

CDE PCD Series with Dual-End Protection System for AC Filtering



Safely opens from busbar mount or standard flexible connections



ENERGIZING IDEAS

CORNELL
DUBILIER



PCD Series Dual-End Protection System

Designed for AC input or output filtering of inverter systems...an all-new capacitor concept that provides dual open-circuit protection with two mounting options.

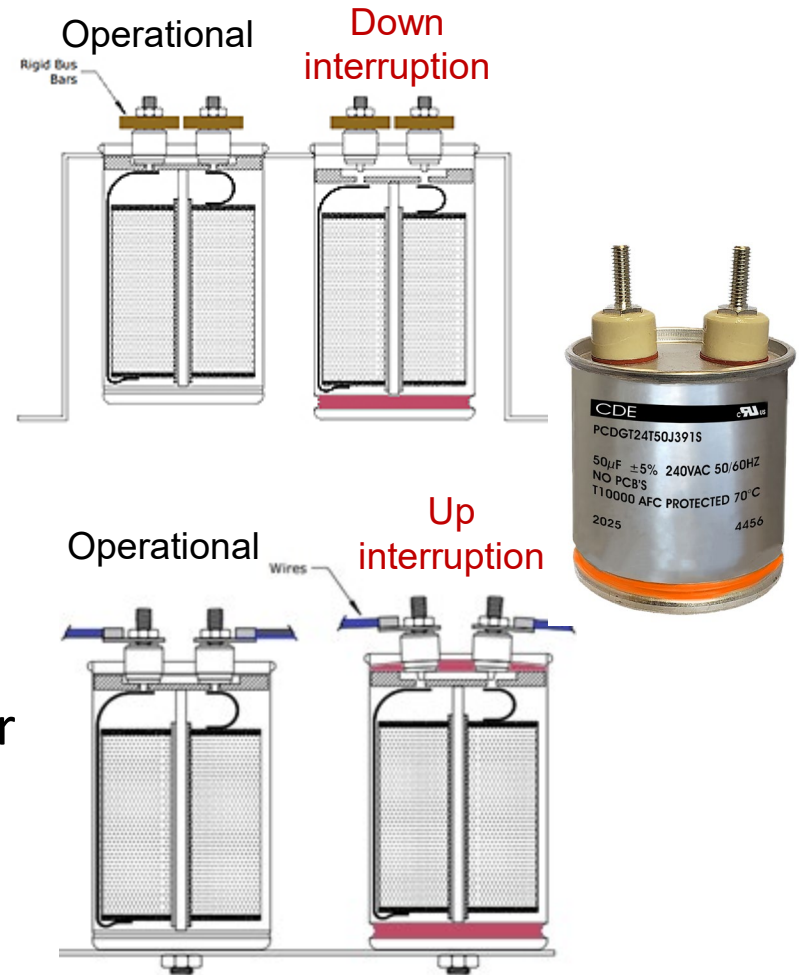
- Patented dual-protection system has a mechanical pressure interrupter system, designed to ensure a safe open-circuit mode in the event of overload or end-of-life.
- High capacitance values with high ripple current ratings
- Self-healing for added reliability



PCD Series Dual-Protection Polypropylene Film Capacitors

Dual protection raises the bar for mounting flexibility.

- Featuring a patented dual-interrupting system that opens:
 - upward with flexible cables
 - downward with busbar
- Connects to solid busbar or flexible cables
- Upgrade for European type AC power film capacitors that typically use a downward interruption mechanism.





