

DUTY ROTATION, BACKUP FUNCTION AND 2nd STAGE CUT IN WITH PAR 30-31MAA CONTROLLERS.

1. Duty rotation function and Back-up function

Outline

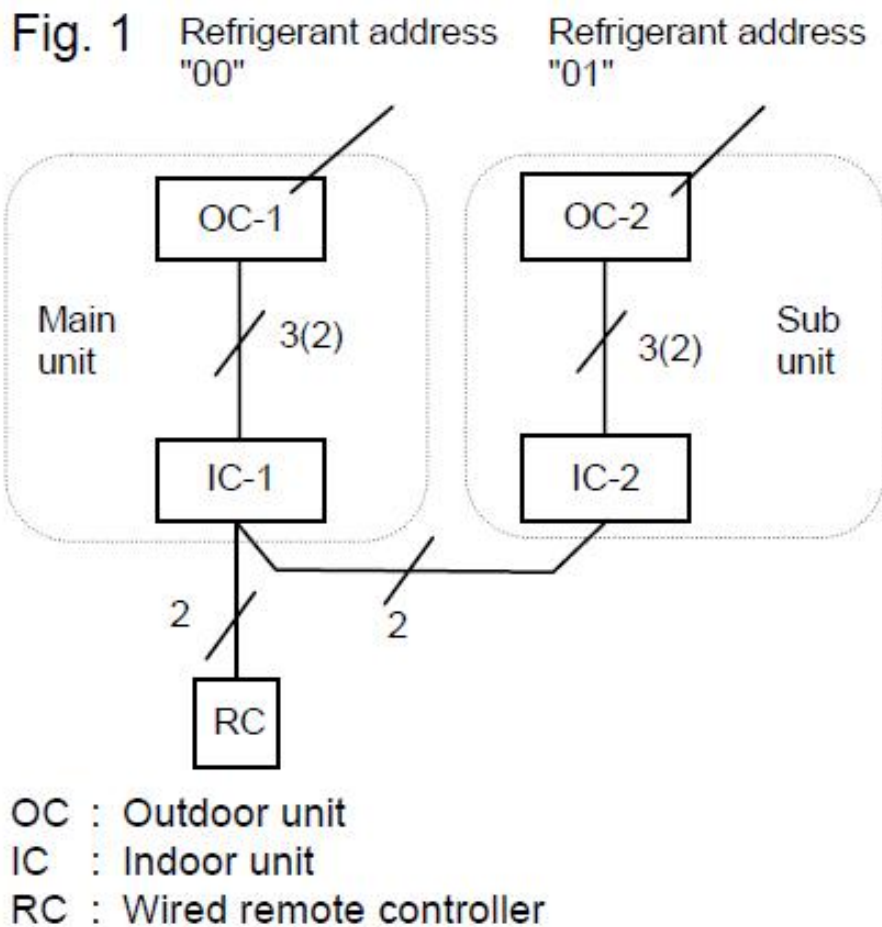
- Main and sub unit operate alternately according to the interval of rotation setting.
- Main and sub unit should be set by refrigerant address. (Outdoor Dip switch setting)

