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220 Volt

Condenser Types

The compressor is often described as the heart of a refrigeration system. However the condenser unit has a primary link to the efficiency and cost of the refrigeration unit.

Wire & Tube Condenser



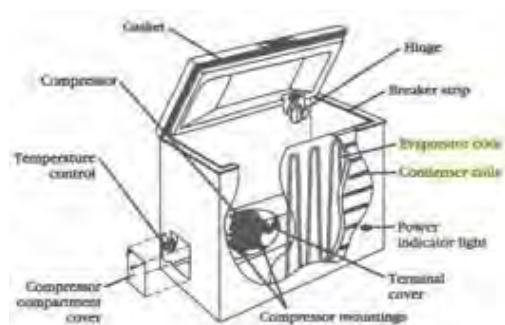
- Good Heat transference rate
- Low condenser pressure & condenser temperature
- Refrigeration efficiency is increased
- Units are generally efficient & performs well under high Ambient Conditions
- Ideal for space constraint units

Forced Draft Wire & Tube / Forced Draft plate Fin



- Good Heat transference rate
- Low condenser pressure & condenser temperature
- Refrigeration efficiency is increased
- Units are generally efficient
- Designed for higher Ambient Conditions
- Has a noise factor

Hot Wall Condenser



13-40 The component/location of a chest freezer

- Used in cheaper domestic refrigeration units (220 Volt)
- Has a higher energy consumption in the same working temperature as a % of heat is transferred back
- Unit not suitable for higher Ambient Conditions

Under Counter Beverage Coolers

Sliding Door

Model: DBQ220LS2



Double door – Sliding
Size: 905 W x 510 D x 900 H New 850

Model: DBQ300LS3



Triple door - Sliding
Size: 1350 W x 510 D x 900 H new 850

Applications: commercial/domestic pubs, display units

Features

Tempered glass
Lockable
Temp range: -5°C to 10°C
Adjustable shelves
Internal display light
Internal fan for air circulation
Fan cooled wire and tube condenser
Compressor cooled
Digital thermostat



Benefits

Clear visual display of products.
Front discharging for built-in or enclosed applications.
Easy access to stored products in confined spaces due to sliding door application.
Efficient cooling system.

Notes: Make sure that these under counter units have enough room to “breathe” i.e. ventilation. Stifling can cause the unit to malfunction or sweat. It is common for condensation to form on the doors. Make sure the unit is tilted approx. 5 deg backwards to assist with auto drainage of the condensation that may form inside the unit. Keep door rails clean and unobstructed at all times. Temperature display and actual temp could have a 2deg variance. NB - Generally these models won’t fit under standard counters as their height is 900mm.

Under Counter Beverage Coolers

850 Height – Pedestrian Door

<p>Model: DBQ220LS2 (Black)</p>	<p>Model: DBQ220LSS (S/Steel)</p> 	<p>Model: DBQ300LS3 (Black)</p>	<p>Model: DBQ300LSS (S/Steel)</p> 
<p>Double door – Pedestrian (Heated) Size: 920 W x 505 D x 850 H (to be confirmed)</p>		<p>Triple door – Pedestrian (Heated) Size: 1335 W x 505 D x 850 H (to be confirmed)</p>	
<p>Applications: commercial/domestic pubs, display units</p>			
<p>Features Tempered glass Lockable Temp range: -5°C to 10°C Adjustable shelves Internal display light Internal fan for air circulation Fan cooled wire and tube condenser Compressor cooled Digital thermostat NEW Heated doors</p>		<p>Benefits: Clear visual display of products. Front discharging for built-in or enclosed applications. Easy access to stored products in confined spaces due to sliding door application. Efficient cooling system (Wire & Tube). Heated doors reduce condensation. 850mm Height – units can be used under standard counters. Digital control external for easy access</p>	
<p>Notes: Make sure that these under counter units have enough room to “breath” i.e. ventilation. Stifling can cause the unit to malfunction or sweat. It is common for condensation to form on the doors. Make sure the unit is tilted approx. 5 deg backwards to assist with auto drainage of the condensation that may form inside the unit. Keep door rails clean and unobstructed at all times. Temperature display and actual temp could have a 2deg variance.</p>			

Under Counter Beverage Cooler

Model: SC-98



Size: 480 W x 480 D x 860 H

Applications: Commercial & Domestic pubs, display units

Features

- Pedestrian door
- Tempered glass
- Lockable
- Wire and tube condenser
- Temp range: -5°C to 10°C
- Adjustable shelves
- Internal display light
- Internal fan for air circulation
- Compressor cooled
- Manual thermostat

Benefits

- Clear visual display of products.
- Efficient cooling system (Wire & Tube).
- 860mm Height – units can be used under standard counters

Notes: Make sure that these under counter units have enough room to “breathe” i.e. ventilation. Stifling can cause the unit to malfunction or sweat. 50mm space all around for ventillation

Combo Fridge freezer

Model: BD/C-100FF



Size: 470 W x 530 D x 855 H
26 Litre Freezer / 70 Litre Fridge

Applications: Bed 'n Breakfasts , Students , Home Pubs



Features

Energy rating A
Double door fridges
Separate top freezer
R600 gas used
S/steel Doors
Wire and tube condenser
Lockable
Noise level 40db(A)

Benefits

Separate fridge/freezer combo
Low energy consumption
Lock for safe storage
Better cooling efficiency
Compact to fit under or on top of most counters

Freestanding Commercial Fridges

<p>Model: DBQ318</p>  <p>Size: 360 W x 365 D x 1880 H Pedestrian Door – Manual Thermostat</p>	<p>Model: LG280</p>  <p>Size: 575 W x 606 D x 1830 H Pedestrian Door – Digital Thermostat</p>	<p>Model: SC130</p> <p>Size: 525 W x 600 D x 1460 H Pedestrian Door – Manual Thermostat</p>
<p>Applications: Display units in Retail or Commercial settings</p>		
<p>Features</p> <ul style="list-style-type: none"> Tempered glass Lockable Temp range: 2°C to 7°C Adjustable shelves Internal display light Internal fan for air circulation Fan cooled wire and tube condenser Compressor cooled Light box Front discharging Castor Wheels 	<p>Benefits</p> <ul style="list-style-type: none"> Front discharging allows for better heat dissipation. Castor wheels allows for easier placement of units. Light switches are external or easy access. Efficient fan and wire condenser. Clear visual display of products 	
<p>Notes: These are commercial units and can be noisy if used in a domestic application. Noise level increases as the unit has a higher velocity cooling fan and larger compressor.</p>		

Upright Glass Door Freezer

Model: DBQ318FF



Size: 670 W x 700 D x 1980 H
Weight 128Kg

Applications: Commercial applications i.e. ice cream parlours, etc.

Features

Glass Heated Door
Temp range: -22°C to 10°C
350 Ltr Capacity
Adjustable shelves
Auto Defrost
Internal display light – Two 10Watt Lamps
Header Panel – One 8Watt Lamp
Internal fan for air circulation
Danfoss Compressor
Fan cooled wire and tube condenser
On Castor wheels (front lockable)
Digital thermostat
Energy Consumption 12kw.h/24Hr
Running Current 4.4 Amps
Defrost Input Power 731.5Watt
Refrigerant R404a

Benefits

Castor wheels allows for easier movement.
Heated doors reduces condensate.
Front discharging for better heat disbursement.
Clear visual display of products
Header Panel with external light switch for easy access.

Undercounter Freezer

Model: BD/C-100 Freezer (NEW)



Size: 470 W x 530 D x 855 H
83 Litre Freezer

Applications: Bed 'n Breakfasts , Students , Home Pubs

Features

Energy rating A
R600 gas used
S/steel Doors
Digital Thermostat
Noise level 40db(A)
Wire and tube condenser
Lockable

Benefits

Low energy consumption
Fits under counter
Accurate temperature setting

Glass Door Table Top Freezer

Model: SD50 (New)



Size: W x D x H
50 Litre Glass Door Freezer

Applications: Retail and Domestic Display Freezer

Features

Energy rating
R600 gas used
Heated Tempered Glass Door
Wire and tube condenser
Lockable

Benefits

Low energy consumption
Clear visual display of products

Table Top Beverage Cooler

Model: SC52



Size: 440 W x 500 D x 505 H

Applications: Commercial/domestic pubs, B&B's, chemists, etc.

