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## Product Spec Sheet

# L13

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## **Model Number: L13**

- Recommend for Intel® Xeon® Platinum / Gold Family Processor  
( Products formerly Skylake ), Socket FCLGA3647
- **For Narrow ILM Only**
- Liquid Cooler for 4U Workstation

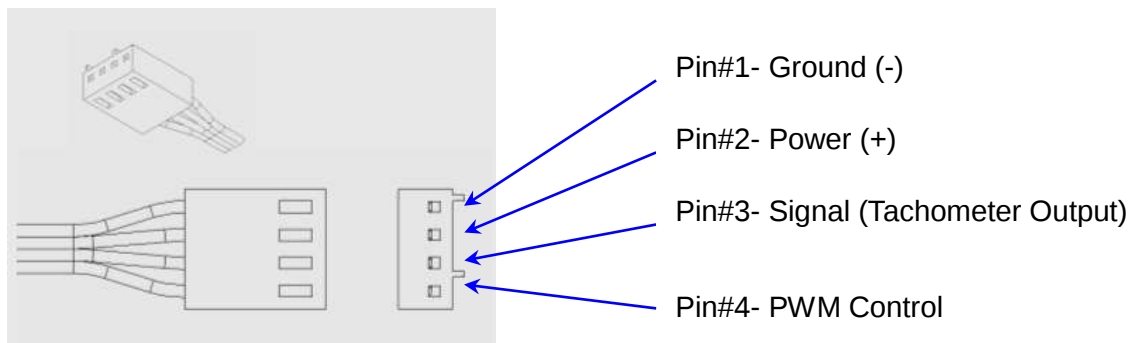
### **Overall Description :**

- Cold Plate Module with Copper Base
- Space Saver Light Weight Radiator
- 12cm Cooling Fans with 4-Pin PWM Connector
- Stand-alone Water Pump with Powerful Flow Rate 1.7 Liter Per Minute
- 30cm Black Pair EPDM Tube Assembled
- Mounting Accessories are included
- Shin-Etsu 7762 or Equivalent Thermal Compound Pre-Printed on Base
- Support CPU Heat Dissipation for 205Watts and up

### **Cooling Fan Specification:**

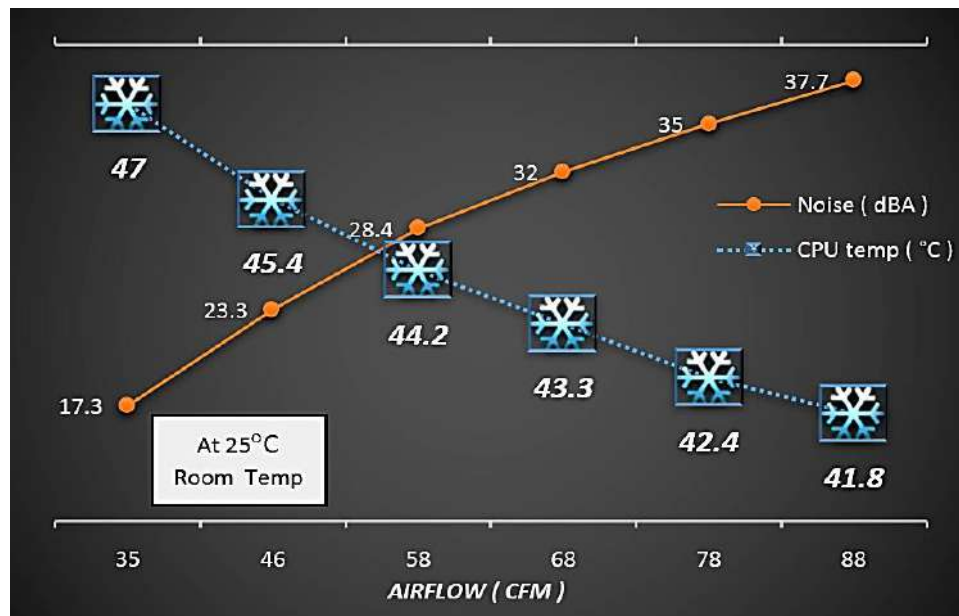
- Model Number: DF121238BH - PWMG
- Dimension: 120mm x 120mm x 38mm
- Bearing: Liquid State
- Rated Voltage: 12V
- Rated Speed:
  - At Duty Cycle 0~20%: 900±200 RPM
  - At Duty Cycle 50%: 1500±200 RPM
  - At Duty Cycle 100%: 2300±10% RPM

