



General-Purpose and Flammable Storage Laboratory Refrigerators and Freezers

- Designed for sample protection
- Wide range of capacities
- ATEX certified spark-free cabinets for flammable material storage

Thermo Scientific ES Series lab refrigerators and freezers

ES Series



Designed for routine sample protection where laboratory space is limited. Our new ES Series lab refrigerators, freezers, and combination refrigerator/freezer are the ideal choice when there is limited space in the laboratory.

All ES Series models deliver the sample protection, performance, security, and quality you have come to depend on from us:

- Integrated controller
- Digital display
- High and low temperature alarms
- Door ajar alarm
- Remote alarm contacts
- Standard door locks
- Access ports
- Low energy consumption
- CE marked
- Reversible doors
- Hydrocarbon refrigerants
- HCFC- and CFC-free insulation



Ask your sales representative about Thermo Scientific sample storage systems



NEW Thermo Scientific ES Series ATEX certified spark-free lab refrigerators and freezers

For the storage of potentially flammable materials

Our new ES Series ATEX certified spark-free flammable material storage (FMS) laboratory refrigerators and freezers* are ideal for storing ethyl ether, acetone, alcohol, benzene, butane, gasoline, hexane, lacquer solvent and naphtha along with other potentially flammable material in general laboratory locations. Household/commercial refrigerators

and freezers are not suitable for such material: They have components in their electrical and refrigeration systems that can trigger explosions of flammable air-vapor mixtures inside the unit.

All ES Series models deliver the sample protection, performance, security, and quality you have come to depend on from us:

- Integrated controller
- Digital display
- High and low temperature alarms
- Door ajar alarm
- Remote alarm contacts
- Standard door locks
- Access ports
- CE/ATEX marking
- Certified spark-free
- Reversible doors
- Hydrocarbon refrigerants
- HCFC- and CFC-free insulation

* Certified spark-free units are designed, evaluated and comply with the ATEX Directive 94/9/EC Annex VIII. These units have an intrinsically safe (IS) barrier installed in the temperature probe circuit with no other internal electrical components that could trigger an explosion or fire of flammable materials inside the unit. The internal wall construction has been reviewed and is not a source for electrostatic build up due to the materials used in construction. The units bear the following ATEX marking:

ES Series Certified Spark-Free



CE  II 3 G c ic IIB T6X



All of our ES Series models are fitted with standard door locks for enhanced sample security and peace-of-mind.



Our ES Series' integrated digital controller with temperature display, door ajar alarm, and high/low temperature alarms is easy-to-use and maintains the correct cabinet temperature.



ES Series Certified Spark-Free

Thermo Scientific ES Series models come standard with access ports making integration of secondary monitoring systems simple.



MODEL NO. 263C-AE, combination lab refrigerator and freezer. See pages 6-7 for specifications and ordering information.



MODEL NO. 151R-AE, 151 litre lab refrigerator. See pages 6-7 for specifications and ordering information.

Integrated digital controllers with temperature display

Standard access port

HC refrigerants (R600a)

Standard door lock

Ergonomic door handles

Reversible doors

Thermo Scientific ES Series lab refrigerators and freezers

ES Series

TSC models are shipped in a robust wooden crate, ideal for long-haul and multiple-stop shipping.



Specifications table and ordering information

ES Series Lab Refrigerators Operating Temperature Range: +1°C to +10°C (Set Point Adjustment Range +4°C to +6°C)**

