DYNATRON

L40

2U Liquid Cooler

PRODUCT SPECIFICATIONS

Speficiation Version: 12/21/2023

(Specifications are subject to change without notice)

Model Number: L40

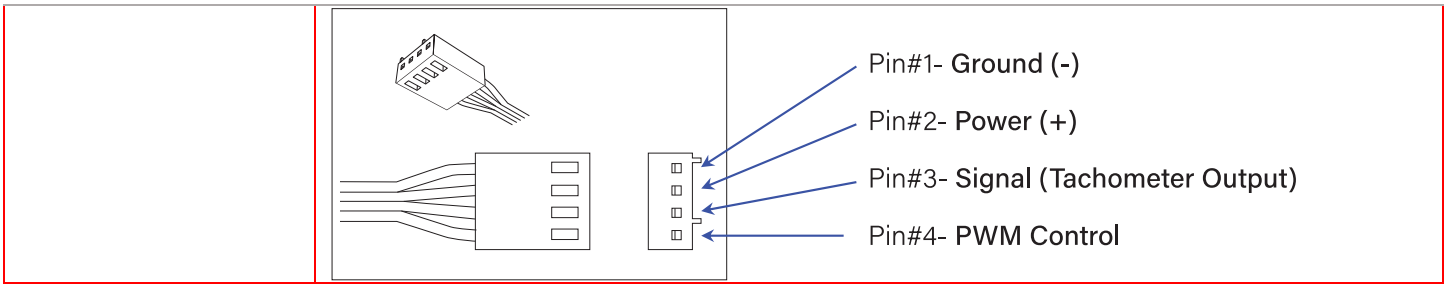
- Recommend for AMD® CPU as following
  - AMD® EPYC™ Processor, Socket SP6
  - AMD® Ryzen™ PRO Processor, Socket sTR5
- Liquid Cooler for 2U Server and Up

