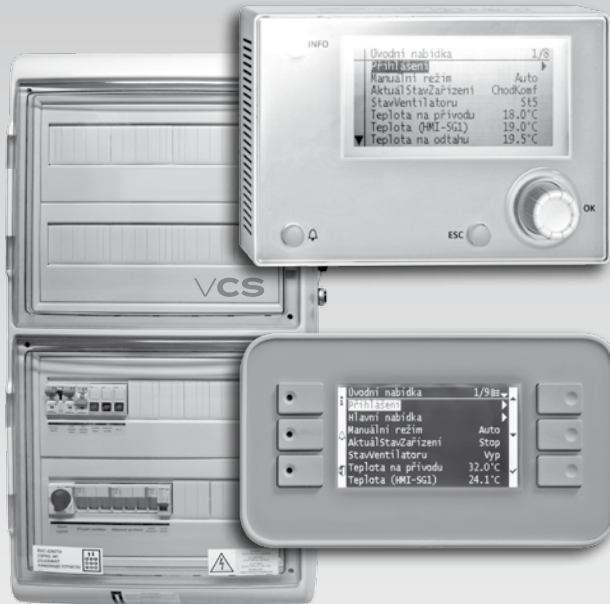


# REMAK



## HMI-DM, HMI-TM, HMI@Web

*Menu overview and list of failures*

### Control units

# VCS

## Menu overview (HMI-DM,HMI-TM, HMI@Web)

Menu		Meaning		Factory settings		
				Value	Min	Max
Monitor		Monitor				
	Current modes	Current modes				
	ActStateEquipment	Current device state				
	FanStageExctCnt	Fan output stage (external control)				
	FanStatus	Fan state				
	PoolMode	Actual pool mode				
	Actual time schedule	Current time schedule				
		Weekly time schedule				
	CalendarWeek	Exception time schedule				
	CalendarExcept	Switch-off time schedule				
	CalendarOff	Current number of failures				
	NumbOffFailures	Temperatures				
	Temperatures	Temperatures				
	Supply	Inlet air temperature				°C
	Room	Room temperature				°C
	Room unit 1	Temperature (HMI-SG1)				°C
	Room unit 2	Temperature (HMI-SG2)				°C
	Return air	Outlet air temperature				°C
	Outdoor	Outdoor air temperature				°C
	Return water heat	Return water temperature from the water heater				°C
	Air heat exchanger	Outlet air temperature behind the heat exchanger				°C
	Air electric preheat	Temperature behind the electric pre-heater				°C
	ReturnWaterPreheating	Return water temperature from the water pre-heater				°C
	ExtraElectricHeating	Temperature behind the electric after-heater				°C
	Flue gas	Flue gas temperature				°C
	ValidRegulationRoom	Room temperature (for control)				°C
	Humidity	Humidity				
	Supply air relative	Inlet - relative				%r.H.
	Supply air absolut	Outlet - absolute				g/kg
	Supply air enthalpy	Inlet - enthalpy				kJ/kg
	Room relative	Room - relative				%r.H.
	Room absolut	Room - absolute				g/kg
	Room enthalpy	Room - enthalpy				kJ/kg
	Outs air relative	Outdoor - relative				%r.H.
	Outs air absolut	Outdoor - absolute				g/kg
	Outs air enthalpy	Outdoor - enthalpy				kJ/kg
	Flow (Pressures)	Flow (Pressures)				
	SupplyPress	SupplyPress				Pa
	ReturnPress	ReturnPress				Pa
	SupplyFlow	SupplyFlow				m3/h
	ReturnFlow	ReturnFlow				m3/h
	HrecPressMin	Hrec press - dP min				
	HrecPressMid	Hrec press - dP mid				
	HrecFirstPressMax	Hrec press - dP max				
	Air quality	Air quality				
	CO2 (VOC, CO)	CO2 (VOC, CO)				ppm
	Outputs	Performances				
	Fan supply output	Inlet fan output				%
	Fan exhaust output	Outlet fan output				%
	Fan additional output	Auxiliary fan output				%
	ExtraElectricalHtgPos	Outlet level for the electric reheater				%
	Heating valve	Heating mixing set valve position				%
	ExtraWtrHeating valve	Heating mixing set valve position reheater				%
	Cooling valve	Cooling valve position				%
	Cooling 2	Cooling valve position 2				%
	Cooling 3	Cooling valve position 3				%
	Electrical preheating	Electric pre-heater outlet position				%
	ElectricalHeatingValve	Electric reheater outlet position				%
	Heat pump	Heat pump outlet position				%
	Heat pump 2	Heat pump 2 outlet position				%
	Heat pump 3	Heat pump 3 outlet position				%
	Mixing section position	Outlet position to the mixing damper				%
	SplyExhDamperPosition	Damper outlet position supply, exhaust				%
	Heat exchanger position	Heat exchanger control outlet position				%
	Gas heating out level	Outlet level for the gas heater				%
	BypassDamperPosition	Outlet position for gas heater's BP damper				%
	Request humidity	Posiadawek na vlhCent				%
	Request dehumidity	Request for dehumidification				%
	Working states	Operating states				
	FanSupplyStatus	Inlet fan state				
	FanExhaustStatus	Outlet fan state				
	FanAdditionalStatus	Auxiliary fan state				
	ElectPreheat	Electric pre-heater state				
	WaterPreheat	Water pre-heater pump state				
	ElectReheating	Electric re-heater state				
	PumpOfWaterHeating	Pump of water heating				
	PumpWaterReHeating	Pump of water re-heating				
	StateHeatExchanger	State heat exchanger				
	PrehtgFunctionsWaterHtg	Pre-heating functions (water heating)				
	WaterCoolPump	Water cooler pump state				
	CoolingStdXCool	Cooling stage (2St)				
	CoolInverter	Cooling stage (inverter)				
	CoolInverter 2	Cooling stage (inverter) 2				
	CoolInverter 3	Cooling stage (inverter) 3				
	CoolIStep	Cooling stage (1 St - inverter)				
	HeatPump	Heat pump state				
	HeatPump 2	Heat pump 2 state				
	HeatPump 3	Heat pump 3 state				
	ElectricHeater	Electric heater state				
	GasHeater	Gas heater state				
	StateHumidifier	StateHumidifier				
	StatePumpHumidifier	StatePumpHumidifier				

