	Register	R / W	Register Name	Min	Max	Unit	Description	Note
USER SETTINGS								
3.0->	**4x5001**	**RW**	**Operating Mode**	**0**	**5**		**0= Shutdown, 1 = Away, 2 = Home, 3 = Boost, 4 = Travelling, *(5 = Home+ included in Genius)***	
3.0->	4x5102	RW	Boost mode timer	0	5		0 = Continuous, 1 = 30min, 2 = 60min, 3 = 90min, 4 = 120min, 5 = 240min	
4.0->	4x5108	RW	Home + mode ventilation level	10	90	%	0% corresponds to the Home mode and 100% the Boost mode ventilation level	
4.0->	4x5203	RW	Home+ visibility in User Panel	0	1		0 =Not visible/disabled 1 = Enabled	User Panel visibility
3.0->	4x5106	RW	Travelling mode speed drop	0	10	%	Traveling mode ventilation reduction from away mode	
3.0->	4x5202	RW	Travelling visibility in User Panel	0	1		0 =Not visible/disabled 1 = Enabled	User Panel visibility
3.0->	4x5207	RW	Shutdown visibility in User Panel	0	1		0 =Not visible/disabled 1 = Enabled	User Panel visibility
3.0->	**4x5018**	**RW**	**Emergency Stop**	**0**	**2**		**0 = Emergency stop disabled, 1 = Emergency stop enabled, 2 = Emergency Overpressurizing enabled**	**If Emergency overpressurising is used Water radiator Freezing protection is disabled!**
3.0->	**4x5009**	**RW**	**CO2 automation**	**0**	**1**		**0 = Auto Home/Away/Boost control disabled, 1 = Auto Home/Away/Boost control enabled**	**Available only in units with CO2 sensor**
4.0->	4x5116	RW	Boost mode Limit	0	2000	ppm	CO2 level when unit is working in boost speed.	
3.0->	4x5114	RW	Home mode Limit	0	2000	ppm	CO2 level when unit is working in home speed.	
3.0->	4x5115	RW	Away mode Limit	0	2000	ppm	CO2 level when unit is working in away speed.	
3.1->	**4x5010**	**RW**	**RH automation**	**0**	**5**		**0 =Off, 1=Low, 2=Normal, 3=High, 4=Max, 5=Advanced**	
4.0->	4x5010 - 1		- Low selection				Max boost level is 1/3 of Home-Boost level. Boost limit is 10% + RH average and full boost limit is 40% + RH average	
4.0->	4x5010 - 2		- Normal selection				Max boost level is 2/3 of Home-Boost level. Boost limit is 5% + RH average and full boost limit is 30% + RH average	
4.0->	4x5010 - 3		- High selection				Max boost level Boost level. Boost limit is 5% + RH average and full boost limit is 20% + RH average	
4.0->	4x5010 - 4		- Full selection				Max boost level Boost level. Boost limit is 5% and boosting is set immediately to max.	
4.0->	4x5117	RW	- Advanced selection Boost Limit	0	50	%	The ventilation is boosted steplessly when the humidity has risen from the averate Boost limit defined amount.	
4.0->	4x5118	RW	- Advanced selection Max Boost Limit	0	50	%	The maximum ventilatoin boost is reached when the humidity has risen the full boost limit defined amount from the average.	
4.0->	4x5178	RW	- Advanced selection Max allowed boost level	0	100	%	0% corresponds to the Home mode and 100% the Boost mode ventilation level	
3.1->	4x5119	RW	Boost delay	0	30	min	Boost start is delayed, so that ventilation is not disturbing during the shower	
3.1->	4x5120	RW	Boost during delay	0	25	%	Boost delay during the delay	
4.0->	4x5179	RW	Automation allowed in away mode	0	1		Allow function in away mode	
4.0->	**4x5224**	**RW**	**RH Control (Sorption units only)**	**0**	**1**		**0 = Off, 1 =On (Do not disable RH Control in Sorption rotor units.**	
4.2->	4x5225	RW	Indoor Humidity Setpoint (RH)	30	65	%	RH control setpoint (outside temperature aboce -5°C) . Note that high value may cause condensation problems during the winter and too low setpoint may increase system energy consumption.	Available only in Sorption Rotor units
4.2->	4x5226	RW	Indoor Humidity Limit in a cold climate	10	50	%	Humidity setpoint when outside temperature is below -15°C.	
4.2->	4x5227	RW	Humidity Recovery control during the summer	0	2		0 = Auto, 1= Off, 2= On The recommended mode is Auto, where humidity recovery is based on supply air temperature and indoor humidity. Select ON if you want maximum humidity recovery when using condencing cooling system. Select Off if you want to disable humidity recovery control during summer.	
3.0	**4x5011**	**RW**	**VOC automation**	**0**	**1**		**0 =Off, 1=Low, 2=Normal, 3=High, 4=Max, 5=Advanced**	**Available only in units with VOC sensor**
4.0->	4x5011 - 1	RW	- Low selection				Max boost level is 1/3 of Home-Boost level. Boost limit is 1200ppm and full boost limit is 2000ppm	
4.0->	4x5011 - 2	RW	- Normal selection				Max boost level is 2/3 of Home-Boost level. Boost limit is 800ppm and full boost limit is 2000ppm	
4.0->	4x5011 - 3	RW	- High selection				Max boost level is Boost level. Boost limit is 700ppm and full boost limit is 1500ppm	
4.0->	4x5011 - 4	RW	- Full selection				Max boost level is Boost level. Boost limit is 500ppm and full boost limit is 1000ppm	
3.0->	4x5121	RW	- Advanced selection Boost limit	0	2000	ppm	The boost starts when the room temperature is over the set limit. Summer mode needs to be active and supply temperarure cold enough.	
3.0->	4x5122	RW	- Advanced selection Full boost limit	0	2000	ppm	Temperature limit when boost is in max level	
4.0->	4x5180	RW	- Advanced selection Max allowed boost level	0	100	%	0% corresponds to the Home mode and 100% the Boost mode ventilation level	
4.0->	4x5181	RW	Automation allowed in away mode	0	1		Allow function in away mode	
4.0->	**4x5169**	**RW**	**Summer mode boost**	**0**	**5**		**0 =Off, 1=Low, 2=Normal, 3=High, 4=Max, 5=Advanced**	
4.0->	4x5169 - 1	RW	- Low selection				Max boost level is Home level. Boost gain: 6°C room temperature difference -> Max boost	
4.0->	4x5169 - 2	RW	- Normal selection				Max boost level is 1/2 of Home-Boost level. Boost gain: 4°C room temperature difference -> Max boost	
4.0->	4x5169 - 3	RW	- High selection				Max boost level is Boost level. Boost gain: 2°C room temperature difference -> Max boost	
4.0->	4x5169 - 4	RW	- Full selection				Max boost level is Boost level. Boost gain: 1°C room temperature difference -> Max boost	
3.0->	4x5170	RW	Advanced selection Boost limit (room temperature)	130	300	0.1°C	Ventilation is boosted when room temperature is higher the limit.	
3.1->	4x5125	RW	Advanced selection Full Boost limit (room temperature)	130	300	0.1°C	Ventilation is boosted to maximum when room temperature reach the limit.	
4.1.45->	4x5870	RW	Advanced selection Boost limit (room temperature)	55	86	F°	Ventilation is boosted when room temperature is higher the limit.	
4.1.45->	4x5823	RW	Advanced selection Full Boost limit (room temperature)	55	86	F°	Ventilation is boosted to maximum when room temperature reach the limit.	
4.0->	4x5182	RW	Advanced selection Max allowed boost level	0	100	%	0% corresponds to the Home mode and 100% the Boost mode ventilation level	
4.0->	4x5183	RW	Automation allowed in away mode	0	1		Allow function in away mode	
3.0->	**4x5005**	**RW**	**Cooking mode control**	**0**	**1**		**0 = Cooker hood damper is closed, 1 = Cooker hood damper is opened and cooking mode airflows are activated. 10h timer is activated.**	**Open cooker hood damper and activates cooking mode. Note that modbus control has 10 hour timer so function is active 10h or when controlled off or if unit is restarted.**
3.0->	**4x5020**	**RW**	**Cooker hood selection**	**0**	**4**		**0 = No Cooker hood, 1 = Cooker hood function with ventilation unit, 2 = Cooker hood with roof fan, 3 = Cooker hood with integrated fan, 4 = Recircullating cooker hood.**	**Cooker Hood function is activated when Casa cooker hood damper is opened**
4.0->	4x5184	RW	Cooking mode Supply fan control	20	100	%	Measure building internal pressure and select supply fan control so that presssure is in balance.	
4.0->	4x5185	RW	Cooking mode Extract fan control	20	100	%	Measure building internal pressure and select extract fan control so that presssure is in balance.	
3.0->	**4x5002**	**W**	**Fireplace function Activation**	**0**	**1**		**1 = Activate Fireplace function with timer, 0 = Stop Fireplace function**	**Firelace function activation**
4.0->	4x5105	RW	Fireplace function level	0	2		0 = Low(1/3 of max), 1= Normal (2/3 of max), 2 = High (max)	Overpressure level
3.0->	4x5201	RW	Fireplace function visibility in User Panel	0	1		0 = Disabled, 1 = Enabled	User Panel visibility
4.0->			**Central Vacuum Cleaner (CVC) function**				**Control only with CVC input DI1-DI5**	
3.0->	4x5113	RW	Central Vacuum Cleaner compensation	0	50	%	Fan speed compensation activated with IO input. Decrease Exhaust fan speed (Min speed Away) and increase supply fan speed if necessary.	

