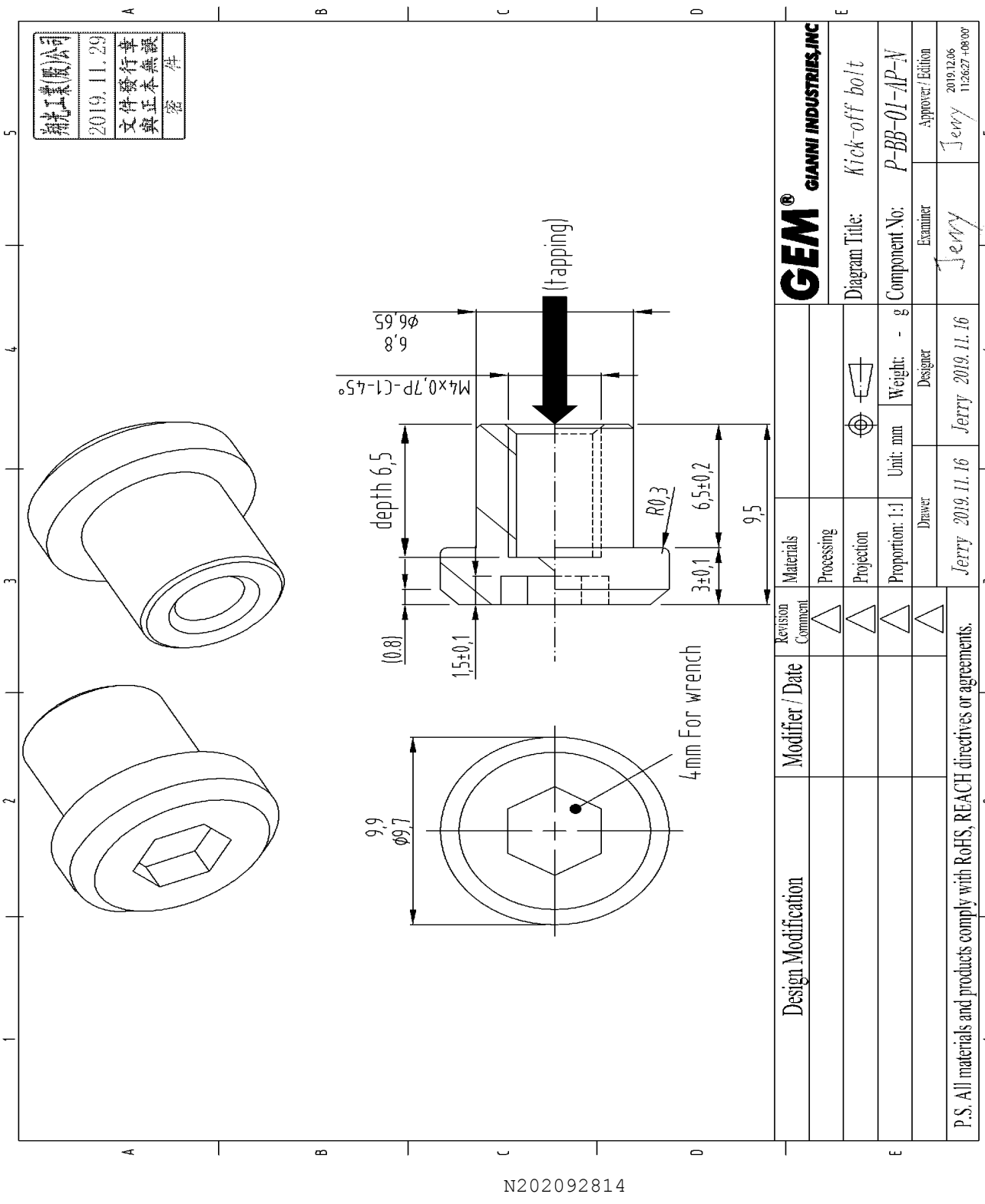

GEM GIANNI INDUSTRIES,INC
Diagram Title: Housing
Component No: P-III-01
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designed
Examiner
Approved
Design Modification
Modifier / Date
Revision Comment
Jerry 2019.11.16
Jerry 2012.04.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.


GEM GIANNI INDUSTRIES,INC
Diagram Title: Magnet
Component No: S-MN-01-PIN
Material: Iron
Weight: -
Unit: mm
Proportion: 1:1
Drawer
Designer: Jerry 2019.10.03
Examiner
Approver: Edison
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
P.S. All materials and products comply with RoHS, REACH directives or agreements.
4-M4x0.7P
2.54
37±0.3
14
10.16
5.8
5.4
60
100
12
6±0.1
2019.11.29
文件發行章與正本無誤
密件

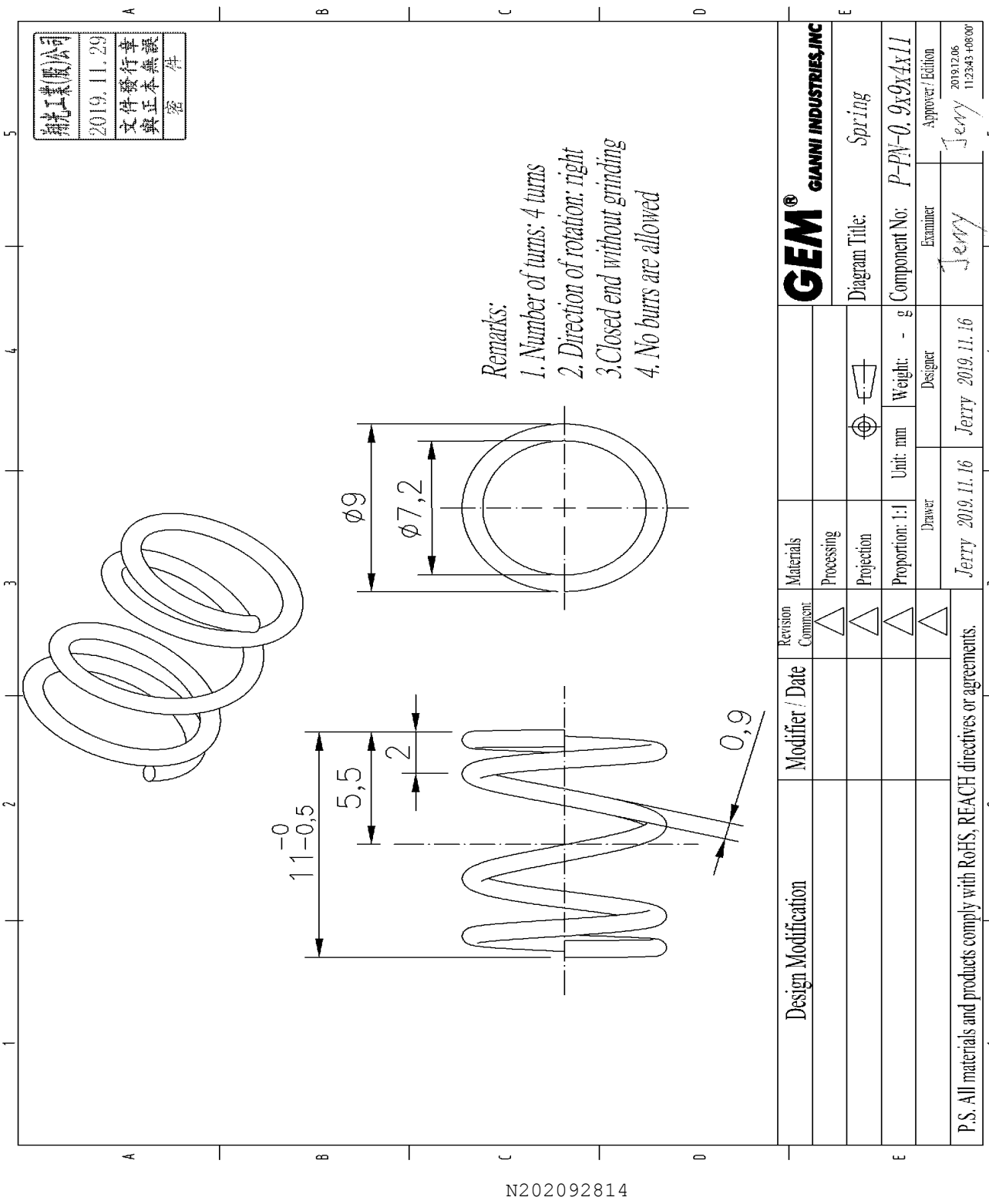
N202092812


38
19
5
61,5
Φ3xΦ6,5-120°
120°
0,5
2
GEM GIANNI INDUSTRIES,INC
Diagram Title: Cover plate
Component No: P-CL-01-02
Examiner: Jerry
Approver: Edition
Jerry 2019.12.06 11:25:16 +08'00'
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Jerry 2016.11.16
Jerry 2012.10.12
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
文件發行章與正本無誤
密件

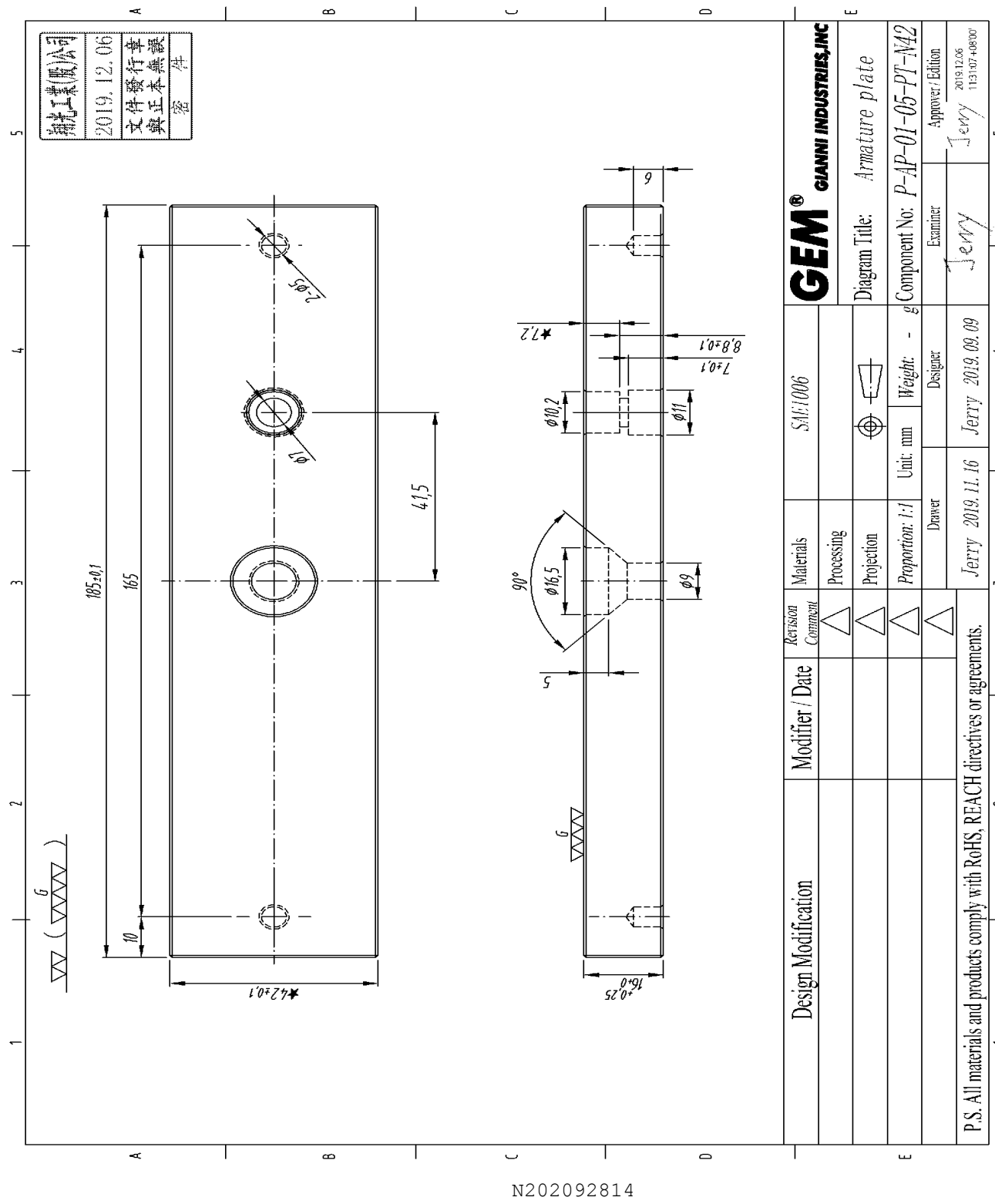
N202092813


(tapping)
M4x0.7P-C1-45°
depth 6,5
(0.8)
1,5±0,1
3±0,1
6,5±0,2
9,5
R0,3
4mm For wrench
9,9
Φ9,7
GEM GIANNI INDUSTRIES,INC
Diagram Title: Kick-off bolt
Component No: P-BB-01-AP-N
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.

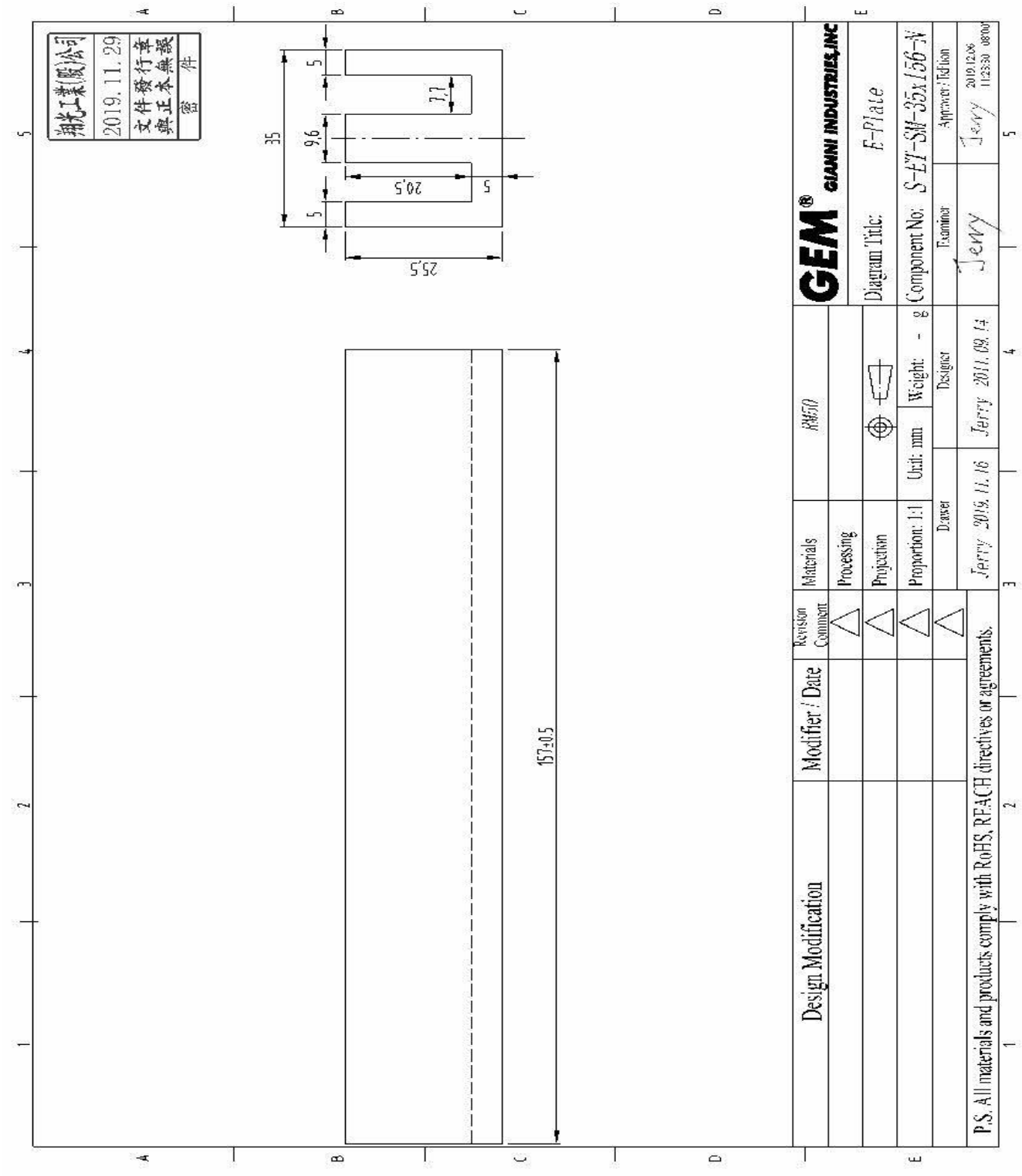
N202092814


Remarks:
1. Number of turns: 4 turns
2. Direction of rotation: right
3.Closed end without grinding
4. No burrs are allowed
ø9
ø7,2
11-0,5
-0
5,5
2
0,9
GEM GIANNI INDUSTRIES,INC
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Diagram Title: Spring
Component No: P-PN-0.9x9x4x11
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.

