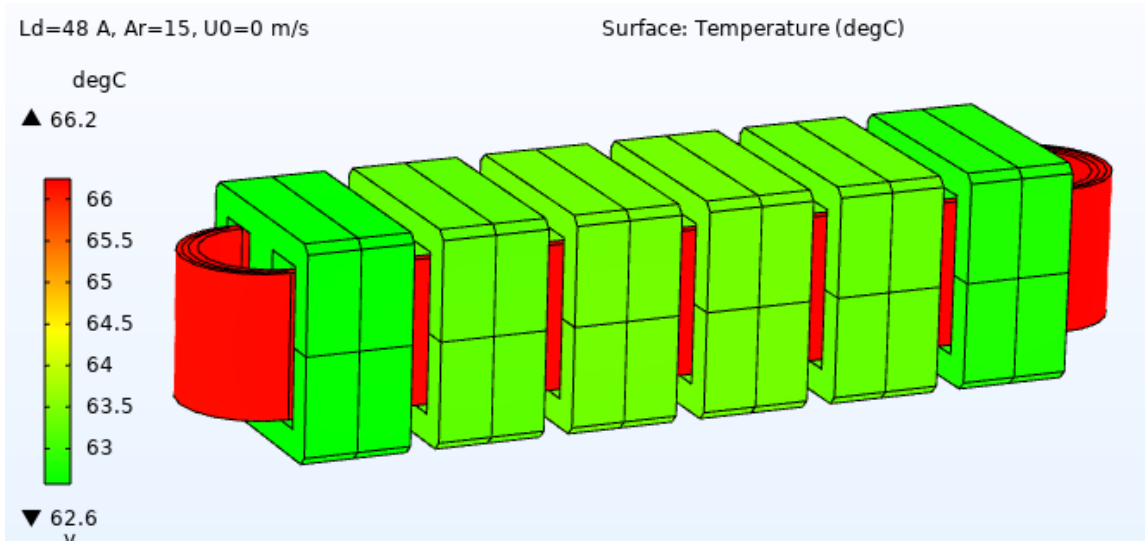
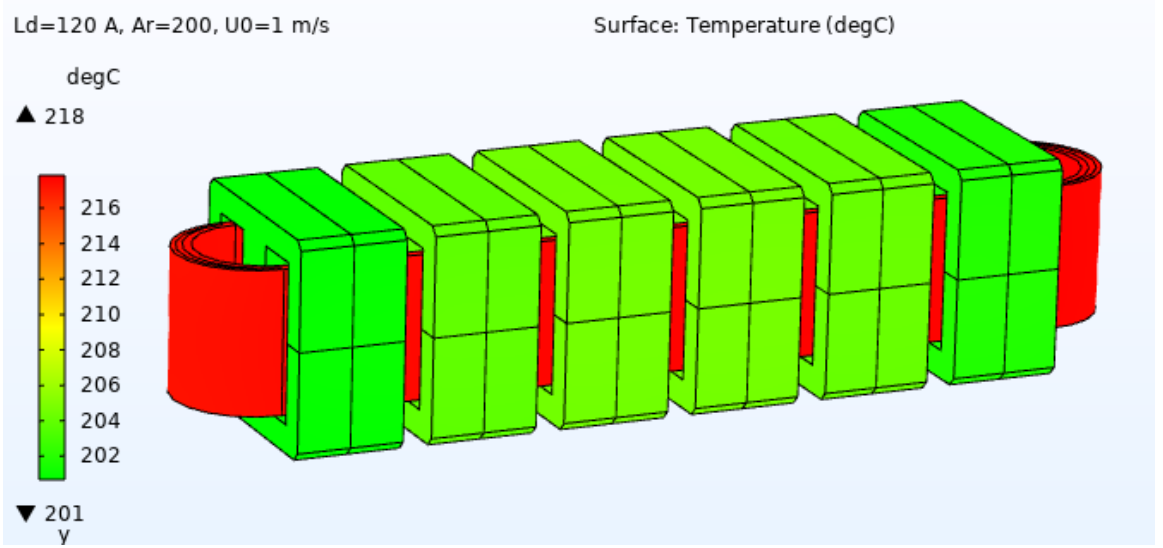
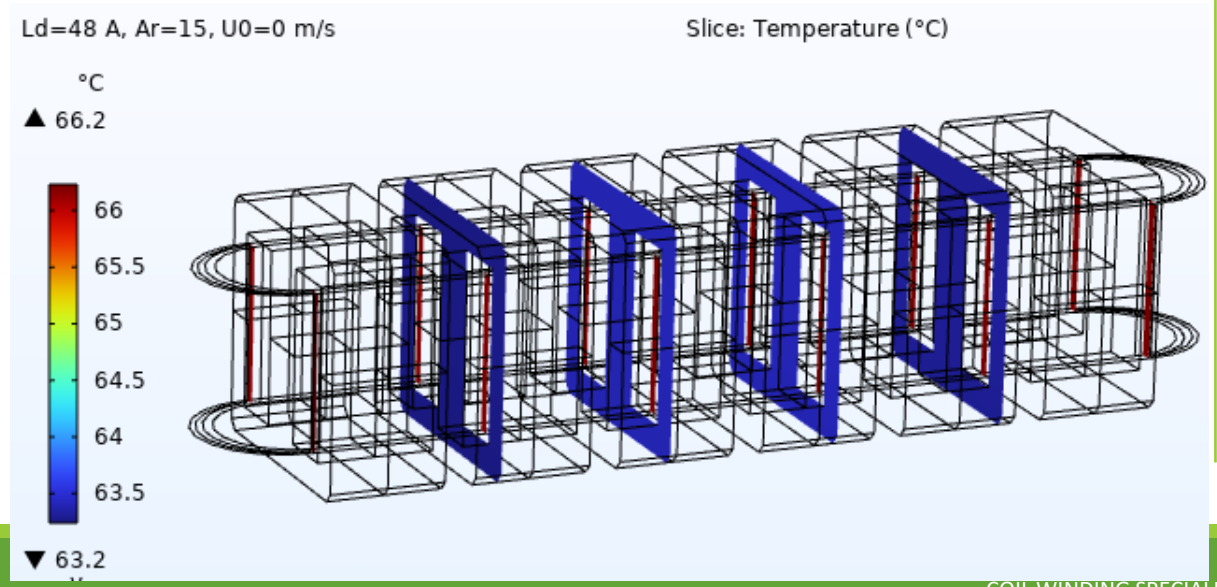
Thermal and Electromagnetics simulation – Part # CWS-MCS-13210– Current rated 160A @ 10kHz

