Webasto - AIR-CONDITIONING

SELECT SERIES - SPLIT-AIR UNITS

1 = SELECT 5000 to 20000 BTU with Air Transition Box with 5 outlets 80 or 100 mm Diam.
2 = Blower Module Straight Inlet - Cabin 2
3 = Blower Module Side Inlet - Cabin 1
4 = Blower Module 90° Inlet - Cabin 1
5 = Special Smooth Bore Suction Ducting Int. Diam 80 or 100 mm with Thin High Performance Insulation

ATTENTION: Unit + Blower Modules have been scaled up for better detailed viewing. Real Components are smaller as compared with interior outfitting and upholstery.
# SPLITAIR AIR-CONDITIONING UNITS - SELECT SERIES

## OPERATION AND INSTALLATION MANUAL

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In a Split-Air system the air is drawn through the common evaporator by remote mounted Split-Air modules connected to the air-transition box by special smoothbore insulated ducting. This principle allows a reduction in duct diameter to 80 and 100 mm and ducts lengths of up to 6/8 meters. In a typical Split-Air set-up 1, 2 or 3 Split-Air modules are controlled directly by the main digital panel and situated in the main salon or cabin. 1 or more secondary Split-Air modules are placed in other cabins. These secondary Split-Air modules have their own independent blower speed control which allows the occupants of these cabins to control their own environment.

**HOW DOES IT WORK?**

After a further delay of approx. 50 seconds the compressor(s) will start up and the normal operation cycle will begin.

**2004 SERIES DIGITAL DISPLAY**

As from June 2004 all Webasto air conditioning units are controlled by a new Digital Display <AIR CONTROL> 2004 SERIES which gives access to all functions necessary for the normal operation of the unit and attached accessories (blowers, pumps, etc).

2004 Series Electronic Controls are easily recognized by their special removable bezels.

**STANDARD ELECTRICAL ACCESSORIES**

**MINIMUM STANDARD CONTROL ELEMENTS DELIVERED FOR ALL WBCS SPLITAIR UNITS**

Summary : 1 Alu control box + 1 display cable + 1 digital control panel (External air-sensor is optional)

**ELECTRICAL CONTROL BOX**

**DIGITAL DISPLAY PANEL**
The new 2004 displays are backwards compatible with the older TCC electronic controller cards. In that case however the dedicated Blower key is not operational.

All Webasto air conditioning units are sea-water cooled by means of an AC sea-water pump.

In order to start the system you only need to press the On/Off key on the digital display.

From there on the electronic control unit takes care of the progressive starting up of the air conditioning components as well as it’s normal functioning.

The digital display will show the present room temperature of the cabin in which the digital display is situated or where the main temperature sensor is located (in case the optional secondary temperature sensor is used).

The WEBASTO <AIR CONTROL> digital display gives access to information and controls at three distinct levels:

- Immediate Access - Level 1:
  1) Room temperature read-out in the main 4 LED display window
  2) 3 small LED’s to the left indicating the operating cycle presently active:
     - Cool cycle only operation.
     - Automatic cycle switching governed by the end-users entered set-point temperature.
     - Heat cycle only operation.

- 3) 2 set-point keys give immediate access to the thermostatic set-points for blower-control (“Sun” and “Snow” keys). These keys are also used to alter programming values - see hereafter chapter 6.

- Start-up delay:
  After pushing the On/Off key the LED’s will display <On> while initializing the system. Push again to stop operation - the display will briefly show <Off> before extinction.

- The adequate LED to the left (heat, cool, etc) will come on after approx. 15 seconds and compressor operation will start after approx. 50 seconds.

- The sea-water circulation pump will come on approx. 9 seconds before compressor start-up.

- Modification of set-point temperature:
  The set-point temperature i.e. the temperature desired by the operator for blower operation directly connected to the TCC controller card, can be modified as following:

  1) Press and hold one of the set-point selector keys and wait until the new desired set-point temperature is obtained. Release the set-point key.
  2) The display will return to normal room temperature read-out after approx. 5 seconds.

- Special New Features - 2004 Series:
  A) New dedicated Blower speed key:
     - the new 2004 Digital Display provides for a dedicated blower speed key which allows for improved energy efficiency and comfort control.
you to cycle through the speed settings. The <F> key from 2004 onwards is only used for programming and setting purposes

**B) New self-priming pumps :**
WEBASTO Marine has developed in partnership with one of the major pump manufacturers a new variable flow ultra-silent self-priming pump. This pump will automatically adjust its flow rate to the real required capacity i.e. during a hot sunny afternoon the pump will run at full speed, during the night it will slow down to minimum speed.

