

Q9

Customized Active Air Cooler

PRODUCT SPECIFICATIONS

Q9 | Customized Air Cooler

Model Number: Q9

- Recommend for Intel® CPU as following
 - Support Intel Core 12th -15th Gen, Socket LGA1700/1851
- Active Cooler for 1.5U Server & Up

Overall Specification

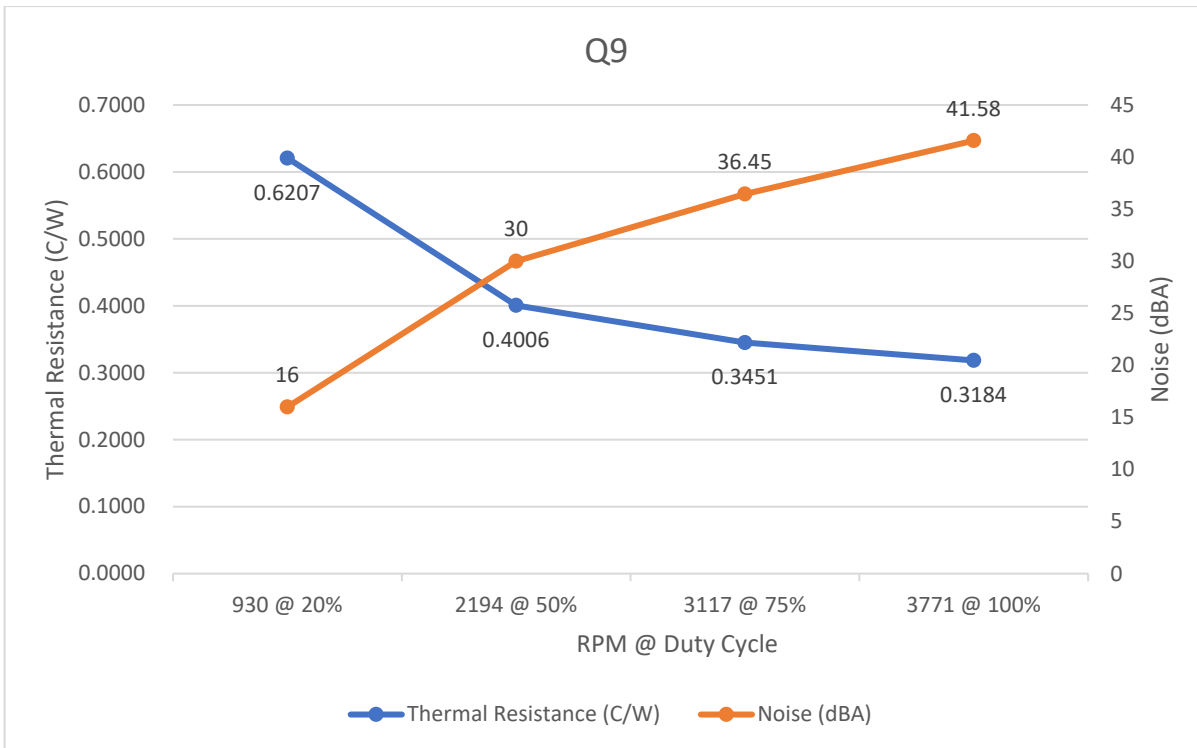
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|-----------------|---|
| Dimension | 95.0 x 95.0 x 41.0mm (W x L x H) |
| Weight | 218 g |
| Material | Aluminum Extruded Heat Sink |
| Fan | 92 CM Plastic Fan with 4-Pin PWM Connector, 4000RPM |
| Mounting Method | 78mm x 78mm mounting pitch with M3 screws (Also support 75 x 75mm mounting pitch) |
| Backplate | Backplate is included (Support 78mm x 78mm mounting pitch) |
| Thermal Grease | Shin-Etsu 7762 or Equivalent Thermal Compound Pre-Printed |
| TDP | Up to 120 Watts at 30°C ambient temperature |