Heating / Cooling								
3.0->	**4x5101**	**RW**	**Temperature setpoint**	**130**	**250**	**0.1°C**	**Supply temperature setpoint (Supply air control method = Supply air)**	
4.0->	**4x5168**	**RW**	**Temperature setpoint Summer**	**130**	**250**	**0.1°C**	**Supply temperature setpoint for summer period (Included in Genius)**	
4.1.45->	**4x5801**	**RW**	**Temperature setpoint**	**55**	**77**	**F°**	**Supply temperature setpoint (Supply air control method = Supply air)**	
4.1.45->	**4x5868**	**RW**	**Temperature setpoint Summer**	**55**	**77**	**F°**	**Supply temperature setpoint for summer period**	
4.0->	4x5164	RW	Summer mode detection	0	2		0 =OFF, 1=Auto, 2=ON	
4.0->	4x5166	RW	Summer mode detection outside limit	0	400	0.1°C	Summer mode is detected when outside temperature or outside average temperature is above limit	
4.0->	4x5167	RW	Summer mode Room temperature limit	100	400	0.1°C	Summer mode is detected when room temperature is above limit	Active if User control selected
4.1.45->	4x5866	RW	Summer mode detection outside limit	32	104	F°	Summer mode is detected when outside temperature or outside average temperature is above limit	
4.1.45->	4x5867	RW	Summer mode Room temperature limit	50	104	F°	Summer mode is detected when room temperature is above limit	Active if User control selected
4.0->	**4x5186**	**RW**	**Winter mode limit**	**-100**	**300**	**0.1°C**	**Winter mode is activated when outside temperture is below the limit. Heat exhanger is controlled to maximum heating efficiency.**	
4.1.45->	**4x5886**	**RW**	**Winter mode limit**	**14**	**86**	**F°**	**Winter mode is activated when outside temperture is below the limit. Heat exhanger is controlled to maximum heating efficiency.**	
4.0->	4x5171	RW	Winter mode Supply temperature setpoint for Away	130	250	0.1°C	Save energy on the heating period in away or travelling mode by selecting a lower supply air temperature setpoint	
4.0->	4x5104	RW	Winter mode Supply temperature setpoint for Travelling	130	250	0.1°C		
4.1.45->	4x5807	RW	Winter mode Supply temperature setpoint for Away	55	77	F°	Save energy on the heating period in away or travelling mode by selecting a lower supply air temperature setpoint	
4.1.45->	4x5871	RW	Winter mode Supply temperature setpoint for Travelling	55	77	F°		
4.1->	4x5199	RW	Defrost level	0	2		0= Defrost level Low, 1=Defrost level normal, 2=Defrost level high	Select level high if significant amount of ice is generated inside the unit
4.1->	4x5198	RW	Minimum supply air temperature during defrost	100	170	0.1°C	Air flows are reduced to maintain supply air temperature in selected level.	Note this value is effective only when defrost is active.
4.1.45->	4x5898	RW	Minimum supply air temperature during defrost	50	63	F°	Air flows are reduced to maintain supply air temperature in selected level.	Note this value is effective only when defrost is active.
3.0->	**4x5130**	**RW**	**Supply air control method**	**0**	**1**		**0 = Supply air, 1 = Room air**	
4.0->	4x5187	RW	Room temperature setpoint	160	260	0.1°C	Supply/Room temperature controller setpoint	
4.0->	4x5188	RW	Winter mode Room temperature setpoint for Away	160	260	0.1°C	Save energy on the heating period in away or travelling mode by selecting a lower room air temperature setpoint	
4.0->	4x5189	RW	Winter mode Room temperature setpoint for Travelling	160	260	0.1°C		
3.0->	4x5133	RW	Room air control, Min Supply temperature setpoint	130	250	0.1°C	Room air control method controls the supply temperature setpoint between selected setpoint limits based on room temperature.	Available only if Room temperature control selected.
3.0->	4x5134	RW	Room air control, Max Supply temperature setpoint	130	250	0.1°C		
3.0->	4x5136	RW	Room air control (cooling), Min Supply temperature setpoint	100	300	0.1°C	If external cooling coil is installed, the room air control method controls the supply temperature setpoint between selected limits when cooling is active.	Available only if Room temperature control selected and with External Cooling device.
3.0->	4x5137	RW	Room air control (cooling), Max Supply temperature setpoint	100	300	0.1°C		
4.1.45->	4x5887	RW	Room temperature setpoint	60	79	F°	Supply/Room temperature controller setpoint	
4.1.45->	4x5888	RW	Winter mode Room temperature setpoint for Away	60	79	F°	Save energy on the heating period in away or travelling mode by selecting a lower room air temperature setpoint	
4.1.45->	4x5889	RW	Winter mode Room temperature setpoint for Travelling	60	79	F°		
4.1.45->	4x5833	RW	Room air control, Min Supply temperature setpoint	55	77	F°	Room air control method controls the supply temperature setpoint between selected setpoint limits based on room temperature.	Available only if Room temperature control selected.
4.1.45->	4x5834	RW	Room air control, Max Supply temperature setpoint	55	77	F°		
4.1.45->	4x5836	RW	Room air control (cooling), Min Supply temperature setpoint	50	86	F°	If external cooling coil is installed, the room air control method controls the supply temperature setpoint between selected limits when cooling is active.	Available only if Room temperature control selected and with External Cooling device.
4.1.45->	4x5837	RW	Room air control (cooling), Max Supply temperature setpoint	50	86	F°		
Duct coils								
4.0->			**Internal Post heater**				**User outside temperature limit to disable internal postheater**	**Available only in units with internal postheater**
3.0->	4x5129	RW	Heating Fresh air limit	-50	300	0.1°C	Heating is allowed when outside temperature is below the limit.	Available only in units with internal postheater
4.1.45->	4x5829	RW	Heating Fresh air limit	23	86	F°	Heating is allowed when outside temperature is below the limit.	Available only in units with internal postheater
4.0->	**4x5016**	**RW**	**External Post heater Liquid / Electrical**	**0**	**1**		**0 = Disabled, 1 = Water based post heater, 2= Electrical post heater**	**Available only in units with External Heating device**
3.0->	4x5129	RW	Heating Fresh air limit	-50	300	0.1°C	Heating is allowed when outside temperature is below the limit.	
4.1.45->	4x5829	RW	Heating Fresh air limit	23	86	F°	Heating is allowed when outside temperature is below the limit.	Available only in units with internal postheater
3.0->	4x5153	RW	T7 External Supply Temperature Sensor	0	1		0=Swegon PTC, 1 = PT1000	Must be installed if external postheater is installed
3.0->	4x5156	RW	T6 Water Temperature Sensor Type	0	1		0=Swegon PTC, 1 = PT1000	Must be installed if water based postheater is installed
4.0->	**4x5015**	**RW**	**External Post Cooling control / Ground liquid cooling**	**0**	**1**		**0 = Disabled, 1 = Liquid based post cooler, 2 = Water based post cooler**	**Available only in units with External Cooling device**
3.0->	4x5135	RW	Cooling Fresh air limit	0	400	0.1°C	Cooling is allowed when outside temperature is above the limit.	Available only in units with External Cooling device
4.1.45->	4x5835	RW	Cooling Fresh air limit	32	104	F°	Cooling is allowed when outside temperature is above the limit.	Available only in units with External Cooling device
4.0->	4x5153	RW	T7 External Supply Temperature Sensor	0	1		0=Swegon PTC, 1 = PT1000	Must be installed if external post cooler is installed
4.0->	4x5156	RW	T6 Water Temperature Sensor Type	0	1		0=Swegon PTC, 1 = PT1000	Must be installed if **water** based post cooler is installed
3.0->	**4x5017**	**RW**	**External liqid coil (preheating / cooling)**	**0**	**1**		**0 = Disabled, 1 = Enabled, Note! define Relay output (DO) for Liquid preheater/precooler pump before function is enabled.**	**Function controls pump/valve relay based on outside temperature.**
3.0->	4x5138	RW	External Pre heating Fresh air limit	-500	500	0.1°C	Output for Preheating/cooling is activated when outside temperature is below the limit	Available only in units with External preheater/cooling device
3.0->	4x5139	RW	External Pre cooling Fresh air limit	-500	500	0.1°C	Output for Preheating/cooling is activated when outside temperature is above the limit	Available only in units with External preheater/cooling device
4.1.45->	4x5838	RW	External Pre heating Fresh air limit	-58	122	F°	Output for Preheating/cooling is activated when outside temperature is below the limit	Available only in units with External preheater/cooling device
4.1.45->	4x5839	RW	External Pre cooling Fresh air limit	-58	122	F°	Output for Preheating/cooling is activated when outside temperature is above the limit	Available only in units with External preheater/cooling device
4.0->	4x5154	RW	T8 External Outside Temperature Sensor	0	1		0=Swegon PTC, 1 = PT1000	External outside temperature measurement is used to for external preheater/cooler output control.
