

SUNON

SPECIFICATION FOR APPROVAL

CUSTOMER : SUNON

MODEL NO : SM421-21002Y

DESCRIPTION : Thermal Module

DIMENSIONS : 118X78X69.7 mm

SUNON SPEC. NO. : C02006400F-01

CUSTOMER APPROVAL NO. :

APPROVED BY CUSTOMER :

(AUTHORIZED)

| | | | | |
|----------------------------|----------------------------|-------------------------------|----------------------|---------------|
| DRAWN Sharon | CHECKED Qian | APPROVED Jordan | SPEC. NO | C02006400F-01 |
| | | | ISSUED DATE | 02. 01. 2023 |
| | | | EDITION | 3 |
| | | | REVISION DATE | 02. 01. 2023 |

建準電機工業股份有限公司

SUNONWEALTH ELECTRIC MACHINE INDUSTRY CO., LTD.

No. 30, LN. 296, XINYA RD., QIANZHEN DIST TEL:886-7-8135888

KAOHSIUNG CITY 80673, TAIWAN(R. O. C) FAX:886-7-8230505/8230606/8231010

URL:<http://www.SUNON.com>

E-mail:SUNON@email.SUNON.com.tw

SPECIFICATION FOR APPROVAL**CHECK LIST**

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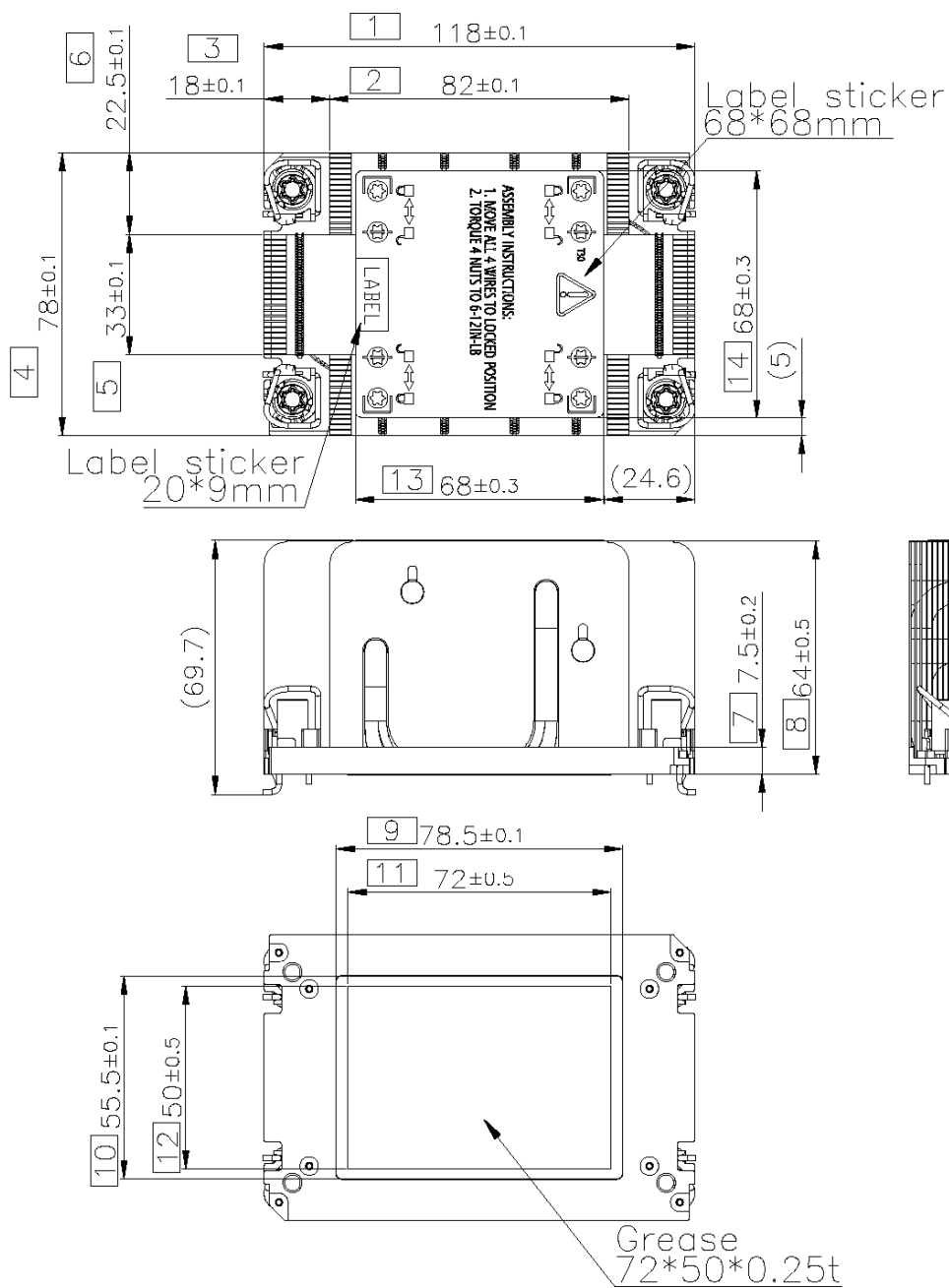
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MODEL : SM421-21002Y**1.SPECIFICATIONS**