- Rated Input Power:
  - At Duty Cycle 0~20%: 1.2 W
  - At Duty Cycle 50%: 2.0 W
  - At Duty Cycle 100%: 4.9 W
- Rated Airflow:
  - At Duty Cycle 0~20%: 34.8 CFM
  - At Duty Cycle 50%: 58.0 CFM
  - At Duty Cycle 100%: 88.93 CFM
- Rated Static Pressure:
  - At Duty Cycle 0~20%: 0.79 mm-H<sub>2</sub>O
  - At Duty Cycle 50%: 2.20 mm-H<sub>2</sub>O
  - At Duty Cycle 100%: 5.17 mm-H<sub>2</sub>O
- Rated Acoustical Noise:
  - At Duty Cycle 0~20%: 17.3 dBA
  - At Duty Cycle 50%: 28.4 dBA
  - At Duty Cycle 100%: 37.7 dBA
- Lead Wire Pin Out Diagram :

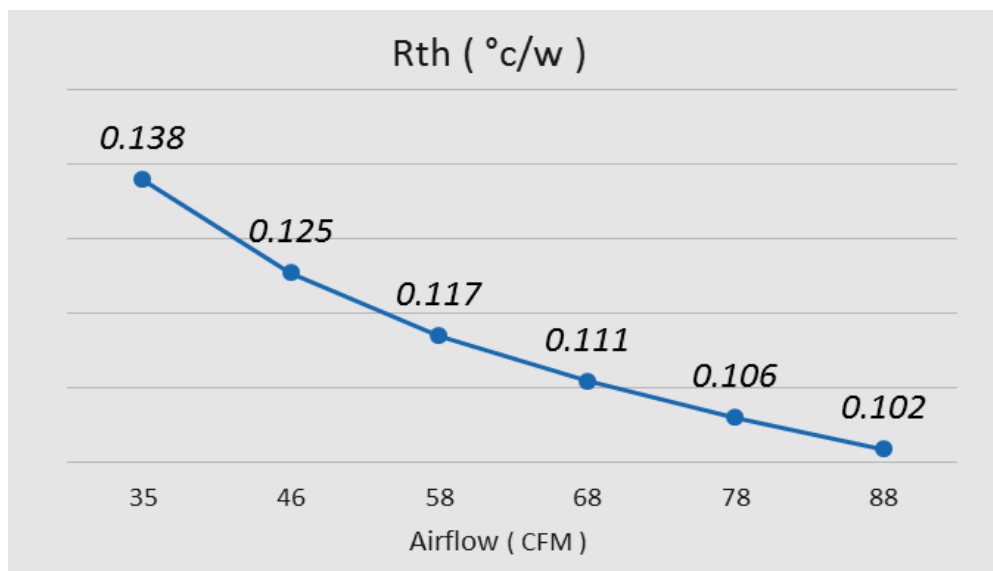


## Desktop Liquid Cooler L13 Thermal Performance

( Airflow VS. CPU Temperature & Noise )



( Airflow VS. Thermal Resistance )