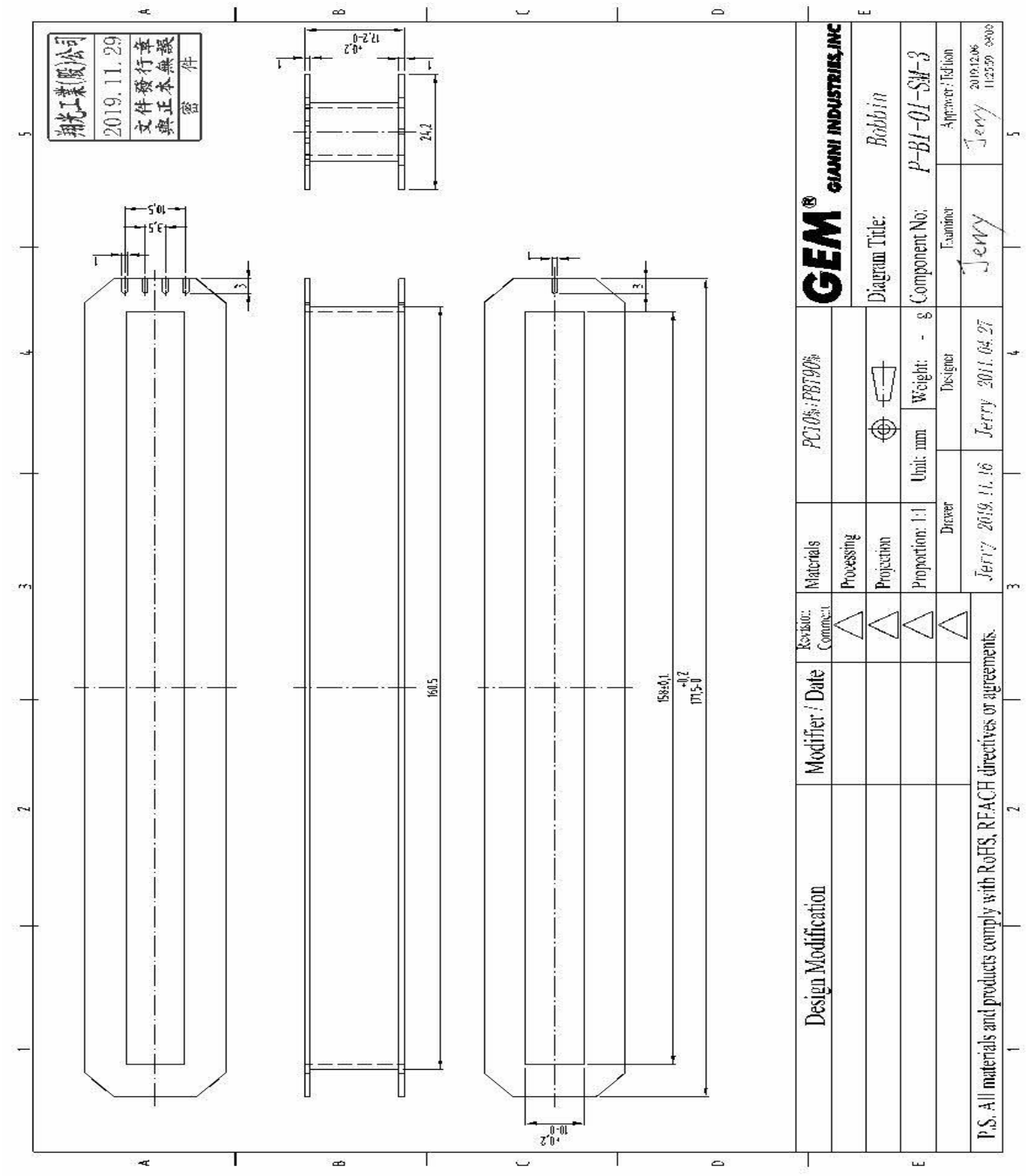
N202092814


GEM GIANNI INDUSTRIES,INC
Diagram Title: Armature plate
Component No: P-AP-01-05-PT-N42
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
SAE1006
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019. 11. 16
Jerry 2019. 09. 09
Jerry 2019.12.06 113107+0800
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019. 12. 06
185±0.1
165
41.5
10
42±0.1
16+0.25 0
7.2
8.8±0.1
7±0.1
ø10.2
ø11
ø16.5
ø9
90°
5
9
6

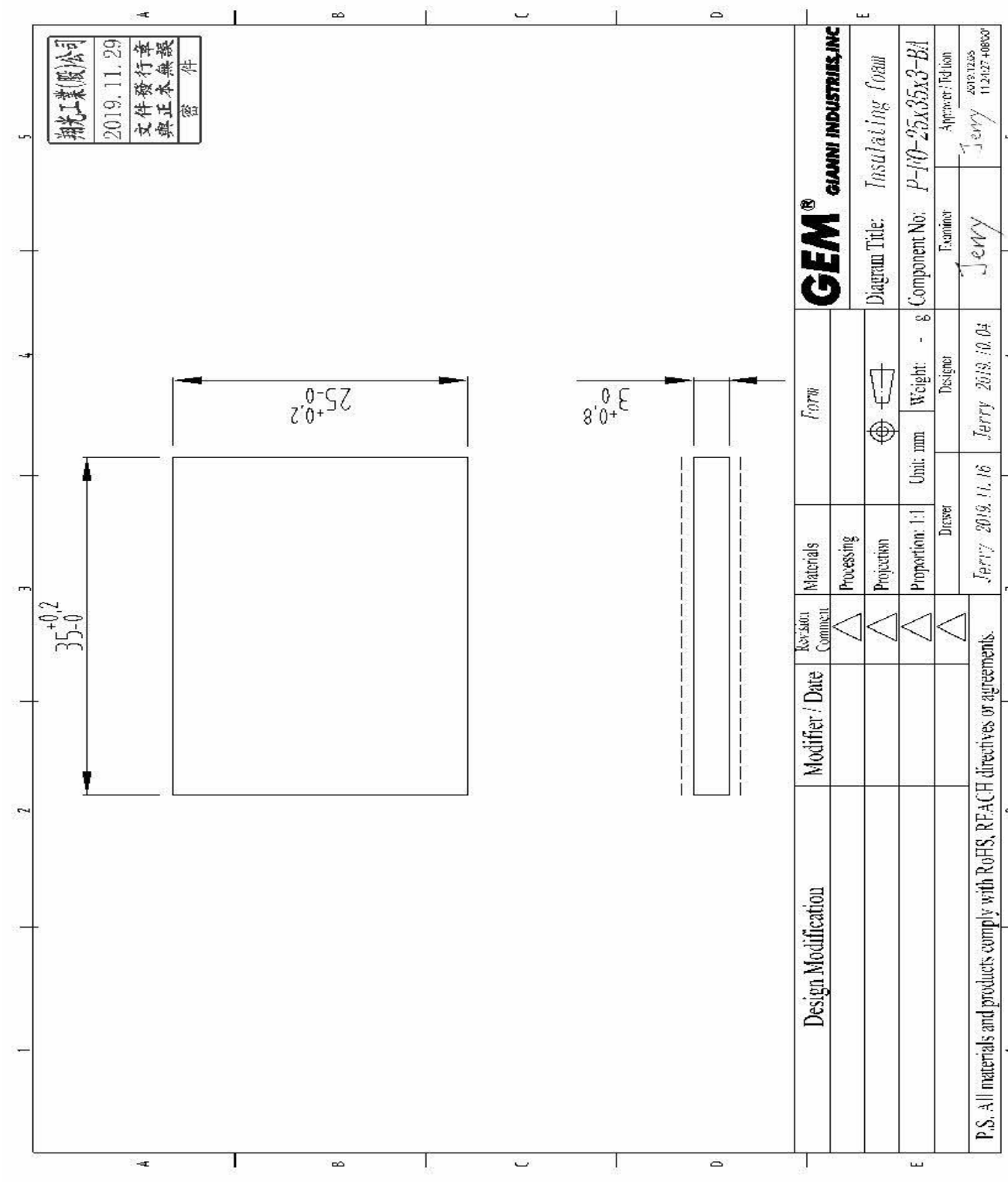
N202092814

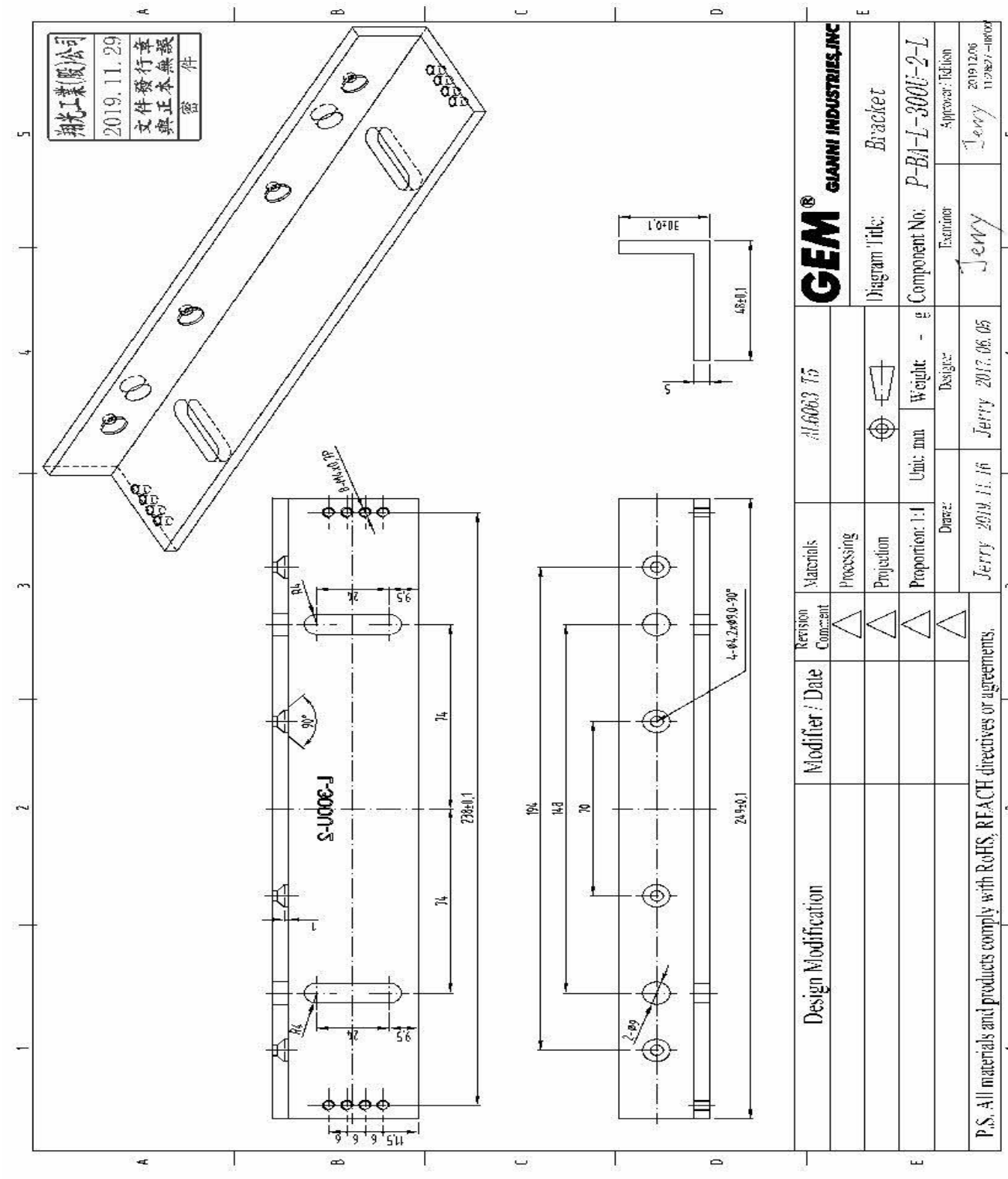

2019.11.29
35
9.6
5
5
20.5
5
7.1
25.5
157±0.5
GEM GIANNI INDUSTRIES,INC
Diagram Title: E-Plate
Component No: S-ET-SM-35x156-N
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.12.06 11:23:50 08:00
Jerry 2019.11.16
Jerry 2011.09.14
P.S. All materials and products comply with RoHS, REACH directives or agreements.