Features

- Pedestrian door
- Tempered glass
- Temp Range: -5°C to 10°C
- Adjustable shelves
- Internal display light
- Compressor cooled
- Manual thermostat
- Table top beverage display units

Benefits

- Clear visual display of products
- Efficient cooling (Wire & Tube condenser).

Table Top Beverage Cooler with Light Box

Model: BC-2



Size: 295 W x 370 D x 550 H

Model: SC-40B



Size: 400 W x 420 D x 730 H

Model: CTB-100

Model: CTB-200B



Size: 460 W x 470 D x 845 H

Size: 330 W x 415 D x 620 H

Applications: Retail or commercial settings.

Features:

- Pedestrian door
- Tempered glass
- Temp range: 2°C to 7°C
- Adjustable shelves
- Internal display light
- Compressor cooled
- Wire on Tube Condenser
- Manual thermostat
- Table top beverage display units
- Light Box
- Display lights have separate isolators

Benefits:

- Clear visual display of products
- Header display for advertising purposes
- Can work in Higher Ambient Conditions
- Light switch for internal and Header Panel display

Wine Chiller Benefits

Questions always arise as to why use a wine chiller compared to a general fridge with wine shelves.

Wine chillers are specifically designed to not just preserve but to age wine. Storing and aging wine properly brings out the full flavour potential.

A number of reasons are:

- Wine chillers have low vibration compressors to reduce disturbance of the sediment in the wine, which can affect the natural aging process.
- Wine chillers maintain the humidity between 50 – 80% whereas refrigerators are designed to remove humidity from the environment. Low humidity will dry out the corks and affect the aging process.
- They have more accurate temperature controls. Temperature stability is one of the primary factors that help preserve and age the wine. General household refrigerators tend to have larger temperature fluctuations.
- Circulating fan balances the storage temperature.
- They have auto defrost functions to maintain interior temperature and prevent frosting.
- Our units also come as front discharging, which allows them to be built in. If heat is not dispensed efficiently, it may cause the unit to overheat.
- Low LED lighting is used in wine chillers as opposed to florescent lights which can break down and destroy the wine flavour.

Wine Coolers

Built in Models

Model: VT24



Size: 592 W x 555 D x 455 H
 24 Bottles
 Single Zone
 Temp range: 5°C– 20°C

Applications: Commercial / domestic pub, kitchen, corporate environment, etc. “Chimney”
 Ventilation at back is required.

Features

- Tempered glass
- One storage zone
- Stainless steel handle
- Internal LED light
- Compressor cooled
- Adjustable beech wood sliding shelves
- Digital touch control
- Automatic control panel lock
- Low vibration
- Auto defrost
- Circulating fan cooling

Benefits

See Wine Chiller benefits.

Wine Coolers

Built in Models

Model: VT41



Size: 592 W x 555 D x 885 H
 41 Bottles
 Dual Zone
 Upper Zone Temp range: 5°C - 12°C
 Lower Zone Temp range: 12°C - 20°C

Applications: Commercial / domestic pub, kitchen, corporate environment, etc. "Chimney"
 Ventilation at back is required.

Features

- Tempered glass
- Two storage zones
- Stainless steel handle
- Internal LED light
- Compressor cooled
- Adjustable beech wood sliding shelves
- Individual Digital touch control
- Automatic control panel lock
- Low vibration
- Auto defrost
- Circulating fan cooling

Benefits

See Wine Chiller Benefits.

Freestanding Single Zone Wine Coolers

Model: VT19



Size: 295 W x 570 D x 870 H
19 Bottles

Model: VT7



Size: 150 W x 525 D x 870 H
7 Bottles

Applications: Commercial / domestic pubs, wine cellars, restaurants, etc. The slim line units can be incorporated into kitchens and used as a “space-filler”.




Features

One storage zone
Stainless steel handle
Temp range: 2°C – 20°C
Tempered glass
Internal LED light
Compressor cooled
Front louver design for discharging
Adjustable sliding shelves
Digital touch control
Automatic control panel lock
Auto defrost
Low vibration
Circulating fan cooling (auto air circulation function)

Benefits

See Wine Chiller Benefits.

Freestanding Dual Zone Wine Coolers

<p>Model: VT46</p>  <p>Size: 595 W x 570 D x 870 H 46 Bottles</p>	<p>Model: VT94</p>  <p>Size: 595 W x 680 D x 1215 H 94 Bottles</p>	<p>Model: VT181</p>  <p>Size: 595 W x 680 D x 1835 H 181 Bottles</p>
<p>Applications: Usage includes commercial / domestic pubs, wine cellars, restaurants, etc.</p>		
<p>Features</p> <ul style="list-style-type: none"> Upper Zone Temp range: 2°C - 12°C Lower Zone Temp range: 12°C - 20°C Tempered glass Adjustable beech wood sliding shelves Reverse door swing Internal LED light Compressor cooled Adjustable sliding shelves Digital touch control Automatic control panel lock Auto defrost Low vibration Circulating fan cooling both upper and lower zone (auto air fan function) Front louver design for discharging 	<p>Benefits</p> <p>See Wine Chiller Benefits.</p>	

Dual Wine Chiller – Side by Side

Model: VT19D



Size: 600 W x 580 D x 865 H

Applications: Commercial or domestic applications.

Features

Heated Door
Temp range: 1°C to 10°C
Adjustable beech wood sliding shelves
18 Bottles per side
Adjustable shelves
Auto Defrost
Internal display light
Internal fan for air circulation (auto air fan function)
Digital thermostat

Benefits

See Wine Chiller Benefits.

Ice Makers - Portable

Model: ZBC-15



Size: 365 W x 390 D x 415 H
Domestic ice maker
Ice Cubes per Cycle : 12

Applications: Private pub or home entertainment areas, B&B's

Features

15kg ice maker
S/Steel finish
S/steel hinge pins
New lid handle
Bullet type ice
12 ice cubes per cycle
Add water function
Full ice sensor
Removable ice bucket
3 cube size selection
Drain point
Portable
Approx. 1.8kg ice storage
Dianoetic check on start up

Benefits

Compressor is a Snomaster High back pressure compressor which is more robust and works efficiently in higher ambient conditions.
Sealed PC Board which reduces moisture content and corrosion.
Copper/aluminium evaporator which is less corrosive than standard steel evaporators.
Stainless steel pins makes moving parts more durable

Notes: Don't use RO water as this can give a false water indicator. Rather use filtered mineralised water. Ice cycle time is dependent on water temperature. Clean and drain the unit at least once or twice a month. Milton or 10ml vinegar can be added to the water to help the cleaning process.

Ice Makers - Plumbed Bullet type

Model: SM26



Size: 400 W x 540 D x 620 H

- 26Kg per 24 Hr
- 16 cubes per cycle
- Storage 5kg

Model: SM50



Size: 550 W x 610 D x 830 H

- 52Kg per 24 Hr
- 32 cubes per cycle
- Storage 20kg

Applications: Domestic or commercial pubs, restaurants, etc.

Features

Bullet type
S/steel finish
S/Steel water inlet valve
Water agitator
Water recycling Function
Ice Bin Storage Mat
ON/OFF switch

Benefits

Inlet valve can handle higher pressures.
Water agitator reduces air in the water to produce clearer, harder ice.
90% of the water is recycled through the system to reduce water waste.
Storage bin Mat protects the bin lining from damage that might be caused when "scooping" ice.

Notes: These units have a gravity fed drain point, thus drain point must be lower than the machine. Keep unit well ventilated.