Cooling Fan Specification

| | |
|-----------------------|--|
| Model Number | DF129225BU |
| Dimension | Ø92.0 x 25.0 mm |
| Bearing | Double Ball |
| Rated Voltage | DC 12V |
| Operating Voltage | 10.8V~13.2V |
| Start Voltage | 7V |
| Rated Speed | At Duty Cycle 0~20%: 1000± 200 RPM At Duty Cycle 50%: 2350±10% RPM At Duty Cycle 100%: 4000 ±10% RPM |
| Input Power | At Duty Cycle 0~20%: 0.6 W At Duty Cycle 50%: 1.2 W At Duty Cycle 100%: 5.16 W |
| Maximum Airflow | At Duty Cycle 0~20%: 17.88 CFM At Duty Cycle 50%: 42.01 CFM At Duty Cycle 100%: 71.50 CFM |
| Rated Static Pressure | At Duty Cycle 0~20%: 0.475 mm-H2O At Duty Cycle 50%: 2.623 mm-H2O At Duty Cycle 100%: 7.60 mm-H2O |
| Acoustical Noise | At Duty Cycle 0~20%: 16.00 dBA At Duty Cycle 50%: 30.03 dBA At Duty Cycle 100%: 41.58 dBA |
| Lead Wire Pin Out | Pin#1- Black(-) Pin#2- Yellow(+) Pin#3- Green(Tachometer/ Signal Output) Pin#4- Blue (PWM) |

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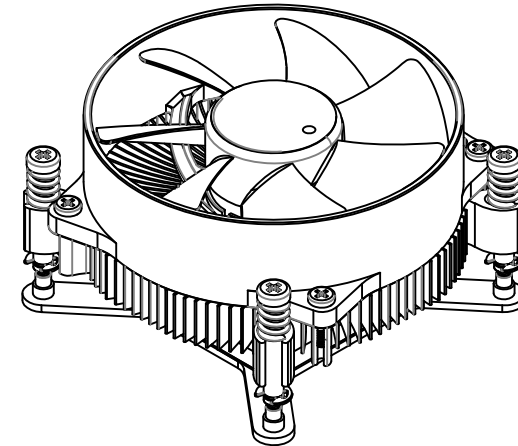
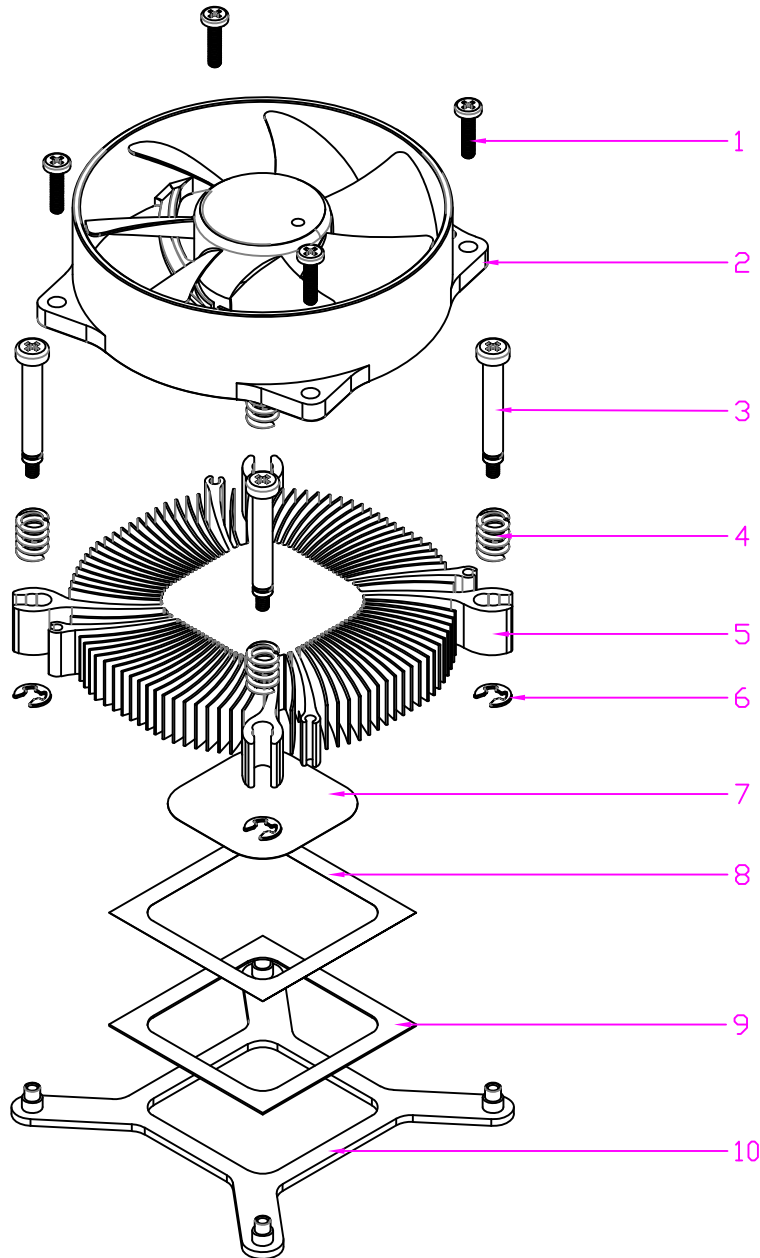
Performance Chart: Active Cooler Q9 Thermal Resistance
 Thermal Resistance vs. Fan Speed (Duty Cycle and RPM)