This new pump is referenced : WEBASTO200; it is basically a DC pump with a special control unit between the TCC controller card and the pump allowing to adjust the pump speed as needed. The use of standard 230V AC pumps is still possible without any restriction.

As from July 2004 all self-contained units from 5000 to 16000 BTU will be equipped with these new self-priming pumps.

Installation of these pumps can be above the water-line to 250mm approx.

Flow rate varies between 6 and 12L/min. approx.

**Continued Features - 2000 Series :**

**C) Automatic blank/sleep mode -** programmable time delay. Factory default : 15 minutes. While in blank/sleep mode the cycle LED flashes discretely every 20 seconds. To go back to normal operation push any key.

**D) Calibrate all blower speed settings** in real time mode.

It is now possible to calibrate all speed settings (1 to 5) before actually putting the system into service.

To do so enter programming mode with set-point at 15°C.; proceed to following line i.e. line <6> = speed 5 (max). (see chapter 6)

The blower will start to function as soon as you access code <6>.

Alter value to the right of code <6> and blower speed will immediately change in real time. When satisfied go to following line <7> = speed 4 and do the same.

Proceed until lowest speed N° 1 and go back again to speed N° 5 if not satisfied.

When all speeds are programmed according to need, validate by pushing On/Off key (<memo> will be displayed briefly). See also page 8 - programming access.

**Warning :** Never program speeds so low that the blower is in danger of stopping or will not re-start at that setting.

This will inevitably entail motor-windings burn-out and will not be covered by the WEBASTO warranty.

**E) Automatic De-Icing Control :**

During intermediate seasons (spring, autumn) when moderate temperature conditions prevail, there is a definite risk of icing the evaporator coil in cool mode and pressure safety cut-outs in heat mode.

To allow maximum blower speed variation and still function within a normal operating window, the TCC card is equipped with a second temperature sensor which reads the exact evaporator coil temperature.

Whenever coil temperature approaches the danger zone, blower speed is increased to half speed; if that is not sufficient the micro-processor will stop compressor operation for pre-determined intervals and will resume normal operation when coil temperature has moved back to within normal operating values.

This feature is completely transparent to the end-user without an error code display; in short this feature belongs to the normal operating procedures in the same way as the temperature set-points.

**F) Infra-Red Remote Control :**

Infra-red remote control can be obtained as an option. This remote control is based on the standard protocols also used by TV and other appliances. Although the WEBASTO controls have been chosen so as to avoid interference with most TV models, the end-user should be aware that in certain cases interference may occur with TV sets or other appliances.

In general it is therefore advisable to avoid locating a WEBASTO Air Control panel next to other appliances using infra-red control units whenever it is planned to use infra-red control mode.

**G) ACCESS CODE :**

The end-user can deny access to all program settings by introducing an access code (see page 8 - code <b>). Blower speed and set-points always remain accessible.

Once an access code is validated, the digital panel will show <Code> if the end-user tries to access other functions then blower speed or set-point. To gain full access push the sun key to reach the code value as programmed and push the F/Blower key again to gain access to full program settings.

**3. SECONDARY COMMANDS :**

The <F> key gives immediate access to commands and displays necessary for day to day operation. When pushing the <F> key you will see to the left a code which indicates the type of display or command and to the right the present value.

In order of appearance here-after an explanation of these commands/displays:

- **a) Blower speed control : <b A>(0,1,2,3,4,5)
This command preceded by the letter b (blower) allows the following settings :**

  - A = automatic blower speed adjusted to temperature differential.

  - 1 to 5 = manual speed control

  - Speed control is in real time mode i.e. changes are effected immediately without any validation procedure.

**Warning :** All following functions need validation before a new value is accepted.

Validation is obtained by pushing the <F> key again and by going to the next function line.

Then final validation will occur automatically when the display goes back to room temperature read-out or final validation can be forced by pushing the On/Off key briefly while still in F mode.

