



Three-phase Filter Reactor

| | |
|-----------------------------|--|
| Design | Three-phase, iron-core with air gaps, PolyGap(R) core design |
| Impregnation | Complete unit vacuum-overpressure impregnated with varnish acc. to temperature class H and temperature hardened in furnace |
| Harmonic load design | Voltages distortion based on UN : $u_1=106\%$ $u_3=0.5\%$ $u_5=5\%$ $u_7=5\%$ |

Technical Data

| | | |
|------------------------------------|-------------|-----------|
| No. of phases | | 3 |
| Rated voltage | Un/V | 600 |
| Rated frequency | fn/Hz | 60 |
| Reactive power | Nc/kVAr | 26.9 |
| Capacitor (star connection) | Cy/ μ F | 184.2 |
| Reactance factor | p/% | 7 |
| Resonance frequency | fr/Hz | 226.78 |
| Rated inductivity | Ln/mH | 3 x 2.674 |
| Negative tolerance | % | -2 |
| Positive tolerance | % | +3 |
| RMS current | Irms/A | 28.8 |
| Limit of linearity | Ilin/A | 48 |
| Losses of fundamental | Nv1/W | 100 |
| Total losses | Nvsum/W | 150 |
| Mass /kg | m/kg | 22 |

Current spectrum

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| n | f/Hz | I/A | U/UN /% | Voltage@reactor/V |
|---|------|-------|---------|-------------------|
| 1 | 60 | 27.42 | 106 | 27.6 |
| 3 | 180 | 0.98 | 0.5 | 2.9 |
| 5 | 300 | 8.02 | 5 | 40.4 |
| 7 | 420 | 3.47 | 5 | 24.4 |



Type number: 1047872

Customer part name: DTR-07-600-60-K025

Operating conditions

| | | | |
|---------------------------------------|----------|------------------------|------------------------------------|
| Protection class | | IP00, Indoor operation | |
| Operation mode | | Continuous mode | |
| Duty cycle | % | 100 | |
| Maximum levitation | masl | 1,000 | |
| Type of cooling | | AN | natural convection |
| Isolation class | | T50/H | |
| Minimum ambient temperature | Tamin/°C | 5 | no condensing, no ice |
| Maximum ambient temperature | Tamax/°C | 50 | |
| Allowed temperature rise | dT/K | 115 | utilized acc. to isolation class H |
| Temperature sensor | | Yes | |
| Temperature sensor middle coil | | T10/180 NC (H) | |

Standards

| | | | |
|--------------------------------|----------------------------|---|--|
| IEC standards | IEC/EN60076-6 VDE0532-76-6 | | |
| UL approval | UL file E173113 class H | | |
| Seperate source voltage | UAC/kV (1 min) | 3 | |

Mechanical characteristics

| | | | |
|-------------------------------|-------------------------------------|--|--|
| Winding material Cu/Al | Al | | |
| Terminal 1 | Cu bar 20 x 3 mm ² / 9mm | | |
| Terminal 2 | Cu bar 20 x 3 mm ² / 9mm | | |

Approximate dimensions

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zeichnungen/pre/CU1_oPE_mT_1s_verlaengert.JPG

| Description | Value |
|-------------|-------|
| A/mm | 260 |
| B/mm | 185 |
| C/mm | 143 |
| D/mm | 200 |
| E/mm | 150 |
| F/mm | 88 |
| G/mm | 102 |
| H/mm | 132 |
| d1/mm | 10 |
| d2/mm | 11 |
| d3/mm | 11 |