N202092815

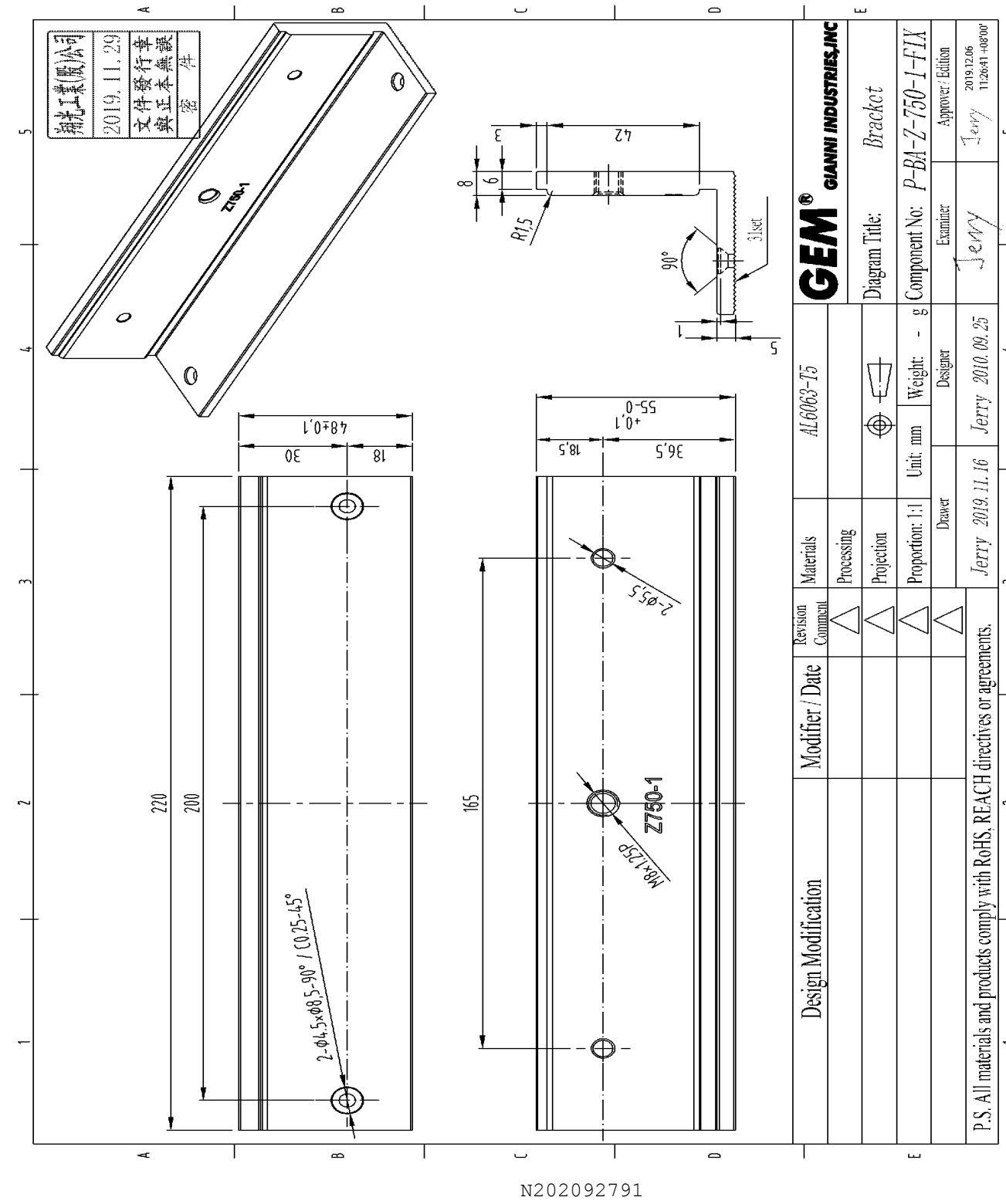

GEM GIANNI INDUSTRIES,INC
Diagram Title: Bobbin
Component No: P-B1-01-SH-3
Material: PC/ABS+PBT/GF%
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver
Jerry 2019.11.16
Jerry 2011.04.27
Jerry
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
160.5
158±0.1
171.5-0.2
10-0.2
12.2-0.2
24.2
3
3.5
10.5

N202092788

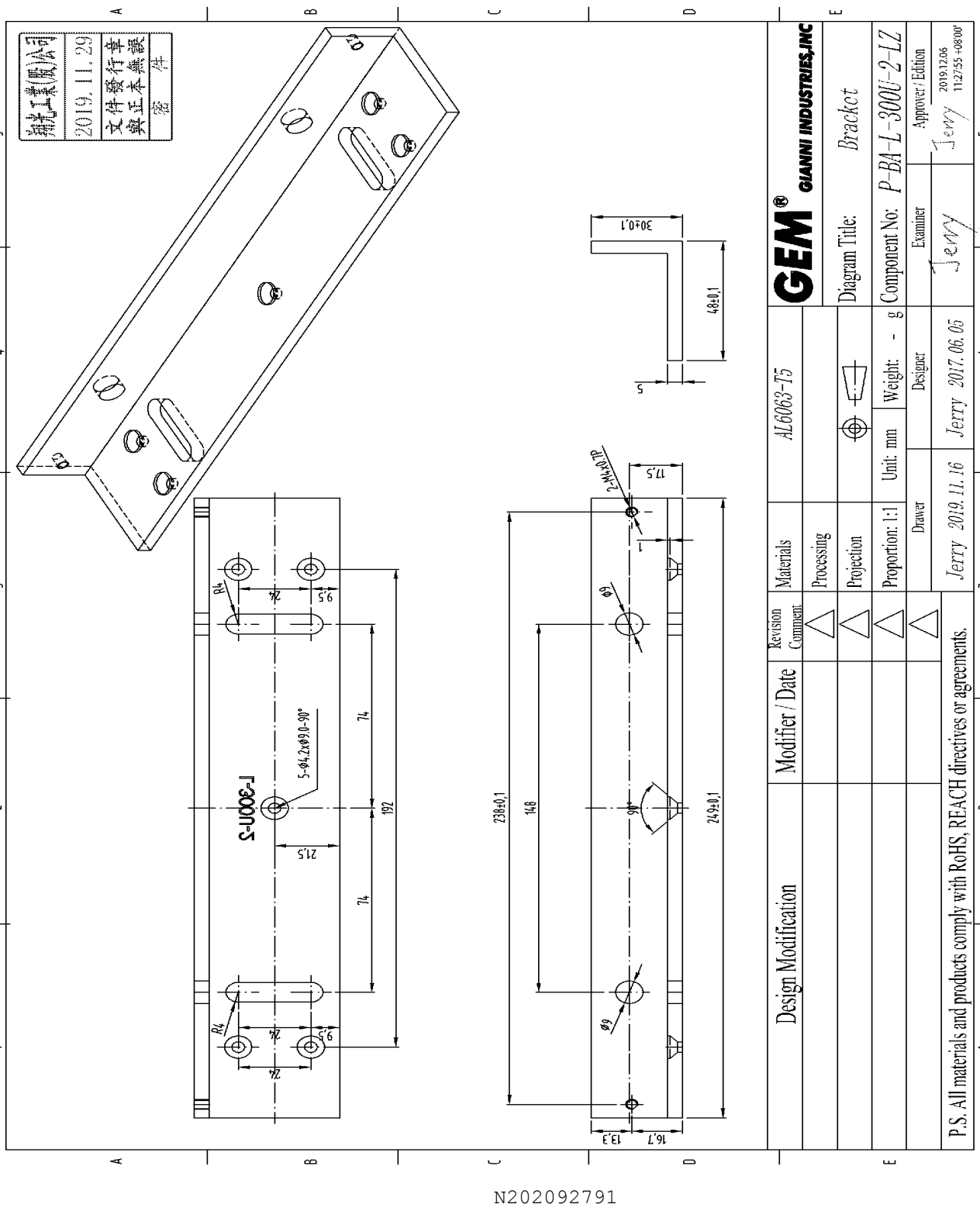

2019.11.29
35+0.2 0
25+0.2 0
3+0.8 0
GEM GIANNI INDUSTRIES,INC
Diagram Title: Insulating foam
Component No: P-HP-25x35x3-Bl
Design Modification
Modifier / Date
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver
Jerry 2019.10.04
Jerry 2019.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.


GEM GIANNI INDUSTRIES,INC
Diagram Title: Bracket
Component No: P-BI-L-300U-2-L
Material: AL6063 T5
Weight: - g
Unit: mm
Proportion: 1:1
Designer
Examiner
Approver
Jerry 2017.06.05
Jerry 2019.11.16
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
8-M4x0.7P
4-Φ4.2xΦ8.0-90°
2-Φ9
P-300U-2
238±0.1
249±0.1
48±0.1
194
143
70
74
115
L'O'FDE

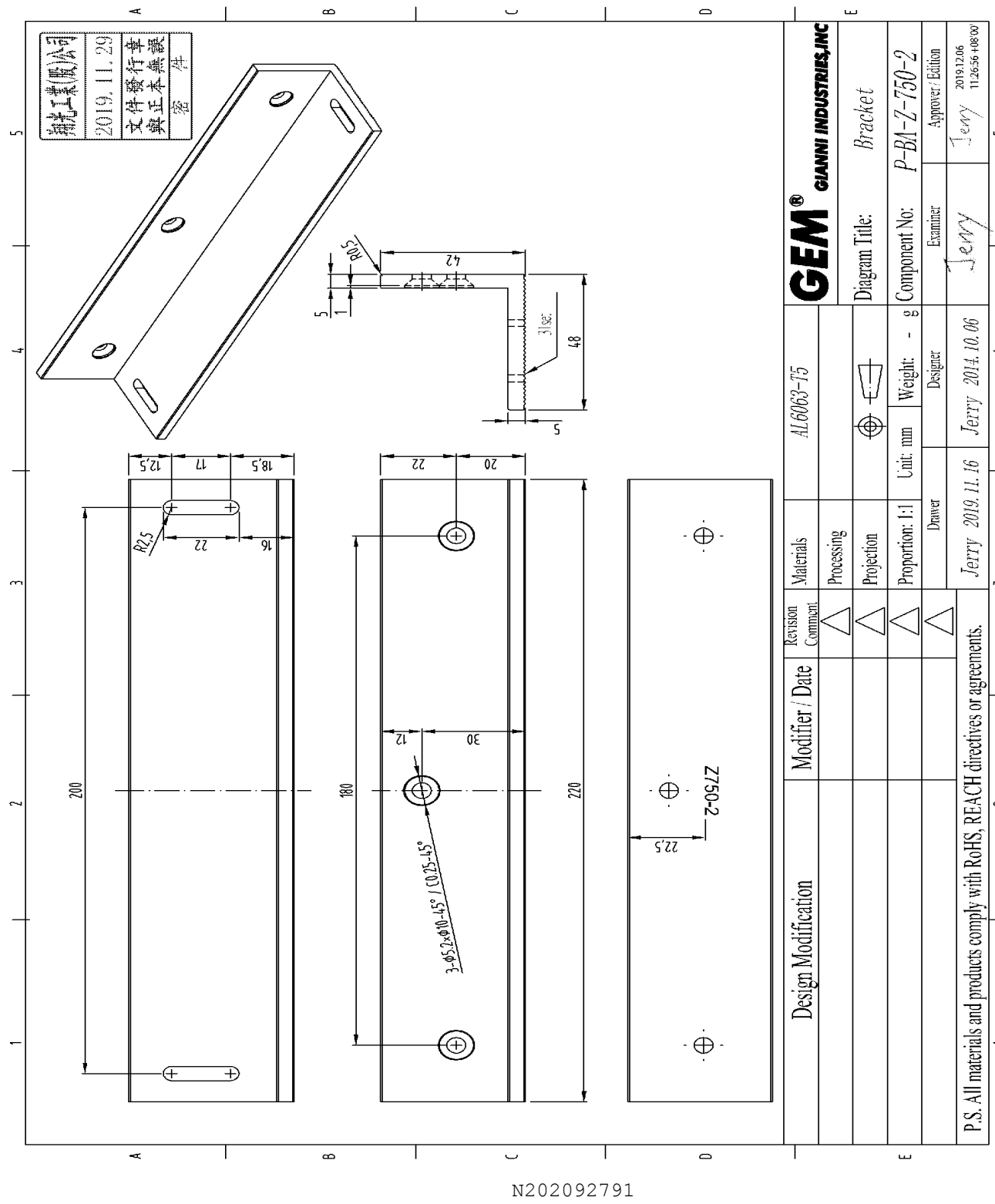
N202092790

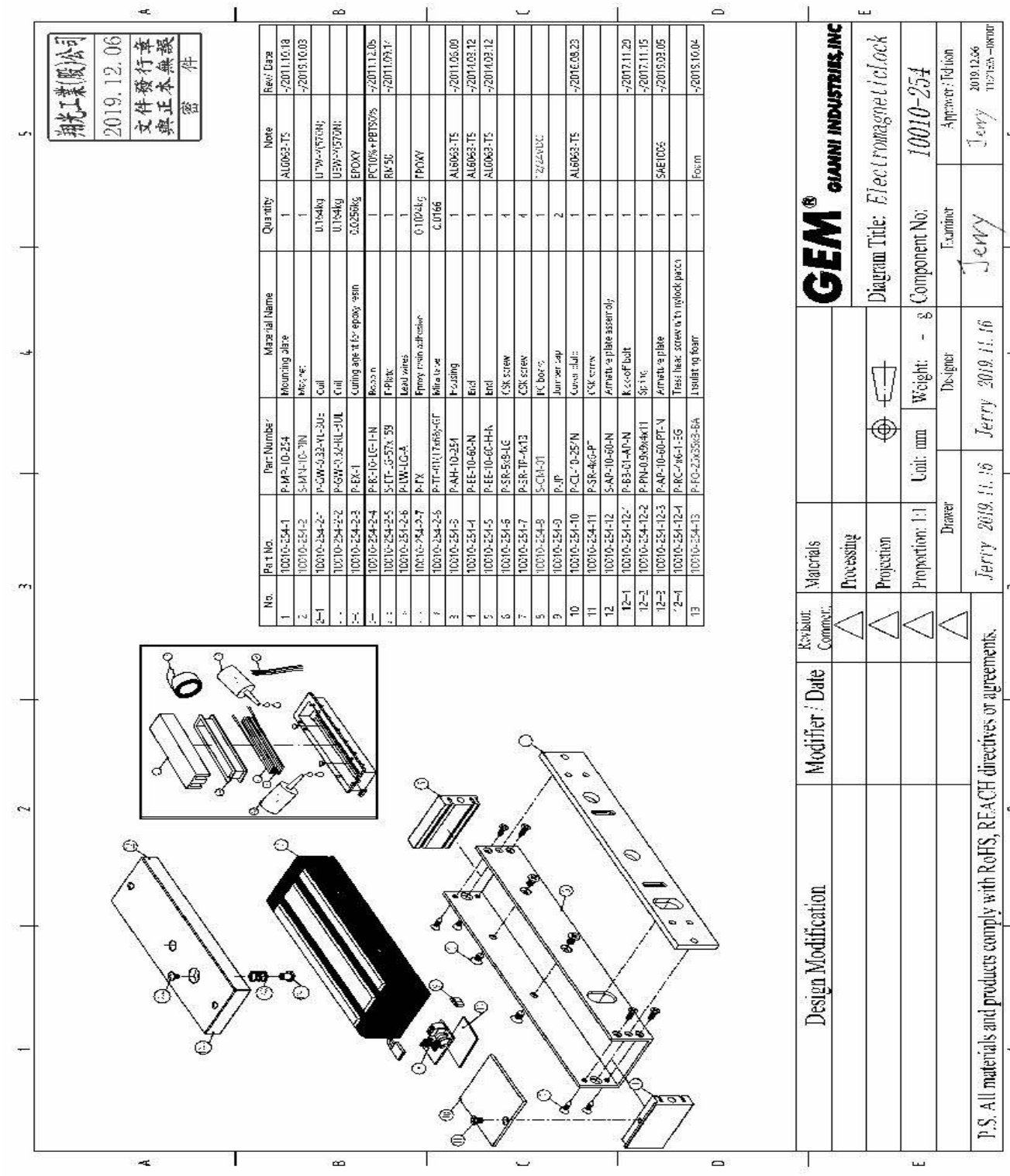

GEM GIANNI INDUSTRIES,INC
Diagram Title: Bracket
Component No: P-BA-Z-750-1-FIX
Materials AL6063-T5
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Designer
Examiner
Approver/ Edition
Drawer
Jerry 2019.11.16
Jerry 2010.09.25
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
220
200
165
48±0.1
30
18
36.5
18.5
55-0 +0.1
2-Φ4.5×Φ8.5-90° / C0.25-45°
2-Φ5.5
M8×1.25P
Z750-1
42
3
6
8
R1.5
90°
3.5±1
5

N202092791


GEM GIANNI INDUSTRIES,INC
Diagram Title: Bracket
Component No: P-BA-L-300i-2-LZ
AL6063-T5
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
Jerry 2017.06.05
Jerry
2019.12.06 11:27:55 +08'00'
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
5-Φ4.2xΦ9.0-90°
2-M4x0.7P
Φ9
Φ9
R4
R4
9.5
9.5
74
74
74
192
21.5
17.5
30±0.1
48±0.1
5
230±0.1
148
249±0.1
13.3
16.7
90°