## Menu overview (HMI-DM,HMI-TM, HMI@Web)

Menu		Meaning	Factory settings		
			Value	Min	Max
Settings	CirculationDamper	CirculationDamper			
	PoolPump	PoolPump			
	ClgLiquidPump	CgLiquidPump			
	Heating cable	Heating cable			
	Date and Time	Settings			
	TimeValidity	Date and time			
	Temp modes	System time validity			
	Comfort - Heating	Temperature modes			
	Comfort - Cooling	Comfortable heating	22,6	0	99 °C
	Economic - Heating	Comfortable cooling	24,6	0	99 °C
Economic - Cooling	Economy heating	20,6	0	99 °C	
ExSpvSupplyTmp	Economy cooling	28	0	99 °C	
Hum modes	Extra required inlet air temperature	20	0	99 °C	
Comfort-Hum	Hum modes				
Comfort-Dehum	Comfort-Hum				
Econom-Hum	Comfort-Dehum				
Econom-Dehum	Econom-Hum				
Manual mode	Econom-Dehum				
Time schedules	Manual mode				
CalendarWeek	Time modes				
CalendarExcept	Weekly time schedule				
CalendarOff	Exception time schedule				
Control humidity	Switch-off time schedule				
HumMaxSpvSply	Humidity control				
ActualValueHum	HumMaxSpvSply	12	0	100 g/kg	
HumSplyMaxCtrl	ActualValueHum	80	0	100 %/H	
HumidityCtrl	HumSplyMaxCtrl				
DeHumidityCtrl	HumidityCtrl				
ActCascSpvHum	DeHumidityCtrl			%	
ActCascSpvDeh	ActCascSpvHum			%	
Dewpoint	ActCascSpvDeh			°C	
DewpointDedZone	Dewpoint			°C	
Fan	DewpointDedZone	1	-64	64 °C	
RegulFans-Flow(Press)	Fans				
SupplyPrsRangeSnsr	RegulFans-Flow(Press)				
ReturnPrsRangeSnsr	SupplyPrsRangeSnsr				
SupplyFlowRangeSnsr	ReturnPrsRangeSnsr				
ReturnFlowRangeSnsr	SupplyFlowRangeSnsr				
SupplyKFactor	ReturnFlowRangeSnsr				
ReturnKFactor	SupplyKFactor				
NmbrOfSplyFans	ReturnKFactor				
NmbrOfRtrnFans	NmbrOfSplyFans				
Enable - K Factor	NmbrOfRtrnFans				
FanSupplyOutputSetpointVal	Enable - K Factor				
Fan output 1. stage %	Inlet fan output				
Fan output 2. stage %	Output settings St1				
Fan output 3. stage %	Output settings St2				
Fan output 4. stage %	Output settings St3				
Fan output 5. stage %	Output settings St4				
FanExhaustOutputSetpointVal	Output settings St5				
Fan output 1. stage %	Outlet fan output				
Fan output 2. stage %	Output settings St1				
Fan output 3. stage %	Output settings St2				
Fan output 4. stage %	Output settings St3				
Fan output 5. stage %	Output settings St4				
FanAddOutputSetpointVal	Output settings St5				
Fan output 1. stage %	Additional fan output				
Fan output 2. stage %	Output settings St1				
Fan output 3. stage %	Output settings St2				
Fan output 4. stage %	Output settings St3				
Fan output 5. stage %	Output settings St4				
TRN Correct	Output settings St5				
ValueOfCorrection	Outlet fan speed TRN correction				
FanOutputSt1	For all stages				
FanOutputSt2	TRN correction for stage 1				
FanOutputSt3	TRN correction for stage 2				
FanOutputSt4	TRN correction for stage 3				
FanOutputSt5	TRN correction for stage 4				
Back-up supply fan	TRN correction for stage 5				
StrtUpDlyFlowMain	Single-speed inlet fan backup				
StrtUpDlyFlowBackup	Failure flow evaluation time-out after main fan start-up	180	0	9999 s	
SupplyFanBackup	Failure flow evaluation time-out after backup fan start-up	180	0	9999 s	
Back-up exhaust fan	Active main fan backup				
StrtUpDlyFlowMain	Single-speed outlet fan backup				
StrtUpDlyFlowBackup	Failure flow evaluation time-out after main fan start-up	180	0	9999 s	
ExhaustFanBackup	Failure flow evaluation time-out after backup fan start-up	180	0	9999 s	
FanRunDwn-HeatRecPlate	Active main fan backup				
Enable	FanRunDwn-HeatRecPlate				
TempOutMin	Enable				
TempOutMax	TempOut Min	-15	-64	64 °C	
FanRunDwn	TempOut Max	5	-64	64 °C	
MinStOnTimeTrans	FanRunDwn	5	1	60 min	
RunDwnTmTrans	Fan run out	180	0	9999 s	
BckHighSpeedFan	Time transition to 2St speed - two-speed fans	15	0	999 s	
ForceStrtTimOn1St	Time transition to 1St speed - two-speed fans	12	0	99 s	
DelayStartFan	Outdoor temperature-dependent fan speed interlocking	-60	-64	64 °C	
FlowActDelayStrtErr	Forced fan start-up to 1St speed (TRN - damper output absent)	20	0	99 °C	
FlowActDelayRunErr	Fan start-up delay (after damper)	20	0	9999 s	
	Failure flow activation delay (at fan start-up)	45	0	600 s	
	Failure flow activation delay (during fan run)	5	0	600 s	