**Validation is witnessed by the brief display of the message <memo>.

- b) Read out of evaporator coil temperature : <E10.2> (10.2 ° C) - example.
- c) Cycle mode choice : <F 3> (1 to 4)
The following cycle modes can be chosen manually :

  - 1 = cool cycle only
  - 2 = heat cycle only
  - 3 = automatic cycle switching with reversible compressor
  - 4 = automatic cycle switching without reversible compressor

- d) AC Voltage read-out : <U232> (232 Volts) - example
**4. VISUAL ERROR CODES - DIGITAL DISPLAY**

The following malfunctions will be displayed directly on the digital display by a code and will be followed by a system halt. Whenever any of these codes appear the system is stopped for approx. 60 seconds and then a re-start is attempted.

If for more than 30 minutes the same malfunction occurs, the system will be stopped completely and the error-code will become steady.

No more re-starts will be attempted and the user will have to re-set the system by pushing the On/Off switch or by temporarily cutting out the AC supply to the system.

**List of error-codes and nature of malfunction:**

**Code <AAA>:**

Persistent low voltage (voltage below 195V) for more than 5 seconds - (see also hereafter - Trouble-Shooting - Page 9).

**Code A01 to A08 *) :**

Pressure safety cut-out of compressors 1 to 4. The HP and BP (if present) safety controls are directly controlled by the micro-processor including the time-delays for re-start, etc.

*) **Standard TCC controller cards** have only 1 outlet for 1 single compressor. However the embedded micro-processor program can operate up to 4 WBCS units from 1 single controller card. This special controller card can be obtained on special request but is not standard delivery.

**Warning:**

- models WBCS5 to 16 do not have a low pressure safety switch (BP); therefore if you see a A01 warning on such model, it can only be an electrical connection problem on the grey 3 pole HP/BP connector on the TCC controller card. Check that the connector is properly seated and that the BP strap is properly tightened.

- raise set-point to max. value i.e. 29° C (or temperature read-out (F key - line E).

- un-interrupted blower operation regardless of thermostatic compressor control.

**5. CENTRAL BLOWER CONTROL**

The central <AIR CONTROL> digital display also directly controls the blower(s) of the evaporator(s).

For all WBCS systems, there are two modes of blower control and operation:

- thermostat interruption of blower operation as soon as the desired set-point temperature has been reached.
- un-interrupted blower operation regardless of thermostatic compressor control.

The choice between these two functioning modes can be programmed directly by the end user - see here-after Chapter 6 - programming procedures.

The digital control is initially programmed by the manufacturer in second - i.e. un-interrupted blower operation.

Blower control can be manual with 5 different speed levels or automatic; in this case blower speed will be governed by the temperature differential with the set-point temperature.

Remote blowers speed is adjusted independently by moving the wheel on the side of the bezel.

To gain access to the hidden programming functions proceed as following:

Raise set-point to max. value i.e. 29° C (or alternatively to lowest value i.e. 15° C) - push Off key to extinguish digital display.

Press <snow> and <sun> key simultaneously for approx. 3 seconds until you see to the left of the display window a single number code indicating the programming line presently valid and to the right the programming value.
To go to the next programming line, push the <F> key.

If you modify the programming value of any line, you need to validate this new value by pushing the <F> key again to move to the next line. This step will validate and memorize the changes made.

1° Functions accessible by raising the set-point to 29° C. :

Code <0> - factory setting : +3°C - lower set-point temperature of the evaporator coil temperature when in cool cycle. This value gives the compressor cut-out point when the de-icing mode is activated (in cool cycle).
Adjustment range : between -4°C and +15°C

Code <1> - factory setting : +8°C - higher set-point temperature of de-icing procedure. This value gives the re-start point of the compressor after a thermostatic interruption when in de-icing mode.
Adjustment range : between 2°C and +18°C.

Code <2> - factory setting : 40°C. Higher set-point temperature of the “de-icing” procedure in relation to the evap. coil temperature when in heat cycle (to avoid HP cut-outs). Gives the cut-out point of the compressor(s) when functioning in heat cycle.
Set-point temperature adjustable between 30°C and 50°C.

Code <3> - factory setting : 35°C. Lower set-point temperature of coil temperature cut-in when in heat cycle. Gives the cut-in point of the compressor after an interruption (“de-icing” procedure) when functioning in heat cycle.
Set-point temperature adjustable between 27°C and 52°C.

Code <4> - pre-programmed value : 0 - calibration of the evaporator coil temperature read-out - correction possible between -9°C to +9°C Celsius.

Code <5> - factory setting : 15 - time delay in minutes before the digital display goes into blank/sleep mode. Cycle LED flashes discretely to indicate system is operational.

Code <6> - factory setting : 1 - first start up delay in seconds after connecting AC supply. To stage starting of several WBCS units when switching on AC supply after an interruption.

