I. Communication data format

1. Standard modbus communication protocol format, baud rate 9600bps, single-character data format (10bit in total, no check, b0 first)

START	b0	b1	b2	b3	b4	b5	b6	b7	STOP
Start bit									Stop bit

START	b0	b1	b2	b3	b4	b5	b6	b7	STOP
Start bit	Data bit								Stop bit

2. Definition of data frame format:

(1) Status query instruction -03 (hexadecimal)

The main device sends instructions	The slave device answer instruction
Slave device address	Slave device address
Function code 03	Function code 03
Register start address H	Byte number
Register start address L	Register 1 data H
Number of registers H	Register 1 data L
Number of registers L	……
CRC（low byte）	Register n data H
CRC（high byte）	Register n data L
	CRC（low byte）
	CRC（high byte）

(2) Single state setting instruction -06 (hexadecimal)

The main device sends instructions	The slave device answer instruction
Slave device address	Slave device address
Function code 06	Function code 06
Register address H	Register address H
Register address L	Register address L
Register data H	Register data H
Register data L	Register data L
CRC（low byte）	CRC（low byte）
CRC（high byte）	CRC（high byte）

(3) Multiple status-setting instruction -0x10 (hexadecimal)

The main device sends instructions	The slave device answer instruction
Slave device address	Slave device address
Function code 0x10	Function code 0x10
Register start address H	Register start address H
Register start address L	Register start address L
Number of registers H	Number of registers H
Number of registers L	Number of registers L
Byte number	CRC（low byte）
Register 1 data H	CRC（high byte）
Register 1 data L	
……	
Register n data H	
Register n data L	
CRC（low byte）	
CRC（high byte）	

3.The device address is 1-32 (test program default address 1)

4. CRC check: Cyclic redundancy check (data starting from the device address), using polynomial $x^{16} + x^{15} + x^2 + 1$ reverse check, that is, 0xA001.

5. Use 03H function code for query, 06H and 10H function code for control.

Note: In order to avoid data detection errors caused by excessively long frame length, the total length of data frame in query, setting and response is controlled within 50 words

II.communication point table content

	Register address	Function	Description	Read/write	Range
Control parameter	40001	On-off state	0- Off 1-On	W	
	40002	Setting Mode	0- Auto, 1- cool, 2- heat, 3- DHW, 4- pool, 5- heating + pool, 6- Auto + DHW, 7- cool + DHW, 8- heat + DHW	W	
	40003	Temperature setting of ZONE1	0-80°C (unit: 0.5 °C, 32 means 16 °C)	W	0—80 (only if direct set point is used in main, 3rd party control and thermostat control)
	40004	Temperature setting of ZONE2	0-80 °C (unit: 0.5 °C, 32 means 16 °C)	W	0—80 (only if direct set point is used in main, 3rd party control and thermostat control)
	40005	DHW temperature setting	0-80 °C (unit: 0.5 °C, 32 means 16 °C)	W	0--80
	40006	Pool temperature setting	0-80 °C (unit: 0.5 °C, 32 means 16 °C)	W	0--80
	40007	Tank sterilization temperature setting	0-80 °C (unit: 1 °C)	W	0--80
	40008	Set ECO mode (HU Energy saving)	0- No 1- Yes	W	
	40009	Fast DHW function	0- No 1- Yes	W	
	40010	SG function selection	0- Self-operating 1- Forced shut down 2- Recommended operation 3- Forced power on	W	WIFI use (Tuya WiFi)
	40011	Tank sterilization operation if is present	0- No 1- Yes	W	

	40012	Normal/silent/Turbo	0- Normal 1- Silent 2- Turbo	W	
	40013	Use of backup heating source	0-HU electrical heater 1-auxiliary heating source gas boiler 2-HU electrical heater and auxiliary heating source gas boiler	W	
	40014	HU anti-freezing function	0- Off 1-On	W	
	40015	Temperature of HU starting anti-freezing	0~15℃, Accuracy 1℃	W	
	40016	If present the buffer tank	0- No 1-Yes	W	
	40017	DHW priority control	0- Off 1-On	W	
	40018	Zone1 Floor drying	0- Off 1-On	W	
	40019	Zone2 Floor drying	0- Off 1-On	W	
	40020	Rust-proof operation	0- Off 1-On	W	
	40021	Set forced defrosting for outdoor unit	0- No 1- Yes	W	
	40022	Allow ZONE 2 cooling	0- No 1-Yes	W	
	40024	Tuya Wi-Fi status	0- Not online 1- Binding 2- Online 3- The server cannot be connected	W	
	40025	If Tuya Wi-Fi is present	0- No 1-Yes	W	The default value is not exist. If the WiFi query command is not received within 4 minutes, the WiFi is considered offline (it needs to be transmitted to the wire controller).
	40026	Sterilization cycle	0-Sunday; 1- Monday; 2- Tuesday; 3- Wednesday; 4- Thursday; 5- Friday; 6- Saturday	W	Bactericidal function Sterilization temperature setting: 0 means 0℃,1 means 0.5℃,2 means 1℃,100

