

# Tact Switch Key Operation

DB68-13140A-00



KEY setting		
K1 (Number of press)	KEY operation	Display on 7-Segment
1 time	Refrigerant charging in Heating mode	1.1.1.1
2 times	Trial operation in Heating mode	1.2.1.1
3 times	Refrigerant discharging (Outdoor unit address 1)	1.3.1.1
4 times	Vacuum (Outdoor unit address 1)	1.4.1.1
5 times	End KEY operation	-
Press and hold	Auto inspection operation	1.1.1.1

KEY setting		
K2 (Number of press)	KEY operation	Display on 7-Segment
1 time	Refrigerant charging in Cooling mode	1.5.1.1
2 times	Trial operation in Cooling mode	1.6.1.1
3 times	Pump down all units in Cooling mode	1.7.1.1
4 times	Auto trial operation	1.8.1.1
5 times	Checking the amount of refrigerant	1.9.XX (Display of last two digits may differ depending on the)
6 times	Forced oil collection	1.1.1.1
7 times	Inverter compressor 1 check	1.1.1.1
8 times	Water pipe connection inspection operation	1.1.1.1
9 times	Load inspection operation	1.1.1.1
10 times	End KEY operation	-

K3 (Number of press)	KEY operation	Display on 7-Segment
1 time	Initialize (Reset) operation	Same as initial state

View Mode			
Table. View mode 1			
K4 (Number of press)	Display content	SEG 1	SEG 2,3,4
1 time	Outdoor Capacity	1	16 horsepower → 0,1,6
2 times	Target frequency (Compressor)	2	120Hz → 1,2,0
3 times	High pressure (kg/cm <sup>2</sup> )	3	15.2K → 1,5,2
4 times	Low pressure (kg/cm <sup>2</sup> ) (Value of 1 second)	4	4.3K → 0,4,3
5 times	Discharge temperature (Compressor)	5	87 °C → 0,8,7
6 times	IPM temperature (Compressor)	6	87 °C → 0,8,7
7 times	CT sensor value (Compressor)	7	2 A → 0,2,0
8 times	Suction temperature	8	-42 °C → -,4,2
9 times	COND OUT temperature	9	-42 °C → -,4,2
10 times	Temperature of liquid pipe	A	87 °C → 0,8,7
11 times	TOP temperature (Compressor)	B	87 °C → 0,8,7
12 times	Water temperature	C	-42 °C → -,4,2
13 times	Main EEV step	D	2000 → 2,0,0
14 times	ESC EEV step	E	300 → 3,0,0
15 times	Current frequency of the compressor	F	120Hz → 1,2,0
16 times	Address of master indoor unit	G	When master indoor unit is not set → BLANK, N, D When indoor unit No.1 is set as master indoor unit → 0, 0, 1
17 times	Temperature of control box	H	-42 °C → -,4,2

Press K4 for 3 seconds to use View mode 2			
Table. View mode2			
K4 (Number of press)	Display content	Page 1	Page 2
1	Main version	MAIN	Version (Example: 1412)
2	Water hub version	HUB2	Version (Example: 1412)
3	Inverter 1 version	INV1	Version (Example: 1412)
4	EEP version	EEP	Version (Example: 1412)
5	Received units	AUTO	SEG1, 2 Indoor unit: "A", "0"
	Automatically assigned address		SEG3, 4 Address (Example: 07)
			MSB: "C", "1"
6	Received units	MANU	SEG3, 4 Address (Example: 15)
	Manually assigned address of the units		Indoor unit: "A", "0"