4.0->	**4x5176**	**RW**	**External Preheater Liquid / Electrical**	**0**	**1**		**0 = Disabled, 1=Electrical preheater, 2 = Liquid based preheater**	**Available only in units with External preheater**
External Connections								
3.0->	4x5157	RW	GIO 1 function	0	255		**Disabled** = 0 **DI:** 1=Emergency Stop, 2=Emergency Stop Resetted, 3= Stop, 4=Travelling, 5=Away, 6=Away/Home	
3.0->	4x5158	RW	GIO 2 function	0	255		7=Home, 8=Home+, 9=Boost, 10=Boost(pulse), 11=Fireplace (pulse), 12= Cooking mode, 13 = Central vacuum cleaner compensation, 14 = Fire alarm 15 = External device message, 16 = External device Alarm, 17= External device critical alarm, 18 = Modbus input, 19 = Output control, 20 = Max Cooling	
3.0->	4x5159	RW	GIO 3 function	0	255		**AI:**64 = Mode control, 65 = Stepless mode Control, 66 = Modbus measurement, 67 = Pa (supply) 68 = Pa(extract), 69 = Airflow(supply), 70 = Airflow(exhaust), 71 = RH, 72 = CO2, 73 = VOC, 74 = Temperature, 75 = Room pressure, 76=Outside humidity, 77= Supply air humidity	
3.0->	4x5160	RW	GIO 4 function	0	255		**DO:** 129 = Test/User panel controlled, 130 = Duct Damper, 131 = Alarm, 132 = Service, 133 = Critical Alarm, 134 = User stopped, 135 = Unit is running, 136 = Travelling, 137 = Away, 138 = Home, 139 = Home+, 140 = Boost , 141 = Fireplace, 142 = Humidity boost,	
3.0->	4x5161	RW	GIO 5 function	0	255		143 = Modbus output, 144 = Input controlled output, 145 = Heating active, 146 = Cooling active, 147 = Liquid Preheater/cooler active 148 = External Heating circuit, 149 = Internal Cooling, 150 = Cooking mode active	
3.0->	4x5162	RW	SET Relay 1 function	0	0		1 = Test/User panel controlled, 2 = Duct Damper, 3 = Alarm, 4 = Service, 5 = Critical Alarm, 6 = User stopped, 7 = Unit is running, 8 = Travelling, 9 = Away, 10 = Home, 11 = Home+, 12 = Boost , 13 = Fireplace, 14 = Humidity boost,	
3.0->	4x5163	RW	SET Relay 2 function	0	0		15 = Modbus output, 16 = Input controlled output, 17 = Heating active, 18 = Cooling active, 19, Preheater/cooler active 20 = External Heating circuit, 21 = Internal Cooling	
3.1->	4x5173	RW	GIO/SET DO POLARITY NO/NC	0	255	bit	BIT0 = GIO1, BIT1 = GIO2, BIT2 = GIO3, BIT3 = GIO4, BIT5 = GIO5 , BIT6 SET1DO, BIT7 =SET2 DO (0 = Normally open, 1=Normally closed)	
3.1->	4x5172	RW	AO4 Output type	0	4		0 = NA, 1 = Control, 2 = Stepless Control, 3 = Temp SP, 4 = Modbus	

GIO Modbus Control								
3.0->	4x5021	RW	GIO1 Relay output	0	1		0 = External Relay Open,1 = External Relay Closed	Select IO1 Type Relay Output and Function Modbus (4x5157 = 143)
3.0->	4x5022	RW	GIO2 Relay output	0	1		0 = External Relay Open,1 = External Relay Closed	Select IO2 Type Relay Output and Function Modbus (4x5158 = 143)
3.0->	4x5023	RW	GIO3 Relay output	0	1		0 = External Relay Open,1 = External Relay Closed	Select IO3 Type Relay Output and Function Modbus (4x5159 = 143)
3.0->	4x5024	RW	GIO4 Relay output	0	1		0 = External Relay Open,1 = External Relay Closed	Select IO4 Type Relay Output and Function Modbus (4x5160 = 143)
3.0->	4x5025	RW	GIO5 Relay output	0	1		0 = External Relay Open,1 = External Relay Closed	Select IO5 Type Relay Output and Function Modbus (4x5161 = 143)
3.0->	3x6349	R	GIO 1 DI status	0	1		0 = Open, 1 = Closed	Select IO1 to Modbus input (4x5157 = 18)
3.0->	3x6350	R	GIO 2 DI status	0	1		0 = Open, 1 = Closed	Select IO2 to Modbus input (4x5158 = 18)
3.0->	3x6351	R	GIO 3 DI status	0	1		0 = Open, 1 = Closed	Select IO3 to Modbus input (4x5159 = 18)
3.0->	3x6352	R	GIO 4 DI status	0	1		0 = Open, 1 = Closed	Select IO4 to Modbus input (4x5160 = 18)
3.0->	3x6353	R	GIO 5 DI status	0	1		0 = Open, 1 = Closed	Select IO5 to Modbus input (4x5160 = 18)
3.0->	3x6354	R	GIO 1 AI value	0	10000	mV	Analog input voltage	Select IO1 to Modbus meas. (4x5157 = 66)
3.0->	3x6355	R	GIO 2 AI value	0	10000	mV	Analog input voltage	Select IO2 to Modbus meas. (4x5158 = 66)
3.0->	3x6356	R	GIO 3 AI value	0	10000	mV	Analog input voltage	Select IO3 to Modbus meas. (4x5159 = 66)
3.0->	3x6357	R	GIO 4 AI value	0	10000	mV	Analog input voltage	Select IO4 to Modbus meas. (4x5160 = 66)
3.0->	3x6358	R	GIO 5 AI value	0	10000	mV	Analog input voltage	Select IO5 to Modbus meas. (4x5161 = 66)
3.0->	4x5026	RW	SET Relay 1 output	0	1		0 = External Relay Open,1 = External Relay Closed	Select SET Relay 1 to Modbus (4x5162 = 15)
3.0->	4x5027	RW	SET Relay 2 output	0	1		0 = External Relay Open,1 = External Relay Closed	Select SET Relay 2 to Modbus (4x5163 = 15)
3.0->	4x5028	RW	AO4 Output control	0	1000	0.01V	AO4 Voltage output control	Select AO4 Function to Modbus (4x5172 = 4)
Measurement inputs								
4.0->	**4x5131**	**RW**	**Room Temperature sensor used for functions**	**0**			**0 = Internal Extract sensor temperature/ sensors package, 1 = T6, 2 = T7, 3 = T7, 4 = T9, 5 = GIO1, 6 = GIO2, 7 = GIO3, 8 = GIO4, 9 = GIO5, 10 = User Panel 1, 11 = UP2, 12 = UP3, 13 = UP4, 14 = UP5**	**Note when room temperature sensor is selected make sure that sensor meaurement exits and is correct. Selected measurement is used i.e summer mode selection, summer night boost or room temperature control.**
4.0->	4x5190	RW	T6 External Room Temperature Sensor type	0	1		0=Swegon PTC, 1* = PT1000 , Temperature can be read from 3x6278	SET Sensor inputs can be used as room temperature sensor if T6 is not reserved for water freesing protection sensor.
4.0->	4x5191	RW	T7 External Room Temperature Sensor type	0	1		0=Swegon PTC, 1* = PT1000, Temperature can be read from 3x6279	SET Sensor inputs can be used as room temperature sensor if T7 is not reserved for supply temperature sensor.
4.0->	4x5192	RW	T8 External Room Temperature Sensor type	0	1		0=Swegon PTC, 1* = PT1000, Temperature can be read from 3x6280	SET Sensor inputs can be used as room temperature sensor if T8 is not reserved for external outside temperature sensor.
4.0->	4x5193	RW	T9 External Room Temperature Sensor type	0	1		0=Swegon PTC, 1* = PT1000, Temperature can be read from 3x6281	SET Sensor inputs can be used as room temperature sensor if T9 is not reserved for external heating circuit sensor.
4.0->	4x5194	RW	GIO Temp measurement scale input low	0	10000	mV	AI (0-10V) measurement scaling values	
4.0->	4x5195	RW	GIO Temp measurement scale input high	0	10000	mV		
4.0->	4x5196	RW	GIO Temp measurement scale Temp output low	-500	500	0.1°C/°F		
4.0->	4x5197	RW	GIO Temp measurement scale Temp output high	-500	500	0.1°C/°F		
4.0->	4x5132	RW	Room Temperature Fine Tuning	-100	100	0.1°C	Room Temperature Fine tuning	
4.1.45->	4x5832	RW	Room Temperature Fine Tuning	14	50	F°	Room Temperature Fine tuning	
4.0->	**4x5151**	**RW**	**T8 External Outside Temperature Sensor**	**0**	**2**		**0 = Internal fresh air sensor, 1 = T8 - External Swegon PTC, 2 = T8 - External PT1000**	**If accurate outside temperature measurement is requesterd external outside temperature sensor can be installed to T8 sensor input.**
4.0->	**4x5209**	**RW**	**RH measurement**	**0**	**5**		**0 = IO1, 1 = IO2, 2 = IO3, 3 = IO4, 4 = IO5, 5 = Internal sensor, 6 = Average, 7 = Highest, 8 = Lowest**	
4.0->	4x5210	RW	GIO RH measurement scale input low	0	10000	mV	0-10V measurement scaling values	
4.0->	4x5211	RW	GIO RH measurement scale input high	0	10000	mV		
4.0->	4x5212	RW	GIO RH measurement scale rh output low	0	100	%		
4.0->	4x5213	RW	GIO RH measurement scale rh output high	0	100	%		
4.0->	**4x5214**	**RW**	**CO2 measurement**	**0**	**5**		**0 = IO1, 1 = IO2, 2 = IO3, 3 = IO4, 4 = IO5, 5 = Internal sensor, 6 = Average, 7 = Highest, 8 = Lowest**	
4.0->	4x5215	RW	GIO CO2 measurement scale input low	0	10000	mV	0-10V measurement scaling values	
4.0->	4x5216	RW	GIO CO2 measurement scale input high	0	10000	mV		
4.0->	4x5217	RW	GIO CO2 measurement scale CO2 output low	0	5000	ppm		
4.0->	4x5218	RW	GIO CO2 measurement scale CO2 output high	0	5000	ppm		
4.0->	**4x5219**	**RW**	**VOC measurement**	**0**	**5**		**0 = IO1, 1 = IO2, 2 = IO3, 3 = IO4, 4 = IO5, 5 = Internal sensor, 6 = Average, 7 = Highest, 8 = Lowest**	
4.0->	4x5220	RW	GIO VOC measurement scale input low	0	10000	mV	0-10V measurement scaling values	
4.0->	4x5221	RW	GIO VOC measurement scale input high	0	10000	mV		
4.0->	4x5222	RW	GIO VOC measurement scale VOC output low	0	5000	ppm		
4.0->	4x5223	RW	GIO VOC measurement scale VOC output high	0	5000	ppm		

Airflow adjustment								
3.0->3.0	**4x5029**	**RW**	**Commissioning Mode**	**0**	**9**		**0= Not in use,1=Away,2=Home,3=Boost, 4=Cooking mode, 5=End**	**Do not use in 4.0-> SW**
3.0->	4x5302	RW	Away mode Supply fan speed	20	Home	%	fan speed	Don't use this register for external fan control.
3.0->	4x5303	RW	Away mode Exhaust fan speed	20	Home	%	fan speed	Don't use this register for external fan control.
3.0->	4x5304	RW	Home mode Supply fan speed	Away	Boost	%	fan speed	Don't use this register for external fan control.
3.0->	4x5305	RW	Home mode Exhaust fan speed	Away	Boost	%	fan speed	Don't use this register for external fan control.
3.0->	4x5306	RW	Boost mode Supply fan speed	Home	100	%	fan speed	Don't use this register for external fan control.
3.0->	4x5307	RW	Boost mode Exhaust fan speed	Home	100	%	fan speed	Don't use this register for external fan control.
