OWNER’S MANUAL

Building Gateways

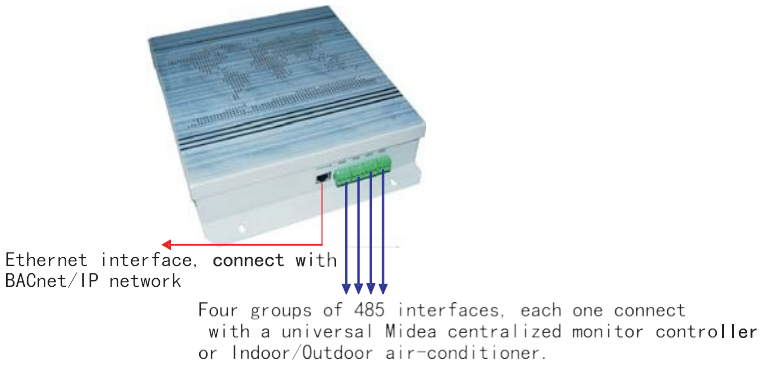
MD-CCM08/E (K01-BACNET)

Thank you very much for purchasing our air conditioner, please read this owner's manual carefully before using your air conditioner.

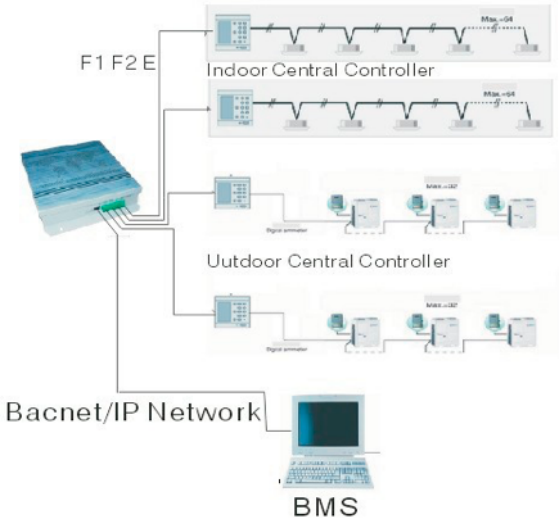
CATALOGUE

1 Connecting diagram

1-1Central Controller interfaces illustration



1-2 System connection illustration



CAUTION

1) BAC net of MD-CCM08/E(K01-BACNET) can connect with the indoor centralized controller and outdoor centralized monitor,and the indoor CCM address must be set to zero (0), the outdoor CCM address must be set to 16 .
2) BAC net of MD-CCM08/E(K01-BACNET) series must connect with Building Control System at the same IP subnet! Otherwise, the unit could not work normally.

2 Function description

This unit shall be installed between in Building Management System (BMS) and air conditioning, which provide with BAC net interfaces, associating these two systems to realize the systems integration. It also can connect with the Multi-connected air-conditioner independently.

BMS is allowed to access any online air conditioning in central air conditioning system for information collection and operation control, after proper installation of central air conditioning and this unit.

2-1Information collection

This unit is provided a function that collecting information from the central air conditioning by BMS, which operation states data of indoor units and outdoor units within air conditioning system could be obtained by accessing the specifically BAC net object. Refer to Object table for detail object information.

2-2 Operation Control

The unit provides BMS control central air conditioning, with seven setting functions to control the indoor units in which of the system. Setting functions included “Operation mode setting”,” time-ON setting”, “time-OFF setting”, “Auxiliary swing function setting” and electric heater setting. By modify the corresponding BAC net object variables to set the units operation status. Refer to Object table for detail object information.

⚠CAUTION

Do not operate the air-conditioner frequently, for avoiding the operating status of the air-conditioner system would be different from the expected status. The operation time interval between different objects in the same air-conditioner should be over 10~20 seconds, to keep the promptness and effectiveness of the status changing.

3 Configuration Illustration

Setting configuration before using this unit, whether can't provide to preinstall function. User input IP address of this unit into the browser, using WEB access function of this unit set air conditioning.

3-1 Control setting

Control of local network has only one control code in range between 0 and 63. Its name will auto-produce following address or has set by self that convenient for remembrance. After the equipment has set and restart, then modifier will perform in the equipment.
The control code has set randomly before ex-factory, "*"means of control code in CONTROL-UNIT-*.

