SKOPE PEGASUS

PG Vertical Series

Chillers and Freezers

PG600VC

PG1300VC

User Manual

SKOPE®
Refrigeration

SKOPE Warranty Protection

To activate your Warranty Protection, you must register your product with SKOPE within 4 weeks from date of invoice.

To register online:
Visit our website at www.skope.com/warrantyprotection then complete and submit the online registration form.

Or alternatively contact our Customer Services team to register:
1800 121 535 (Australia)
0800 947 5673 (New Zealand)

SKOPE 1-year Extended Warranty
Extend your Warranty Protection by 1 year during registration. Please check you have not already organised an extended warranty through your dealer at time of purchase. For pricing information on an extended warranty visit www.skope.com/warrantyprotection

Service & Support

We know you will get years of satisfaction from your new SKOPE product when you follow a few simple preventative maintenance guidelines.

Helpful information is available on our website www.skope.com/serviceandsupport

Thank you for purchasing a SKOPE refrigeration product.

CONTENTS

1 Models

Chillers

Model	Part No.	Doors	Refrigeration unit	Operating temperature range
PG600VC	H11PV	1	Integral	+1°C to +4°C up to 43°C ambient
PG1300VC	H12PV	2	Integral	
PG600VCr	RH11PV	1	Remote	
PG1300VCr	RH12PV	2	Remote	

Freezers

Model	Part No.	Doors	Refrigeration unit	Operating temperature range
PG600VF	H21PV	1	Integral	-18°C to -21°C up to 40°C ambient
PG1300VF	H22PV	2	Integral	
PG600VFr	RH21PV	1	Remote	
PG1300VFr	RH22PV	2	Remote	

2 Installation

Safety First Always observe safety precautions when using any electrical appliance. Read these instructions carefully and retain them for future reference.

- When the appliance is used by or near young children or infirm persons, close supervision is necessary, especially to ensure children do not play with it.
- Do **not** use this appliance for other than its intended use.
- Do **not** cover the grilles or block the entry or exhaust of airflow by placing objects up against the refrigeration unit.
- Do **not** probe any opening.
- Only use this appliance with the voltage specified on the rating label.
- Ensure the appliance has adequate ventilation as this is essential to economical, high performance.
- Be careful not to touch moving parts and hot surfaces.
- For your own safety and that of others, ensure that all electrical work is done by authorised personnel.
- If the power supply flexible cord becomes damaged, it must be replaced by an authorised service agent or similarly qualified person in order to avoid a hazard.
- Ensure all necessary safety precautions are observed during installation or removal of the refrigeration unit.
- The appliance is not designed to be stable while in motion. Use extreme caution when moving or transporting it.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- Please contact SKOPE Customer Services for advice regarding disposal of this appliance.

CAUTION

Overloading the power supply could damage the appliance and product. Check the rating label inside the cabinet for the safe power supply and current draw.

WARNING

Always disconnect the cabinet from the mains power supply before cleaning or maintenance.

Locating the Cabinet

Location When positioning the cabinet, avoid direct sunlight and warm draughts etc. The cabinet must NOT be situated where it is affected by warm or hot air from adjacent equipment, as this will compromise the airflow and performance of the chiller.

The cabinet must be positioned on a level surface for the doors to shut and seal correctly, and to prevent the condensate tray from overflowing. Adequate allowance should be made for door opening.

Installation Guidelines The maximum recommended ambient temperature (at place of installation) is 43°C for chillers and 40°C for freezers. This appliance will generally use less power when installed in a cooler location.

When installing the cabinet:

◻ Avoid direct sunlight and warm draughts etc.

◻ Allow adequate space for the door/s to open fully.

◻ Ensure the cabinet is positioned on a level surface so the door/s shut and seal correctly and to prevent the condensate tray from overflowing.

◻ The self-closing door/s have internal torsion bars, pretensioned at the factory, and should not require any further adjustment.

◻ Do not overload the power supply. See the rating label inside the cabinet for power supply and current draw.

◻ If a remote refrigeration system is being installed, installation must be done by a qualified refrigeration tradesperson. Refer to page 10 for information.

