DPLb DIFFERENTIAL PRESSURE REGULATOR

Conditions

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



PROCEDURE FOR COMMISSIONING VIA LINDINSIDE

(See next page for instructions with screenshots from LINDINSIDE)

1. Pull down to scan for nearby units:

• Select the correct controller from the list.

By calling the unit via the clock symbol, a beep sound with a blue blinking light is emitted, 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 the recommended assignment from Lindinvent. *After assignment: It is advisable to perform a new scan to verify that the unit's Node ID has been updated correctly. For assigning Node IDs to a large number of units, the "Set nodeIDs" function can be used.

3. Connect to the unit:

Press the field for the unit's product name in the list of scanned units to connect.

4. Set the intended regulator function:

- Differential pressure regulation (Default)
- Differential pressure regulation with external measurement
- Differential pressure measurement
- Slave regulation

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 option in LINDINSIDE or centrally via LINDINTELL/LINDINSPECT[®].

Appendix with Control Parameters

The control parameters for DPLb are the same as for previous versions of DPL. See the attached appendix for a presentation of the status screen and the complete set of control parameters for DPLb and DPL.



Smartphone with the LINDINSIDE app for communication with Lindinvent devices equipped with Bluetooth®.



5. Complete commissioning via Quick Setup screen option:

- Perform a test of the damper motor (Manual motor control)
- Check that the damper is fully open. Confirm the position.

- Check that the damper is fully closed. Confirm the position.

 Assign differential pressure zone (Differential pressure zone)

[0]; 0 = no assigned zone.

• Specify placement for supply or exhaust air (G1 placement) Only required for differential pressure regulation

function. [Exhaust air]

Specify differential pressure setpoint (Differential pressure SP)
Only required for differential pressure requilation

Only required for differential pressure regulation function. Pa [10]

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



Version C04

Setting Node ID via LINDINSIDE

LIND**INSIDE**



Available via LINDINSIDE

Status Values

After selecting the scanned unit: A selection of status values related to • Quick setup the ongoing regulation is displayed on . the homepage.

Available screen options via the app's homepage

- **Symbols**
- History
- System
- Peripherals

About the Symbols screen option

All settings are grouped for easy access via Symbols.



Version C04

STATUS SCREEN AND MENU

This attachment presents the status screen with selected setpoint values and the entire menu structure of settings in DPL. The set of control parameters is identical for the DPL and DPLb regulators.

Note: All settings for the DPLb regulator are accessed from LINDINSIDE via the screen selection Symbols.

Settings are shown with factory default values; see comments and notes for guidance. The displayed menu structure with the parameter list applies from software version

DPL_DPLb_6.0.0.

LOGIN

- DPL: Directly to the controller only via the DHP user panel. The controller can be accessed via CAN from the LINDINTELL tool Remote.
- DPLb: The controller can be accessed via CAN from the LINDINTELL tool Remote.

For handling DHP: See specific instructions. For handling LINDINSIDE: See the commissioning instructions for DPLb.

Note: No login is required to read status values on the DPL. However, login is required to change settings.



Only DPL: Screenshot and keypad while navigating the DPL menu via DHP and the application for wireless communication via IR.

iate	Port No	: <i>localhost</i> de	6
Spj 10	ällöppr °	n NC C	RM K
		-	
	Up		
Back	Up		Ente

Both DPLb and DPL: Screenshot from connection to the regulator via network connection and the LINDINTELL tool Remote.

STATUS SCREEN FOR DPL & DPLB

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

DPL only: via the screen on a directly connected DHP. DPLb only: via the start screen in LINDINSIDE. DPL/DPLb: The status screen can alternatively be accessed via either a permanently connected DISPLAY (FLOCHECK P) or via CAN from the LINDINTELL tool Remote.

When selecting the function Differential Pressure Control

Actual Value Differential press. Damper open. **Comment** Differential pressure in Pa Damper opening in degrees

Step forward in the actual values display by repeatedly pressing <Back Arrow> When selecting the function Differential Pressure Control with External Measurement:

Actual ValueCommentExt differential pres. External differential pressure in PaDamper open.Spjällöppning i grader

When selecting the function Differential Pressure Measurement:

Actual ValueCommentDifferential press.Differential pressure in Pa



When selecting the function Slave Control:

Damper open. Dampe

Comment Damper opening in degrees



Version C04

Menu Options and Settings

When assigning the function of the control unit, the settings requested during Quick Config are determined, which is equivalent to Quick Setup in LINDINSIDE.