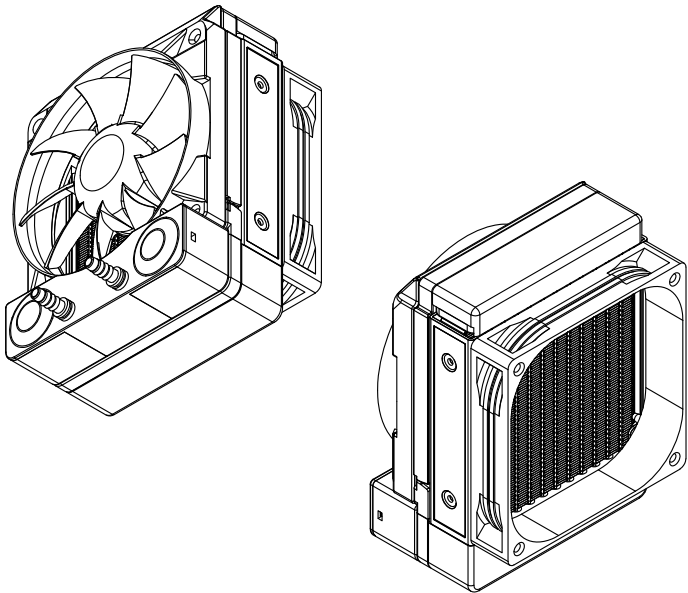
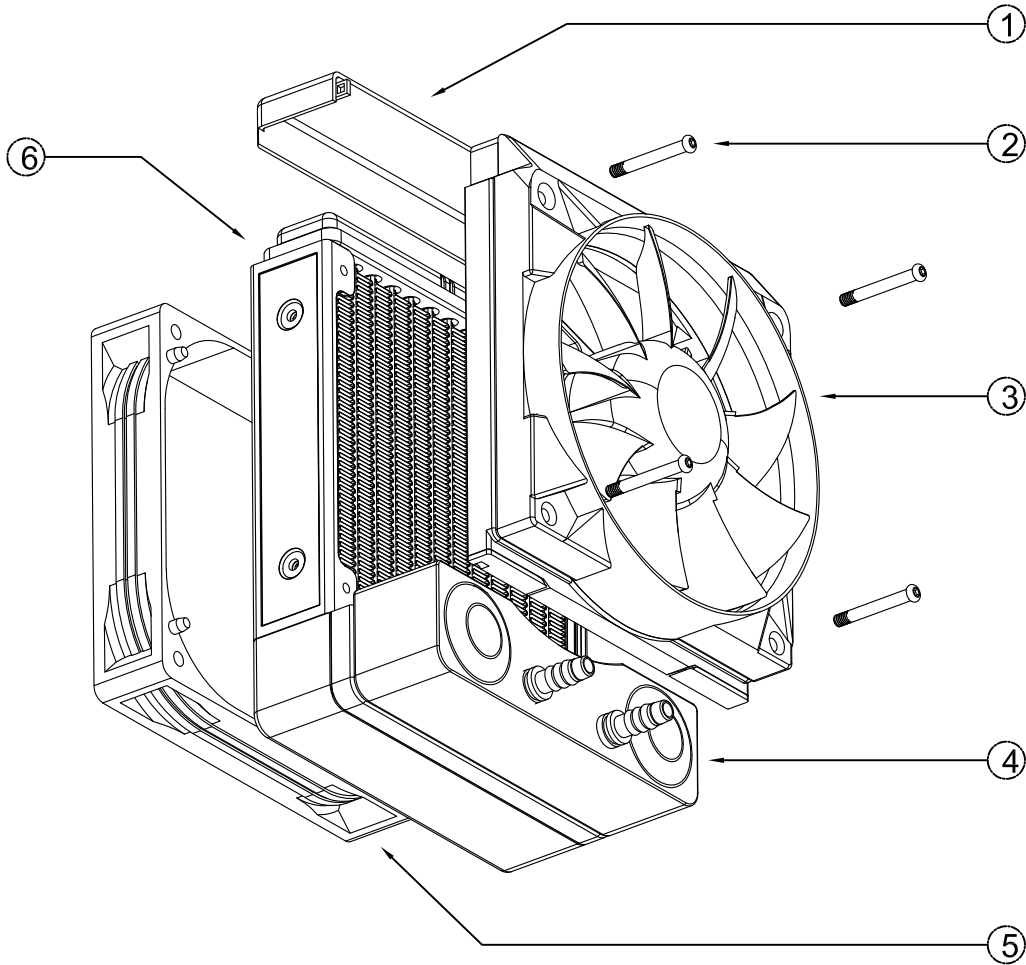
# CONFIDENTIAL DOCUMENT

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| REV# | DESCRIPTION     | CHECKER | DATE       |
|------|-----------------|---------|------------|
| 0.0  | INITIAL RELEASE | LANG    | 04/06/2018 |

