POT CORE SERIES

Introduction

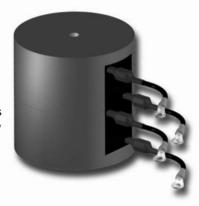
PREMO GROUP introduces a new high energy chokes standard series. Its high efficiency and compact format make them perfect for inverter applications.

POT CORE series is based on a combination of high performance pot cores and rectangular copper wire, the wound coil is completely enclosed by the iron powder core, improving EMC performance.

PO serie is available in a wide range of dimensions including the possibility to assembly in one or two cells, allowing to use one inductance per line.



- High efficiency renewable energies applications such as solar, wind and fuel-cells.
- Spot-welding equipments.
- Input and output chokes for UPS applications.



Features

- Current up to 44 Arms.
- High current density.
- High storage low losses designs, improved efficiency for renewable applications (>99%).
- Double cell format.
- Low cost assembly.
- EMC improved.
- Very good inductance stability Vs temperature.
- Soft saturation curve (Inductance Vs current).
- Operating temperature from -40°C to 85°C.
- Wide range of output terminals (racket, fast-on, direct leads...).
- Reduced size.

Product list

| Part Number | L load (mH) | Irms (Amps) | Power (VA) | Iripple (Apeak) | Ipeak (Amps) | Fundamental Frec. (Hz) | Ripple Frec. (kHz) | Rdc per winding $(m\Omega)$ | Total losses (W) | ∆T (°C) | Dim (mm) |
|-------------|----------------|----------------|---------------|--------------------|-----------------|------------------------------|--------------------------|-----------------------------|------------------------|------------|-------------|
| PO-0250-100 | 2x0,25 | 24 | 5520 | 2,28 | 34,8 | 50/60 | 15 | 11 | 27 | < 30 | 100x100 |
| PO-1000-100 | 1 | 24 | 5520 | 2,28 | 34,8 | 50/60 | 15 | 22 | 27 | < 30 | 100x100 |
| PO-0200-120 | 2x0,2 | 33 | 7590 | 3,27 | 49,94 | 50/60 | 10 | 11 | 39 | < 40 | 100x120 |
| PO-0800-120 | 0,8 | 33 | 7590 | 3,27 | 49,94 | 50/60 | 10 | 21 | 38 | < 40 | 100x120 |
| PO-0250-180 | 2x0,25 | 44 | 10120 | 4,36 | 66,58 | 50/60 | 10 | 14 | 90 | < 50 | 120x180 |
| PO-1000-180 | 1 | 44 | 10120 | 4,36 | 66,58 | 50/60 | 10 | 28 | 90 | < 50 | 120x180 |

Inductance measured at 10kHz, 100mV, T=25°C.

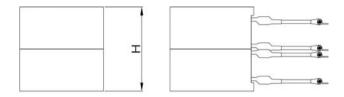
Inductance tolerance ±10%.

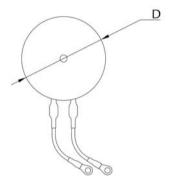
Based on natural cooling convection.



POT CORE SERIES

Dimensions





| | D max | H max |
|----------|----------|----------|
| PO-X-100 | 100 | 100 |
| PO-X-120 | 100 | 120 |
| PO-X-180 | 120 | 180 |

Characteristic curve Inductance Vs RMS Current

