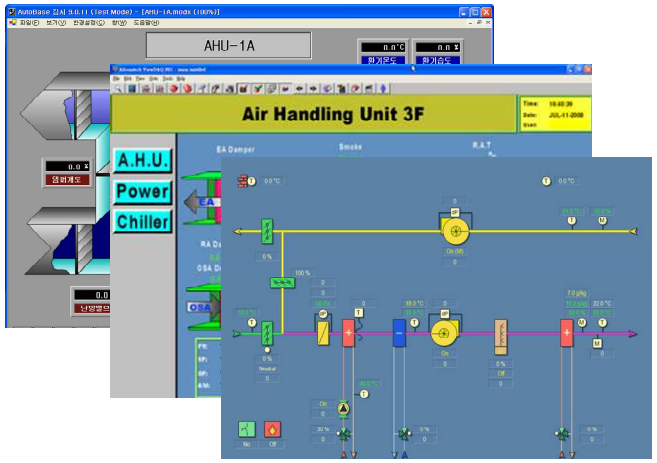
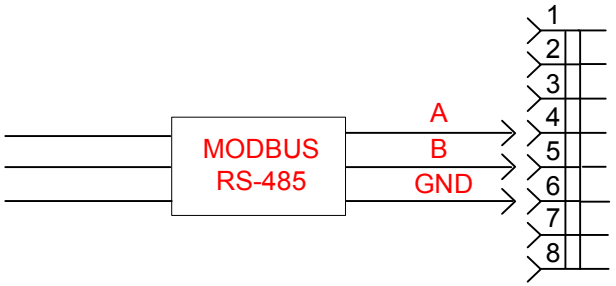
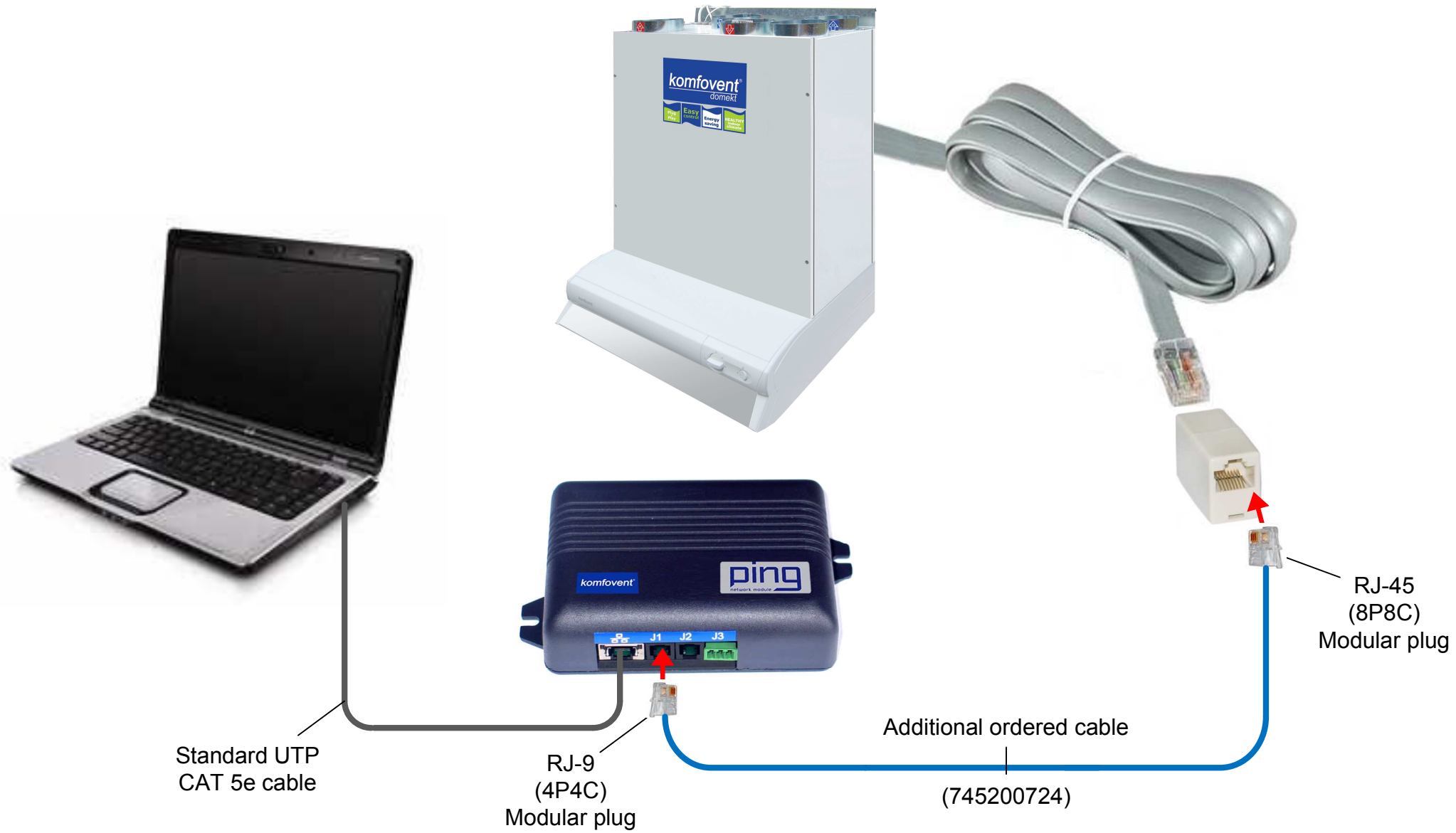
“RS485” connection for DOMEKT units without control panel