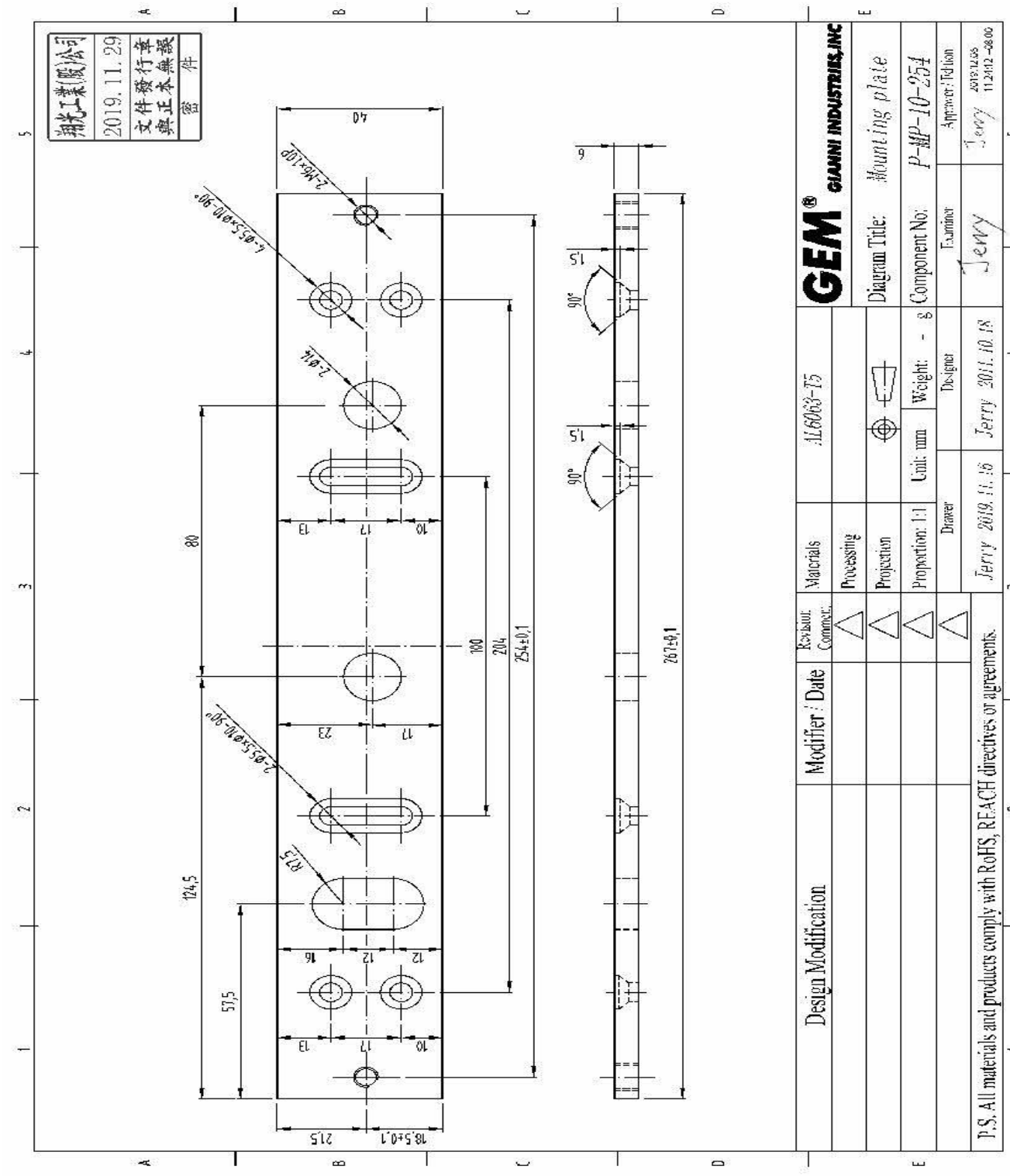
N202092791


2019.11.29
文件發行章
與正本無誤
GEM GIANNI INDUSTRIES,INC
Diagram Title: Bracket
Component No: P-BA-Z-750-2
Materials AL6063-T5
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer Jerry 2014.10.06
Examiner Jerry
Approver / Edition Jerry 2019.12.06
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
Jerry 2019.11.16
Z750-2
200
180
220
42
48
5
1
R0.5
3-Φ5.2×Φ10-45° / C0.25-45°
R2.5
12.5
17
18.5
16
22
20
30
12
22.5



No.	Part No.	Part Number	Material Name	Quantity	Note	Revi Date
1	10010-254-1	P-MP-10-254	Mounting plate	1	AL6063-T5	-/2011.10.18
2	10010-254-2	S-M4-10-3N	Washer	1		-/2019.10.03
2-1	10010-254-2-1	P-CW-0.32-YL-30±	Coil	U.1644kg	U.TW-0.45/YL/N	
-	10010-254-2-2	P-CW-0.32-RL-30±	Coil	U.164kg	U.RW-0.45/RL/N	
-	10010-254-2-3	P-EX-1	Curing agent for epoxy resin	0.02568kg	EPOXY	
-	10010-254-2-4	P-BC-10-LC-1-N	Bobbin	1	PC10%+PBT90%	-/2011.12.05
-	10010-254-2-5	S-CT-...-57± 59	T-Plate	1	RW-5C	-/2011.09.17
-	10010-251-2-6	P-LW-LC-A	Lead wires	1		
-	10010-254-2-7	P-FX	Epoxy resin adhesive	0.1024kg	EPOXY	
-	10010-254-2-8	P-TF-01/17x68-6F	Mica sheet	0.0166		
3	10010-251-3	P-AH-10-251	H-Casing	1	AL6063-T5	-/2011.06.09
4	10010-251-4	P-EE-10-60-N	End	1	AL6063-T5	-/2011.03.12
5	10010-254-5	P-EE-10-60-HA	End	1	AL6063-T5	-/2011.03.12
6	10010-251-6	P-SR-5x8-LE	CSK screw	4		
7	10010-251-7	P-SR-TP-4x13	CSK screw	4		
8	10010-254-8	S-CM-01	PC board	1	ZY1240DC	
9	10010-254-9	P-JP	Jumper cap	2		
10	10010-251-10	P-CL-...0-25?N	Curved slut	1	AL6063-T5	-/2016.08.23
11	10010-254-11	P-SR-4x6-PT	CSK screw	1		
12	10010-251-12	S-AP-10-60-N	Armature plate assembly	1		
12-1	10010-251-12-1	P-B3-01-AT-N	Rubber Butt	1		-/2017.11.20
12-2	10010-254-12-2	P-PN-0.9x9x11	Spring	1		-/2017.11.15
12-3	10010-254-12-3	P-AP-10-60-PT-N	Armature plate	1	SAE1005	-/2019.03.05
12-4	10010-254-12-4	P-RC-...x6-1-55	Trasc head screw with nylock patch	1		
13	10010-254-13	P-FO-20x35x3-BA	Insulating foam	1	Foam	-/2019.10.04

N202092792


GEM GIANNI INDUSTRIES,INC
Diagram Title: Mounting plate
Component No: P-MP-10-254
Material: AL6063-T5
Weight: - g
Unit: mm
Proportion: 1:1
Design Modification
Modifier / Date
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
文件發行章與正本無誤
密件

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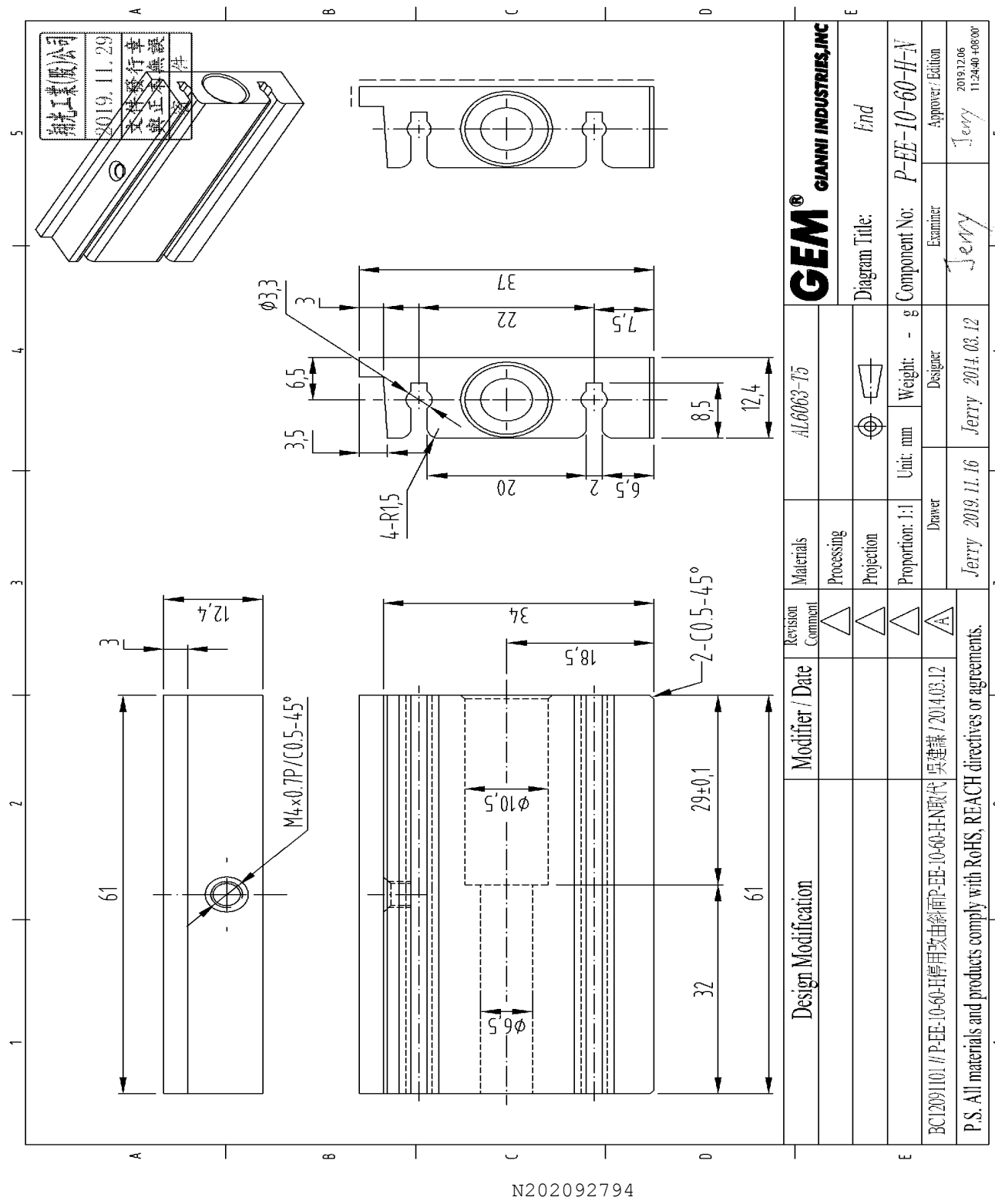
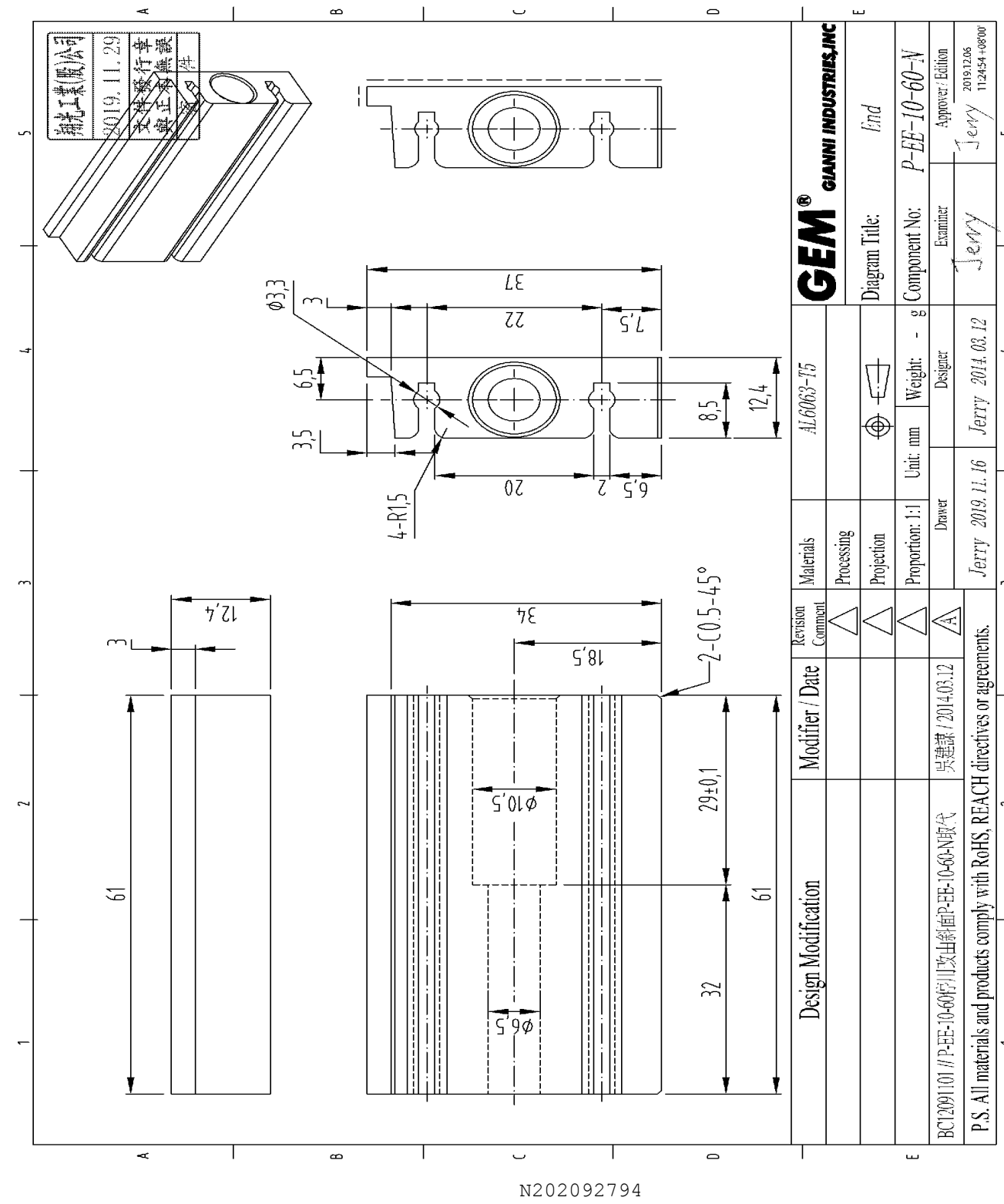
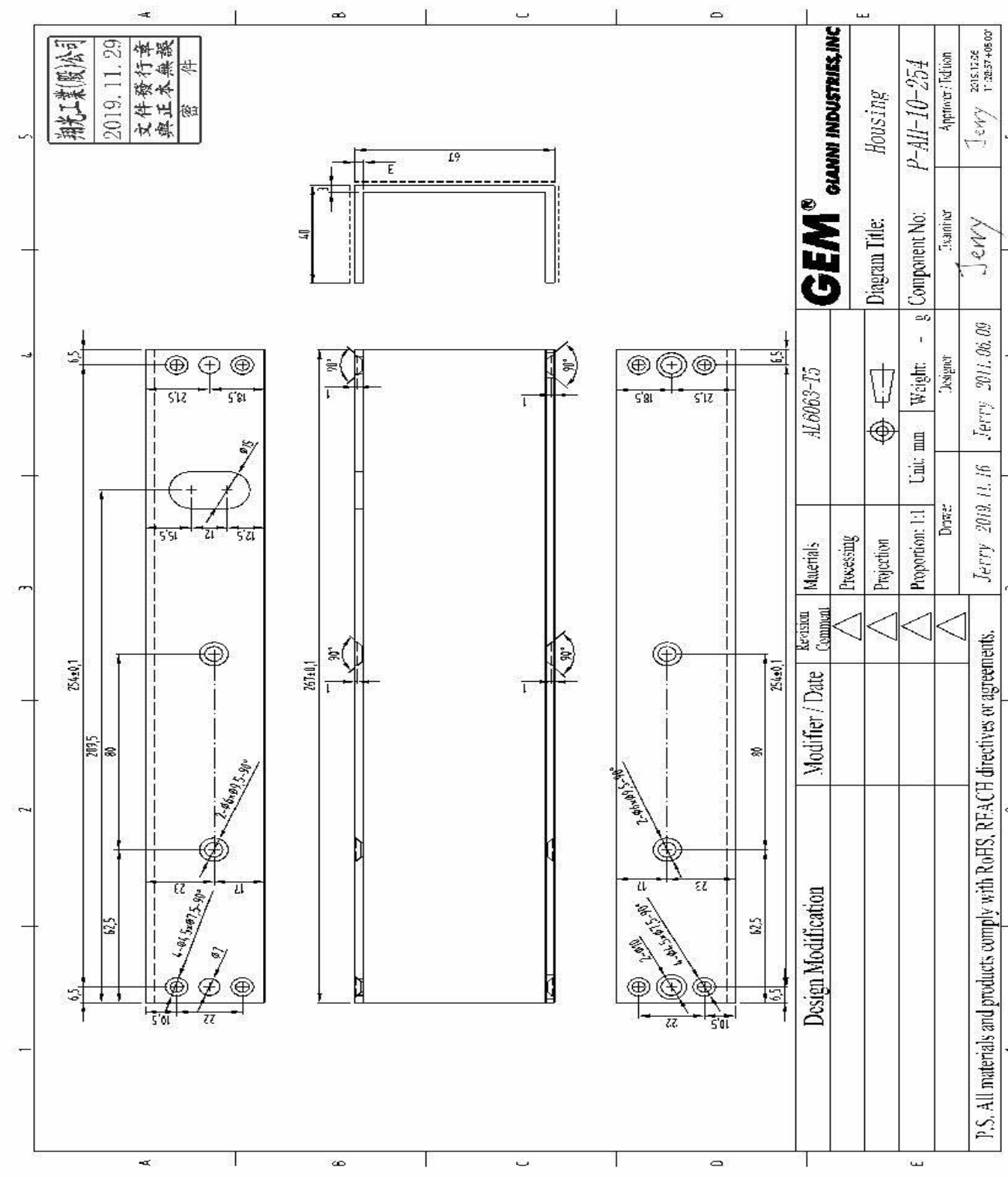
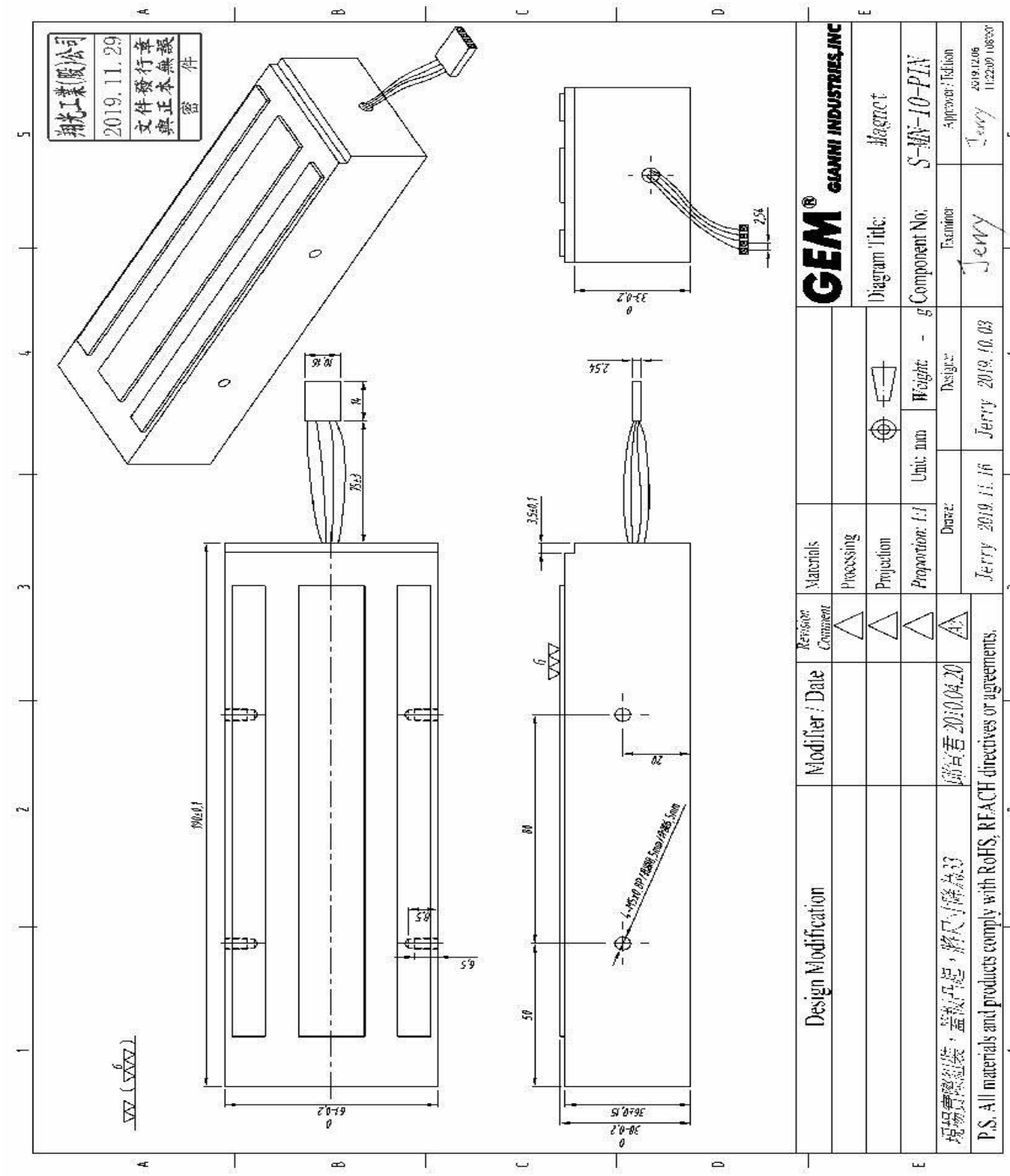