				means 50℃,150 means 75℃
40027	Start time	Hour (bit8-bit15)/minute (bit0-bit7)	W	
40028	Sterilization temperature setting	50-75℃, step size 0.5℃	W	
40029	ECO mode start time	Hour (bit8-bit15)/minute (bit0-bit7)	W	
40030	End time of ECO mode	Hour (bit8-bit15)/minute (bit0-bit7)	W	
40031	△T	-10℃--0℃ Step size 0.5℃	W	ECO mode △T: 0 means -10 ° C, step size 0.5, 1 means -9.5 ° C, 20 means 0 ° C
40032	If have Turbo mode	0- No 1-Yes	W	
40033	Turbo mode running time	0-30min， 1-60min， 2-90min， 3-continuous	W	
40034	Quiet mode time1 if available	0- No 1-Yes	W	
40035	Quiet mode time2 if available	0- No 1-Yes	W	
40036	time1 Start time	Hour (bit8-bit15)/minute (bit0-bit7)	W	
40037	time1 End time	Hour (bit8-bit15)/minute (bit0-bit7)	W	
40038	time2 Start time	Hour (bit8-bit15)/minute (bit0-bit7)	W	
40039	time2 End time	Hour (bit8-bit15)/minute (bit0-bit7)	W	
40040	holiday mode if available	0- No 1-Yes	W	
40041	holiday mode start time	Year 7 bits (bit9-bit15)/ Month 4 bits (bit5-bit8)/ Day 5 bits (BIT0-bit4)	W	
40042	holiday mode End time	Year 7 bits (bit9-bit15)/ Month 4 bits (bit5-bit8)/ Day 5 bits (BIT0-bit4)	W	
40043	holiday mode zone1 Area temperature	0-30 ° C, Step size 0.5 ° C	W	
40044	holiday mode zone2 Area temperature	0-30 ° C, Step size 0.5 ° C	W	
40045	Compressor load control (Hz control)	0-100% Step size 1	W	If 0 → the unit will stand by mode If set 100 →

					100% full capacity request If set 50 → 50% request
		40101	On-off state	0- Off 1-On	R	
		40102	Setting Mode	0- Auto, 1- cool, 2- heat, 3- DHW, 4- pool, 5- heating + pool, 6- Auto + DHW, 7- cool + DHW, 8- heat + DHW	R	
Query parameter		40103	Temperature setting of ZONE1	0-80°C (unit: 0.5 °C, 32 means 16 °C)	R	0—80 (only if direct set point is used in main, 3rd party control and thermostat control)
		40104	ZONE1 control ways selection	0- main and sub controllers (water temperature) 1- External third-party controller (water temperature) 2- Thermostat (Haier Brand)	R	
		40105	Temperature setting of ZONE 2	0-80°C (unit: 0.5 °C, 32 means 16 °C)	R	0—80 (only if direct set point is used in main, 3rd party control and thermostat control)
		40106	ZONE 2 control mode selection	0- main and sub controllers (water temperature) 1- External third-party controller (water temperature) 2- Thermostat (Haier Brand)	R	
		40107	DHW temperature setting	0-80 °C (unit: 0.5 °C, 32 means 16 °C)	R	0--80
		40108	Pool temperature setting	0-80 °C (unit: 0.5 °C, 32 means 16 °C)	R	0--80
		40109	Allow system cooling	0- No 1- Yes	R	
		40110	Set ECO mode (HU Energy saving)	0- No 1- Yes	R	
		40111	Fast DHW function	0- No 1- Yes	R	
		40112	SG function selection	0- Self-operating 1- Forced shut down 2- Recommended operation 3- Forced power on	R	Tuya Wi-Fi use
		40113	Tank sterilization operation if is present	0- No 1- Yes	R	

