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HVAC/R
Service Products



KEEP
IT
DRY

CONDENSATE PUMPS

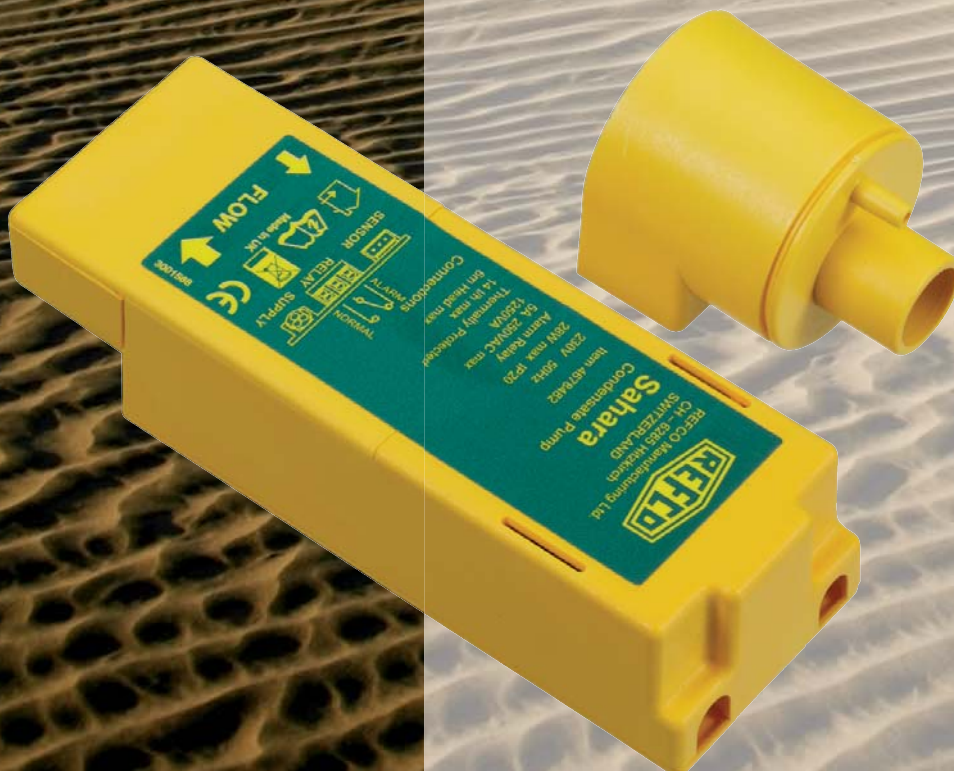
The **SAHARA** is an electronic condensate removal system that fits neatly inside even the smallest high wall split air conditioner. At the heart of the pump is its solid state electronic control system that works with a special timer.

- Fits all wall-mounted splits
- Low profile for ease of mounting
- Mounts vertically or horizontally
- No float to stick
- Quiet
- Thermal protection
- Tiny reservoir / sensing unit

Voltage:	230 V, 50 Hz
Power:	30 W when running
Relay switching:	250 V AC, 5 A, 1250 VA
Pump capacity:	14 l/h
Discharge head:	5 m ↑, 30 m →
Ambient temperature:	0° C to 50° C
Thermal protection:	cut-out 80° C Reset 35° C - 65° C
Sensor-pump tube:	length 1.5 m, diameter 3.18 mm (supplied)

Part No: 4678482

SAHARA





KAROO

The **KAROO** is a Drain Pan Pump which turns on to remove the defrost water from a refrigeration cabinet, or condensate water from an air conditioner. The water level is measured by a sensitive electronic sensor and this controls the operation of the pump via the fully-encapsulated circuitry.

- Efficient removal of defrost water from refrigerated cabinets
- Works also under water
- Filter and non-return valves built in
- No mechanical floats to stick – electronic sensing reliability
- All electrical components safely encapsulated against moisture ingress

Voltage:	230 V, 50 Hz
Power:	30 W pump running, 0.33 W pump off
Discharge head:	6 m ↑, 30 m →
Water temperature:	40° C max.
Thermal protection:	cut-out 50° C
Discharge tube size:	6 - 6.35 mm / (1/4") i.d.
Material:	flame retardant
Dimension:	120 x 40 x 32 mm (LxWxH)

Part No: 4678512

CONDENSATE PUMPS

The **YUMA** fills the continuing need for a small pump which will fit inside the tubing chase of a High-Wall-Mount Air Conditioner, and will quietly and efficiently pump all the condensate to a drain. Completely automatic operation is enhanced by the Electronic Noise Control© circuitry to give quiet starting and stopping, as well as power control to regulate the amount of power needed to remove the condensate.

- Powerful and compact
- Electronic noise control for quiet operation
- AquaSensor Electronic Water Sensor and control
- Technically advanced automatic operation
- High Water alarm and cut-out switch
- Built-in easy-cleaning filter
- Horizontal and vertical mounting possible

Voltage:	230 V, 50 Hz
Power:	30 W when running
Alarm relay rating:	250 V, 5 A max. break on fault
Pumping capacity:	12 l/h
Discharge Head:	15 m ↑, 100 m →
Water temperature:	25° C max.
Ambient temperature:	0° C to + 50° C
Discharge tube size:	6 mm internal diameter
Material:	flame retardant
Dimension:	192 x 40 x 35 mm (LxWxH)

Part No: 4678520

YUMA



GOBI



The **GOBI** is a condensate discharge module designed for modern wall mounted Air conditioners. Because of the aesthetic design the Gobi can be used with all wall mounted air conditioners; it needs no space inside the air conditioner!

