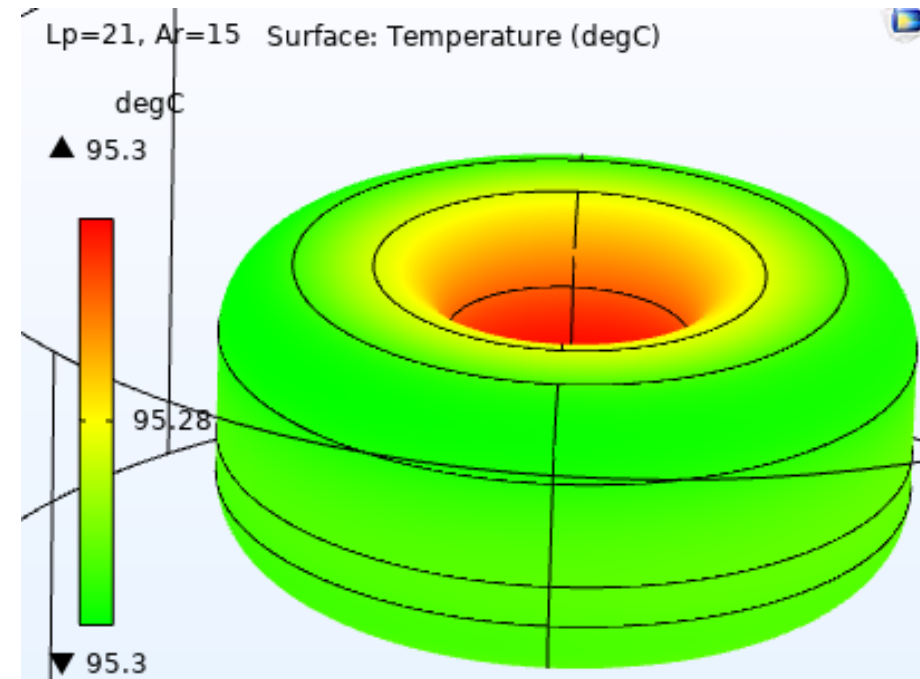
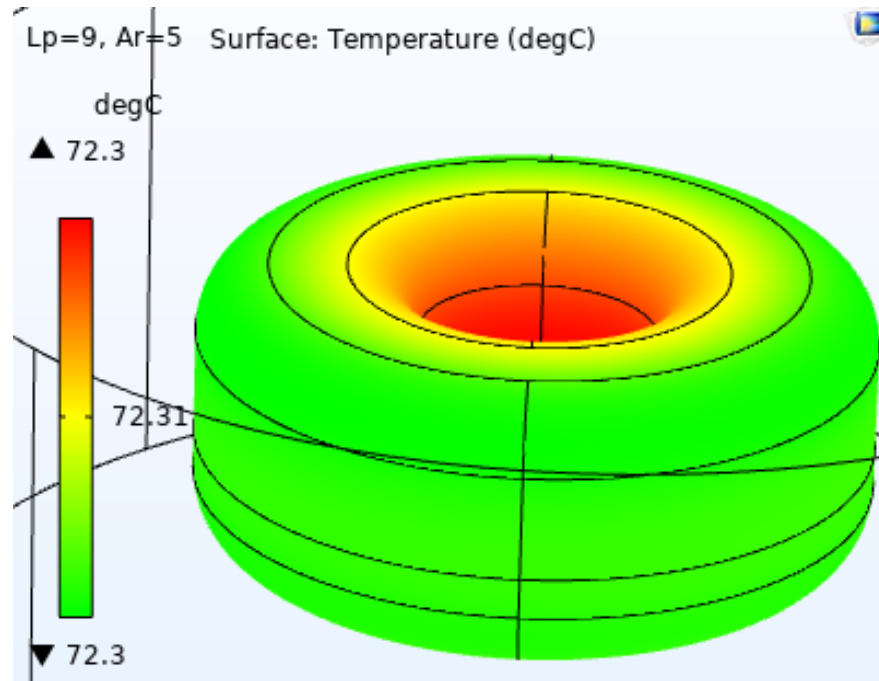
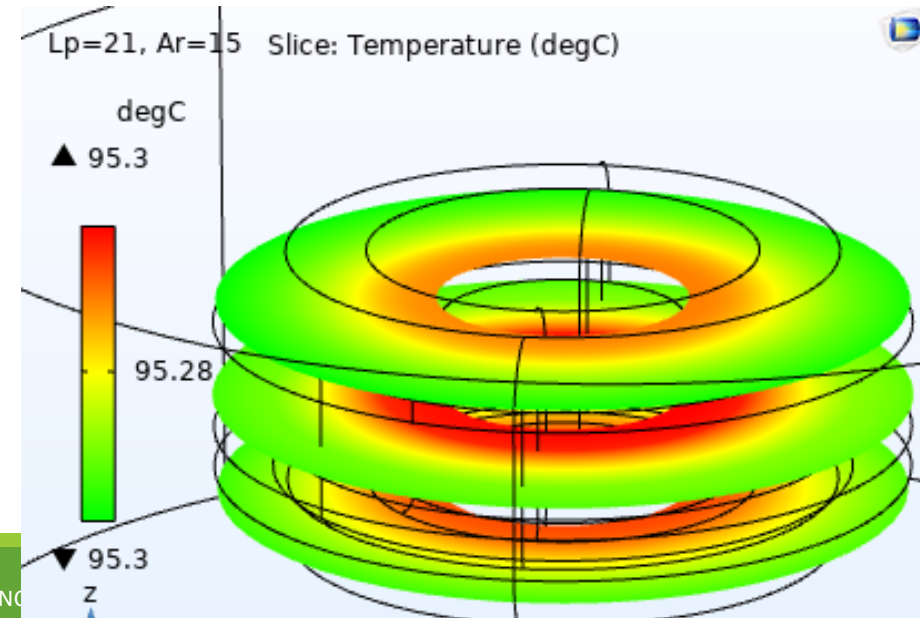
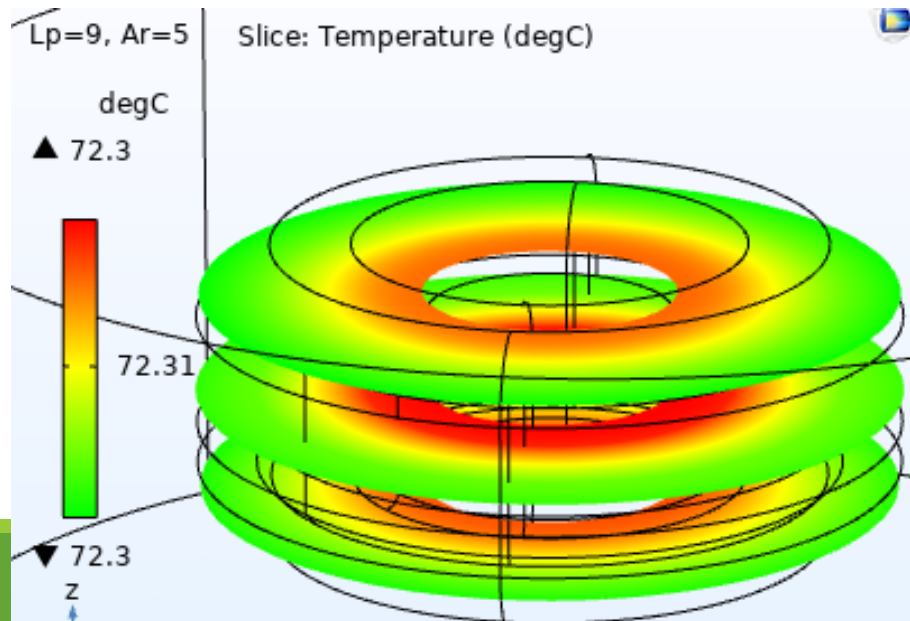