	40114	Normal/silent/Turbo	0- Normal 1- Silent 2- Turbo	R	
	40115	Use of backup heating source	0-HU electrical heater 1-auxiliary heating source gas boiler 2-HU electrical heater and auxiliary heating source gas boiler	R	
	40116	Zone 1 area exist sign	0- No 1- Yes	R	Default- On
	40117	Zone 2 area exist sign	0- No 1- Yes	R	
	40118	DHW area exist sign	0- No 1- Yes	R	
	40119	Pool area exist sign	0- No 1- Yes	R	
	40120	HU anti-freezing function	0- Off 1-On	R	
	40121	Temperature of HU starting anti-freezing	0~15°C, Accuracy 1°C	R	
	40122	If present the buffer tank	0- No 1-Yes	R	
	40123	DHW priority control	0- Off 1-On	R	
	40124	ZONE 1 Floor drying	0- Off 1-On	R	
	40125	ZONE 2 Floor drying	0- Off 1-On	R	
	40126	Rust-proof operation	0- Off 1-On	R	
	40127	Set forced defrosting for outdoor unit	0- No 1- Yes	R	
	40128	Whether ZONE 2 can operation cooling	0- No 1- Yes	R	
	40130	Whether solar exists	0- No 1- Yes	R	
	40131	Tank sterilization operation status	0- No 1- Yes	R	
	40132	ZONE1 Pump （pump1） output	0- Off 1-On	R	
	40133	ZONE2 Pump （pump2） output	0- Off 1-On	R	
	40134	Pump in front of pool heat exchanger（pump3）output	0- Off 1-On	R	
	40135	Pump after the pool heat exchanger（pump4）output function	0- Off 1-On	R	
	40136	Solar thermal pump output	0- Off 1-On	R	
	40137	Gas boiler auxiliary output	0- Off 1-On	R	
	40138	Tank electric heater output	0- Off 1-On	R	
	40139	Outdoor unit defrosting operation	0- No 1- Yes	R	
	40140	Outdoor unit operation mode	0- Off 1- cooling 2- heating	R	
	40141	Outdoor unit ambient temperature	Unit 0.1 ℃	R	

		40142	ZONE1 Indoor Tai_1 temperature	Unit 0.1 ℃		R	
		40143	Temperature of ZONE1 after 3 way valve	Unit 0.1 ℃		R	
		40144	ZONE2 Indoor Tai_1 temperature	Unit 0.1 ℃		R	
		40145	ZONE2 Temperature of Twz-2 after the mixing valve	Unit 0.1 ℃		R	
		40146	Temperature of buffer tank T-buffer	Unit 0.1 ℃			
		40147	DHW tank T_tank temperature	Unit 0.1 ℃		R	
		40148	Water temperature after the pool mixing valve	Unit 0.1 ℃		R	
		40149	Water temperature of swimming pool	Unit 0.1 ℃		R	
		40150	Temperature of the solar thermal sensor	Unit 0.1 ℃		R	
		40151	HU Water Inlet temperature of Twi	Unit 0.1 ℃		R	■
		40152	HU Water Outlet temperature of Two	Unit 0.1 ℃		R	■
		40153	Current operating mode on water side	0- Auto 1-cool 2- heat 3- DHW 4- pool 5- heat + pool		R	■
		40154	Tuya Wi-Fi status	0- Not online 1- Binding 2- Online 3- The server cannot be connected		R	
		40155	Tuya Configure Wi-Fi	0- Off 1-On		R	
		40156	If Tuya Wi-Fi is present	0- No 1-Yes		R	
		40157	High pressure value	Unit: 0.01kg Sent value = actual value *100,16 integer		R	
		40158	Low pressure value	Unit: 0.01kg Sent value = actual value *100, 16 integer		R	
		40159	Compressor frequency	Unit :0.1hz. Sent value = actual value x 10, 16 integer		R	
		40160	Speed of fan	Unit :1 RPM		R	
		40161	Compressor air discharge temperature	Unit 0.1 ℃		R	
		40162	Compressor suction air temperature	Unit 0.1 ℃		R	