4.0->	**4x5020**	**RW**	**Cooker Hood mode**	**0**	**4**		**0=Not Selected, 1=Hood connected to ventilation unit, 2= Roof fan, 3=Integrated fan, 4=Recircullating cooker hood**	**Note when cookerhood mode 2-4 is selected the ventilation unit can not be controlled with cooker hood.**
4.0->	4x5184	RW	Cooking mode Supply fan speed	20	100	%	Cooking mode fan control	Note select cooking mode before adjustment
4.0->	4x5185	RW	Cooking mode Exhaust fan speed	20	100	%	Cooking mode fan control	Note select cooking mode before adjustment
3.0->3.3	**4x5318**	**RW**	**Ventilation control mode (Smart)**	**0**	**5**		**0=Normal,1=PA Supply control, 2=PA Extract control, 3=PA control 4= l/s control**	**If PA or l/s control is selected, commissioning must be done with User Panel**
4.2->	**4x5318**	**RW**	**Ventilation control mode (Genius)**	**0**	**5**		**0=Normal,1=PA controlled air flow, 2=PA control 3= Room Pressure controlled air flow**	**If PA or l/s control is selected, commissioning must be done with User Panel**
4.2->	4x5321	RW	Supply duct pressure control setpoint	0	1000	0.1Pa	Duct pressure control with fixed setpoint.	This is setting is active when Ventilation control mode is Fixed Duct pressure control
4.2->	4x5322	RW	Extract duct pressure control setpoint	0	1000	0.1Pa	Duct pressure control with fixed setpoint.	This is setting is active when Ventilation control mode is Fixed Duct pressure control
4.2->	4x5323	RW	Supply duct pressure control adjustable setpoint	0	1000	0.1Pa	This can be used when duct pressure target is controlled with bms system. Note value is not stored to AHU	This is setting is active when Ventilation control mode is Fixed Duct pressure control
4.2->	4x5324	RW	Extrarct duct pressure control adjustable setpoint	0	1000	0.1Pa	This can be used when duct pressure target is controlled with bms system. Note value is not stored to AHU	This is setting is active when Ventilation control mode is Fixed Duct pressure control
3.0->3.3, 4.2->	4x5312	RW	Away mode Supply Pressure	0	10000	0.1Pa	duct pressure control away mode setpoint	Commissioning must be done with Commissioning wizard
3.0->3.3, 4.2->	4x5313	RW	Away mode Exhaust Pressure	0	10000	0.1Pa	duct pressure control away mode setpoint	Commissioning must be done with Commissioning wizard
3.0->3.3, 4.2->	4x5314	RW	Home mode Supply Pressure	0	10000	0.1Pa	duct pressure control home mode setpoint	Commissioning must be done with Commissioning wizard
3.0->3.3, 4.2->	4x5315	RW	Home mode Exhaust Pressure	0	10000	0.1Pa	duct pressure control home mode setpoint	Commissioning must be done with Commissioning wizard
3.0->3.3, 4.2->	4x5316	RW	Boost mode Supply Pressure	0	10000	0.1Pa	duct pressure control Boost mode setpoint	Commissioning must be done with Commissioning wizard
3.0->3.3, 4.2->	4x5317	RW	Boost mode Exhaust Pressure	0	10000	0.1Pa	duct pressure control Boost mode setpoint	Commissioning must be done with Commissioning wizard
4.2->	4x5325	RW	Cooking mode Supply Pressure	0	10000	0.1Pa	duct pressure control Cooking modesetpoint	Commissioning must be done with Commissioning wizard
4.2->	4x5326	RW	Cooking mode Exhaust Pressure	0	10000	0.1Pa	duct pressure control Cooking mode setpoint	Commissioning must be done with Commissioning wizard

ALARMS									
3.0->	**4x5141**	**RW**	**Service Reminder**	**0**	**1**		**0 = Disabled, 1 = Enabled**	**Service time can be resetted by writing 0 and 1 to this register**
3.0->	3x6343	R	Hours to next Service	0	10000	Hours		Available if Service Reminder enabled (see 4x5142 for Service Interval)
3.0->	4x5142	RW	Service Reminder interval	0	12	months		
3.0->	3x6129	R	Service Info	0	1		0 = No Alarms, 1 = Unconfirmed Info Alarm	3x6136 Bit 9
3.0->	**4x5406**	**W**	**Reset All info alarms**	**0**	**1**		**1 Confirm Alarm, Register is cleared when command is processed.**	
3.0->	4x5401	W	Re-heater failure alarm confirm	0	1		1 Confirm Alarm, Register is cleared when command is processed.	
3.0->	4x5402	W	Preheater failure alarm confirm	0	1		1 Confirm Alarm, Register is cleared when command is processed.	
3.0->	4x5403	W	Water radiator Freezing danger alarm confirm	0	1		1 Confirm Alarm, Register is cleared when command is processed.	
3.0->	4x5404	W	Filter Guard info confirm	0	1		1 Confirm Alarm, Register is cleared when command is processed.	
3.0->	4x5405	W	Service Timer info confirm	0	1		1 Confirm Alarm, Register is cleared when command is processed.	
3.0->	4x5407	W	Fan failure alarm confirm	0	1		1 Confirm Alarm, Register is cleared when command is processed.	
3.0->	4x5408	W	Sensor failure confirm	0	1		1 Confirm Alarm, Register is cleared when command is processed.	
4.0->	3x6195	R	Critical Alarms **(Ventilation stopped)**	0	1		0 = No Alarms, 1 = Critical Alarm	Only in Genius control system
3.0->	3x6132	R	Active Alarms	0	1		0 = No Alarms, 1 = Active Alarm	
3.0->	3x6133	R	Unconfirmed Info	0	1		0 = No Unconfirmed alarms, 1 =Unconfirmed alarms	
3.0->	**3x6136**	**R**	**Active Alarms Bitwise - 1**	**0**	**16bit**		**See bitwise description in alarms notes. 0= No Alarm, 1= Active alarm.**	See bit information below
3.0->	3x6137	R	Resettable alarm bitwise - 1 (Past active alarm)	0	16bit		See bitwise description in alarms notes. 0= No past alarm, 1= Past active alarm	See bit information below
3.0->	**3x6117** / 3x6118	R	**E011 Postheater failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 0 /** 3x6137 Bit 0 (0000 0000 0000 0001)
3.0->	**3x6119** / 3x6120	R	**E021 Preheater failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 1 /** 3x6137 Bit1
3.0->			Reserved					**3x6136 Bit 2 /** 3x6137 Bit2
3.0->	**3x6121** / 3x6122	R	**E051 Freezing danger** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 3 /** 3x6137 Bit 3
3.0->	**3x6125** / 3x6126	R	**E061 Supply Fan Failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 4 /** 3x6137 Bit 4
3.0->	**3x6127** / 3x6128	R	**E071 Exhaust Fan Failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 5 /** 3x6137 Bit 5
3.0->	**3x6101** / 3x6109	R	**E221/E311 T1 Temperature Sensor Failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 6 /** 3x6137 Bit 6
3.0->	**3x6102** / 3x6110	R	**E231/E321 T2 Temperature Sensor Failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 6 /** 3x6137 Bit 6
3.0->	**3x6103** / 3x6112	R	**E241/E331 T3 Temperature Sensor Failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 6 /** 3x6137 Bit 6
3.0->	**3x6104** / 3x6113	R	**E251/E341 T4 Temperature Sensor Failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 6 /** 3x6137 Bit 6
3.0->	**3x6105** / 3x6114	R	**E261/E351 T5 Temperature Sensor Failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 6 /** 3x6137 Bit 6
3.0->	**3x6106** / 3x6115	R	**E271/E361 T6 Temperature Sensor Failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 6 /** 3x6137 Bit 6
3.0->	**3x6107** / 3x6116	R	**E281/E371 T7 Temperature Sensor Failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 6 /** 3x6137 Bit 6
3.0->	**3x6108** / 3x6117	R	**E291/E381 T8 Temperature Sensor Failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 6 /** 3x6137 Bit 6
3.0->	**3x6134** / 3x6135	R	**E301/E391 T9 Temperature Sensor Failure** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 6 /** 3x6137 Bit 6
3.0->	**3x6131**	R	**E082 Emergency Stop**	0	1		**0 = No Alarms, 1 = Active Alarm**	**3x6136 Bit 7 /**
3.0->	3x6130	R	Reserved	0	1			/3x6317 Bit 8
3.0->	**3x6129**	R	**Service Info**	0	1		**0 = No Alarms, 1 = Service info**	/ 3x6137 Bit 9
3.0->	**3x6123** / 3x6124	R	***New Genius alarm /*** *Genius unconfirmed alarm*	0	1		**0 = No Genius alarms, 1 = Active Genius alarm** / Resettable alarm bitwise	**3x6136 Bit 10** /3x6137 Bit 10 **see Genius alarms**
3.0->	**3x6143** / 3x6144	R	**E111 Suppy temperature low alarm** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 11 /** 3x6137 Bit 11
3.0->	**3x6145** / 3x6146	R	**E121 Internal temperature high alarm** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 12 /** 3x6137 Bit 12
3.0->	**3x6141** / 3x6142	R	**Preheater temperature high alarm** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 13 /** 3x6137 Bit 13
3.1->	**3x6147** / 3x6148	R	**E131 Rotor RPM alarm** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 14 /** 3x6137 Bit 14