Thermal and Electromagnetics simulation – Part # HF203-3R2M-30AH – Current rated 30A @ 1kHz

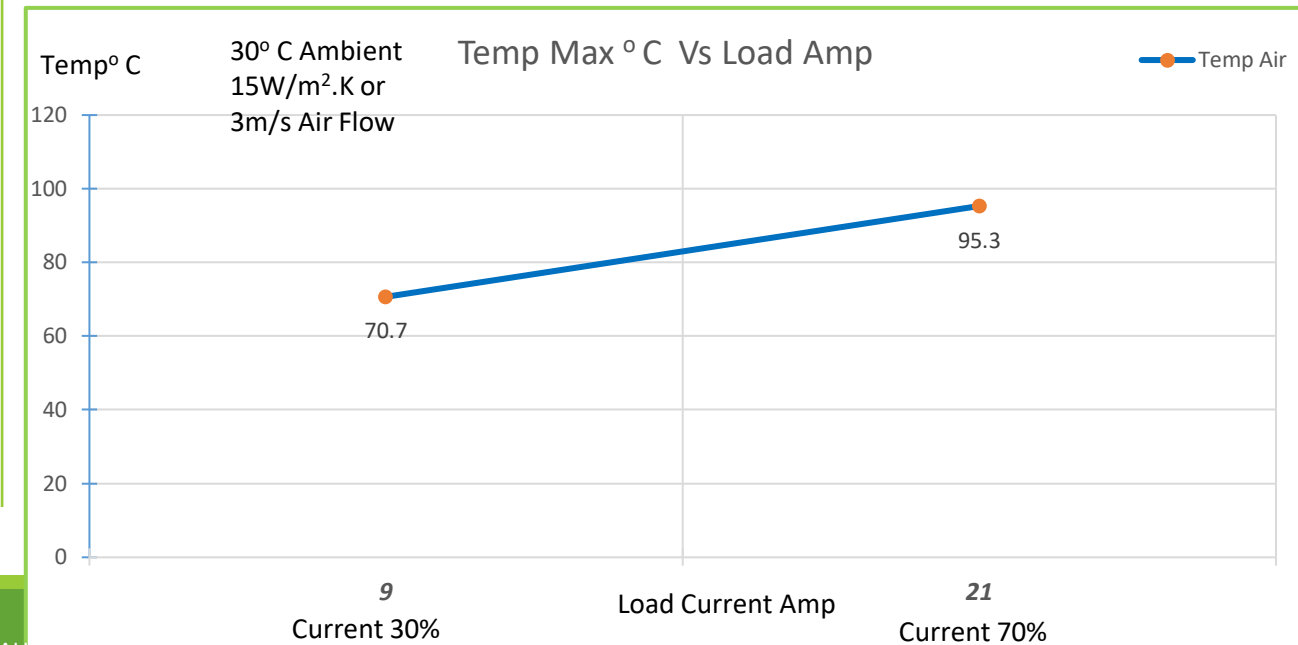