## Menu overview (HMI-DM,HMI-TM, HMI@Web)

Menu		Meaning	Factory settings			
			Value	Min	Max	
	<b>TherContActDelayTmErr</b>	Thermo-contact (TX) failure activation delay (fans)	2	0	600	s
	<b>FreqInvtActSetDelayTmErr</b>	Frequency inverter failure activation delay	2	0	600	s
	<b>SplyFanLowLim</b>	Sply fan low limit	40	0	100	%
	<b>ExhFanLowLim</b>	Exh fan low limit	40	0	100	%
	<b>ExhFanLowLimCmpMix</b>	Exh fan low limit Comp. Mix	20	0	100	%
	<b>Control Parameters</b>	Control parameters				
	<b>ValueOfTemperatureRegulation</b>	Temperature control values				
	<b>MaxDevRmSplyTemp</b>	Maximum difference between room and inlet temperatures	5	0	64	°C
	<b>MinDevRmSplyTemp</b>	Min. difference between room and inlet temperatures	5	0	64	°C
	<b>ActCascSpvHeating</b>	Calculated required temperature for heating with cascade control				°C
	<b>ActCascSpvCooling</b>	Calculated required temperature for cooling with cascade control				°C
	<b>ActMainSpvHeating</b>	Calculated required temperature for heating				°C
	<b>ActMainSpvCooling</b>	Calculated required temperature for cooling				°C
	<b>ActualTempControlMode</b>	Current temperature-dependent control (inlet, room, outlet)				
	<b>SplyTempLimitation</b>	Inlet temperature limitation				
	<b>SplyMinLimit</b>	Minimum inlet air temperature	15	0	64	°C
	<b>SplyMaxLimit</b>	Maximum inlet air temperature	35	0	64	°C
	<b>Sequences</b>	Sequence				
	<b>WaterHtgWithFunctionPretHtg</b>	Water heating with pre-heating function				
	<b>PmpStrtOutTmP</b>	Outdoor temperature-dependent pump start-up in the AHU Stop and Run mode	5	-64	64	°C
	<b>PmpMinRunTime</b>	Minimum pump run time	180	0	9999	s
	<b>PmpKickTm</b>	Pump downtime to the pump turning activation	168	0	9999	h
	<b>PmpKickTmOn</b>	Active pump turning time	60	0	9999	s
	<b>PretHtgTm</b>	Active water pre-heating operation time	120	0	600	s
	<b>PretHtgTmOff</b>	Function blocking time between AHU unit shut-down and restart	5	0	30	min
	<b>PretHtgEquCurX1</b>	Water heater circuit heating curve setting at the AHU start-up X1	-10	-30	5	°C
	<b>PretHtgEquCurY1</b>	Water heater circuit heating curve setting at the AHU start-up Y1 (%)	100	0	100	%
	<b>PretHtgEquCurX2</b>	Water heater circuit heating curve setting at the AHU start-up X2	10	0	50	°C
	<b>PretHtgEquCurY2</b>	Water heater circuit heating curve setting at the AHU start-up Y2 (%)	10	0	100	%
	<b>StrtDelaySwchAntiFreeze</b>	Stop to Run mode switching delay AP trigger value	60	0	600	s
	<b>StrtAntiFreezeInRun</b>	Water heat exchanger dependent AP trigger value - AHU in Run mode	15	0	50	°C
	<b>StrtAntiFreezeInStop</b>	Water heat exchanger dependent AP trigger value - AHU in Stop mode	30	0	50	°C
	<b>DlyEvalSplyAntiFreeze</b>	Inlet air dependent AP evaluation enabling delay after the unit start-up	60	0	600	s
	<b>StrtSplyAntiFreezeAlmA</b>	Inlet air temperature dependent AP start-up - failure alarm A	6	-64	64	°C
	<b>StrtSplyAntiFreeze</b>	Inlet air temperature dependent AP start-up	8	-64	64	°C
	<b>MaxTempReturnWater</b>	Maximum return water temperature	70	20	120	°C
	<b>Electric heating</b>	Electric Heating				
	<b>ActiveElectricalHtg</b>	Electric heating switching on - request for heating	20	0	100	%
	<b>HystOffElectricalHtg</b>	Electric heating hysteresis	10	1	100	%
	<b>Gas heating</b>	Gas heating				
	<b>EnableSequenceCool</b>	Cooling sequence enabling				
	<b>MinOnTime</b>	Minimum burner run time	150	0	600	s
	<b>MinOffTime</b>	Minimum burner downtime	150	0	600	s
	<b>BckInTmAgainStrt1StBurner</b>	Burner restart protection time (burner Stage 1)	150	0	600	s
	<b>RampModulationBurner</b>	Modulation burner opening/closing speed (%/s) (burner Stage 1)	5	0	20	%/s
	<b>MinLoadOffZ2StBurner</b>	Heating request value for the burner Stage 2 switch-off (%)	40	10	100	%
	<b>SetPointAlarmTmPFlueGas</b>	Maximum flue-gas alarm temperature	230	210	400	°C
	<b>MaxTempFlueGas</b>	Maximum flue-gas temperature	210	160	230	°C
	<b>SetPointTempTFlueGas</b>	Requested flue-gas temperature	160	150	210	°C
	<b>MinTmPFlueGas</b>	Minimum flue-gas temperature	150	150	160	°C
	<b>Electrical preheating</b>	Electric pre-heating				
	<b>SetPointPretHtgTmP</b>	Required temperature for pre-heating	-20	-50	10	°C
	<b>BckEI PretHtgOutTmP</b>	Outdoor dependent electric pre-heating blocking	-30	-50	10	°C
	<b>ActiveEIPretHtg</b>	Heating request-dependent electric pre-heating switch-on	20	0	100	%
	<b>HystOffPretHtg</b>	Hysteresis for electric pre-heater switch-off	10	0	100	%
	<b>Water preheating</b>	Water pre-heating				
	<b>PreheatPumpStpt</b>	Outdoor dependent pre-heating (pump) start-up	5	-50	15	°C
	<b>PmpKickTm</b>	Pump downtime to the pump turning activation	168	0	9999	h
	<b>PmpKickTmOn</b>	Active pump turning time	30	0	9999	s
	<b>PmpMinRunTime</b>	Minimum pump run time	30	0	9999	s
	<b>Extra wather heating</b>	Extra wather heating				
	<b>PmpStrtOutTmP</b>	Outdoor dependent temperature	5	-64	64	°C
	<b>PmpMinRunTime</b>	Pump minimum run time	180	0	9999	s
	<b>PmpKickTm</b>	Pump kick time	168	0	9999	h
	<b>PmpKickTmOn</b>	Pump kick time on	60	0	9999	s
	<b>MaxTempReturnWater</b>	Max temperature return water	70	20	120	°C
	<b>Extra electrical heating</b>	Electric re-heating				
	<b>ActiveExtraElHeating</b>	St1 heating request dependent electric re-heating start-up	20	0	100	%
	<b>HystOffExtraElHeating</b>	Hysteresis for electric re-heating switch-off	10	1	100	%
	<b>MaxPowExtraHtgForFanSt1</b>	Fan St1 dependent outlet limitation	100	0	100	%
	<b>MaxPowExtraHtgForFanSt2</b>	Fan St2 dependent outlet limitation	100	0	100	%
	<b>MaxPowExtraHtgForFanSt3</b>	Fan St3 dependent outlet limitation	100	0	100	%
	<b>MaxPowExtraHtgForFanSt4</b>	Fan St4 dependent outlet limitation	100	0	100	%
	<b>MaxPowExtraHtgForFanSt5</b>	Fan St5 dependent outlet limitation	100	0	100	%
	<b>HeatPump_HeatPump2, HeatPump3</b>	Heat pump - heating				
	<b>HeatPump - heating</b>	Heat pump - heating				
	<b>StptBckOutTmP</b>	Outdoor temperature dependent heat pump blocking	5	-45	35	°C