3.0->	**3x6149** / 3x6150	R	**Fan Control alarm** / Resettable alarm bitwise	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	**3x6136 Bit 15 /** 3x6137 Bit 15 (1000 0000 0000 0000)
GENIUS CONTROL SYSTEM NEW ALARMS								
4.0->	**3x6191**	**R**	**Active Alarms Bitwise - 2**	**0**	**16bit**		**See bitwise description in alarms notes. 0= No Alarm, 1= Active alarm**	See bit information below
4.0->	3x6192	R	Resettable Alarms Bitwise - 2 (Active alarm in the past)	0	16bit		See bitwise description in alarms notes. 0= No info, 1= Unconfirmed Info alarm	See bit information below
4.0->	**3x6151** / 3x6152	R	**E401 Sensor package Failure** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 0 / 3x6192 Bit 0 (0000 0000 0000 0001)
4.0->	**3x6153** / 3x6154	R	**E411 RH sensor Failure** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 1 / 3x6192 Bit 1
4.0->	**3x6155** / 3x6156	R	**E421 CO2 sensor Failure** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 2 / 3x6192 Bit 2
4.0->	**3x6157** / 3x6158	R	**E431 VOC sensor Failure** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 3 / 3x6192 Bit 3
4.0->	**3x6159** / 3x6160	R	**E031 External Electrical Preheater Failure** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 4 / 3x6192 Bit 4
4.0->	**3x6161** / 3x6162	R	**E041 External Electrical Postheater Failure** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 5 / 3x6192 Bit 5
4.0->	**3x6163** / 3x6164	R	**E202 Internal PCB Temperature High** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 6 / 3x6192 Bit 6
4.0->	**3x6165** / 3x6166	R	**E211 Internal Parameter error** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 7 / 3x6192 Bit 7
4.0->	**3x6167** / 3x6168	R	**E091 External Alarm** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 8 / 3x6192 Bit 8
4.0->	**3x6169** / 3x6170	R	**External device message** / Resettable message	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 9 / 3x6192 Bit 9
4.0->	**3x6171** / 3x6172	R	**E092 External critical alarm** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 10 / 3x6192 Bit 10
4.0->	**3x6173** / 3x6174	R	**E102 External Fire detector alarm** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 11 / 3x6192 Bit 11
4.0->	**3x6175** / 3x6176	R	**E171 Heat exhanger efficiency low** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 12 / 3x6192 Bit 12
4.0->	**3x6177** / 3x6178	R	**Heat exhanger control failure** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6191 Bit 13 / 3x6192 Bit 13 (0010 0000 0000 0000)
4.0->	**3x6193**	**R**	**Active Alarms Bitwise - 3**	**0**	**16bit**		**See bitwise description in alarms notes. 0= No Alarm, 1= Active alarm**	See bit information below
4.0->	3x6194	R	Unconfirmed Alarms Bitwise - 3 (Active alarm in the past)	0	16bit		See bitwise description in alarms notes. 0= No info, 1= Unconfirmed Info alarm	See bit information below
4.0->	**3x6179** / 3x6180	R	**E451 Cooling conderser temperature high** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6193 Bit 0 / 3x6194 Bit 0 (0000 0000 0000 0001)
4.0->	**3x6181** / 3x6182	R	**E461 Cooling hotgas temperature high** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6193 Bit 1 / 3x6194 Bit 1
4.0->	**3x6183** / 3x6184	R	**E471 Cooling pressure high** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6193 Bit 2 / 3x6194 Bit 2
4.0->	**3x6185** / 3x6186	R	**E161 Rotor stall detection** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6193 Bit 3 / 3x6194 Bit 3
4.0->	**3x6187** / 3x6188	R	**E141 Rotor driver overheat** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6193 Bit 4 / 3x6194 Bit 4
4.0->	**3x6189** / 3x6190	R	E151 Rotor connection failure / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6193 Bit 5 / 3x6194 Bit 5
4.1->	**3x6196** / 3x6197	R	**E502 Indoor humidity** / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6193 Bit 6 / 3x6194 Bit 6
4.1->	**3x6198** / 3x6199	R	E512 Cooling coil condense removal critical failure / Resettable alarm	0	1		0 = **Not active alarm**, 1 = **Active /** Resettable alarm	3x6193 Bit 7 / 3x6194 Bit 7

DEVICE INFORMATION								
3.0->	**3x6001**	**R**	**Device Firmware version major**	**0**	**99**			
3.0->	**3x6002**	**R**	**Device Firmware version minor**	**0**	**99**			
3.0->	**3x6003**	**R**	**Device Firmware build**	**0**	**999**			
3.0->	3x6004	R	Parameter build	0	99			
3.0->	3x6005	R	Parameter minor build	0	99			
3.0->	3x6006	R	Modbus Gateway Software version major	0	99			
3.0->	3x6007	R	Modbus Gateway Software version minor	0	99			
3.0->	3x6008	R	Model name[0:14]			ASCII	Model name ASCII code 3x16008 - 3x16024	
[illegible]								
3.0->	3x6023	R						
3.0->	3x6024	R	Unit Serial Number[0:23]			ASCII	Unit serial number ASCII code. 3x6024 - 3x6047	Direct Access to Service Portal
DIAGNOSTICS - MEASUREMENTS								
3.0->	**3x6201**	**R**	**Fresh air temperature**	**-400**	**600**	**0.1°C**	**Ventilation unit internal outside air temperature (Filtered)**	T1 sensor
3.0->	3x6202	R	Supply air before re-heater temperature	-400	600	0.1°C	Heat exhanger supply temperature	T2 or calculated from supply temperature T4 by scaling internal postheater effect.
3.0->	**3x6203**	**R**	**Supply air temperature**	**-400**	**600**	**0.1°C**	**Effective supply air temperature. If external heater / cooling devices are installed external sensor is used.**	T4 or T7 if external sensor is installed
3.0->	**3x6204**	**R**	**Extract air temperature**	**-400**	**600**	**0.1°C**	**Extract air/Air from the room temperature**	T3 or Sensor package
3.0->	3x6205	R	Exhaust air temperature	-400	600	0.1°C	Exhaust / Waste air temperature	T5 if sensor installed to unit
3.0->	3x6209	R	Water Radiator temperature	-400	600	0.1°C	Water battery freezing protection measurement	T6 if with water based radiator installed
3.0->	3x6211	R	External Outside air temperature	-400	600	0.1°C	External outside temperature	T8 if External PreHeater/Cooling control or if external outside sensor measurement is selected
3.0->	**3x6206**	**R**	**Room air temperature**	**-400**	**600**	**0.1°C**	**Effective room air temperature, sensor defined with register**	
4.0->	3x6278	R	T6 room temperature	-400	600	0.1°C	External room temperature sensor, type (PTC / PT1000) defined with register 4x1407 (included in Genius)	
4.0->	3x6279	R	T7 room temperature	-400	600	0.1°C	External room temperature sensor, type (PTC / PT1000) defined with register 4x1408 (included in Genius)	
4.0->	3x6280	R	T8 room temperature	-400	600	0.1°C	External room temperature sensor, type (PTC / PT1000) defined with register 4x1409 (included in Genius)	
4.0->	3x6281	R	T9 room temperature	-400	600	0.1°C	External room temperature sensor, type (PTC / PT1000) defined with register 4x1410 (included in Genius)	
4.0->	3x6282,3x6207	R	User Panel 1 temperature	-400	600	0.1°C	User panel internal temperature measurement	
4.0->	3x6283,3x6208	R	User Panel 2 temperature	-400	600	0.1°C	User panel internal temperature measurement	
4.0->	3x6284	R	User Panel 3 temperature	-400	600	0.1°C	User panel internal temperature measurement (included in Genius)	
4.0->	3x6285	R	User Panel 4 temperature	-400	600	0.1°C	User panel internal temperature measurement (included in Genius)	
4.0->	3x6286	R	User Panel 5 temperature	-400	600	0.1°C	User panel internal temperature measurement (included in Genius)	
4.0->	3x6287	R	IO1 temperature	-400	600	0.1°C	0-10V temperature transmitter connected to IO1 (included in Genius)	
4.0->	3x6288	R	IO2 temperature	-400	600	0.1°C	0-10V temperature transmitter connected to IO2 (included in Genius)	
4.0->	3x6289	R	IO3 temperature	-400	600	0.1°C	0-10V temperature transmitter connected to IO3 (included in Genius)	
4.0->	3x6290	R	IO4 temperature	-400	600	0.1°C	0-10V temperature transmitter connected to IO4 (included in Genius)	
4.0->	3x6291	R	IO5 temperature	-400	600	0.1°C	0-10V temperature transmitter connected to IO5 (included in Genius)	
4.1.45->	**3x6940**	**R**	**Fresh air temperature**	**-400**	**1400**	**0.1F°**	**Ventilation unit internal outside air temperature (Filtered)**	T1 sensor
4.1.45->	3x6902	R	Supply air before re-heater temperature	-400	1400	0.1F°	Heat exhanger supply temperature	T2 or calculated from supply temperature T4 by scaling internal postheater effect.