Ice Makers - Plumbed Gourmet Block

Model: SM26S



Model: SM80S



Size: 380 W x 450 D x 675 H

Storage bin capacity: 5kg

cubes per cycle 30

Capacities: 26kg

Ice cube size: Approx. 32mm x 32mm x 32mm
/18gms

Size: 677 W x 585 D x 895 H

Storage bin capacity: 30kg

Cubes per cycle 39

Capacities: 80kg

Ice cube size: Approx. 32mm x 32mm x 32mm
/18gms

Applications: Commercial or domestic application.

Features



Makes Gourmet ice blocks
Front ventilating
S/steel
Embraco Compressor
Replaceable nozzles

Benefits

Easy maintenance with replaceable nozzles.
Gravity fed drain reduces moving parts.
Spray system gives a clear, solid ice block.
Front discharging so can be built in.




Notes: Recommended that filtration system be installed to help protect the "spray" function. Unit is front discharging. This is a gravity fed drain, thus drain point must be lower than unit. New models will have on/off switch

Ice Makers - Commercial Plumbed with Storage Bin

Model: SM150	Model: SM250	Model: SM450
		
Size: 760 W x 610 D x 560 H Capacity: 150kg per 24 hours Ice cubes per cycle: 180	Size: 760 W x 600 D x 560 H Capacity: 25kg per 24 hours Ice cubes per cycle: 240	Size: 760 W x 600 D x 720 H Capacity: 450kg per 24 hours Ice cubes per cycle: 380
Applications: Larger pubs, restaurants, B&B's, hotels, etc.		
Features S/steel Air filter for condenser Compressor type: Copeland 120kg storage bin 220volt Ice full sensor Square block ice	Benefits Condenser filter improves the efficiency of the unit. 120 KG storage bin included in unit Price.	
Notes: Ensure that unit is installed in a well-ventilated environment. Maximum ambient temperature of 38°C. Clean condenser filter regularly		

Water Coolers

Bottle Type

<p>Model: YLRS-5-LBF</p>  <p>Size: 320 W x 380 D x 970 H</p> <p>16 Litre Cooler 5 Litres Hot water per hour – 90 deg</p>	<p>Model: YLR2-5-16T</p>  <p>Size: 320 W x 380 D x 520 H</p> <p>5 Litres Hot water per hour – 90 deg</p>	<p>Model: YLR2-5-16LB</p>  <p>Size: 325 W x 335 D x 880 H</p> <p>Cold Only</p>
<p>Applications: Offices, receptions area and domestic homes.</p>		
<p>Features</p> <p>Compressor cooled 2ltr cold water per Hour – temp 7 to 10 deg Fits both standard and filter water bottle Drip tray Drainage port Isolating switches</p>	<p>Benefits</p> <p>Do not need plumbing Does not need a drain Filter bottle allows for better flexibility when using water ie no contracts, water on hand</p>	
<p>Notes: Remove bottle support when using filter bottle. NB - Units supplied without bottle</p>		

Water Cooler

Direct Connection

Model: KSW-291



Size: 430 W x 330 D x 1020 H

Applications: Factories, mines, gyms, etc.

Features

Plumbed in water fountain
S/steel
Compressor cooled
8ltr cold water per hour
Cooling temp 6°C – 10°C
Bubbler connected to Chill tank
3 stage filtration system
Goose neck and water bubbler
Pressure regulating valve supplied

Benefits

Filtered water enhances life expectancy of unit.
Pressure regulator helps prevent water leaks.

Notes: Filters need to be replaced regularly, dependent on usage and water quality. Must be installed with Inlet Water Pressure Regulating Valve.

**12 Volt /
220 Volt**

Stainless Steel Fridge/Freezer Single Compartment

Model: BD/C-40R

Model: BD/C-60R

Model: BD/C-80R



Size: 600 W x 420 D x 520 H
Wireless Temperature Monitor
supplied
40 Litre

Size: 715 W x 450 D x 525 H
Wireless Temperature Monitor
supplied
60 Litre

Size: 720 W x 530 D x 525 H
Wireless Temperature
Monitor supplied
80 Litre

Applications: Camping, Boating, hunting, fishing, 4WDS, trucks, caravans, etc.

Features

Single compartment 220/12volt fridge or freezer
Lid open Alarm
60mm polyurethane insulation
S/steel Cabinet
S/steel hinges, locks and handles
3 Internal baskets included
Temp range: -22°C to 10°C
Digital thermostat
66watt Snomaster
Internal power supply
LED light
Polyurethane insulation
Transit bag included
5 amps on high speed, 2.5 amps on low speed
Voltage Cut out can be set between 10 & 11.5
Volts

Benefits

S/steel finish cabinet, hinges, locks and handles
enhances durability.
S/steel cabinet allow the polyurethane to be
injected under high pressure, giving better
insulation.
60mm insulation suitable for higher ambient
conditions.
Transit bag and baskets are included in price.
Wireless monitor allows you to monitor your unit
on long trips.
Larger Compressor allows for better cooling
efficiency over a 24hour cycle.
5 year Warranty on Snomaster 66 Watt
Compressor.

Stainless Steel Dual Fridge/Freezer Dual Compartments

Model: BD/C-60D

Model: BD/C-80D



Size: 715 W x 450 D x 525 H

24 Litre / 28 Litre split

Wireless thermostat Monitor supplied

Size: 715 W x 450 D x 595 H

32 Litre / 40 Litre split

Wireless thermostat Monitor supplied

Applications: Camping, boating, hunting, fishing, 4WDS, trucks, caravans, etc.

Features

Dual 220/12volt fridge or freezer
S/steel cabinet
S/steel hinges, locks and handles
Lid open Alarm
3 Internal baskets included
Temp variance -22°C to 10°C
Digital thermostat
Interchangeable compartment settings
66watt Snomaster compressor
Internal power supply
Polyurethane insulation
Transit bag included
5 amps on high speed, 2.5 amps on low speed
Voltage Cut out can be set between 10 & 11.5 Volts

Benefits:

S/steel finish cabinet, hinges, locks and handles enhances durability.
S/steel cabinet allow the polyurethane to be injected under high pressure, giving better insulation.
60mm insulation suitable for higher ambient conditions.
Dual compartment temperature settings are interchangeable.
Transit bag and baskets are included in price.
Wireless monitor allows you to monitor your unit on long trips.
Larger Compressor allows for better cooling efficiency over a 24hour cycle.
5 year Warranty on Snomaster 66 Watt Compressor.

Stainless Steel Dual Fridge/Freezer Dual Compartments

Model: BD/C-70SS

Model: BD/C-100SS



Size: 830 W x 500 D x 530 H
22 Litre / 48 Litre split
Wireless thermostat supplied

Size: 830 W x 500 D x 640 H
60 Litre / 35 Litre split
Wireless thermostat supplied

Applications: Camping, boating, hunting, fishing, 4WDS, trucks, caravans, etc.

Features

220/12volt fridge or freezer double door
S/steel
Temp variance -19°C to 10°C
Digital thermostat
Interchangeable compartment settings
55watt Danfoss/Sebcob compressor
Internal power supply
Polyurethane insulation
Transit bag included
5 amps on high speed, 2.5 amps on low speed
Voltage Cut out can be set between 10 & 11.5 Volts

Benefits

Dual compartment temperature settings are interchangeable
S/steel cabinet allow the polyurethane to be injected under high pressure, giving better insulation.
60mm insulation suitable for higher ambient conditions.
Transit bag and baskets are included in price.
Wireless thermostat allows you to control your unit operation when unit has been packed away.
Larger Compressor allows for better cooling efficiency over a 24hour cycle.
3 year Warranty on Danfoss/Sebcob 55 Watt Compressor.