Code <7> - factory setting : 0 - calibration of room temperature read-out. Correction between +9 and -9°C.

Code <8> - pre-programmed value : 0. Factory calibration of AC voltage 50 Hz as displayed on the digital panel when accessing the secondary commands - F/Blower key. Correction between -20 and +20 Volt.

Code <9> - pre-programmed value : 2 - Time delay before re-start in minutes after a compressor stop when in “de-icing” procedure. (both for cool and heat cycle).

Code <A> - pre-programmed value : 0. Factory calibration of AC voltage 60 Hz as displayed on the digital panel when accessing the secondary commands by the F key. Correction between -30 and +20 Volt.

Code <B> - Program version

Re-initializing of factory default settings :

It is possible to force the program to re-initialize all program values to factory default settings by the following procedure:
When reading the <b> line as above (through the 29° set-point), push the <sun> key until the program version starts to flash. Keep the <sun> key pushed down until the display shows <init>.

Leave programming mode by pushing On/Off key - you are now back to the factory default settings.

Code <C> - Factory setting : 0 - Pump1 outlets on the TCC controller card non-regulated for standard 230V AC sea-water pump. For the use of the new WEBASTO200 self-priming variable speed pump this code should be set to <1>. In that case the AC outlet is pulse hashed to enable variable pump speed.

Code <D> - Factory setting : 12(V) - Lower adjustment ceiling DC output for special self-priming pump. Can de adjusted to higher ceiling (18V) - see also Code <E> here-after.

Code <E> - Factory setting : 18 (V) - Higher adjustment ceiling DC output for special self-priming pump. Can be adjusted downwards to lower ceiling - see also Code <D> here-above.

2° Functions accessible when lowering the set-point temperature to 15° C :

Code <0> - pre-programmed value : 195 - low voltage cut-out value AC.
Time delay is 5 seconds approx. i.e. the low voltage situation will have to persist during more than 5 seconds before cut-out occurs.

After cut-out the electronic controller resets and will start a new cycle. So a renewed attempt to start the compressor will occur after approx. 90 seconds.

During low-voltage cut-out the display panel will show the 3 letters <AAA>.

Programming of a cut-out level below 195 V is done at the entire risk of the operator. It
should be noted that almost all compressor manufacturers decline all responsibility for defects resulting from operating the compressors below 195V AC.

**Code <1>** - factory setting : 0 - infra-red remote control :
- 0 = infra-red remote control disabled (in this mode no interference is possible with other infra-red commands)
- 1 = infra-red remote control active

**Code <2>** : Blower type : Centrifugal or Cross-Flow. Factory default : 1
- 0 = centrifugal blowers only
- 1 = centrifugal + cross-flow
- 2 = for use with OND800 inverter only. Special AC/DC self-contained units.

**Code <3>** - pre-programmed value : 1 - basic choice of blower control :
- 0 = thermostat control of blower operation i.e. blower operation will be interrupted thermostatically when reaching the appropriate set-point.
- 1 = un-interrupted blower operation regardless of the thermostat control.

**Code <4>** - factory setting : 1 - Choice between integrated air sensor and external air sensor :
- 1 = air sensor integrated in digital display
- 0 = external air sensor

**Code <5>** - Celsius or Fahrenheit display - factory setting : 0
- 0 = Celsius read-out
- 1 = Fahrenheit read-out

**Code <6>** : modification speed N° 5 (max)

**Code <7>** : idem speed N° 4

**Code <8>** : idem speed N° 3

**Code <9>** : idem speed N° 2

**Code <A>** : idem speed N° 1

**Code <b>** - factory setting : 0 - access code for programming mode.
- 0 = no access code required
- 1 to 99 = access code/number activated

*) Factory access code : in case the system is blocked and the access code cannot be found, you can access the programming line by using the factory code number : 64

**Code <c>** - factory setting : 1 - duration in minutes of heat cycle operation under the dehumidifying cycle.

**Code <d>** - factory setting : 1 - duration in minutes of cool cycle operation under the dehumidifying cycle.

**DIPSWITCHES :**

The TCC controller card has a dipswitch arrangement which should be set and maintained according to the following settings:

1) TCC controller for single compressor without the secondary card for compressors 3 and 4 :

**Warning :** if dipswitches are not set according to the above configurations i.e. according to the number of compressors effectively on line, the TCC controller card may behave in unpredictable manner :

- the initialisation <init> can not be completed - card remains locked on start-up.

