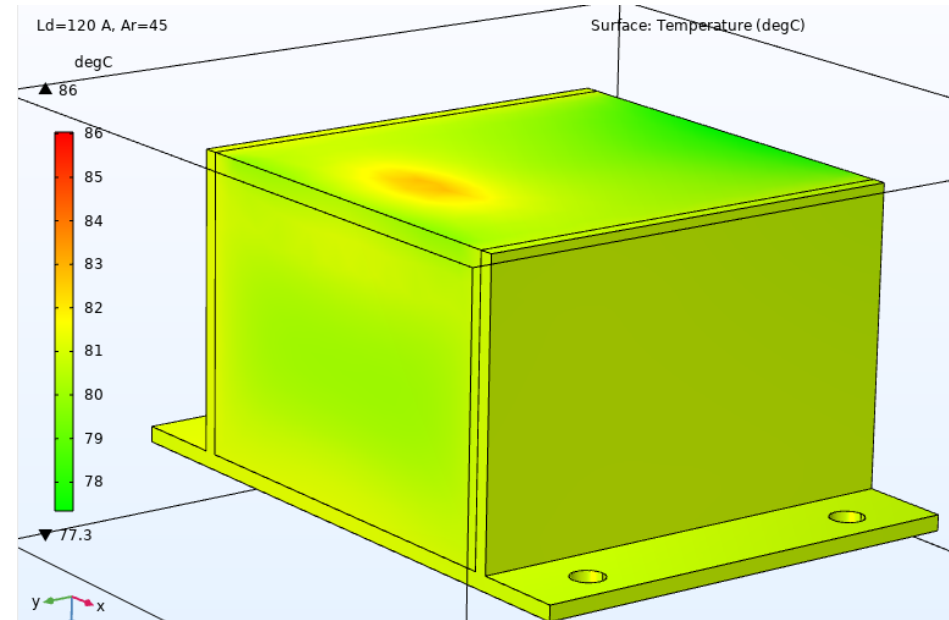
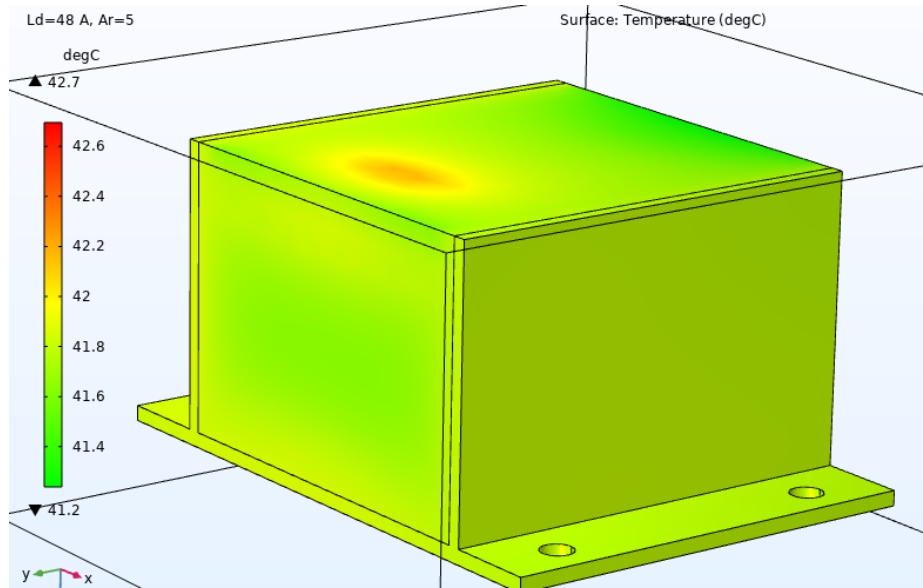
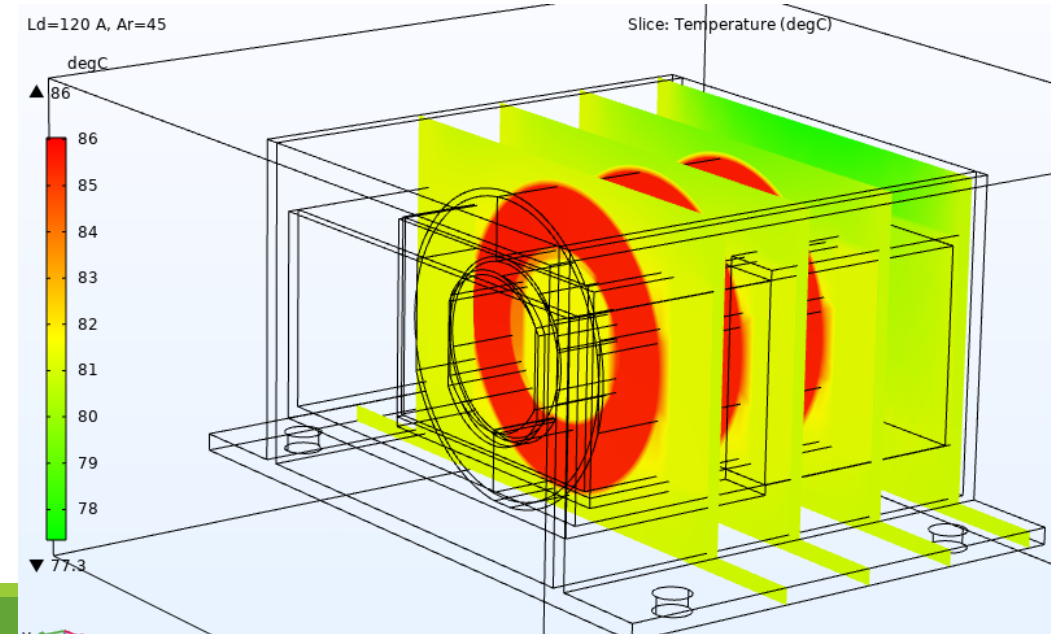