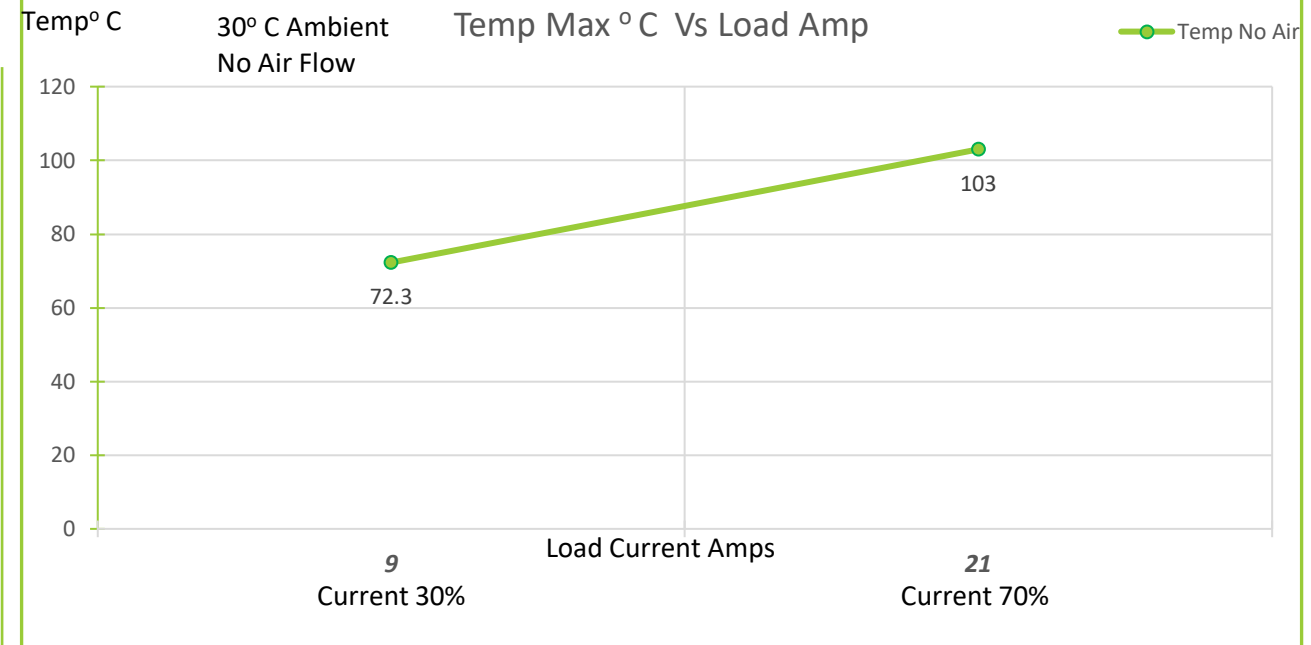
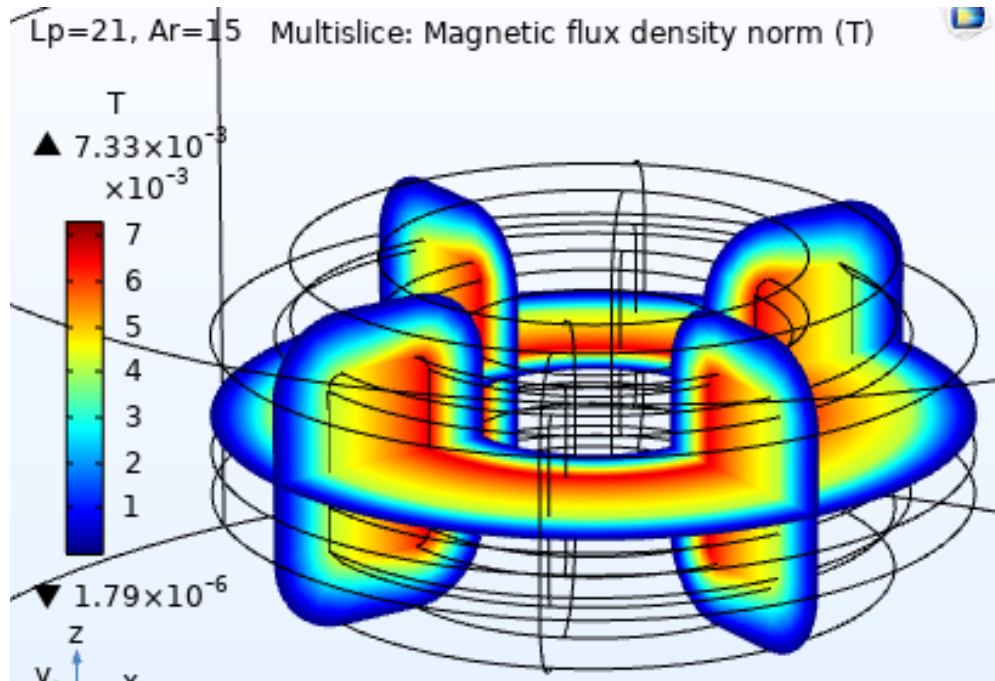
Current 30% (9A)
No Airflow
Natural convection