GEM GIANNI INDUSTRIES,INC
Diagram Title: End
Component No: P-EE-10-60-H-N
Materials AL6063-T5
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer Jerry 2014.03.12
Examiner Jerry
Approver/ Edition Jerry 2019.12.06
Design Modification
Modifier / Date
Revision Comment
BC12091101 // P-EE-10-60-H停用改由斜面P-EE-10-60-H-N取代 吳建謀 / 2014.03.12
P.S. All materials and products comply with RoHS, REACH directives or agreements.
M4x0.7P/C0.5-45°
2-C0.5-45°
4-R1,5
Ø3,3
Ø10,5
Ø6,5
12,4
3
61
34
18,5
29±0,1
32
37
22
7,5
6,5
3,5
20
2
6,5
8,5

N202092794

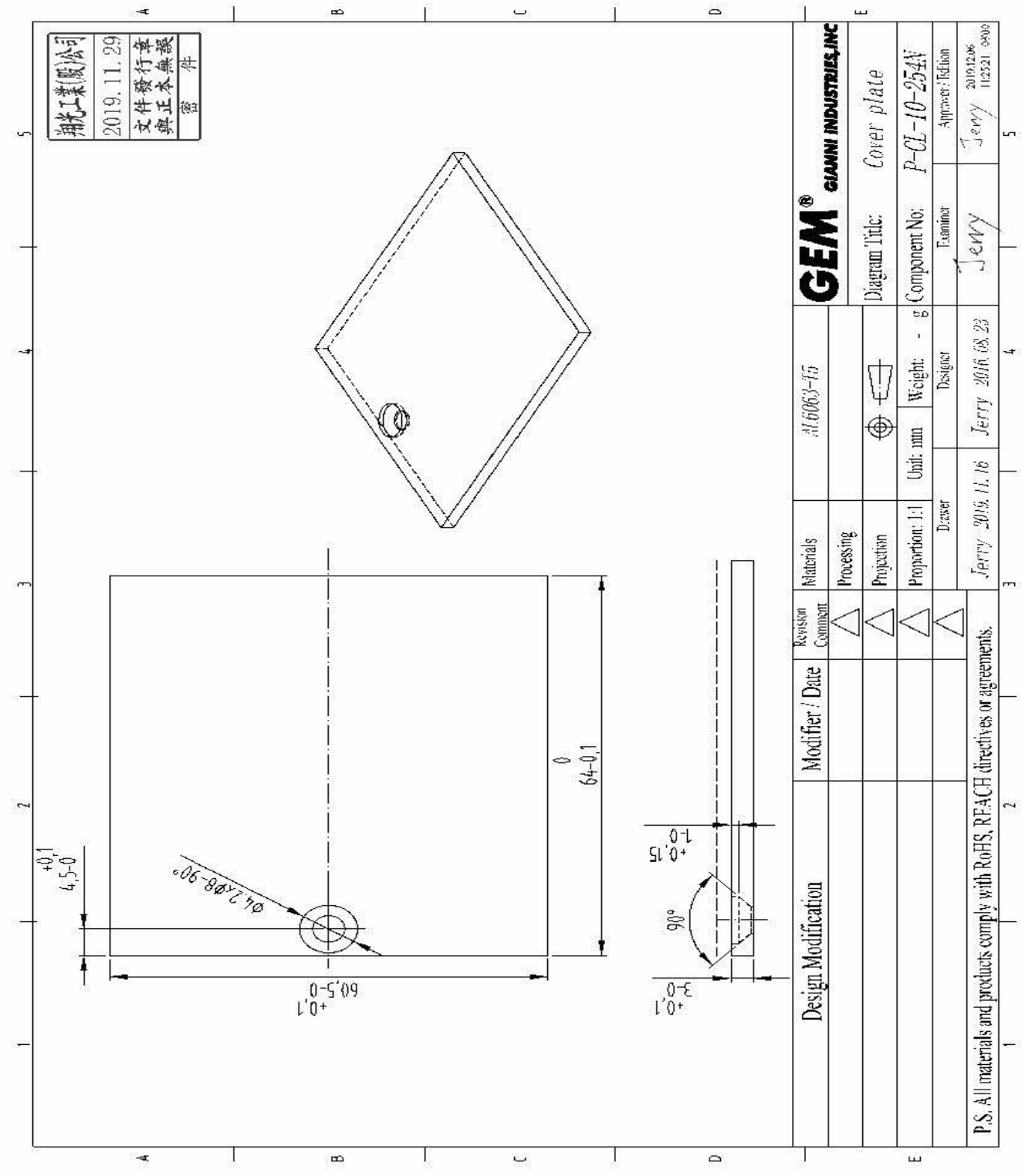

GEM GIANNI INDUSTRIES,INC
Diagram Title: Find
Component No: P-EE-10-60-N
Material: AL6063-T5
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Designer
Examiner
Approver/ Edition
Drawer
Jerry 2019.11.16
Jerry 2014.03.12
Jerry 2019.12.06
Design Modification
Modifier / Date
Revision Comment
BC12091101 // P-EE-10-60外川改由斜面P-EE-10-60-N版令
吴建赋 / 2014.03.12
P.S. All materials and products comply with RoHS, REACH directives or agreements.
37
22
7,5
3
Φ3,3
6,5
3,5
4-R1,5
20
2
6,5
8,5
12,4
34
18,5
2-C0.5-45°
12,4
3
61
Φ10,5
29±0,1
61
32
Φ6,5

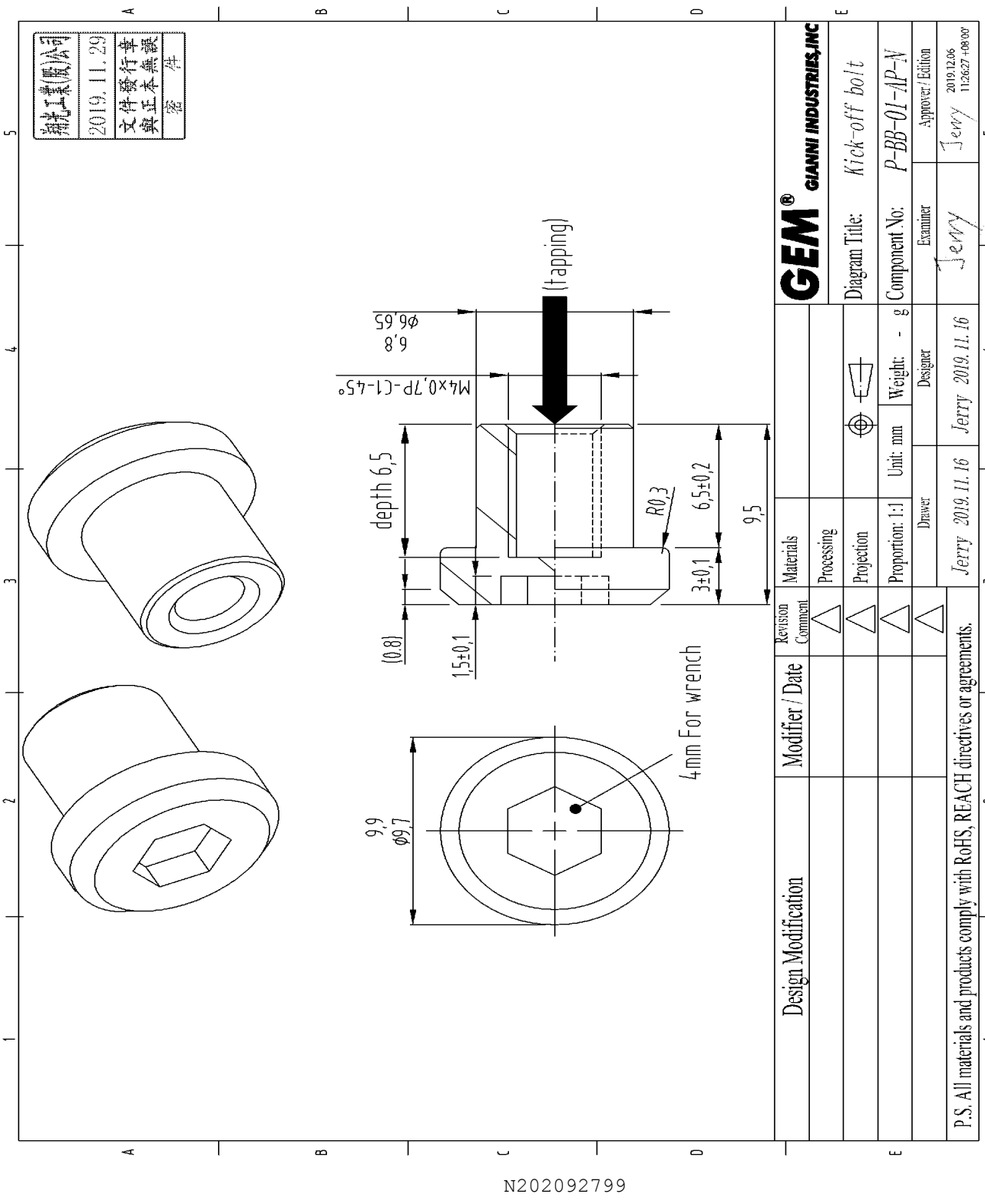
N202092794


GEM GIANNI INDUSTRIES,INC
Diagram Title: Housing
Component No: P-AH-10-254
Material: AL6063-T5
Weight: - g
Unit: mm
Proportion: 1:1
Projection
Designer
Drawer
Jerry 2019.11.16
Jerry 2011.06.09
Design Modification
Modifier / Date
Revision Command
P.S. All materials and products comply with RoHS, REACH directives or agreements.