Overall Specification

Thermal Grease	Shin-Etsu 7762 Pre-Printed
TDP	Up to 350 Watts

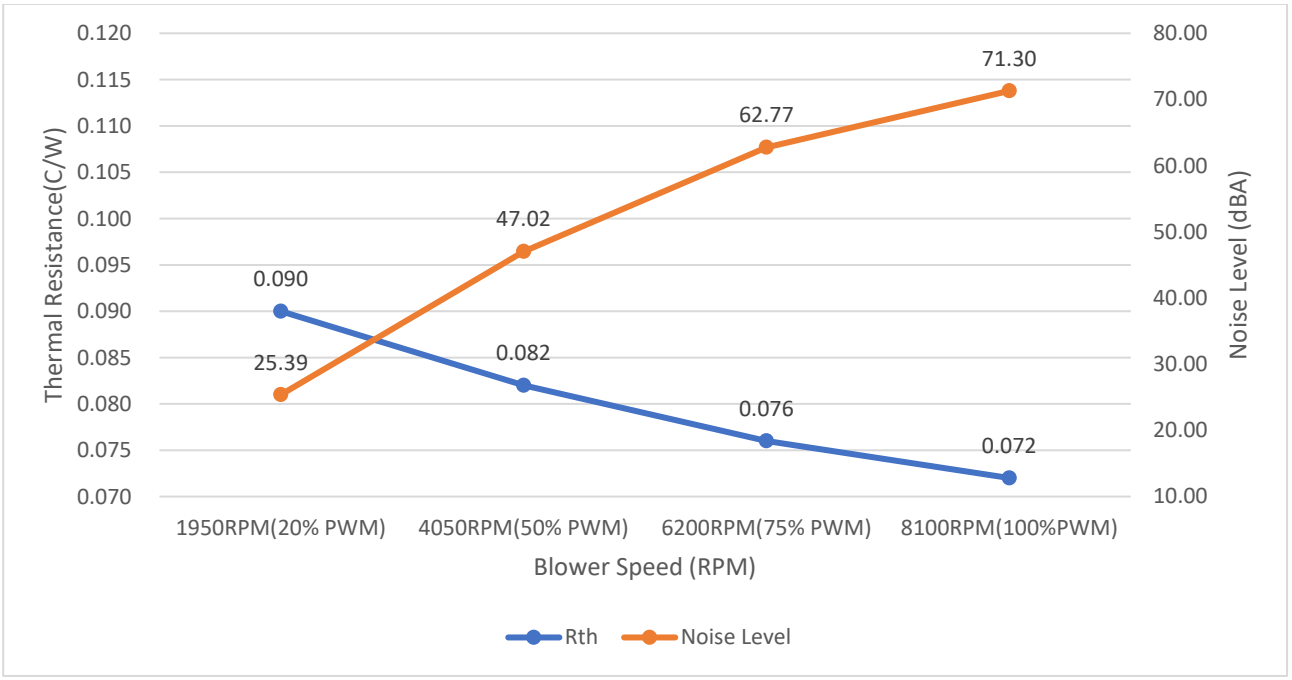
Cooling Fan Specification

Model Number	DB128038BX-PWMG
Dimension	Double Ball
Bearing	Liquid State
Rated Voltage	12V
Rated Speed	At Duty Cycle 0~20%: 2400± 200 RPM At Duty Cycle 50%: 4800± 10% RPM At Duty Cycle 100%: 8000±10% RPM
Input Power	At Duty Cycle 0~20%: 1.20 W At Duty Cycle 50%: 5.52 W At Duty Cycle 100%: 24.72 W
Maximum Airflow	At Duty Cycle 0~20%: 35.52CFM At Duty Cycle 50%: 67.24 CFM At Duty Cycle 100%: 115.61 CFM
Rated Static Pressure	At Duty Cycle 0~20%: 1.39 mm-H2O At Duty Cycle 50%: 5.97 mm-H2O At Duty Cycle 100%: 34.06 mm-H2O
Acoustical Noise	At Duty Cycle 0~20%: 25.63 dBA At Duty Cycle 50%: 47.85 dBA At Duty Cycle 100%: 64.40 dBA
Lead Wire Pin Out	Pin#1- Black(-) Pin#2- Yellow(+) Pin#3- Green(Tachometer/ Signal Output) Pin#4- Blue (PWM)



Performance Chart: Passive Cooler L40 Thermal Resistance

Thermal Resistance vs. Fan Speed (at Specific PWM Duty Cycle)