Refrigerant address "00" Main unit

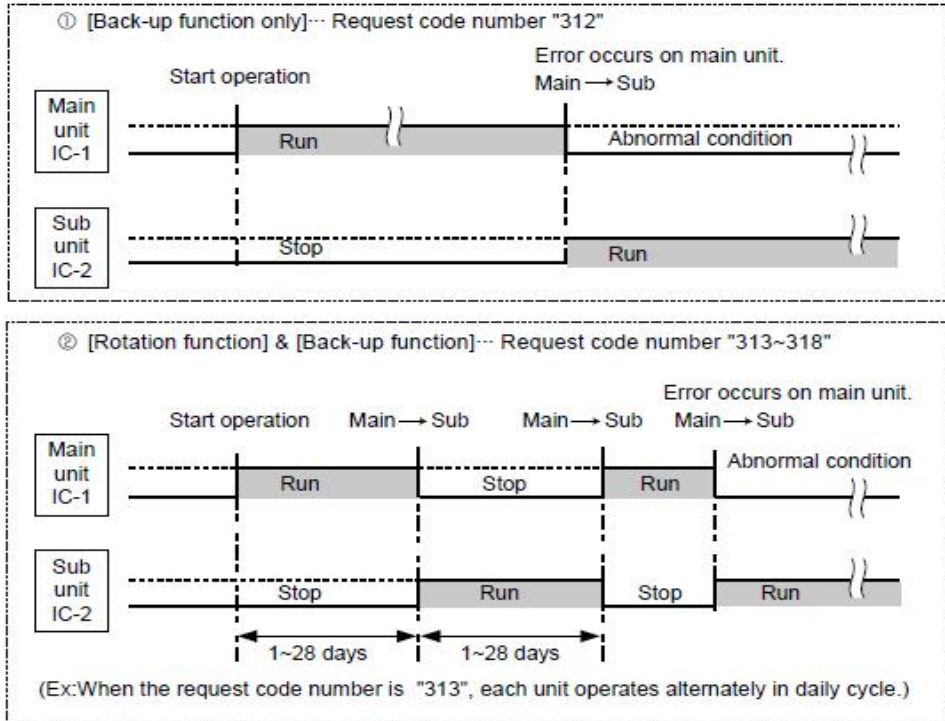
Refrigerant address "01" Sub unit

- When error occurs to one unit, another unit will start operation. (Back-up function)

The wiring configuration should be set as fig. 1 below.



Operation pattern

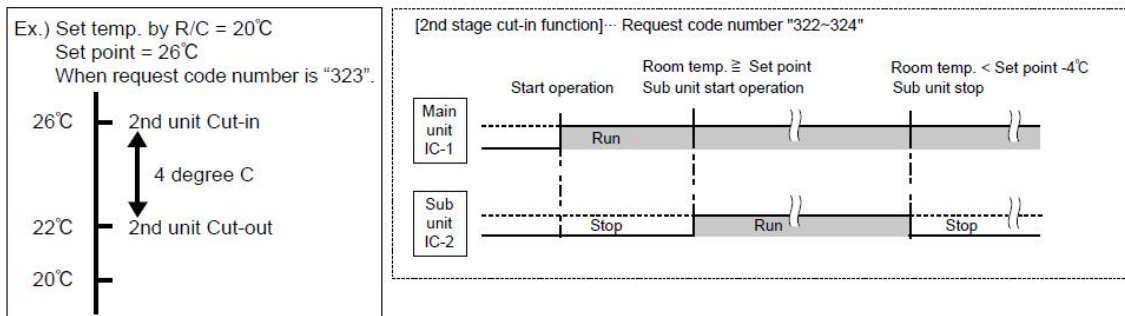


2. 2nd stage cut-in function

Outline

- When the 1st unit cannot supply sufficient capacity for high-demand/load conditions and the actual room temperature reaches set point *, the 2nd unit starts operation in conjunction with the 1st unit.
- Once the actual room temperature goes down to 4 degrees C below set point *, the 2nd unit stops operation automatically.
- (* set point = set temperature by remote controller + 4, 6, 8 degrees (selectable))
- Number of operating units is determined according to the room temperature and set point.
- When room temperature becomes higher than the set point, the standby unit starts. (2 units operation)
- When room temperature falls below set point -4degrees, the standby unit stops. (1 unit operation)

NB. This function is only available in cooling mode.

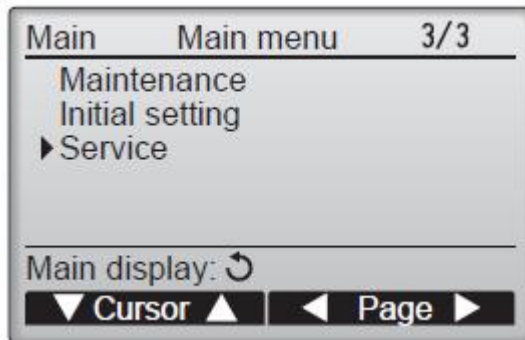


3. How to set up Duty rotation function and Back-up function and 2nd Stage cut in function.

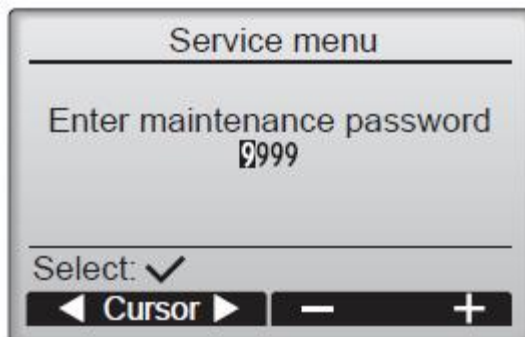
1. The unit can be either on or off during this process
2. Press the menu button