Power Supply The cabinet is supplied with a 1.8m flexible power cord fitted with a 3-pin plug, which exits out the rear of the refrigeration unit. The power cord should be retrieved before the cabinet is positioned, as wall and partitions may make access difficult.
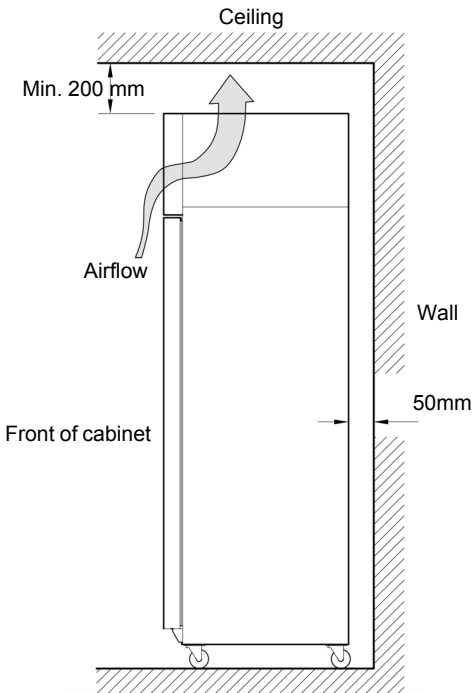

CAUTION
Do **NOT** overload the power supply. See the rating label inside the cabinet for power supply and current draw.

Ventilation For efficient operation of the chiller, it is essential that adequate ventilation be provided above the refrigeration unit. Never store cardboard cartons or other items on top of the refrigeration unit.

When positioning the cabinet, a gap of at least 200mm must be left above the refrigeration unit. The back of the cabinet can be positioned hard against a wall, however a gap of 50mm is recommended to prevent moisture build-up.

> **IMPORTANT**
> To ensure efficient and reliable operation, a minimum of 200mm clear ventilation space is required above the refrigeration unit.

Positioning the Cabinet

The cabinet is supplied fitted with castors as standard and includes a set of adjustable height legs packed inside the cabinet. Alternatively the cabinet may be supplied ready for plinth mounting.
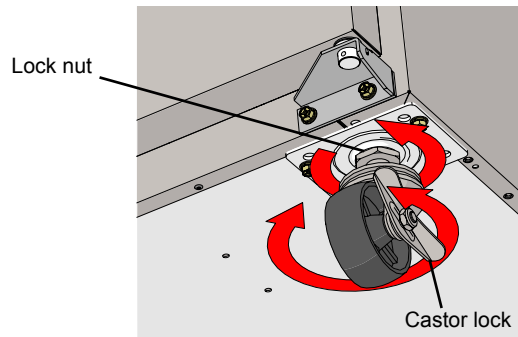
Castors The adjustable castors can be used to adjust the cabinet height up or down through a 15mm range. Refer to the procedure below to adjust the castors.

When adjusting the castors, ensure the lock nut is re-tightened after the final adjustment has been made.

> **CAUTION**
> Ensure the castor lock-nut is re-tightened after castor adjustment.

To adjust castor height

1. Loosen the lock nut.

2. Turn the castor counter-clockwise to raise the height or clockwise to lower. Re-tighten each lock nut after final adjustment has been made.
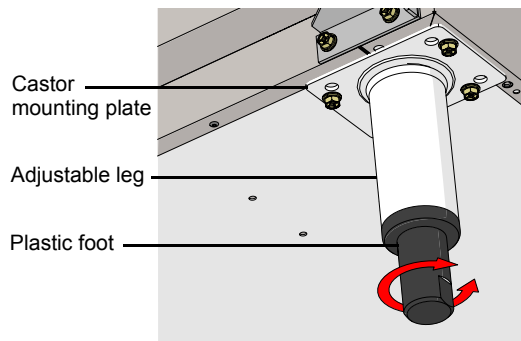
Lock nut

Castor lock

Once the cabinet height and position has been set, lock the cabinet in place with the two front castor locks (one on each castor).

Plinth Mounting Plinth mount cabinets have a flat base and are fitted with a plinth surround, ready for positioning in place.

