

## Inductit® Design Form



### Contact Information

Company \_\_\_\_\_  
 Contact Person \_\_\_\_\_  
 Telephone \_\_\_\_\_  
 Email \_\_\_\_\_

Address \_\_\_\_\_  
 City \_\_\_\_\_  
 State \_\_\_\_\_  
 Country \_\_\_\_\_

### Application

*E.g. – LCL Filter in motor drive, PFC in UPS...*

First Year of Production \_\_\_\_\_  
 Estimated Number Per Year \_\_\_\_\_ [www.inductit.com](http://www.inductit.com)  
*3 Phase are to be counted as 3 Inductors*

Primary Objective ☐ Cost ☐ Loss ☐ Dimensions

Target price (if known) \_\_\_\_\_  
*For One Phase Inductor*

### Maximum Physical Dimensions

#### Inductor Excluding Connectors

X(mm) × Y(mm) × Z(mm)

*Please include additional free space if existing solution is not utilizing as it might help in reducing cost. Inductit solution is fully isolated and has near zero leakage on outer side and hence there is no requirement to keep space between inductor and other components.*

#### Connectors

Length (mm) \_\_\_\_\_

Direction (e.g. - X) \_\_\_\_\_

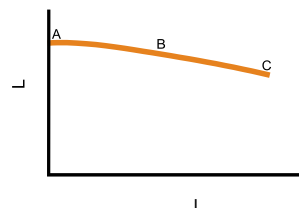
#### End Type If Decided

*Example – Bare, Lug...*

### Technical Requirements

#### Incremental/Differential Inductance

| Point | I [A]* | L [μH] |
|-------|--------|--------|
| A     |        |        |
| B     |        |        |
| C     |        |        |



#### Loss

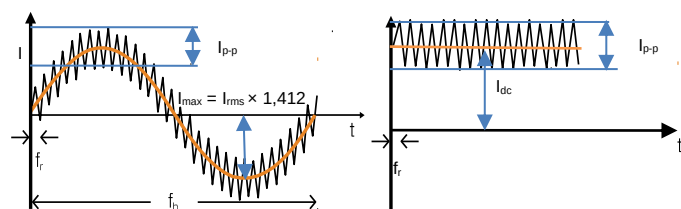
Rdc (mΩ) < If any \_\_\_\_\_  
*Stringent requirement may lead to higher cost solution*

Total Loss (W) < If any \_\_\_\_\_  
*Stringent requirement may lead to higher cost solution*

#### Operating Current

|                                   |  |
|-----------------------------------|--|
| Base Current $I_{dc}/I_{rms}$ (A) |  |
| Base Frequency $f_b$ (Hz)         |  |
| Ripple Current $I_{p-p}$ (A)      |  |
| Ripple Frequency $f_r$ (kHz)      |  |

*Alternatively, current harmonic spectrum is also acceptable.*



### Thermal Requirements and Conditions

Hottest Point (°C) < \_\_\_\_\_

*Standard Class F Insulation < 155°C*

Cooling Medium (Select One)

☐ Only Natural Convection

☐ Heatsink

☐ Forced Air Cooling

☐ Forced Air Cooling with Heatsink

☐ Water Plate Cooling

Ambient Air Temperature (°C) \_\_\_\_\_

(Fill Corresponding Details of The Selected Medium)

No Further Information Required

Single or Double Sided \_\_\_\_\_

Heatsink Surface (e.g. – XY) \_\_\_\_\_

Thermal Resistance per Side (°C/W) If Known \_\_\_\_\_

Heatsink Temperature (°C) \_\_\_\_\_

Fan Speed (m/sec) \_\_\_\_\_

Air Temperature (°C) \_\_\_\_\_

Flow Direction (e.g. – X) \_\_\_\_\_

Single or Double Sided \_\_\_\_\_

Heatsink Surface (E.g. – XY) \_\_\_\_\_

Thermal Resistance per Side (°C/W) If Known \_\_\_\_\_

Heatsink Temperature (°C) \_\_\_\_\_

Fan Speed (m/sec) \_\_\_\_\_

Flow Direction (e.g. – X) \_\_\_\_\_

Single or Double Sided \_\_\_\_\_

Water Plate Surface (e.g. – XY) \_\_\_\_\_

Thermal Resistance per Side (°C/W) If Known \_\_\_\_\_

Water Temperature (°C) \_\_\_\_\_

### Insulation Requirements

HiPot Test Voltage \_\_\_\_\_

*Between coil and core - e.g.: Withstand test AC 3.6 kV, 60s*

Operation Voltage (V) \_\_\_\_\_

### Mounting

Surface (e.g.- XY) \_\_\_\_\_

Surface Type (e.g.- Insulated) \_\_\_\_\_

Method (e.g.- Screw(s), Paste) \_\_\_\_\_

### Other Requirements/Information (If Any)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_