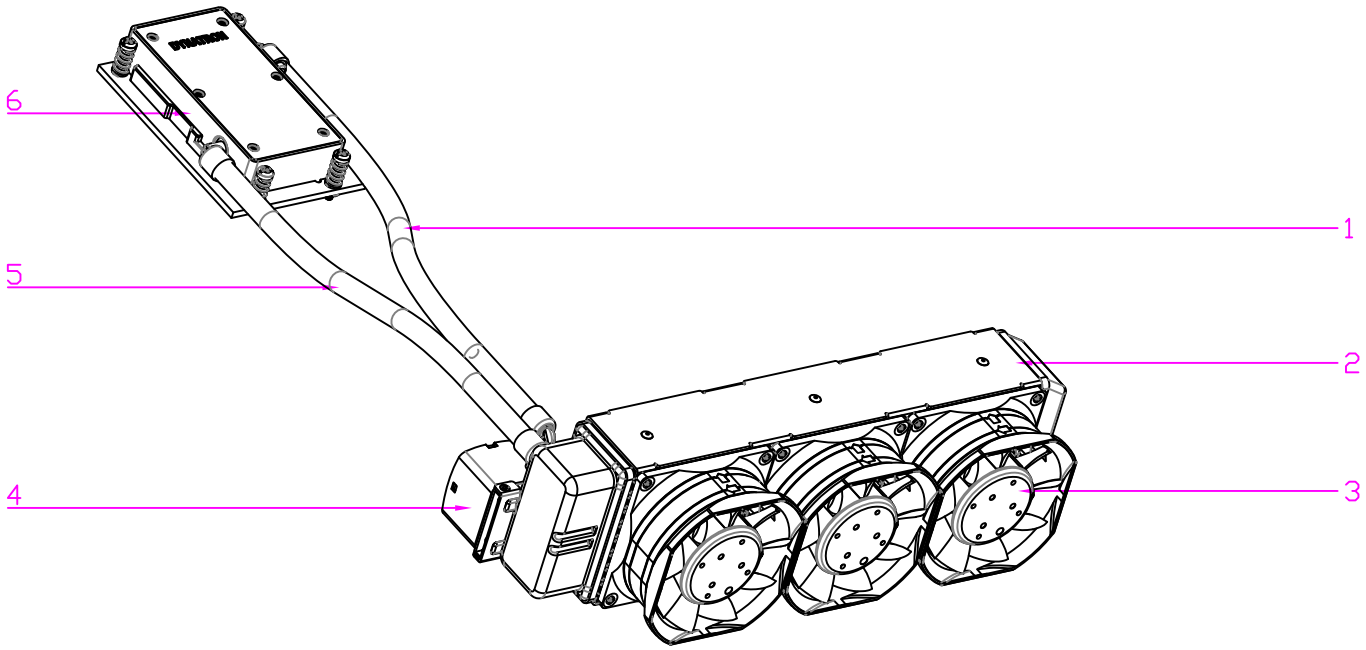
1. SCOPE

This specification defines the electrical and mechanical characteristics of the ☐ AC / ■DC Brushless Pump (■Liquid State/ ☐2-Balls Bearing), which is carefully designed and manufactured for your special needs by Dynatron Corporation.

2. ELECTRICAL CHARACTERISTICS(Pump)

Items		Description
1.	Rated Voltage	DC 12V
2.	Start Voltage	DC 7V
3.	Operating Voltage	10.2 V ~ 13.8 V
4.	Flow – (maximum value)	3.19LPM (0.86GPM)
5.	Input Current	0.6A (Max.)
6.	Input Power	7.2W
7.	Speed	4800RPM ± 10 %
8.	Insulation Resistance – Between Frame and Terminal	10 M ohm at DC 500 V
9.	Dielectric Strength – Between Frame and Terminal	5 mA (Max.) @ AC 500 V 60 Hz 1 min.
10.	Life – Continuous operating under normal temperature (25 °C or 77 °F)	35,000 hours
11.	Rotation	Anticlockwise Air Discharged
12	Autorestart Time	3-5sec
13.	Lead Wires	UL 2468, AWG 26 or Equivalent “-“: Black; “+”: Black; “S” Black;
14.	Acoustical Noise	26.5dBA(Max27 dBA)

REV#	DESCRIPTION	CHECKER	DATE
0.0	INITIAL RELEASE	Engr.	12/21/23



ITEM #	DESCRIPTION	MATERIAL	QTY.
6	COLD PLATE	(SEE DRAWING)	1
5	HOSE, COLD-SIDE, 350MM LENGTH	EPDM	1
4	PUMP60	PLASTIC	1
3	FAN, 8038, 4-Pin, 8000RPM	PLASTIC	4
2	RADIATOR	ALUMINUM (SEE DRAWING)	1
1	HOSE, WARM-SIDE, 300MM LENGTH	EPDM	1

	DATE	NAME
DRAWN	12/21/23	Engr.
CHECKED	12/21/23	Engr.
ENG. APPR.		
MFG. APPR.		
Q.A.		
COMMENTS:		

TOP MOTOR DYNATRON CORPORATION

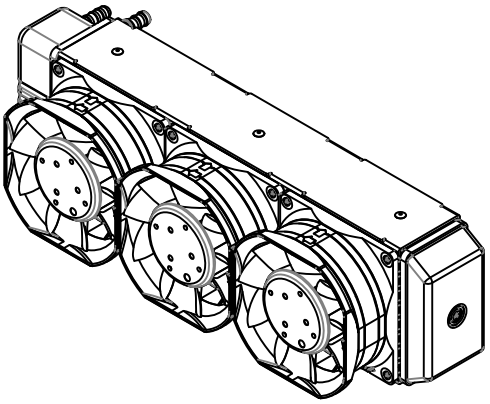
TITLE:
2U Liquid Cooler L40
BOM & Exploded Assembly Drawing