CONFIDENTIAL DOCUMENT

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| REV# | DESCRIPTION | CHECKER | DATE |
|------|-----------------|---------|----------|
| 0.0 | INITIAL RELEASE | Engr. | 05/04/22 |



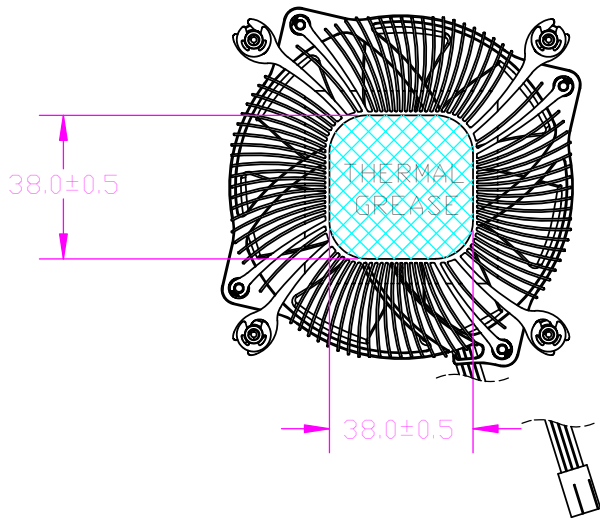
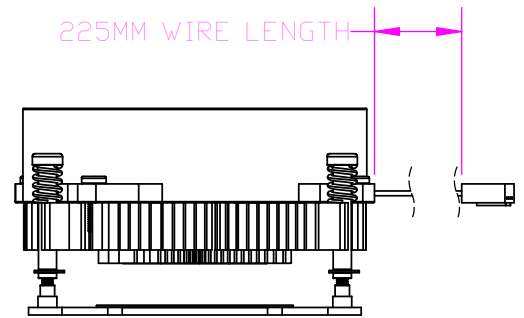
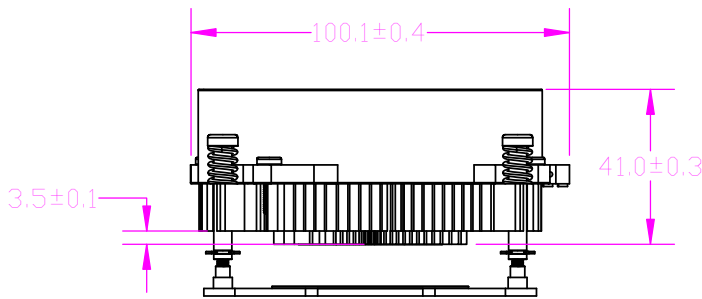
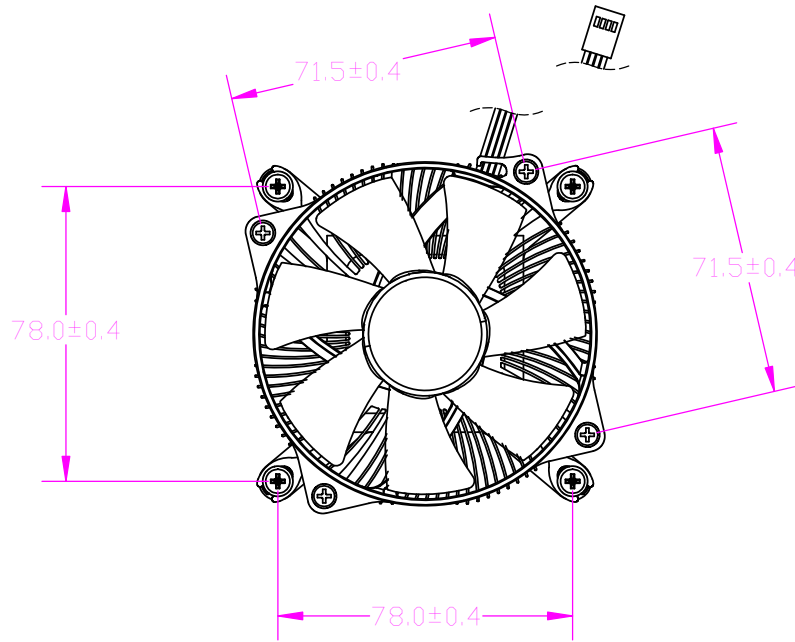
| ITEM # | DESCRIPTION | MATERIAL | QTY. |
|--------|--------------------------|------------------|------|
| 10 | BACKPLATE | SPCC | 1 |
| 9 | INSULATOR | FORMEX GK-17 | 1 |
| 8 | STICKER | 3M | 1 |
| 7 | THERMAL GREASE | SHIN-ETSU 7762 | / |
| 6 | C-RING | STEEL | 4 |
| 5 | HEATSINK, EXTRUSION | ALUMINUM 6063-T6 | 1 |
| 4 | SPRING | 50600910G | 4 |
| 3 | SCREW, HEATSINK | 50902130G | 4 |
| 2 | FAN, DF129225BU, 4000RPM | PLASTIC | 1 |
| 1 | SCREW, FAN, M3 TAPPING | STEEL | 4 |