Option item	Input unit	SEG1	SEG2	SEG3	SEG4	Function of the option	Remarks
Emergency operation for compressor malfunction	Individual	0	0	0	0	Disabled (Factory default)	E560 will occur when all the compressors are set as malfunction state.
				0	1	Set compressor 1 as malfunction state	
				0	2	Set compressor 2 as malfunction state	
Cooling capacity correction	Main	0	1	0	0	7-9 (Factory default)	Targeted evaporation temperature [°C]. (When low temperature value is set, discharged air temperature of the indoor unit will decrease)
				0	1	5-7	
				0	2	9-11	
				0	3	10-12	
				0	4	11-13	
				0	5	12-14	
Heating capacity correction	Main	0	2	0	6	13-15	Targeted high pressure [MPa]. (When low pressure value is set, discharged air temperature of the indoor unit will decrease)
				0	0	2.8 (Factory default)	
				0	1	2.5	
				0	2	2.6	
				0	3	2.7	
				0	4	2.9	
Current restriction rate	Individual	0	3	0	5	3.0	When restriction option is set, cooling and heating performance may decrease.
				0	6	3.1	
				0	7	3.2	
				0	8	3.3	
				0	0	100 % (Factory default)	
				0	1	95 %	
				0	2	90 %	
				0	3	85 %	
				0	4	80 %	
				0	5	75 %	
Oil collection interval	Main	0	4	0	6	70 %	
				0	7	65 %	
				0	8	60 %	
Disable	Main	0	5	0	9	55 %	
				0	0	50 %	
				1	1	Disable	
Disable	Individual	0	6	0	1	Disable	
				0	0	Disable	
				0	1	Disable	
Disable	Main	0	7	0	0	Disable	
				0	1	Disable	
				0	2	Disable	
Setting high-head condition	Main	0	8	0	3	Disable	
				0	0	Disable (Factory default)	
				0	1	Level 1 of height difference type 1 (Indoor unit is lower than outdoor unit)	
Setting long piping condition (Setting is unnecessary if high-head condition is set.)	Main	0	9	0	2	Level 2 of height difference type 1 (Indoor unit is lower than outdoor unit)	When outdoor unit is over 40 ~ 80 m (131' ~ 263') above the indoor unit
				0	3	Height difference type 2 (Outdoor unit is lower than indoor unit)	
				0	0	Disable (Factory default)	
Setting long piping condition (Setting is unnecessary if high-head condition is set.)	Main	0	9	0	1	Long piping level 1	When equivalent length of farthest indoor unit from the outdoor unit is between 100~170 m (328'~558')
				0	2	Long piping level 2	
				0	0	Disable (Factory default)	



Option item	Input unit	SEG1	SEG2	SEG3	SEG4	Function of the option	Remarks
Energy saving setting	Main	1	0	0	0	Disable (Factory default)	The energy saving mode starts when the room temperature reaches desired temperature while operating in heating mode.
				0	1	Enable	
Disable	Main	1	1	0	0	Disable	This function is not applicable for this model.
				0	1	Enable	
Expand operational temperature range for cooling operation	Main	1	2	0	0	Disable	
				0	1	Enable	
Channel address	Main	1	3	A	U	Automatic setting (Factory default)	Address for classifying the product from upper level controller (DMS, S-NET 3, etc)
				0 ~ 15		Manual setting for channel 0~15	
Disable	Main	1	4	0	0	Disable	This function is not applicable for this model.
				0	1	Disable	
Circulation water flow control	Main	1	5	0	0	Disable (Factory default)	When variable flow control valve is applied
				0	1	7-10 V	
				0	2	5-10 V	
				0	3	3-10 V	
Forced quiet mode (Disuse)	Main	1	6	0	0	Disable	
Disable	Main	1	7	0	0	Disable (Factory default)	Options for high-speed operation
				0	1	Enable	
Maximum cooling capacity restriction	Main	1	8	0	0	Enable	Maximum cooling capacity restriction
				0	1	Disable	
Leaked refrigerant collection (Disuse)	Main	1	9	0	0	Disable	Leaked refrigerant collection
				0	1	Disable	
Circulation fluid flow setting	Individual	2	0	0	0	Water	Circulation fluid flow setting
				0	1	Antifreeze solution 1	
				0	2	Antifreeze solution 2	
				0	3	Water	

