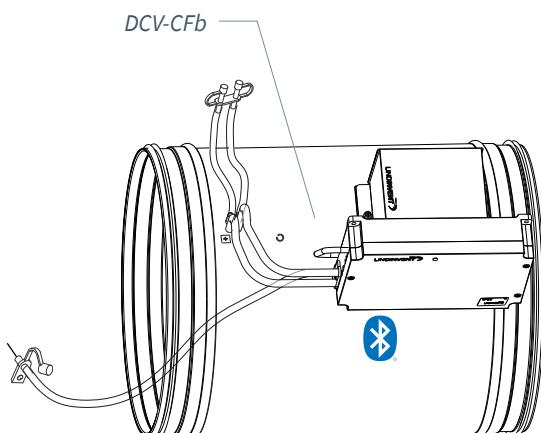


Prerequisites

- The regulator is expected to be connected to 24 VAC + CAN.
- CFLb is equipped with Bluetooth® and can thus be commissioned via the LINDINSIDE mobile app. A user account with authorization for the relevant building is required. The app is available for download from Google Play/App Store. The link to the software can be accessed by scanning the attached QR code.



Commissioning

Follow the instructions below. Once a controller has been assigned the intended Node ID, the final settings can be made either on-site via the “Quick setup” screen in LINDINSIDE or centrally via LINDINTELL/LINDINSPECT®.

Status Screen and Control Parameters

The control parameters for CFLb and the previous version CFL are the same. See the following presentation of the status screen and the set of control parameters for CFLb and CFL.



A smartphone with the LINDINSIDE app for communication with Lindinvent units equipped with Bluetooth®.



[Read more about LINDINSIDE](#)



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WORKFLOW FOR COMMISSIONING VIA LINDINSIDE (See next page for instructions with screenshots from LINDINSIDE)

1. Scan for Nearby Units:

- Pull down to scan for nearby units

Select the correct controller from the list. By activating the unit via the clock symbol, an audible beep and a blue blinking light will be triggered, which can be used to identify the unit.

2. Set (Change) Node ID*:

Select the Node ID field for the intended unit from the list of scanned units. Enter the unique Node ID between 1–239 that has been assigned to the regulator according to Lindinvent's recommended allocation.*After assignment: It is recommended to perform a new scan to verify that the unit's Node ID has been updated correctly. When assigning Node IDs to a large number of units, the "Set nodeIDs" function can be used.

3. Connect to the Unit:

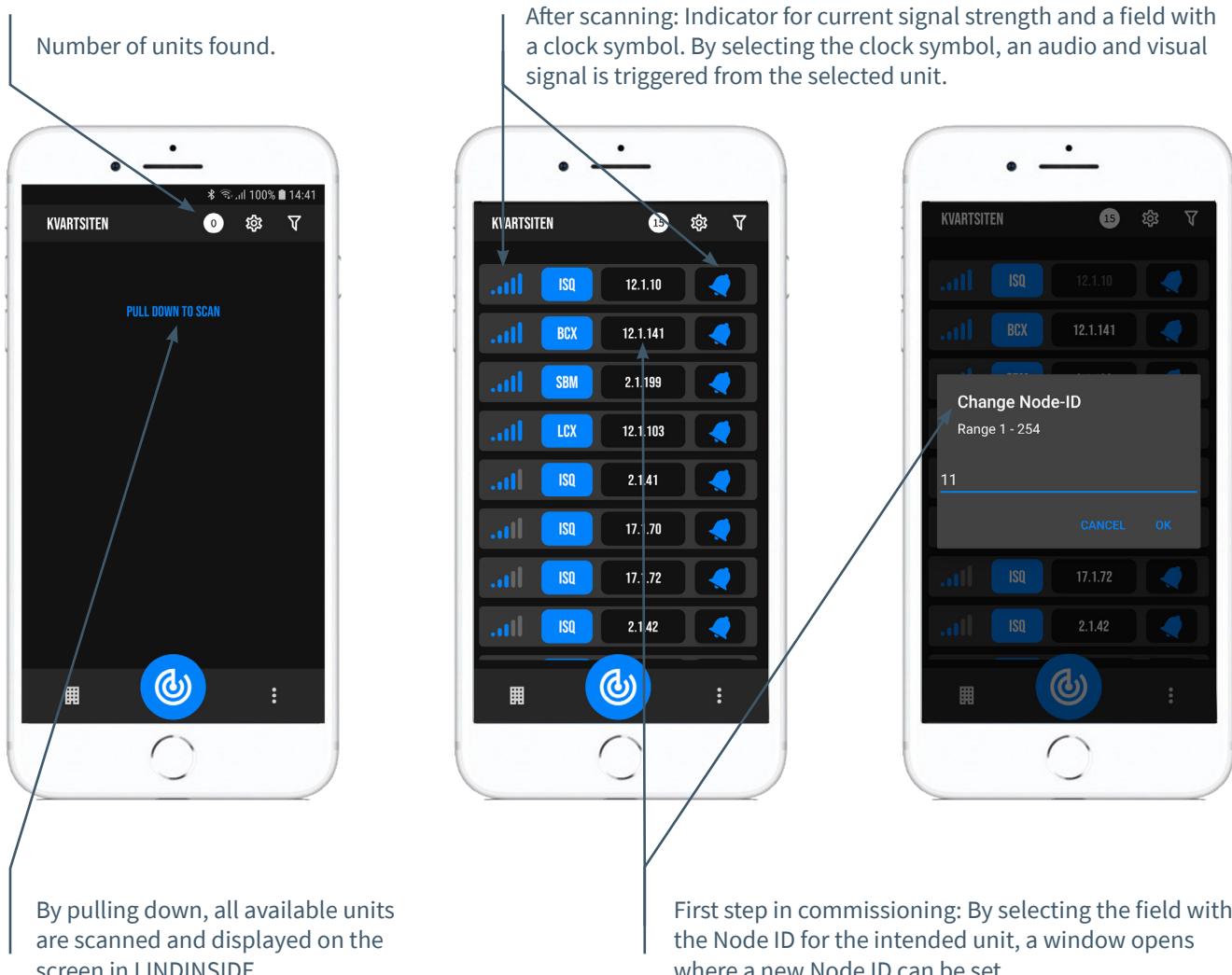
Connect by tapping on the unit's product name field in the list of scanned units.

