

DAIKIN



ADDENDUM INSTALLATION AND OPERATION MANUAL

Option Inverter fans

INTRODUCTION

To achieve a lower noise level, the units are equipped with inverter fans. In addition, it is possible to run the unit in low noise mode during periods that the unit can be used with lower cooling capacity and cooling efficiency.

- When the unit is running in normal mode, the fans of the air cooled condenser will be controlled as to achieve a high pressure of 13.0 bar.
- When the unit is running in low noise mode, the fans of the air cooled condenser will be controlled as to achieve a high pressure of 22.0 bar.

NOTE



In case more cooling capacity is required during low noise mode, it is possible to lower the high pressure value of 22.0 bar via the service menu. In this case however, noise reduction will be less.

ADVANCED FEATURES OF THE DIGITAL CONTROLLER

This chapter gives an overview and a brief functional description of the screens provided by the different menus. Please add this information to the information mentioned in the operation manual.

Readout menu

```

-> UNIT STATUS
C1:OFF-CAN STARTUP
C2:OFF-CAN STARTUP
UNIT:000% LOWNOISE:H
    
```

To consult information about the unit status and to consult if the low noise mode is active or not.

```

-> ACT. PRESSURES C1
HP1: 19.0b = 50.8°C
LP1: 4.4b = 5.2°C
HP SETPOINT C1:13.0b
    
```

To consult information about the pressures and the high pressure setting of circuit 1.

```

-> ACT. PRESSURES C2
HP2: 19.0b = 50.8°C
LP2: 4.4b = 5.2°C
HP SETPOINT C2:13.0b
    
```

To consult information about the pressures and the high pressure setting of circuit 2.
(only for EWAP400~540MBYNN)

Usersettings menu

```

->CAP. LIM. SETTINGS
L3CIR1:100%
L4CIR1:100%
LOW NOISE MODE:CH.DI
    
```

To define the capacity limitations (second screen) and the low noise mode.
(only for EWAP110~340MBYNN)

```

->CAP. LIM. SETTINGS
L3CIR1:100%CIR2:100%
L4CIR1:100%CIR2:100%
LOW NOISE MODE:CH.DI
    
```

To define the capacity limitations (second screen) and the low noise mode.
(only for EWAP400~540MBYNN)

Info menu

```

-> UNIT INFORMATION
UNIT:AW-CO-540 C:STL
CIR:2 EVAP:2 FAN:INU
REFRIGERANT :R407C
    
```

To consult additional information about the unit such as the unit type and the refrigerant used.

Input/output menu

```

-> DIGITAL INPUTS
C1 DISCH.TH.PR.:OK
C1 COMPR.TH.PR.:OK
C1 FAN INU. :OK
    
```

To check whether or not the discharge thermal protector or the compressor thermal protector are activated and to check the status of the fan inverter for circuit 1.

```

-> DIGITAL INPUTS
C2 DISCH.TH.PR.:OK
C2 COMPR.TH.PR.:OK
C2 FAN INU. :OK
    
```

To check whether or not the discharge thermal protector or the compressor thermal protector are activated and to check the status of the fan inverter for circuit 2.
(only for EWAP400~540MBYNN)

```

-> RELAY OUTPUTS
C1 FANON/OFF:OPEN
C1 FANINU SP:00HZ
    
```

To check the status of the fan on/off and the setpoint requested to the fan inverter of circuit 1.

```

-> RELAY OUTPUTS
C2 FANON/OFF:OPEN
C2 FANINU SP:00HZ
    
```

To check the status of the fan on/off and the setpoint requested to the fan inverter of circuit 2.
(only for EWAP400~540MBYNN)

SOFTWARE STRUCTURES

The software structures mentioned in the operation manual, must be replaced by the software structures shown in this manual:

- For the EWAP110~340MBYNN, see [page 3](#)
- For the EWAP400~540MBYNN, see [page 4](#)

SELECTING INSTALLATION SITE

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

DEFINING THE LOW NOISE MODE

The low noise mode can be selected in the CAP. LIM. SETTINGS second screen of the usersettings menu.

The low noise mode can be activated in 3 different ways:

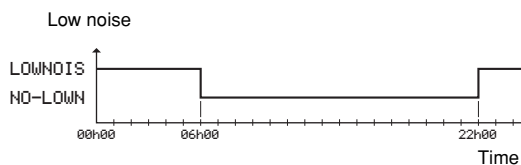
1. Through the schedule timer: LOW NOISE MODE:SCH.T.
Refer to "Defining the schedule timer" in the operation manual. Schedule timers can be set to:
 - LOWNOIS to activate low noise mode at a programmed time.
 - NO-LOWN to de-activate low noise mode at a programmed time.

Example: (usersettings menu)

- ```

1 : 06h00 NO-LOWN
2 : 22h00 LOWNOIS

```



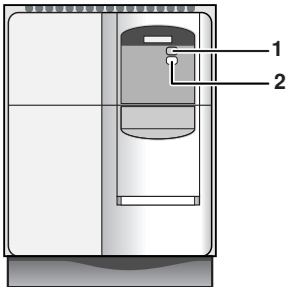
2. Through a field installed low noise mode switch.  
In this case the low noise mode activation is depending on a changeable digital input: LOW NOISE MODE=CH. DI.  
Refer to "Customization in the service menu", chapter "Setting of the changeable digital inputs and outputs" in the installation manual.  
The changeable digital input must be configured as low noise by selecting LOW NOISE to activate or de-activate the low noise mode.  
Example: (service menu)  
DI1 : LOW NOISE
3. Through manual selection: LOW NOISE MODE: YES or LOW NOISE MODE: NO.

## TROUBLESHOOTING OF INVERTER WITH THE STATUS DISPLAY PANEL



Only a licensed electrician is allowed to carry out an inspection on the status display panel as this inspection requires the switch box to be opened.