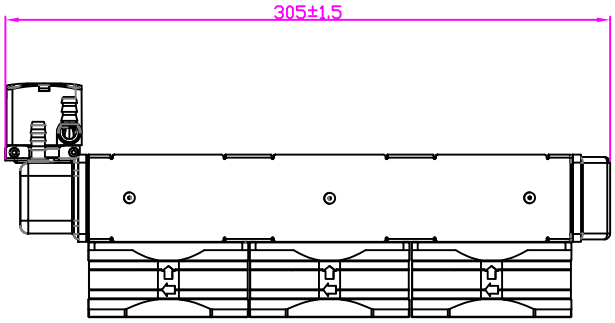
DWG. No: DYN-EP-L40

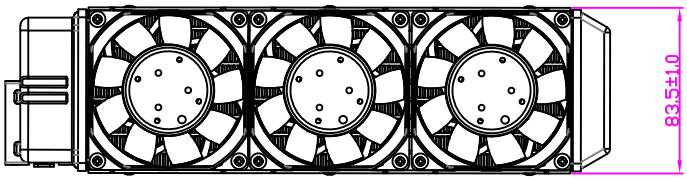
REV 0.0

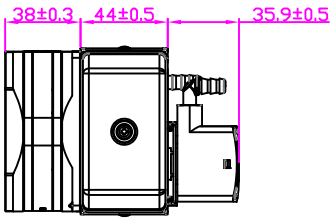
NOTES:
1. THE FIGURE IS FOR REFERENCE ONLY, AND NOT FOR SCALE

REV#	DESCRIPTION	CHECKER	DATE
0.0	INITIAL RELEASE	Engr.	12/21/23









NOTES:
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	NAME	DATE
DRAWN BY	ENGR	12/21/2023
CHECKED BY	ENGR	12/21/2023
ENG.APPROVED		
MFG.APPROVED	_	_