Legs The adjustable legs can adjust the cabinet height up to 30mm. They screw into the castor mounting plates attached to the bottom of the cabinet. The legs should be fitted to the base of the cabinet before final positioning of the chiller.

To adjust leg height

1. Turn the black plastic foot at the bottom of the leg counter-clockwise to raise the height or clockwise to lower.

Castor mounting plate

Adjustable leg

Plastic foot

Shelving

The cabinet is supplied with two sets of shelves and shelf support brackets per door. The shelves can be positioned at different heights to suit various products.

To fit the shelves

2. Unpack the shelving items from inside the cabinet.

3. Establish the desired position for each of the shelves, based on the height of the product intended to go on each shelf.

4. Fit the stainless steel tray slides into the corresponding slots in both the front and back support rails. Each shelf requires two tray slides.

5. Slide each wire shelf into the corresponding pair of tray slides.

Loading Product

The cabinet should be left running for 30 minutes before loading with product. When loading the cabinet shelves with product:

◻ Ensure all shelves are securely fitted (see above).

◻ Allow air space around all the product, to ensure even cooling and efficient operation of the chiller.

◻ Do not allow products to overhang the front of the shelf as this could prevent the doors from shutting. Leave an airspace of at least 50mm above product loaded on the top shelf.

◻ Products must NOT be stored on the floor of the cabinet.

◻ Do not exceed a maximum loading of 20kg per shelf.

◻ Remove some product if the shelves are flexing or bending.

◻ Do not move the cabinet when loaded with product.

Door Lock

Each door has a key lock, located at the top of the door, on the same side as the handle.

Door Lock

Remote Cabinet Installation

The specifications below are specific to standard Pegasus Vertical Remote chillers and freezers. Exceptions are possible due to model type, installation type, specification and/or customised product.

SKOPE remote cabinets are also supplied with a seperate instruction sheet: *Guidelines for SKOPE remote Refrigeration* (PRN2362). Refer to this for generic SKOPE remote refrigeration installation guidelines.

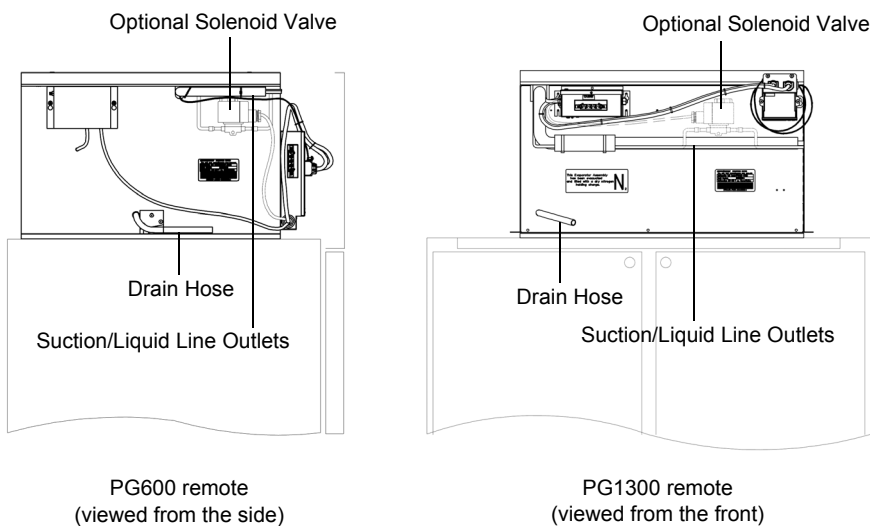**Specifications** **Remote cabinets**

Type	Chiller		Freezer	
Model	**PG600VCr**	**PG1300VCr**	**PG600VFr**	**PG1300VFr**
Refrig. duty	600 Watts	1000 Watts	695 Watts	1070 Watts
Max. ambient temp.*	43°C	43°C	40°C	40°C
Mean product temp.	3.5°C	3.5°C	-18°C	-18°C
Condensing temp.	45°C	45°C	45°C	45°C
Liquid temp.	40°C	40°C	40°C	40°C
Evaporating temp.	-5°C	-5°C	-30°C	-30°C
Operation basis	18/24 hours	18/24 hours	18/24 hours	18/24 hours

*Optimised at 32°C / 65% RH

Electronic Controller When the cabinet is connected to the power supply, the electronic controller will display the current cabinet temperature. On the controller display, the ⊖ symbol will indicate the compressor output signal has been initiated and the ✼ symbol will indicate the evaporator fan is on.