- Quick simple trouble free installation
- Easy access promotes fast, efficient servicing
- Aesthetic design blends naturally into its surroundings
- Built-in non-return valves
- Electronic noise control
- AquaSensor electronic condensate sensing
- Built-in alarm circuit
- Filter built in

Voltage:	230 V, 50 Hz
Power:	30 W
Alarm relay:	250 V AC, 5 A
Pumping capacity:	12 l/h
Ambient temperature:	0° C to + 40° C
Discharge head	15 m ↑, 60 m →
Discharge tube size:	6 mm
Material:	flame retardant
Dimension:	242 x 55 x 50 mm (LxWxH)

Part No: 4678538

WATER SENSOR SWITCH, LOW AMBIENT CONTROLLER AND INVERTER CHECK KIT



AQUASWITCH

The **AQUASWITCH** is an electronic Water Switch for valves, pumps and alarms. The AQUASWITCH is a small controller with a sensitive electronic circuit encapsulated inside. Constructed for all applications where a reliable switch is needed to control or indicate the presence of water.

- Electronic switch
- Water detection with accurate switching level
- AquaSensor electronic water detector has no moving parts and non-contact sensing
- All components totally encapsulated for safety against moisture ingress
- High reliability
- Small enough to be used in restricted spaces

Voltage:	95 - 254 V, 50 Hz
Max. switched relay current:	5 A
Relay switch-off delay:	2.5 +/- 0.5 seconds
Ambient temperature range:	0° C - 75° C
Water Level for Switching Relay:	1.0 +/- 5 mm (depends on water quality)
Cable Length:	500 mm

Part No: 4678741

AQUASWITCH-24

Voltage:	24 V AC/DC
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Part No: 4678546

The **LAC UNIVERSAL** is an electronic controller for outdoor fans on heat pumps and cooling-only air conditioners. By controlling the speed of the fan in changing ambient temperatures this electronic controller brings benefits to all air conditioning installations.

- Helps prevent freeze-up of indoor coils
- Works with all refrigerants
- Shorter compressor run times
- Improves seer's
- Fits inside the smallest condensing units
- Smooth control of fan speeds



LAC UNIVERSAL

Fan motor voltage:	230 V, 50 Hz
Max. continuous Fan motor current:	2 A
Max. fan motor start current:	5 A
Controller max. ambient temperature:	50° C
Condensing temperature control range:	30° C - 60° C
Fan minimum speed adjustment range:	0 - 100% (factory set to approx. 30%)
Heat pump solenoid valve voltage:	24 V AC - 250 V AC
Sensor cable length:	1 m

Part No: 4678555

INVERTER CHECK KIT



LAC EXTREME

The **LAC EXTREME** is a Low Ambient Controller for all air cooled condensing units in air conditioning and refrigeration units with fan motor. The intelligent logic programmed into these high specification controllers decides the correct speed for the outdoor fan, whether the fan should stop and for how long, to provide the maximum system efficiency.

- No over-condensing even with outdoor temperatures down to -20°C
- No iced-up indoor coils
- Higher efficiency through shorter compressor running times
- Simple to set up – just tell it what condensing temperature you want
- Suitable for all refrigerants
- No liquid slugging – extends compressor life
- Suitable for heat pumps and cooling-only air conditioners
- Also suitable for single or dual-circuit condensers

Supply voltage: 230 V, 50 Hz
 Fan motor running current: 4 A max.
 Ambient temperature: -30° C to + 50° C
 Set point condensing temperature range: +30° C to + 60° C
 Input voltage from reversing valve: 24 to 240 V 50/60 Hz
 Dimension: 130 x 69 x 38 mm (LxWxH)

Part No: 4678563



The **INVERTER CHECK KIT** is an invaluable test kit for the analysis of problems solving with inverted-fed air conditioners.

Designed to be used both in installation and maintenance, this kit can indicate correctly-operating inverter power stages, as well as the serial-link communication between the condensing unit and the indoor units. This allows the air conditioning engineer to easily identify faults and reduces the time required for analysis and repair. The kit contains the electronic module with a set of leads for testing the serial communications links, as well as a selection of cables and connectors for the power output terminals of the inverter.

- Suitable for all sizes and manufacturer's air conditioners
- Crocodile clips, hook connectors and cable sets provided
- Shows up damage to Inverter Output Stage
- Identifies pc-board or wiring faults on Data Link Circuits
- LED indicators show correct operation

Dimension: 81 x 73 x 28 mm (LxWxH)

Part No: 4678571

ACCESSORIES



ACOUSTIC JACKET

ACOUSTIC JACKET for SAHARA

The **ACOUSTIC JACKET** is an accessory for the application of SAHARA Pumps in extreme noise sensitive environments. The SAHARA pump is inserted into the rubber sleeve and the ends are then plugged with the inserts supplied.

Part No: 4678589



IN-LINE-FILTER

In-Line Filter for SAHARA and YUMA

The In-Line Filter fits in the drain line from an Air Conditioner to its Condensate Pump, and should be used wherever dirt particles, construction debris, hairs or greasy deposits can be washed from the drain tray down into the pump.

Part No: 4678597

PVC-TUBE

Plastic Tube

6 mm (1/4"), minimum 30 meters

Part No: 4679160

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