

# SUNON

## SPECIFICATION FOR APPROVAL

**CUSTOMER** : SUNON

**MODEL NO** : SM320-21001Y

**DESCRIPTION** : Thermal Module

**DIMENSIONS** : 118X78X30.4 mm

**SUNON SPEC. NO.** : C02006390F-01

**CUSTOMER APPROVAL NO.** :

**APPROVED BY CUSTOMER** :

(AUTHORIZED)

DRAWN  Sharon	CHECKED  Qian	APPROVED  Jordan	SPEC. NO	C02006390F-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.

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**SPECIFICATION FOR APPROVAL****CHECK LIST**

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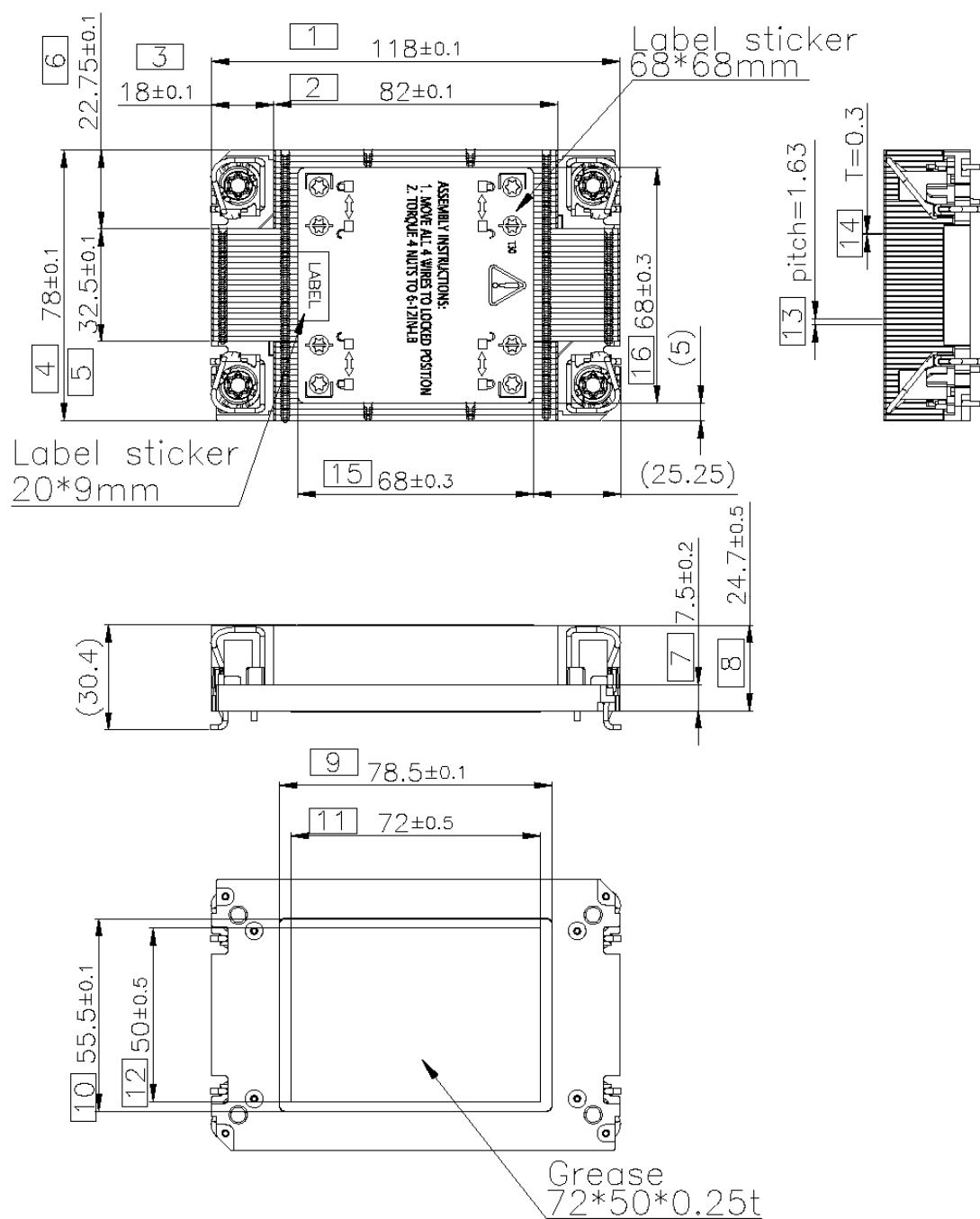
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**MODEL : SM320-21001Y****1.SPECIFICATIONS**

