



C-EVO Temperature & Humidity Test Chambers

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:

- 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

- Smart 1.1™ 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 (cm)

C-EVO Temperature / Humidity Test Chamber Specifications												
Model	C10S	C10C	C10RS	C10RC	C20S	C20C	C20RS	C20RC	C30S	C30C	C30RS	C30RC
Cubic Feet	10				20				30			
Liters	283				566				850			
Work Space (WxDxH)	24" x 26" x 28" (61 x 66 x 71)				30" x 32" x 36" (76 x 81 x 91)				36" x 40" x 36" (91 x 102 x 91)			
Exterior(nominal) (WxDxH)	34" x 59" x 75" (86 x 150 x 191)				40" x 65" x 78" (102 x 165 x 198)				46" x 73" x 78" (117 x 185 x 198)			
Unit Weight (LBS)	1300	1400	1325	1500	1550	1600	1600	1750	1750	1850	1950	2050
Temperature Range	-35°C	-68°C	-35°C	-68°C	-35°C	-68°C	-35°C	-68°C	-35°C	-68°C	-35°C	-68°C
	180°C	180°C	180°C	180°C	180°C	180°C	180°C	180°C	180°C	180°C	180°C	180°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) (C/min)												
180 to -65°C		72(3.4)		72(3.4)		111(2.2)		111(2.2)		136(1.8)		136(1.8)
125 to -40°C		37(4.5)		37(4.5)		53(3.1)		53(3.1)		63(2.6)		63(2.6)
85 to -20°C	22(4.8)		22(4.8)		33(3.2)		33(3.2)		40(2.6)		40(2.6)	
85 to -40°C		30(4.1)		30(4.1)		45(2.8)		45(2.8)		54(2.3)		54(2.3)
ambient to -40°C		15(4.3)		15(4.3)		23(2.8)		23(2.8)		28(2.3)		28(2.3)
ambient to -68°C		40(2.3)		40(2.3)		66(1.4)		66(1.4)		85(1.1)		85(1.1)
Heating Rate (empty chamber) (C/min)												
-65°C to 180°C		42(5.9)		42(5.9)		64(3.8)		64(3.8)		84(2.9)		84(2.9)
-40°C to 125°C		28(6.0)		28(6.0)		42(3.9)		42(3.9)		50(3.3)		50(3.3)
-20°C to 85°C	18(6.0)		18(6.0)		26(4.0)		26(4.0)		32(3.3)		32(3.3)	
-40°C to 85°C		21(6.0)		21(6.0)		31(4.0)		31(4.0)		38(3.3)		38(3.3)
-34°C 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)
-68°C to ambient		15(6.2)		15(6.2)		22(4.2)		22(4.2)		25(3.5)		25(3.5)
Live Load Watts @ -18°C	1200	1700	1200	1160	1160	1650	1160	1650	1120	1610	1120	1610
Live Load Watts @ -40°C		1400		1400		1330		1330		1260		1260
Live Load Watts @ -54°C		1100		1100		1010		1010		940		940
Temperature Control	±0.3°C after stabilization				±0.3°C after stabilization				±0.3°C after stabilization			
Temperature Uniformity	±2°C @ 65°C				±2°C @ 65°C				±2°C @ 65°C			
Humidity Control	–	–	±3%RH	±3%RH	–	–	±3%RH	±3%RH	–	–	±3%RH	±3%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 - 203v1ph 60Hz				208V - 203v1ph 60Hz				208V - 203v1ph 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

Overall dimensions in inches (cm)

C-EVO Temperature / Humidity Test Chamber Specifications								
Model	C40S	C40C	C40RS	C40RC	C64S	C64C	C64RS	C64RC
Cubic Feet	40				64			
Liters	1132				1812			
Work Space (WxDxH)	40" x 44" x 40" (102 x 112 x 102)				48" x 48" x 48" (122 x 122 x 122)			
Exterior(nominal) (WxDxH)	50" x 77" x 82" (127 x 196 x 208)				58" x 81" x 90" (147 x 206 x 229)			
Unit Weight (LBS)	2550	2650	2750	2850	2750	2850	2550	3050
Temperature Range	-35°C	-68°C	-35°C	-68°C	-35°C	-68°C	-35°C	-68°C
	180°C	180°C	180°C	180°C	180°C	180°C	180°C	180°C
Humidity Range*	—	—	10%-95%RH	10%-95%RH	—	—	10%-95%RH	10%-95%RH
Cooling Rate (empty chamber) (C/min)								
180 to -65°C		160(1.5)		160(1.5)		211(1.2)		211(1.2)
125 to -40°C		76(2.2)		76(2.2)		96(1.7)		96(1.7)
85 to -20°C	54(1.9)		54(1.9)		80(1.3)		80(1.3)	
85 to -40°C		65(1.9)		65(1.9)		88(1.4)		88(1.4)
ambient to -40°C		35(1.9)		35(1.9)		45(1.4)		45(1.4)
ambient to -68°C		108(0.9)		108(0.9)		160(0.6)		160(0.6)
Heating Rate (empty chamber) (C/min)								
-65°C to 180°C		102(2.4)		102(2.4)		134(1.8)		134(1.8)
-40°C to 125°C		62(2.7)		62(2.7)		79(2.1)		79(2.1)
-20°C to 85°C	40(2.6)		40(2.6)		50(2.1)		50(2.1)	
-40°C to 85°C		46(2.7)		46(2.7)		58(2.2)		58(2.2)
-34°C to ambient	21(2.8)		21(2.8)		27(2.2)		27(2.2)	
-68°C to ambient		33(2.8)		33(2.8)		41(2.2)		42(2.2)
Live Load Watts @ -18°C	630	1260	630	1260	560	1210	560	1210
Live Load Watts @ -40°C		1150		1150		1060		1060
Live Load Watts @ -54°C		750		750		630		630
Temperature Control	±2°C after stabilization				±2°C after stabilization			
Temperature Uniformity	±0.3°C @ 65°C				±0.3°C @ 65°C			
Humidity Control	—	—	±3%RH	±3%RH	—	—	±3%RH	±3%RH
Air Flow Rate	500 CFM				500 CFM			
Heat Capacity	3KW				3KW			
Humidifier Capacity	—	—	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
Condenser	Air Cooled - Std Water Cooled - Option				Air Cooled - Std Water Cooled - Option			
Power	208V - 203v1ph 60Hz				208V - 203v1ph 60Hz			
Amp - Fuse	40	60	50	60	40	60	50	60
Amp - Under Load	32	45	40	45	32	45	40	45
Power	460V 1P 60Hz				460V 1P 60Hz			
Amp - Fuse	20	30	30	30	20	30	30	30
Amp - Under Load	16	23	20	23	16	23	20	23

*Optional extended range (-35°C-200°C or -73°C-200°C) available. Consult your Tenney Environmental Sales Representative.



Baker Furnace, Blue M, Gruenberg, Lindberg/MPH, Lunaire, Tenney, Wisconsin Oven

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Specifications and Product Information are subject to change without notice.

» Baker Furnace » Blue M » Gruenberg » Lindberg/MPH
» Lunaire » Tenney » Wisconsin Oven