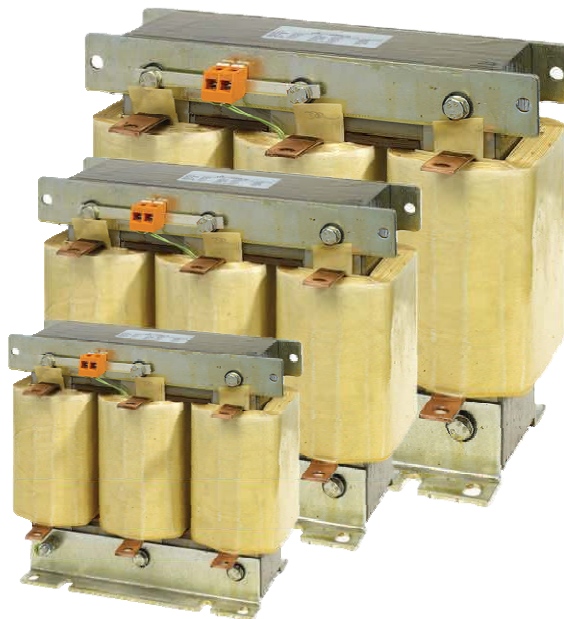


Capacitor Detuning Reactors

- UL Listed (USA/Canada) File E173113
- Optimized 7% detuning
- CUL Listed up to 690V
- Unique PolyGap® core construction
- Suitable for use in ambient temperatures up to 50°C
- Class H, 115°C rise
- N.C. over-temperature switch (center coil)
- Compact design



Protect power factor capacitors from harmful harmonics.

Type DTR capacitor detuning reactors, from Hans von Mangoldt, protect power factor capacitors from harmful effects of harmonics and can suppress switching transients in power factor capacitors.

DTR reactors increase the capacitor system impedance at typical harmonic frequencies, which reduces harmonic currents that flow into the capacitor and helps to prevent harmonic resonance.

Mangoldt Detuning Reactors offer the optimum 7% impedance and provide valuable benefits for detuned power factor capacitor systems:

- Reduce the flow of harmonic currents into the capacitor
- Prevent harmonic resonance
- Slightly reduce system harmonic current distortion
- Extend PF capacitor life

Capacitor Detuning Reactor Selection

Mangoldt Detuning Reactors are suitable for use with capacitors that are connected in either wye or delta configurations. Select the appropriate reactor based on your capacitor rating which can be found in the left side of the charts. These charts cover the most popular ratings. Please contact us for any other ratings that are required.

480V Capacitor Ratings				Reactor Ratings			
kVAR	uF (wye)	uF (3x delta)	net kVAR	Catalog No.	HvM p/n	mH	I _{max} (Arms)
16.7	192.27	64.09	17.96	DTR-07-480-60-K016.7	1048213	2.561	24.0
20.0	230.26	76.75	21.50	DTR-07-480-60-K020	1040679	2.139	28.8
25.0	287.82	95.94	26.88	DTR-07-480-60-K025	1039690	1.711	36.0
30.0	345.39	115.13	32.26	DTR-07-480-60-K030	1040681	1.426	43.2
40.0	460.52	153.51	43.01	DTR-07-480-60-K040	1048216	1.070	57.6
50.0	575.65	191.88	53.76	DTR-07-480-60-K050	1048217	0.856	72.0
60.0	690.78	230.26	64.51	DTR-07-480-60-K060	1048218	0.713	86.4
75.0	863.47	287.82	80.64	DTR-07-480-60-K075	1059859	0.570	108.0
100.0	1151.29	383.76	107.52	DTR-07-480-60-K100	1048219	0.428	144.0
120.0	1381.55	460.52	129.02	DTR-07-480-60-K120	1048221	0.357	172.8
150.0	1726.94	575.65	161.28	DTR-07-480-60-K150	1050192	0.285	216.0