## ASSEMBLY PARTS

## WHOLE SET OF CONDENSER

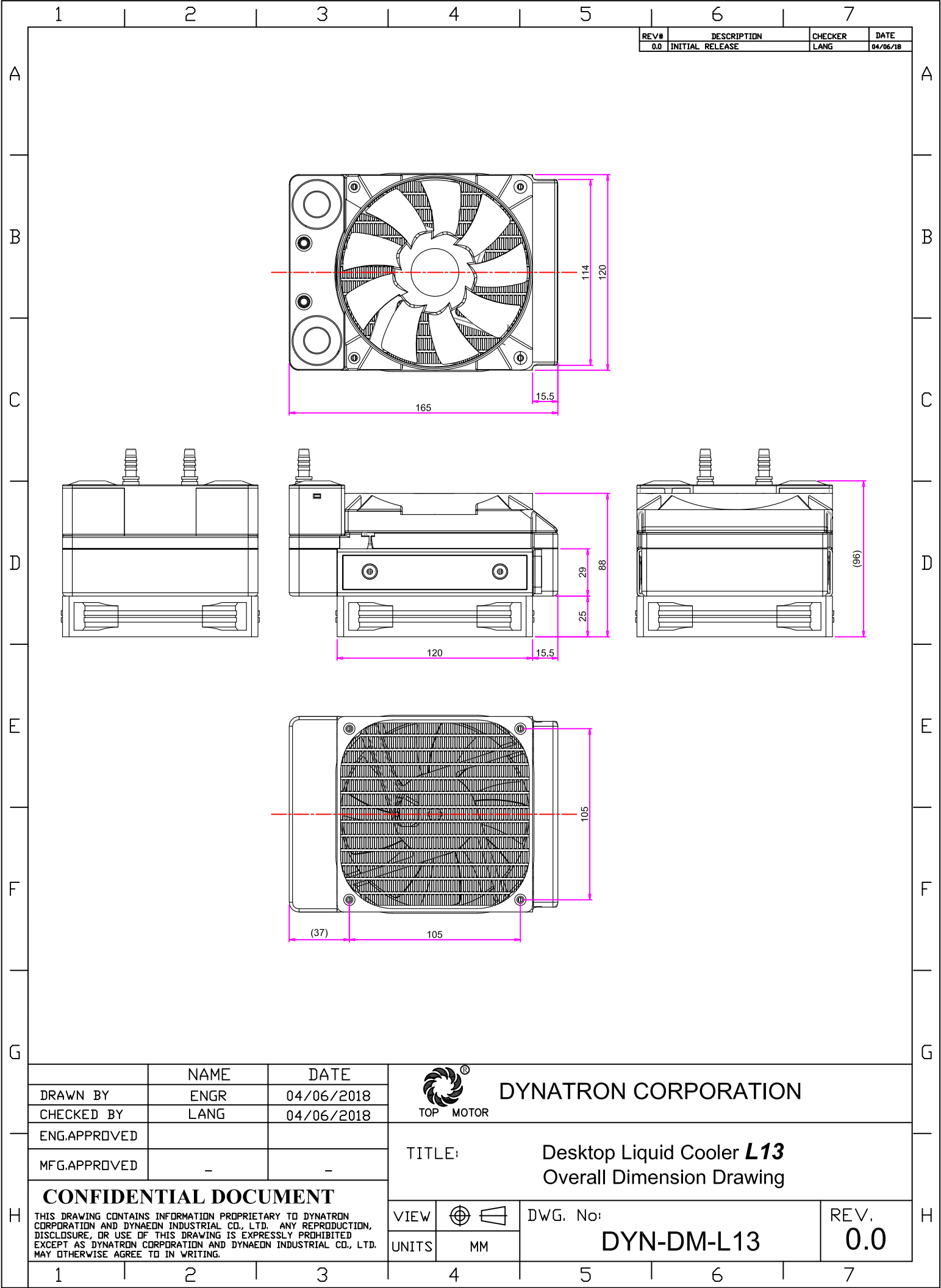


| 6     | Radiator                     | Aluminum Alloy | 1    |
|-------|------------------------------|----------------|------|
| 5     | Adapter Frame                | Plastic        | 1    |
| 4     | Pump Enclosure               | Plastic        | 1    |
| 3     | Fan, DF121238SH-PWM, 2400RPM | Plastic Frame  | 1    |
| 2     | Screw, Fan                   | Steel          | 4    |
| 1     | Cover, Top                   | Plastic        | 1    |
| ITEM# | DESCRIPTION                  | MATERIAL       | QTY. |