## Menu overview (HMI-DM,HMI-TM, HMI@Web)

Menu		Meaning	Factory settings				
			Value	Min	Max		
		StpHysOutTmp	Temp. hysteresis for outdoor temperature dependent heat pump unblocking	3	1	10	°C
		MinRunTm	Minimum operating time for heat pump heating	60	0	9999	s
		BickTmAgainStrt	Re-heating blocking	120	5	600	s
		ActiveHeatPump	Heat pump switching on	20	0	100	%
		HysOffHeatPump	Digital output opening hysteresis	10	1	100	%
		AlarmFromOutTmp	Information - outdoor temperature dependent heat pump heating blocking				
		StartAnalogVal	Start analog value	30	0	50	%
		MaxAnalogVal	Max analog value	100	0	100	%
		BickOutTmpMin	Block out Temp Min				
		BickOutTmpMax	Block out Temp Max				
		BickOutTmp	Block out temp				
		Bick-HrecPres	Block hrec pres				
		<b>HeatPump - cooling</b>	Heat pump - cooling				
		StpTbickOutTmp	Outdoor temperature dependent heat pump blocking	14	-45	35	°C
		StpHysOutTmp	Temp. hysteresis for outdoor temperature dependent heat pump unblocking	3	1	10	°C
		MinRunTm	Minimum operating time for heat pump cooling	60	0	9999	s
		BickTmAgainStrt	Re-cooling blocking	120	5	600	s
		ActiveHeatPump	Heat pump switching on	20	0	100	%
		HysOffHeatPump	Digital output opening hysteresis	10	1	100	%
		AlarmFromOutTmp	Information - outdoor temperature dependent heat pump cooling blocking				
		StartAnalogVal	Heat pump analogue signal lower level	30	0	50	%
		MaxAnalogVal	Heat pump analogue signal max level	100	0	100	%
		<b>HeatPump - special</b>	HeatPump - special				
		Invert signal heating	Invert signal heating				
		Invert signal cooling	Invert signal cooling				
		DaikinSpec0-10V	DaikinSpec0-10V				
		DifferSt1-St2SigDaikin	DifferSt1-St2SigDaikin	40	0	100	%
		ChangeTimeToMaxSigDaikin	ChangeTimeToMaxSigDaikin	120	0	500	s
		StartAnalogVal	StartAnalogVal	30	0	50	%
		<b>Heat recovery</b>	Heat recovery				
		HeatExFreezAlarm	Freezing determination heat exchanger	1	-64	64	°C
		HeatExTmpMaxSpeed	Start temperature for maximum - HRE speed/volume open BP PE	15	-64	64	°C
		HeatExTmMaxSpeed	Start time for maximum - HRE speed/volume open BP PE	60	0	600	s
		SetStartRequestHeatEx	Heat recovery request dependent HRE run enabling	38	0	100	%
		SetHysHeatEx	Hysteresis for HRE run stop	5	0	100	%
		InfoStrtAntiFreez	Information - antifreeze protection start-up				
		FrstAlmStrtTmpOut	FrstAlmStrtTmpOut				
		FrstMinOnTime	FrstMinOnTime				
		FrstMinOffTime	FrstMinOffTime				
		HrecFrstPressMax	HrecFrstPressMax				
		<b>WheelCleaning</b>	WheelCleaning				
		Enable	Enable				
		TimeOn	TimeOn	10	0	600	s
		TimeToNextKick	TimeToNextKick	30	0	36000	min
		<b>Mixing</b>	Mixing				
		MinFreshAir	Minimum fresh air flow rate	20	0	100	%
		MinFreshAir - Comfort	Minimum fresh air flow rate - Comfort (pool unit)	20	0	100	%
		MinFreshAir - Econom	Minimum fresh air flow rate - Economy (pool unit)	20	0	100	%
		MixDampTmFullOp	Starting temperature for mixing damper wide-open position	15	-64	64	°C
		MixDampTmFullOp	Starting time for mixing damper wide-open position	60	0	600	s
		Value0Mixing	Mixing damper control signal recurrence vale (normal/inverse) (%)	100	0	100	%
		ActMaxFrshAirLim	ActMaxFrshAirLim				
		MaxFrshAir	MaxFrshAir				
		ToutActMaxFrshAir	ToutActMaxFrshAir				
		<b>Cooling</b>	Cooling				
		CigBickOutTmp	Outdoor temperature-dependent blocking	12	-64	64	°C
		MinRunTmPump	Minimum pump operating time	180	0	9999	s
		PmpKickTm	Pump downtime to the pump turning activation	168	0	9999	h
		PmpKickTmOn	Active pump turning time	60	0	9999	s
		MinRunTm1StDXClg	Minimum operating time, 1St condensing unit	60	0	9999	s
		BickTmAgainStrtDXCool	Re-cooling blocking, 1St (2St) condensing unit	120	5	600	s
		TmRemainIn1StDXCool	Minimum dwell time in condensing unit's 1St; 2St condensing unit	360	5	600	s
		DXCoolStage1On	Condensing unit's 1St switch-on	20	0	100	%
		DXCoolStage2On	Condensing unit's 2St switch-on	20	0	100	%
		DXCoolHysOff1St	Hysteresis for 1St - 2St transition, 2St condensing unit	10	0	20	%
		MinRunTmInverter	Minimum operating time; inverter	10	0	9999	s
		BickTmAgainDXCool-Inv	Re-cooling blocking, 1St - condensing unit	60	0	300	s
		Invert signal cooling	Invert signal cooling				
		CigLimRmHum	CigLimRmHum	65	0	100	%
		<b>Cooling 2</b>	Outdoor temperature-dependent blocking	12	-64	64	°C
		MinRunTmPump	Minimum pump operating time	180	0	9999	s
		Invert signal cooling	Invert signal cooling				
		<b>Cooling 3</b>	Outdoor temperature-dependent blocking	12	-64	64	°C
		MinRunTmPump	Minimum pump operating time	180	0	9999	s
		Invert signal cooling	Invert signal cooling				
		<b>DemandHtg</b>	Heating Water Source Switching				
		SptTmDemandHtg	Heating water heating start-up	15	5	25	°C
		SptDlyStrtSeq	Start-up sequence delay	120	10	600	s
		<b>PoolPump</b>	PoolPump				
		MinOnTime	MinOnTime	10	0	36000	s
		PoolPump	PoolPump				