Stainless Steel Fridge/Freezer 70mm Insulated

Model: BD/C-82



Size: 825W x 470D x 535H
75 Ltr Single Compartment
Wireless Controller (Solar Powered)

Model: BD/C-82D



Size: 825W x 470D x 535H
30 Litre / 36 Litre split
Wireless Controller (Solar Powered)

Applications:

Features

220/12volt fridge or freezer double door
S/steel
70mm polyurethane insulation
Temp variance -22°C to 10°C
Digital thermostat
Interchangeable compartment settings
66watt Snomaster compressor
Internal power supply
Polyurethane insulation
Transit bag included
5 amps on high speed, 2.5 amps on low speed.
Also has auto setting
Voltage Cut out can be set between 10 & 11.5 Volts
NEW wireless Temp Controller

Benefits

70mm insulation allows for more efficient cool down period and allows unit to maintain lower temperature for longer periods in a higher ambient environment.
S/steel cabinet allow the polyurethane to be injected under high pressure, giving better insulation.
Wireless controller enables the unit to be operated remotely (Solar Powered).
Transit bag and baskets are included in price.
Larger Compressor allows for better cooling efficiency over a 24hour cycle.
Auto function will allows the unit to scroll between running amps.
5 year Warranty on Snomaster 66 Watt Compressor.

Snomaster Compressor versus Danfoss Compressor

Snomaster	Danfoss
66W Compressor	55W Compressor
Compressor cools quicker and can handle higher temperatures	
Better cool down time on larger units	

Snomaster entered into a joint Venture with Baixue in 2002, a reputable Chinese government owned compressor manufacture based in China. They manufacture over 1000000 varies high quality compressors, every year. Snomaster developed the 66 watt 12/24 volt DC Compressor with Baixue for the South African and Australian market, taking into consideration their varying conditions. The design has been based on a similar specifications to that of the original Danfoss compressor, but with more cooling capacity. The cooling systems on all SnoMaster products are designed to suit our market conditions

Danfoss is a well-known compressor manufacturer but with very little back up locally. The replacement parts very expensive and they have limited cooling capacity.

Their popularity is decreasing due to price, availability as well as the name change to Sabcob. The name change has co-inside with the units being manufacturing in China, rather than Germany.

Inverters / Generators

Inverters


- Need to use a “pure sign wave” inverter to run a compressor driven product
- Minimum 1000W “pure sign wave” inverter needs to be used because of the start-up current
- Average Retail cost of “pure sign” wave inverter: R3 000.00
- 1000w “pure sign” inverter will draw around 9Amps
- This can cause overheating over extended usage
- If a “modified sign” wave inverter is used, this will damage the compressor due to the pulsating frequency

Generators

- Must use an AVR generator (Automatic Voltage Regulator). This maintains the voltage draw and does not give a fluctuation when more power is requires.
- A minimum 1000W generator will be required

Powder Coated Fridge/Freezer Combination

220 Volt only

<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> Model: BD40E  Size: 600 W x 420 D x 520 H 40 Litre </div> <div style="text-align: center;"> Model: BD60E Size: 715 W x 455 D X 525H 60 Litre </div> </div>	
Applications: Ideal for camping, caravans, etc.	
Features 220 volt fridge or freezer single door White powder coated S/steel hinges, locks and handles 3 Internal baskets included 60mm polyurethane insulation Temp range: -22°C to 10°C Digital thermostat SnoMaster compressor Polyurethane insulation Transit bag included	Benefits Used as a Fridge or Freezer. Transit bag and baskets are included in price. Cost is lower than the 12volt units as this is only 220volt.

Powder Coated Dual Fridge/Freezer Combination

220 Volt only

Model: BD60DE



Black Trim

Size: 715 W x 450 D X 525H
Fridge or Freezer 24 Lt / 28 Lt split

Applications: Ideal for camping, caravans, etc.

Features

- 220 volt fridge or freezer single door
- White powder coated
- S/steel hinges, locks and handles
- 3 Internal baskets included
- 60mm polyurethane insulation
- Temp range: -22°C to 10°C
- Individual compartment temperature settings
- Digital thermostat
- SnoMaster compressor
- Polyurethane insulation
- Transit bag included

Benefits

- Dual compartment temperature settings are interchangeable
- Transit bag and baskets are included in price.
- Cost is lower than the 12volt units as this is only 220volt.

2 Way Super Refrigerator

220 Volt / Gas

Model: BD/C-50GF



Size: 630 W x 520 D x 520 H
50 Litre

Applications: Camping, hunting, fishing, caravans, etc.

Features

220volt/gas
Absorption cooling system works with ammonia
Removal cooling system
Gas flow meter
Built in level indicator
Gas automatic shut off valve
Pulsar igniter
Temperature range: -5°C @ 30°C ambient
Powder coated

Benefits

Flexibility of use ie Gas or Power

Notes: NB Not be used as a freezer. Unit must be level and well ventilated during operation.

12Volt Freezers

Model: BD/C-280



Size: 1100x640x850
280 Litre

Applications: This freezer can be used in areas that don't have 220volt power readily available. Ideal for camping, hunting, fishing, 4WD, caravans, etc.

Features

12volt
6 Amps Running Current
Digital thermostat with mechanical back up
70mm insulation
Drain Plug
LED light on Lid
280 ltr chest freezer
White

Benefits

Large Freezer compartment that runs off 12Volt

Notes: This can be linked up to the solar panel

12 Volt Freezer

Model: BD/C-100 Freezer (NEW)



Size: 470 W x 530 D x 855 H
86 Litre Freezer

Applications: Bed 'n Breakfasts , Students , Home Pubs

Features

Energy rating A
S/steel Doors
Wire and tube condenser
Lockable

Benefits

Low energy consumption

12 Volt Combo Fridge freezer

Model: BD/C-100FFACDC



Size: 470 W x 530 D x 855 H
26 Litre Freezer / 70 Litre Fridge

Applications: Caravans , motor homes, camping etc

Features

Energy rating A
Double door fridges
Separate top freezer
S/steel Doors
Wire and tube condenser
Lockable

Benefits

Separate fridge/freezer

12 Volt Fridges – Conversion Kit

Snomaster 12Votl Compressor + Electronics	R2000.00 excl vat
Consumables (Gas , Filter Dryer etc)	R450.00 excl vat
Labour	Approx. 3 hours
Delivery	R180.00
Precise installation needs to be discussed with Warren.	
NB: Fridge needs to have Mechanical thermostat and have a max capacity of 220Ltrs.	

This will allow an individual to convert an existing 220 Volt fridge to a 12 volt unit. If they require 12 & 220 Volt an external power supply will be required at an additional cost of R650.00 excl vat

Solar Panel

Model: SP100



The solar panel can be used to “trickle” charge your batteries and thus enable extended usage.

Features

- 100watt solar panel
- Indicator lights
- Folding panel
- Accessory cables supplied
- Built in regulator (MPTT 10 Amp Regulator)
- Storage compartments
- Supplies 5amp trickle charge

Benefits

- Compact and durable
- Portable
- Adjustable to suit sun direction for max efficiency

Notes: This panel is used to boost your battery charge, but won't recharge your “deep cell” unit from empty.

Power Pack

Model: PP002



This is a “box” to help protect and add “ease of use” to your power source.

Features

- Suitable for “deep “cycle battery
- Brad Harris socket
- Built in fuses
- Hella Socket
- Cigarette Lighter Socket
- Battery Level indicator
- External battery terminals
- Solar panel charging port
- ON/OFF Isolator
- Tie down straps

Benefits

Protects battery and has readily available sockets

Notes: Power box is not supplied with a battery.

12 Volt Mini Fridge / Freezer

Model: BD-C9

Model: BD-C11



Size: 185W x 515D x 365H

Capacity: 9 Litres

Running Current 3 Amps

Power Consumption 36 Watt

Weight 6.5Kg

Size: 185W x 515D x 400H

Capacity: 11 Litres

Running Current 4 Amps

Power Consumption 48 watt

Weight 7Kg

Features

12 Volt
Temp Range 10 to -18deg
Micro Danfoss Compressor
Cut out Voltage 10.5 Amps
DC cable storage compartment
Interior LED Light
Supplied with mounting bracket and straps
Protection bag supplied
3 min delay protection start up
On / off Switch

Benefits

Slim line to fit between most 4x4 front seats.
Durable casing design to withstand general ware & tear.
Side discharging to reduce overheating.