4. Complete the Commissioning via the Quick Setup Screen:

- Perform a damper motor test (Manual motor control):
 - Check that the damper has fully opened. Confirm the position.
 - Check that the damper has fully closed. Confirm the position.
- Assign Flow Zone [0]; 0 = no assigned flow zone
- Enter Duct Size or K-factor (G1 Duct dimension or G1 K-factor)
 - For circular ducts: Select from the list [315]
 - For rectangular ducts: Enter the K-factor
- Specify Placement for Supply or Exhaust Air
 - Select sensor placement [Exhaust Air]
- Enter Normal Pressure (Normal pressure SP)
 - Normal pressure in Pa [100]

After completing Quick Setup, the regulator is configured with other control parameters set to default values.

SET NODE ID VIA LINDINSIDE



Available via LINDINSIDE

Status Values

After selecting the scanned unit:
A selection of status values regarding ongoing regulation is displayed on the home screen.

Available screen options via the home screen in the app

- Quick setup
- Symbols
- History
- System
- Peripherals

About Symbols screen

All settings are grouped for easy access via Symbols.

STATUS SCREEN AND MENU

This appendix presents the status screen with selected current values and the entire menu structure of settings in CFL. The set of control parameters is identical for the CFL and CFLb regulators.

NOTE: All settings for the CFLb regulator are accessed from LINDINSIDE via the Symbols screen.

Settings are shown with factory default values; refer to comments and notes for guidance. The presented menu structure with the parameter list applies from software version CFL_CFLb_6.0.0.

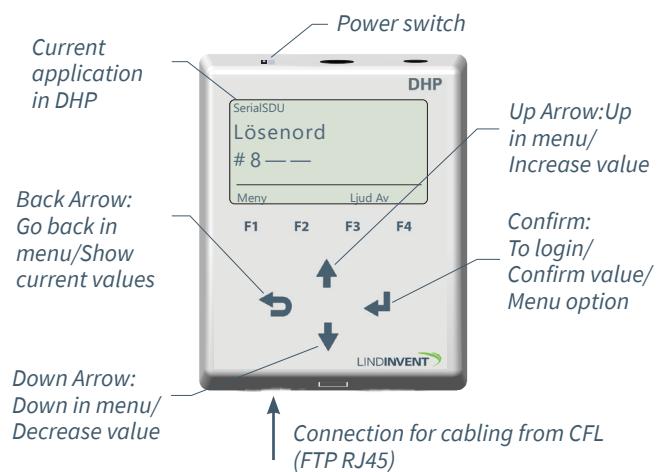
LOGIN:

- CFL: Direct access to the controller is only via the DHP user panel. The controller can be accessed via CAN from the LINDINTELL tool Remote.
- CFLb: The controller can be accessed via CAN from the LINDINTELL tool Remote.

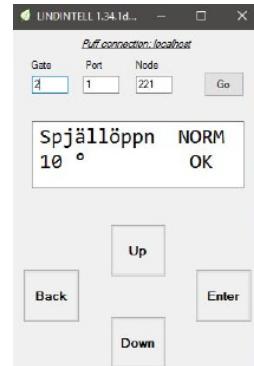
For handling DHP: See separate instructions.