Menu		Meaning		Factory settings			
				Value	Min	Max	
	<b>ClgLiquidPump</b>	ClgLiquidPump					
	MinOnTime	MinOnTime	10	0	36000	s	
	<b>ClgLiquidPump</b>	ClgLiquidPump					
	<b>CompensationRequestTemperatur</b>	Required temperature compensation					
	ClgCompStart	Cooling initial point (outdoor temperature)	25	-64	64	°C	
	ClgCompEnd	Cooling end point (outdoor temperature)	35	-64	64	°C	
	MaxValCompClg	Maximum cooling compensation (required value)	2	-64	64	dK	
	ActShiftReqTempClg	Required cooling value current shift		-64	64	°C	
	CompHStart	Heating initial point (outdoor temperature)	0	-64	64	°C	
	CompHEnd	Heating end point (outdoor temperature)	-20	-64	64	°C	
	MaxCompHtg	Maximum heating compensation (required value)	-1	-64	64	dK	
	ActShiftReqTempHtg	Required heating value current shift		-64	64	°C	
	<b>FanCompensationOutTemperature</b>	Outdoor temperature-dependent fan speed compensation					
	ClgCompStart	Cooling initial point (outdoor temperature)	25	-64	64	%	
	ClgCompEnd	Cooling end point (outdoor temperature)	30	-64	64	°C	
	MaxValCompStgClg	Maximum cooling compensation (speed)	0	-100	100	%	
	ActValCompStgFanClg	Current cooling speed compensation		-100	100	%	
	CompHStart	Heating initial point (outdoor temperature)	5	-64	64	°C	
	CompHEnd	Heating end point (outdoor temperature)	-20	-64	64	°C	
	MaxValCompStgHtg	Maximum heating compensation (speed)	0	-100	100	%	
	ActValCompStgFanHtg	Current heating speed compensation		-100	100	%	
	<b>FanCompensationRoomExhaustTmp</b>	Room (Outlet) Temperature-Dependent Fan Speed Compensation					
	FunctionComp	Compensation function setting					
	SpvTempInRoom	Required room temperature	20	0	99	°C	
	ActValCom	Actual compensation		0	100	%	
	<b>FanCompensationSequenceHtg</b>	Heating dependent fan speed compensation					
	HysTempHeating	Heating temperature hysteresis (°C)	1	0	20	°C	
	ActValCom	Heating compensation display (%)		0	100	%	
	<b>FanCompensationSequenceClg</b>	Cooling dependent fan speed compensation					
	HysTempCooling	Cooling temperature hysteresis (°C)	1	0	20	°C	
	ActValCom	Cooling compensation display (%)		0	100	%	
	<b>Compensation air quality</b>	Air quality dependent compensation (damper position/fan speed)					
	SetFuncAirQuality	Compensation function setting (according to the sensor characteristics)					
	SpvValueConcentration	Required (allowable) value of the CO <sub>2</sub> , VOC, (CO) concentration	800	0	3000	ppm	
	SettingRangeSensor	CO <sub>2</sub> , VOC, (CO) sensor range setting	2000	0	3000	ppm	
	ActValComp	CO <sub>2</sub> , VOC (CO) compensation rate display, %		0	100	%	
	<b>FanCompValSplTmp</b>	Fan compensation value supply temperature					
	ValueCompensation	Value compensation				%	
	DeltaTsplymaxForStart	Delta temp. supply max for start					
	MinOnTime	Minimum operation time					
	CompensState	Compensation status					
	<b>Humidity fan compensation</b>	Humidity-dependent fan speed compensation					
	Func compensation	Fan speed compensation function					
	ActValComp	Compensation display				%	
	<b>Humidity Hrec Damp compensat</b>	Humidity Hrec Damp compensat					
	Func compensation	Humidity compensation					
	ActValComp	ActValComp				%	
	<b>TemperatureStart</b>	Temperature start-up					
	StrtTmpHeating	Heating trigger temperature	25	-64	64	°C	
	SpvTmpHeating	Required temperature for heating	25	-64	64	°C	
	StrtTmpCooling	Cooling trigger temperature	30	-64	64	°C	
	SpvTmpCooling	Required temperature for cooling	15	-64	64	°C	
	Temperature hysteresis	Hysteresis	-1	0.1	64	°C	
	BlckTmAgainStart	Heating and cooling blocking time	30	0	999	min	
	MinRunTm	Minimum operating time	0	0	999	min	
	<b>Night Cooling</b>	Night chilling					
	SpvTmpRoom	Required room temperature, inlet-dependent control	22	-64	64	°C	
	HysTmpRoom	Temperature hysteresis	3	0	64	°C	
	MinOutTm	Minimum outdoor temperature setting	12	-64	64	°C	
	OutRoomOnDiffTm	Outdoor temperature and room temperature difference	5	1	64	°C	
	MinRunTm	Minimum operating time	30	0	999	min	
	<b>Boost</b>	Optimized start					
	PreStrtTmTimeSchedul	Pre-set interval before time program start-up	60	0	999	min	
	SpvTmpRoom	Required room temperature - inlet-dependent control	20	-64	64	°C	
	HysTmp	Temperature hysteresis	0.5	-64	64	°C	
	SpvTmpHeating	Required temperature for heating	25	-64	64	°C	
	SpvTmpCooling	Required cooling temperature	15	-64	64	°C	
	<b>Night kick</b>	Night turning					
	DateTime	Turning time					
	TmToNextKick	Time to next turning (h)	3	0	9999	h	
	TmOn	Active turning time (s)	300	0	9999	s	
	<b>Sensor correction</b>	Sensor correction					
	Supply	Supply	0	-64	64	dK	
	Room	Room	0	-64	64	dK	
	Room unit 1	Room unit 1	0	-64	64	dK	
	Room unit 2	Room unit 2	0	-64	64	dK	
	Return air	Return air	0	-64	64	dK	
	Outdoor	Outdoor	0	-64	64	dK	
	Return water heat	Return water heat	0	-64	64	dK	
	Air heat exchanger	Air heat exchanger	0	-64	64	dK	
	Air electric preheat	Air electric preheat	0	-64	64	dK	
	ReturnWaterPreheating	ReturnWaterPreheating	0	-64	64	dK	
	ExtraElectricHeating	ExtraElectricHeating	0	-64	64	dK	
	Flue gas	Flue gas	0	-5	5	dK	
	Supply air relative	Supply air relative	0	-100	100	%/H	

## Menu overview (HMI-DM,HMI-TM, HMI@Web)

Menu			Meaning	Factory settings			
				Value	Min	Max	
		Room relative	Room relative	0	-100	100	%r.H.
		Air quality	Air quality	0	-3000	3000	ppm
	Heating cable	Actual state	Heating cable	0			
		ActiveOutTemp	Actual state	1	-64	64	°C
		HysteresisOff	HysteresisOff	1	-64	64	K
	Control factors	TempCascade	Control constants				
		PropFactor	Cascade control factors				
		IntegFactor	Proportional factor	10			
	TempMinControl	Temp Min control	Integrating factor	1200			s
		PropFactor	Temp Min control				
		IntegFactor	Proportional factor	-20			s
		DifferFactor	Integrating factor	120			s
	TempMaxControl	Temp Max control	Derivative factor	0			s
		PropFactor	Temp Max control				
		IntegFactor	Proportional factor	20			s
		DifferFactor	Integrating factor	120			s
	AntiFreezeRetWatHeat	Return water AP factors	Derivative factor	0			s
		PropFactor	Return water AP factors				
		IntegFactor	Proportional factor	20			s
		DifferFactor	Integrating factor	90			s
	AntiFreezeSplyTemp	Inlet air AP factors	Derivative factor	0			s
		PropFactor	Inlet air AP factors				
		IntegFactor	Proportional factor	50			s
		DifferFactor	Integrating factor	0			s
	MaxRetWatHeat	Maximum return water temperature factors	Derivative factor	0			s
		PropFactor	Maximum return water temperature factors				
		IntegFactor	Proportional factor	-3			s
		DifferFactor	Integrating factor	300			s
	SetpointTempWaterheating	Water heating required temperature factors	Derivative factor	0			s
		PropFactor	Water heating required temperature factors				
		IntegFactor	Proportional factor	5			s
		DifferFactor	Integrating factor	150			s
	Electrical heating	Electric heating factors	Derivative factor	0			s
		PropFactor	Electric heating factors				
		IntegFactor	Proportional factor	5			s
		DifferFactor	Integrating factor	120			s
	BurnerFactors	Gas burner factors	Derivative factor	0			s
		PropFactor	Gas burner factors				
		IntegFactor	Proportional factor	5			s
		DifferFactor	Integrating factor	60			s
	Bypass damper	Gas heater bypass damper factors	Derivative factor	0			s
		PropFactor	Gas heater bypass damper factors				
		IntegFactor	Proportional factor	-5			s
		DifferFactor	Integrating factor	120			s
	GasHeatingMaximalTempFlueGas	Maximum temperature of flue gas	Derivative factor	0			s
		PropFactor	Maximum temperature of flue gas				
		IntegFactor	Proportional factor	10			s
		DifferFactor	Integrating factor	120			s
	GasHeatingMinimumTempFlueGas	Minimum temperature of flue gas	Derivative factor	0			s
		PropFactor	Minimum temperature of flue gas				
		IntegFactor	Proportional factor	-10			s
		DifferFactor	Integrating factor	120			s
	Electrical preheating	Electric pre-heating factors	Derivative factor	0			s
		PropFactor	Electric pre-heating factors				
		IntegFactor	Proportional factor	5			s
		DifferFactor	Integrating factor	120			s
	Extra electrical heating	Electric after-heating factors	Derivative factor	0			s
		PropFactor	Electric after-heating factors				
		IntegFactor	Proportional factor	1			s
		DifferFactor	Integrating factor	60			s
	Extra wather heating	Extra wather heating factors	Derivative factor	0			s
		PropFactor	Extra wather heating factors				
		IntegFactor	Proportional factor	5			s
		DifferFactor	Integrating factor	150			s
	Heat pump - heating	Heat pump factors - heating	Derivative factor	0			s
		PropFactor	Heat pump factors - heating				
		IntegFactor	Proportional factor	5			s
		DifferFactor	Integrating factor	300			s
	Heat pump - cooling	Heat pump factors - cooling	Derivative factor	0			s
		PropFactor	Heat pump factors - cooling				
		IntegFactor	Proportional factor	-5			s
		DifferFactor	Integrating factor	300			s
	Heat pump 2 - heating	Heat pump 2 factors - heating	Derivative factor	0			s
		PropFactor	Heat pump 2 factors - heating				
		IntegFactor	Proportional factor	5			s
		DifferFactor	Integrating factor	300			s
	Heat pump 2 - cooling	Heat pump 2 factors - cooling	Derivative factor	0			s
		PropFactor	Heat pump 2 factors - cooling				
		IntegFactor	Proportional factor	-5			s
		DifferFactor	Integrating factor	300			s
	Heat pump 3 - heating	Heat pump 3 factors - heating	Derivative factor	0			s
		PropFactor	Heat pump 3 factors - heating				
		IntegFactor	Proportional factor	5			s
		DifferFactor	Integrating factor	300			s
	Heat pump 3 - cooling	Heat pump 3 factors - cooling	Derivative factor	0			s
		PropFactor	Heat pump 3 factors - cooling				
		IntegFactor	Proportional factor	-5			s
		DifferFactor	Integrating factor	300			s
	Heat recovery	Heat recovery RHE/ BP PE	Derivative factor	0			s