40163	~~Module~~ IPM temperature	Unit 0.1 ℃	R	
40164	Thi sensor	Unit 0.1 ℃	R	
40165	Tho sensor	Unit 0.1 ℃	R	
40166	Sterilization cycle	0-Sunday; 1- Monday; 2- Tuesday; 3- Wednesday; 4- Thursday; 5- Friday; 6- Saturday	R	
40167	Start time	Hour (bit8-bit15)/minute (bit0-bit7)	R	
40168	Sterilization temperature setting	50-75℃, step size 0.5℃	R	
40169	ECO mode start time	Hour (bit8-bit15)/minute (bit0-bit7)	R	
40170	End time of ECO mode	Hour (bit8-bit15)/minute (bit0-bit7)	R	
40171	△T	-10℃--0℃ Step size 0.5℃	R	
40172	If have Turbo mode	0- No 1-Yes	R	
40173	Turbo mode running time	0-30min， 1-60min， 2-90min， 3-continuous	R	
40174	Quiet mode time1 if available	0- No 1-Yes	R	
40175	Quiet mode time2 if available	0- No 1-Yes	R	
40176	time1 Start time	Hour (bit8-bit15)/minute (bit0-bit7)	R	
40177	time1 End time	Hour (bit8-bit15)/minute (bit0-bit7)	R	
40178	time2 Start time	Hour (bit8-bit15)/minute (bit0-bit7)	R	
40179	time2 End time	Hour (bit8-bit15)/minute (bit0-bit7)	R	
40180	holiday mode if available	0- No 1-Yes	R	
40181	holiday mode start time	Year 7 bits (bit9-bit15)/ Month 4 bits (bit5-bit8)/ Day 5 bits (BIT0-bit4)	R	

40182	holiday mode End time	Year 7 bits (bit9-bit15)/ Month 4 bits (bit5-bit8)/ Day 5 bits (BIT0-bit4)	R	
40183	holiday mode zone1 Area temperature	0-30 ° C, Step size 0.5 ° C	R	
40184	holiday mode zone2 Area temperature	0-30 ° C, Step size 0.5 ° C	R	
40185	Sterilization mode Current status	0- off 1- Sterilizing	R	
40186	The current status of Quiet mode	0- Off 1-On	R	
40187	The current status of Turbo Mode	0- Off 1-On	R	
40188	The current status of ECO Mode	0- Off 1-On	R	
40189	HU gets a new time sign	0- No 1-Yes	R	Yes: Deliver immediately No: Delivered every day at 1:00 a.m
40190	Energy consumption monitoring/thermostat support	bit0: thermostat bit1: energy consumption	R	0: not supported 1: supported
40191	Water flow Volume	Accuracy 0.1	R	Unit: L/min
40192	Water pressure	Accuracy 0.1	R	Unit: Bar
40193	Compressor flow	Accuracy 0.1	R	Unit: Ampere
40194	Outdoor Unit current input (included fan motor)	Accuracy 0.1	R	Unit: Ampere
40195	Electrical power high 16 bits	Accuracy 1, Calculated value, high 16 bits, Cascade reserved	R	Unit: W (not present in the RC)
40196	Electrical power low 16 bit	Accuracy 1, Calculated value, high 16 bits, Cascade reserved	R	Unit: W (not present in the RC)
40197	~~Thermal~~ Capacity (heat/cool) power high 16 bit	Accuracy 1, Calculated value, high 16 bits, Cascade reserved	R	Unit: W (not present in the RC)
40198	~~Thermal~~ Capacity (heat/cool) power low 16 bit	Accuracy 1, Calculated value, high 16 bits, Cascade reserved	R	Unit: W (not present in the RC)
40199	Compressor load control	0-100% Step size 1	R	0 The control function is disabled

					1-9 Compressor stop 10-100 Normal control
	40201	Hydrobox HU Historical fault	HU Historical fault code 1 (0 indicates no fault)	R	
	40202		HU Historical fault code 2 (0 indicates no fault)	R	
	40203		HU Historical fault code 3 (0 indicates no fault)	R	
	40204	Current fault subcode	Current fault subcode	R	
	40205	Current fault code	Current fault code	R	
	40206	Outdoor unit history fault code	Outdoor unit history fault code 1	R	
	40207		Outdoor unit history fault code 2	R	
	40208		Outdoor unit history fault code 3	R	
	40209		Outdoor unit history fault subcode 1	R	
	40210		Outdoor unit history fault subcode 2	R	
	40211		Outdoor unit history fault subcode 3	R	

Energy consumption correlation

	Register address	Function	Description	Read/write	Range
	40301	Data type	0- Cooling power consumption	W/R	
			1- Power consumption of heat pump		
			2-DHW heat pump power consumption		
			3- Water tank electric heating power consumption/heat production		
			4-HU auxiliary electric heating power consumption/heat production		
			5- Reserve		
			6- Heating capacity of heat pump		
			7-DHW heat pump heat capacity		
			8- Total heating power consumption (heating heat pump +HU auxiliary electric heating)		
			9-DHW Total power consumption (Heat pump + water tank electric heating)		
	40302	Query Type	0- Last 24 hours per hour (excluding current hours)	W/R	0 & 1 step size 0.1 kWh，2 & 3 step size 1 kWh
			1- Last month 31 days (when + near)		
			2- Last 12 months per month (when + near)		