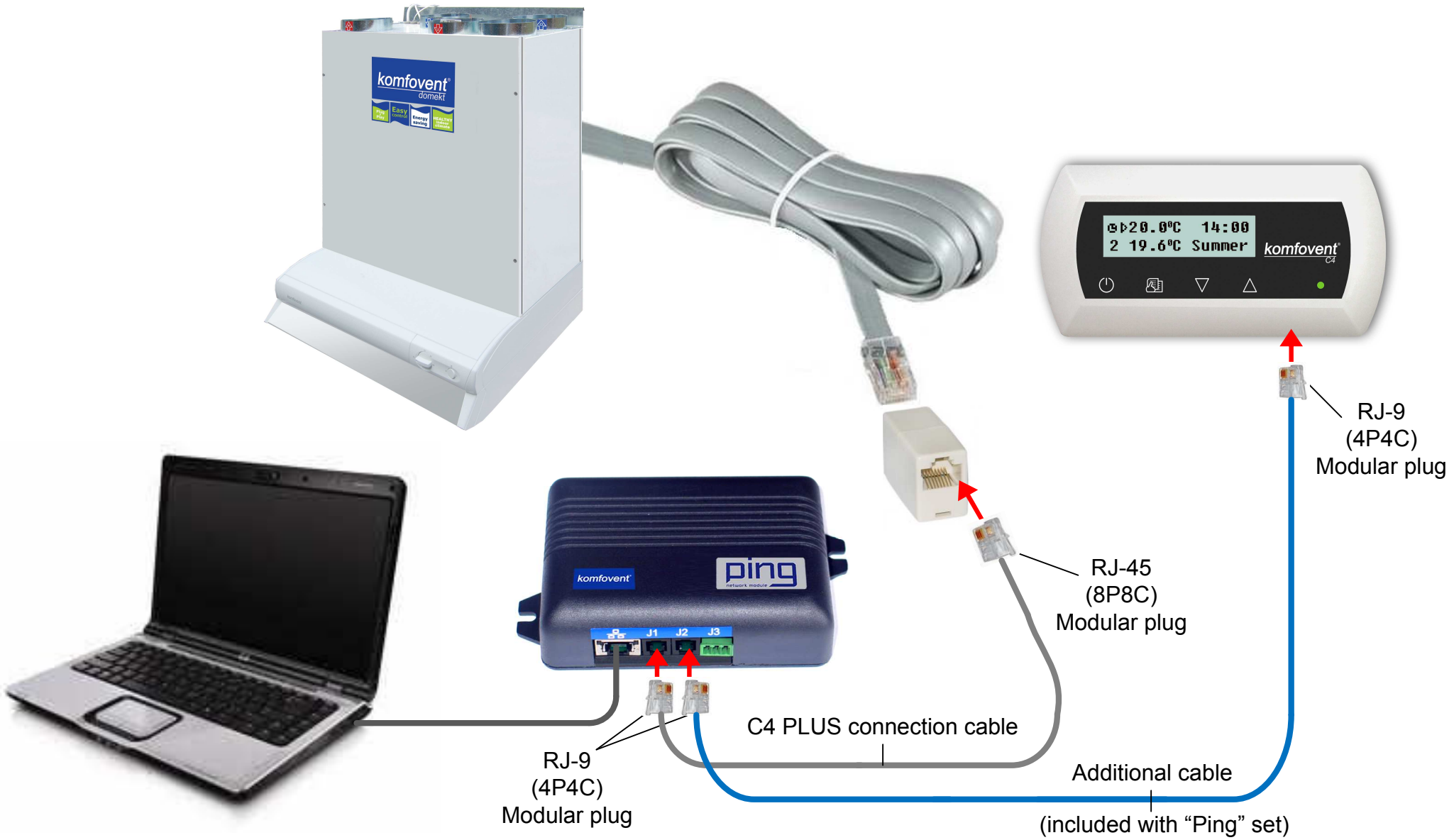
To BMS system



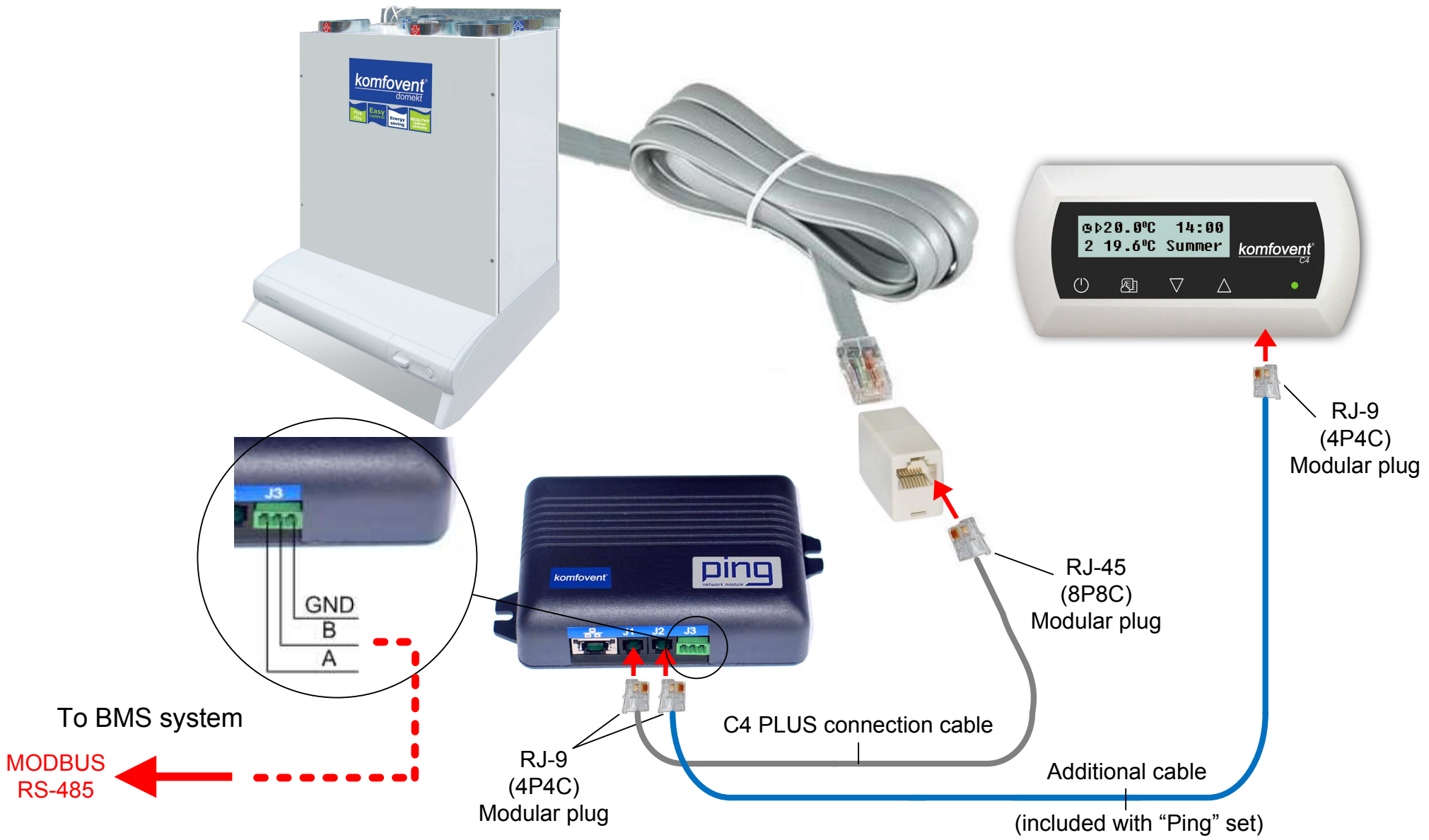
“Ethernet” connection for DOMEKT units without control panel