3-2 Time and date setting

Control provide real-time clock for saving date and time setting, control also provide corresponding set function through network. After setting to control that will be preform at once and the equipment need restart.

3-3 Safe setting

Controller was reset function through administrator s keyword provided by network. After setting will effect at once and need trestart.
The default administrator name is "admin" and the password is "12345".

⚠CAUTION

For the system safety, please change the password in time.

3-4 Network setting

There is an Ethernet interfaces in the controller, It is Eth0.This device adapts Ethernet as the network interface of BAC net/IP.
IP address of Ethernet has been set 192.168.1.8 before ex-factory, please modified to appropriate network address. Please contact with network manager to know detailed information.

CAUTION

BAC net of MD-CCM08/E (K01-BACNET) series must connect with Building Control System at the same IP subnet! After IP configuration, must click the "Apply and "Reboot" key to restart the equipment. Other wise, the unit could not work normally.

3-5 BAC net setting

The BAC net network code represents only one of the BAC net Centralized Controller, at the range from 0 to 65535. Once set up the address, please restart the device to renew the modified settings to become effective.
BAC net network No. is the BAC net network No. that belong to the BAC net device of the MDV series air conditioner which under connect with the BAC net centralized controller. For different centralized controller must be set in different BAC net network NO., which is the unique number in the system could not be used for represent the other device or BAC net centralized controller.
The calculation formula of air-conditioner indoor and outdoor unit instance number is as follow:
Device ID=BTXX;.
B is the bus Number 0-3;
T means type 0-indoor unit,1-outdoor unit;
XX is the indoor unit Number 0-63 or outdoor unit 0-31

3-6 Factory Reset

When the unit is electrified, short connect the terminal 1and 2 of 485.It will return to factory settings when finishing start-up.(E.g. Factory IP address)

4 Object Tabel

This device provides with different objects tables for the different types of outdoor units which are in using for the MDV system. System will automatically identify the in using outdoor unit and generate the BAC net object.

4-1Indoor objects

This equipment provides with fourteen types of BAC net object, show as the following table, for connecting with indoor unit using in the Building Management System (BMS) or other system which suitable for BAC net Protocol.

Number	Content
1	Devise information
2	Operation mode
3	Fan state
4	Preset temperature
5	Indoor temperature
6	Set on time
7	Set off time
8	Swing function
9	Electric heater function
10	Malfunction state
11	Protection state
12	Mode query
13	Speed query
14	Temp set query

Detailed information of corresponding objects refer to under-table

1) Devise information

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Device + Ac number	R
Object name	Character string	Indoor _*_*	R
Object type	BAC net object type	Device	R
Devise status	BAC net device status	Operational	R
Producer name	Character string	AC Inc	R
Producer identifier	Unsigned 16	111 (Unsigned)	R
Model name	Character string	Get one of these from protocol analysis: Wall mounted type Floor type Embedded type Duct type Floor & ceiling type AC auxiliary type Digital Multi-connection type Frequency conversion type Digital rotation type	R
Firmware edition	Character string	1.0	R
Application software edition	Character string	1.0	R
Protocol edition	Unsigned	1	R
Protocol correspondency type	Unsigned	3	R
Protocol service support	BAC net service support	Read property	R
Protocol object types support	BAC net object types support	Analog input	R
Object array	Bac net array (n)	Array all object	R
Max length of APDU support	Unsigned	1476	R
Segmentation support	BAC net segmentation	Segmented both (0)	R
Local time	Time		R/W
Local date	Date		R/W
APDU segmentation time over	Unsigned	2000	0
APDU time over	Unsigned	3000	R
APDU resend times	Unsigned	3	R
Devise address binding	Address binding	ASN 1	R
Operation instruction	The OBJECT NAME attribute of this selected object stands for the MODEL INFORMATION which could not be set.		

