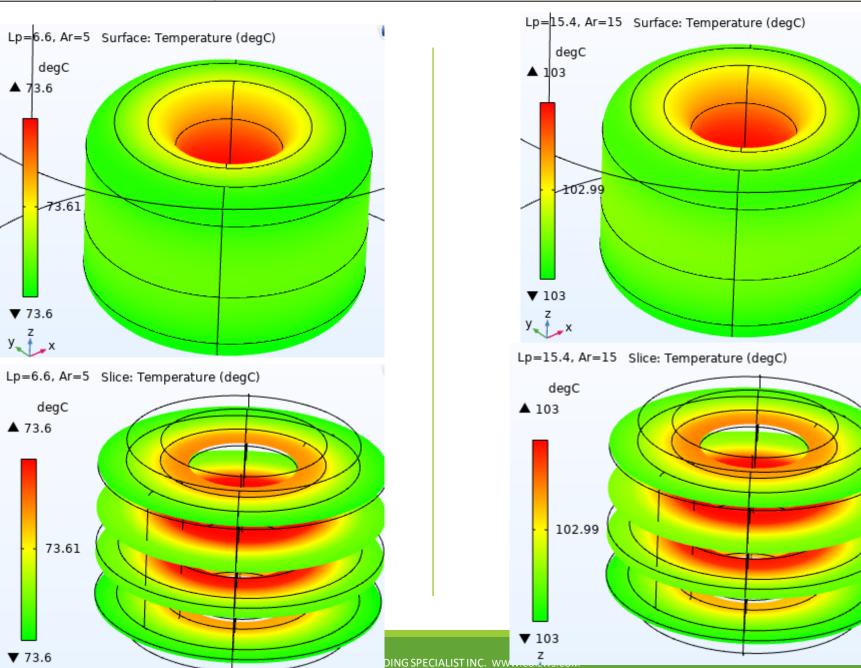
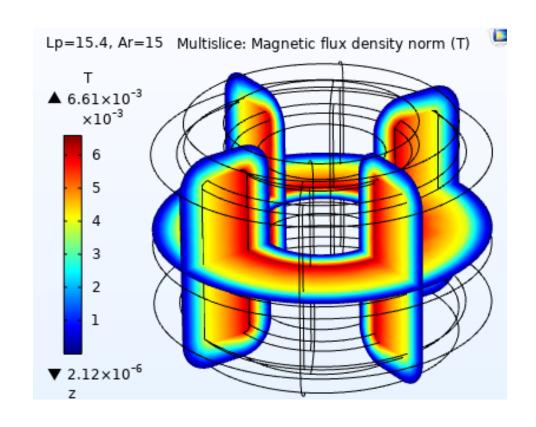
Current 30% (6.6A) No Airflow Natural convection

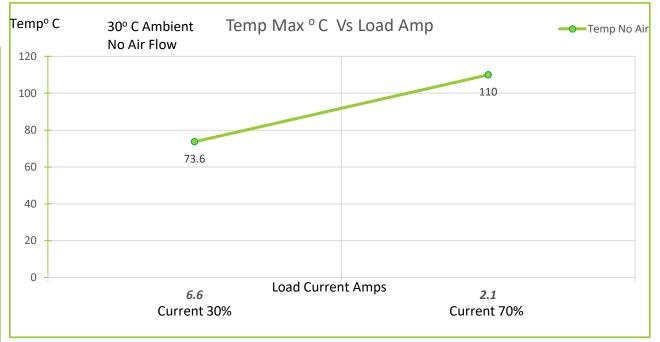
Z

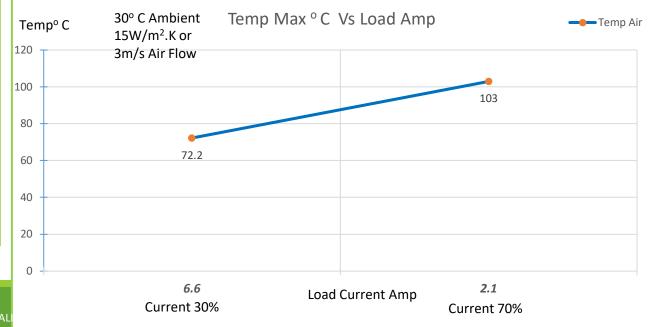


Current 70% (15.4A) 15 W/ (m<sup>2</sup>K) or 3 m/s air flow.

### Thermal and Electromagnetics simulation – Part # HF203-050M-22AV – Current rated 22A @ 1kHz

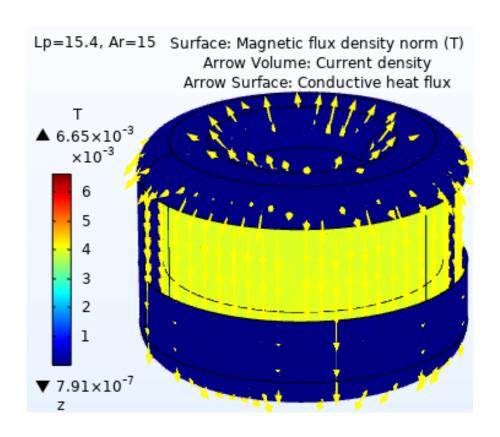


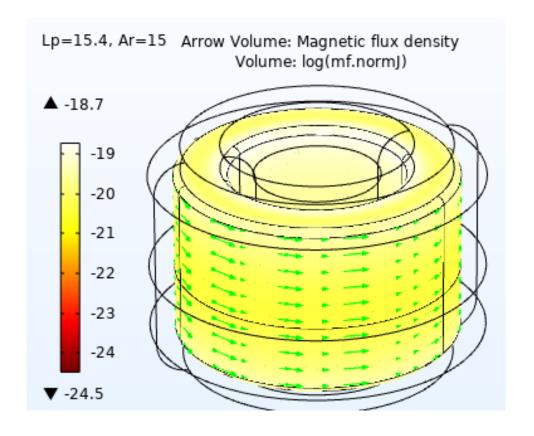




#### Magnetics Flux in Coil

## Magnetic Flux in Core





# Abbreviations

Ld : Current rated Amps

Ar : Airflow

W/m<sup>2</sup>.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:

<sup>-</sup>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.

<sup>-</sup> Simulation results are for reference purposes only; CUSTOMER shall perform thorough testing using the actual device.