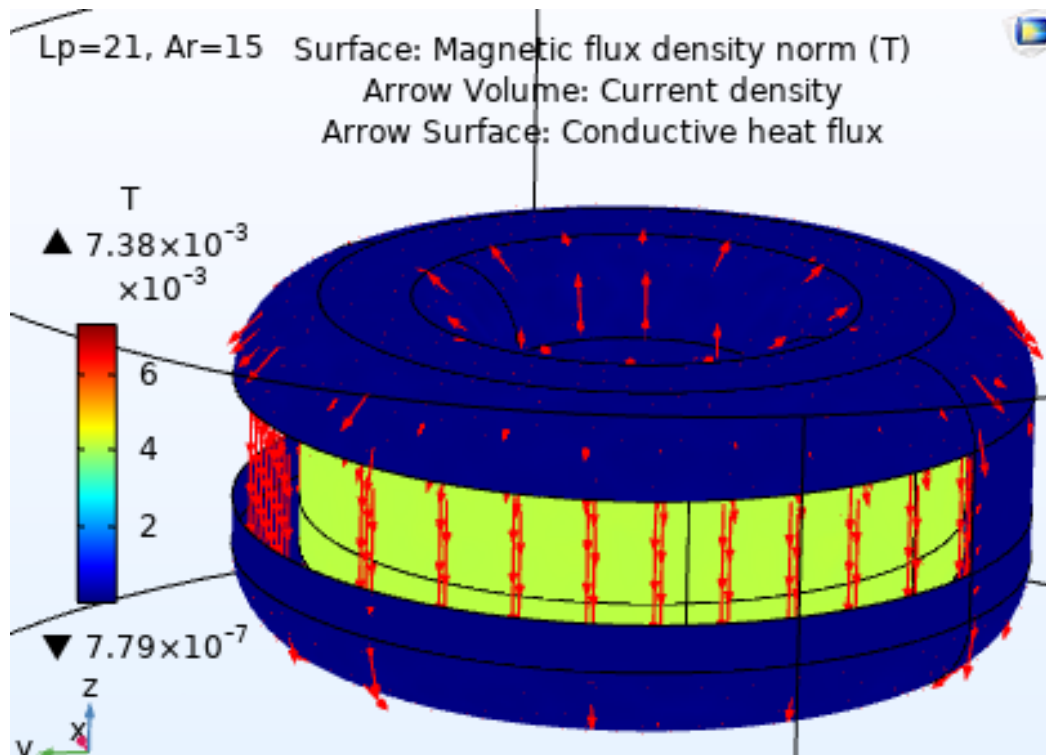
Current 70% (21A)
15 W/(m²K) or 3 m/s air
flow.



