



**Three-phase Filter Reactor**

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

**Technical Data**

<b>No. of phases</b>		3
<b>Rated voltage</b>	Un/V	480
<b>Rated frequency</b>	fn/Hz	60
<b>Reactive power</b>	Nc/kVAr	53.8
<b>Capacitor (star connection)</b>	Cy/ $\mu$ F	575.6
<b>Reactance factor</b>	p/%	7
<b>Resonance frequency</b>	fr/Hz	226.78
<b>Rated inductivity</b>	Ln/mH	3 x 0.856
<b>Negative tolerance</b>	%	-2
<b>Positive tolerance</b>	%	+3
<b>RMS current</b>	Irms/A	72
<b>Limit of linearity</b>	Ilin/A	120
<b>Losses of fundamental</b>	Nv1/W	160
<b>Total losses</b>	Nvsum/W	220
<b>Mass /kg</b>	m/kg	28

**Current spectrum**

90892

n	f/Hz	I/A	U/UN /%	Voltage@reactor/V
1	60	68.55	106	22.1
3	180	2.44	0.5	2.4
5	300	20.05	5	32.3
7	420	8.66	5	19.6



Type number: 1048217

Customer part name: DTR-07-480-60-K050

## Operating conditions

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

## Standards

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

## Mechanical characteristics

<b>Winding material Cu/Al</b>	Al		
<b>Terminal 1</b>	Cu bar 20 x 3 mm <sup>2</sup> / 9mm		
<b>Terminal 2</b>	Cu bar 20 x 3 mm <sup>2</sup> / 9mm		

## Approximate dimensions

90888

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Description	Value
A/mm	260
B/mm	240
C/mm	147
D/mm	200
E/mm	150
F/mm	88
G/mm	102
H/mm	132
d1/mm	10
d2/mm	11
d3/mm	11

