Danfoss AK-CC55 Multi Coil Case Controllers User Guide

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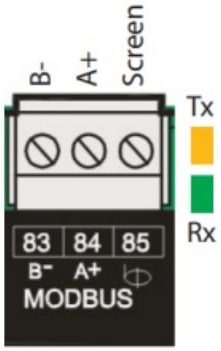

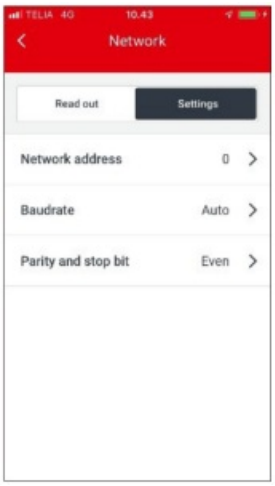

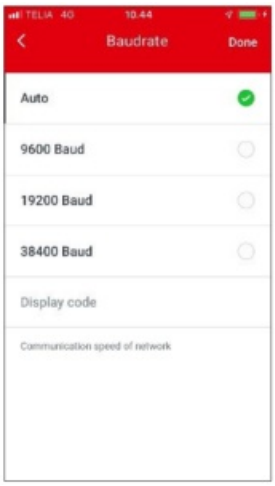

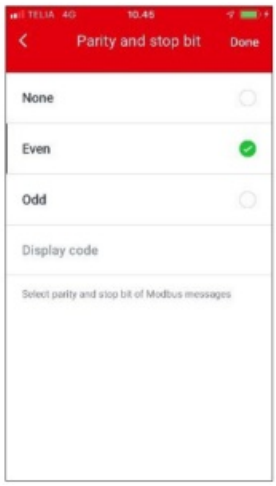

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Modbus Communication

Danfoss AK-CC55 controllers are using Modbus RTU.
Communication speed is default “auto detection” Default communication settings are “8 bit, Even parity, 1 stop bit”.

Network address can be set via AK-UI55 setting display and Network address as well as Network communication settings can be changed via the AK-UI55 Bluetooth display and the AK-CC55 Connect service app. For further information see AK-CC55 Documentation.

Danfoss AK-CC55 controllers are Modbus compliant and MODBUS Application Protocol Specification can be found via **http://modbus.org/specs.php**

AK-CC55 Documentation:
AK-CC55 User Guides and Installation Guides can be found via **www.danfoss.com**:

https://www.danfoss.com/en/products/electronic-controls/dcs/evaporator-and-room-control/#taboverview

Parameter list for Multi Coil (084B4084)

Parameter	PNU	Value	Min.	Max.	Type	RW	Scale	A
Readouts								
— Sum alarm	2541	0	0	1	Boolean	R	1	
u00 Ctrl. State	2007	0	0	48	Integer	R	1	
U74 Ctrl. State B	2734	0	0	48	Integer	R	1	X
U83 Ctrl. State C	2743	0	0	48	Integer	R	1	X
u17 Ther. air	2532	0	-2000	2000	Float	R	0.1	
U77 Ther. air B	2737	0	-2000	2000	Float	R	0.1	X

U86 Ther. air C	2746	0	-2000	2000	Float	R	0.1	X
u26 Evap Temp Te	2544	0	-2000	2000	Float	R	0.1	
u20 S2 temp	2537	0	-2000	2000	Float	R	0.1	
U79 S2 temp. B	2739	0	-2000	2000	Float	R	0.1	X
U88 S2 temp. C	2748	0	-2000	2000	Float	R	0.1	X
u16 S4 air temp.	2531	0	-2000	2000	Float	R	0.1	
U76 S4 temp B	2736	0	-2000	2000	Float	R	0.1	X
U85 S4 temp C	2745	0	-2000	2000	Float	R	0.1	X
u09 S5 temp	1011	0	-2000	2000	Float	R	0.1	X
u75 S5 temp. B	2595	0	-2000	2000	Float	R	0.1	X
U72 Food temp	2702	0	-200	2000	Float	R	0.1	X
u23 EEV OD %	2528	0	0	100	Float	R	0.1	X
U82 EEV OD % B	2742	0	0	100	Float	R	0.1	X
U91 EEV OD % C	2751	0	0	100	Float	R	0.1	
U73 Def. Stop Temp	2703	0	-2000	2000	Integer	R	1	X
U93 Def. Stop Tem B	2763	0	-2000	2000	Integer	R	1	X
U94 Def. Stop Tem C	2764	0	-2000	2000	Integer	R	1	X
u57 Alarm air	2578	0	-2000	2000	Float	R	0.1	
u86 Ther. band	2607	1	1	2	Integer	R	0.1	
U34 Alarm air B	2671	0	-2000	2000	Float	R	0.1	X
U92 Alarm air C	2762	0	-2000	2000	Float	R	0.1	X
u13 Night cond	2533	0	0	1	Boolean	R	1	
u90 Cutin temp.	2612	0	-2000	2000	Float	R	0.1	
u91 Cutout temp.	2513	0	-2000	2000	Float	R	0.1	

