



**TPS**  
Thermal Product Solutions

**Tenney**

C-EVO Environmental Cycling Test Chamber

### C-EVO

Since 1932 Tenney has pioneered the design and manufacturing of environmental testing equipment.

Designed for value, reliability and performance, C-EVO is a world class environmental cycling test chamber loaded with standard features and advanced technological upgrades:

- Largest temperature and humidity range in the industry
- Smallest equipment footprint in the industry
- Superior heat capacity (kW), cooling capacity (HP/BTU) and air flow capacity (CFM) deliver the best temperature change rates and uniformity in the industry
- Redundant user and equipment safety features are standard

#### ► Features

- VersaTouch™ controller
- Ethernet port
- USB port
- Heated viewing glass window
- Chamber light
- Two 3" cable ports
- Solid-state humidity sensor
- Platinum RTD temperature sensor
- Heavy-duty leveling casters
- Nichrome wire air heater
- Solid-state pressure switches
- Thermal expansion valves
- FM approved safety OTP
- Backup safety thermal cutoff
- Main electrical disconnect LOTO
- Chamber vent port
- One shelf standard
- UL 508A compliant



Overall dimensions in inches/centimeters

Model	C10S	C10C	C10RS	C10RC	C20S	C20C	C20RS	C20RC	C30S	C30C	C30RS	C30RC
Cubic Feet	10				20				30			
Liters	283				566				850			
Work Space (W x D x H)	24" x 26" x 28" / 61cm x 66cm x 71cm				30" x 32" x 36" / 76cm x 81cm x 91cm				36" x 40" x 36" / 91cm x 102cm x 91cm			
Exterior (nominal) (W x D x H)	32" x 58" x 68" / 81cm x 147cm x 173cm				38" x 64" x 76" / 97cm x 163cm x 193cm				44" x 72" x 76" / 111cm x 183cm x 193cm			
Unit Weight (LBS)	1000	1154	1000	1154	1100	1254	1100	1254	1250	1350	1250	1350
Temperature Range	-35°C	-73°C	-35°C	-73°C	-35°C	-73°C	-35°C	-73°C	-35°C	-73°C	-35°C	-73°C
	200°C	200°C	200°C	200°C	200°C	200°C	200°C	200°C	200°C	200°C	200°C	200°C
Humidity Range *	-	-	10% - 95%RH	10% - 95%RH	-	-	10% - 95%RH	10% - 95%RH	-	-	10% - 95%RH	10% - 95%RH
Cooling Rate (empty chamber) Min (C/Min)												
180C to -65C		72 (3.4)		72 (3.4)		111 (2.2)		111 (2.2)		136 (1.8)		136 (1.8)
125C to -40C		37 (4.5)		37 (4.5)		53 (3.1)		53 (3.1)		63 (2.6)		63 (2.6)
85C to -20C	22 (4.8)		22 (4.8)		33 (3.2)		33 (3.2)		40 (2.6)		40 (2.6)	
85C to -40C		30 (4.1)		30 (4.1)		45 (2.8)		45 (2.8)		54 (2.3)		54 (2.3)
ambient to -40C		15 (4.3)		15 (4.3)		23 (2.8)		23 (2.8)		28 (2.3)		28 (2.3)
ambient to -68C		40 (2.3)		40 (2.3)		66 (1.4)		66 (1.4)		85 (1.1)		85 (1.1)
Heating Rate (empty chamber) Min (C/Min)												
-65C to 180C		42 (5.9)		42 (5.9)		64 (3.8)		64 (3.8)		84 (2.9)		84 (2.9)
-40C to 125C		28 (6)		28 (6)		42 (3.9)		42 (3.9)		50 (3.3)		50 (3.3)
-20C to 85C	18 (6)		18 (6)		26 (4)		26 (4)		32 (3.3)		32 (3.3)	
-40C to 85C		21 (6)		21 (6)		31 (4)		31 (4)		38 (3.3)		38 (3.3)
-34C to ambient	10 (6.2)	10 (6.2)	10 (6.2)	10 (6.2)	14 (4.2)	14 (4.2)	14 (4.2)	14 (4.2)	17 (3.5)	17 (3.5)	17 (3.5)	17 (3.5)
-68C to ambient		15 (6.2)		15 (6.2)		22 (4.2)		22 (4.2)		27 (3.5)		27 (3.5)
Live Load Watts @ -18C	1200	1700	1200	1700	1160	1650	1160	1650	1120	1610	1120	1610
Live Load Watts @ -40C	-	1400	-	1400	-	1330	-	1330	-	1260	-	1260
Live Load Watts @ -54C	-	1100	-	1100	-	1010	-	1010	-	940	-	940
Temperature Control	±0.3°C				±0.3°C				±0.3°C			
Temperature Uniformity	±2°C @ 65°C				±2°C @ 65°C				±2°C @ 65°C			
Humidity Control	-	-	±2% RH	±2% RH	-	-	±2% RH	±2% RH	-	-	±2% RH	±2% RH
Air Flow Rate	500 CFM				500 CFM				500 CFM			
Heat Capacity	3kW				3kW				3kW			
Humidifier Capacity	-	-	2kW	2kW	-	-	2kW	2kW	-	-	2kW	2kW
Refrigeration	2 HP	(2) 2 HP	2 HP	(2) 2 HP	2 HP	(2) 2 HP	2 HP	(2) 2 HP	2 HP	(2) 2 HP	2 HP	(2) 2 HP
Condenser	Air Cooled - Std Water Cooled - Option				Air Cooled - Std Water Cooled - Option				Air Cooled - Std Water Cooled - Option			
Power	208V - 230V 1P 60Hz				208V - 230V 1P 60Hz				208V - 230V 1P 60Hz			
Amp - Fuse	40	60	50	60	40	60	50	60	40	60	50	60
Amp - Under Load	32	45	40	45	32	45	40	45	32	45	40	45
Power	460V 1P 60Hz				460V 1P 60Hz				460V 1P 60Hz			
Amp - Fuse	20	30	30	30	20	30	30	30	20	30	30	30
Amp - Under Load	16	23	20	23	16	23	20	23	16	23	20	23

Performance estimates based on 230v 1P 60Hz

\*Humidity Range: based on temperature range 20°C to 85°C limited by 3°C dewpoint

All specifications are subject to change without notice.



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