## Menu overview (HMI-DM,HMI-TM, HMI@Web)

Menu		Meaning	Factory settings		
			Value	Min	Max
	PropFactor	Proportional factor	3		
	IntegFactor	Integrating factor	60		s
	DifferFactor	Derivative factor	1		s
Heat exchanger freeze		Heat recovery AP factors			
	PropFactor	Proportional factor	20		
	IntegFactor	Integrating factor	150		s
	DifferFactor	Derivative factor	0		s
Mixing		Mixing factors			
	PropFactor	Proportional factor	7		
	IntegFactor	Integrating factor	45		s
	DifferFactor	Derivative factor	15		s
Cooling		Cooling factors			
	PropFactor	Proportional factor	-5		
	IntegFactor	Integrating factor	300		s
	DifferFactor	Derivative factor	0		s
Cooling 2		Cooling factors 2			
	PropFactor	Proportional factor	-5		
	IntegFactor	Integrating factor	300		s
	DifferFactor	Derivative factor	0		s
Cooling 3		Cooling factors 3			
	PropFactor	Proportional factor	-5		
	IntegFactor	Integrating factor	300		s
	DifferFactor	Derivative factor	0		s
Cooling LimRmHum		Factors limiting cooling based on humidity in the space			
	PropFactor	Proportional factor	-20		
	IntegFactor	Integrating factor	120		s
	DifferFactor	Derivative factor	0		s
Humidity		Humidity factors			
	PropFactor	Proportional factor	5		
	IntegFactor	Integrating factor	120		s
	DifferFactor	Derivative factor	0		s
Dehumidify		Dehumidification factors			
	PropFactor	Proportional factor	-2		
	IntegFactor	Integrating factor	240		s
	DifferFactor	Derivative factor	0		s
Humidity cascade		Humidity cascade control factors			
	PropFactor	Proportional factor	4		
	IntegFactor	Integrating factor	0		s
HumSplyMaxCtrl		Humidity supply max control			
	PropFactor	Proportional factor	-19		
	IntegFactor	Integrating factor	120		s
	DifferFactor	Derivative factor	0		s
FanCompensationSequenceHtg		Heating-dependent fan speed compensation factors			
	PropFactor	Proportional factor	5		
	IntegFactor	Integrating factor	120		s
	DifferFactor	Derivative factor	0		s
FanCompensationSequenceClg		Cooling-dependent fan speed compensation factors			
	PropFactor	Proportional factor	-10		
	IntegFactor	Integrating factor	120		s
	DifferFactor	Derivative factor	0		s
FanCompensationRoomExhaustTmp		Room (outlet) temperature-dependent fan speed compensation factors			
	PropFactor	Proportional factor	20		
	IntegFactor	Integrating factor	0		s
	DifferFactor	Derivative factor	0		s
FanCompensationHumidity		Humidity-dependent fan speed compensation factors			
	PropFactor	Proportional factor	-2		
	IntegFactor	Integrating factor	45		s
	DifferFactor	Derivative factor	0		s
HrecDampCompHumidity		Hrec damper compensation humidity			
	PropFactor	Proportional factor	-2		
	IntegFactor	Integrating factor	45		s
	DifferFactor	Derivative factor	0		s
CompensationAirQuality		Air quality CO2(VOC,CO)-dependent compensation (damper position/fan speed) factors			
	PropFactor	Proportional factor	-0,3		
	IntegFactor	Integrating factor	300		s
	DifferFactor	Derivative factor	0		s
SplyFanVarCtrl		Supply fan variable control			
	PropFactor	Proportional factor	-0,3		
	IntegFactor	Integrating factor	30		s
	DifferFactor	Derivative factor	0		s
ExhFanVarCtrl		Exhaust fan variable control			
	PropFactor	Proportional factor	-0,3		
	IntegFactor	Integrating factor	30		s
	DifferFactor	Derivative factor	0		s
Device configuration		Device configuration			
		Application information			
Application info		Device information			
Device info		Change units from Metric to imperial			
	Unit °C → °F	OS version			
	Version OS	Contoller internal temperature			
	InternTempRegulator	Operating hours			
	Operating Hours	Device type			
	Type of device	Inputs configuration			
Inputs configuration		Heat pump alarm input			
	HeatPumpAlm	Cooling alarm input			
	Cooling alarm	Output configuration			
Output configuration		Control signal 0-10 V or 2-10 V, heating			
	Signal type heating	Control signal 0-10 V or 2-10 V, cooling			
	Signal type cooling	Control signal 0-10 V or 2-10 V, mixing damper			
	Signal type mix damper				