2) Running mode

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Multistate-output 1	R
Object name	Character string	AC_0 mode setting	R
Object type	BAC net object type	Multi-state-output	R
Description	Character string	Operation mode setting	0
Current value	Unsigned		W
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
States number	Unsigned	6	R
States text	BAC net array (N) Character string	Auto Cool Heat Dehumidify Fan only Stop	0
Priority array	BAC net priority array	NULL	R
Release default	Unsigned	0	R
Time delay	Unsigned	2	0
Publicly type	Unsigned	1701	0
Feedback value	Unsigned	6	
Event enable	Bac net event transition bits	T T T	0
Affirm transform	Bac net event transition bits	T T T	0
Notify type	BAC net notify type	Alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current OPERATION MODE (it's writeable and settable). There into, the CURRENT VALUE 1 means HEATING MODE; the CURRENT VALUE 2 means COOLING MODE; the CURRENT VALUE 3 means DEHUMIDIFIED MODE; the CURRENT VALUE 4 means AIR SUPPLY; the CURRENT VALUE 5 means AUTO MODE; the CURRENT VALUE 6 means SHUT OFF.		

3) Fan states

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Multistate-output 2	R
Object name	Character string	AC_OFF a speed	R
Object type	BAC net object type	Multistate-output	R
Description	Character string	Fan speed setting	0
Current value	Unsigned		W
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
States number	Unsigned	5	R
States text	BAC net array (N) Character string	Auto Low Middle Hight Stop	0
Priority array	BAC net priority array	NULL	R
Release default	Unsigned	5	R
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Feedback value	Unsigned	5	
Event enable	Bac net event transition bits	T T T	0
Affirm transform	Bac net event transition bits	T T T	0
Notify type	BAC net notify type	Alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current FAN SPEED (It's writable and settable). There into, the CURRENT VALUE 1 means HIGH SPEED; the CURRENT VALUE 2 means MEDIUM SPEED; the CURRENT VALUE 3 means LOW SPEED; the CURRENT VALUE 4 means AUTO SPEED; the CURRENT VALUE 5 means FAN STOP. The thing is, during air conditioner operating, the CURRENT VALUE would be set as to 5 (the order of stop the fan) for ensuring the normal operate, however, this default setting would be omitted by the system automatically.		

4) Preset temperature

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Analog-output 1	R
Object name	Character string	AC_O temp setting	R
Object type	BAC net object type	Analog-output	R
Current value	REAL		W
Description	Character string	Temperature setting	0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
Unit	BAC net engineering units	Degree-Celsius	R
Minimum	REAL	16	0
Maximum	REAL	32	0
Priority array value	BAC net priority array	NULL	R
Default release	REAL	25	R
Distinguishability	REAL	1	0
COV increment	REAL	1	0
Low valve value	REAL	16	0
High valve value	REAL	32	0
Width valve value	REAL	1	0
Enable valve value	BAC net limit enable	T T	0
Event enable	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	alarm	0
Publicly type	Unsigned	1701	0
Time delay	Unsigned	1	0
Affirm transform	BAC net event transition bits	T T T	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current SETTNG TEMPERATURE (it's writable and settable). The MINIMAL VALUE stands for the min. temperature, while the MAXMUN VALUE stands for the max. temperature. The setting temperature could not excede than the range.		

5) Room temperature

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Analog-output 1	R
Object name	Character string	AC_I temp Indoor	R
Object type	BAC net object type	Analog-output	R
Current value	REAL		W
Description	Character string	Indoor temperature	0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Reliability	BAC net reliability	NO-FAULT-DETECTED	
Take off service	Boolean	F	R
Unit	BAC net engineering units	Degree-Celsius	R
Minimum	REAL	-20	0
Maximum	REAL	100	0
Distinguishability	REAL	1	0
Time	Unsigned	1	0
Publicly type	Unsigned	1701	0
Low valve value	REAL	-20	
High valve value	REAL	100	0
Width valve value	REAL	1	0
Enable valve value	BAC net limit enable	T T	0
Event enable	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	event	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current ROOM TEMPERATURE (its read only, could not be set). The MINIMAL VALUE stands for the min. temperature, while the MAXMUN VALUE stands for the max. Temperature.		