## Error code

Code	Description
E-108	Error in setting an address repeatedly (two or more devices using a same address)
E-121	Indoor temperature sensor of the indoor unit is open or short-circuited
E-122	Eva in temperature sensor of the indoor unit is open or short-circuited
E-123	Eva out temperature sensor of the indoor unit is open or short-circuited
E-128	Eva in temperature sensor of the indoor unit break away from Eva_in pipe
E-129	Eva in temperature sensor of the indoor unit break away from Eva_out pipe
E-149	AHU Master indoor sensor of the indoor unit is incorrect set
E-151	Indoor unit EEV startup error (during the second check)
E-152	Indoor unit EEV shutoff error (during the second check)
E-153	Indoor unit floating switch error (during the second check)
E-154	Indoor unit RPM feedback error
E-162	Microcomputer EEPROM error (accessories/circuit physical property in bad condition)
E-163	Remote control option of the indoor unit input error / not input, outdoor EEPROM data error
E-198	Indoor unit temperature fuse line interrupt error (wiring board temperature increases)
E-201	Communications error between indoor unit and outdoor unit (number of units setting error, indoor unit address used repeatedly and indoor communication line error)
E-202	Communications error between indoor unit and outdoor unit (all indoor units unable to communicate, outdoor communication line error, etc.)
E-203	Communications error between outdoor host computer and split machine
E-205	Outdoor unit C-Box internal PBA communication error, communication line error
E-206	E206-C003: INV1 PBA communication error E206-C005: Water Hub PBA communication error
E-224	Water sensor is short-circuited or open
E-225	Temperature sensor of control box is short-circuited or open
E-231	Cond out temperature sensor is open or short-circuited

E-241	Cond out sensor tripped
E-251	Temperature sensor of the compressor 1 discharge sensor is open or short-circuited
E-262	Temperature sensor of the compressor 1 discharge sensor breaks away from the pipeline sensor
E-266	Top sensor of compressor 1 tripping error
E-269	Suction temperature sensor breaks away from the pipeline sensor
E-276	Top sensor of the compressor 1 is open or short-circuited
E-291	Refrigerant leakage or high pressure sensor is open/short-circuited
E-296	Refrigerant leakage or low pressure sensor is open/short-circuited
E-308	Suction temperature sensor is open or short-circuited
E-311	Double wall tube/fluid tube (slave heat exchanger) temperature sensor is open or short-circuited
E-407	Compressor start suspended due to high pressure control
E-410	Compressor start suspended due to low pressure control or refrigerant leakage
E-416	Compressor start suspended due to discharge temperature protection
E-428	Compressor start suspended due to abnormal compression ratio
E-435	Flow switch error (outdoor unit)
E-436	Heat exchanger antifreezing
E-438	EVI (ESC) EEV leakage and intercooler internal leakage or EVI (ESC) EEV connector bad contact
E-439	Refrigerant leakage error
E-440	Start suspended due to high temperature of the supply water
E-441	Start suspended due to low temperature of the supply water
E-442	Start suspended due to low pressure
E-443	Start disabled due to low pressure
E-458	Air fan restriction error
E-461	Start failure error of variable compressor 1
E-462	Compressor stopped due to total current control
E-464	Overcurrent error of variable compressor 1
E-465	V-limit error of variable compressor 1
E-466	Inverter PBA1 overcurrent error
E-467	Electric wire unconnected error of variable compressor 1
E-468	Inverter PBA1 input current sensor error
E-469	Inverter PBA1 DC voltage sensor error
E-474	Inverter PBA1 Heat sink temperature sensor error
E-483	H/W DC_Link overvoltage error
E-484	PFC overload (overcurrent) error
E-485	Inverter PBA1 input current error
E-488	AC input voltage sensor error
E-500	Overheating error caused by Bad contact between IPM and heat sink of Inverter PBA1
E-503	Stop Valve lock confirmation request error
E-515	Control Box internal temperature overheat
E-516	No feedback from the cooling air fan of the control box
E-552	Comp down due to low output pressure
E-560	Outdoor unit option setting error (E2P options of different models are used or all compressors of the outdoor unit are incorrectly set)
E-563	Versions of the previous indoor unit installation wrong (Micom version to be confirmed)
E-590	Exchanger EEPROM check error
E-702	Indoor unit EEV shutoff error (during the first check)
E-703	Indoor unit EEV startup error (during the first check)
E-901	EHS water inlet sensor short-circuited/open
E-902	EHS water outlet sensor short-circuited/open
E-904	EHS water box sensor short-circuited/open
E-907	EHS antifreezing protection error
E-908	EHS frost protection error (EHS can be restarted)
E-909	EHS frost protection error (EHS cannot be restarted)
E-910	EHS water outlet sensor tripping error
E-911	EHS flow switch error
E-913	EHS flow check switch error 6 times (EHS cannot be restarted)
E-914	EHS thermostat false wiring error
E-915	EHS heat shield panel not running error
UP	Auto check operation not finished (Not ready)