4.1.45->	**3x6903**	**R**	**Supply air temperature**	**-400**	**1400**	**0.1F°**	**Effective supply air temperature. If external heater / cooling devices are installed external sensor is used.**	T4 or T7 if external sensor is installed
4.1.45->	**3x6904**	**R**	**Extract air temperature**	**-400**	**1400**	**0.1F°**	**Extract air/Air from the room temperature**	T3 or Sensor package
4.1.45->	3x6905	R	Exhaust air temperature	-400	1400	0.1F°	Exhaust / Waste air temperature	T5 if sensor installed to unit
4.1.45->	3x6909	R	Water Radiator temperature	-400	1400	0.1F°	Water battery freezing protection measurement	T6 if with water based radiator installed
4.1.45->	3x6901	R	External Outside air temperature	-400	1400	0.1F°	External outside temperature	T8 if External PreHeater/Cooling control or if external outside sensor measurement is selected
4.1.45->	**3x6906**	**R**	**Room air temperature**	**-400**	**1400**	**0.1F°**	**Effective room air temperature, sensor defined with register**	
4.1.45->	3x6978	R	T6 room temperature	-400	1400	0.1F°	External room temperature sensor, type (PTC / PT1000) defined with register 4x1407 (included in Genius)	
4.1.45->	3x6979	R	T7 room temperature	-400	1400	0.1F°	External room temperature sensor, type (PTC / PT1000) defined with register 4x1408 (included in Genius)	
4.1.45->	3x6980	R	T8 room temperature	-400	1400	0.1F°	External room temperature sensor, type (PTC / PT1000) defined with register 4x1409 (included in Genius)	
4.1.45->	3x6981	R	T9 room temperature	-400	1400	0.1F°	External room temperature sensor, type (PTC / PT1000) defined with register 4x1410 (included in Genius)	
4.1.45->	3x6982	R	User Panel 1 temperature	-400	1400	0.1F°	User panel internal temperature measurement	
4.1.45->	3x6983	R	User Panel 2 temperature	-400	1400	0.1F°	User panel internal temperature measurement	
4.1.45->	3x6984	R	User Panel 3 temperature	-400	1400	0.1F°	User panel internal temperature measurement (included in Genius)	
4.1.45->	3x6985	R	User Panel 4 temperature	-400	1400	0.1F°	User panel internal temperature measurement (included in Genius)	
4.1.45->	3x6986	R	User Panel 5 temperature	-400	1400	0.1F°	User panel internal temperature measurement (included in Genius)	
4.1.45->	3x6987	R	IO1 temperature	-400	1400	0.1F°	0-10V temperature transmitter connected to IO1 (included in Genius)	
4.1.45->	3x6988	R	IO2 temperature	-400	1400	0.1F°	0-10V temperature transmitter connected to IO2 (included in Genius)	
4.1.45->	3x6989	R	IO3 temperature	-400	1400	0.1F°	0-10V temperature transmitter connected to IO3 (included in Genius)	
4.1.45->	3x6990	R	IO4 temperature	-400	1400	0.1F°	0-10V temperature transmitter connected to IO4 (included in Genius)	
4.1.45->	3x6991	R	IO5 temperature	-400	1400	0.1F°	0-10V temperature transmitter connected to IO5 (included in Genius)	

3.0->	**3x6213**	**R**	**Room air CO2**	**450**	**2000**	**ppm**	**Effective CO2 measurement, define used sensor with register 4x5214**	**Filterd CO2 value**
4.0->	3x6258	R	CO2 IO1	0	5000	ppm	External CO2 sensor connected to IO1	
4.0->	3x6259	R	CO2 IO2	0	5000	ppm	External CO2 sensor connected to IO2	
4.0->	3x6260	R	CO2 IO3	0	5000	ppm	External CO2 sensor connected to IO3	
4.0->	3x6261	R	CO2 IO4	0	5000	ppm	External CO2 sensor connected to IO4	
4.0->	3x6262	R	CO2 IO5	0	5000	ppm	External CO2 sensor connected to IO5	
4.0->	3x6263	R	CO2 internal sensor	450	2000	ppm	Ventilation unit internal sensor	
4.2->	3x6296	R	CO2 internal sensor Digital	450	5000	ppm	Ventilation unit internal digital sensor	
3.0->	**3x6214**	**R**	**Room air RH (%)**	**0**	**100**	**%**	**Effective RH measurement, define used sensor with register 4x5209**	
4.0->	3x6215	R	Room air AH (g/m3)	0	5000	0.01g/m3	Calculated absolute humidity, used in RH automation function	
4.0->	3x6216	R	Room air AH SetPoint (g/m3)	0	5000	0.01g/m3	Calculated absolute humidity boost limit, used in RH automation function	
4.0->	3x6264	R	RH IO1	0	100	%	External RH sensor connected to IO1	
4.0->	3x6265	R	RH IO2	0	100	%	External RH sensor connected to IO2	
4.0->	3x6266	R	RH IO3	0	100	%	External RH sensor connected to IO3	
4.0->	3x6267	R	RH IO4	0	100	%	External RH sensor connected to IO4	
4.0->	3x6268	R	RH IO5	0	100	%	External RH sensor connected to IO5	
4.0->	3x6269	R	RH internal sensor	450	100	%	Ventilation unit internal sensor	
4.2->	3x6297	R	RH internal sensor Digital SCD40	450	100	%	Ventilation unit internal digital sensor (Co2 sensor package)	
4.2->	3x6298	R	RH internal sensor Digital SHT3a	450	100	%	Ventilation unit internal digital sensor	
3.0->	**3x6217**	**R**	**Room air VOC**	**0**	**2000**	**ppm**	**Effective VOC measurement, define used sensor with register 4x5219**	**Available only in units with VOC sensor**
4.0->	3x6270	R	VOC IO1	0	5000	ppm	External VOC sensor connected to IO1	
4.0->	3x6271	R	VOC IO2	0	5000	ppm	External VOC sensor connected to IO2	
4.0->	3x6272	R	VOC IO3	0	5000	ppm	External VOC sensor connected to IO3	
4.0->	3x6273	R	VOC IO4	0	5000	ppm	External VOC sensor connected to IO4	
4.0->	3x6274	R	VOC IO5	0	5000	ppm	External VOC sensor connected to IO5	
4.0->	3x6275	R	VOC internal sensor	450	2000	ppm	Ventilation unit internal sensor	
4.2->	3x6299	R	VOC internal sensor Digital	450	2000	ppm	Ventilation unit internal digital sensor	
3.0->	**3x6218**	**R**	**Supply Duct Pressure**	**0**	**500**	**Pa**	**External duct pressure sensor is needed**	
3.0->	**3x6219**	**R**	**Exhaust Duct Pressure**	**0**	**500**	**Pa**	**External duct pressure sensor is needed**	
4.2->	3x6237	R	Supply Duct Pressure Target	0	1000	Pa	When duct pressure control is active, this register shwow pressure setpoint for control	
4.2->	3x6238	R	Exhaust Duct Pressure Target	0	1000	Pa	When duct pressure control is active, this register shwow pressure setpoint for control	
3.0->	3x6220	R	Supply Air Flow	0	500	l/s	External Air flow sensor is needed and K value needs to be adjusted	
3.0->	3x6221	R	Exhaust Air Flow	0	500	l/s	External Air flow sensor is needed and K value needs to be adjusted	
4.0->	**3x6277**	**R**	**Room pressure**	**-500**	**500**	**0.1Pa**	**External measurement of building out/in pressure difference**	

DIAGNOSTICS -UNIT STATUS								
3.0->	**3x6301**	**R**	**Unit state**	**0**	**4**		**0 = Critical Stop, 1 = User Stopped, 2 = Starting, 3 = Normal, 4 = Commissioning**	
3.0->	3x6308	R	Boost Time left	0	120	min	Timed Function remaining time	
3.0->	3x6309	R	Week Timer Active	0	10		0 = Weekly timer not Active, 1 = Stopped, 2 = Travelling, 3 = Away, 4 = Silent, 5 = Home, 6 = Home+, 7 = Boost, 8=NA, 9=NA, 10 = Weeklytimer interrupted	
3.0->	3x6307	R	Travelling mode Active	0	1		0 = Function Not Active, 1 =Travelling mode active	
4.0->	3x6325	R	Silent mode Active	0	1		0 = Function Not Active, 1 = Silent mode active, no boosting allowed	
3.0->	3x6335	R	Fireplace function active	0	1		0 = Function Not Active, 1 = Function Active	
3.0->	3x6336	R	Central Vacuum Cleaner function active	0	1		0 = Function Not Active, 1 = Function Active	
3.0->	3x6337	R	Cooking mode Active	0	1		0 = Function Not Active, 1 = Function Active	
3.0->	**3x6302**	**R**	**Ventilation Speed state (compatibility to Smart)**	**0**	**4**		**0 = Stopped, 1= Away, 2 = Home, 3 = Boost**	
4.0->	**3x6434**	**R**	**Ventilation Speed state (Genius)**	**0**	**4**		**0 = Stopped, 1 = Travelling, 2 = Away, 3 = Home, 4 = Home+, 5 = Boost, 6 = Fireplace**	
3.0->	3x6303	R	Supply Fan Control	0	100	%		
3.0->	3x6304	R	Exhaust Fan Control	0	100	%		
3.0->	**3x6305**	**R**	**Supply Fan RPM**	**0**	**5000**	**1/min**		Fan RPM measuremet is needed
3.0->	**3x6306**	**R**	**Exhaust Fan RPM**	**0**	**5000**	**1/min**		Fan RPM measuremet is needed
3.0->	**3x6315**	**R**	**Automation control + /- of Home mode**	**-100**	**100**	**%**	**Ventilation is controlled steplessly from selected mode according this register**	
3.0->	3x6310	R	CO2 Automation	-100	100	%	Fan control change based on CO2 automation	Available only in units with CO2 sensor
3.0->	3x6311	R	RH Automation	0	100	%	Fan control boost based on RH automation	Available only in units with RH sensor
3.0->	3x6312	R	VOC Automation	0	100	%	Fan control boost based on VOC automation	Available only in units with VOC sensor
3.0->	3x6313	R	Temperature boost	0	100	%	Fan control boost based on summer mode boost	
3.0->	3x6314	R	Fan Speed limit Control (Supply temperature low, ventilation reduction)	-100	0	%	Fan control change based on cold climate control. Note depending on unit model fan control change method may vary.	
