Danfoss AK-CC55 Single Coil User Guide

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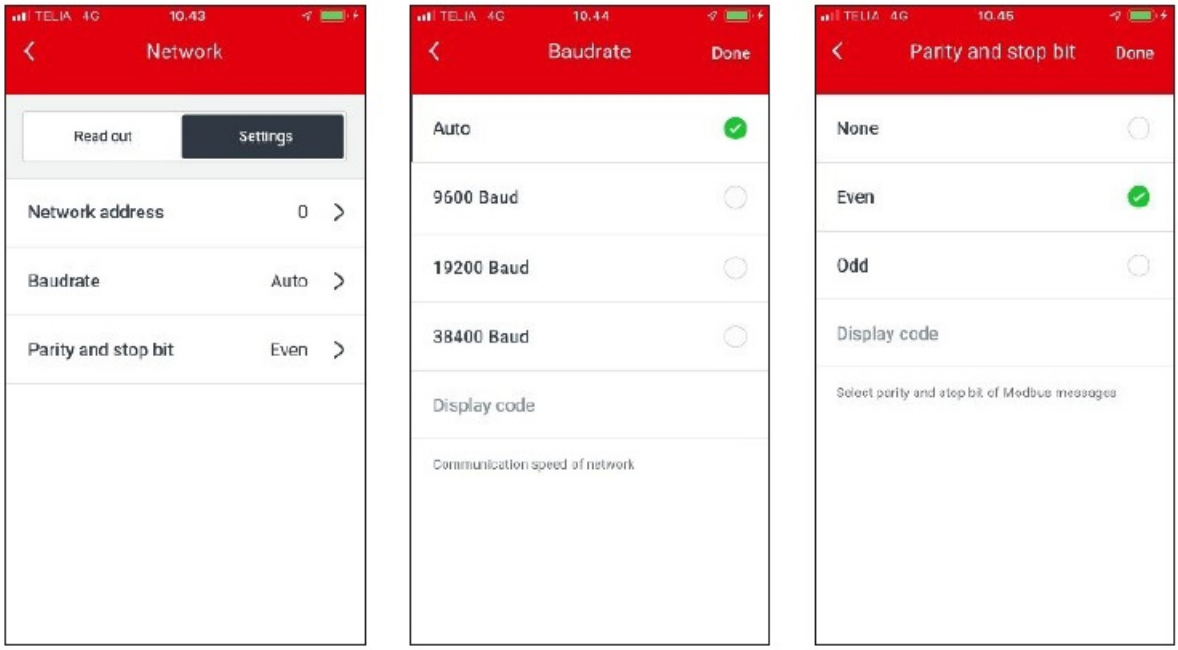
Danfoss AK-CC55 Single Coil

Danfoss AK-CC55 Single Coil & Single Coil UI Case controllers



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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 below link
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/#tab-overview

Parameter list for Single Coil (084B4082, 084B4083)

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	
u17 Ther. air	2532	0	-2000	2000	Float	R	0.1	
u26 EvapTemp Te	2544	0	-2000	2000	Float	R	0.1	
u20 S2 temp	2537	0	-2000	2000	Float	R	0.1	
u12 S3 air temp.	2530	0	-2000	2000	Float	R	0.1	
U76 S3 airtemp B	2596	0	-2000	2000	Float	R	0.1	X
u16 S4 air temp.	2531	0	-2000	2000	Float	R	0.1	
u09 S5 temp	1011	0	-2000	2000	Float	R	0.1	
u75 S5 temp. B	2595	0	-2000	2000	Float	R	0.1	X
u36 S6 temp	2555	0	-2000	2000	Float	R	0.1	
U72 Food temp	2702	0	-2000	2000	Float	R	0.1	
u23 EEV OD %	2528	0	0	100	Integer	R	1	
U73 Def.StopTemp	2703	0	-2000	2000	Float	R	0.1	
u57 Alarm air	2578	0	-2000	2000	Float	R	0.1	
u86 Ther. band	2607	1	1	2	Integer	R	0	
U34 Alarm air B	2671	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 SuperheatRef	2535	0	-2000	2000	Float	R	0.1	
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 temp	1001	60	0	500	Float	RW	0.1	
A03 Alarm delay	10002	30	0	240	Integer	RW	1	
A13 HighLim Air	10019	80	-500	500	Float	RW	0.1	
A14 LowLim Air	10020	-300	-500	500	Float	RW	0.1	

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).

Parameter	PNU	Value	Min.	Max.	Type	RW	Scale	A
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.StopTemp	1001	6.0	0.0	50.0	Float	RW	1	
d04 Max Def.time	1003	45	d24	360	Integer	RW	0	
d28 DefStopTemp2	1046	6.0	0.0	50.0	Float	RW	1	
d29 MaxDefTime2	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	
--- S3 error	20004	0	0	1	Boolean	R	1	
--- S4 error	20005	0	0	1	Boolean	R	1	
--- S5 error	20006	0	0	1	Boolean	R	1	
--- S6 error	20007	0	0	1	Boolean	R	1	
--- S3 error B	20008	0	0	1	Boolean	R	1	
--- S5 error B	20009	0	0	1	Boolean	R	1	
--- RH input err	20010	0	0	1	Boolean	R	1	
--- High t.alarm	20011	0	0	1	Boolean	R	1	
--- Low t. alarm	20012	0	0	1	Boolean	R	1	
--- Door alarm	20013	0	0	1	Boolean	R	1	
--- Max HoldTime	20014	0	0	1	Boolean	R	1	
--- No Rfg. sel.	20015	0	0	1	Boolean	R	1	
--- High temp S6	20016	0	0	1	Boolean	R	1	
--- Low temp S6	20017	0	0	1	Boolean	R	1	
--- DI1 alarm	20018	0	0	1	Boolean	R	1	
--- DI2 alarm	20019	0	0	1	Boolean	R	1	
--- Standby mode	20020	0	0	1	Boolean	R	1	
--- Case clean	20021	0	0	1	Boolean	R	1	
--- High Temp. B	20022	0	0	1	Boolean	R	1	
--- Low Temp. B	20023	0	0	1	Boolean	R	1	
--- CO2 Alarm	20024	0	0	1	Boolean	R	1	
--- Refg.Leak	20025	0	0	1	Boolean	R	1	
--- HighHumidity	20026	0	0	1	Boolean	R	1	
--- Low Humidity	20027	0	0	1	Boolean	R	1	
--- Wrong IO cfg	20028	0	0	1	Boolean	R	1	
--- AD Iced	20029	0	0	1	Boolean	R	1	
--- AD flashgas	20030	0	0	1	Boolean	R	1	
--- Max Def.Time	20031	0	0	1	Boolean	R	1	
--- Fan safety	20032	0	0	1	Boolean	R	1	
--- Driver alarm	20033	0	0	1	Boolean	R	1	

Danfoss A/S

- Climate Solutions
- danfoss.com
- +45 7488 2222

Documents / Resources

	Danfoss AK-CC55 Single Coil [pdf] User Guide AK-CC55 Single Coil, AK-CC55, Single Coil, Coil

References

- Modbus Specifications and Implementation Guides
- Danfoss - Engineering Tomorrow | Danfoss
- Evaporator controllers for high food safety | Danfoss