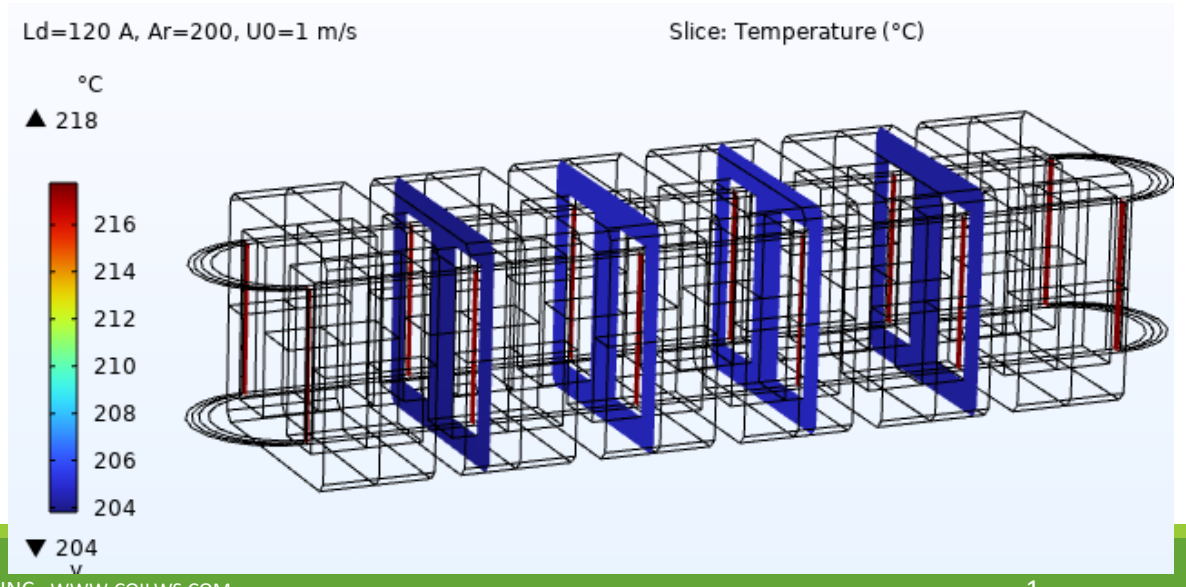
Current Irms: 48 A
No Airflow, Exhaust 15m/s
Natural convection