### Notes:

1. The Figure is For Reference Only, and Not For Scale
2. Overall Dimension: 165 x 120 x 96 mm

|            |          |      |                                                                                                                       |     |
|------------|----------|------|-----------------------------------------------------------------------------------------------------------------------|-----|
|            | DATE     | NAME | <div> DYNATRON CORPORATION</div> |     |
| DRAWN      | 04/06/18 | ENGR | <div>TITLE: Desktop Liquid Cooler <b>L13</b><br/>Condenser<br/>BOM &amp; Exploded Assembly Drawing</div>              |     |
| CHECKED    | 04/06/18 | LANG |                                                                                                                       |     |
| ENG. APPR. |          |      |                                                                                                                       |     |
| MFG. APPR. |          |      |                                                                                                                       |     |
| Q.A.       |          |      |                                                                                                                       |     |
| COMMENTS:  |          |      | DWG. No:                                                                                                              | REV |
|            |          |      | DYN-EP-L13                                                                                                            | 0.0 |



| REV# | DESCRIPTION     | CHECKER | DATE     |
|------|-----------------|---------|----------|
| 0.0  | INITIAL RELEASE | LANG    | 04/06/18 |

|              |      |            |
|--------------|------|------------|
|              | NAME | DATE       |
| DRAWN BY     | ENGR | 04/06/2018 |
| CHECKED BY   | LANG | 04/06/2018 |
| ENG.APPROVED |      |            |
| MFG.APPROVED | -    | -          |



DYNATRON CORPORATION

TITLE: Desktop Liquid Cooler **L13**  
Overall Dimension Drawing

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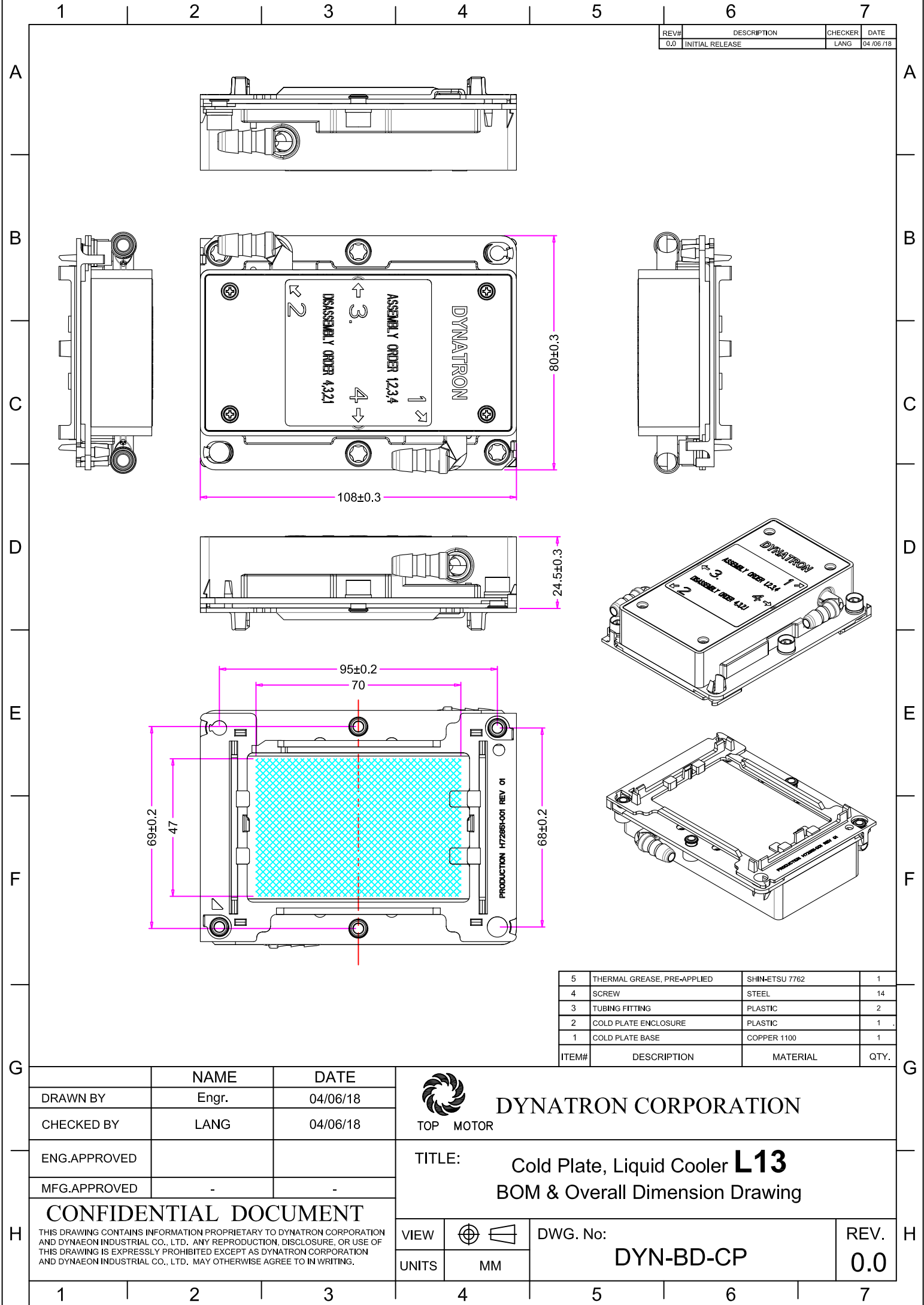
|       |    |
|-------|----|
| VIEW  |    |
| UNITS | MM |

