

Factory code	Date	Revision
16025300005215	2020.04.24	J

Leakage Protection Switch must be installed to the Power Supply of the unit.

After power off, it will take 5 minutes to power on

1. Equipment must be grounded.
2. All high-voltage external load, if it is metal or a grounded port, must be grounded.
3. All external load current is needed less than 0.2A, if the single load current is greater than 0.2A, the load must be controlled through AC contactor.
4. "AHS1" "AHS2", "A1" "A2", "R1" "R2" and "DFT1" "DFT2" wiring terminal ports provide only the switch signal.
5. Expansion valve E-Heating tape, Plate heat exchanger E-Heating tape and Flow switch E-Heating tape share a control port.

Error Code

MAIN CONTROL BOARD	
Display	Fault or Protection
E1	Phase loss or neutral wire and live wire are connected reversely (only for three phase unit)
E5	The condenser outlet refrigerant temperature sensor (T3) fault
E6	The ambient temperature sensor (T4) fault
E9	Compressor suction temp.sensor (Th) fault
EA	Compressor discharge temp.sensor (Tp) fault
F1	DC bus low voltage protection
H0	Communication fault between main control board of hydraulic module and main control board
H1	Communication malfunction between main control board and inverter board
H4	Three times P6 protection
H6	DC fan motor fault
H7	Main circuit voltage protection fault
H8	Pressure sensor fault
HF	Inverter module board EEPROM fault
HH	H6 displayed 10 times in 120 minutes
C7	High temp. protection of inverter module
HP	Low pressure protection, (Pe<0.6)occurred 3 times in 1 hour in cooling mode
P0	Low pressure protection
P1	High pressure protection
P3	Compressor overcurrent protection
P4	Compressor discharge temp. too high protection
P6	Inverter module protection
Pd	High temperature protection of refrigerant outlet temp. of condenser
bH	PED PCB fault
L0	DC compressor inverter module fault
L1	DC bus low voltage protection (from inverter module mostly when compressor running)
L2	DC bus high voltage protection from DC driver
L4	MCE fault
L5	Zero speed protection
L7	Phase sequence fault
L8	Compressor frequency variation greater than 15Hz within 1 second protection
L9	Actual compressor frequency differs from target frequency by more than 15Hz protection

MAIN CONTROL BOARD

S6	
ON	Outdoor unit capacity
OFF	OFF-OFF,18kW
ON	Outdoor unit capacity
OFF	OFF-ON,22kW
ON	Outdoor unit capacity
OFF	ON-OFF,26kW
ON	Outdoor unit capacity
OFF	ON-ON,30kW

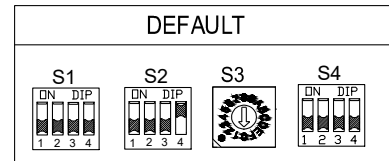
Note: S6-3 reserved

Caution

- Operate the switches and push buttons with an insulated stick (such as a closed ball-point pen) to avoid touching of components.

HYDRO-BOX CONTROL BOARD	
Display	Fault or Protection
E0	Water flow fault (E8 displayed 3 times)
E2	Communication fault between controller and main control board of hydraulic module
H0	Communication fault between main control board of hydraulic module and main control board
E3	Final outlet water temp. sensor(T1) fault
E4	Water tank temp. sensor(T5) fault
E8	Water flow fault
Ed	The plate exchanger water inlet temp. sensor (Tw_in) fault
EE	The main control board of hydraulic module EEPROM fault
H2	The plate exchanger refrigerant outlet (liquid pipe) temp. sensor(T2) fault
H3	The plate exchanger refrigerant outlet (gas pipe) temp. sensor(T2B) fault
HA	The plate heat exchanger water outlet temperature sensor (TW_out) fault
Hb	Three times "PP" protection and
Eb	Solar panel temp.sensor(Tsolar) fault
H9	Zone 2 water flow temp. sensor(Tw2) fault
Pb	Anti-freeze mode protection
P5	High Temperature difference protection between water inlet and water outlet of the plate heat exchanger
PP	Water inlet temperature is higher than water outlet in heating mode
E7	The balance tank up temp.sensor (Tbt1) fault
Ec	The balance tank low temp.sensor(Tbt2) fault
H5	Room temp.sensor(Ta) fault
Hd	Communication fault between master unit and slave unit (in parallel)
HE	Communication fault between indoor unit and Ta / room thermostart transfer PCB

HYDRO-BOX CONTROL BOARD



DIP switch	ON=1	OFF=0	Factory defaults	
S1	1	Reserved	Reserved	OFF
	2	Reserved	Reserved	OFF
S2	3/4	0/0=Without IBH and AHS 0/1=With AHS for heat mode 1/0=With IBH 1/1=With AHS for heat mode and DHW mode		3:OFF 4:OFF
	1	Start pumpo after six hours will be invalid	Start pumpo after six hours will be valid	OFF
S4	2	Without TBH	With TBH	OFF
	3/4	0/0=variable speed pump,Max head:8.5m 0/1=constant speed pump 1/0=variable speed pump,Max head:10.5m 1/1=variable speed pump,Max head:9.0m		3:OFF 4:ON
S4	1/2	Reserved	Reserved	1:OFF 2:OFF
	3/4	Reserved	Reserved	3:OFF 4:OFF

CODE	NAME
COMP	Inverter compressor
EEV1/2	Electric expansion valve
FAN_UP/DOWN	DC fan motor
HEAT1/HEAT2	Crankcase heating
H_PRO/L_PRO	High/Low pressure switch
H-SEN	High pressure sensor
XT1	Big 4-phase terminal
CT1	AC current transformer
RA	Reactor
STF1/STF2	4-way valve
SV5/SV6	Solenoid valve
T3/T3A	Piping temperature sensor
T4	Outdoor ambient temperature sensor
TP	Compressor exhaust temperature sensor
TH	Compressor return temperature sensor

SW1/SW2	Key
S3	Rotary dip switch
S1/S2/S4/SW9	Switch
FS	Flow Switch
SV1 - SV3	Motorized 3-way valve (field supply)
T2,T2B,TW-in, TW-out,T1,Tbt1, Tbt2,T5,TW2,Tsolar	Temperature sensor
PUMP	Variable speed pump
XT1	Terminal block
SG	Solar energy
EVU	Commercial power
M1/M2	Remote switch
KM5 - KM11	AC Contactor

Temp.sensor code	Property values
T2/T2B	B _{25/50} =4100K, R _{25°C} =10kΩ
T1/TW_out TW_in/T5/T1B	B _{0/100} =3970K, R _{50°C} =17.6kΩ

CN35-SMART GRID		
Operating behavior	EVU	SG
Increased operation output	ON	ON
Normal operation	OFF	ON
Decreased operation output	OFF	OFF



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Serie/Series:

WSAN-YMI

Schema/Wiring Diagram:

WD-16025300005215

Grandezza/Size:

91 - 101 - 121 - 141

Tensione/Supply:

380-415V 3N~ 50Hz

