

# W24

Active Air Cooler

**PRODUCT SPECIFICATIONS**

Speficiation Version: 01/10/2025

*(Specifications are subject to change without notice)*

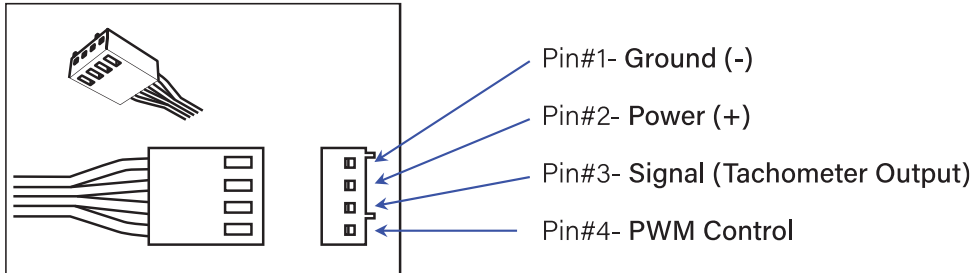
**W24 | LGA5964****Model Number: W24**

- Recommend for Intel® Socket LGA 5964
- Active Air Cooler for Tower PC
- Designed for Ampere AmpereOne CPU

**Overall Specification**

|                            |                                                                                              |
|----------------------------|----------------------------------------------------------------------------------------------|
| Dimension                  | 125.0 x 120.0 x 158.0 mm (LxWxH)                                                             |
| Weight                     | 994g                                                                                         |
| Material                   | Copper Base + Direct Contact Heat Pipe + Aluminum Fins                                       |
| Thermal Interface Material | Shin-Etsu X23-8079-2 (or equivalent) Pre-Printed and Tflex HD7.5 Pre-applied (or equivalent) |
| TDP                        | Fully support 400W at 41 °C Ambient Temperature                                              |

## Cooling Fan Specification

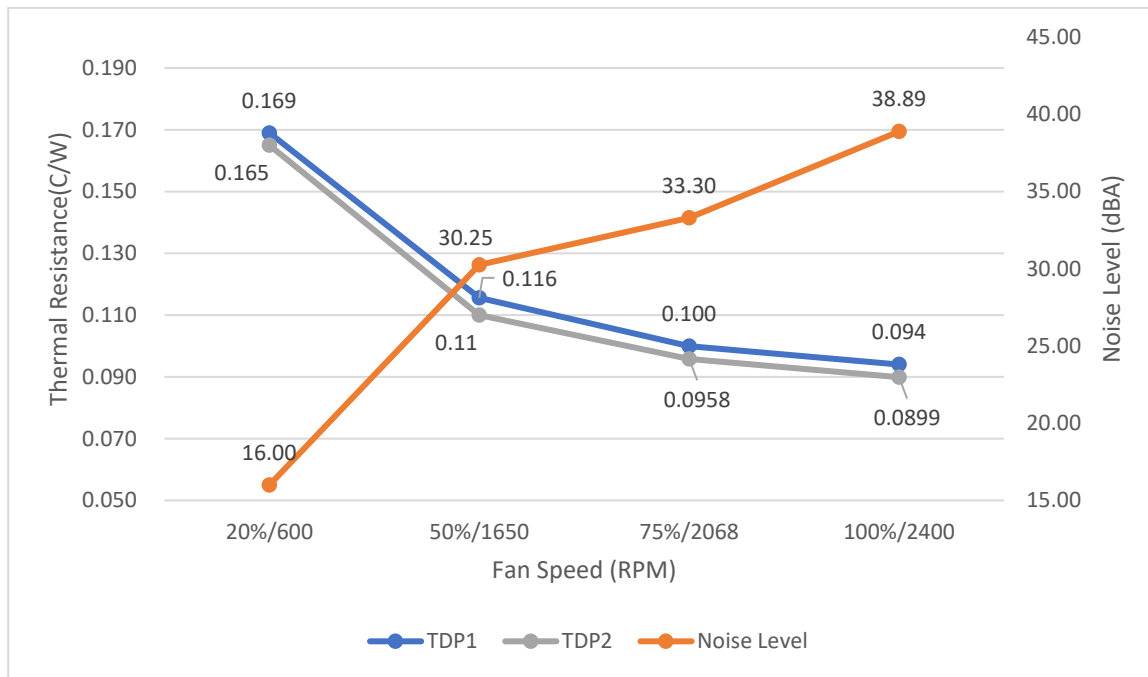
|                       |                                                                                                                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Number          | DF121225SM                                                                                                                                                                                        |
| Dimension             | 120 x 120 x 25 mm                                                                                                                                                                                 |
| Bearing               | Double Ball                                                                                                                                                                                       |
| Rated Voltage         | 12V                                                                                                                                                                                               |
| Rated Speed           | At Duty Cycle 0~20%: 600 ± 200 RPM<br>At Duty Cycle 50%: 1650 ± 200 RPM<br>At Duty Cycle 100%: 2400 ± 10% RPM                                                                                     |
| Input Power           | At Duty Cycle 0~20%: 0.6 W<br>At Duty Cycle 50%: 1.92 W<br>At Duty Cycle 100%: 5.4 W                                                                                                              |
| Maximum Airflow       | At Duty Cycle 0~20%: 21.98 CFM<br>At Duty Cycle 50%: 60.45 CFM<br>At Duty Cycle 100%: 87.93 CFM                                                                                                   |
| Rated Static Pressure | At Duty Cycle 0~20%: 0.25 mm-H <sub>2</sub> O<br>At Duty Cycle 50%: 1.91 mm-H <sub>2</sub> O<br>At Duty Cycle 100%: 4.05 mm-H <sub>2</sub> O                                                      |
| Acoustical Noise      | At Duty Cycle 0~20%: 16 dBA<br>At Duty Cycle 50%: 30.25 dBA<br>At Duty Cycle 100%: 38.89 dBA                                                                                                      |
| Lead Wire Pin Out     | <p>Pin#1- Black(-)<br/>Pin#2- Black(+)<br/>Pin#3- Black(Tachometer/ Signal Output)<br/>Pin#4- Black(PWM)</p>  |