4.0->	3x6382		Building pressure balance control	-50	50	%	Building pressure control, negative value decreases extract airflow and positive increases the airflow	External room pressure sensor is needed
4.0->	**3x6370**		**Heating state**				**0 = Starting, 1 = Stopped, 2 = External Cooling, 3 = Internal Cooling, 4 = Internal Cooling limited, 5 = Summer mode control 6 = Heat exhanger control, 7 = Heating, 8 = Defrost 1, 9 = Defrost 2, 10 = Defrost 3**	
4.0->	3x6320	R	Temperature Setpoint	130	300	0.1°C	Effective supply temperature setpoint, controlled either user setpoint, summer mode, away or travelling mode or by room temperature controller	Available only in units with controlled re-heater
4.1.45->	3x6326	R	Temperature Setpoint	550	860	0.1F°	Effective supply temperature setpoint, controlled either user setpoint, summer mode, away or travelling mode or by room temperature controller	Available only in units with controlled re-heater
4.0->	3x6317	R	Combined Post heating external/internal control	0	100	%	Internal postheating 0 - 100% Exteral Postheating 0 - 200%	
4.0->	3x6318	R	Internal post heating control	0	100	%	Internal electrical postheater control. Power (W) depend on post heater power	Available only in units with internal postheater
4.0->	3x6344	R	Internal Preheater control	0	100	%	Internal electrical preheater control. Power (W) depend on preheater power	Available only in units with Preheater
4.0->	**3x6319**	R	External post heating control water	0	100	%	External heating coil control (valve position. 100% equals 10V control signal	Available only in units with external postheater
4.0->	**3x6322**	R	External post heating control electrical	0	100	%	External heating coil control (power control). 100% equals 10V control signal	Available only in units with external postheater
4.0->	3x6321	R	External post cooling control	0	100	%	External cooling control (valve position). 100% equals 10V control signal	Available only in units with external post cooler
3.0->	3x6323	R	External post cooling active	0	1		External cooling control active	Available only in units with external post cooler
4.0->	3x6345	R	External Preheater control	0	100	%	External preheater control. Power (W) depend on preheater power	
4.0->	3x6331	R	External preheater/cooling output	0	1		0 = Not active, 1 = Active, 2= Idle for pump/valve anti jamming	
4.0->	3x6348	R	Heat exchanger bypass plate position	0	100	%	Bepass plate 100% full open 0% Closed	
4.0->	3x6332	R	Rotor control	0	1000	0.1%	% of max speed with 1 decimal accuracy	
4.0->	3x6234	R	Rotor rotating speed	0	2000	0.1/min	Rotation speed 0.1 rotations / minute	

EXTERNAL ROOM CONTROLLERS (Modbus)								
4.1 >	4x1505	RW	Controller 1 ID	6	247		Configure room controllers with individua ID's and define controller ID	
4.1 >	4x1506	RW	Controller 2 ID	6	247			
4.1 >	4x1507	RW	Controller 3 ID	6	247			
4.1 >	4x1508	RW	Controller 4 ID	6	247			
4.1 >	4x1509	RW	Controller 5 ID	6	247			
4.1 >	4x1510	RW	Controller 6 ID	6	247			
4.1 >	4x1511	RW	Controller 7 ID	6	247			
4.1 >	4x1512	RW	Controller 1 Type	0	3		0 = LUNA d MB, 1 = Produal TRC-1A2T-MOD-24-W, 2 = Produal CU-LH (1), 3= Produal CU-LH (2)	
4.1 >	4x1513	RW	Controller 2 Type	0	3			
4.1 >	4x1514	RW	Controller 3 Type	0	3			
4.1 >	4x1515	RW	Controller 4 Type	0	3			
4.1 >	4x1516	RW	Controller 5 Type	0	3			
4.1 >	4x1517	RW	Controller 6 Type	0	3			
4.1 >	4x1518	RW	Controller 7 Type	0	3			
4.1 >	4x1519	RW	Controller 1 Location	0	21		0 = Controller disabled, 1 = Living room 1, 2 = Living room 2, 3 = Living room 3, 4 = Bedroom 1, 5 = Bedroom 2, 6 = Bedroom 3, 7 = Bedroom 4, 8 = Bedroom 5, 9 = Hallway, 10 = Kitchen, 11 = Dining room, 12 = Bathroom, 13 = Utility room, 14 = Walk-in closet, 15 = Storage room, 16 = Garage, 17 = Technical room, 18 = Zone 1, 19 = Zone 2, 20 = Zone 3, 21 = Zone 4	
4.1 >	4x1520	RW	Controller 2 Location	0	21			
4.1 >	4x1521	RW	Controller 3 Location	0	21			
4.1 >	4x1522	RW	Controller 4 Location	0	21			
4.1 >	4x1523	RW	Controller 5 Location	0	21			
4.1 >	4x1524	RW	Controller 6 Location	0	21			
4.1 >	4x1525	RW	Controller 7 Location	0	21			
4.1 >	4x1526	RW	Controller 1 Setpoint override (Only LUNA d MB controller)	0	1		0 = Use controller knob setpoint, 1 = Override setpoint defined with register 4x1542...4x1548	Only LUNA d MB controller
4.1 >	4x1527	RW	Controller 2 Setpoint override (Only LUNA d MB controller)	0	1			
4.1 >	4x1528	RW	Controller 3 Setpoint override (Only LUNA d MB controller)	0	1			
4.1 >	4x1529	RW	Controller 4 Setpoint override (Only LUNA d MB controller)	0	1			
4.1 >	4x1530	RW	Controller 5 Setpoint override (Only LUNA d MB controller)	0	1			
4.1 >	4x1531	RW	Controller 6 Setpoint override (Only LUNA d MB controller)	0	1			
4.1 >	4x1532	RW	Controller 7 Setpoint override (Only LUNA d MB controller)	0	1			
4.1 >	4x1542	RW	Controller 1 Setpoint	0	300	0,1°C	Room temperature setpoint	LUNA d MB controller uses by default setpoint defined with the knob located on controller.
4.1 >	4x1543	RW	Controller 2 Setpoint	0	300	0,1°C		
4.1 >	4x1544	RW	Controller 3 Setpoint	0	300	0,1°C		
4.1 >	4x1545	RW	Controller 4 Setpoint	0	300	0,1°C		
4.1 >	4x1546	RW	Controller 5 Setpoint	0	300	0,1°C		
4.1 >	4x1547	RW	Controller 6 Setpoint	0	300	0,1°C		
4.1 >	4x1548	RW	Controller 7 Setpoint	0	300	0,1°C		
4.1 >	3x2253	R	Controller 1 Room temperature	0	300	0,1°C	Room temperature	
4.1 >	3x2254	R	Controller 2 Room temperature	0	300	0,1°C		
4.1 >	3x2255	R	Controller 3 Room temperature	0	300	0,1°C		
4.1 >	3x2256	R	Controller 4 Room temperature	0	300	0,1°C		
4.1 >	3x2257	R	Controller 5 Room temperature	0	300	0,1°C		
4.1 >	3x2258	R	Controller 6 Room temperature	0	300	0,1°C		
4.1 >	3x2259	R	Controller 7 Room temperature	0	300	0,1°C		

FAN COIL								
CONFIGURATION								
4.3 >	4x1655	RW	FanCoil 1 Type	0	4			
4.3 >	4x1656	RW	FanCoil 2 Type	0	4		FanCoilType: 0=Not selected, 1= Heating, 2= Cooling, 3= Heating/Cooling 2Pipe, 4= Heating/Cooling 4pipe	
4.3 >	4x1657	RW	FanCoil 3 Type	0	4			
4.3 >	4x1658	RW	FanCoil 1 Location	0	21		0 = Controller disabled, 1 = Living room 1, 2 = Living room 2, 3 = Living room 3, 4 = Bedroom 1, 5 = Bedroom 2, 6 = Bedroom 3, 7 = Bedroom 4, 8 = Bedroom 5, 9 = Hallway, 10 = Kitchen, 11 = Dining room, 12 = Bathroom, 13 = Utility room, 14 = Walk-in closet, 15 = Storage room, 16 = Garage, 17 = Technical room, 18 = Zone 1, 19 = Zone 2, 20 = Zone 3, 21 = Zone 4	
4.3 >	4x1659	RW	FanCoil 2 Location	0	21			
4.3 >	4x1660	RW	FanCoil 3 Location	0	21			
4.3 >	4x1661	RW	FanCoil 1 Actuator type	0	3		0=Not Selected, 1=On/Off, 2=PWM, 3=0-10VC	For On/Off and PWM control define EXTERNAL CONTROL GIO1-GIO5 or SET Relay 1 / 2 output for the function
4.3 >	4x1662	RW	FanCoil 2 Actuator type	0	3			
4.3 >	4x1663	RW	FanCoil 3 Actuator type	0	3			
4.3 >	4x1667	RW	FanCoil 1 Heating Output 0-10V	0	4		0=Not Selected, 1 =SET AO1, 2=SET AO2, 3=SET AO4, 4=SEC/SEM AO4	Output voltages can be scaled
4.3 >	4x1668	RW	FanCoil 2 Heating Output 0-10V	0	4			
4.3 >	4x1669	RW	FanCoil 3 Heating Output 0-10V	0	4			
4.3 >	4x1726	RW	FanCoil 2 Heating Output voltage Scale 0…10V	0	100	0.1V	Output voltage scale	
4.3 >	4x1727	RW	FanCoil 3 Heating Output voltage scale 0…10V	0	100	0.1V		
4.3 >	4x1679	RW	FanCoil 1 Cooling Output 0-10V	0	4		0=Not Selected, 1 =SET AO1, 2=SET AO2, 3=SET AO4, 4=SEC/SEM AO4	Output voltages can be scaled
4.3 >	4x1680	RW	FanCoil 2 Cooling Output 0-10V	0	4			
4.3 >	4x1681	RW	FanCoil 3 Cooling Output 0-10V	0	4			
4.3 >	4x1724	RW	FanCoil 2 Cooling Output voltage Scale 0…10V	0	100	0.1V	Output voltage scale	
4.3 >	4x1725	RW	FanCoil 3 Cooling Output voltage scale 0…10V	0	100	0.1V		
4.3 >	4x1700	RW	FanCoil Heating / Cooling PWM control cycle time	60	10000	s	If PWM type control for thermomechanical valve is used the cycle time defines pwm cycle time.	Always use SSR relays in order to prevent relay failure, because in PWM mode the relay is controlled periodically on/off when heating or cooling state is active.
4.3 >	4x1679	RW	FanCoil 1 Fan Output 0-10V	0	4		0=Not Selected, 1 =SET AO1, 2=SET AO2, 3=SET AO4, 4=SEC/SEM AO4	
4.3 >	4x1680	RW	FanCoil 2 Fan Output 0-10V	0	4			
4.3 >	4x1681	RW	FanCoil 3 Fan Output 0-10V	0	4			
4.3 >	4x1673	RW	FanCoil 1 Room Temperature sensor	0	9		0 = Not Selected, 1=T6, 2=T7, 3=T8, 4=T9, 5=HMI 1, 6=HMI 2, 7=HMI 3, 8=HMI 4, 9=HMI 5.	Note if three fan coil units are connected and season selection is done with circullation water temperature, the HMI must be used for room temperature measurement. (Max 4 temperature measurement is possible) Sensor type must be selected see registers 4x5190 - 4x5193 to select external temperature sensor type.
4.3 >	4x1674	RW	FanCoil 2 Room Temperature sensor	0	9			
4.3 >	4x1675	RW	FanCoil 3 Room Temperature sensor	0	9			
4.3 >	4x1704	RW	**FanCoil 1 Cooling / Heating season selection**	0	3		0=Manual, 1=Circullation water temperatureSensor, 2= DI, 3=Modbus	Cooling / Heating season is selected either manually from HMI, based on circullation water tempeture or by using external coolin/heating system information which is connected either GIO or with modbus.
4.3 >	4x1732	RW	FanCoil 2 Cooling / Heating season selection	0	3			
4.3 >	4x1733	RW	FanCoil 3 Cooling / Heating season selection	0	3			
4.3 >	4x1673	RW	FanCoil 1 Circullation water temperature sensor	0	9		0 = Not Selected, 1=T6, 2=T7, 3=T8, 4=T9	Sensor type must be selected see registers 4x5190 - 4x5193 to select external temperature sensor type.