DWG. No:

**DYN-DM-L13**

REV.

**0.0**



| REV# | DESCRIPTION     | CHECKER | DATE     |
|------|-----------------|---------|----------|
| 0.0  | INITIAL RELEASE | LANG    | 04/06/18 |

| 5     | THERMAL GREASE, PRE-APPLIED | SHIN-ETSU 7762 | 1    |
|-------|-----------------------------|----------------|------|
| 4     | SCREW                       | STEEL          | 14   |
| 3     | TUBING FITTING              | PLASTIC        | 2    |
| 2     | COLD PLATE ENCLOSURE        | PLASTIC        | 1    |
| 1     | COLD PLATE BASE             | COPPER 1100    | 1    |
| ITEM# | DESCRIPTION                 | MATERIAL       | QTY. |

|              | NAME  | DATE     |
|--------------|-------|----------|
| DRAWN BY     | Engr. | 04/06/18 |
| CHECKED BY   | LANG  | 04/06/18 |
| ENG.APPROVED |       |          |
| MFG.APPROVED | -     | -        |

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TOP MOTOR

**DYNATRON CORPORATION**

TITLE: Cold Plate, Liquid Cooler **L13**  
BOM & Overall Dimension Drawing

|       |    |
|-------|----|
| VIEW  |    |
| UNITS | MM |

|           |      |
|-----------|------|
| DWG. No:  | REV. |
| DYN-BD-CP | 0.0  |



## Certificate of Environment Protection

### 環保證明書

Document Number: RH\_L13-R0

|                              |                                                                                           |
|------------------------------|-------------------------------------------------------------------------------------------|
| <b>Customer:</b><br>客戶名稱:    | <b>Company:</b> _____ <b>Address:</b> _____<br><b>Phone Number:</b> _____ - _____ - _____ |
| <b>Issue Date:</b>           | 04/06/2018                                                                                |
| <b>Product Model Number:</b> | L13                                                                                       |

**Dynatron Corporation** hereby declares and certifies that all components manufactured are RoHS compliant according to the definitions and restrictions given by the European Union's Restriction (Directive 2002/95/EC) (Decision 2011/65/EU) RoHS 2, on the restriction of the use of certain Hazardous Substances in the electrical and electronic equipment. Also, compliance to the most recent list of substances on the REACH candidate list.

**Number of substances on the Candidate List: 168 (last updated: 17/12/2015)**

No exemptions are claimed in order for the part to be compliant with the RoHS directive.

**Dynatron Corporation / 政久興業股份有限公司** 證明所有產品, 零件 (包括附屬品, 包裝類) 之環境管理物質完全符合 RoHS, WEEE, 及該環保標準之規定, 並承諾遵循以上之證明.

**Dynatron Corporation.**  
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**Title (職務):** \_\_\_\_\_ ASSISTANT-MANAGER

**Signature (簽字):** \_\_\_\_\_ *Alan Lee*

Date: 04 / 06 / 2018