| Model No. | Capacity (Litre)* | Voltage | Plug Type**** | Includes | Defrost Type |
|--------------|-----------------------|------------------------------------|------------------------------------|--------------------------|--------------|
| 151R-AEV-TS | 151 | 230V/50Hz | EU | 3 shelves, 1 basket | automatic |
| 151R-AEV-TSC | 151 | 230V/50Hz | EU | 3 shelves, 1 basket | automatic |
| 288R-AEV-TS | 288 | 230V/50Hz | EU | 5 shelves, 1 basket | automatic |
| 288R-AEV-TSC | 288 | 230V/50Hz | EU | 5 shelves, 1 basket | automatic |
| Model No. | Energy Consumption*** | Internal Dimensions W x D x H (mm) | External Dimensions W x D x H (mm) | Shipping Weight kg (lbs) | |
| 151R-AEV-TS | 0.6 kWh/day | 500 x 450 x 705 | 595 x 595 x 845 | 65 (143) | |
| 151R-AEV-TSC | 0.6 kWh/day | 500 x 450 x 705 | 595 x 595 x 845 | 65 (143) | |
| 288R-AEV-TS | 0.5 kWh/day | 480 x 445 x 1382 | 595 x 634 x 1570 | 90 (198) | |
| 288R-AEV-TSC | 0.5 kWh/day | 480 x 445 x 1382 | 595 x 634 x 1570 | 90 (198) | |

ES Series Lab Freezers Operating Temperature Range: -18°C to -25°C (Set Point Adjustment Range -19°C to -21°C)**

| Model No. | Capacity (Litre)* | Voltage | Plug Type**** | Includes | Defrost Type |
|--------------|-----------------------|------------------------------------|------------------------------------|--------------------------|--------------|
| 151F-AEV-TS | 151 | 230V/50Hz | EU | 3 baskets | manual |
| 151F-AEV-TSC | 151 | 230V/50Hz | EU | 3 baskets | manual |
| 232F-AEV-TS | 232 | 230V/50Hz | EU | 2 shelves, 3 baskets | manual |
| 232F-AEV-TSC | 232 | 230V/50Hz | EU | 2 shelves, 3 baskets | manual |
| Model No. | Energy Consumption*** | Internal Dimensions W x D x H (mm) | External Dimensions W x D x H (mm) | Shipping Weight kg (lbs) | |
| 151F-AEV-TS | 1.6 kWh/day | 500 x 450 x 705 | 595 x 595 x 845 | 65 (143) | |
| 151F-AEV-TSC | 1.6 kWh/day | 500 x 450 x 705 | 595 x 595 x 845 | 65 (143) | |
| 232F-AEV-TS | 1.0 kWh/day | 437 x 430 x 1300 | 595 x 634 x 1570 | 85 (187) | |
| 232F-AEV-TSC | 1.0 kWh/day | 437 x 430 x 1300 | 595 x 634 x 1570 | 85 (187) | |

ES Series Combination Lab Refrigerator/Freezer (Set Point Adjustment Range: Ref +4°C to +6°C; Frz -19°C to -21°C)

| Model No. | Capacity (Litre)* | Voltage | Plug Type**** | Includes | Defrost Type |
|--------------|-----------------------|---|------------------------------------|---|-------------------------------|
| 263C-AEV-TS | 159 ref / 104 frz | 230V/50Hz | EU | 3 shelves, 2 half baskets /1 shelf, 2 baskets (frz) | automatic (ref), manual (frz) |
| 263C-AEV-TSC | 159 ref / 104 frz | 230V/50Hz | EU | 3 shelves, 2 half baskets /1 shelf, 2 baskets (frz) | automatic (ref), manual (frz) |
| Model No. | Energy Consumption*** | Internal Dimensions W x D x H (mm) | External Dimensions W x D x H (mm) | Shipping Weight kg (lbs) | |
| 263C-AEV-TS | 0.9 kWh/day | 457 x 450 x 725 ref / 408 x 415 x 670 frz | 540 x 600 x 1680 | 95 (209) | |
| 263C-AEV-TSC | 0.9 kWh/day | 457 x 450 x 725 ref / 408 x 415 x 670 frz | 540 x 600 x 1680 | 95 (209) | |

* Published interior volumes are nominal; usable litre capacities may be offset by shelves, drawers, blower coils, or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representative. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences, and frequency of door openings. Contact our sales representative for specific inquiries regarding your application.