4.3 >	4x1674	RW	FanCoil 2 Circullation water temperature sensor	0	9			
4.3 >	4x1675	RW	FanCoil 3 Circullation water temperature sensor	0	9			
4.3 >	4x5034	RW	FanCoil Cooling / Heating season selection with modbus	0	2		0= Heating / Cooling is NOT allowed, 1=Cooling is allowed, 2=Heating is allowed	
Control Settings								
4.3 >	4x1688	RW	FanCoil 1 FanSpeed low	0	100	%	Fan Control low speed	This is the minimum fan speed when unit is in auto mode
4.3 >	4x1689	RW	FanCoil 2 FanSpeed low	0	100	%		
4.3 >	4x1690	RW	FanCoil 3 FanSpeed low	0	100	%		
4.3 >	4x1691	RW	FanCoil 1 FanSpeed normal	0	100	%	Fan Control normal speed	Not used when fan speed is in atuo mode
4.3 >	4x1692	RW	FanCoil 2 FanSpeed normal	0	100	%		
4.3 >	4x1693	RW	FanCoil 3 FanSpeed normal	0	100	%		
4.3 >	4x1694	RW	FanCoil 1 FanSpeed high	0	100	%	Fan Control high speed	This is the maximum fan speed when unit is in auto mode
4.3 >	4x1695	RW	FanCoil 2 FanSpeed high	0	100	%		
4.3 >	4x1696	RW	FanCoil 3 FanSpeed high	0	100	%		
4.3 >	4x1697	RW	FanCoil 1 FanState neutral state	0	1		0 = Fan stopped when heating or cooling is not active, 1 = Fan is running low speed when heating or cooling is not active	
4.3 >	4x1698	RW	FanCoil 2 FanState neutral state	0	1			
4.3 >	4x1699	RW	FanCoil 3 FanState neutral state	0	1			
4.3 >	4x1664	RW	FanCoil 1 Boost Limit	0	100	%	Fan speed is boosted in auto mode when temperature controller output is above this limit.	Available only in auto mode
4.3 >	4x1665	RW	FanCoil 2 Boost Limit	0	100	%		
4.3 >	4x1666	RW	FanCoi 3 Boost Limit	0	100	%		
4.3 >	4x1701	RW	FanCoil Hysteresis	0	50	0,1°C	Hysteresis defines the difference to the setpoint before the heating or the cooling is activated. When unit changes to heating or cooling state the hystesis is not effective and temperature controller aims to control room temperature to selected setpoint	
4.3 >	4x1716	RW	FanCoil Hysteresis (Farenheit)	32	41	°F		
4.3 >	4x1702	RW	FanCoil User setpoint Max	180	250	0,1°C	Limitations for the Setpoint selection	
4.3 >	4x1703	RW	FanCoil User setpoint Min	180	250	0,1°C		
4.3 >	4x1717	RW	FanCoil User setpoint Max (Farenheit)	65	77	°F		
4.3 >	4x1718	RW	FanCoil User setpoint Min (Farenheit)	65	77	°F		
4.3 >	4x1706	RW	FanCoil 1 Room temperature finetune				Room temperature finetune	Note that if temperature measurement is not valid because of sensor location, the error may be differend during the winter and summer.
4.3 >	4x1707	RW	FanCoil 2 Room temperature finetune					
4.3 >	4x1708	RW	FanCoil 3 Room temperature finetune					
4.3 >	4x1719	RW	FanCoil 1 Room temperature finetune (Farenheit)					
4.3 >	4x1720	RW	FanCoil 2 Room temperature finetune (Farenheit)					
4.3 >	4x1721	RW	FanCoil 3 Room temperature finetune (Farenheit)					
4.3 >	4x1710	RW	FanCoil Room temperature controller P Gain	0	100		Room temperature controller proportional gain. Controller output is Temperature error(°C) * P Gain. i.e with 1°C error the P Gain 25 will generate 25% control signal.	
4.3 >	4x1711	RW	FanCoil Room temperature controller I Time	0	300	min	Room temperature controller integration time. Output is doubled in given time if the error does not change. i.e. I Time 10 will double the output in 10 minutes if temperature error does not change.	
FAN COIL								
CONFIGURATION continues…								
4.3 >	4x1734	RW	FanCoil Cooling season cooling limit for circullation water				If circullation water temperature is used for cooling season detection the limit defines when the cooling is allowed. Cooling is allowed only when the circullation water temperature is below the limit.	
4.3 >	4x1735	RW	FanCoil Cooling season cooling limit for circullation water (Farenheit)					
4.3 >	4x1736	RW	FanCoil Heating season cooling limit for circullation water				If circullation water temperature is used for heating season detection the limit defines when the heating is allowed. Heating is allowed only when the circullation water temperature is above the limit.	
4.3 >	4x1737	RW	FanCoil Heating season cooling limit for circullation water (Farenheit)					
4.3 >	4x1709	RW	FanCoil Away Mode, Heating temperature setpoint limit					
4.3 >	4x1738	RW	FanCoil_Setpoint_change_heating_F					
4.3 >	4x1739	RW	FanCoil_Setpoint_change_cooling					

4.3 >	4x1740	RW	FanCoil_Setpoint_change_cooling_F					
4.3 >	4x1712	RW	FanCoil_Condence_Alarm_Input_enable					
4.3 >	4x1730	RW	FanCoil_Cooling_Alarm_enable					
4.3 >	4x1731	RW	FanCoil_Heating_Alarm_enable					
User Settings								
4.3 >	4x1676	RW	FanCoil1 Setpoint	100	300	0.1°C	Room temperature setpoint	The setpoint can be lowered or highered in away and travelling modes in order to save energy
4.3 >	4x1677	RW	FanCoil2Setpoint	100	300	0.1°C		
4.3 >	4x1678	RW	FanCoil3 Setpoint	100	300	0.1°C		
4.3 >	4x1713	RW	FanCoil1 Setpoint (Farenheit)	50	86	°F		
4.3 >	4x1714	RW	FanCoil2Setpoint (Farenheit)	50	86	°F		
4.3 >	4x1715	RW	FanCoil3 Setpoint (Farenheit)	50	86	°F		
4.3 >	4x1682	RW	FanCoil 1 Fan Control	0	3		0=Auto, 1=Low, 2=Normal, 3=High	Use Auto selection to allow temperature control by demand. Low, Normal, High selections will force the fan speed to fixed level and it will not affect to temperature control
4.3 >	4x1683	RW	FanCoil 2 Fan Control	0	3			
4.3 >	4x1684	RW	FanCoil 3 Fan Control	0	3			
4.3 >	4x1685	RW	FanCoil 1 Heating / Cooling Manual enable	0	3		0 = Heating & Cooling Disabled, 1 = Heating enabled, Cooling disabled, 2= Cooling enabled, Heating disabled, 3 = Heating and cooling enabled	Manual selection can disable heating or cooling, even if the season is active.
4.3 >	4x1686	RW	FanCoil 2 Heating / Cooling Manual enable	0	3			
4.3 >	4x1687	RW	FanCoil 3 Heating / Cooling Manual enable	0	3			
Diagnostics								
4.3 >	3x2327	R	FanCoil1 Room temperature	0	400	0.1°C	Measured room temperture. Temperature measurement sensor defined in the settings, and fine tune applied.	
4.3 >	3x2328	R	FanCoil2 Room temperature	0	400	0.1°C		
4.3 >	3x2329	R	FanCoil3 Room temperature	0	400	0.1°C		
4.3 >	3x2339	R	FanCoil1 Room temperature (Farenheit)	320	1040	°F	Measured room temperture. Temperature measurement sensor defined in the settings, and fine tune applied.	
4.3 >	3x2340	R	FanCoil2 Room temperature (Farenheit)	320	1040	°F		
4.3 >	3x2341	R	FanCoil3 Room temperature (Farenheit)	320	1040	°F		
4.3 >	3x2364	R	FanCoil1 Circullation water temperature	-200	400	0.1°C	If circullation water measurement used for heating / cooling season detection. Temperature measurement sensor defined in the settings	
4.3 >	3x2365	R	FanCoil1 Circullation water temperature	-200	400	0.1°C		
4.3 >	3x2366	R	FanCoil1 Circullation water temperature	-200	400	0.1°C		
4.3 >	3x2367	R	FanCoil1 Circullation water temperature (Farenheit)	-40	1040	°F	If circullation water measurement used for heating / cooling season detection. Temperature measurement sensor defined in the settings	
4.3 >	3x2368	R	FanCoil1 Circullation water temperature (Farenheit)	-40	1040	°F		
4.3 >	3x2369	R	FanCoil1 Circullation water temperature (Farenheit)	-40	1040	°F		
4.3 >	3x2343	R	FanCoil1 State	0	100	%	0 = Starting, 1= Neutral (No heating or cooling), 2 = Heating, 3 = Cooling, 4 = Heating circullation water temperature test, 5 = Cooling circullation water temperature test	
4.3 >	3x2344	R	FanCoil2 State	0	100	%		
4.3 >	3x2345	R	FanCoil3 State	0	100	%		
4.3 >	3x2346	R	FanCoil1 Heating control	0	100	%	Control signal when the heating state is active. Note that depending configuration this value effect temperature actuator and fan speed (auto mode selected)	
4.3 >	3x2347	R	FanCoil2 Heating control	0	100	%		
4.3 >	3x2348	R	FanCoil3 Heating control	0	100	%		
4.3 >	3x2349	R	FanCoil1 Cooling control	0	100	%	Control signal when the cooling state is active. Note that depending configuration this value effect temperature actuator and fan speed (auto mode selected)	
4.3 >	3x2350	R	FanCoil2 Cooling control	0	100	%		
4.3 >	3x2351	R	FanCoil3 Cooling control	0	100	%		
4.3 >	3x2352	R	FanCoil1 Heating and Cooling control	0	100	%	2 pipe system only. Control signal when the heating or the cooling state is active. Note that depending configuration this value effect temperature actuator and fan speed (auto mode selected)	
4.3 >	3x2353	R	FanCoil2 Heating and Cooling control	0	100	%		
4.3 >	3x2354	R	FanCoil3 Heating and Cooling control	0	100	%		
4.3 >	3x2355	R	FanCoil1 Fan control	0	100	%	Fan control, 0-100% is scaled lineary to 0-10V output voltage	
4.3 >	3x2356	R	FanCoil2 Fan control	0	100	%		
4.3 >	3x2357	R	FanCoil3 Fan control	0	100	%		
4.3 >	3x2358	R	FanCoil1 Setpoint	100	300	0.1°C	Effective Room temperature setpoint. Setpoint can be selected from the user panel. The setpoint can be lowered or highered in away and travelling modes in order to save energy	
4.3 >	3x2359	R	FanCoil2 Setpoint	100	300	0.1°C		
4.3 >	3x2360	R	FanCoil3 Setpoint	100	300	0.1°C		
4.3 >	3x2361	R	FanCoil1 Setpoint (Farenheit)	500	860	°F	Effective Room temperature setpoint. Setpoint can be selected from the user panel. The setpoint can be lowered or highered in away and travelling modes in order to save energy	
4.3 >	3x2362	R	FanCoil2 Setpoint (Farenheit)	500	860	°F		
4.3 >	3x2363	R	FanCoil3 Setpoint (Farenheit)	500	860	°F		