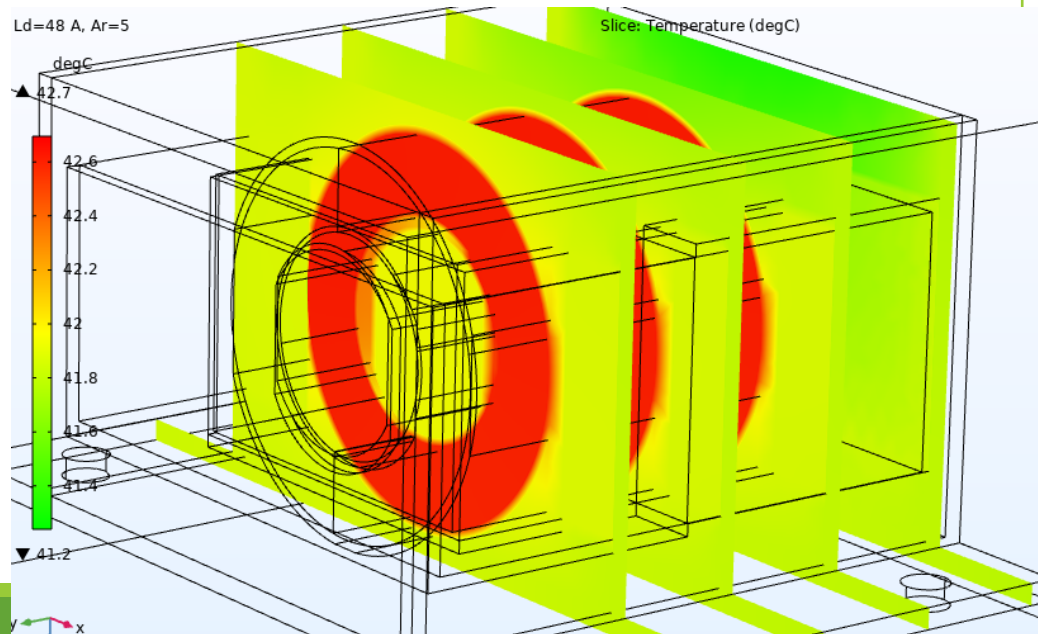


Thermal and Electromagnetics simulation – Part # S55020-140M-160AH – Current rated 160A @ 10kHz

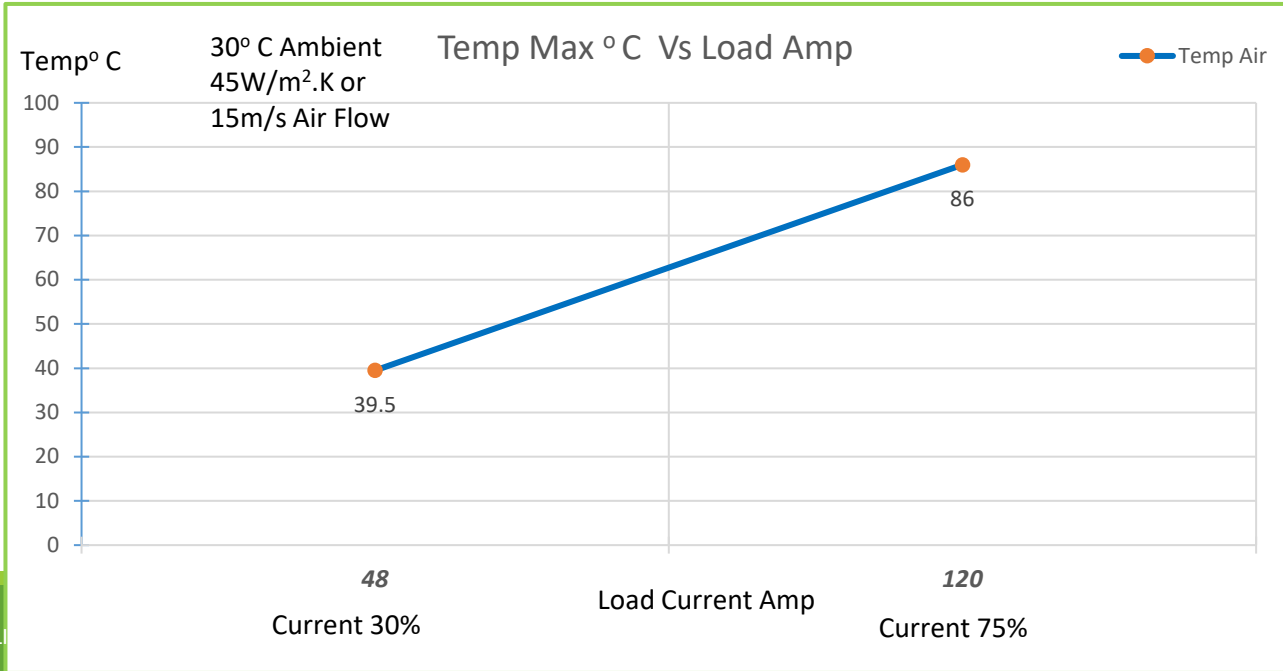