** Temperature range is the spectrum of temperature within the refrigerator or freezer under standard operation. All refrigerators/combo refrigerators are factory set at +5°C and freezers/combo freezers at -20°C.

*** Internal performance data; data on file. January, 2012.

**** All models shipped to the UK will be supplied with a UK plug adapter.

Thermo Scientific ES Series ATEX certified spark-free lab refrigerators and freezers

ES Series Certified Spark-Free

TSC models are shipped in a robust wooden crate, ideal for long-haul and multiple-stop shipping.



151R-AXV-TS / 151 Litre (ref)



151F-AXV-TS / 151 Litre (frz)



288R-AXV-TS / 288 Litre (ref)



232F-AXV-TS / 232 Litre (frz)



263C-AXV-TS / 159 Litre (ref), 109 Litre (frz)

Specifications table and ordering information

ES Series ATEX Certified Spark-Free Lab Refrigerators Operating Temp. Range: +1°C to +10°C (Set Point Adjustment Range +4°C to +6°C)**

| Model No. | Capacity (Litre)* | Voltage | Plug Type**** | Includes | Defrost Type |
|--------------|-----------------------|------------------------------------|------------------------------------|--------------------------|--------------|
| 151R-AXV-TS | 151 | 230V/50Hz | EU | 3 shelves, 1 basket | manual |
| 151R-AXV-TSC | 151 | 230V/50Hz | EU | 3 shelves, 1 basket | manual |
| 288R-AXV-TS | 288 | 230V/50Hz | EU | 5 shelves, 1 basket | manual |
| 288R-AXV-TSC | 288 | 230V/50Hz | EU | 5 shelves, 1 basket | manual |
| Model No. | Energy Consumption*** | Internal Dimensions W x D x H (mm) | External Dimensions W x D x H (mm) | Shipping Weight kg (lbs) | |
| 151R-AXV-TS | 0.6 kWh/day | 500 x 450 x 705 | 595 x 595 x 845 | 65 (143) | |
| 151R-AXV-TSC | 0.6 kWh/day | 500 x 450 x 705 | 595 x 595 x 845 | 65 (143) | |
| 288R-AXV-TS | 0.5 kWh/day | 480 x 445 x 1382 | 595 x 634 x 1570 | 90 (198) | |
| 288R-AXV-TSC | 0.5 kWh/day | 480 x 445 x 1382 | 595 x 634 x 1570 | 90 (198) | |

ES Series ATEX Certified Spark-Free Lab Freezers Operating Temp. Range: -18°C to -25°C (Set Point Adjustment Range -19°C to -21°C)**

| Model No. | Capacity (Litre)* | Voltage | Plug Type**** | Includes | Defrost Type |
|--------------|-----------------------|------------------------------------|------------------------------------|--------------------------|--------------|
| 151F-AXV-TS | 151 | 230V/50Hz | EU | 3 baskets | manual |
| 151F-AXV-TSC | 151 | 230V/50Hz | EU | 3 baskets | manual |
| 232F-AXV-TS | 232 | 230V/50Hz | EU | 2 shelves, 3 baskets | manual |
| 232F-AXV-TSC | 232 | 230V/50Hz | EU | 2 shelves, 3 baskets | manual |
| Model No. | Energy Consumption*** | Internal Dimensions W x D x H (mm) | External Dimensions W x D x H (mm) | Shipping Weight kg (lbs) | |
| 151F-AXV-TS | 1.6 kWh/day | 500 x 450 x 705 | 595 x 595 x 845 | 65 (143) | |
| 151F-AXV-TSC | 1.6 kWh/day | 500 x 450 x 705 | 595 x 595 x 845 | 65 (143) | |
| 232F-AXV-TS | 1.0 kWh/day | 437 x 430 x 1300 | 595 x 634 x 1570 | 85 (187) | |
| 232F-AXV-TSC | 1.0 kWh/day | 437 x 430 x 1300 | 595 x 634 x 1570 | 85 (187) | |