12 Volt Accessories

Dual Battery Isolator



Multi Adaptor

2 x Hella Socket
2 x Cigarette Lighter socket
1 x Brad Harris
Built in fuses

Temperature Monitor



Wireless Fridge and Ambient temperature monitor
with clock

WH001 DIY Wiring Harness



DIY Wiring Harness for 12 Volt
DC Auxiliary Socket Outlet
7 metres long

Air Conditioning

Split Air Conditioners

Model: SMAC-09



9000BTU Indoor Evaporator

Size: 805 W x 305 D x 255 H
Weight: 9kg
Noise level: 36dB(A)
Cooling: 900W
Heating 880W

Model: SMAC-12



12000BTU Indoor Evaporator

Size: 855 W x 305 D x 255 H
Weight: 10kg
Noise level: 37dB(A)
Cooling: 1200W
Heating 1270W

Outdoor condenser unit

Size: 803 W x 361 D x 390 H
Weight: 25kg
Noise level: 50dB(A)

Outdoor condenser unit

Size: 803 W x 361 D x 590 H
Weight: 35kg
Noise level: 52dB(A)

Powder coated galvanized casing
R22 gas
Piping kit included
Remote control

Additional



Snomaster Warranty Policy 2014

Tel : 011 – 392 5315

Fax 011 – 392 4198

Email: service@snomaster.co.za

Web Address: www.snomaster.co.za

Snomaster will repair or replace a product that develops a fault within the prescribed period of time. This period will commence from the date the “end-user” purchases the product. Our obligation is to repair or replace the defected part or unit only once it has been returned to the original authorised dealer. Products that are deemed to be “built-in or fixed” will be repaired on site, as long as they are within 100 kilometres of a major city or town, within South Africa. Products that fall outside this area will only carry a parts warranty.

This warranty is only valid within South African borders, unless written consent is obtained by an authorised Snomaster representative.

Warranty repairs must be carried out by a Snomaster Authorized Service Centre. Snomaster shall not be liable for reimbursements, claims and damages that may result from the unauthorized repair of the product.

Repair or replacement under the terms of this warranty does not provide right to extension or renewal of the warranty period. Repair or direct replacement of the product under the terms of this warranty may be fully filled with functionally equivalent service exchange units. All repairs only cover a 3 month warranty on the work that has been carried out.

Snomaster warrants to the “end-user” that their products are free from defects in material workmanship, for the period prescribed below, commencing from the date of purchase

220 Volt Products

- 1 year warranty on product
- 1 year extended parts warranty on the compressor

12/220 Volt Fridge / Freezer units

- 1 year warranty on product
- 4 year extended parts warranty on Snomaster 66watt compressor or 2 year extended parts warranty on Danfoss compressor

The warranty is valid only upon presentation of the proof of purchase consisting of original invoice or sales slip indicating the date of purchase, dealer's name, model and serial number of the product. Snomaster reserves the right to refuse warranty if this information has been removed or changed after the original purchase of the product from the dealer.

Specifically EXCLUDED from the warranty:

- Periodic checks, maintenance, repair and replacement of parts due to normal wear and tear.
- Accidental damage due to incorrect handling, normal wear and tear, faulty installation, abuse or misuse, neglect, including but not solely limited to the failure to use this product for its normal purposes or in accordance.
- Defects resulting from usage of the product in conjunction with accessories that are not approved by Snomaster for use with this product.
- Failure of the product arising from incorrect installation or use not consistent with the instructions prescribed in the product user manual.
- Accidents, Acts of God, lightning, water, fire, public disturbances, improper ventilation, voltage fluctuations.
- Unauthorized modifications carried out to the product.
- The serial no. on the product has been altered, deleted, removed or made illegible.

This warranty is not transferable. This warranty will be the purchasers 'sole and exclusive remedy and neither Snomaster nor its service centres shall be liable for any incidental or consequential damages or breach of any express or implied warranty of this product.

The above policies are for warranty service and the customer will be responsible for any costs associated with non-warranty conditions. Snomaster reserves the right to make final decisions regarding problem determination and the appropriate service option. Exchange units assume the remaining warranty of the original product. Snomaster warranty are subject to change without prior notice.

When the Karoo freezes over ...

When kitting out your bush wagon to go driving in faraway places, a freezer is one of the most expensive and important pieces of kit you'll ever buy.

Piet van Heerde had a look at how the various models differ from one another.

There are a few reasons why we're so besotted with our 4x4 fridges. First of all, we simply don't have as much time as old people. When we get hungry we can't spend a day stalking an impala with a Lee Metford.

We also cannot grind mealie meal to make pap, hang biltong and droëwors to dry and bake rusks in an anthill oven. It takes too long for our rushed lifestyle.

We have also become terribly fussy. We want to eat good stuff – top-drawer steaks, chops and wors, and crispy fresh veggies and salad.

And when we stop next to the Orange River nowadays and it's 45°C outside, we don't want to drink a beer that's been slightly cooled by letting the six pack lie in a river rapid for a while; that Tafel Lager must be cold enough to burn your tongue.

That's why you need proper refrigeration.

What kind of freezer should I buy?

If you live in Africa and go on expeditions, it does not really make sense anymore to look at any other freezer than a compressor fridge.

They're reliable and can maintain very low freezer temperatures in very hot African summers (-10°C in a 40°C exterior temperature).

They don't have to be completely level to work, and with a good solar panel and dual-battery system you can make your freezer run just about non-stop, except when you're hit by a three-month monsoon.

The only drawback is that they're a little expensive. However, quality is not an issue in our market – there are plenty of robust products that last for years and have good after-sales service.

There is also another kind of fridge – the so-called absorption fridge that has been fitted to caravans for years. They are cheaper and run on electricity (12V and 220V) as well as butane (a gas), but the cooling process (heat is turned to cold through a gas) doesn't work as well if the fridge doesn't stand exactly level.

In other words, it's fine if you're going camping for two weeks, but not so nice if you're driving down a Kaokoland riverbed every day.

Furthermore, these fridges aren't that effective if the outside temperature climbs above 40°C

when you're passing Keetmanshoop. You'll struggle to keep the chops frozen.

The third type of mobile cooling – a thermo-electric cooler – is really only to keep your Cokes cold for the braai outside Loftus before the Bulls game. A packet of ice in a well-insulated cool box almost works better.

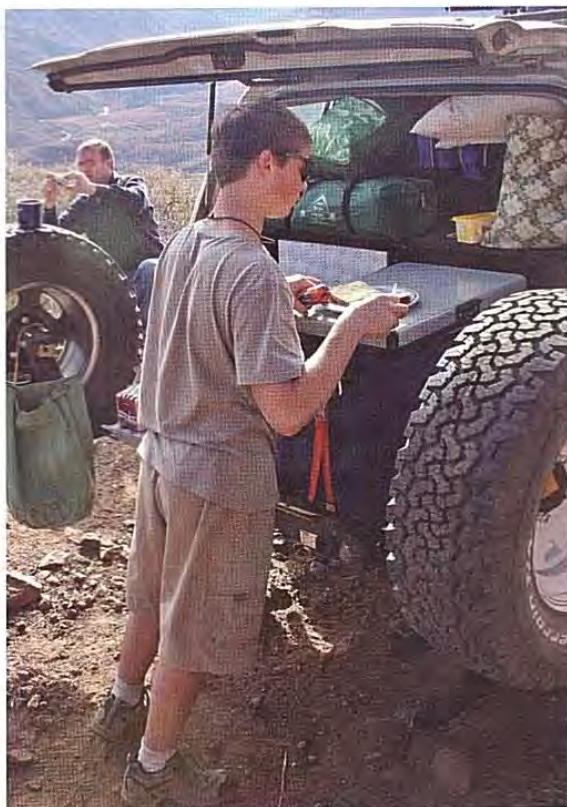
How big is big enough?

Before you buy the biggest, most expensive fridge, you have to ask what you want it for.