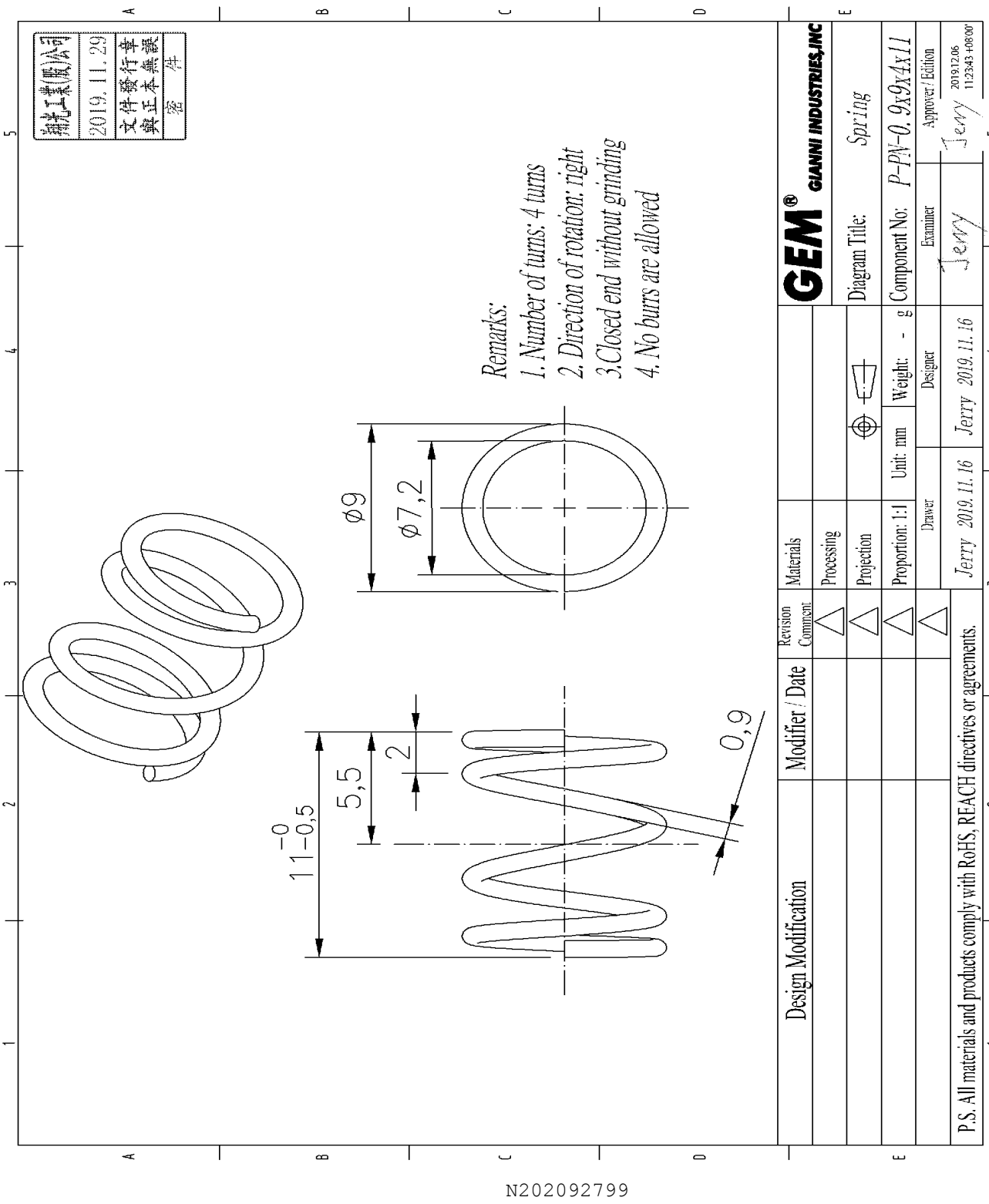

GEM GIANNI INDUSTRIES,INC
Diagram Title: Magnet
Component No: S-MW-10-PIN
Material
Processing
Projection
Proportion: 1:1
Unit: mm
Weight - g
Designer
Examiner
Approver / Edition
Jerry 2019.10.03
Jerry 2019.11.16
Design Modification
Modifier / Date
Revision Comment
All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29

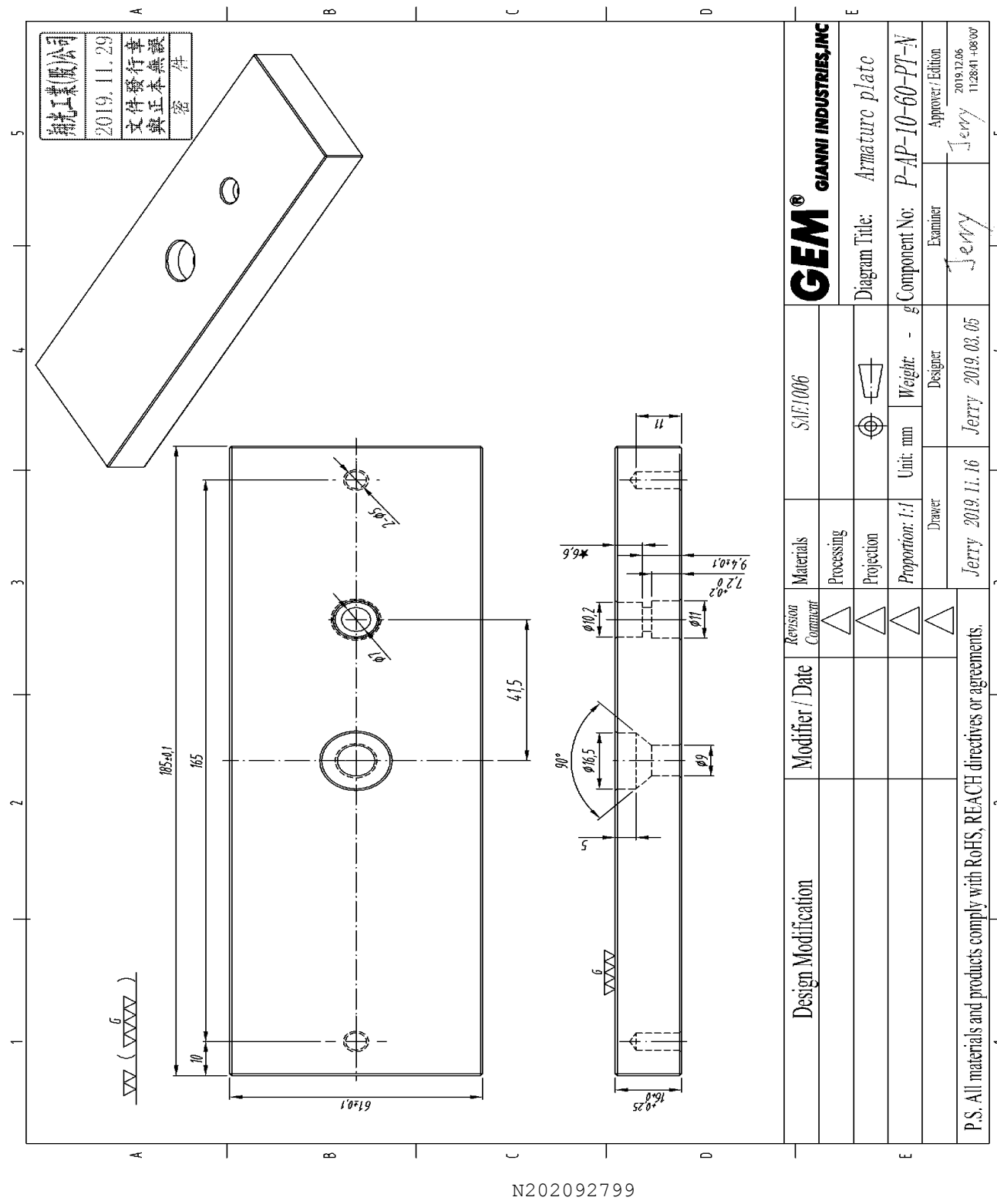
N202092796


GEM GIANNI INDUSTRIES,INC
Diagram Title: Cover plate
Component No: P-CL-10-254W
Material: AL6063-T5
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2016.05.23
Jerry 2016.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
Ø64-0,1
90°
Ø4,2x08-90°

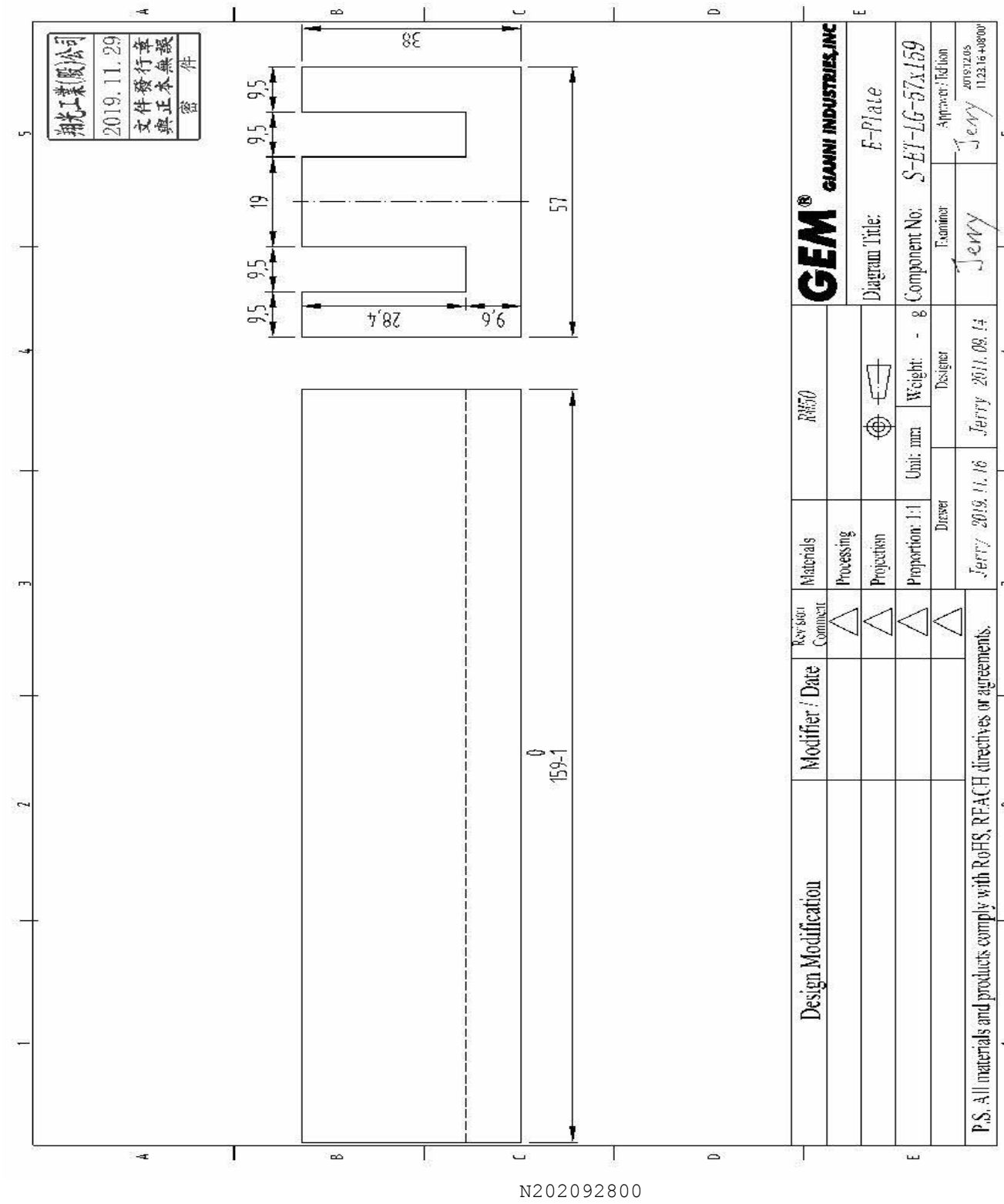

(tapping)
M4x0.7P-C1-45°
6.8
ϕ6.65
depth 6,5
(0.8)
1,5±0,1
R0.3
3±0,1
6,5±0,2
9,5
9,9
ϕ9,7
4mm For wrench
GEM GIANNI INDUSTRIES,INC
Diagram Title: Kick-off bolt
Component No: P-BB-01-AP-N
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
Jerry 2019.12.06 11:26:27 +08'00'
P.S. All materials and products comply with RoHS, REACH directives or agreements.

N202092799

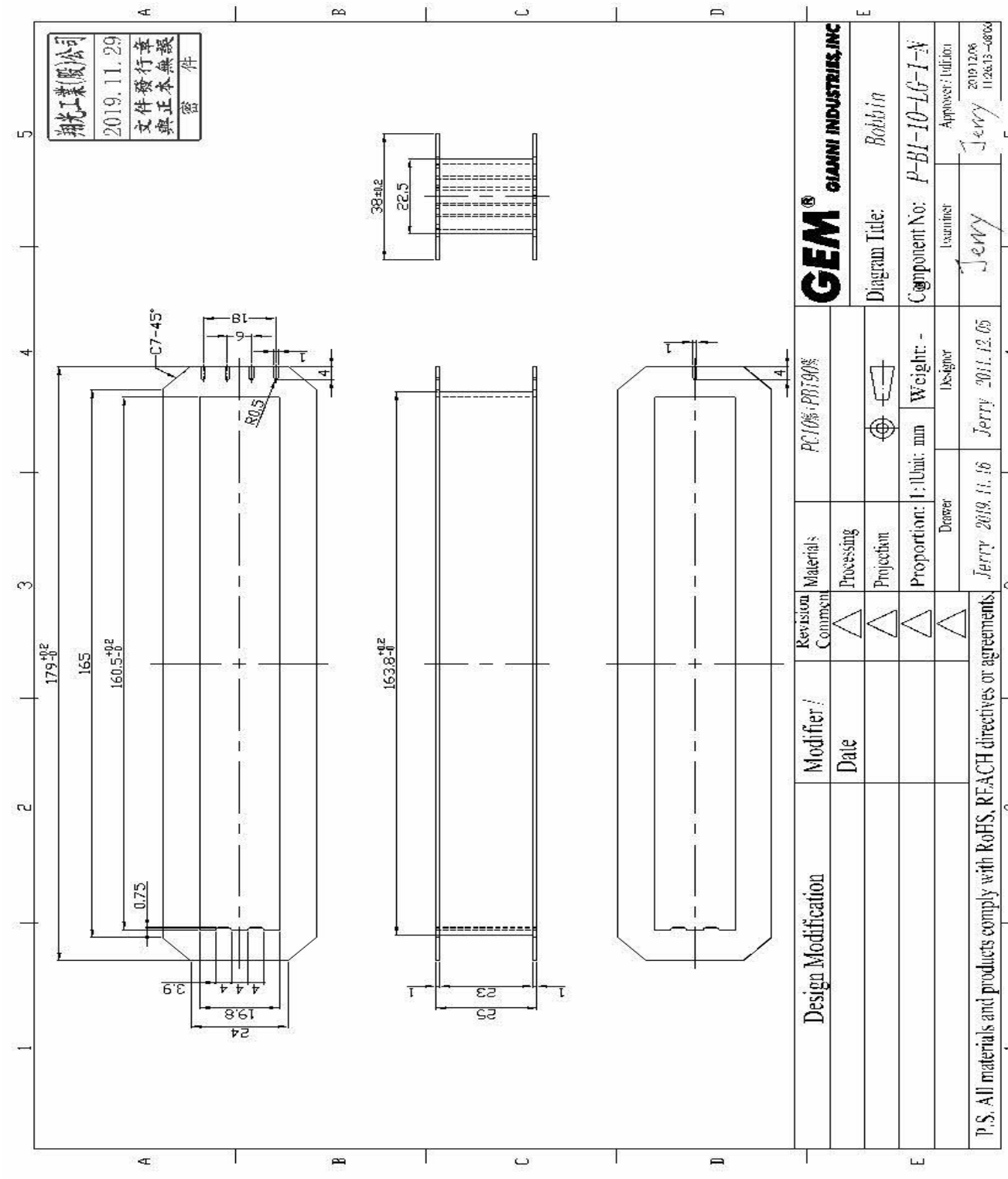

Remarks:
1. Number of turns: 4 turns
2. Direction of rotation: right
3.Closed end without grinding
4. No burns are allowed
ø9
ø7,2
11-0,5
5,5
2
0,9
GEM GIANNI INDUSTRIES,INC
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
Diagram Title: Spring
Component No: P-PN-0.9x9x4x11
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.