Installation Diagrams Refer to the diagram below (remote chiller unit pictured) for component locations and unit access points.

Pegasus Vertical Remote installation diagram

PG600 remote
(viewed from the side)

PG1300 remote
(viewed from the front)

3 Operation

Automatic Start-Up

Connect the cabinet to the mains power supply and check operation of the refrigeration unit, electronic controller and cabinet lighting.

Refrigeration Unit

Integral

The compressor and the condenser and evaporator fans should all operate within two minutes from the time the cabinet is plugged in. This may be verified by listening for compressor switch-on and checking for air movement inside the cabinet. The compressor and condenser fan will switch off when the cabinet internal temperature reaches 2°C.

Remote

The evaporator fan should operate within five minutes from the time the cabinet is plugged in.

Note: Freezers may take longer depending on evaporator temperature.

Electronic Controller

The electronic controller is located behind the unit front panel. When the cabinet is connected to the power supply, the electronic controller will display the current cabinet temperature.
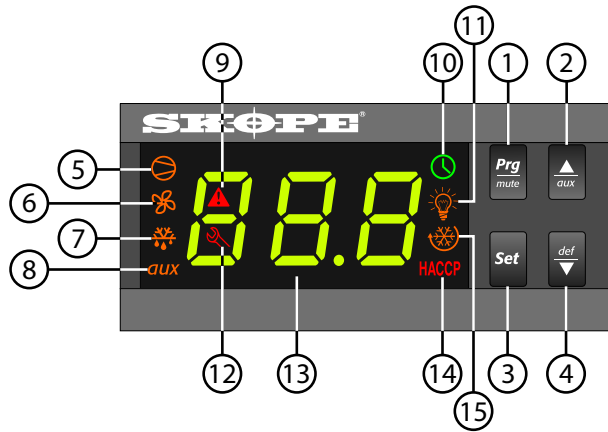
The compressor LED ⊖ will indicate the compressor is operating. The evaporator fan LED ✼ will normally come on within 2 minutes (see page 11 for controller display).

To ensure efficient operation, the electronic controller forces six hourly defrosts. During the defrost cycle, the compressor and condenser fan switches off and the evaporator fan stays on.

Cabinet Lighting

The interior lighting will go on when a cabinet door is opened. The only time that a light should not turn on is either if an LED tube is faulty or the 'CHt' high temperature shutdown alarm has been activated (see page 14 for controller alarms). To replace an LED tube see service instructions on page 15.

HACCP

If Hazard Analysis Critical Control (HACCP) functions are required, to monitor food storage temperature, please contact SKOPE to arrange for an authorised SKOPE service technician to setup the electronic controller.

Electronic Controller

Item	Icon	Function
1	**Prg** *mute*	**Mute / program:** Mutes the audible alarm (buzzer) and deactivates the alarm relay. To initiate program sets, press for 5 seconds.
2	▲ *aux*	**Up:** To scroll settings up (in program mode).
3	**Set**	**Set point:** If pressed for more than 2 seconds displays and / or enables changing the temperature setpoint.
4	*def* ▼	**Manual defrost / down:** Press for more than 5 seconds to initiate manual defrost. To scroll settings down (in program mode).
5	⊖	**Compressor:** ON when the compressor and condenser fan starts. Flashes when activation of the compressor is temporarily delayed.
6	✺	**Fan:** Shows when the fan is operational.
7	❄	**Defrost:** ON when the defrost is activated. Flashes when the activation of the defrost is temporarily delayed due to procedures in progress.
8	*aux*	**Aux:** n.a.
9	⚠	**Alarm:** Flashes in the event of alarms.
10	◷	**Clock:** n.a.
11	☀	**Light:** n.a.
12	⚒	**Service:** Flashes in the event of malfunctions.
13	88.8	**DISPLAY:** Shows the cabinet temperature. Flashes when the door is open.
14	HACCP	**HACCP:** n.a.
15	❄	**CONTINUOUS CYCLE:** On when freezer is running in continuous run mode.