PCD Series Key Performance Parameters

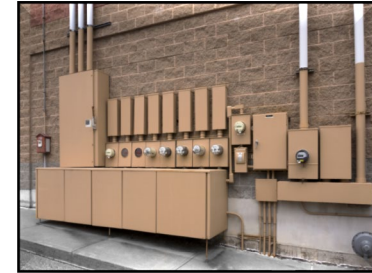
- Optimized for AC harmonic filtering on the input and output of inverter circuits
- Capacitance ranges from 20 to 125 μ F at 240-600 Vac, 50/60Hz
- High rms current ratings for handling higher-ordered harmonics
- Meets UL810 10,000 AFC and RoHS
- Suitable for high-frequency applications
- Custom designs available



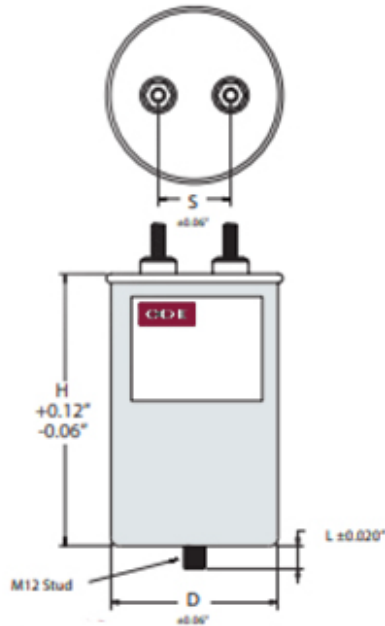
High Performance in a Variety of Power Electronics Applications

General applications include:

- Uninterruptable power supplies (UPS)
- AC tuned filters (harmonic reduction)
- AC input filtering
- Line conditioning
- Noise suppression
- Variable speed drives
- Wind turbine motoring
- Tested to 85 °C / 85%RH for 1000h
at $V_r \times 1.25$



PCD Series Case Sizes and Lead Configurations



Max torque 88.5 in-lbs.

Case Diameter (in)	S Dimension (in)	L Dimension (in)
2.50	1.250	0.487
3.00	1.375	0.630
3.50	1.375	0.630

Construction Details	
Case Material	Extruded aluminum with steel or aluminum cover
Encapsulation	Soft gel (Oil optional)

Part Numbering System

PCD	G	T	4	A	150	J	569	S
Series	Type	Base Size	Voltage (Vrms)	Case Material	Capacitance	Tolerance (%)	Case Height (in)	Terminals
PCD	G = Gel Filled O = Oil Filled	T = 2 1/2" Round V = 3" Round X = 3.5" Round Y = 4" Round Z = 4.5" Round	24 = 240 48 = 480 60 = 600	A = Aluminum case and cover T = Aluminum case w/steel cover	Capacitance value	J = ±5%	Expressed as 3 digit number rounded and displayed without decimal point	S = Studs

CDE PCD Series

Specifications Summary

Capacitance Range	20 μ F to 125 μ F
Capacitance Tolerance	\pm 5% Standard, \pm 10%, \pm 6 and \pm 3% available
Rated Voltage	240 Vac, 480 Vac, 600 Vac
Operating Temperature Range	-40 $^{\circ}$ C to +70 $^{\circ}$ C
Maximum Permissible Voltage (Vmax)	110% of rated rms voltage 120% of rated peak voltage ($1.2 \times \sqrt{2} \times V_{rms}$)
Maximum Permissible Current (Imax)	135% of nominal rms current based on the combined effects of harmonics, over voltages capacitances and tolerances
Terminations	M6x1 Threaded tinplated brass terminals standard, other sizes available
Maximum Rated Current (Irms)	85A (Limited by the terminals)
Service Life Objective	60,000 h w/94% survival rate
FIT (Failure In Time)	$\leq 300 \times 10^9$ component h
Maximum Short Circuit Current (available fault current)	10 kA (according to UL 810)
Notes	Additional ratings, size and terminals are available upon request.
RoHS Compliant	

CDE PCD Series 85/85 THB-Rated Capacitor Summary

- Mounting via either busbar or flexible connections
- Tested to 85 °C / 85%RH for 1000h at $V_r \times 1.25$
- 60,000+ hours load life with rated voltage applied
- Dry gel filled (oil filled available)
- Excellent replacement for European style AC capacitors
- UL 810 10,000 AFC
- Self-Healing for reliability
- Ideal for inverter, UPS, and VFD filtering





**CDE PCD Series 85/85
AC Input/Output Filter Capacitors
with Dual-End Protection are
Available from:**