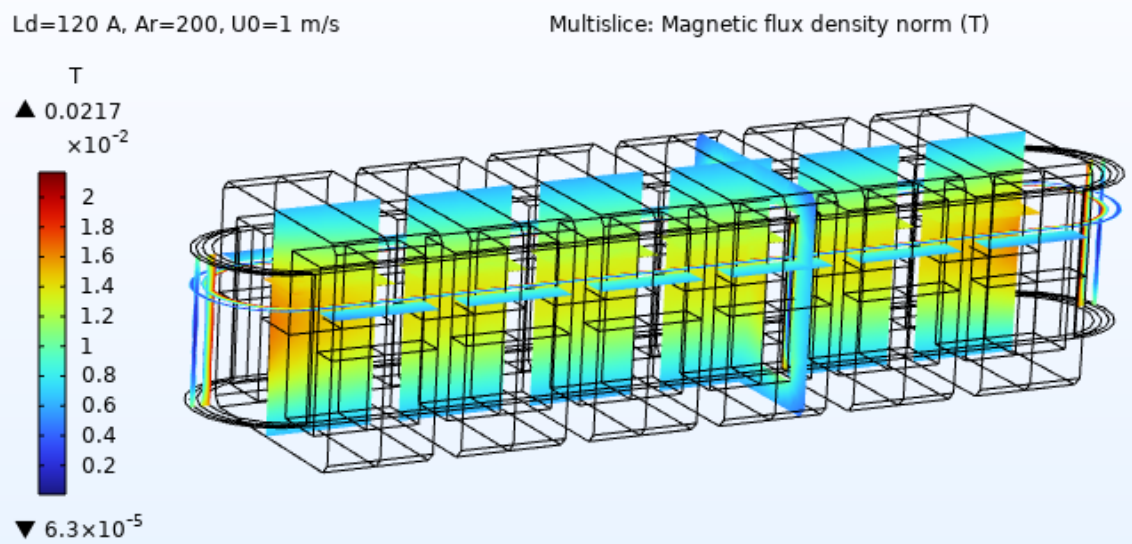
Current Irms: 120A
200 W/ (m²K) + 1 m/s forced air flow .