For handling LINDINSIDE: See the commissioning instructions for CFLb.

Note: Reading status values on CFL does not require login. To change settings, login is required.



CFL only: Screenshot upon login via DHP version A02 with the SerialSDU application for wired connection.



Both CFLb and CFL: Screenshot from connection to the regulator via network connection and the LINDINTELL tool Remote.

Status Screen

Selected current values can be displayed on the screen without prior login.

CFL only: via screen on a directly connected DHP.

CFLb only: via the start screen in LINDINSIDE.

CFL/CFLb: The status screen can also be accessed via CAN from the LINDINTELL tool Remote.

Pressure and flow measurement:

Current Values	Comment
Pressure	Current pressure in Pa
Flow	Airflow in l/s
Damper Opening	Damper opening in degrees



Step forward in the current value display with repeated presses of <Back Arrow>

Menu Option QUICK CONFIG

Access to the regulator's menu structure requires login. All necessary settings for easy commissioning are gathered under the menu option Quick Config.

Settings under Quick Config for CFL and CFLb:

Displayed in the display	Comment [Default value]
Quick Config	Main Menu Header
Node ID	Enter Node ID
Flow Zone	[0]; 0 = no assigned flow zone
Duct Size (Note 1)	Select damper size [315]
K-factor (Note 1)	As specified in Note 1
Location	Select sensor location [Exhaust Air]
Pressure Norm	Normal pressure in Pa [100]
amper Calib. (Note 11)	Motor test; find max and min

PRESENTATION OF VARIABLES

In the order that the headings are presented in the main menu of the controller.

Börvärden	Rubrik_2 (Huvudmeny)	Kommunikation	Rubrik_5 (Huvudmeny)
Tryck	Tryck i Pa [112]	Nod-ID	1 - 247; Får ej sättas till 0
Mintryck	Mintryck i Pa [30]	CAN Hastighet (Not 8)	[AUTO]
Ärvärden	Rubrik_3 (Huvudmeny)	Grupper	[0 = ingen grupp tillhörighet]
Tryck	Aktuellt tryck i Pa	Grupp 8-1 (Not 9)	[0 = ingen grupp tillhörighet]
Flöde	Aktuellt flöde i l/s	Grupp 16-9	[0 = ingen grupp tillhörighet]
Spjällöppn	Spjällöppning i grader [10]	Grupp 24-17	[0 = ingen grupp tillhörighet]
Spjällåter	[0]	Grupp 32-25	[0 = ingen grupp tillhörighet]
In/Ut-signaler	Aktuella signalnivåer [V]	Zoner	
AIN1/AIN2		Brand	[0 = ingår ej i brandzon]
DIN1		Brandzon	[0]
AUT1/AUT2		Vid zonbrand (Not 10)	[0]
DUT1 (Relä)		Vid övr brand (Not 10)	
G1		Flöde	[0 = ingår ej i zon]
Inställningar	Rubrik_4 (Huvudmeny)	Flödeszon	
Larm	Ostillåten tryckavvikelse [200] Pa	Tryck	[0 = ingår ej i zon]
Larmavvikelse	Tid till larm i sekunder [10]	Tryckzon	Frekvens [5.0]
Tid till lar	[0 = inaktiverad summer]	Tryckzon fr	
Larmljud	[0] Pa	Kalibrering	Rubrik_6 (Huvudmeny)
Larmgräns 1	[2000] Pa	Spjäll (Not 11)	
Larmgräns 2		Hitta max:	[255]
In/Ut-signaler		Hitta min:	[0]
Insignaler		Givarkonfig GF1	
AIN1 till AIN2		GF1-placering	[Frånluft]
Funktion (Not 2)	[AIN1: Spjäll] [AIN2: Inaktiv]	GF1 Storlek	Spjällstorlek alt. "Ange K-faktor"
Parameter 1 (Not 3)	[0.0]	GF1 K-faktor	[56 = för Spjäll 315]
Parameter 2 (Not 3)	[0.0]	GF1 K-korr	Korrektion av K-faktori % [0]
DIN1		LDE (GP1)	
Funktion (Not 2)	[Inaktiv]	Tryckvärde	[GP1=1]; [GP2=-1]; 1= Tilluft; -1 = Frånluft
Parameter (Not 3)	[0.0]	LDE korr	Korrigerat uppmätt tryck i Pa
Utsignalen		LDE2 (GF1) (Not 12)	[0.0; i %]; korrigeringskoeff. tryck
AUT1 till AUT2		Tryckvärde	Internt Lindinvent
Funktion (Not 2)	[AUT1: Spjäll] [AUT2: Inaktiv]	LDE2 korr (Not 12)	
Parameter 1 (Not 3)	[0.0]	Honeywell (Not 12)	
Parameter 2 (Not 3)	[0.0]	Nollpunkt (Not 12)	
DUT1 (Relä)		Flödespunkter (Not 13)	
Funktion (Not 2)	[Inaktiv]	Punkter	
Parameter (Not 3)	[0.0]	Sekunder	
Filter ALIN8-1 (Not 4)	[11111111 = filter På 8-1]; 0=Av	Spjällöppn.	
Regulator	Avancerade inställningar	Ange flöde	
Parametrar	Menyrubrik		
R-intervall (Not 5)	[150] satt till 150	Koeff.	
R-int user (Not 5)	[-10] Om > 0 ställer R-intervall	GF1 K2	
Hyst tryck (Not 6)	[2.0] Kan ställas via Hyst tr user	GF1 K1	
Hyst tr use (Not 6)	[-10] Om > 0 ställer Hyst tryck	GF1 K0	
Hyst rel	Tryckavvikelse i % [+/- 5]	Prod kalib	
Hysterestid	Tid i sekunder [0]	System	Rubrik_7 (Huvudmeny)
Skalning (Not 7)	PID-skalning [-10 = fast angivna värden]	Firmware	Visar aktuell mjukvaruversion
P	[0.4]	Reset (Not 14)	
I	[0.02]	Fabriksinst (Not 15)	
Minvinkel	i grader [10]	Självtest	
Maxvinkel	i grader [90]	Logga ut (Not 16)	Enbart internt Lindinvent
Flödesbegr	[0]		Rubrik_8 (Huvudmeny)
Flödesbegr hy	[0]		
Max pulser	[0]		