“Ethernet” connection for DOMEKT units with C4 PLUS

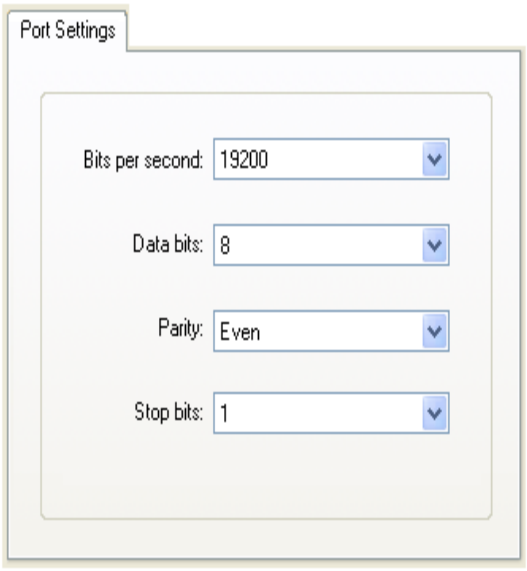


“RS485” connection for DOMEKT units with C4 PLUS



MODBUS CONNECTION PARAMETERS

To read data from controller must be provided serial or TCP/IP connection. For TCP/IP connection should be used 502 port. Serial connection parameters are fixed, detailed information below.



If distance between AHUs and BMS computer is more than 10 meters, for serial connection the ground wire is required (not two but three wires: A, B, GND).

When the distance between AHUs and BMS is very long, to ensure good connection line compensation resistances are recommended.

Modbus registers of C4 controller

	Register	Description	Data type	Access	Data range/values
General	1000	C4 Start/Stop	integer	R/W	1-Start, 0-Stop
	1001	Season	integer	R/W	1-Winter, 0-Summer
	1002	Time	2x char	R/W	(8:05 => 0x0805)
	1003	Day of the week	integer	R/W	1-Mon,2-Tue,..,7-Sun
	1004	Month-day	2x char	R/W	(9may => 0x0509)
	1005	Year	integer	R/W	
	1006	Modbus address	integer	R/W	1..100
	1007	Alarm status (warnings)	binary	R	14-Service, 13-Heater off, 11-Rotor stop
	1008	Alarm status (stop flags)	binary	R	1 - Supply sensor B1 2 - Heater overheating 3 - Water temp low 4 - Rotor stop 5 - Frost possibility 6 - Air temp high 7 - Air temp low
	1009	Alarm status (stop code)	integer	R	3 - Rotor stop 4 - Heater overheating 9 - Supply sensor B1 19 - Air temp low 20 - Air temp high 27 - Water temp low 28 - Frost possibility
	1010	Recuperator level	integer	R	0..100%
	1011	Electric heater level	integer	R	0..100%
	1012	Water heating level	integer	R	0..100%
	1013	Water cooling level	integer	R	0..100%

Ventilation	1100	Ventilation level (manual)	integer	R/W	1..3
	1101	Ventilation level (current)	integer	R	0..4
	1102	Mode (Auto/Manual)	integer	R/W	0-Manual, 1-Auto
	1103	Intake ventilation intensity level 1 (EC)	integer	R/W	20..100 / 0
	1104	Intake ventilation intensity level 2 (EC/AC)	integer	R/W	20..100 / 0..2
	1105	Intake ventilation intensity level 3 (EC)	integer	R/W	20..100 / 0
	1106	Intake ventilation intensity level 4 (EC)	integer	R/W	20..100 / 0
	1107	Exhaust ventilation intensity level 1 (EC)	integer	R/W	20..100 / 0
	1108	Exhaust ventilation intensity level 2 (EC/AC)	integer	R/W	20..100 / 0..2
	1109	Exhaust ventilation intensity level 3 (EC)	integer	R/W	20..100 / 0
	1110	Exhaust ventilation intensity level 4 (EC)	integer	R/W	20..100 / 0
	1111	"OVR" enable	integer	R/W	1 - "OVR" enabled
	1112	"OVR" time	integer	R/W	1..90
	1113	"OVR" time(current)	integer	R	0..90
	1114	AHU fans status	binary	R	1-Operating, 0-Stopped
	1115	Supply fan level (current)	integer	R	0..100
	1116	Exhaust fan level (current)	integer	R	0..100