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|------------|----------|-------|-------|--|
| DATE | | NAME | |  DYNATRON CORPORATION |
| 05/04/22 | 05/04/22 | Engr. | Engr. | |
| DRAWN | | | | TITLE: Customized Air Cooler Q9 BOM & Exploded Assembly Drawing |
| CHECKED | | | | |
| ENG. APPR. | | | | |
| MFG. APPR. | | | | |
| QA | | | | |
| COMMENTS | | | | DWG. No: DYN-EP-Q9 |
| | | | | REV 0.0 |

NOTES:

1. THE FIGURE IS FOR REFERENCE ONLY, AND NOT FOR SCALE

| REV# | DESCRIPTION | CHECKER | DATE |
|------|-------------------|---------|----------|
| 0.0 | INITIAL RELEASE | ENGR | 05/04/22 |
| 0.1 | ADDED WIRE LENGTH | JUN | 08/10/23 |



| | NAME | DATE |
|---------------|------|-----------|
| DRAWN BY | JUN | 8/11/2023 |
| CHECKED BY | JUN | 8/11/2023 |
| ENG. APPROVED | | |
| MFG. APPROVED | | |



DYNATRON CORPORATION

TOP MOTOR

TITLE:

2U AIR COOLER Q9
OVERALL DIMENSION DRAWING

CONFIDENTIAL DOCUMENT

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|-------|----|-----------|------|
| VIEW | | DWG. No: | REV. |
| UNITS | MM | DYN-BD-Q9 | 0.0 |

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Document history:

Rev 0.2: Thermal Performance Chart Update

Rev 0.1: Thermal Performance Chart Added

Rev 0.0: Initial Release