ES Series ATEX Certified Spark-Free Combi Lab Refrigerator/Freezer (Set Point Adjustment Range: Ref +4°C to +6°C; Frz -19°C to -21°C)

| Model No. | Capacity (Litre)* | Voltage | Plug Type**** | Includes | Defrost Type |
|--------------|-----------------------|---|------------------------------------|---|-------------------------------|
| 263C-AXV-TS | 159 ref / 104 frz | 230V/50Hz | EU | 3 shelves, 2 half baskets /1 shelf, 2 baskets (frz) | automatic (ref), manual (frz) |
| 263C-AXV-TSC | 159 ref / 104 frz | 230V/50Hz | EU | 3 shelves, 2 half baskets /1 shelf, 2 baskets (frz) | automatic (ref), manual (frz) |
| Model No. | Energy Consumption*** | Internal Dimensions W x D x H (mm) | External Dimensions W x D x H (mm) | Shipping Weight kg (lbs) | |
| 263C-AXV-TS | 0.9 kWh/day | 457 x 450 x 725 ref / 408 x 415 x 670 frz | 540 x 600 x 1680 | 95 (209) | |
| 263C-AXV-TSC | 0.9 kWh/day | 457 x 450 x 725 ref / 408 x 415 x 670 frz | 540 x 600 x 1680 | 95 (209) | |

* Published interior volumes are nominal; usable litre capacities may be offset by shelves, drawers, blower coils, or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representative. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences, and frequency of door openings. Contact our sales representative for specific inquiries regarding your application. ** Temperature range is the spectrum of temperature within the refrigerator or freezer under standard operation. All refrigerators/combo refrigerators are factory set at +5°C and freezers/combo freezers at -2. *** Internal performance data; data on file. January, 2012. **** All models shipped to the UK will be supplied with a UK plug adapter.

ATEX Certified Spark-Free units are not designed for use in Class 1, Zone 0 or Zone 1 applications which require an explosion-proof unit.

CE  II 3 G c ic IIB T6X

Thermo Scientific GPS Series lab refrigerators and freezers

**Medium and large capacities designed
for routine sample protection**

With capacities ranging from space-saving to spacious our new GPS Series lab refrigerators and freezers meet the demands of today's laboratory requirements. All models contain sample protection features designed for the rigorous demands of the laboratory environment.

All GPS Series models deliver the sample protection performance, security, and quality you have come to depend on from us:

- Integrated controller
- Digital display
- High and low temperature alarms
- Door ajar alarm
- Remote alarm contacts
- Standard door locks
- Standard casters
- Access ports
- Low energy consumption
- Choice of glass or solid door (refrigerators only)
- Forced air circulation
- Automatic defrost
- CE marked
- Reversible doors (R/F 400 and R/F 700 modules only)
- HCFC- and CFC-free insulation
- Interior fluorescent lighting

Ask your sales
representative about
Thermo Scientific
sample storage
systems

GPS Series





All of our GPS Series models are fitted with standard door locks for enhanced sample security and peace-of-mind.



Our GPS Series' integrated digital controller with temperature display, door ajar alarm, and high/low temperature alarms is easy-to-use and maintains the correct cabinet temperature.



GPS Series

Thermo Scientific GPS Series models come standard with access ports making integration of secondary monitoring systems simple.



Integrated controller with digital temperature display

Standard door lock

Standard access port

Interior lighting (refrigerators only)

Glass or solid door (glass available on refrigerators only)

Reversible doors (R/F 400 and R/F 700 models only)

Standard casters

MODEL NO. R700-GAE,
700 litre glass door lab refrigerator.
See page 8 for specifications and
ordering information.

MODEL NO. F700-SAE,
700 litre lab freezer. See page 8
for specifications and ordering
information.

Thermo Scientific GPS Series lab refrigerators and freezers

GPS Series

TSC models are shipped in a robust wooden crate, ideal for long-haul and multiple-stop shipping.