W24 | LGA5964

## Performance Chart: Active Cooler W24 Thermal Resistance

### Thermal Resistance vs. Fan Speed

**LGA 5964**



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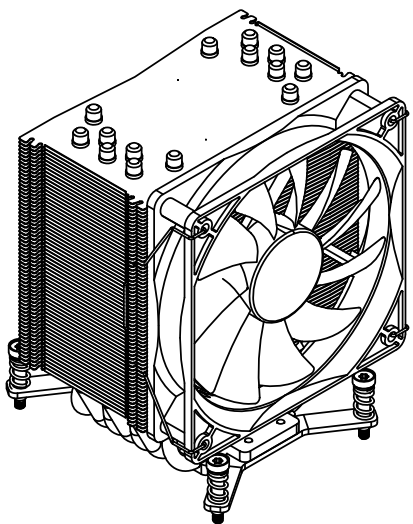
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| REV# | DESCRIPTION     | CHECKER  | DATE     |
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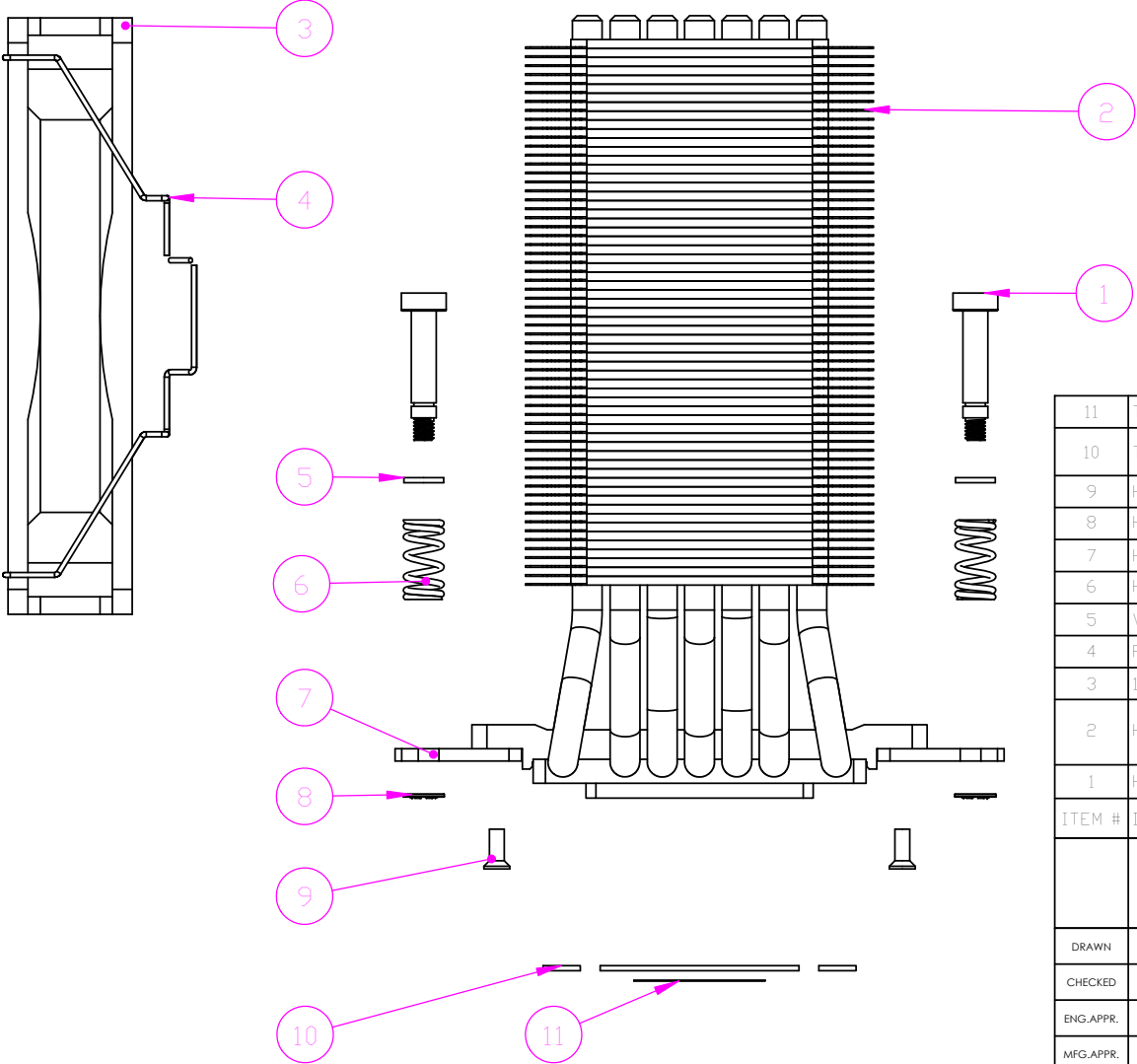
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|        |                        |                                                       |      |
|--------|------------------------|-------------------------------------------------------|------|
| 11     | THERMAL GREASE         | SHIN-ETSU X23-8079-2 (OR EQUIVALENT)                  | 1    |
| 10     | Thermal Pad Set        | Tflex HD7.5 (OR EQUIVALENT)                           | 1    |
| 9      | Heatsink Bracket Screw | Steel                                                 | 4    |
| 8      | Heatsink Screw Clip    | STEEL                                                 | 4    |
| 7      | Heatsink Bracket       | SPCC                                                  | 2    |
| 6      | Heatsink Spring        | SWC                                                   | 4    |
| 5      | Washer                 | Steel                                                 | 4    |
| 4      | Fan Bracket            | Steel                                                 | 2    |
| 3      | 12025 2200RPM Fan      | Plastic                                               | 1    |
| 2      | Heatsink               | Heatpipes, AL6063 Base, CU1100 Base Black, AL1100 Fin | 1    |
| 1      | Heatsink Screw         | Steel                                                 | 4    |
| ITEM # | DESCRIPTION            | MATERIAL                                              | QTY. |

|           |            |          |                                                                                                            |            |
|-----------|------------|----------|------------------------------------------------------------------------------------------------------------|------------|
|           | DATE       | NAME     |  DYNATRON CORPORATION |            |
| DRAWN     | 11/18/2024 | MichaelZ | TITLE:<br><br>W24<br>BOM & exploded Assembly Drawing                                                       |            |
| CHECKED   | 11/18/2024 | MichaelZ |                                                                                                            |            |
| ENG.APPR. |            |          |                                                                                                            |            |
| MFG.APPR. |            |          |                                                                                                            |            |
| COMMENTS: |            |          | DWG. NO.<br>DYN-EP-W24                                                                                     | REV<br>0.0 |