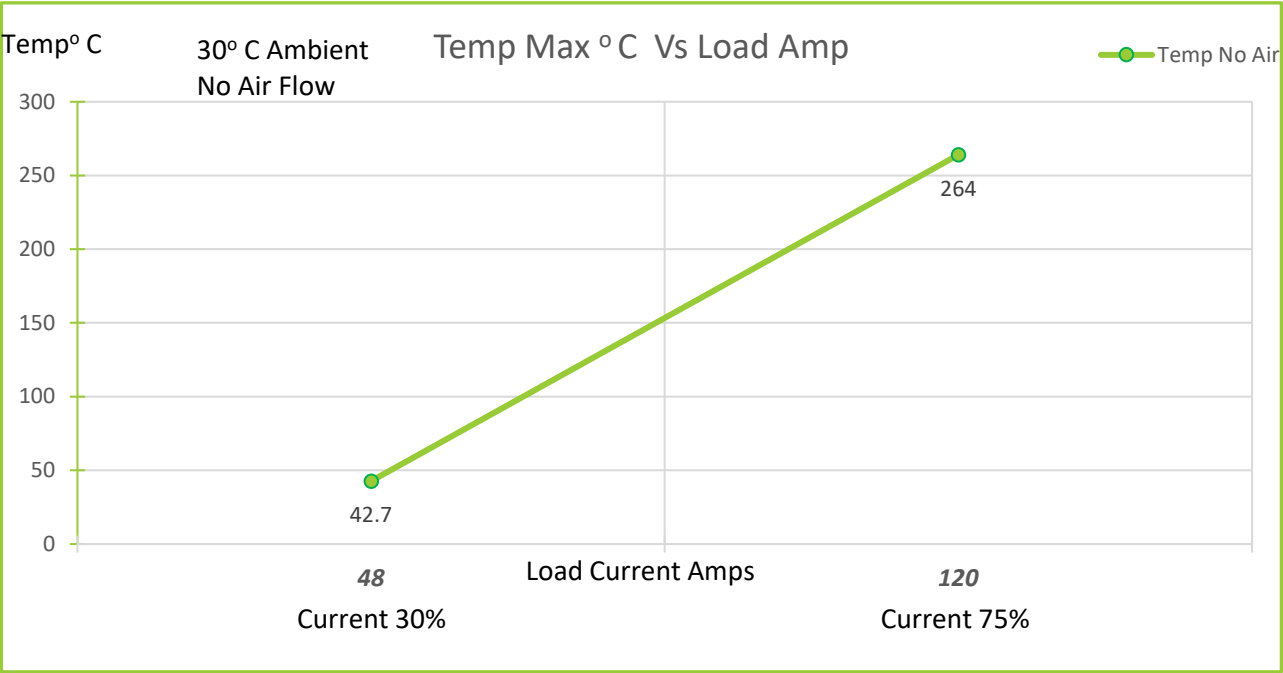
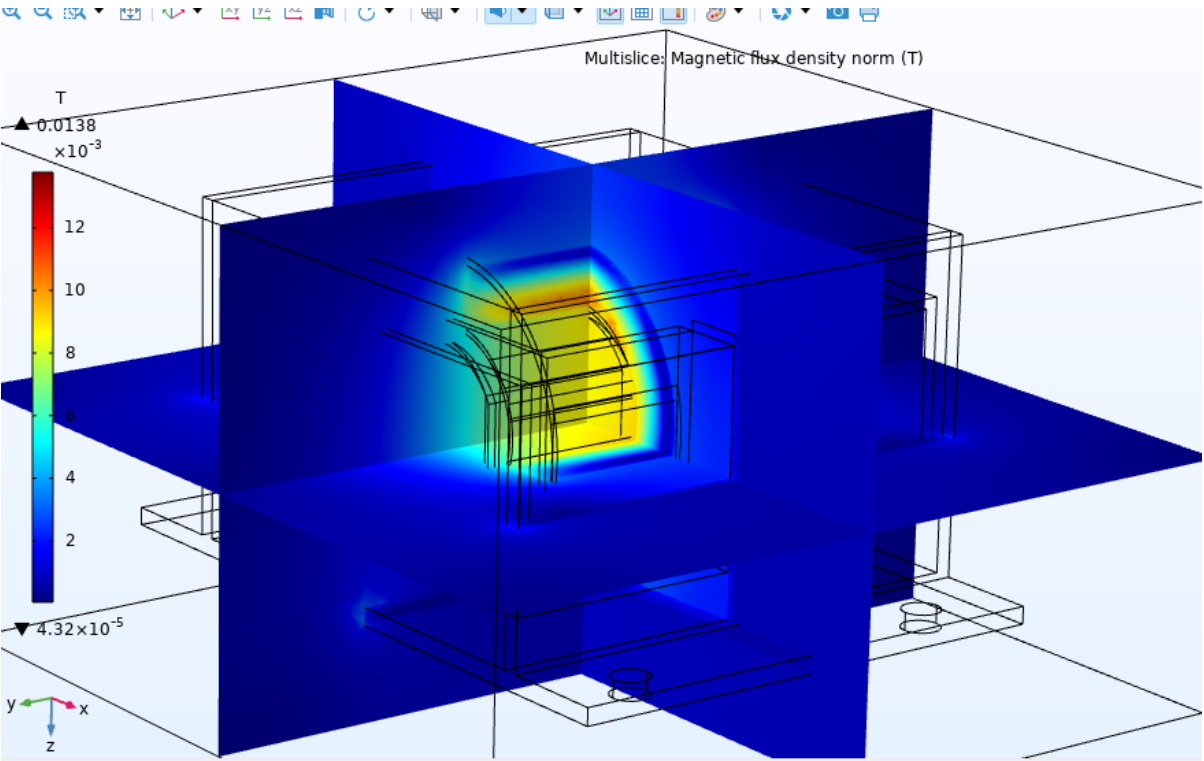
Current 30% (48A)
No Airflow