Weekend warrior: Are you a guy who spends long weekends in campsites with 220V power points? If so, you need nothing more than a 40-litre fridge. They usually use a little more power and aren't that well insulated, but it'll hold its temperature – as long as there's power.

All-rounder. If you have two and a half kids on the double-cab's back seat, want to spend three weeks in Botswana, Namibia or Mozambique every year and in between spend a few weekends every term in bush camps in the Magaliesberg or Cederberg, you probably need something from 50 to 60 litres that is well insulated and therefore uses little power.

World traveller. Few people really need an 80-litre freezer. There is after all no need to cart all of Checkers and Solly Kramers across the Limpopo. However, if you have to cook for a whole group and there is no time to buy local produce, you can consider an 80-litre fridge. Just make sure you freeze everything at home and it's well-insulated.



Family planning. Teach your family from early on not to open the fridge on a whim. The fewer times you open it, the better it works.

How Drive Out's test works

Yes, we know, the only true test for a fridge is to make it work hard for three months in the back of a bakkie in Angola.

But it's impossible for us to do such a comparative test. That's why we decided to test the fridges in a lab.

We tested four aspects:

- The speed at which a fridge cools down;
- The amount of power used to cool down;
- The amount of power the fridge uses to maintain the low temperature after cooling; and
- The speed at which it warms up again after we switched it off, which of course tested the efficacy of the insulation.

We used an independent metrologist, the measuring specialists Good Hope Metrology.

The fridges were all left open for 12 hours at 32°C. Then they were all coupled to 12.6V power (we only tested fridges that run on 12V compressors) and set all the fridges to 0°C and closed them with a data logger inside that recorded all the information.

How did we pick the fridges for testing?

We tried to get a 50–60 litre fridge from every manufacturer, because this is the most commonly used size by the majority of readers who use these products. Some manufacturers in-

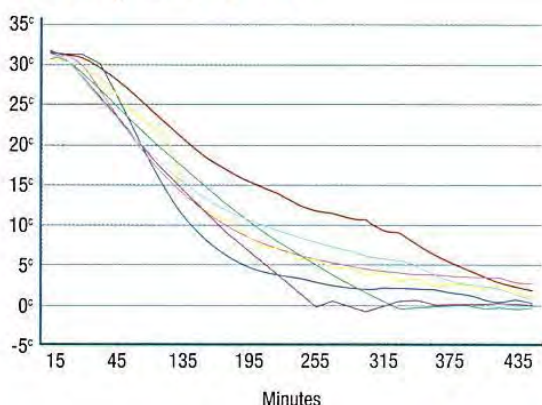
sisted that we tested the 40-litre fridge because these are apparently the bestselling 4x4 fridges. The selection was therefore ar-

bitrary to a certain extent, but we reckon we roughly put the most popular fridges in the market through the mill.



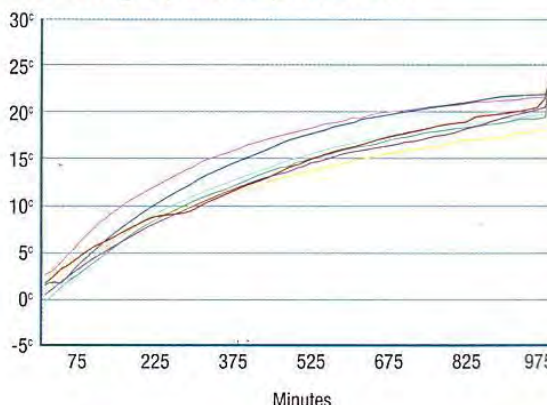
For good measure. If you have a drawer system and every centimeter in your load bay counts, you measure properly before buying a fridge. It's bulky, but makes life easier.

Cooling time to 0°C



■ Waeco ■ National Luna ■ Indel B ■ Campmaster ■ Snomaster ■ ARB ■ Engel

Warming up after power off



	Cooling time: 32°C to 0°C	Average power consumption in cooling period	Average power consumption to keep temperature stable	Warming-up period: 0°C to 20°C
ARB (47 litre)	9 hours 35 minutes	6.2 ampere	182 mA* - 210 mA	13 hours 30 minutes
Engel (40 litre)	6 hours 45 minutes	3.2 ampere	100 mA - 168 mA	16 hours 45 minutes
Indel B TB 55	6 hours 45 minutes	5.8 ampere	300 mA - 410 mA	16 hours 30 minutes
National Luna Weekender 52	7 hours 15 minutes	6.1 ampere	210 mA - 228 mA	10 hours 45 minutes
Waeco Coolfreezer CF50	4 hours 30 minutes	6.3 ampere	185 mA - 233 mA	11 hours 30 minutes
Campmaster 60 litre	6 hours 30 minutes	6.12 ampere	129 mA - 179 mA	16 hours
Snomaster BD/C-40R	4 hours 25 minutes	5.95 ampere	82 mA - 110 mA	13 hours 15 minutes

*mA = milli-ampere



ARB 47-LITRE FREEZER

Old name, new guy

Unlike National Luna and Engel, the Australian company ARB's freezers are fairly new to the market. Few people argue about the quality of ARB's other products, and this particular model was chosen as the best 4x4 freezer by the Australian magazine *4WD Action*.

Specifications

Material: The cabinet is of zinc-steel, and the lid of plastic, sturdy enough for a man to sit on.

Weight: 22.5 kg

Compressor: Danfoss

Battery protection? Yes, adjustable setting

Dimensions: 508 mm (h) x 380 mm (w) x 705 mm (d)

Warranty? Three years

Good points

- It has a handy interior light
- The useful draining plug in the bottom makes it easy to clean
- Easily-removable lid for access from all sides
- Robust and easy-to-handle locking mechanism
- Cleverly designed and adaptable baskets
- Easy-to-see digital meters on top

Other models in the range: ARB also manufactures 35, 60 and 78-litre models

Price: R7 895

Contact: 4x4 Megaworld 021 511 3311 (Western Cape) and 011 454 2874 (Gauteng); www.4x4megaworld.co.za

Drive Out says: This ARB freezer was designed by someone who is well acquainted with the 4x4 lifestyle, because the draining plug, the light, the removable lid and handles were very sensibly thought out.

The ARB doesn't do too well when it comes to its cooling-down period and insulation (it warms up again fairly quickly), but once it's cold, its power consumption is very reasonable.

The price is a bit on the steep side, but you can't fault the ARB's quality and durability.



ENGEL 40-LITRE FREEZER

Tough old fox

Engel is a Japanese product (marketed largely in Australia) that has been travelling with the 4x4 community for 50 years.

What sets the Engel freezers apart from all the other freezers on the market is the so-called Sawafuji swing-motor compressor, instead of the better-known Danfoss compressor in most other freezers.

Engel reckons the Sawafuji is better because it only has one moving part, and because it needs less current to get going.

Specifications

Material: Steel cabinet and lid with fixed steel handles

Weight: 24 kg

Compressor: Sawafuji swing-motor compressor

Battery protection? No

Dimensions: 508 mm (h) x 364 mm (w) x 648 mm (d)

Warranty? Three years

Good points

- LED light inside
- Very robust walls and build quality
- Long-life interior battery connected to a device that continuously gives a temperature reading
- Extremely reliable Sawafuji swing-motor compressor
- Low average power consumption
- Easy-to-reach electronic control panel (it sits on top)

Other models: Engel has nine models ranging from 14 to 80 litres.

Price: R7 495

Contact: 4x4 Megaworld, 021 511 3311 (Western Cape) and 011 454 2875 (Gauteng); www.4x4megaworld.co.za

Drive Out says: Engel's fridges have a reputation for reliability and quality. The steel shell and handles are noticeably sturdy.

The Engel freezer also did very well in our test. It used the least power of all to cool down, and once it was cold, it also used very little power to stay cold. It also looks as if the Engel is the best-insulated, because it took the longest of all the fridges to warm up again.

If you want to find a downside, you could probably say the platinum finish can wear and look ugly in time. Complaints about after-sales service have also surfaced here and there. And although it's expensive, it's the cheapest of the three expensive models. But remember, you get what you pay for.