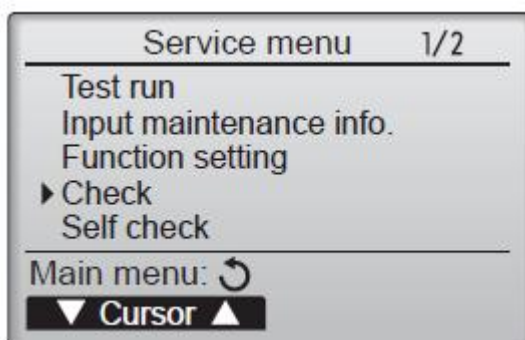
3. Scroll down to the service menu then press the tick button



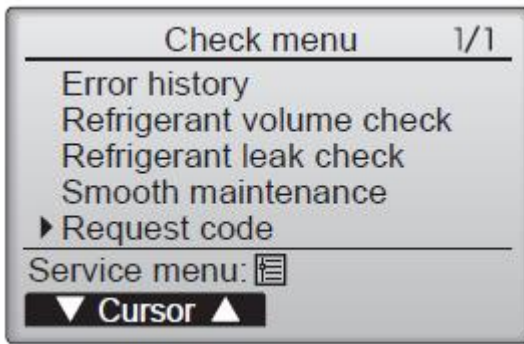
4. Enter the maintenance password 9999



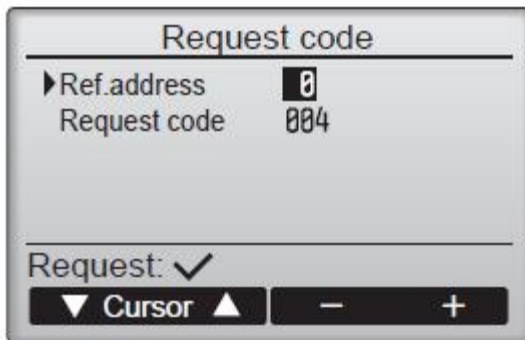
5. Scroll down to "Check" and press the tick button



6. Scroll down to “Request” and press the tick button



7. Enter the refrigerant address of the unit you want to control



8. Enter the desired request code from the list below. (310-324)

(1) Request Code List

Rotation setting

| Setting No. (Request code) | Setting contents | Initial setting |
|-------------------------------|--|-----------------|
| No.1 (310) | Monitoring the request code of current setting. | |
| No.2 (311) | Rotation and Back-up OFF (Normal group control operation) | ☉ |
| No.3 (312) | Back-up function only | |
| No.4 (313) | Rotation ON (Alternating interval = 1day) and back-up function | |
| No.5 (314) | Rotation ON (Alternating interval = 3days) and back-up function | |
| No.6 (315) | Rotation ON (Alternating interval = 5days) and back-up function | |
| No.7 (316) | Rotation ON (Alternating interval = 7days) and back-up function | |
| No.8 (317) | Rotation ON (Alternating interval = 14days) and back-up function | |
| No.9 (318) | Rotation ON (Alternating interval = 28days) and back-up function | |

2nd unit cut-in setting

| Setting No. (Request code) | Setting contents | Initial setting |
|-------------------------------|---|-----------------|
| No.1 (320) | Monitoring the request code of current setting. | |
| No.2 (321) | Cut-in function OFF | ☉ |
| No.3 (322) | Cut-in function ON(Set point = Set temp.+ 4°C (7.2°F)) | |
| No.4 (323) | Cut-in function ON(Set point = Set temp.+ 6°C (10.8°F)) | |
| No.5 (324) | Cut-in function ON(Set point = Set temp.+ 8°C (14.4°F)) | |

-Both main and sub units should be set with the same setting.

-Every time an indoor controller board is replaced, this function should be set again.