6) Set on time

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Analog-output 2	R
Object name	Character string	AC_I on time	R
Object type	BAC net object type	Analog-input	R
Current value	REAL		W
Description	Character string	On time setting	0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Reliability	BAC net reliability	NO-FAULT-DETECTED	R
Take off service	Boolean	F	R
Unit	BAC net engineering units	Hours	R
Minimum	REAL	0	0
Maximum	REAL	24	0
Distinguishability	REAL	0.25	0
Priority Array	BAC net engineering units	NULL	R
Default release	REAL	0	R
Cov increment	REAL	0 25	0
Low valve value	REAL	-0	0
High valve value	REAL	24	0
Width valve value	REAL	0.5	0
Enable valve value	BAC net limit enable	T T	0
Event enable	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	alarm	0
Publicly type	Unsigned	1701	0
Time delay	Unsigned	1	0
Affirm transform	BAC net event transition bits	T T T	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current TIMING ON time (it is read only, could not be set). From 0 to 24 means during the 24 hours without timing has been set.		

7) Set off time

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Analog-output 3	R
Object name	Character string	AC_off time	R
Object type	BAC net object type	Analog-output	R
Current value	REAL		W
Description	Character string	Off time setting	0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
Unit	BAC net engineering units	Hours	R
Minimum	REAL	0	0
Maximum	REAL	24	0
Distinguishability	REAL	0.25	0
Reliability	BAC net reliability	NO-FAULT-DETECTED	0
Priority Array	BAC net Priority Array	NULL	R
Default release	REAL	0	R
Cov increment	REAL	0 25	0
Low valve value	REAL	0	0
High valve value	REAL	24	0
Width valve value	REAL	0.5	0
Enable valve value	BAC net limit enable	T T	0
Event enable	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	alarm	0
Publicly type	Unsigned	1701	0
Time delay	Unsigned	1	0
Affirm transform	BAC net event transition bits	T T T	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current TIMING OFF time (it is read only, could not be set). From 0 to 24 means during the 24 hours without timing has been set.		

8) Swing function

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Binary-output 1	R
Object name	Character string	AC_0 swing	R
Object type	BAC net object type	Binary-output	R
Current value	BAC net binary PV	inactive	W
Description	Character string	Swing setting	0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
Polarity	BAC net polarity	Normal	R
Inactive text	Character string	Turn off	0
Active text	Character string	Turn on	0
Time delay	Unsigned	1	0
States change time	BAC net date time		0
States change times	Unsigned		0
Change time to	BAC net date time		0
Publicly type	Unsigned	1701	0
Feedback value	BAC net binary PV	Inactive	0
Event enable	BAC net event transition bits	T T T	R
Affirm transform	BAC net event transition bits	T T T	0
Priority array	BAC net priority array	NULL	R
Default release	BAC net binary PV	Inactive	R
Notify type	BAC net notify type	alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current SWING STATUS. INACTIVE means SWING OFF, while ACTIVE means SWING ON.		

9) Electric heater function

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Binary-output 2	R
Object name	Character string	AC_0 Elec heat	R
Object type	BAC net object type	Binary-output	R
Current value	BAC net binary PV	Inactive	W
Description	Character string	Elec heat setting	0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
Polarity	BAC net polarity	Normal	R
Inactive text	Character string	Turn off	0
Active text	Character string	Turn on	0
Time delay	Unsigned	1	0
States change time	BAC net date time		0
States change times	Unsigned		0
Change time to 0	BAC net date time		0
Publicly type	Unsigned	1701	0
Feedback value	BAC net binary PV	Inactive	0
Event enable	BAC net event transition bits	T T T	R
Affirm transform	BAC net event transition bits	T T T	0
Priority array	BAC net priority array	NULL	R
Default release	BAC net binary PV	Inactive	R
Notify type	BAC net notify type	alarm	0
Operation instruction	The CURRENT VALUE attribute of this selected object reflects the current ELECTRIC HEATER working status. INACTIVE means ELECTRIC HEATER OFF, while ACTIVE means ELECTRIC HEATER ON. The thing is, when air conditioner in the COOLING MODE or other mode, the CURRENT VALUE would be set as ELECTRIC HEATER ON for ensuring the normal operate, however, this default setting would be omitted by the system automatically.		