Electronic Dual Battery Isolator

12 Volt Systems

140 Amp

Specifications and Installation Instructions

WARNING

- PLEASE READ THESE INSTRUCTIONS COMPLETELY PRIOR TO INSTALLATION.
- BATTERIES PRODUCE EXPLOSIVE GASES - Ensure no sparks or flames are present.
- Wear eye protection.
- Vehicles must be in "NEUTRAL " or "PARK ", park brakes "ON "
- Follow all vehicle manufacturer's instructions.
- Beware of moving parts.
- Battery Isolators are designed for negative ground alternator systems with batteries of the same nominal voltage.
- Batteries of differing voltages cannot be used.

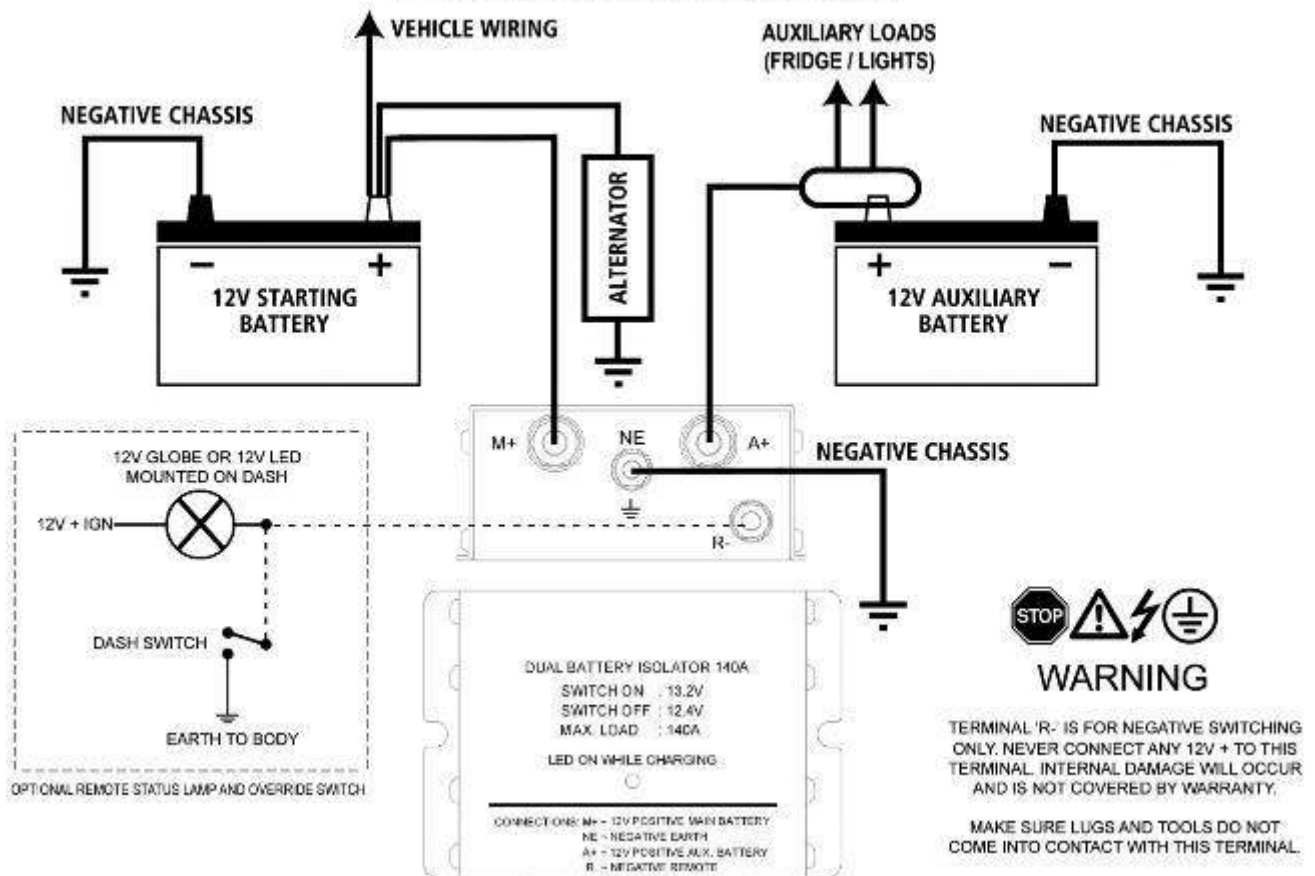
FEATURES

- Easy to Install - The electronic isolator does not require any changes to the vehicle's existing wiring. It can be fitted to all 12V vehicle types.
- Priority Charging for Starting Battery - Ensures that the starting battery is charged before connecting the auxiliary battery in parallel.
- Start Assist - Forced override by remote terminal (optional).

SPECIFICATIONS

VOLTAGE	12V
CHARGING CURRENT	140A / 280A Peak (5 sec start assist)
CHARGE TYPE	Parallel
CONTROL	Electronic
MOUNTING	Surface Mount
CURRENT DRAW	Charging 300 mA (Standby 30 mA)
VOLTAGE DROP	None
SURGE PROTECTION	Built in

TYPICAL WIRING DIAGRAM



Installation.

This installation should not be attempted by unqualified persons.

Disconnect all battery negative posts.

Fit the isolator as close as possible to the main starting battery following the drawing included with these instructions. 6 B&S 13mm² cable is recommended, fit fuses or breakers to the wiring rated at no more than the alternators maximum output. (In most cases a 100 amp fuse or breaker will be sufficient) Earth the isolator to the vehicle chassis / body.

Check that all cables are secure and won't be cut or damaged in any way. Reconnect the batteries.

Operation / Testing.

Make sure no accessories or loads are connected to the auxiliary battery.

Using a volt meter check the voltage of the main and auxiliary batteries.

Start the engine and after a short time the LED on the isolator will come on indicating that the batteries are joined and charging together.

Check the voltage at the batteries again and they should be similar and approx 13.8 to 14.0 volts.

Switch the engine off. The LED may stay on if the batteries are in good condition. Isolation takes place when the main battery voltage drops down to 12.4 volts (This may take up to 2 hours in some vehicles).

If the LED is on and you wish to test the isolation simply switch on the head lights and wait for the LED to go off. Check the voltage at the batteries and they should be different. The head lights should continue to bring the main battery voltage down to well below the 12.4 voltage cut out and the auxiliary battery voltage should remain stable.

If your results are not as above re-check your wiring and the diagram.

You can now connect your accessories to the auxiliary battery following the suppliers instructions.

Note:

If batteries are in poor condition or deeply discharged they may cause the isolator to cycle on and off during the first few minutes of operation as the voltages equalize. This is normal and is not a malfunction of the isolator.

Start Assist / Override: (optional)

Using a dash mounted momentary push button or switch the isolator can be forced to join the main and aux batteries. This aids in starting a vehicle with a low main battery or boosting the aux battery using power from the main battery. Simply ground the 'R' terminal of the isolator via the switch. Do not use start assist for more than 5 seconds while cranking the engine to prevent isolator damage.

Testing Procedure.

Make sure the batteries, earths and all wiring is tight, secure and safe.

Depending on your installation make a note of which battery is the starting battery and which is the auxiliary battery.

Using a multimeter test the voltage of each battery. These should be close to 12.5V if in good condition.

Start the engine.

The starting battery voltage should rise to alternator output voltage 13.8V approx. (+0.5V)

The DBi140 should switch on and the amber LED on the DBi140 should glow, at which point the auxiliary battery voltage will increase to alternator output voltage.



Switch the engine off.

Turn on the headlights and monitor the LED and starting battery voltage.

At 12.4V approx. the LED will switch off and the system is now isolated, the starting battery should continue to decrease in voltage and the AUX battery voltage will remain constant at 12.5V approx.

Switch the headlights off.

You can now test the remote override 'R' terminal. (Optional BLUE wire).

Simply EARTH the 'R' terminal (blue wire) to the body or NEG battery post and the LED should switch on and the isolator will join the batteries for start assist.