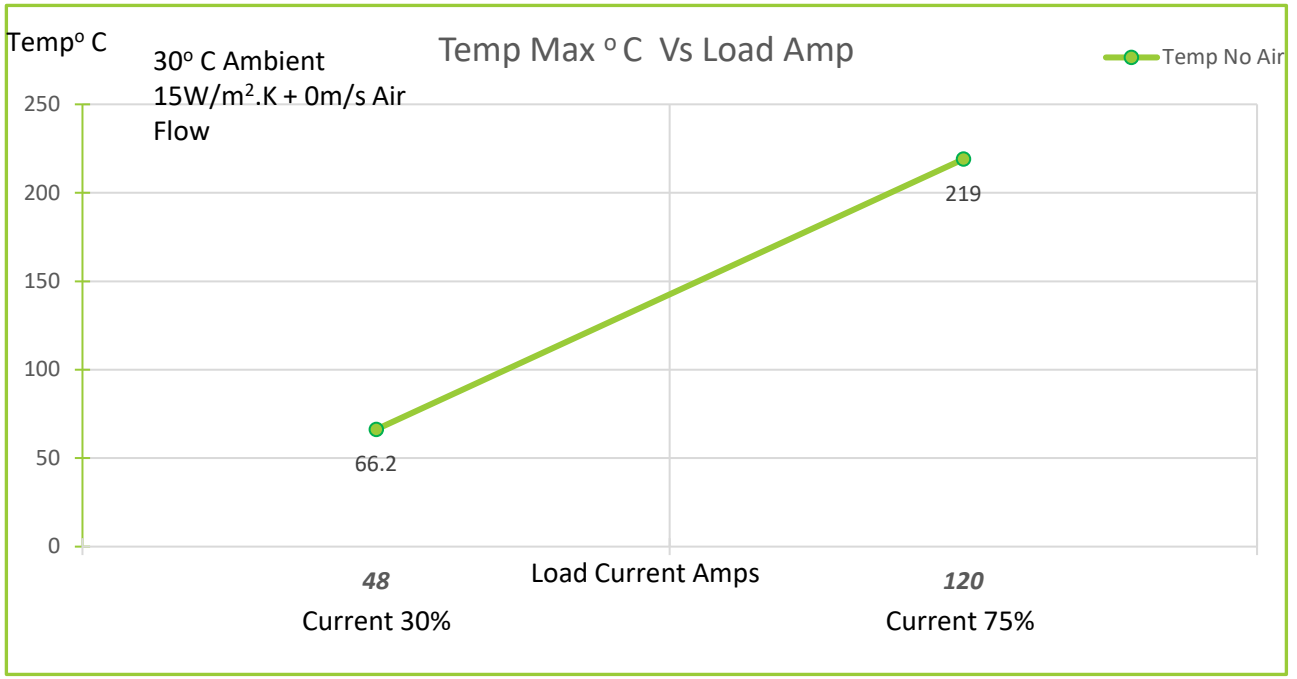


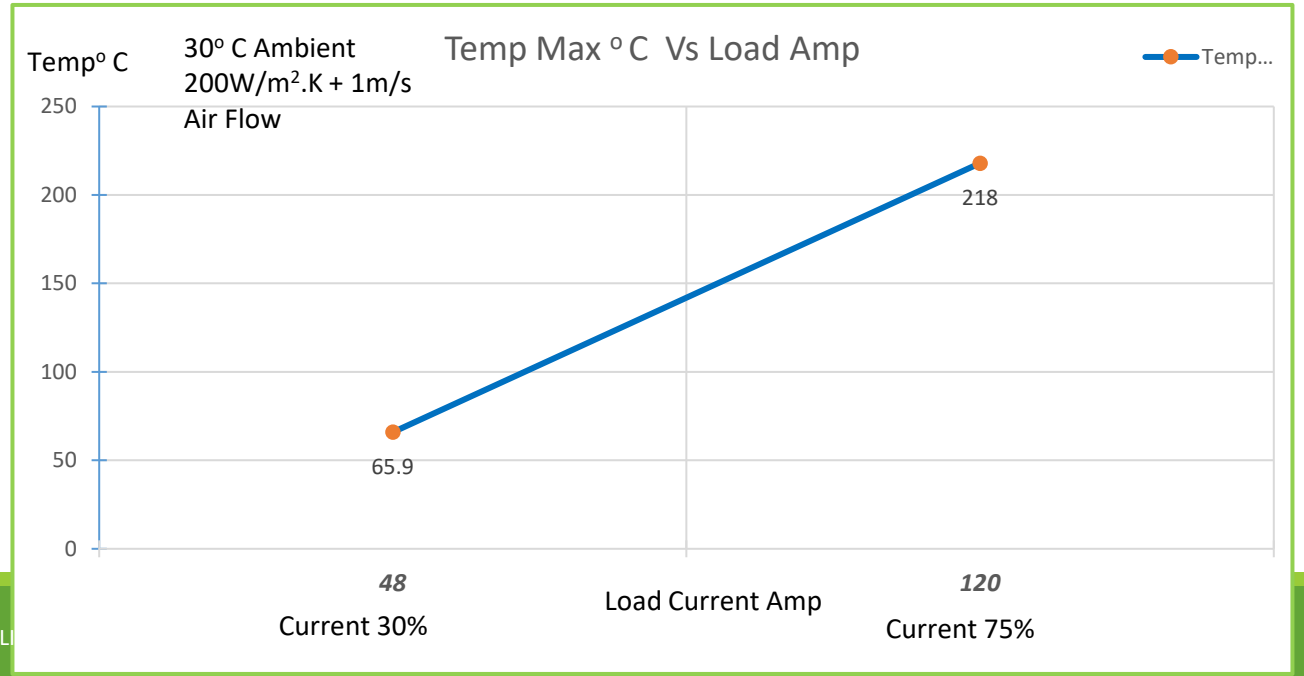




Thermal and Electromagnetics simulation – Part # CWS-MCS-13210– Current rated 160A @ 10kHz