10) Malfunction states

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Multistate-input 1	R
Object name	Character string	AC_Malfunction	R
Object type	BAC net object type	Multistate-input	R
Description	Character string	Malfunction state	W
Current value	Unsigned		0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
States number	Unsigned	17	0
States text	BAC net ARRAY (N) Character string	EF EE ED EC EB EA E9 E8 E7 E6 E5 E4 E3 E2 E1 E0 No E	0
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Event enable	BAC net event transition bits	T T T	0
Affirm transform	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current MALFUNCTION (it's read only). In case of the CURRENT VALUE shows as No E, that means without malfunction, while other information displaying means the relevant malfunction. For detail, please refer to TROUBLESHOOT & MAINTENANCE BROCHURE, or contact with After-sales agent. Provided that more the one malfunction occurs simultaneously, only the minimal No. of the error would be showed.		

11) Protection states

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Multistate-input 2	R
Object name	Character string	AC_I Protect	R
Object type	BAC net object type	Multistate-input	R
Description	Character string	Protect state	0
Current value	Unsigned		R
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
States number	Unsigned	11	R
States text	BAC net ARRAY (N) Character string	PF P8 P7 P6 P5 P4 P3 P2 P1 P0 No P	0
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Event enable	BAC net event transition bits	T T T	0
Affirm transform	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current PROTECTION status (it's read only). In case of the CURRENT VALUE shows as No P, that means the system without protection, while other information displaying means the other relevant protection. For detail, please refer to TROUBLESHOOT & MAINTENANCE BROCHURE, or contact with After-sales agent. Provided that more than one protection occurs simultaneously, only the minimal No. of the protection would be showed. There into, the CURRENT VALUE displays as 1 means P0; the CURRENT VALUE displays as 2 means P1, analogously, the CURRENT VALUE displays as 3 means P2; the CURRENT VALUE displays as 10 means PF; the CURRENT VALUE displays as 11 means No P.		

12)Mode query

Attribute identifier	Data type	Attribute value	Read/Write
Object identifier	BAC net Object Identifier	Multistate-input 3	R
Object name	Character String	AC_Query Mode	R
Object type	BAC net Object Type	Multistate-input	R
Description	Character String	Query Mode	O
Status text	BAC net ARRAY[N] Character String	{"Heat", "Cool", "Dehumidify", "Fan only", "Auto", "Stop"}	O

13)Fan speed query

Attribute identifier	Data type	Attribute value	Read/Write
Object identifier	BAC net Object Identifier	Multistate-input 4	R
Object name	Character String	AC_Query Fan Speed	R
Object type	BAC net Object Type	Multistate-input	R
Description	Character String	Query Fan Speed	O
Status text	BAC net ARRAY[N] Character String	{"High", "Middle", "Low", "Auto", "Stop"}	O

14)Temperature setting query

Attribute identifier	Data type	Attribute value	Read/Write
Object identifier	BAC net Object Identifier	Analog-input 4	R
Object name	Character String	AC_ Query Temp Setting	R
Object type	BAC net Object Type	Analog-input	R
Current value	REAL		R
Description	Character String	Query Temp Setting	O
Unit	BAC net Engineering Units	Degree-Celsius	R

4-2Outdoor Air Conditioner Objects

This equipment provides with ten types of BAC net object, show as the following table, for connecting with Inverter AC or Digital AC using in the Building Management System (BMS) or other system which suitable for BAC net Protocol

Number	Content
1	Device information
2	Operation mode
3	Fan state
4	Outdoor temperature
5	Indoor unit quality
6	Compressor 1 electric current
7	Compressor 2 electric current
8	Compressor 3 electric current
9	Malfunction state
10	Protection state

1) Devise information

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Device + ac number	R
Object name	Character string	Outdoor _*_*_*	R
Object type	BAC net object type	Device	R
System status	Character string	Operational	R
Producer name	Unsigned	AC Inc.	R
Producer identifier	BAC net status flags	111 (reserve)	R
Model name	BAC net event states	Frequency conversion AC or digital rotation AC	R
Firmware edition	Boolean	1.0	R
Application software edition	Unsigned	1.0	R
Protocol edition	BAC net ARRAY (N) Character string	1	R
Protocol correspondency type	Unsigned	3	R
Protocol service support	Unsigned	Read property etc.	R
Protocol object types support	BAC net event transition bits	Analog input etc.	R
Object array	BAC net event transition bits	List all objects	R
Max length of APDU support	BAC net notify type	1476	R
Segmentation support	BAC net segmentation	Segmented both (0)	R
Local time	Time		R/W
Local date	Date		R/W
APDU segmentation time over	Unsigned	2000	0
APDU time over	Unsigned	3000	R
APDU resend times	Unsigned	3	R
Device address bring ding	Address binding	ASN 1	R
Operation instruction	The OBJECT NAME attribute of this selected object reflects the MODEL INFORMATION, which is not allowed to set, while the specific MODEL NAME is defined by the relevant protocol.		