Natural convection



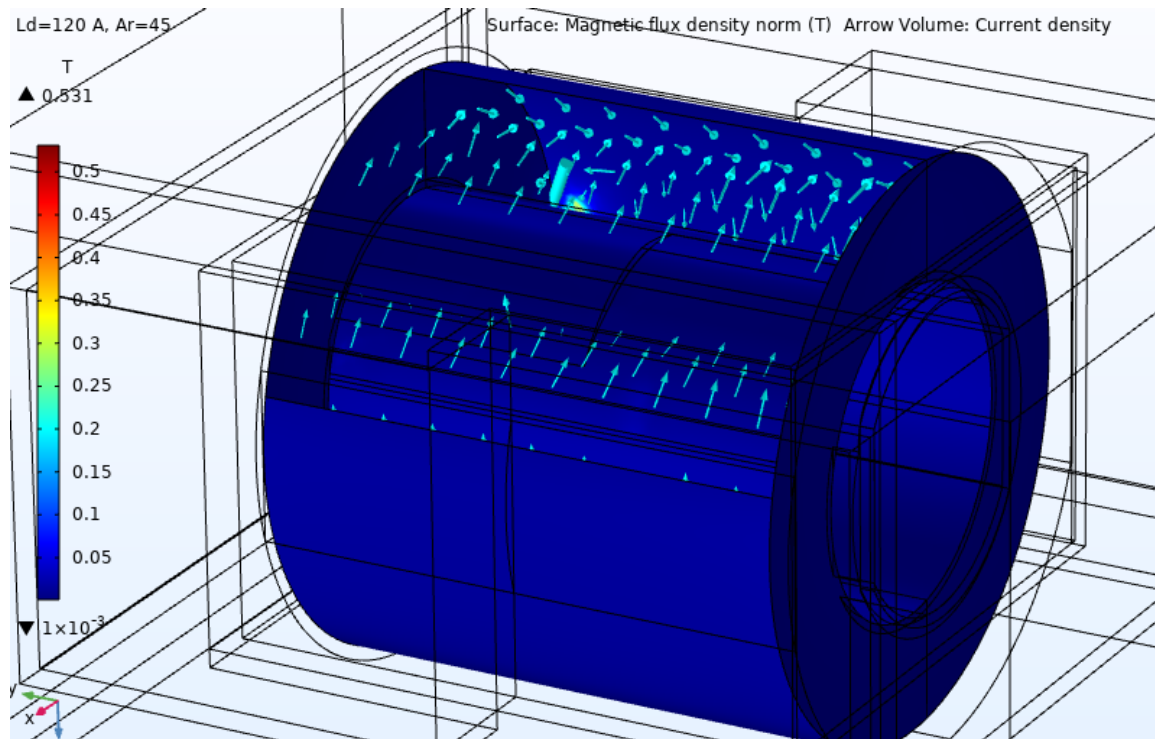
Current 75% (120 A)
45 W/ m²·K or 15
m/s air flow.