1. Application	205W		
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	265 g		
19. Life Expectance	N/A		
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## 2.DIMENSION

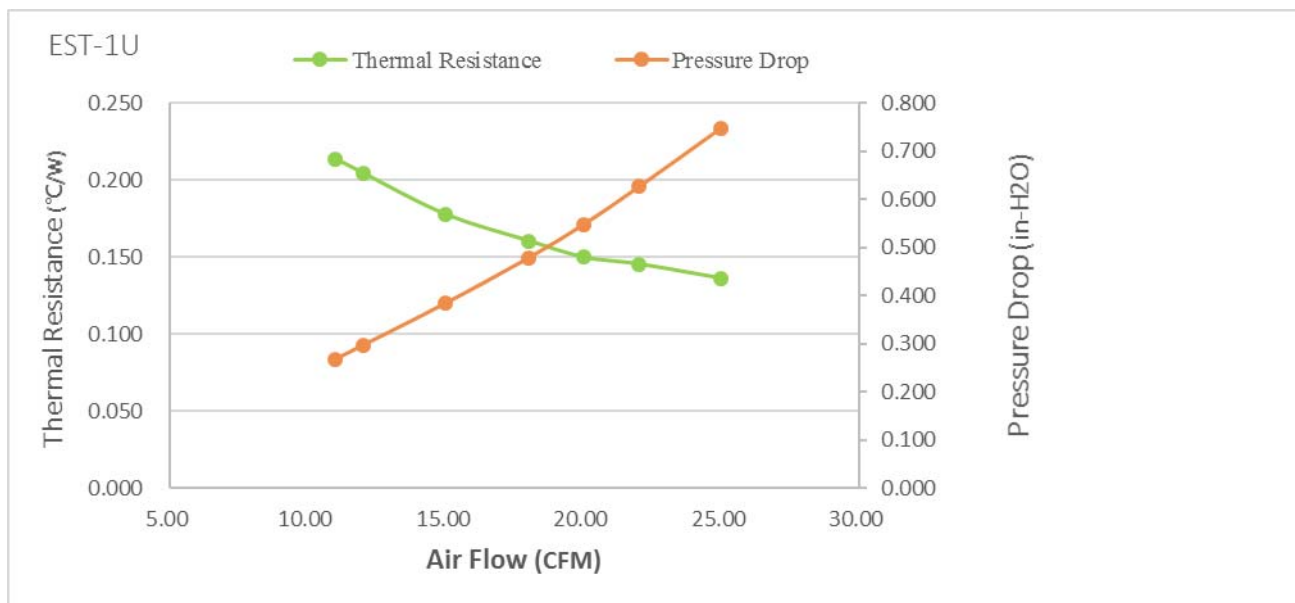


UNIT: mm

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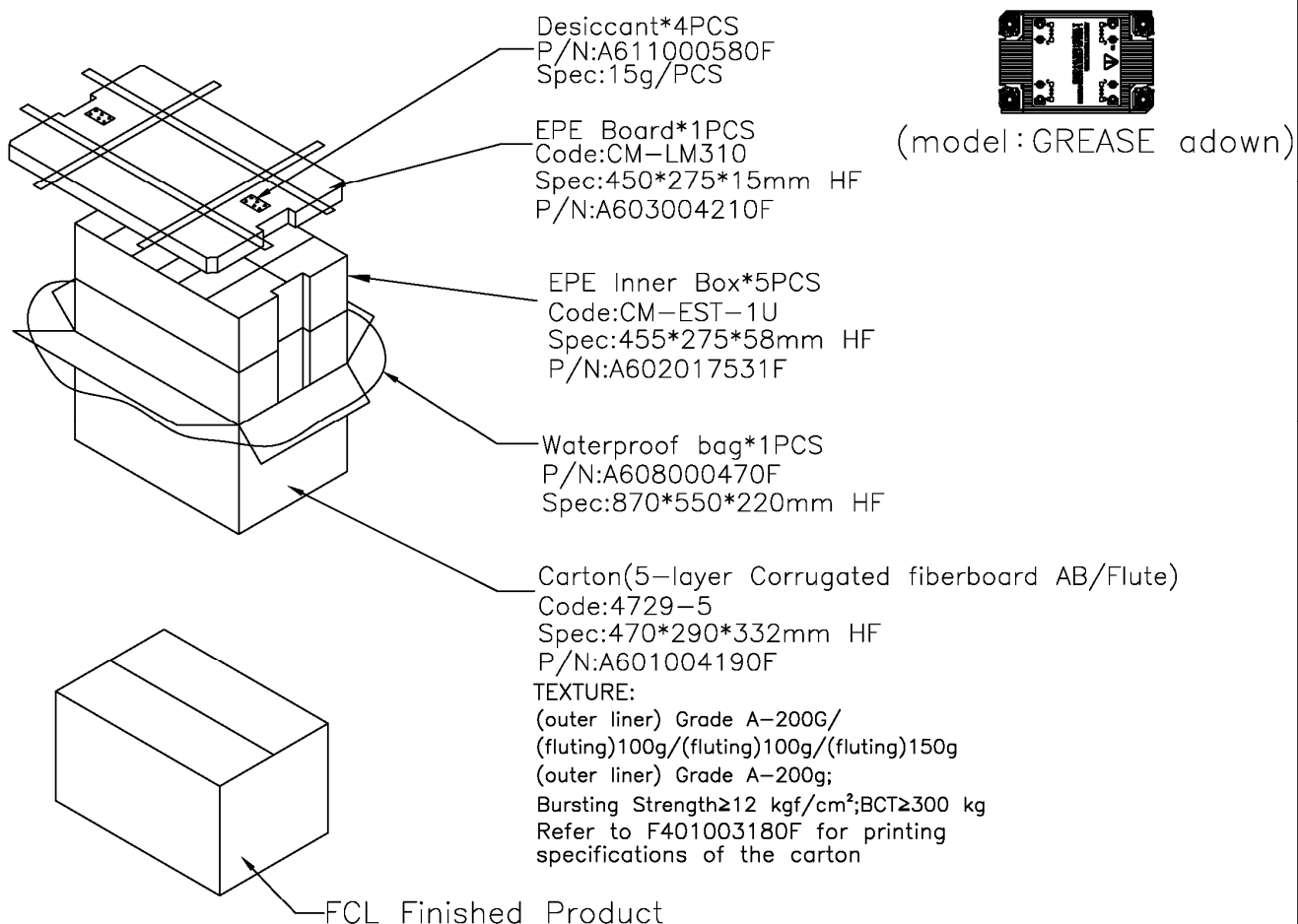
### 3.Heatsink Performance



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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, 5 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:

SM320-21001Y

★: With this mark,  
inspect the dimension.

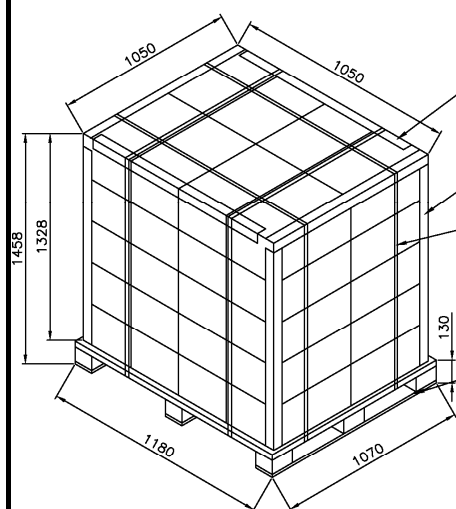
SPEC. of MC	P/N of MC	QTY	Cuft	Code	Carton: Corrugate Fiberboard/ EPE Inner Box
470*290*332	A601004190F	30	1.6	4729-5	材 質 MATERIAL

適用範圍  
SCOPE

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## 4.Package



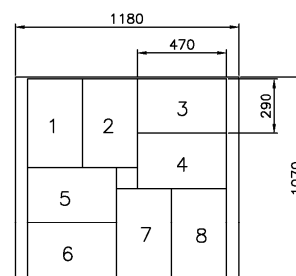
L-shaped pallet edge boards\*4PCS  
Spec:50\*50\*1000\*5mm GN  
P/N:A611000270G

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.	SM320-21001Y	470*290*332	32	30	960	255	304

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**ISSUED DATE**

**02. 01. 20223**

**EDITION**

**3**

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**02. 01. 2023**

# 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, H<sub>2</sub>S, SO<sub>2</sub>, NO<sub>2</sub>, or Cl<sub>2</sub>.
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 $\mu$ g/m <sup>2</sup>

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