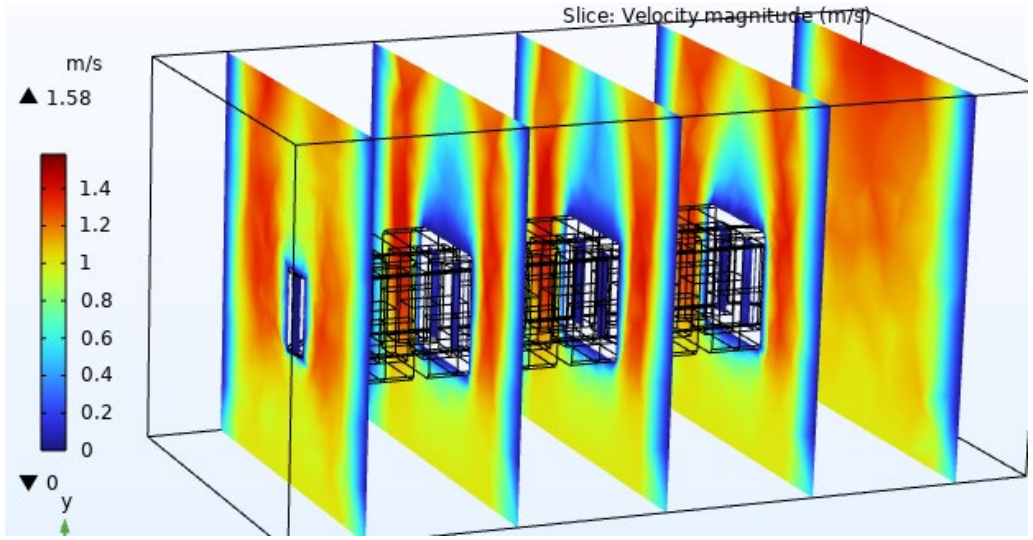






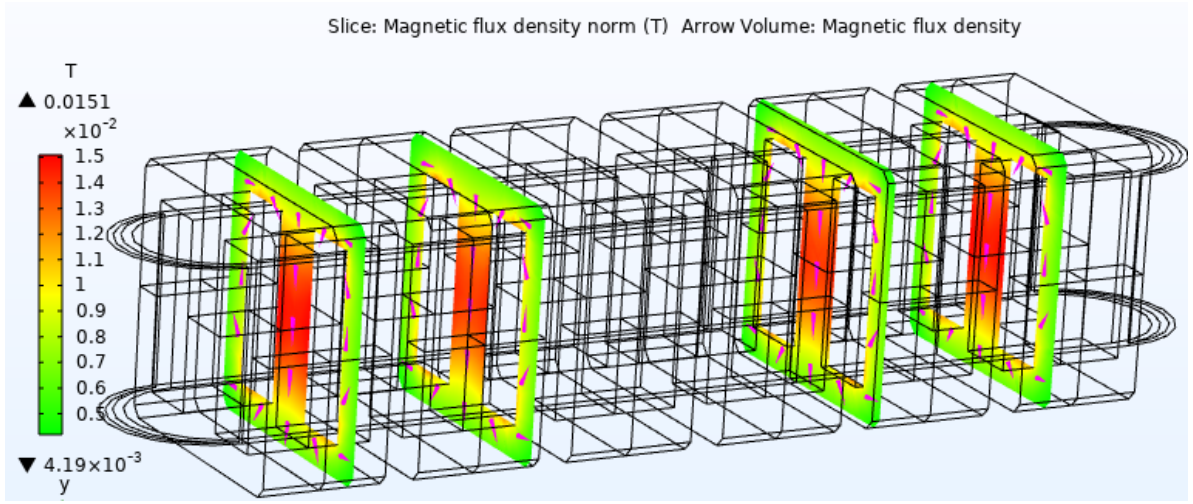
Thermal and Electromagnetics simulation – Part # CWS-MCS-13210– Current rated 160A @ 10kHz

Airflow

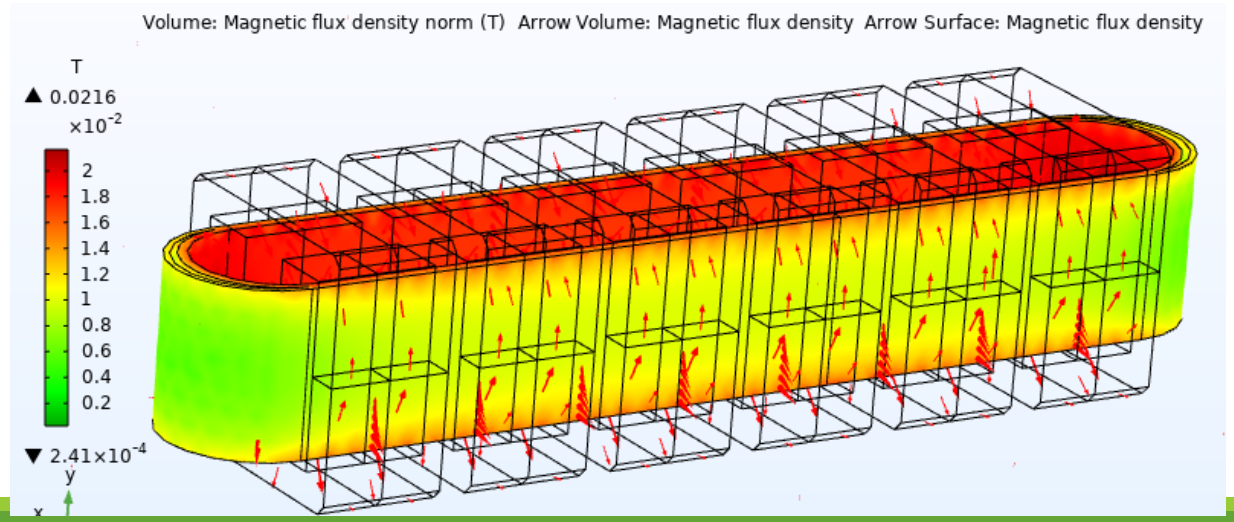


Note:
Need additional Fan min 1 m/s airflow over the surface.

Core flux



Coil 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.