TOP MOTOR

DYNATRON CORPORATION

TITLE: L40 Radiator
Overall Dimension Drawing

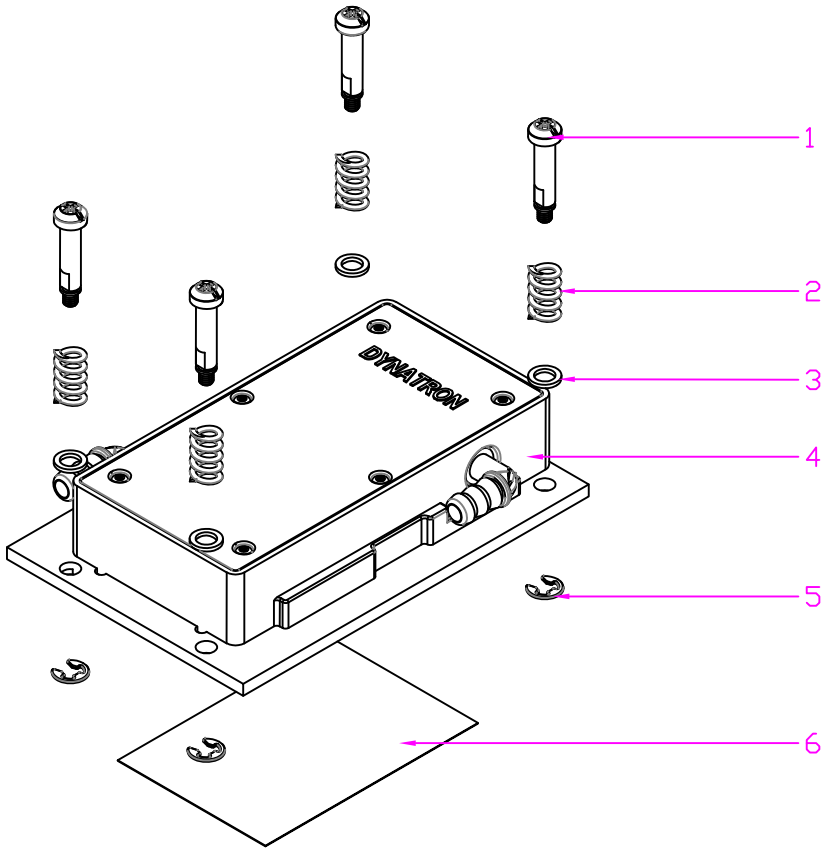
VIEW

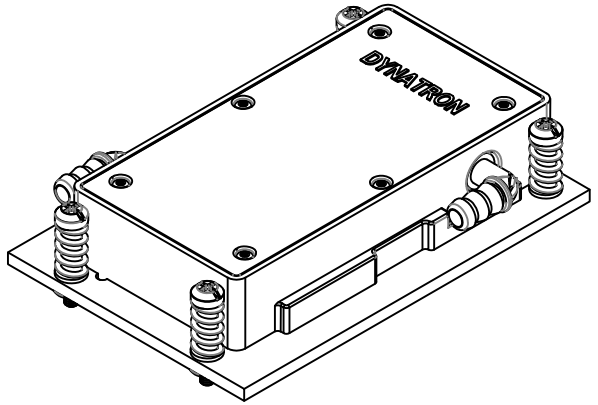
UNITS MM

DWG. No: DYN-DM-2U_Radiator_L40

REV. 0.0

REV#	DESCRIPTION	CHECKER	DATE
0.0	INITIAL RELEASE	Engr.	06/30/23





ITEM #	DESCRIPTION	MATERIAL	QTY.
6	THERMAL GREASE	SHIN-ETSU X-23-7762 (72x50x0.2, NO MESH)	N/A
5	C-CLIp	STEEL	4
4	COLD PLATE	COPPER BASE, PPS ENCLOSURE	1
3	HEATSINK WASHER (52000030)	STEEL	4
2	HEATSINK SPRING (50600890)	SWP	4
1	HEATSINK SCREW (50904380)	STEEL	4

	DATE	NAME
DRAWN	06/30/23	Engr.
CHECKED	06/30/23	Engr.
ENG. APPR.		
MFG. APPR.		
Q.A.		
COMMENTS:		

TOP MOTOR DYNATRON CORPORATION

TITLE:
1U Socket SP6 Cold Plate
BOM & Exploded Assembly Drawing

DWG. No: DYN-EP-SP6-CP-1U

REV 0.0

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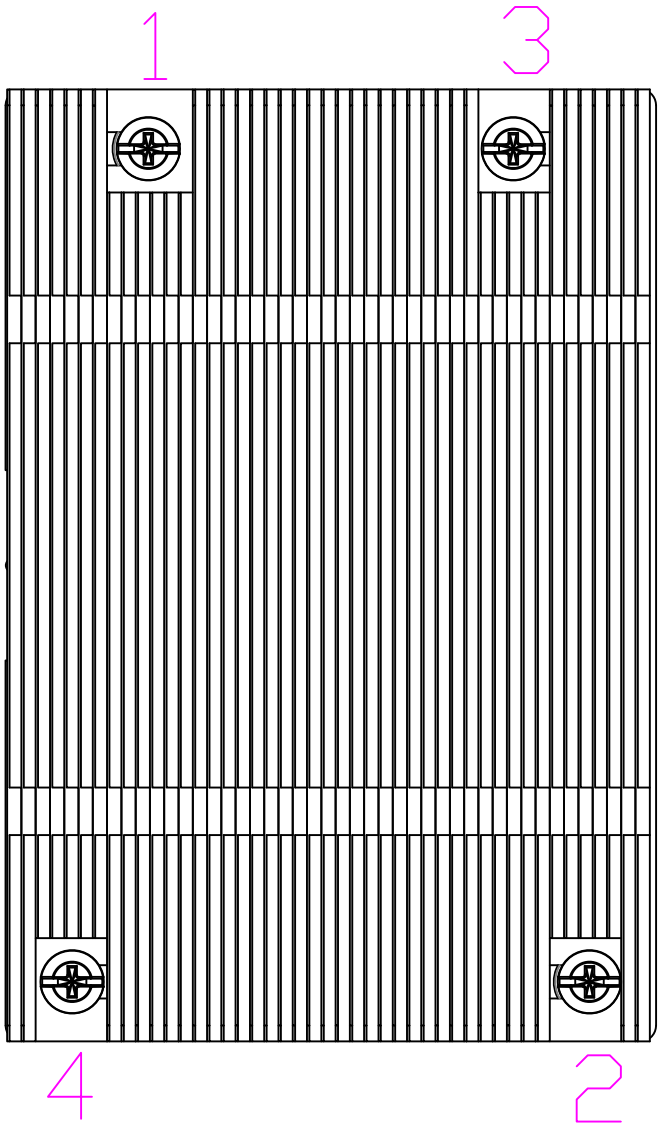
SOCKET SP6 COOLER INSTALLATION INSTRUCTION



HEATSINK ASSEMBLY
ORDER 1,2,3,4

HEATSINK DISASSEMBLY
ORDER 4,3,2,1

TORQUE = 12.5 - 15.1 KG -CM

ALL SCREWS SHOULD BE TIGHTENED/RELEASED EVENLY, AVOIDING TIGHTENING/RELEASING ANY SCREWS TO THE BOTTOM/TOP AT ONCE

Publication History:

12/21/2023: Initial Release

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