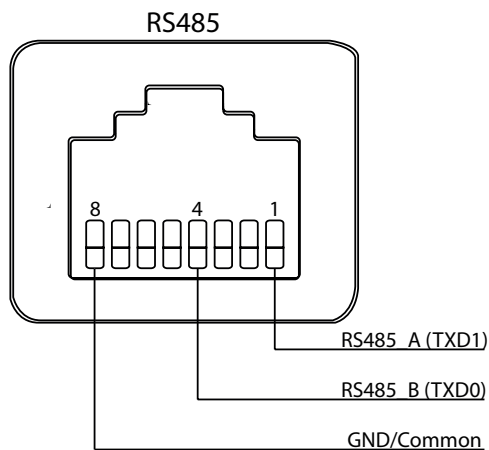


Modbus RTU Interface for CDP/ CDP-T/ CDF 40-50-70

Modbus RTU Interface



RS-485 Interface implements Modbus RTU protocol as slave device. Device doesn't have address . Settings: 115200, N, 8, 1. and accepts requests to any address.

Code Functions

0x06	preset single register
0x10	preset multiple registers
0x03	read holding registers

Register	Byte	Database parameter	Min	Max	De- fault	Description
2	2	Comp_state	0	1	0	Compressor state: 0 - Compressor stopped 1 - Compressor works
	3	Fan_state	0	1	0	FAN state: 0 - FAN stopped 1 - FAN works
3	4	Sole_state	0	1	0	Solenoid valve: 0 - closed 1 - open
	5	ExFan_state	0	1	0	Exhaust FAN state: 0 - FAN stopped 1 - FAN works
4	6	Heat1_state	0	1	0	Heater 1 state: 0 - Heater turned off 1 - Heater turned on
	7	Heat2_state	0	1	0	Heater 2 state: 0 - Heater turned off 1 - Heater turned on
5	8	Alarm1_state	0	1	0	Alarm 1 output: 0 - Alarm out turned off 1 - Alarm out turned on
	9	Alarm2_state	0	1	0	Alarm 2 output: 0 - Alarm out turned off 1 - Alarm out turned on

Modbus RTU Interface

Continued

Register	Byte	Database parameter	Min	Max	De- fault	Description
6	10	Evap_ temp1 (decimal)	-40	100	0	Temperature from evaporator 1: decimal: may be used as integer value of temperature fraction: may be recalculated to value after decimal point. To get whole value use the equation in float point values "val = decimal + (fraction / 256)"
	11	Evap_ temp1 (fraction)	-40	100	0	
7	12	Evap_ temp2 (decimal)	-40	100	0	Temperature from evaporator 2: Usage the same as above.
	13	Evap_ temp2 (fraction)	-40	100	0	
8	14	Cond_ temp1 (decimal)	-40	100	0	Temperature from condenser: Usage the same as above.
	15	Cond_ temp1 (fraction)	-40	100	0	
9	16	Aux_temp (decimal)	-40	100	0	Temperature from auxiliary sensor: Usage the same as above.
	17	Aux_temp (fraction)	-40	100	0	
10	18	Amb_temp (decimal)	-40	100	0	Temperature of ambient air: Usage the same as above.
	19	Amb_temp (fraction)	-40	100	0	
11	20	Amb_hum (High byte)	0	100	0	Humidity of ambient air: High byte has no meaning and always contains zero. Only low byte can be used.
	21					
12	22	RH_set	40	95	40	Setpoint value of desired humidity.
	23	RH_Fan	40	95	40	Setpoint value of humidity for exhaust fan start.
13	24	Temp_set (decimal)	0	36	0	Setpoint value of desired temperature: Usage the same as for Evap_temp1.
	25	Temp_set (fraction)				
16	30	Fail_start	0	1	0	State of Fail_start mode
	31	SB_mode	0	1	0	Stand-by mode state
17	32	DEH_mode	0	1	0	Dehumidifying state
	33	Ice_mode	0	1	0	Deicing state

Modbus RTU Interface

Continued

Register	Byte	Database parameter	Min	Max	De- fault	Description
18	34	LP_mode	0	1	0	LP fail mode state
	35	Sens_mode	0	1	0	Sensor fail mode state
19	36	HP_mode	0	1	0	HP fail mode state
	37	Amb_mode	0	1	0	Ambient fail mode state
20	38	AmbT_mode	0	1	0	Ambient temperature fail mode state
	39	AmbRH_mode	0	1	0	Ambient humidity fail mode state
21	40	SW Build number (high)	0	65535	x	SW build number
	41	SW Build number(low)	0			
22	42	SW Version (Major)	0	255	x	SW version major
	43	SW Version (Minor)	0	255	x	SW version minor
23	44	HP Alarm Temp. (Decimal)	0	99	60	HP fail occurs when Cond_temp1 is more then this value. Usage the same as for Evap_temp1.
	45	HP Alarm Temp. (Fraction)				
41	80	Fan_function	0	1	0	Enable FAN function in standby mode
	81					
42	82	Time_wait_fan	60	7200	3600	Time to wait until FAN will be started in standby mode, if enabled (seconds)
	83					
43	84	Time_run_fan	15	600	60	Time to run FAN in standby mode if enabled (seconds)
	85					
44	86	RH_Fen	0	1	0	Enable/disable Exhaust Fan function
	87	Service_ena	0	1	0	Enable/disable Service interval function
45	88	Service_int	0	99	0	Service interval value in weeks
	89					