- HP/BP alarms for non--existing compressors.

7. **PRACTICAL INSTALLATION GUIDE**

1) **Sea-water cooling :**

Install the pump/strainer assembly in such a manner that a natural gentle upwards slope exists from the sea-cock to the pump itself. See also drawing hereabove ref. 6.1.

It is strongly recommended to install an air-bleeder system both in the suction line as well as immediately after the discharge outlet of the pump. The advice is especially valid for pumps CLD250/350/1000. The CLD1500/2000 and Calpeda pumps 0.5HP to 1 HP generally will not require a bleeder system to ensure proper operation.

For ALL boats it is strongly recommended to install a water-scoop at the entry of the sea-cock and directed towards the bow of the boat so that at speed positive pressure builds up in the supply line to the sea-water pump.

2) **Sea-water cooling exits :**

Provide for a separate sea-water exit for each air-conditioning unit installed even if only one pump provides cooling for all units. Introduce shut-off valves for each unit if 1 pump provides cooling for more than 1 air-conditioning unit.
This will allow easy priming of the circuit and also calibration of the sea-water flow for each air-conditioning unit in case of imbalance in the water tubing lengths.

3) Evaporator coils :

The finned coils of the evaporators and/or air-handlers are fragile. When during installation the fins of these coils are damaged, take care to re-align the fins in order to not impair proper air-flow.

4) Air-ducts :

Flexible air-ducts need to be of good quality with sufficiently strong steel or plastic reinforcement. Do not restrict air-flow by bending the air-ducts too tightly or by accidental local deformation.

Do not install air-ducts of excessive lengths (+ 2.5 ml); the pressure loss and consequent reduction of air-flow will seriously diminish the efficiency of the installation.

8. ROUTINE CHECKS

When starting up an air conditioning unit it is advisable to carry out a certain number of routine checks to ensure proper functioning of the unit.

- always check (especially after a long absence) the functioning of the sea water cooling system. Immediately stop the system if no sea-water comes out of the pump exit after compressor starts up.
- periodically check the air filter in the return air grilles. Clean if necessary.
- check condensation drain from the evaporator drain pan.
- take care to not damage the air-ducts. A damaged air-duct may stop air flow through the evaporator, freeze up the evaporator and subsequently damage the compressor.
- when preparing for winter lay-up take care to rinse all sea-water circuits with a fresh-water/glycol solution (25% or more depending on local winter conditions).

8A. TROUBLE SHOOTING

1) No sign of live : check main electrical supply, fuses, etc.
2) The digital display shows 3 lettres <AAA>. This means a persistent state of low voltage (less than 195 V AC). The system will re-start as soon as the voltage level climbs above cut-out level and the system will then re-start after a time-delay of 1 minute approx.
3) The compressor will start but no sea-water circulation can be observed :
   - check sea-cock to sea-water pump.
   - check sea-water strainer
   - check if pump rotates
   - if the pump does not turn with the compressor working, check power-supply from the main control unit box to the pump.
4) Compressor and pump work but no correct operation in either cool or heat cycle :
   - check proper air ventilation - blowers. If air flow completely stops with the compressor working, the evaporator coils may freeze up completely, obstruing all air circulation.
   - during the heat cycle with too slow a sea-water circulation you may actually freeze up the sea-water in the cupro-nickel condenser and completely block the system.
   - check voltage level. Do not operate a system with a persistent voltage level below 195 V AC.
   - check freon charge if operation is still not satisfactory, after having checked all the above points.
5) The compressor works but is subject to intermittent stops without having attained the desired set-point temperature.
   - the HP and BP (if present) pressure safety switches stop the compressor because of abnormal working pressures either on the high or on the low side. Check proper functioning of the cooling circuit. Check ventilator/blower system for obstructions.
   - incorrect freon charge (over-charge or insufficient charge level).

See also here-above : Error codes/inter rupted system operation.

6) The heat cycle takes very long to get started.
   - normal if the sea-water temperature is very low. If sea-water temperature drops below approx. 8° C, the heat cycle becomes much less effective and takes long to get properly started.

*    *    *

Edition dated 1st November 2005
9 - AIR DUCTING - VENTILATION

1) MINIMUM AIR DUCTING

In order to obtain an acceptable air flow, the use of 80 mm interior diameter special smoothbore insulated ducting is highly recommended. No performance warranty will remain if other air ducts are used. If several blowers are connected on one air outlet, the section should begin at 100 mm before splitting in 80 mm.