Temp.	1200	Supply air temp, C	integer	R	-30..75 (10x C, 25.0C => 250)
	1201	Setpoint temp, C	integer	R/W	0..300 (10x C, 25.0C => 250)
	1202	Temp.correction, C	integer	R/W	-90..+90 (10x C, +5C => 50)
	1203	Temp.correction start time	2x char	R/W	(8:05 => 0x0805)
	1204	Temp.correction stop time	2x char	R/W	(8:05 => 0x0805)
	1205	Water temp, C	integer	R	-10..110 (10x C, 25.0C => 250)

Schedule	1300	Schedule: Mo1 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1301	Schedule: Mo1 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1302	Schedule: Mo2 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1303	Schedule: Mo2 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1304	Schedule: Mo3 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1305	Schedule: Mo3 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1306	Schedule: Tu1 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1307	Schedule: Tu1 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1308	Schedule: Tu2 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1309	Schedule: Tu2 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1310	Schedule: Tu3 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1311	Schedule: Tu3 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1312	Schedule: We1 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1313	Schedule: We1 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1314	Schedule: We2 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1315	Schedule: We2 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1316	Schedule: We3 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1317	Schedule: We3 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1318	Schedule: Th1 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1319	Schedule: Th1 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1320	Schedule: Th2 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1321	Schedule: Th2 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1322	Schedule: Th3 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1323	Schedule: Th3 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1324	Schedule: Fr1 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1325	Schedule: Fr1 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1326	Schedule: Fr2 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1327	Schedule: Fr2 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1328	Schedule: Fr3 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1329	Schedule: Fr3 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1330	Schedule: Sa1 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1331	Schedule: Sa1 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1332	Schedule: Sa2 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1333	Schedule: Sa2 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1334	Schedule: Sa3 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1335	Schedule: Sa3 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1336	Schedule: Su1 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1337	Schedule: Su1 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1338	Schedule: Su2 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1339	Schedule: Su2 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1340	Schedule: Su3 start time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1341	Schedule: Su3 stop time	2x char	R/W	0x0000..0x1800 (0:00..24:00)
	1342	Schedule: Mo1 ventilation level	integer	R/W	0..3
	1343	Schedule: Mo2 ventilation level	integer	R/W	0..3
	1344	Schedule: Mo3 ventilation level	integer	R/W	0..3
	1345	Schedule: Tu1 ventilation level	integer	R/W	0..3
	1346	Schedule: Tu2 ventilation level	integer	R/W	0..3
	1347	Schedule: Tu3 ventilation level	integer	R/W	0..3
	1348	Schedule: We1 ventilation level	integer	R/W	0..3
	1349	Schedule: We2 ventilation level	integer	R/W	0..3
	1350	Schedule: We3 ventilation level	integer	R/W	0..3
	1351	Schedule: Th1 ventilation level	integer	R/W	0..3
	1352	Schedule: Th2 ventilation level	integer	R/W	0..3
	1353	Schedule: Th3 ventilation level	integer	R/W	0..3
	1354	Schedule: Fr1 ventilation level	integer	R/W	0..3
	1355	Schedule: Fr2 ventilation level	integer	R/W	0..3
	1356	Schedule: Fr3 ventilation level	integer	R/W	0..3
	1357	Schedule: Sa1 ventilation level	integer	R/W	0..3
	1358	Schedule: Sa2 ventilation level	integer	R/W	0..3
	1359	Schedule: Sa3 ventilation level	integer	R/W	0..3
	1360	Schedule: Su1 ventilation level	integer	R/W	0..3
	1361	Schedule: Su2 ventilation level	integer	R/W	0..3
	1362	Schedule: Su3 ventilation level	integer	R/W	0..3