			3- Nearly 5 years per year (when + near)		
First kind	40303	Data bit 1	The first data	R	
	40304	Data bit 2	Number two	R	
	…	...	...		
	40332	Data bit 30	Number 30	R	
	40333	Data bit 31	Number 31	R	
	40334	reserve	reserve		
Second kind	40303	Data bit 1 (low)	The first data	R	
	40304	Data bit 1 (high)			
	…	...	…	…	
	40331	Data bit 15 (low)	The first data	R	
	40332	Data bit 15 (high)			
	40333	reserve	reserve		
	40334	reserve	reserve		
Power setting	40335	reserve	reserve		
	40336	Power mode selection	0- Calculation 1- Measurement	R	
	40337	reserve	reserve		
	40338	Power pulse selection	0- Not installed 1-1/10kWh, 2-1/kWh, 3-10/kWh 4-100/kWh, 5-1000/kWh	R	
Heat setting	40339	reserve	reserve		
	40340	Heat mode selection	0- Calculation 1- Measurement	R	
	40341	reserve	reserve		
	40342	Heat pulse selection	0- Not installed 1-1/10kWh, 2-1/kWh, 3-10/kWh, 4-100/kWh, 5-1000/kWh	R	
The energy consumption information is transmitted simultaneously with this time	40343	Used to transmit energy consumption information time/hour		R	Transmit energy consumption information to WiFi with time transmission
Time synchronization of wire controller	40344	Used to synchronize the time day/year/month with the wire controller	Year 7 bits (bit9-bit15)/ Month 4 bits (bit5-bit8)/ Day 5 bits (BIT0-bit4)	W/R	For example: May 16, 2019 0010011 0101 10000
	40345	Used to synchronize time with the wire controller	Hour (bit8-bit15)/minute (bit0-bit7)	W/R	
	40346	Used to synchronize time/second with the wire controller		W/R	

	Register address	Function	Description	Read/write	Range
The energy consumption information is transmitted simultaneously with this time	40347	Used to transmit energy consumption information time/year/month/day	Year 7 bits (bit9-bit15)/ Month 4 bits (bit5-bit8)/ Day 5 bits (BIT0-bit4)	R	Transmit energy consumption information to WiFi with time transmission

Thermostat parameter setting

	Register address	Function	Description	Read/write	Range
"0-15" If present Thermostat	40350	Whether the 0-15 Thermostat exists	bit0: Thermostat with address 0 bit1: Thermostat with address 1 ... bit15: Thermostat with address 15	R	
Thermostat 0	40351	On Off	0: On 1: Off	W/R	
	40352	Operation mode	0- fan coil cooling 1- fan coil heating 2- floor heating 3- fan coil heating + floor heating 4- fan coil Air supply (reserved)	W/R	Depending on the availability of fan coil and floor heating, Mode operations are automatically adapted
	40353	Set temperature	0-50℃ unit 0.5℃ 32 means 16℃	W/R	Automatically set the temperature according to the mode: heating: 10~30 ℃ Cooling: 16~30℃ floor heating + heating: 10~30 ℃ floor heating: 10~30℃
	40354	Operating wind speed	0-auto 1-low 2-mid 3-high	W/R	
	40355	Thermostat fault	0-150	R	
	40356	Indoor ambient temperature	0-50°C Step size 0.1°C	R	
	40357	Fan coil if present	0: No 1: Yes	R	
	40358	Floor heating if present	0: No 1: Yes	R	
	40359	Zone Area	0: zone1 1: zone2	R	
	40360	Whether the thermostat works	0: No 1: Yes	R	
	40361	On Off	0: On 1: Off	W/R	