R400-SAEV-TS / 400 Litre (ref)

R700-GAEV-TS / 700 Litre (ref)

R14X-GAEV-TS / 1400 Litre (ref)



F400-SAEV-TS / 400 Litre (frz)

F700-SAEV-TS / 700 Litre (frz)

F14X-SAEV-TS / 1400 Litre (frz)

Specifications table and ordering information

GPS Series Lab Refrigerators (Operational/Settable Temperature Range +1°C to +11°C, factory set point 5°C)**

| Model No. | Capacity (Litre)* | Voltage | Door Type | Plug Type**** | Includes | Defrost Type |
|---------------|-------------------|-----------|-----------|---------------|-----------|--------------|
| R400-SAEV-TS | 400 | 230V/50Hz | solid | EU | 3 shelves | automatic |
| R400-SAEV-TSC | 400 | 230V/50Hz | solid | EU | 3 shelves | automatic |
| R400-GAEV-TS | 400 | 230V/50Hz | glass | EU | 3 shelves | automatic |
| R400-GAEV-TSC | 400 | 230V/50Hz | glass | EU | 3 shelves | automatic |
| R700-SAEV-TS | 700 | 230V/50Hz | solid | EU | 3 shelves | automatic |
| R700-SAEV-TSC | 700 | 230V/50Hz | solid | EU | 3 shelves | automatic |
| R700-GAEV-TS | 700 | 230V/50Hz | glass | EU | 3 shelves | automatic |
| R700-GAEV-TSC | 700 | 230V/50Hz | glass | EU | 3 shelves | automatic |
| R14X-SAEV-TS | 1400 | 230V/50Hz | solid | EU | 6 shelves | automatic |
| R14X-SAEV-TSC | 1400 | 230V/50Hz | solid | EU | 6 shelves | automatic |
| R14X-GAEV-TS | 1400 | 230V/50Hz | glass | EU | 6 shelves | automatic |
| R14X-GAEV-TSC | 1400 | 230V/50Hz | glass | EU | 6 shelves | automatic |

| Model No. | Capacity (Litre) | Energy Consumption*** | Internal Dimensions W x D x H (mm) | External Dimensions W x D x H (mm) | Shipping Weight kg (lbs) |
|---------------|------------------|-----------------------|------------------------------------|------------------------------------|--------------------------|
| R400-SAEV-TS | 400 | 3.1 kWh/day | 480 x 500 x 1150 | 600 x 642 x 1822 | 95 (209) |
| R400-SAEV-TSC | 400 | 3.1 kWh/day | 480 x 500 x 1150 | 600 x 642 x 1822 | 95 (209) |
| R400-GAEV-TS | 400 | 3.6 kWh/day | 480 x 500 x 1150 | 600 x 642 x 1822 | 120 (265) |
| R400-GAEV-TSC | 400 | 3.6 kWh/day | 480 x 500 x 1150 | 600 x 642 x 1822 | 120 (265) |
| R700-SAEV-TS | 700 | 3.4 kWh/day | 600 x 660 x 1300 | 700 x 817 x 1972 | 130 (287) |
| R700-SAEV-TSC | 700 | 3.4 kWh/day | 600 x 660 x 1300 | 700 x 817 x 1972 | 130 (287) |
| R700-GAEV-TS | 700 | 5.3 kWh/day | 600 x 660 x 1300 | 700 x 817 x 1972 | 120 (265) |
| R700-GAEV-TSC | 700 | 5.3 kWh/day | 600 x 660 x 1300 | 700 x 817 x 1972 | 120 (265) |
| R14X-SAEV-TS | 1400 | 2.6 kWh/day | 1300 x 660 x 1300 | 1400 x 817 x 1972 | 190 (419) |
| R14X-SAEV-TSC | 1400 | 2.6 kWh/day | 1300 x 660 x 1300 | 1400 x 817 x 1972 | 190 (419) |
| R14X-GAEV-TS | 1400 | 7.7 kWh/day | 1300 x 660 x 1300 | 1400 x 817 x 1972 | 190 (419) |
| R14X-GAEV-TSC | 1400 | 7.7 kWh/day | 1300 x 660 x 1300 | 1400 x 817 x 1972 | 190 (419) |