NOTES:  
THE FIGURE IS FOR REFERENCE ONLY, AND NOT FOR SCALE

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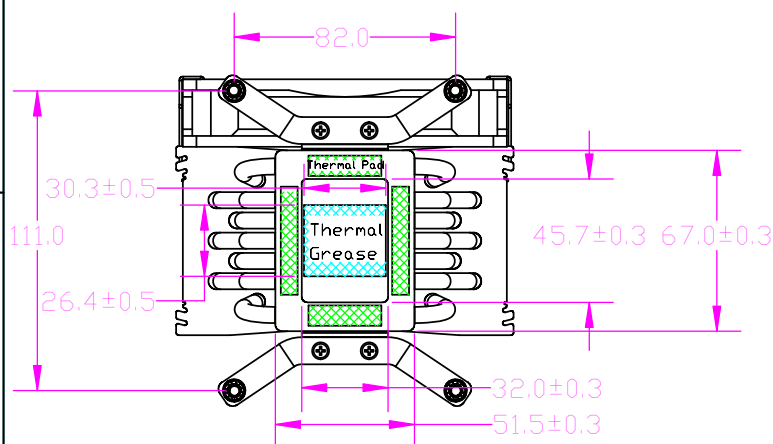
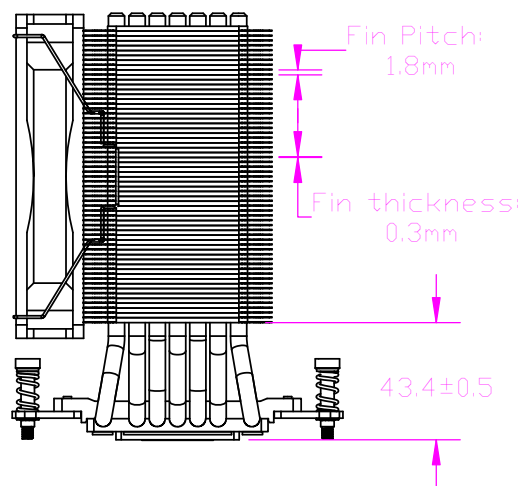
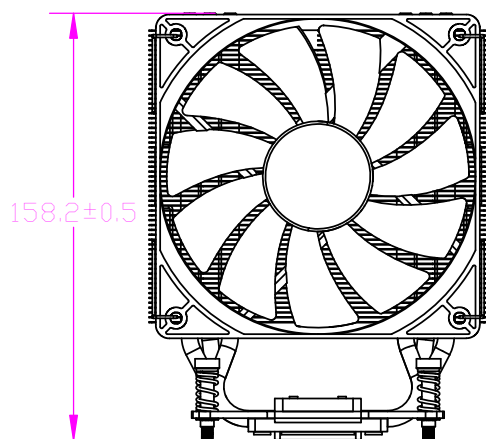
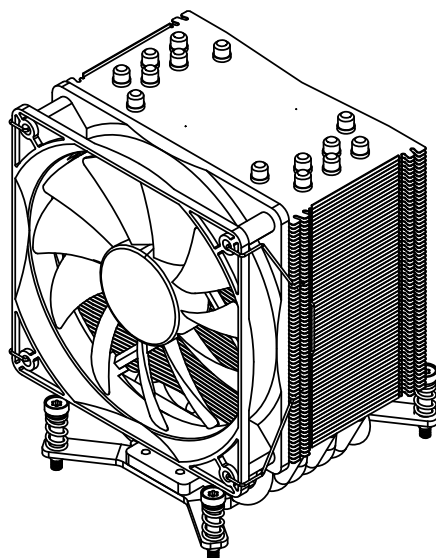
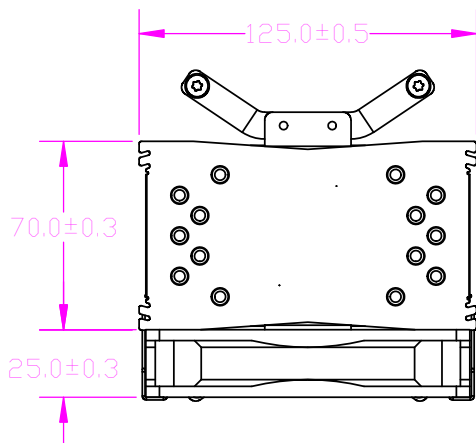
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## NOTES:

1. THE FIGURE IS FOR REFERENCE ONLY, AND NOT FOR SCALE
2. RECOMMENDED HEATSINK TORQUE RANGE:12-24 LBF-IN

|              | NAME     | DATE       |
|--------------|----------|------------|
| DRAWN BY     | MichaelZ | 11/18/2024 |
| CHECKED BY   | MichaelZ | 11/18/2024 |
| ENG.APPROVED |          |            |
| MFG.APPROVED |          |            |



TOP MOTOR

DYNATRON CORPORATION

TITLE:

W24 Overall Dimension Drawing

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

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|----------|------------|
| DWG. No: | DYN-BD-W24 |
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|      |     |
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| REV. | 0.0 |
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## Publication History:

01/10/2025: Initial Release

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