| | | |
|--|--------------------|---------------|
| 1. Application | 350W | |
| 2. Heat Sink Dimension | 118X78X7.5mm | |
| 3. Heat Sink Material | ADC10 | |
| 4. Cooling Method | N/A | |
| 5. Thermal Grease / PAD | X-23-7921-5 | |
| 6. Fan Dimension | N/A | |
| 7. Fan Speed (with Heat Sink) | N/A | |
| 8. Fan Airflow (with Heat Sink) | N/A | |
| 9. Fan Rating Voltage | N/A | |
| 10. Fan Rating Current (with Heat Sink) | N/A | |
| 11. Fan Power Consumption (with Heat Sink) | N/A | |
| 12. Fan Bearing Type | N/A | |
| 13. Fan Connector | N/A | |
| 21. Cooling Module Noise | N/A | |
| 15. Fan Operating Voltage Range | N/A | |
| 16. Operating Temperature | -10 to + 70 deg. C | |
| 17. Storage Temperature | -40 to + 70 deg. C | |
| 18. Weight | 435 g | |
| 19. Life Expectance | N/A | |
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2.DIMENSION

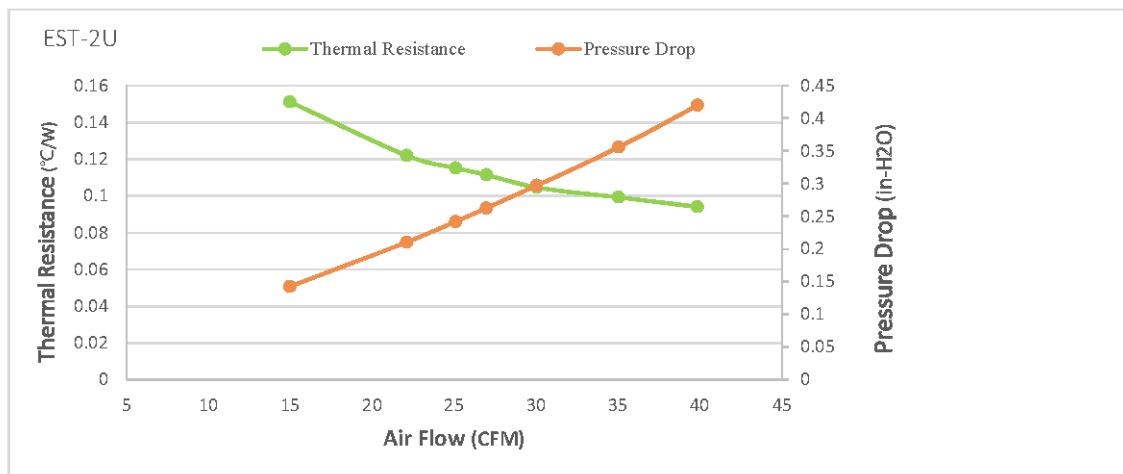


UNIT: mm

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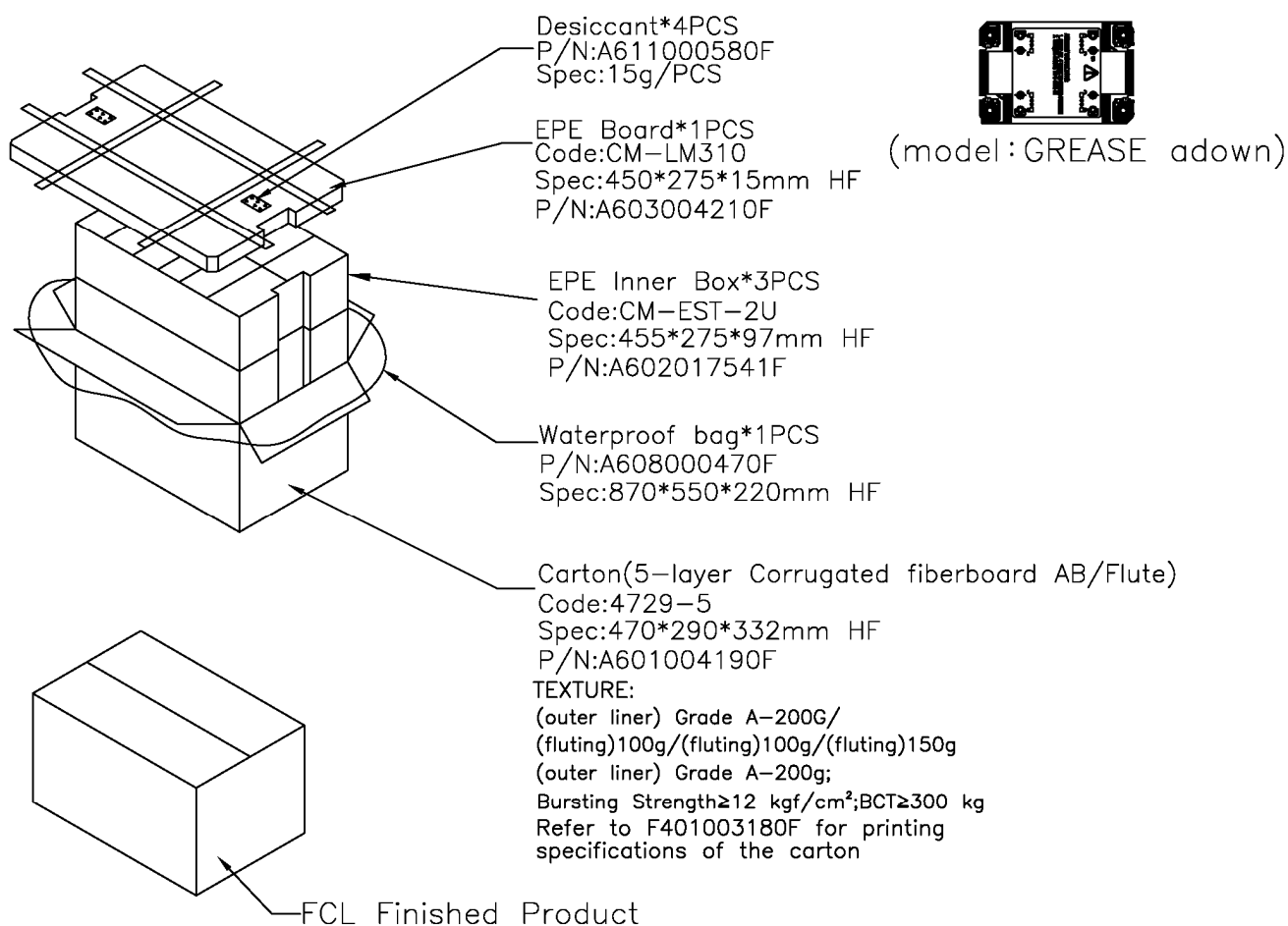
3.Heatsink Performance