2) Running mode

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Multistate-input 1	R
Object name	Character string	AC_I operation mode	R
Object type	BAC net object type	Multistate-output	R
Description	Character string	Operation mode	0
Current value	Unsigned		W
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
States number	Unsigned	3	R
States text	BAC net ARRAY (N) Character string	Cool Heat Stop	0
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Event enable	BAC net event transition bits	T T T	0
Affirm transform	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	ALARM	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current OUTDOOR UNIT OPERATION MODE (it's unset table). There into, the CURRENT VALUE 1 means HEATING MODE; the CURRENT VALUE 2 means COOLING MODE; the CURRENT VALUE 3 means DEHUMIDIFIED MODE.		

3) Fan states

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Multistate-output 2	R
Object name	Character string	AC_I fan speed	R
Object type	BAC net object type	Multistate-output	R
Current value	Unsigned		R
Description	Character string	Fan speed	0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
States number	Unsigned	4	R
States text	BAC net ARRAY (N) Character string	Low Middle Hight Stop	0
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Event enable	BAC net event transition bits	T T T	0
Affirm transform	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current FAN SPEED (It's read only). There into, the CURRENT VALUE 1 means HIGH SPEED; the CURRENT VALUE 2 means MEDIUM SPEED; the CURRENT VALUE 3 means LOW SPEED; the CURRENT VALUE 4 means FAN STOP.		

4) Outdoor temperature

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Analog-output 1	R
Object name	Character string	AC_I temp outdoor	R
Object type	BAC net object type	Analog-output	R
Current value	Real		R
Description	Character string	Outdoor temperature	0
Status flags	BAC net status flags	F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
States number	BAC net engineering units	Degree Celsius	R
Minimum	Real	-20	0
Maximum	Real	100	0
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Low valve value	Real	-20	0
High valve value	Real	100	0
Width valve value	Real	1	
Enable valve value	BAC net limit enable	T T	
Event enable	BAC net event transition bits	T T T	
Notify type	BAC net notify type	Event	
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current ROOM TEMPERATURE (it could not be set). The MINIMAL VALUE stands for the minimum temperature, while the MAXMUN VALUE stands for the maximum Temperature.		

5) Indoor quantity

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Analog-output 2	R
Object name	Character string	AC_I total I ACs	R
Object type	BAC net object type	Analog-0utput	R
Current value	Real		R
Description	Character string	Indoor unit qty	0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
Unit	BAC net engineering units		R
Minimum	Real	0	0
Maximum	Real	250	0
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Low valve value	Real	0	0
High valve value	Real	250	0
Width valve value	Real	1	0
Enable valve value	BAC net limit enable	F T	0
Event enable	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	Alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current INDOOR UNIT QUANTITY (it's read only).		

6) Compressor 1 current

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Analog-output 3	R
Object name	Character string	AC_I Com1Current	R
Object type	BAC net object type	Analog-output	R
Current value	Real		R
Description	Character string	Compressor 1 current	0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
Unit	BAC net engineering units	Amperes	R
Minimum	Real	0	0
Maximum	Real	200	0
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Low valve value	Real	0	0
High valve value	Real	200	0
Width valve value	Real	1	0
Enable valve value	BAC net limit enable	T T	0
Event enable	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	Alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the COMPRESSOR 1 ELECTRIC CURRENT (it's unsettable). The MINIMAL VALUE stands for the MINIMUM ELECTRIC CURRENT, while the MAXMUN VALUE stands for the MAXIMUM ELECTRIC CURRENT.		

7) Compressor 2 current

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Analog-output 4	R
Object name	Character string	AC_I Com2Current	R
Object type	BAC net object type	Analog-output	R
Current value	Real		R
Description	Character string	Compressor 2 current	0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
Unit	BAC net engineering units	Amperes	R
Minimum	Real	0	0
Maximum	Real	200	0
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Low valve value	Real	0	0
High valve value	Real	200	0
Width valve value	Real	1	0
Enable valve value	BAC net limit enable	T T	0
Event enable	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	Alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the COMPRESSOR 2 ELECTRIC CURRENT (it's unset table). The MINIMAL VALUE stands for the minimum electric current, while the MAXMUN VALUE stands for the maximum electric current.		

