

# CD3200 thyristor unit



## General Description

- To drive single phase transformer, resistive and inductive loads up to 700A
- Phase phase firing (PA) with SoftStart
- Configurable and isolated analog input
- Adjustable current limit
- Selectable feedback mode: V, I, V<sup>2</sup>, I<sup>2</sup> and VxI
- Profiling of current limit by analog input
- Heater Break option
- External fuseholder and fuse up to 110A, internal fuse over 110A
- Thyristor in inverse parallel
- Comply with EMC and CE mark

## Technical specification

Operating temperature	0÷45°C up to 110A. For higher temperature seederating curve
Voltage power supply	24V minimum, 440V max and 500V on request
Input signal	0÷10V, SSR Logic value > 10V < 20
Firing mode	Phase Angle plus SoftStart (S+PA) with analog input and SSR
Auxiliary voltage supply	240V or 440V ± 15%; 10VA power consumption
Fan voltage supply	240V ± 15% from 110A to 700A
Heater break alarm	Minimum current 3A. Discrimination better than 20%. HB diagnostic active at 100% of load current
Current Limit	Adjustable
Soft Start	Adjustable by pot. or by serial comm.
Current monitoring	Signal available on RS485 comm.
Current limit monitoring	Signal available on RS485 comm.
Feedback monitoring	Signal available on RS485 comm.
Mounting	Bulkhead