The blowers include their transition box and grilles. The grilles may be mounted horizontally or vertically, the thick side facing outside. The grilles are not symmetrical to allow air deflection.

2) BLOWER INSTALLATION

In order to ease the installation, you may use two circular saw (90 mm and 64 mm diameter). The grille is maintain on the blower with 6 self threading screws. After installation, just clip on the bezel.

3) ELECTRICAL CONNECTION

The blowers are all connected to the electronic card. The blowers of the main cabin, managed by the digital display, are connected on the FAN outlet. The remote blowers with independant speed control are connected on the piggy card (see picture).

5) RETURN GRILLE OFFSET

It is best to avoid placing a return air grille directly opposite the finned coil surface of the cooling unit. This will inevitably allow propagation of direct noise through the grille. Always try to offset the grille so as to chicane the return air to the coil inlet.

This will lower direct noise propagation in a significant manner.

Template of wall cutting
WIRING SCHEMATICS - SPLIT-AIR WITH NON-SELFPRIMING SEAWATER PUMP

- **GREEN LINES**: PRECABLED WIRES IN CABLE HARNESS

- **ADD-ON CONTROLLER CARD (ON/OFF) FOR REMOTE SPLIT-AIR BLOWER MODULES**

- **DISPLAY CABLE**

- **EXTERNAL AIR SENSOR**

- **EVAPORATOR TEMP. SENSOR**

- **SEAWATER PUMP** (Non Self-Priming)

- **AC 230/115V Supply**

- **BP SAFETY SWITCH** - 12000 BTU and above

- **HP SAFETY SWITCH**

- **REVERSED CYCLE VALVE**

- **TO SPLIT-AIR BLOWER MODULES** WITH SPEED CONTROL

- **TO SPLIT-AIR BLOWER MODULES** WITHOUT SPEED CONTROL

- **TO AC COMPRESSOR**

- **ADD-ON CONTROLLER CARD (ON/OFF) FOR REMOTE SPLIT-AIR BLOWER MODULES**

- **GREEN LINES**: PRECABLED WIRES IN CABLE HARNESS

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WIRING SCHEMATICS - SPLIT-AIR WITH CLD200 SELF-PRIMING SEAWATER PUMP

- Red = phase
- Blue = neutral
- Brown = ground
- Green = prewired in factory

In the same electrical box:
- Self-Priming Pump
- Controller card + pre-wired AC supply cable

In the electrical box:
- Controller card
- Pre-wired AC supply cable

Components:
- ADD-ON CONTROLLER CARD
- FOR REMOTE SPLIT-AIR BLOWER MODULES
- DISPLAY CABLE
- EXTERNAL AIR SENSOR
- TP SAFE-TY SWITCH
- HP SAFE-TY SWITCH
- REVERSED CYCLE VALVE
- AC 230/115V Supply
- GND
- HP SAFETY SWITCH
- BP SAFETY SWITCH
- 12/16/20/24/30000 Btu
- TO SPLIT-AIR BLOWER MODULES
- WITHOUT SPEED CONTROL
- TO SPLIT-AIR BLOWER MODULES
- WITH SPEED CONTROL
- TCC V3 Controller Card
- REVERSED CYCLE VALVE
- TO AC COMPRESSOR
- TO SPLIT-AIR BLOWER MODULES
- WITHOUT SPEED CONTROL
- TO SPLIT-AIR BLOWER MODULES
- WITH SPEED CONTROL
- ADD-ON CONTROLLER CARD
- FOR REMOTE SPLIT-AIR BLOWER MODULES
- DISPLAY CABLE
- EXTERNAL AIR SENSOR
- EVAPORATOR TEMP. SENSOR
- ADD-ON CONTROLLER CARD
- FOR REMOTE SPLIT-AIR BLOWER MODULES
- DISPLAY CABLE
- EXTERNAL AIR SENSOR
- EVAPORATOR TEMP. SENSOR
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- EVAPORATOR TEMP. SENSOR
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- DISPLAY CABLE
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WIRING SCHEMATICS - BLOWER SPEED CONTROL to CROSS-FLOW BLOWER

115/230V AC SUPPLY FROM SPLITAIR UNIT's ELECTRICAL BOX

GND

SPLITAIR BLOWER MODULE

BLOWER ELECTRICAL TERMINALS

BLOWER SPEED CONTROLLER CARD MOUNTED IN GRILLE BASE