Controller Overview

The CAREL ir33 electronic controller controls and displays the internal cabinet temperature. The electronic controller also signals temperature alarms (see page 14).

For general operation, the electronic controller requires no initial setup or additional programming. When the cabinet is connected to the power supply, the electronic controller will display the current cabinet temperature. The compressor LED ⊖ will indicate the compressor is operating (integral cabinets only) and the evaporator fan LED ❀ will normally come on within 2 minutes.

Temperature Setpoint

SKOPE do not recommend that the setpoint be changed unless it is absolutely necessary, and then only by small increments at a time.

Chillers

The chiller temperature setpoint is factory set at 2.0°C. If necessary the standard setting can be adjusted between 1.5°C and 3.5°C.
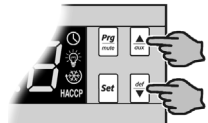
Freezers

The freezer temperature setpoint is factory set at -18°C. If necessary the standard setting can be adjusted between -18°C and -21°C.

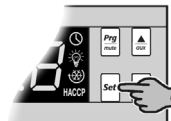### To view and adjust the temperature setpoint

1. To view the setpoint:
   Press and hold the **Set** key for 2 seconds, until the setpoint value flashes.

2. To adjust the setpoint:
   Press either the ▲/aux or def/▼ keys to display the required setpoint value.

3. Press the **Set** key again to memorise the new setpoint value. If this is not done within 60 seconds changes will be lost and you will need to repeat the above procedure.

Controller Alarms

Code	Display	Buzzer	Alarm	Action
HI	⚠ Flashing	on	Product HIGH temperature alarm (auto reset)	1. Check the cabinet product loading to ensure ventilation slots are not blocked, and that product does not overhang the shelves. Ensure the doors are closed.
LO	⚠ Flashing	on	Product LOW temperature alarm (auto reset)	2. Ensure the cabinet is installed with good refrigeration unit ventilation. 3. Check and clean the condenser coil (see page 16). 4. If immediate alarm recovery is required - unplug the cabinet from the power supply for 1 minute, then reconnect to power supply. If alarm persists, contact SKOPE. **NOTE:** The 'HI' and 'LO' alarms deactivate the cabinet lighting and trim heaters.
cht	🔧 Flashing	off	Refrigeration system high temperature pre-warning (auto reset)	1. Clean the condenser coil (see page 16). 2. Check refrigeration ventilation. Ensure clear airpath at the top and front of the cabinet (to extract hot air). A minimum of 200mm clear space is required above and in front of the refrigeration unit.
CHt	🔧 Flashing	on	Refrigeration system and cabinet high temperature shutdown (manual reset)	3. Ensure the cabinet is installed in a suitable environment. 4. To reset the 'CHt' alarm - unplug the cabinet from the power supply for 1 minute, then reconnect to power supply. If alarm persists, contact SKOPE.
E0	🔧 Flashing	off	Ambient probe fault (also flashes 'rE')	
E1	🔧 Flashing	off	Evaporator probe fault	
E2	🔧 Flashing	off	Condenser probe fault	
Ed1	None	off	Defrost over-time limit	To reset alarm - unplug the cabinet from the power supply for 1 minute, then reconnect to power supply. 1. If alarm persists, contact SKOPE.
Etc	🕐 Flashing	off	Real-time clock fault	
EE	🔧 Flashing	off	Controller E prom error	
EF	🔧 Flashing	off	Controller E prom error	
dFb	None	-	Start defrost request	None
dFE	None	-	End defrost request	
dor	⚠ Flashing	on	Door open alarm	Check that a door or drawer has not been left open. Note: The audible alarm buzzer cannot be turned off manually.

4 Servicing

Lighting

Cabinet Interior Lights   The cabinet interior is lit by an LED tube fitted behind the diffuser at the top of the cabinet (PG600), or behind the centre pillar (PG1300). See the table below for LED tube specifications.