	40362	Operation mode	0- fan coil cooling 1- fan coil heating 2- floor heating 3- fan coil heating + floor heating 4- fan coil Air supply (reserved)	W/R	Depending on the availability of fan coil and floor heating, Mode operation are automatically adapted
Thermostat 1	40363	Set temperature	0-50℃ unit 0.5℃ 32 means 16℃	W/R	Automatically set the temperature according to the mode: heating: 10~30 ℃ Cooling: 16~30℃ floor heating + heating: 10~30 ℃ floor heating: 10~30℃
	40364	Operating wind speed	0-auto 1-low 2-mid 3-high	W/R	
	40365	Thermostat fault	0-150	R	
	40366	Indoor ambient temperature	0-50°C Step size 0.1°C	R	
	40367	Fan coil if present	0：No 1：Yes	R	
	40368	Floor heating if present	0：No 1：Yes	R	
	40369	Zone Area	0：zone1 1：zone2	R	
	40370	Whether the thermostat works	0：No 1：Yes	R	
			....		
	40491	On Off	0：On 1：Off	W/R	
	40492	Operation mode	0- fan coil cooling 1- fan coil heating 2- floor heating 3- fan coil heating + floor heating 4- fan coil Air supply (reserved)	W/R	Depending on the availability of fan coil and floor heating, Mode operation are automatically adapted
Thermostat 14	40493	Set temperature	0-50℃ unit 0.5℃ 32 means 16℃	W/R	Automatically set the temperature according to the mode: heating: 10~30 ℃ Cooling: 16~30℃ floor heating + heating: 10~30 ℃ floor heating: 10~30℃

	40494	Operating wind speed	0-auto 1-low 2-mid 3-high	W/R	
	40495	Thermostat fault	0-150	R	
	40496	Indoor ambient temperature	0-50°C Step size 0.1°C	R	
	40497	Fan coil if present	0：No 1：Yes	R	
	40498	Floor heating if present	0：No 1：Yes	R	
	40499	Zone Area	0：zone1 1：zone2	R	
	40500	Whether the thermostat works	0：No 1：Yes	R	
Thermostat 15	40501	On Off	0：On 1：Off	W/R	
	40502	Operation mode	0- fan coil cooling 1- fan coil heating 2- floor heating 3- fan coil heating + floor heating 4- fan coil Air supply (reserved)	W/R	Depending on the availability of fan coil and floor heating, Mode operation are automatically adapted
	40503	Set temperature	0-50°C unit 0.5°C 32 means 16°C	W/R	Automatically set the temperature according to the mode: heating: 10~30 ℃ Cooling: 16~30℃ floor heating + heating: 10~30 ℃ floor heating: 10~30℃
	40504	Operating wind speed	0-auto 1-low 2-mid 3-high	W/R	
	40505	Thermostat fault	0-150	R	
	40506	Indoor ambient temperature	0-50°C Step size 0.1°C	R	
	40507	Fan coil if present	0：No 1：Yes	R	
	40508	Floor heating if present	0：No 1：Yes	R	
	40509	Zone Area	0：zone1 1：zone2	R	
	40510	Whether the thermostat works	0：No 1：Yes	R	
Query parameters: Others	40601	Temperature curve type	0- direct 1- auto curve 2- set curve	R	

IV. ZONE setting logic

Set ZONE1 and ZONE2 based on register 40104/40106 query data Below settings are possible if parameter 40601 is 0.			
ZONE1/ ZONE2 control mode selection	Setting Mode (40102)	Temperature setting	Note
0- Main and sub controllers (Water temperature control)	0- Auto	Water temperature ranges from 5 to 80. The default value is 25	Temperature Settings, R/W (40003 and 40004) Turn on and turn off, R/W (40001)
	1- Cool	Water temperature ranges from 5 to 25. The default value is 25	
	2- Heat	Water temperature ranges from 25 to 80. The default value is 25	
	5- heat + pool	Water temperature ranges from 25 to 80. The default value is 25	
	6- Auto + DHW	Water temperature ranges from 5 to 80. The default value is 25	
	7- Cool+ DHW	Water temperature ranges from 5 to 25. The default value is 25	
	8- Heat + DHW	Water temperature ranges from 25 to 80. The default value is 25	
1- External third-party controller (Dry Contact) (Water temperature control)	0- Auto	Water temperature ranges from 5 to 80. The default value is 25	Temperature Settings, R/W (40003 and 40004) Turn on and turn off, W (40001)
	1- Cool	Water temperature ranges from 5 to 25. The default value is 25	
	2- Heat	Water temperature ranges from 25 to 80. The default value is 25	

5- heat + pool	Water temperature ranges from 25 to 80. The default value is 25	
6- Auto + DHW	Water temperature ranges from 5 to 80. The default value is 25	
7- Cool+ DHW	Water temperature ranges from 5 to 25. The default value is 25	
8- Heat + DHW	Water temperature ranges from 25 to 80. The default value is 25	