## Menu overview (HMI-DM,HMI-TM, HMI@Web)

Menu		Meaning	Factory settings		
			Value	Min	Max
	SignalTypByPassHeatRec	Control signal 0-10 V or 2-10 V, heat exchanger by-pass damper			
	SignalTypByPassBurn	Control signal 0-10 V or 2-10 V, chamber by-pass damper			
	RegulationSupplyFan	Type of regulation supply fan			
	RegulationExhaustFan	Type of regulation exhaust fan			
	RegulationAdditionalFan	Type of regulation additional fan			
	Heating	Heating			
	Heat pump	Heat pump			
	Gas heat type	Type of gas heating			
	GasHeaterByPassDamp	Bypass damper gas heater			
	Cooling	Cooling			
	Heat recovery	Heat recovery			
	Mixing	Mixing			
	Preheating	Preheating			
	Extra heating	Extra heating			
	TemperatControlMode	Temperature control mode			
	HumidityControlMode	Humidity control mode			
	RemoteFault-ClassFault	Remote fault - choice class fault			
	Version SW-HMI	SW-HMI version			
AdditionalOper	ModeAndFunction	Additional operating modes, functions			
	TemperatureMeasurePointSelect	Room temperature measuring point selection			
	FanCompensationOutTemperature	Outdoor Temperature-Dependent Fan Speed Compensation			
	Fan compensation sequence	Heating/cooling dependent fan speed compensation			
	Fan compensation air quality	Air quality-dependent fan speed compensation			
	FanCompensationRoomExhaustTmp	Room (outlet) temperature-dependent fan speed compensation			
	Temperature deviation alarm	Difference between required and actual temperature monitoring			
	HrecPlateFrostType	Hrec plate frost type			
	HeatRecoveryCompensationAirQ	Air quality-dependent damper position compensation			
	Heat recovery cooling	Cooling using ZZT (ROV, BP, DEV, mixing damper)			
	Fan cooling sequence	Heating/cooling dependent fan speed compensation -cooling sequence (fan, cooler)			
	HeatRecoveryDamperSequence	Mixing heating sequence (damper, heater)			
	Night cooling	Night chilling			
	Temperature start-up	Temperature start-up			
	Boost	Time mode start optimization			
	BlockedDamperAndExhaustFan	Damper and outlet fan blocking			
	Type correct TRN exhaust fan	Outlet fan correction type (TRN controllers)			
	LimitationDehumidiforHeating	Limitation of dehumidification during heating			
	Humidity fan compensation	Humidity-dependent fan speed compensation			
	Humidity HrecDampCompensation	Humidity hrec damper compensation			
	ActiveMaxFrshAirDHrec	Active function - limit max fresh air damper hrec (pool v3)			
	Apply - Reset	Reset after configuration of additional modes/functions			
HMI-SG		HMI-SG			
	DisplayedRoomTemp	Room temperature display, combined or inlet temperature	3	0	12 °C
	SetpointRangeCorr	Setpoint range correction temperature setpoint +/-	0.1	0.1	0.5 °C
	SetpointIncrement	Required temperature increment setting (0.5/0.1) (°C)	24	12	24 h
	TimeFormat	Displayed time format (2h/24h)			
External Control		External control			
	ToggFuncInp1	External contact function definition (Ext. control 1 contact)			
	DelayOffTmToAUTO	Transition time from ext. control mode to AUTO mode (Ext. control 1 contact)	0	0	23 h
	FanOutputStg1	Fan output stage setting (Ext. control 1 contact or 2 contacts)			
	FanOutputStg2	Fan output stage setting "higher" (Ext. control 2 contacts)			
	TmpMod1	Temperature mode setting (Ext. control 1 contact or 2 contacts)			
	TmpMod2	Temperature mode setting "higher" (Ext. control 2 contacts)			
	FanStageExtCnt	Fan output stages (external control)			
Identification device		Device identification			
	Name of device	Equipment name			
	Number of devices	Device number			
	Location of the installation	Device location			
Checks		Checks			
	Save / Restore	Saving and recovery			
	UpgradeStart	Upgrade Start			
	SaveDataOnSDCard	Save data on SD Card			
	SaveDataFromSDCard	Save data from SD card			
	RestoreFactorySetting	Factory settings recovery			
	Restore settings	Settings recovery			
	Save settings	Save settings			
Operating hours		Operating hours			
	Supply fan	Operating hour counter - inlet fan			
	Exhaust fan	Operating hour counter - outlet fan			
	Additional fan	Operating hour counter - 3rd auxiliary fan			
	Operating hours settings fans	Fan operating hours settings			
	OperationHoursAlm	Fan operating hour alarm state			
	EnbHOperHoursAlm	Alarm enable fan operating hour			
	OperHoursLimit	Operating hours for alarm activation	17520	0	999999 h
	Water preheating	Operating hour counter - water pre-heating			
	ElectricPreheating	Operating hour counter - electric pre-heating			
	Heating water	Operating hour counter - water heating			
	Electrical heating	Operating hour counter - electric heating			
	Cooling water	Operating hour counter - water cooling			
	CoolingCondensUnit	Operating hour counter - condensing unit			
	CoolingCondensUnit 2	Operating hour counter - condensing unit 2			
	CoolingCondensUnit 3	Operating hour counter - condensing unit 3			
	ExtraElectricalHtg	Operating hour counter - electric after-heating			
	HeatPump-heating	Operating hour counter - HeatPump-heating			