u21 Superheat	2536	0	-2000	2000	Float	R	0.1	
u22 Superheat Ref	2535	0	-2000	2000	Float	R	0.1	
U80 Superheat B	2740	0	-2000	2000	Float	R	0.1	X
U81 SH Ref B	2741	0	-2000	2000	Float	R	0.1	X
U89 Superheat C	2749	0	-2000	2000	Float	R	0.1	X
U90 SH Ref C	2750	0	-2000	2000	Float	R	0.1	X
Settings								
r12 Main switch	117	0	-1	1	Integer	RW	1	
r00 Cutout	100	20	-500	500	Float	RW	0.1	
r01 Differential	101	20	1	200	Float	RW	0.1	
— Def. Start	1013	0	0	1	Boolean	RW	1	
d02 Def . Stop t emp	1001	60	0	500	Float	RW	0.1	
A03 Alarm delay	10002	30	0	240	Integer	RW	1	
A13 High Lim Ai r	10019	80	-500	500	Float	RW	0.1	
A14 Low Lim Air	10020	-300	-500	500	Float	RW	0.1	
r21 Cutout 2	131	2.0	-60.0	50.0	Float	RW	1	
r93 Diff Th2	210	2.0	0.1	20.0	Float	RW	1	
d02 Def. Stop Te mp	1001	6.0	0.0	50.0	Float	RW	1	
d04 Max Def. ti me	1003	45	d24	360	Integer	RW	0	
d28 DefStopTe mp2	1046	6.0	0.0	50.0	Float	RW	1	
d29 MaxDefTim e2	1047	45	d24	360	Integer	RW	0	
Alarms								
— Contr. error	20000	0	0	1	Boolean	R	1	

— RTC error	20001	0	0	1	Boolean	R	1	
— Pe error	20002	0	0	1	Boolean	R	1	
— S2 error	20003	0	0	1	Boolean	R	1	
— S4 error	20004	0	0	1	Boolean	R	1	
— S5 error	20005	0	0	1	Boolean	R	1	
— S5 error B	20006	0	0	1	Boolean	R	1	
— RH input err	20007	0	0	1	Boolean	R	1	
— S4 error B	20008	0	0	1	Boolean	R	1	
— S4 error C	20009	0	0	1	Boolean	R	1	
— S2 error B	200010	0	0	1	Boolean	R	1	
— S2 error C	200011	0	0	1	Boolean	R	1	
— Hight. alarm	200012	0	0	1	Boolean	R	1	
— Low t. alarm	200013	0	0	1	Boolean	R	1	
— Door alarm	200014	0	0	1	Boolean	R	1	
— Max Hold Ti me	200015	0	0	1	Boolean	R	1	
— No Rfg. sel.	200016	0	0	1	Boolean	R	1	
— DI1 alarm	200017	0	0	1	Boolean	R	1	
— DI2 alarm	200018	0	0	1	Boolean	R	1	
— Standby mod e	200019	0	0	1	Boolean	R	1	
— Case clean	200020	0	0	1	Boolean	R	1	
— High Temp. B	200021	0	0	1	Boolean	R	1	
— Low Temp. B	200022	0	0	1	Boolean	R	1	
— CO2 Alarm	200023	0	0	1	Boolean	R	1	
— Refg. Leak	200024	0	0	1	Boolean	R	1	
— High Humidit y	200025	0	0	1	Boolean	R	1	
— Low Humidity	200026	0	0	1	Boolean	R	1	

— High Temp. C	200027	0	0	1	Boolean	R	1	
— Low Temp. C	200028	0	0	1	Boolean	R	1	
— Max Def. Tim e	200029	0	0	1	Boolean	R	1	
— Max Def Tim e B	200030	0	0	1	Boolean	R	1	
— Max Def Tim e C	200031	0	0	1	Boolean	R	1	

Note: Parameters marked with “X” in the “A” (App mode column) is not present in all App modes (for further info see AK-CC55 User Guide).

Customer Support

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Documents / Resources

	Danfoss AK-CC55 Multi Coil Case Controllers [pdf] User Guide AK-CC55, AK-CC55 Multi Coil Case Controllers, Multi Coil Case Controllers, Coil Case Controllers, Case Controllers, Controllers

References

- User Manual