The presentation of the menu in CFL and CFLb is complete.

NOTES:

Note 1 When applying to a circular duct/circular damper, specify the current duct size from a predefined list. For non-standard dimensions or rectangular ducts, select the function <Specify K-factor>.
Under <K-factor>, specify the current K-factor. The value can only be changed if <Specify K-factor> is selected under Duct Size as mentioned above.

Note 2 Selection of function from a predefined list:
AIN: <Damper>; <Inactive>; <DUC>; <Fire>
DIN: <Inactive>; <Switch>
AUT: <Inactive>; <Sensor>; <Pressure>; <Param>;
<Damper>; <Inverse damper>; <Flow>
DUT1 (Relay): <Inactive>; <Summary Alarm>; <Limit
Alarm>; <Follow Fire>; <Param>

Note 3 Parameter values are used or not used depending on the selected function; they can be values at minimum or maximum.

Note 4 Filter function; Binary input from AIN1 to AIN8.

Note 5 Allows correction of the calculated pressure change as a function of damper position change. If R-int user > 0, the R-interval value is set to the specified value.
For unstable control: Try setting R-int user to 1.5.

Note 6 If Hyst dtr us(user) > 0, the Hyst pressure value is replaced.

Note 7 Set to -10 for the control to use the set values of P and I.

Note 8 If the loop has no NCE: At least one controller on the loop must be set from AUTO to the projected speed.

Note 9 General group affiliation;
Binary input [00000000]; Specified in decimal.

Note 10 If in fire zone; 0 = normal control; 1 = closed in case of fire; 2 = open in case of fire.

Note 11 For testing the motor and damper calibration; confirm minimum and maximum positions with <Confirm>.

Note 12 From CFL Version B03, an LDE sensor replaces the previous Honeywell sensors. The on-site calibration procedure now only applies to CFL up to version A02.

The correction coefficient in % indicates how the pressure value has been corrected as a result of calibration.
Changing the LDE correction allows adjustment to the measured pressure value after verification.

Note 13 Honeywell menu selection is only relevant for CFL version A02 and earlier, all of which are equipped with Honeywell flow sensors.

Reset the flow sensor via the menu option <Zero Point> (hoses disconnected for atmospheric pressure over the sensor). Reconnect the hoses to/from the sensor. Connect a measuring instrument to the extra measuring ports on the measuring flange.

Typically, 2 flow points are selected in the <Flow Points> menu option. Then set the update frequency that the measuring instrument has. The menu options <Damper Position> and <Specify Flow> then follow in sequence for each point. Choose the first point at low flow (about 0.5-0.6 V sensor signal). The damper is adjusted with <Up Arrow> and <Down Arrow> to find the point. Both the damper position and the specified flow from the external measuring instrument are confirmed with <Confirm>. Select the second point at approximately the calculated maximum flow. If there is an alarm signal or "invalid calibration," the flow calibration must be repeated as described above.

Note 14 Menu option Reset restarts with logout; counters and other set values are retained.

Note 15 Menu option Factory Settings results in logout and all settings and counters are reset to factory settings.

Note 16 Menu option Logout results in logout. Adjusted values and counters are retained.