GEM GIANNI INDUSTRIES,INC
Diagram Title: Armature plate
Component No: P-AP-10-60-PT-N
Materials
SAE1006
Processing
Projection
Unit: mm
Weight: - g
Proportion: 1:1
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019. 03. 05
Jerry 2019. 11. 16
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019. 11. 29
185±0.1
165
10
61±0.1
4,15
ø10,2
ø11
ø16,5
ø9
90°
6,6
9,4±0.1
7,2±0.2
11
5
16±0.25

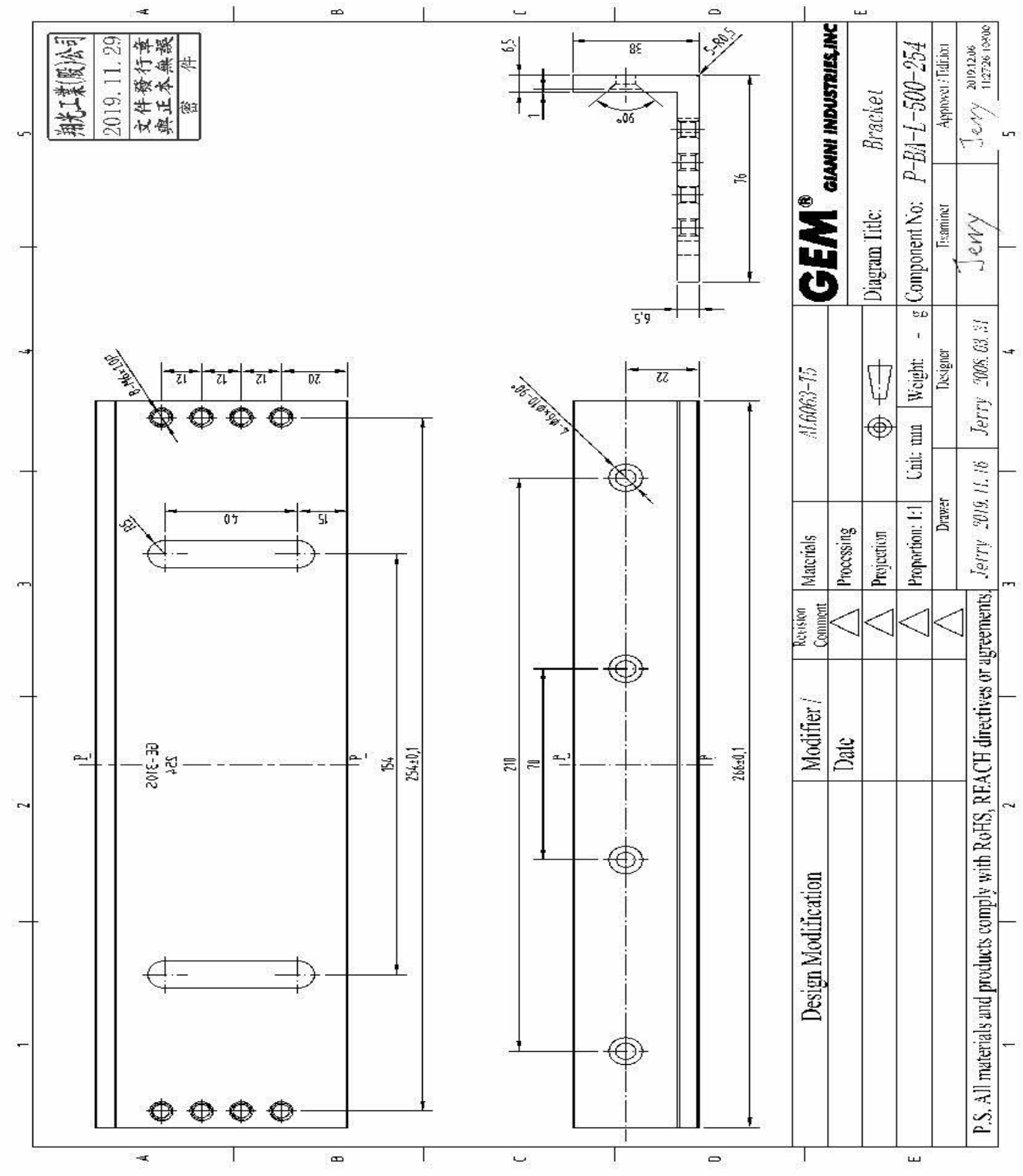
N202092799


38
9.5
9.5
19
9.5
9.5
57
28.4
9.6
0
159-1
GEM GIANNI INDUSTRIES,INC
Diagram Title: E-Plate
Component No: S-EI-LG-57x159
Design Modification
Modifier / Date
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver
P.S. All materials and products comply with RoHS, REACH directives or agreements.

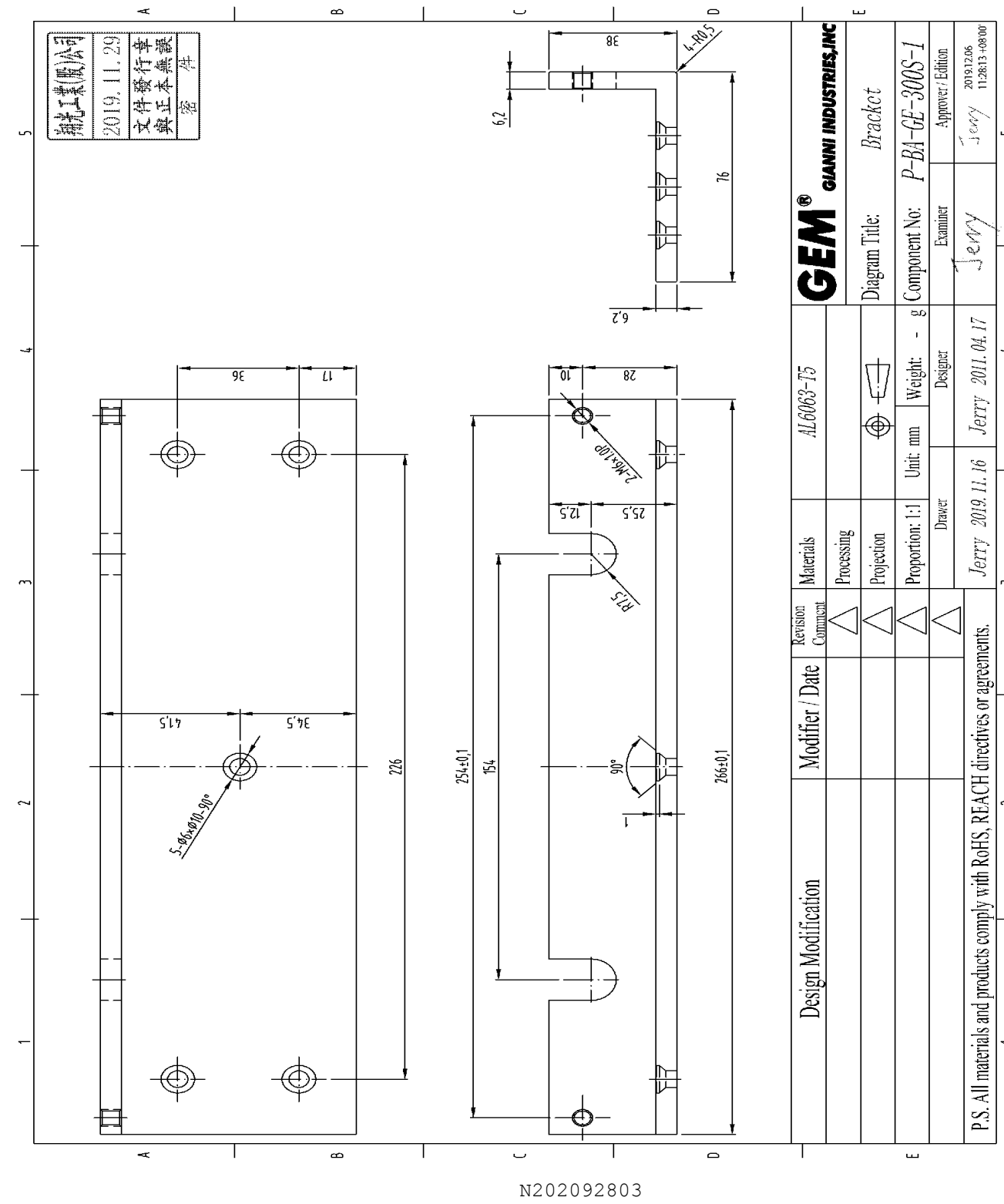
N202092800


GEM GIANNI INDUSTRIES,INC
Diagram Title: Bobbin
Component No: P-B1-10-LG-1-N
PC106;PBT90%
Weight: -
Proportion: 1:1Unit: mm
Design Modification
Modifier:
Date
Revision Comment
Materials
Processing
Projection
Drawer
Designer
Examiner
Approver: Edition
Jerry 2019.11.16
Jerry 2011.12.05
Jerry
2019/12/06
11:26:13 +08'00'
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.29
文件發行章
與正本無誤
密 件
C7-45°
R0.5
0.75
3.9
19.8
24
38±0.2
22.5
163.8+0.2
179+0.2
165
160.5+0.2