## Menu overview (HMI-DM,HMI-TM, HMI@Web)

Menu		Meaning	Factory settings		
			Value	Min	Max
	HeatPump-cooling	Operating hour counter - HeatPump-cooling			
	HeatPump2-heating	Operating hour counter - HeatPump2-heating			
	HeatPump2-cooling	Operating hour counter - HeatPump2-cooling			
	HeatPump3-heating	Operating hour counter - HeatPump3-heating			
	HeatPump3-cooling	Operating hour counter - HeatPump3-cooling			
	SetpointAndSupplyTmpDeviation	Difference between required and inlet air temperature monitoring			
	MaxDeviation	Maximum difference (°C)	10	0	99 °C
	MinLimit	Minimum limit (°C)	10	0	99 °C
	DlyOnTmEvalAfterStart	Time delay evaluation after AHU start-up (s)	60	0	9999 s
	SetpointAndRoomTmpDeviation	Difference between required and room (outlet) air temperature monitoring			
	MaxDeviation	Maximum difference (°C)	10	0	99 °C
	MinLimit	Minimum limit (°C)	10	0	99 °C
	DlyOnTmEvalAfterStart	Time delay evaluation after AHU start-up (s)	600	0	9999 s
	FireAlarmActivityFans	Fan behaviour during fire alarm			
	FireAlarmFansOutSvp	Fan output during fire alarm	80	0	100 %
	SplyTmpFireLmt	Fire alarm activation inlet temperature	70	0	99 °C
	ExhstTmpFireLmt	Fire alarm activation outlet temperature	50	0	99 °C
Connection		Connection			
	Modbus Master	ModbusMaster			
	AdrFrqInlv1SplyFan	Frequency inverter 1 address, inlet fan	1		
	AdrFrqInlv2SplyFan	Frequency inverter 2 address, inlet fan backup or second inlet fan	2		
	AdrFrqInlv3SplyFan	Frequency inverter 3 address, inlet fan twin backup	3		
	AdrFrqInlv4SplyFan	Frequency inverter 4 address, inlet fan twin backup	4		
	AdrFrqInlv5ExhFan	Frequency inverter 5 address, outlet fan	5		
	AdrFrqInlv6ExhFan	Frequency inverter 6 address, outlet fan backup or second outlet fan	6		
	AdrFrqInlv7ExhFan	Frequency inverter 7 address, outlet fan twin backup	7		
	AdrFrqInlv8ExhFan	Frequency inverter 8 address, outlet fan twin backup	8		
	AdrFrqInlv9AddFirst	Frequency inverter 9 address, 3rd auxiliary fan	9		
	AdrFrqInlv10AddSec	Frequency inverter 10 address, second 3rd auxiliary fan	10		
	AdrFrqInlv11RotHeatExch	Frequency inverter 11 address, rotary heat exchanger	11		
	ResistiveTerminatBus	Control unit Modbus resistance terminal	2		
	NumberRepeatErrMess	Number of message repeating during error transfers	2		
	NumberOfErrMess	Number of error transfers for communication failure evaluation	6		
	LAN Connection	LAN connection			
	DHCP	DHCP			
	ActIPAdr	Current IP address			
	ActMaskAdr	Current mask address			
	ActGatewayAdr	Current gate address			
	GivenIPAdr	IP address input			
	GivenMaskAdr	Mask address input			
	GivenGateAdr	Gate address input			
	HostName	Host name			
	MACAddress	MAC address			
	Web user name	HMI@WEB user name:			
	Web user name	HMI@WEB password			
	Apply-Reset	Apply-Reset			
	LON	LON			
	OutTmpCommunicat	Outdoor temperature from the bus			
	ExtAlarmCommunicat	External failure form the bus			
	Modbus - CommModul	Modbus communication module			
	LON - CommModul	LON communication module			
	OutTmpCommunicat	Outdoor temperature from the bus			
	ExtAlarmCommunicat	External failure from the bus			
	BACnet/IP	BACnet/IP communication module			
	Language	Language			
	Current Language	Current language			
	Passwords	Passwords			
	Login	Log-in			
	Log Out	Log-out			
	Change password	Password change			
		Password:SERVICE			
		Level:SERVICE			
		Password:ADMIN			
		Level:ADMIN			
		Password:USER			
		Level:USER			
		Password:GUEST			
		Level:GUEST			
	Function button Fault				
	1x Alarm list detail	Last failure digital description			
	2x Alarm list:	List of failures			
	Acknowledge	Failure reset			
	3x Alarm history:	Error history			
	Acknowledge	Failure reset			
	4x Alarms	Failures			
	Alarm list	List of failures			
	Reset	Reset			
	Alarm history:	Error history			
	Reset	Reset			

List of failures (HMI-DM, HMI-TM, HMI@Web)	
Failure	Description
SupplyTmpSnsr	Inlet air temperature sensor
RoomTmpSnsr	Room air temperature sensor
HMI-SG1	Local HMI-SG1 controller
HMI-SG2	Local HMI-SG2 controller
ReturnAirTmpSnsr	Outlet air temperature sensor
OutTmpSnsr	Outdoor temperature sensor
HtgFrstTmpSnsr	Return water temperature sensor
FrostTmpSnsrHeatEx	Antifreeze protection temperature sensor
PreElHtgTmpSnsr	Temperature sensor after the el. pre-heater
PreWtrHtgTmpSnsr	Pre-heating antifreeze protection temperature sensor
ExtraSupplyTmp	Temperature sensor after the el. after-heater
BnrFlueTmpSnsr	Flue gas temperature sensor
AirQualitySnsr	Air quality sensor
SupplyHumSnsr	Inlet air humidity sensor
RoomHumSnsr	Room air humidity sensor
OutHumSnsr	Outdoor air humidity sensor
Supply fan	Inlet – 1st fan
SplyFanInfBckUp	Inlet fan backup information
SplyFanBckUpOrTwn	Backup or twin – 2nd inlet fan
TwnSplyFanActBckUp	Twin inlet fan backup information
SplyFanBckUpFrsTwn	1st inlet fan twin backup
SplyFanBckUpSecTwn	2nd inlet fan twin backup
Exhaust fan	Outlet fan – 1st fan
ExhFanActBckUp	Outlet fan backup information
ExhFanBckUpOrTwn	Backup or twin - 2nd outlet fan
ExhFanBckUpFrsTwn	Twin backup – 1st outlet fan
TwnExhFanActBckUp	Twin outlet fan backup information
ExhFanBckUpSecTwn	Twin backup – 2nd outlet fan
Fan additional	Auxiliary 3rd fan
FanTwinAdditional	Auxiliary 3rd twin fan
Supply fan - flow	Supply fan - flow
Exhaust fan - flow	Exhaust fan - flow
AdditionalFan-Flow	AdditionalFan-Flow
WaterHeatingPump	WaterHeatingPump
Heat pump	Heat pump
BlockHeatPumpFromOutTmpHeating	BlockHeatPumpFromOutTmpHeating
BlockHeatPumpFromOutTmpCooling	BlockHeatPumpFromOutTmpCooling
Fan	Fan
Filter	Filter fouling
Electric heating	Electric heater
Fire	Fire
OverHeatFlueGas	Flue gas temperature exceeded
HighFlueGasTemp	High flue gas temperature
BackdraftProtec	Gas heater thermostat switching ON

## List of failures (HMI-DM, HMI-TM, HMI@Web)

Failure	Description
Burner	Gas heater
ElectricPreheating	Electric pre-heating
ExtraElectricalHtg	Electric after-heating
CondensingUnit	Condensing unit
FreqInVRotHeatEx	ROV failure
AntiFreezeHeatEx	Heat exchanger antifreeze protection
SplyFanMainTK	Main inlet fan - TK
SplyFanBckUpTK	Backup inlet fan - TK
SplyFanMainDifPr	Main inlet fan - pressure deference sensor
SplyFanBckUpDifPr	Backup inlet fan - pressure deference sensor
SupplyFanBack-up	Active inlet fan twin backup
ExhFanMainTK	Main outlet fan - TK
ExhFanBckUpTK	Backup outlet fan - TK
ExhFanMainDifPr	Main outlet fan - pressure deference sensor
ExhFanBckUpDifPr	Backup outlet fan - pressure deference sensor
ExhaustFanBack-up	Active outlet fan twin backup
CommunicatioModbus	Modbus communication
FanOperHours	Fan operating hours
StptSplyTmpDev	Difference between required and inlet air temperature monitoring.
StptRoomTmpDev	Difference between required and room (outlet) air temperature monitoring.
HeatPumpDefrost	HeatPumpDefrost
Supply pressure	Supply pressure
Exhaust pressure	Exhaust pressure
Inlet flow	Inlet flow
Exhaust flow	Exhaust flow
Humidifier	Humidifier
LimitDehumTmpPrio	LimitDehumTmpPrio
HRecDtctr	Hrec Detector
HRecBelt	Hrec belt