

Low-Voltage Detuned Reactors

XDTH Series



Introduction

Detuned reactors, connected in series, are necessary for circuits with high harmonic currents. These “series reactors,” usually part of a power factor correction (PFC) capacitor bank, help to reduce harmonics in currents, increase power efficiency, and prevent disasters caused by resonance.

Features

- Winding of the coils with shaped wire (or round wire) of high conductivity
- IP degree of protection: IP00
- Type of cooling: Natural
- Indoor installation
- Electrical insulation class: Class H
- Equipped with thermal sensors

Specifications

- Standards: IEC 60076-6 or CNS Standards
- Rated voltage: 220~600 Vac
- Detuning factor p: 7% (50 Hz) or 6% (60 Hz)
- High linearity: ≥ 1.8 times the rated current
- Inductance tolerance: $\pm 3\%$ (IEC), or $-5\% \sim +10\%$ (CNS)
- Ambient air temperature for operation: $-20^{\circ}\text{C} \sim +40^{\circ}\text{C}$
- Custom designs upon request



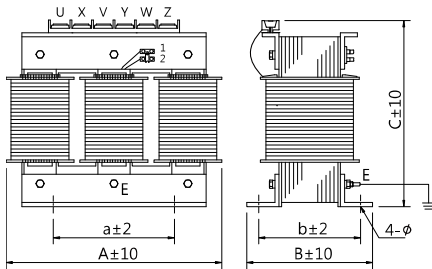
CHALLENGE INDUSTRIAL CO., LTD.

www.cic-ltd.com.tw

Dimensions and Example Specifications

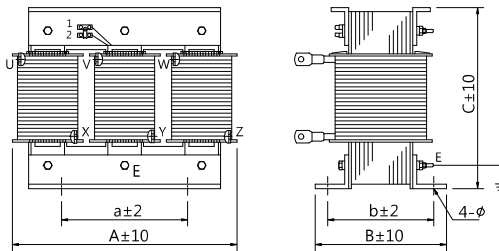
Drawing 1

(Unit: mm)

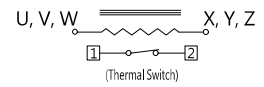


Drawing 2

(Unit: mm)



Wiring Diagram



Rated Voltage (V)	Capacitor Rating (kVAR)	Approx. Reactor Power ¹ (kVA)	Dimensions ²						Approx. Weight (kg)	Drawing
			A	B	C	a	b	Ø		
260~280 or 440~600	5	0.3	180	80	185	90	60	6	6	1
	10	0.6	180	95	185	90	75	6	9	
	15	0.9	180	105	185	90	85	6	11	
	20	1.2	180	115	185	90	95	6	12	
260~280	30	1.8	230	120	185	160	95	10	15	2
	40	2.4	275	115	220	150	90	10	19	
	50	3.0	275	120	220	150	95	10	21	
440~600	30	1.8	230	120	225	160	95	10	15	1
	40	2.4	275	115	270	150	90	10	18	
	50	3.0	275	120	220	150	95	10	21	2
	60	3.6	275	130	220	150	105	10	24	
	70	4.2	275	140	220	150	115	10	28	
	75	4.5	275	150	220	150	125	10	30	

¹ The manufacturer will calculate the exact inductance of the reactor needed according to the actual voltage and capacitor capacitance of the capacitor bank.

² Dimensions provided are for reference only.