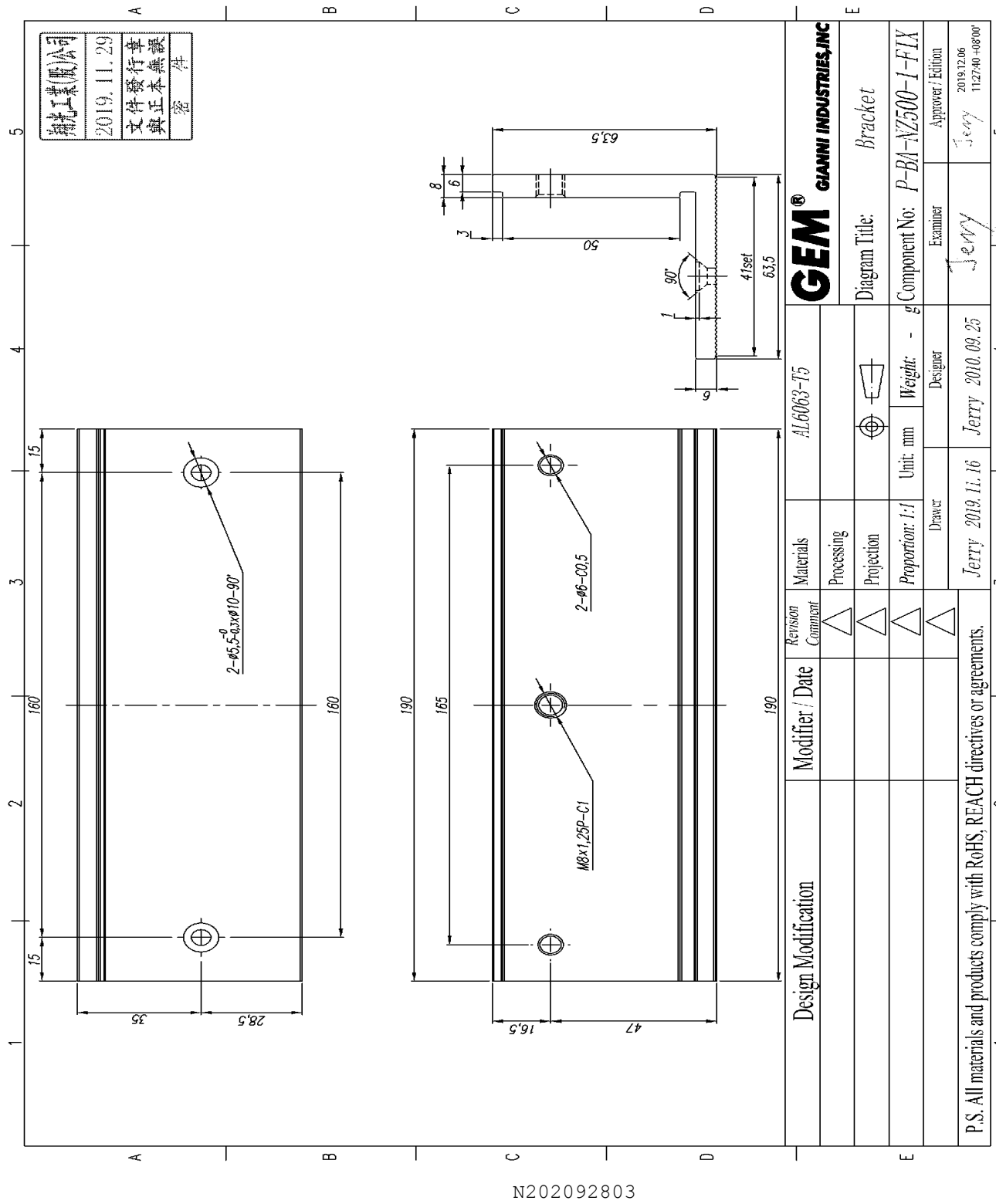
N202092801

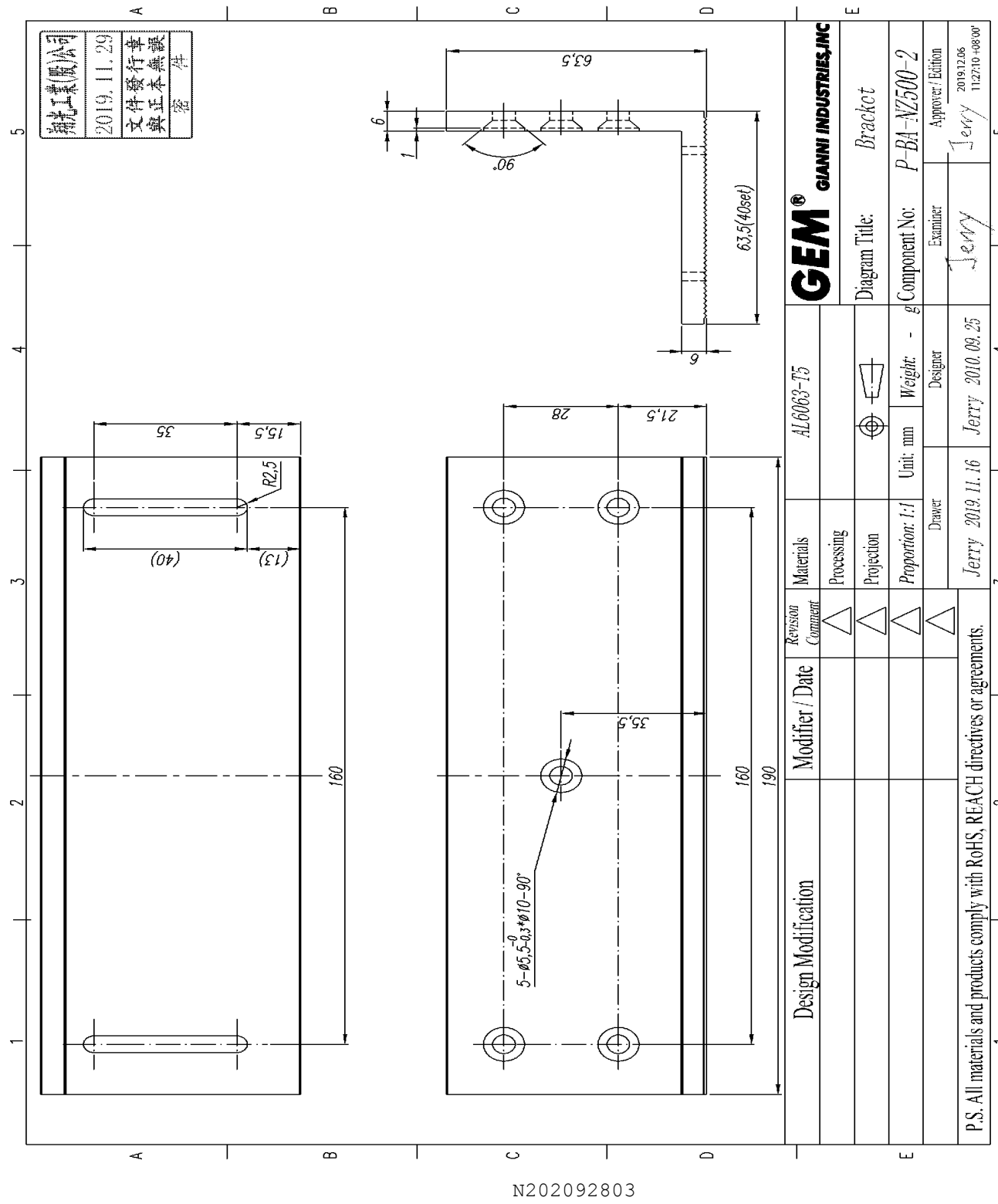

GEM GIANNI INDUSTRIES,INC
Diagram Title: Bracket
Component No: P-BR-L-500-254
Material: AL6063-T5
Weight: - g
Unit: mm
Proportion: 1:1
Design Modification
Modifier /
Date
P.S. All materials and products comply with RoHS, REACH directives or agreements.
Jerry 2019.11.18
Jerry 2005.03.31
Jerry 2019.12.06
254±0.1
216±0.1
154
210
76
38
6.5
1
5.5
22
20
12
40
15
25
Ø25 +0.021 0

N202092802

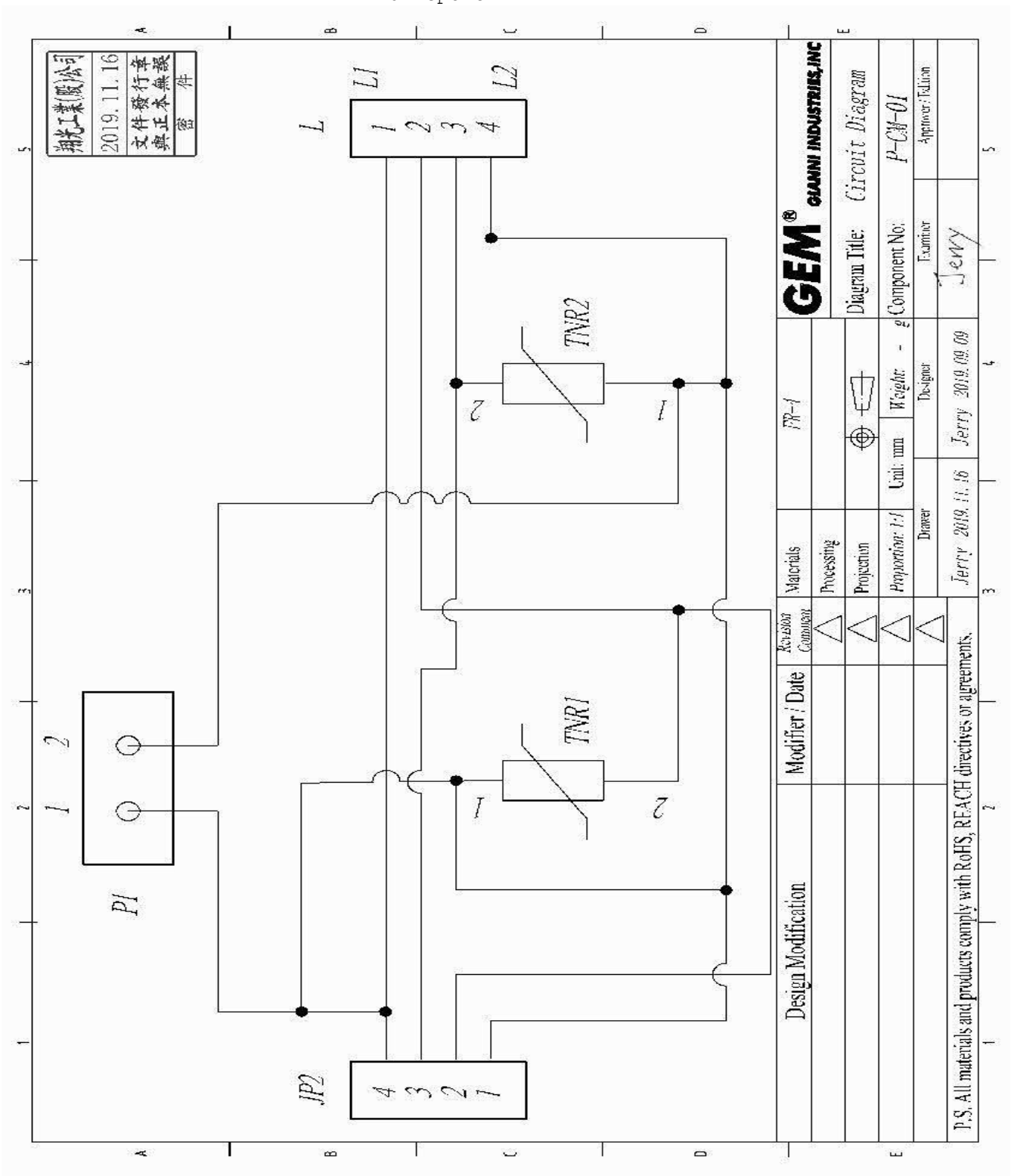

2019.11.29
GEM GIANNI INDUSTRIES,INC
Diagram Title: Bracket
Component No: P-BA-GE-300S-1
Materials AL6063-T5
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer Jerry 2011.04.17
Examiner Jerry
Approver / Edition
2019.12.06 11:28:13 +08:00
Design Modification
Modifier / Date
Revision Comment
Jerry 2019.11.16
P.S. All materials and products comply with RoHS, REACH directives or agreements.
5-Φ6×Φ10-90°
2-M6×1.0P
4-R0.5
254±0.1
266±0.1
154
226
R7.5
90°

N202092803

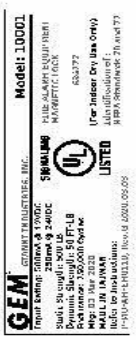

2019.11.29
文件發行章
與正本無誤
宏 仲
2-ø5,5-0,1xø10-90°
2-ø6-C0,5
M8x1,25P-C1
63,5
50
41set
90°
GEM GIANNI INDUSTRIES,INC
Design Modification
Modifier / Date
Revision Comment
Materials
Processing
Projection
AL6063-T5
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Diagram Title: Bracket
Component No: P-BA-NZ500-1-FIX
Jerry 2019.11.16
Jerry 2010.09.25
2019.12.06 11:27:40 +08'00'
P.S. All materials and products comply with RoHS, REACH directives or agreements.


2019. 11. 29
63,5
6
1
.06
63,5(40set)
6
35
15,5
R2,5
(40)
(13)
160
28
21,5
35,5
160
190
5-Ø5,5-0,3*Ø10-90°
AL6063-T5
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
GEM GIANNI INDUSTRIES,INC
Diagram Title: Brackct
Component No: P-BA-NZ500-2
Jerry 2010.09.25
Jerry 2019.11.16
Jerry 2019.12.06 11:27:10 +08'00'
Design Modification
Modifier / Date
Revision Comment
P.S. All materials and products comply with RoHS, REACH directives or agreements.

N202092803


L
L1
L2
1
2
3
4
TNR2
TNR1
P1
JP2
GEM
GIANNI INDUSTRIES,INC
Diagram Title: Circuit Diagram
Component No: P-CM-01
FR-4
Design Modification
Modifier / Date
Materials
Processing
Projection
Proportion: 1:1
Unit: mm
Weight: - g
Drawer
Designer
Examiner
Approver / Edition
Jerry 2019.11.16
Jerry 2019.09.09
Jerry
P.S. All materials and products comply with RoHS, REACH directives or agreements.
2019.11.16
文件發行章
與正本無誤
密件

N202092824


GEM
Model 10001
LISTED


GEM
Model: 10010-254
LISTED

TEST RECORD NO.1

SAMPLES:

Samples of Electromagnetic Lock, Models 10001 and 10010-254, as indicated below and constructed as described herein, were submitted by the manufacturer for evaluation.

GENERAL:

The purpose of this investigation was to evaluate the above products to comply with UL 864 requirements.

Test results relate only to the items tested.

The following limited test plan was considered necessary:

TEST	UL 864 SECTION	Datasheet/ Test location
TEST SAMPLE SETUP	30/31	DS1/ UL-TAI
OPERATION TEST – RELEASING DEVICE (NON-EXTINGUISHING AND NON-WATER BASED)	51-54	DS1/ UL-TAI
VARIABLE VOLTAGE OPERATION	65	DS1/ UL-TAI
POLARITY REVERSAL	90	DS1/ UL-TAI

The following tests were considered covered as follows:

Test Name	UL 1034 SECTION	UL 294 SECTION	File Reference	Report Date	Test Record No.
ELECTRICAL RATINGS – POWER INPUT CIRCUITS	28	37	SA44784	2019-12-11	1
VARIABLE TEMPERATURE TEST	34	44			
HUMIDITY	35	45			
ENDURANCE	39	49			
JARRING	40	50			
DIELECTRIC VOLTAGE-WITHSTAND	41	51			
COMPOMENT TEMPERATURE	42	52			
TRANSIENT TESTS – INTERNALLY INDUCED TRANSIENTS	44.1 44.3	54.1 54.3			
TRANSIENT TESTS – INPUT/OUTPUT (LOW-VOLTAGE) FIELD-WIRING TRANSIENTS	44.1 44.4	54.1 54.4			

The following tests were considered waived or not applicable:

TEST WAIVED	UL 864 SECTION	Rationale for waived Test
OPERATION TESTS - GENERAL	30-31	1
OPERATION TESTS – LOCAL SERVICE	32-34	2
OPERATION TESTS – RELEASING SERVICE	35-36	3
OPERATION TESTS – REMOTE STATION, CENTRAL STATION, AND PROPRIETARY SERVICES	37-41	4
OPERATION TESTS – AUXILIARY SERIVCE	42-44	5
OPERATION TESTS – MARINE APPLIECATIONS	45-46	6
OPERATION TESTS – SMOKE-CONTROL APPLICATIONS	47-50	7
COMMON REQUIREMENTS	55-62	8
VOICE AMPLIFIER HARMONIC DISTORTION	64	9
POWER-LIMITED CIRCUITS	66	10
COMPATIBILITY	67	11
CHARGING CURRENT	69	12
STANDBY OPERATING POWER TEST FOR RELEASING DEVICES	70	13
OVERLOAD	72	14
TIME-LIMIT CUTOUT CALIBRATION	75	15
LEAKAGE CURRENT	76	16
TRANSIENT TESTS – EXTERNALLY-INDUCED SUPPLY-LINE TRANSIENTS	77.2	14
ELECTRIC SHOCK CURRENT	78	17
IGNITION TEST THROUGH BUTTOM-PANEL OPENINGS	79	17
ABNORMAL OPERATION	81	17
TESTS ON SPECIAL TERMINAL ASSEMBLIES	82	19
MECHANICAL STRENGTH TEST FOR METAL ENCLOSURES AND GUARDS	83	20
RADIO FREQUENCY INTERFERENCE	84	21
SHORT-RANGE RADIO FREQUENCY (RF) DEVICES	85	21
LONG-RANGE RADIO FREQUENCY (RF) DEVICES	86	21
PRIMARY BATTERIES	87	12
STRAIN-RELIEF	88	22
ANTENNA END-PIECE SECURENESS	89	23
ENVIRONMENTAL TESTS FOR MARINE APPLICATIONS	91	6
WET LOCATIONS AND OUTDOOR-USE	92	24
PERMANCECE OF MARKING	95.2	25

Rationale for waived Test:

1. No fault conditions were employed on the products.
2. Not a local control unit system.
3. Not an extinguishing agent or water.
4. Not intend for remote station, central station, and proprietary services.
5. Not intend for auxiliary service.
6. Not for marine-use.
7. Not for smoke-control.
8. Not a fire alarm control panel.
9. Voice amplifier not employed.
10. Energized outputs not employed.
11. Not connected to or providing the following circuits: notification appliance circuits (NAC), power output circuits, releasing device circuits, signaling line circuits (SLC), two-wire conventional smoke detectors, and audio amplifier.
12. Battery not employed.
13. Standby (Secondary) power not employed.
14. Not connected to primary power/Commercial AC.
15. Not a notification-alarm circuit.
16. Not a cord-connected product.
17. Low voltage product, energized by an UL Listed Class 2/ Power-Limited power source, no potential for fire or electric shock.
18. Only varistors, jumpers, terminal block, and 4-pin connector employed in the PCB. Component malfunction wouldn’t introduce a risk of fire, electric shock, or injury to persons.
19. R/C (XCFR2), rated FW-2 terminal blocks were used.
20. Metal enclosures complied with the minimum thickness requirements specified in Sec. 6.2.1 and Table 6.3, UL 864 10th edition.
21. Not a radio frequency device.
22. Field-wiring leads not employed.
23. Antenna not employed.
24. Not for wet-location or outdoor use.
25. R/C PGJI2 or PGDQ2 label was used.

TEST RECORD NO. 1 Summary:

The results of this investigation, including construction review and testing, indicate that the products evaluated comply with the applicable requirements in the standards noted below.

Number	Standard Name	Edition No.	Publication Date	Revision Date
UL 864	Control Units and Accessories for Fire Alarm Systems	10th	December 1, 2014	March 29, 2018

Therefore, the products are judged eligible to bear UL's Mark as described on the Conclusion Page of this Report.

Test Record by:

Jo Tseng
Engineer
Henry Lee (L2 shadow)
Sr. Project Engineer

Reviewed by:

Todd Zhong
Staff Engineer

CONCLUSION

Samples of the products covered by this Report have been found to comply with the requirements covering the category and the products are found to comply with UL's applicable requirements. The description and test result in this Report are only applicable to the sample(s) investigated by UL and does not signify UL certification or that the product(s) described are covered under UL's Follow-Up Service Program. When covered under UL's Follow-Up Service Program, the manufacturer is authorized to use the UL Listing Mark on such products which comply with UL's Follow-Up Service Procedure and any other application requirements of UL LLC.

The Listing Mark of UL LLC on the product, or the UL symbol on the product and the Listing Mark on the smallest unit container in which the product is packaged, is the only method to identify products investigated by UL to published requirements and manufactured under UL's Listing and Follow-Up Service.

Test Record by:

Jo Tseng

Engineer

Henry Lee
Sr. Project Engineer

Reviewed by:

Todd Zhong
Staff Engineer