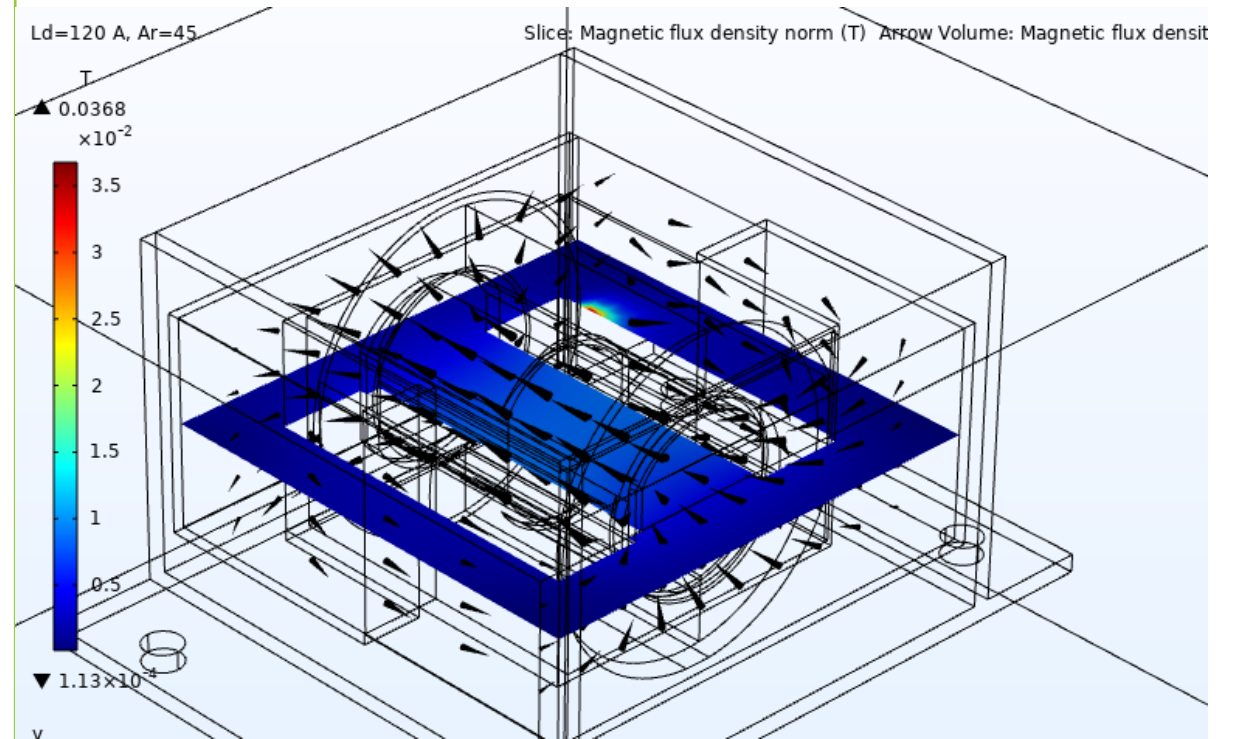
Thermal and Electromagnetics simulation – Part # S55020-140M-160AH – Current rated 160A @ 10kHz



Coil Current



Core Flux



Abbreviations

Ld	: Current rated Amps
Ar	: Airflow
W/m ² .K	: Watts / Sq meter .Kelvin – Heat Convection rate
m/s	: Meter/ Second - Airflow
degC	: Temperature in Deg C
T	: Tesla – Magnetic Flux density
Temp	: Temperature
Temp max:	Temperature Maximum
Amb	: Ambient Temperature
Amps	: Ampere Load current.
Slice	: Sectional view

Disclaimer :

- Simulation MODEL is an effective tool for evaluating product performance by simulation; however, it does not simulate product performance in all test environments and is not intended to be a replacement for testing of the actual device by means of a test board or otherwise.
- Simulation results are for reference purposes only; CUSTOMER shall perform thorough testing using the actual device.