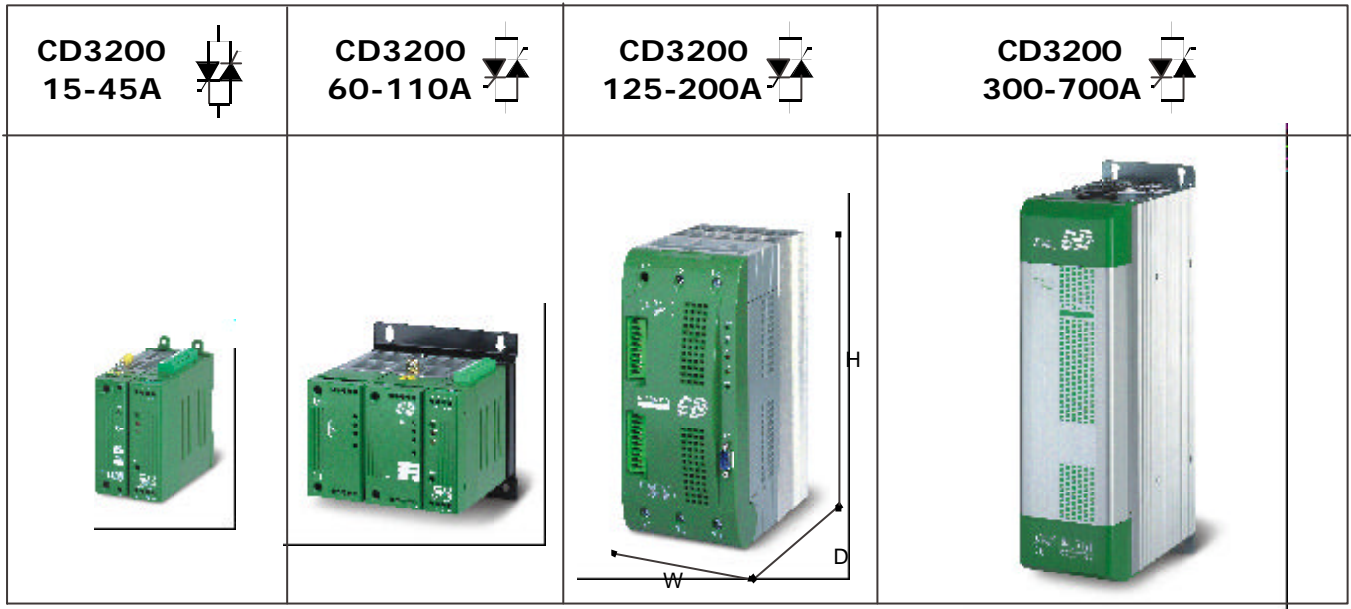
## Ordering code

Model	Current (A)	Supply Voltage (V)	Aux Voltage (V)	Feed back	Input	Firing mode	Options
CD3200	5	240	As supply volt.	V	SSR	PA (Phase Angle)	HB (Heater Break Alarm)
	25	280	up to 400V.	I	0÷10V	S+PA (Soft Start+Phase)	EF (External Fuse+Fuse Holder)
	35	380	Provide an ext. transformer for	V <sup>2</sup>	4÷20mA	Anlge	NF (NO FUSE up to 100A)
	45	415	500V	I <sup>2</sup>			IF (Internal Fuses are standard over 110 A)
	60	440		VxI (option)			VxI feedback (constant power)
	90	500					
	10						
	125						
	150						
	200						
	300						
	400						
	500						
	600						
	700						

### CODE

CD3200 -45A - 380V - 380V - V -4 ÷ 20mA- PA - HB





## Dimensions

	W	H	D		W	H	D		W	H	D		W	H	D
15A	63	120	120	60A	136	145	140	150A	116	316	187	500A	137	520	270
25A	63	120	120	90A	136	145	140	200A	116	316	187	600A	137	520	270
35A	85	120	120	110A	136	165	140	300A	137	520	270	700A	137	520	270
45A	85	120	120	125A	116	316	187	400A	137	520	270				

## Fuses and Fuseholder

External Fuses + Fuseholder up to 110A; Internal Fuses from 125 to 700A.

## Input features

Input signal	Maximum current drain	Input impedance	ON condition	Off condition
SSR	5mA constant current drain	≥4V-max 30V	≥4V-max 30V	≤1V
0÷10V		8200Ω		
4÷20mA		100Ω		
10K Pot.		8200Ω		
<b>Auxiliary Power Supply</b>				
240-400Vac				

## Output features

Current	Voltage range (V)	Ripetitive peak reverse voltage		Latching current (mAeff)	Max peak one cycle (10msec.) (A)	Leakage current (mAeff)	I2T value for fusing tp=10msec.	Frequency range (Hz)	Power loss I=Inom (W)	Isolation Voltage Vac
		(440V)	(500V)							
15A	24 ÷ 440 V	1200	NA	150	230	15	61C	47 ÷ 70	18	2500
25A	24 ÷ 440 V	1200	NA	150	230	15	610	47 ÷ 70	30	2500
35A	24 ÷ 500 V	1200	160C	250	400	15	80C	47 ÷ 70	42	2500
45A	24 ÷ 500 V	1200	1600	250	600	15	1800	47 ÷ 70	54	2500
60A	24 ÷ 500 V	1200	160C	450	1500	15	883C	47 ÷ 70	72	2500
90A	24 ÷ 500 V	1200	1600	450	1700	15	11300	47 ÷ 70	108	2500
110A	24 ÷ 500 V	1200	160C	450	1500	15	11300	47 ÷ 70	132	2500
125A	24 ÷ 500 V	1200	1600	450	1540	15	11300	47 ÷ 70	146	2500
150A	24 ÷ 500 V	1200	160C	450	2000	15	19100	47 ÷ 70	162	2500
200A	24 ÷ 500 V	1200	1600	300	4800	15	108000	47 ÷ 70	204	2500
300A	24 ÷ 500 V	1200	160C	300	5250	15	128000	47 ÷ 70	320	2500
400A	24 ÷ 500 V	1200	160C	200	7800	15	300000	47 ÷ 70	397	2500
500A	24 ÷ 500 V	1200	160C	200	8000	15	1027000	47 ÷ 70	530	2500
600A	24 ÷ 500 V	1200	160C	1000	17800	15	1027000	47 ÷ 70	589	2500
700A	24 ÷ 500 V	1200	160C	1000	17800	15	1027000	47 ÷ 70	712	2500

Note: for more deep information about derating curve, fuseholder dimensions and wiring see our website: [www.cdautomation.com](http://www.cdautomation.com)