This BLUE wire is to only ever be connected to NEG (-).

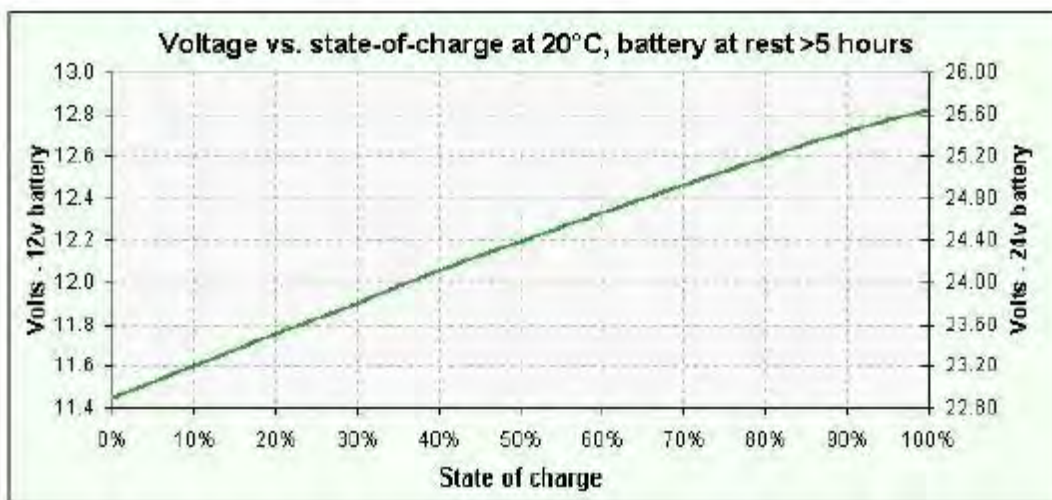
Warning ! Connecting the blue remote wire to (+) will damage the isolator.

Notes: If the auxiliary battery is deeply discharged you may hear the isolator cycle or tick, this is normal and not a malfunction. Make sure to charge the battery fully to prevent cycling.

Optional remote LED and PUSH button switches are available; see isolator instructions on how to connect these options.

Battery Monitoring (OPTIONAL)

There are many battery voltmeters that can be used to monitor the status of the auxiliary battery. These devices simply connect to the battery and show the voltage. The graph below shows basic battery voltage in relation to state of charge.



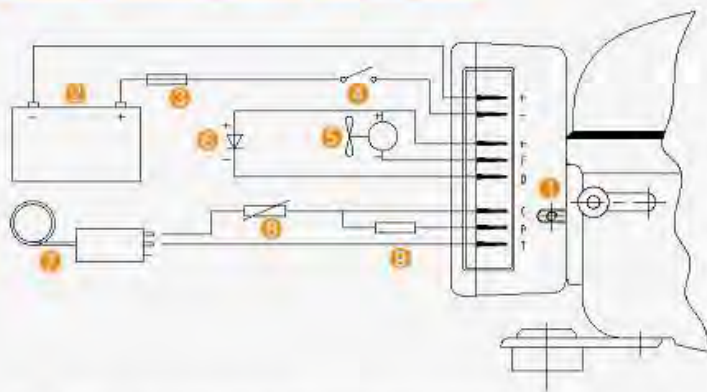
The DBi140-R dual battery monitor with status LED and LINK function is now available. These monitors will show voltage of the starting battery and the auxiliary battery. The LINK switch will activate the start assist function.



For further assistance, hi-res photos or technical help please send us an email.

12/24/48V Direct current Compressors

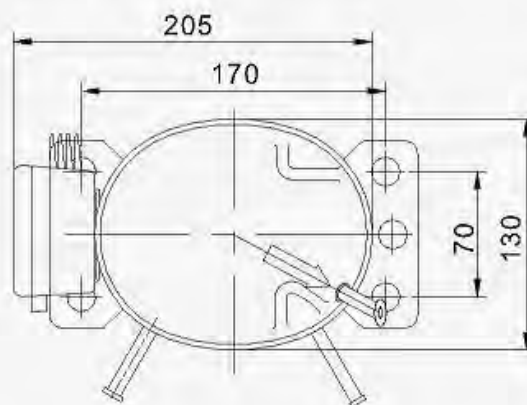
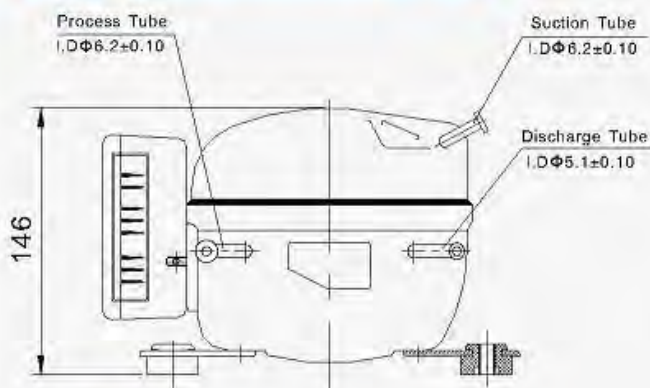
Compressor Wiring Diagram



1. Controller
2. Battery
3. 20A fuse
4. Switching
5. 12V 0.18~0.23A DC Cooling Fan
6. LED (optional)
7. Thermostat
8. Resistor for presetting speed
Resistor for presetting power (optional)
9. Resistor for presetting battery protection voltage (optional)

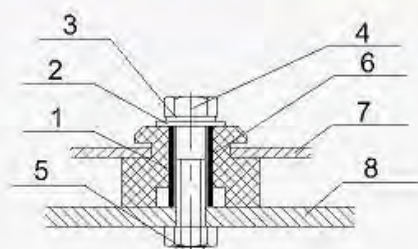
NOTE: You can put an adjustable resistance between the Pin "C" and "T" of the controller, so the output power will be adjusted. The relationship as follow

Compressor dimensions



NOTE: Suction tube and process tube can't be exchanged!

The connection of the Compressor



1. Sleeve
2. Flat washer (not supplied)
3. Spring washer (not supplied)
4. M6 screw (not supplied)
5. Nut (not supplied)
6. Rubber grommet
7. Mounting feet
8. Cabinet floor

12/24V

Performance Data

Refrigerant	Application	Model	Displacement	Rotate Speed	-23.3℃					oil charge	Cooling Type	Certificate	Power Supply
					Ashrae								
					Cooling Capacity			Efficiency					
								COP	EER				
			cm³	rpm	w	Kcal/h	Btu/h	w/w	Btu/W.h	ml			
R134a	LBP	QDZH25G	2.5	2000	43	37	147	1.1	3.75	150	FC	CE VDE	12/24V (DC)
				2500	53	46	181	1.1	3.75				
				3000	63	54	213	1.1	3.75				
				3500	73	63	249	1.1	3.75				

Test Conditions: Evap. Temp.: -23℃ Amb. Temp.: 32.2℃ Cond. Temp.: 54.4℃
Suction Temp.: 32.2℃ Subcooling Temp.: 32.2℃

Controller

- Controller overheating protection, when inside temperature of the controller is over 95℃, the current will disconnect, automatic resetting when the temperature lowering down.
- If outside extension, we suggest to use DC blower fan cool the condenser, the compressor and the controller. Protection signal of controller: flash frequency within 4s.
- Error type: 1 time: fault of hardware, 2 times: over-current, 3 times: over-voltage, 4 times: overload, 5 times: temperature too high.
- Fault connecting of anode and cathode of voltage, compressor not run.

Voltage protection

Resistor protection KΩ	Rated voltage V	Voltage protection
330	12	9.6
	24	20.3
5	12	10.4
	24	22.9

The max power and max rotation speed is optional

Set max output power

Max output power (W)	Regulating speed resistor (Ω)
48	7000
60	5300
72	4200
84	2500
96	≤233

Set max rotation speed

The speed of the motor rpm	Regulating speed resistor KΩ
2000	13
2500	9
3000	5
3500	2.33