GPS Series Lab Freezers (Operational/Settable Temperature Range -12°C to -25°C, factory set point -20°C)**

| Model No. | Capacity (Litre)* | Voltage | Door Type | Plug Type**** | Includes | Defrost Type |
|---------------|-------------------|-----------|-----------|---------------|-----------|--------------|
| F400-SAEV-TS | 400 | 230V/50Hz | solid | EU | 3 shelves | automatic |
| F400-SAEV-TSC | 400 | 230V/50Hz | solid | EU | 3 shelves | automatic |
| F700-SAEV-TS | 700 | 230V/50Hz | solid | EU | 3 shelves | automatic |
| F700-SAEV-TSC | 700 | 230V/50Hz | solid | EU | 3 shelves | automatic |
| F14X-SAEV-TS | 1400 | 230V/50Hz | solid | EU | 6 shelves | automatic |
| F14X-SAEV-TSC | 1400 | 230V/50Hz | solid | EU | 6 shelves | automatic |

| Model No. | Capacity (Litre) | Energy Consumption*** | Internal Dimensions W x D x H (mm) | External Dimensions W x D x H (mm) | Shipping Weight kg (lbs) |
|---------------|------------------|-----------------------|------------------------------------|------------------------------------|--------------------------|
| F400-SAEV-TS | 400 | 10.1 kWh/day | 480 x 500 x 1150 | 600 x 642 x 1822 | 95 (209) |
| F400-SAEV-TSC | 400 | 10.1 kWh/day | 480 x 500 x 1150 | 600 x 642 x 1822 | 95 (209) |
| F700-SAEV-TS | 700 | 10.6 kWh/day | 600 x 660 x 1300 | 700 x 817 x 1972 | 130 (287) |
| F700-SAEV-TSC | 700 | 10.6 kWh/day | 600 x 660 x 1300 | 700 x 817 x 1972 | 130 (287) |
| F14X-SAEV-TS | 1400 | 12.0 kWh/day | 1300 x 660 x 1300 | 1400 x 817 x 1972 | 200 (441) |
| F14X-SAEV-TSC | 1400 | 12.0 kWh/day | 1300 x 660 x 1300 | 1400 x 817 x 1972 | 200 (441) |

* Published interior volumes are nominal; usable litre capacities may be offset by shelves, drawers, blower coils, or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representative. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences, and frequency of door openings. Contact our sales representative for specific inquiries regarding your application. ** Temperature range is the spectrum of temperature within the refrigerator or freezer under standard operation. *** Internal performance data; data on file. January, 2012. **** All models shipped to the UK will be shipped with a UK plug adapter.

Thermo Scientific GPS Series Shelf Kits

| Model No. | For GPS Series | Includes |
|------------|-----------------|-----------------------------|
| GPS400/SH | 400 litre | One shelf with set of clips |
| GPS714/SHG | 700, 1400 litre | One shelf with metal guides |

Also available for your cold storage applications

Thermo Scientific plastic and glass labware offer a complete range of tubes, bottles, flasks and vials for all of your cold storage applications. Our labware products are designed and manufactured for tough applications under rigorous laboratory conditions. For more information, visit www.thermoscientific.com/labwareandsupplies

Thermo Scientific Smart-Vue is a complete and simplified wireless monitoring solution to monitor critical samples stored inside your lab refrigerator or freezer. Smart-Vue monitor features audit trail traceability to assist with conformance to 21 CFR part 11 and other regulatory requirements while safeguarding critical samples. Smart-Vue is not available in all Radio Frequency (RF) regions; for more information, visit www.thermoscientific.com/smartvue.





WolfLabs

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

www.wolflabs.co.uk

Tel : 01759 301142

Fax : 01759 301143

sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.