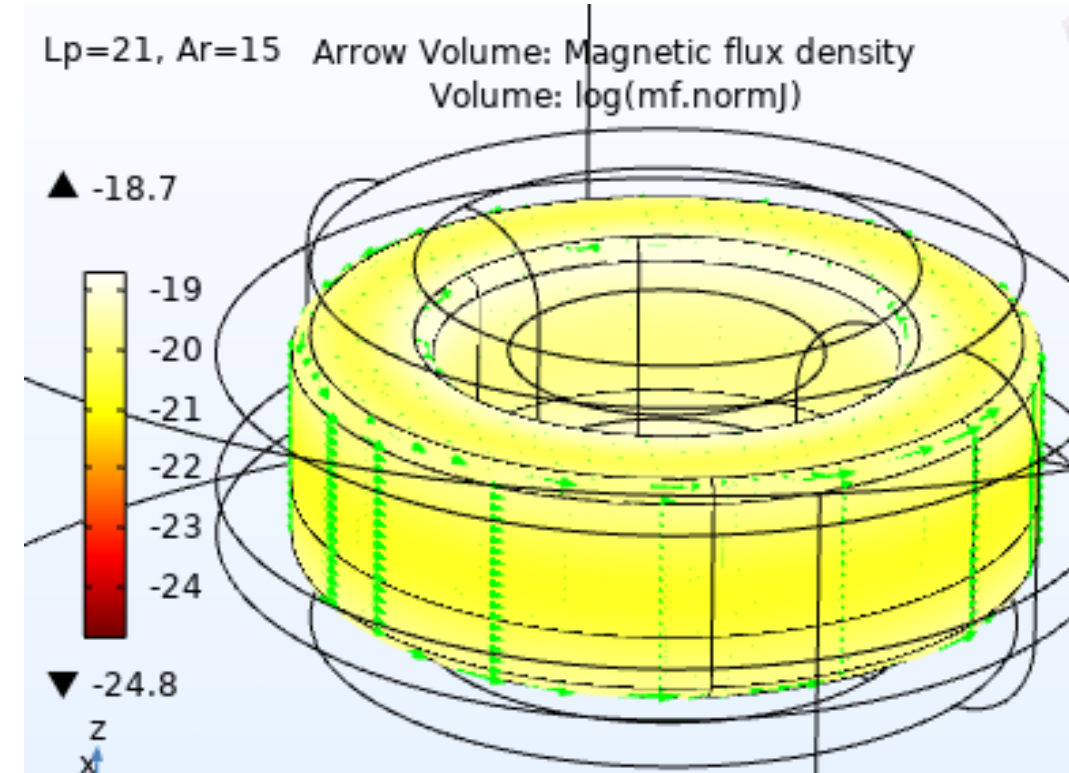
Thermal and Electromagnetics simulation – Part # HF203-3R2M-30AH – Current rated 30A @ 1kHz



Magnetics Flux in Coil



Magnetic Flux in Core



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 |

Note : For the modeling purpose the winding is considered as homogenous multilayer winding .

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.