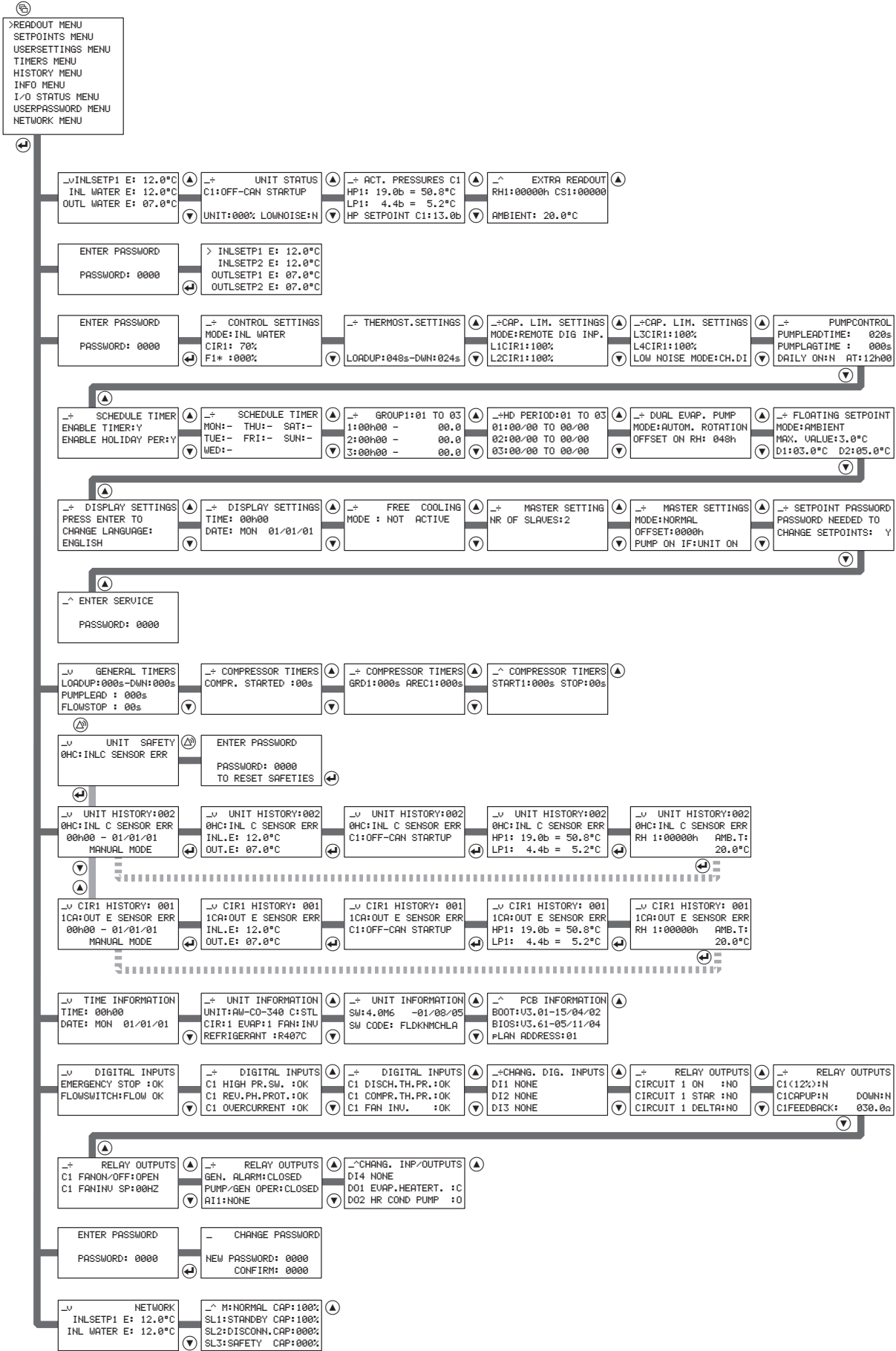
The operating status of the inverter is indicated by the green and yellow LEDs on the status display panel. These LEDs indicate the following warnings and fault states.



- 1 Green LED
- 2 Yellow LED

| Green LED    | Yellow LED   | Priority Display | Drive Status Definitions                                        |
|--------------|--------------|------------------|-----------------------------------------------------------------|
| OFF          | OFF          | 1                | Mains not present                                               |
| OFF          | ON           | 8                | Inverter fault - other than the ones listed below               |
| ON           | OFF          | 13               | Inverter running                                                |
| ON           | ON           | 14               | Ready to run - standby                                          |
| OFF          | Flashing -R1 | 4                | Fault overcurrent                                               |
| Flashing -R1 | OFF          | 5                | Fault overvoltage                                               |
| Flashing -R1 | ON           | 7                | Fault motor overtemperature                                     |
| ON           | Flashing -R1 | 8                | Fault inverter overtemperature                                  |
| Flashing -R1 | Flashing -R1 | 9                | Warning current limit - Both LEDs are flashing at the same time |
| Flashing -R1 | Flashing -R1 | 11               | Other warnings - Both LEDs are flashing alternately             |
| Flashing -R1 | Flashing -R2 | 6/10             | Undervoltage trip/undervoltage warning                          |
| Flashing -R2 | Flashing -R1 | 12               | Drive is not ready - Display state >0                           |
| Flashing -R2 | Flashing -R2 | 2                | ROM failure - Both LEDs are flashing at the same time           |
| Flashing -R2 | Flashing -R2 | 3                | RAM failure - Both LEDs are flashing alternately                |

R1 - On time 900 msec.  
R2 - On time 300 msec.



# SOFTWARE STRUCTURE only for EWAP400~540MBYNN