8) Compressor 3 current

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Analog-output 5	R
Object name	Character string	AC_I Com3Current	R
Object type	BAC net object type	Analog-output	R
Current value	Real		R
Description	Character string	Compressor 3 current	0
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
Unit	BAC net engineering units	Amperes	R
Minimum	Real	0	0
Maximum	Real	200	0
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Low valve value	Real	0	0
Hight valve value	Real	200	0
Width valve value	Real	1	0
Enable valve value	BAC net limit enable	T T	0
Event enable	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	Alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the COMPRESSOR 1 ELECTRIC CURRENT (it's unset table). The MINIMAL VALUE stands for the minimum electric current, while the MAXMUN VALUE stands for the maximum electric current.		

9) Error states

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Multistate-input 3	R
Object name	Character string	AC_I out malfunction	R
Object type	BAC net object type	Multistate-input	R
Description	Character string	Fan speed	0
Current value	Unsigned		R
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
States number	Unsigned	17	R
States text	BAC net ARRAY (N) Character string	EF EE ED EC EB EA E9 E8 E7 E6 E5 E4 E3 E2 E1 E0 No E	0
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Event enable	BAC net event transition bits	T T T	0
Affirm transform	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current ERROR status (it's read only). In case of the CURRENT VALUE shows as No E, that means the system without protection, while other information displaying means the other relevant protection. For detail, please refer to TROUBLESHOOT & MAINTENANCE BROCHURE, or contact with After-sales agent. Provided that more the one protection occurs simultaneously, only the minimal No. of the protection would be showed. There into, the CURRENT VALUE displays as 1 means E0; the CURRENT VALUE displays as 2 means E1, analogously, the CURRENT VALUE displays as 3 means E2; the CURRENT VALUE displays as 16 means EF; the CURRENT VALUE displays as 17 means No E.		

10)Protect states

Attribute identifier	Data mode	Attribute value	Read/write
Object identifier	BAC net object identifier	Multistate-input 4	R
Object name	Character string	AC_I out protect	R
Object type	BAC net object type	Multistate-input	R
Description	Character string	Protect state	0
Current value	Unsigned		R
Status flags	BAC net status flags	F F F F	R
Event states	BAC net event states	Normal	R
Take off service	Boolean	F	R
States number	Unsigned	17	R
States text	BAC net ARRAY (N) Character string	PF PE PD PC PB PA P9 P8 P7 P6 P5 P4 P3 P2 P1 P0 No P	0
Time delay	Unsigned	1	0
Publicly type	Unsigned	1701	0
Event enable	BAC net event transition bits	T T T	0
Affirm transform	BAC net event transition bits	T T T	0
Notify type	BAC net notify type	alarm	0
Operation instruction	The CURRENT VALUE attribute of the selected object reflects the current PROTECTION STATUS (it's read only). In case of the CURRENT VALUE shows as No P, that means the system without protection, while other information displaying means the other relevant protection. For detail, please refer to TROUBLESHOOT & MAINTENANCE BROCHURE, or contact with After-sales agent. Provided that more than one protection occurs simultaneously, only the minimal No. of the protection would be showed. Thereinto, the CURRENT VALUE displays as 1 means P0; the CURRENT VALUE displays as 2 means P1, analogously, the CURRENT VALUE displays as 3 means P2; the CURRENT VALUE displays as 16 means PF; the CURRENT VALUE displays as 17 means No P.		

⚠CAUTION

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MAIN OFFICE
Blasco de Garay, 4-6
08960 Sant Just Desvern
(Barcelona)
Tel. +34 93 480 33 22
http://home.frigicoll.es/

OFICINA CENTRAL
Blasco de Garay, 4-6
08960 Sant Just Desvern
(Barcelona)
Tel. 93 480 33 22
http://home.frigicoll.es/

BUREAU CENTRAL
Blasco de Garay, 4-6
08960 Sant Just Desvern
(Barcelone)
Tel. +34 93 480 33 22
http://home.frigicoll.es/