

## Explosion Proof Chambers by Russells Lithium Ion Battery Testing

Russells Explosion Proof Test Chambers give the maximum durability and performance for your most demanding battery test requirements. Built in safety features will prevent the chamber from causing any sparking to protect your products and ensure operator safety.

Russells Explosion Proof Chambers can provide the following combination of controlled testing environments:

- Steady state temperature and temperature/humidity tests
- Cycling temperature/humidity tests
- Temperature ranges from -70C to +177C
- Humidity ranges from 10-95%RH

### Features:

- Intrinsic safety barriers
- Spark resistant chamber interior
- Pressure relief blow out port
- Product overtemp safeguard
- Nitrogen purge system
- Interior and exterior EP rated
- Temperature limited heaters
- Gas monitors
- Hepa filtration



**WD-1386-30-30-WC-EP**  
Class I Div.1 Group D Interior



**GD-32-3-3-AC-EP**  
Class I Div. II Group C&D Interior

Russells Explosion Proof Chambers are available in sizes from 8 cu./ft. (226L) to walk in sizes. Our EP Chambers can test any type and size of LI-Ion batteries. A Russells application engineer can assist you in selecting the chamber configuration and size that is most economical for your testing needs. Let Russells give you the competitive edge!



## technical products

---

### Explosion Proof Chambers by Russells

#### Standard Features:

- Brushed 304 series stainless steel liner, heliarc welded and dye checked.
- Capable of handling extreme temperature and humidity.
- Fiberglass insulation, .25k factor.
- Welded steel frame.
- Full opening chamber door with dual gaskets.
- Removable access panels to serviceable components.
- Durable blue enamel finishes (custom colors available).

#### Cooling:

- Low or zero ozone depletion refrigerants.
- Energy saving refrigeration bypass capacity control.
- Low stage desuperheater.
- Oil pressure switches.
- Compressor suction and discharge pressure switches.
- Water cooled condenser.
- Vapor tank and condenser ASME certified.
- Low stage oil separator.
- All piping joints silfos or silver soldered.
- Stainless steel compressor condensate pans.

#### Electrical:

- All wiring meets NEC standards.
- 120 volt control circuit transformer.
- Fully enclosed electrical panel.
- All circuits fused or circuit breaker protected.
- Full system function switches w/ system status pilot lights.
- Incandescent interior ep lighting.
- All wiring numbered or color coded.
- High Temperature limit safety.
- Master heating circuit contactor.
- Air circulator/heater interlock
- Balanced load on 3 phase power.

#### Optional Accessories:

- Through-wall access ports w/foam plugs.
- Viewing windows.
- Refrigeration gauges.
- Refrigeration sound deadening package.
- Remote refrigeration systems.
- LN2 boost cooling.
- Air cooled condenser.
- Humidity water demineralizer.
- Dry air purge system.
- Desiccant dehumidifier.
- Entry ramp
- Running timer meter.
- System message display.
- Electrical disconnect switch.
- Explosion proof electrical system.

#### Optional Instrumentation:

- **russellsOne** Touch screen microprocessor temperature/humidity programmer controller.
- Solid state humidity sensor on humidity models.
- Product safeguard redundant over/under temperature limit.
- Circular or electronic chart recorders.
- Computer communications, networking, data-logging software.
- Free standing remote instrument console.



## technical products

1883 Russell Court, Holland, MI 49423  
Phone: (616) 392-3161 / Fax: (616) 392-2438  
Web-Site: <http://www.russells-tech.com>  
E-Mail: [Info@russells-tech.com](mailto:Info@russells-tech.com)