600V Capacitor Ratings				Reactor Ratings			
kVAR	uF (wye)	uF (3x delta)	net kVAR	Catalog No.	HvM p/n	mH	I _{max} (Arms)
16.7	123.05	41.02	17.96	DTR-07-600-60-K016.7	1047346	4.009	19.2
20.0	147.37	49.12	21.50	DTR-07-600-60-K020	1047329	3.342	23.0
25.0	184.21	61.40	26.88	DTR-07-600-60-K025	1047872	2.674	28.8
30.0	221.05	73.68	32.26	DTR-07-600-60-K030	1047873	2.228	34.6
40.0	294.73	98.24	43.01	DTR-07-600-60-K040	1047874	1.671	46.1
50.0	368.41	122.80	53.76	DTR-07-600-60-K050	1047348	1.337	57.6
60.0	442.10	147.37	64.51	DTR-07-600-60-K060	1047349	1.114	69.1
75.0	552.62	184.21	80.64	DTR-07-600-60-K075	1052932	0.891	86.4
100.0	736.83	245.61	107.52	DTR-07-600-60-K100	1047350	0.668	115.2
120.0	884.19	294.73	129.02	DTR-07-600-60-K120	1047875	0.557	138.2
150.0	1105.24	368.41	161.28	DTR-07-600-60-K150	1050193	0.446	172.8

Mangoldt Detuning Reactors are designed for use with power factor capacitors that will be connected to power systems with harmonic voltage that does not exceed the values listed in the chart below. Please contact us for any other requirements.

Harmonic order	1	3	5	7
Frequency	60Hz	180Hz	300Hz	420Hz
% of fundamental voltage	106%	0.50%	5%	5%



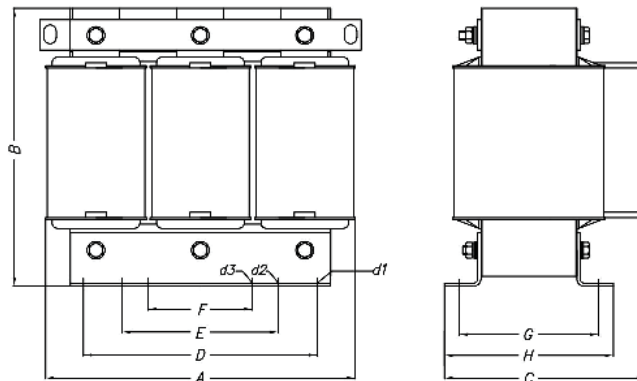
Capacitor Detuning Reactor Technical Data

480V Reactor Technical Data

Catalog No.	mH	I _{max} (Arms)	Watts	Width (A)	Height (B)	Depth (C)	Weight (kg)
DTR-07-480-60-K016.7	2.561	24.0	110	230	160	131	15
DTR-07-480-60-K020	2.139	28.8	110	230	205	131	18
DTR-07-480-60-K025	1.711	36.0	150	230	205	140	18
DTR-07-480-60-K030	1.426	43.2	180	240	210	135	19
DTR-07-480-60-K040	1.070	57.6	220	260	240	142	26
DTR-07-480-60-K050	0.856	72.0	220	260	240	147	28
DTR-07-480-60-K060	0.713	86.4	250	300	235	159	34
DTR-07-480-60-K075	0.570	108.0	280	300	235	176	40
DTR-07-480-60-K100	0.428	144.0	330	300	265	191	50
DTR-07-480-60-K120	0.357	172.8	430	300	325	172	48
DTR-07-480-60-K150	0.285	216.0	480	300	325	195	57

600 V Reactor Technical Data

Catalog No.	mH	I _{max} (Arms)	Watts	Width (A)	Height (B)	Depth (C)	Weight (kg)
DTR-07-600-60-K016.7	4.009	19.2	110	240	180	138	16
DTR-07-600-60-K020	3.342	23.0	130	240	180	138	16
DTR-07-600-60-K025	2.674	28.8	150	260	185	143	22
DTR-07-600-60-K030	2.228	34.6	170	260	185	145	22
DTR-07-600-60-K040	1.671	46.1	200	240	210	152	24
DTR-07-600-60-K050	1.337	57.6	230	260	240	147	28
DTR-07-600-60-K060	1.114	69.1	250	300	235	161	34
DTR-07-600-60-K075	0.891	86.4	280	300	235	177	41
DTR-07-600-60-K100	0.668	115.2	370	300	295	175	49
DTR-07-600-60-K120	0.557	138.2	400	300	325	185	54
DTR-07-600-60-K150	0.446	172.8	500	300	325	200	61





Reactors Produced by Hans von Mangoldt:

3-phase, 1-phase, DC

Low and Medium Voltage (up to 35kV)

Iron core & Air core Reactors

Harmonic Filter Reactors

PWM Filtering Reactors

Current Limiting Reactors

Inrush Reactors

Detuning Reactors

Liquid Cooled Reactors

Reactors for Renewable Energy Inverters



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