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4.Package



Procedure:

- Step:①Place the waterproof bag inside the carton,
and put desiccants at each corner of the carton.
- ②Put finished products inside the EPE Inner box,
6 units per tray, 3 trays stacked in total.
Place a EPE board on the top, with BOPP tapes for wrapping.
- ③Place desiccants at each top corner of the EPE board
and organize the bag opening.
Finish the packing by sealing the carton with BOPP packing tapes.

Parts and raw materials used in this product shall not contain any prohibited and hazardous substance pertained to <List of Environmental Hazardous Substance Inspection Techniques and Standards> of Sunonwealth Electric Machine Industry Co., Ltd.

注意事項 NOTICE

Applicable Client:

For Customization

Applicable Model:

SM421-21002Y

★: With this mark,
inspect the dimension.

| SPEC. of MC | P/N of MC | QTY | Cuft | Code | Carton: Corrugate Fiberboard/ EPE Inner Box |
|-------------|-------------|-----|------|--------|--|
| 470*290*332 | A601004190F | 18 | 1.6 | 4729-5 | 材 質 MATERIAL |

適用範圍
SCOPE

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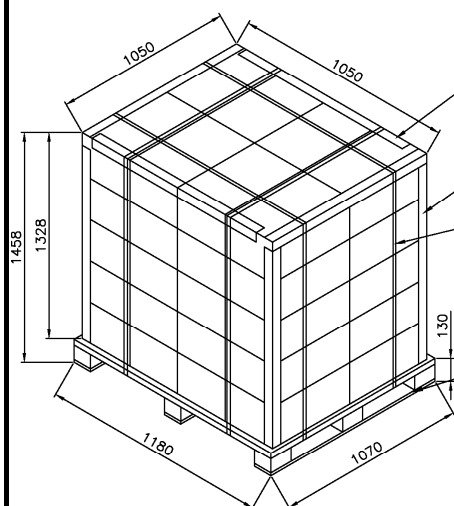
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4.Package



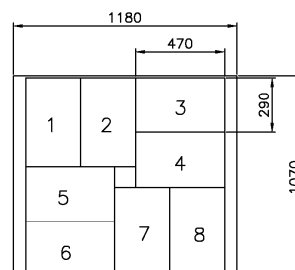
L-shaped pallet edge boards*4PCS
Spec:50*50*1000*5mm GN
P/N:A611000270G

L-shaped pallet edge boards*4PCS
Spec:50*50*1200*5mm GN
P/N:A611000720F

Packing Strap

Plywood pallet:
Spec:1180*1070*130mm GN
P/N:A609000570G

Carton Layout



NOTICE:

1. 8 cartons per layer, 4 layers in total (32 Carton/Pallet).
2. Tightly wrap around the pallet with wrapping films.

| NO. | Model | SPEC. of carton | Carton/Pallet | pcs/Carton | pcs/Pallet | N.W | G.W |
|-----|--------------|-----------------|---------------|------------|------------|-----|-----|
| 1. | SM421-21002Y | 470*290*332 | 32 | 18 | 576 | 251 | 303 |

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Notes

I. SPECIFICATION MODIFICATION

1. SUNON offers engineering assistance on module installation and cooling system design.
2. All changes, modifications and/or revisions to the specifications, if any, are incorporated in the attached specifications.
3. No changes, modifications and/or revisions to these specifications are effective absent agreement, by both SUNON and the customer, in writing.
4. This module will be shipped in accordance with the attached specification unless SUNON and the customer have agreed otherwise, in writing, as specified in Paragraph 3, above.