LED tube specifications

Cabinet	LED tube description	SKOPE part No.
PG600VC	Ecopoint 5W 360mm T8 LED tube	ELL10435
PG1300VC	Ecopoint 20W 1200mm T8 LED tube	ELL10436

To replace the interior LED light tube

1. Disconnect the chiller from the mains power supply.

2. Remove the diffuser by squeezing it until it is released from the housing, and then push the diffuser out of the way (single door cabinet pictured for clarity).

3. Rotate the LED tube until the pins on the ends of the tube align with the slots, then slide it out.

4. Fit a new LED tube and clip the diffuser back into place. Reconnect to the power supply.

Cleaning

Cabinet When necessary, wipe both the interior and exterior of the cabinet with a damp cloth. Ensure the cabinet is disconnected from the mains power supply before cleaning the cabinet. Periodic cleaning of the condenser coil is also required.

> **WARNING**
> Disconnect the cabinet from the mains power supply before cleaning the condenser coil or washing the cabinet.

Condenser Coil Integral cabinets only. The condenser coil is situated behind the unit front panel. The condenser coil **MUST** be kept clean for reliable operation and to minimise power consumption (a blocked condenser can double power consumption).

To ensure trouble free performance, the condenser coil should be brushed clean once a month and blown clean by qualified service personnel every six months.

Over time, dust may accumulate within the condenser that cannot be removed with a brush. if this occurs, contact SKOPE to arrange for a SKOPE Authorised Service Agent to clean the condenser with compressed air.
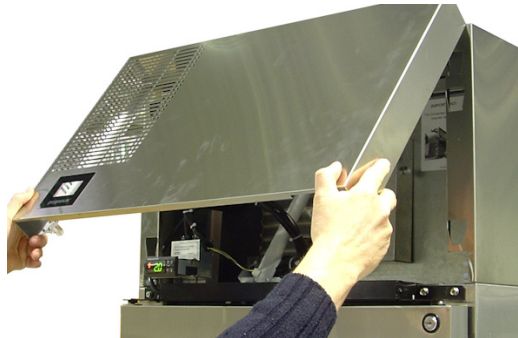
> **IMPORTANT**
> If the electronic controller display flashes '**cht**' the condenser coil must be cleaned immediately.

To access the condenser coil

1. Disconnect the chiller from the mains power supply.

2. Remove the refrigeration unit front panel from the cabinet by pulling the bottom of the panel out to unclip from the side panels and then lift the panel up off the cabinet. Refitting the front panel is a reversal of this procedure.

3. The condenser coil is now accessible for cleaning.

Troubleshooting

Complaint	Possible Cause	Repair
1. Cabinet not operating and no controller display:	• Loss of power supply.	• Check mains power supply.
2. Cabinet lights not operating:	• Failed LED light tube. • Controller high temperature shutdown alarm 'CHt'. • Cabinet ENSTO supply plug not plugged into control box.	• Replace LED light tube (see page 15). • Determine cause and eliminate (see ppage 14). • Reconnect plug.
3. Power consumption is higher than expected:	• Unit operating too hot. • Cabinet doors are opened excessively.	• Clean condenser (integral cabinets only). • Ensure the chiller is installed with good ventilation above the refrigeration unit. • Keep door/s open for minimum time.
4. Product is too warm and spoiling:	• Restricted cabinet airflow. • Temperature setpoint is too warm.	• Ensure product is not blocking airflow slots and the product is no closer than 50mm from the cabinet top. • Adjust setpoint (see page 13).
5. Warm cabinet temperatures and/or compressor operating for long periods (more than 1 hour):	• Blocked condenser. • Poor refrigeration unit ventilation.	• Clean condenser (see page 16). • Ensure the cabinet is installed with good ventilation around the front and top of the refrigeration unit (see page 9).

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- Alters, removes (including part removal) or obliterates (including part obliteration) the trade mark on the product
- Applies any other trade mark to the product
- Adds to the product any written material that is likely to damage the reputation of the trade mark

Notice of the above contractual obligations passes to:

- Successors or assignees of the buyer
- Future owners of the product

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