II. OTHER

1. DO NOT operate this module in proximity to hazardous materials such as organic silicon, cyanogens, formalin, phenol, or corrosive gas environments including, but not limited to, H₂S, SO₂, NO₂, or Cl₂.
2. Unless otherwise noted, all testing of this module is conducted at 25°C ambient temperature and sixty-five percent (65%) relative humidity.
3. DO NOT store this module in an environment with high humidity. This module must be stored in accordance with the attached specifications regarding storage temperature. If this module is stored for more than 6 months, SUNON recommends functional testing before using.
4. SUNON reserves the right to use components from multiple sources at its discretion. The use of components from other sources will not affect the specifications as described herein.

III. WARRANTY

This module is warranted against all defects which are proved to be fault in our workmanship and material for one year from the date of our delivery. The sole responsibility under the warranty shall be limited to the repair of the module or the replacement thereof, at SUNON's sole discretion. SUNON will not be responsible for the failures of its module due to improper handling, misuse or the failure to follow specifications or instructions for use. In the event of warranty claim, the customer shall immediately notify SUNON for verification. SUNON will not be responsible for any consequential damage to the customer's equipment as a result of any module proven to be defective.

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Declaration of Restricted Materials

Control declaration of environment- related substances/ materials

1. In accordance with the Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU and specific market requirements, SUNON Halogen-Free Product have complied with law and discipline not to employ the forbidden substances, and restrict the allowable concentration of some limited substances deliberately in our components.

| No | Substance | Criteria |
|----|--|--|
| 1 | CFCs & HCFCs (ozone depleting substances) | Forbidden |
| 2 | Chlorinated Organic Solvent | Forbidden |
| 3 | Lead and its compounds | Plastic (Frame, Impeller, wire harness, etc.) |
| | | Solder |
| | | Steel alloy |
| | | Aluminium alloy |
| | | Copper alloy |
| 4 | Cadmium and its compounds | Solder |
| | | Parts composed of metals containing zinc (e.g. brass, zinc for die casting) |
| | | Plastic |
| 5 | PBBs and PBDEs | Forbidden |
| 6 | PCB and PCT | Forbidden |
| 7 | CP, Short-chain Chlorinated paraffins C10-13, Cl \geq 48 wt% | Forbidden |
| 8 | Mirex | Forbidden |
| 9 | PCN | Forbidden |
| 10 | Hexavalent Chromium compounds | <100ppm |
| 11 | Mercury and its compounds | Forbidden |
| 12 | Asbestos | Forbidden |
| 13 | Organic Tin compounds | Forbidden |
| 21 | Azo compounds | Forbidden |
| 15 | TBBP-A in external case plastic parts of products (PCB is exempted) | <1000ppm |
| 16 | Nickel in external case parts, which are likely to result in prolonged skin exposure | <1000ppm |
| 17 | Hexabromocyclododecane (HBCDD) | <1000ppm |
| 18 | Di-butyl Phthalate (DBP) | <1000ppm |
| 19 | Benzyl butyl Phthalate (BBP) | <1000ppm |
| 20 | Di-ethylhexyl Phthalate (DEHP) | <1000ppm |
| 21 | Di-isobutyl Phthalate (DIBP) | <1000ppm |
| 22 | Brominated/chlorinated flame retardants (other than PBBs or PBDEs), applicable item: frame, bobbin, impeller, lear wire, connector, mylar insulator. | Br<900ppm Cl<900ppm Br+Cl<1500ppm |
| 23 | PAHs and its 16 compounds in unusual contact material | BaP < 20ppm Total <200ppm |
| 24 | PCB and electroplating material, PFOS content complianced with 2006/122/EC | PFOS \leq 1000ppm; coating material PFOS \leq 1 μ g/m ² |

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