Difftryckreglering

Visas i display Snabbkonfig Nod-ID Difftryckzon Spjällplacering Difftryck BV Spjällkalib. (Not 10)

Rubrik (Huvudmeny) Ange Nod-ID [196] [0]; 0 = ej tilldelad zon

Kommentar [Defaultvärde]

Välj givarplacering [Frånluft] Pa [10] Test av motor; hitta max och min

Difftryckreglering extern mätning

Visas i display Snabbkonfig Nod-ID Difftryckzon Spjällplacering Difftryck BV Spjällkalib. (Not 10)

Difftryckmätning

Visas i display Snabbkonfig Nod-ID Difftryckzon Spjällkalib. (Not 10)

Slavreglering

Visas i display Snabbkonfig Nod-ID Difftryckzon Spjällkalib. (Not 10)

Kommentar [Defaultvärde]

Rubrik (Huvudmeny) Ange Nod-ID [196] [0]; 0 = ej tilldelad zon Välj givarplacering [Frånluft] Pa [10] Test av motor; hitta max och min

Kommentar [Defaultvärde]

Rubrik (Huvudmeny) Ange Nod-ID [0]; 0 = ej tilldelad zon Test av motor; hitta max och min

Kommentar [Defaultvärde]

Rubrik (Huvudmeny) Ange Nod-ID [0]; 0 = ej tilldelad zon Test av motor; hitta max och min



Presentation of Variables

In the order in which the headings are presented in the main menu of the control unit.

Börvärden Difftryck Ärvärden Difftryck Spjällöppn Spjällåter In/Ut-signaler AIN1/AIN2 DIN1 AUT1/AUT2 DUT1 (Relä) Inställningar Larm Larmavvikelse Tid till lar Larmljud Larmgräns 1 Larmgräns 2 In/Ut-signaler Insignaler AIN1 till AIN2 Funktion (Not 1)

Parameter 1 (Not 2) Parameter 2 (Not 2) DIN1 Funktion Parameter Utsignaler AUT1 till AUT2 Funktion (Not 1) Parameter 1 (Not 2) Parameter 2 (Not 2) DUT1 (Relä) Funktion (Not 1) Parameter 1 (Not 2) Parameter 2 (Not 2) Filter AIN8-1 (Not 3) Regulator Parametrar R-intervall (Not 4) R-int user (Not 4) Hyst difftr (Not 5) Hyst dtr us (Not 5) Hyst rel Hysterestid Skalning (Not 6) Ρ T Minvinkelbeg Maxvinkelbeg Max pulser

Rubrik_2 (Huvudmeny) Differenstryck i Pa [10] Rubrik 3 (Huvudmeny) Aktuellt differenstryck i Pa Spjällöppning i grader [10] Aktuella signalnivåer [V]

[0]

Rubrik_4 (Huvudmeny)

Otillåten tryckavvikelse [5] Pa Tid till larm i sekunder [10] [0 = inaktiverad summer] [0] Pa [2000] Pa

[Inaktiv] [0.0] [0.0]

[Inaktiv] [0.0]

[Inaktiv]

Filterfunktion AIN Avancerade inställningar:

[200] Ställd till 200 [-10] Om > 0 ställer till R-intervall [2.0] Kan ställas via Hyst difftryck user [-10] Om > 0 ställer till Hyst difftr Difftryckavvikelse i % [+/- 5] Tid i sekunder [0] PID-skalning [-10 = fast angivna värden] [0.00] [0.06] i grader [10] i grader [90] [0]

Kommunikation Nod-ID CAN Hastighet (Not 7) Grupper Grupp 8-1 (Not 8) Grupp 16-9 Grupp 24-17 Grupp 32-25 7oner Brand Brandzon Vid zonbrand (Not 9) Vid övr. bran (Not 9) Difftryck Difftryckzon Frekvens

Kalibrering Spjäll (Not 10) Hitta max:

Hitta min: LDE (GP1) Tryckvärde LDE korr Prod kalib System Firmware Reset (Not 11) Fabriksinst (Not 12) Självtest Logga ut (Not 16) Debug

Rubrik_5 (Huvudmeny) 1 - 247; Får ej sättas till 0 [Auto] [0 = ingen grupptillhörighet] [0 = ingen grupptillhörighet] [0 = ingen grupptillhörighet] [0 = ingen grupptillhörighet]

[0 = ingår ej i brandzon] [0] [0]

[0 = ingår ej i zon] [1.0] [0]

Rubrik_6 (Huvudmeny

[255] [0] [GP1=1]; [GP2 =-1]; 1= Tilluft; -1 = Frånluft Korrigerat uppmätt tryck i Pa [0.0; i %]; korrigeringskoeff. tryck Internt Lindinvent Rubrik 7 (Huvudmeny) Visar aktuell mjukvaruversion

Enbart internt Lindinvent Rubrik_8 (Huvudmeny) Enbart internt Lindinvent

Presentation of the menu in DPL and DPLb completed.





COMMISSIONING INSTRUCTIONS

NOTES:

Note 1 Selection of Function from a Predefined List: AIN: <Damper>; <Inactive>; <DUC>; <Fire> DIN: <Inactive>; <Switch> AUT: <Inactive>; <Sensor>; <Pressure>; <Parameter>; <Damper>; <Internal Damper> DUT1 (Relay): <Inactive>; <Summary Alarm>; <Limit Alarm>; <Follow Fire>; <Parameter>

- Note 2 Parameter values are used alternatively depending on the selected function; they can be values at min or max.
- Note 3 Filter function; Binary input AIN1-8; [11111111 = filter on 8-1]; 0 = Off
- Note 4 Provides the ability to correct the calculated differential pressure change as a function of the changed damper opening. If R-int user > 0, the R-interval value is set to the specified value.
- Note 5 If Hyst dtr us(user) > 0, the value replaces Hyst difftr.
- Note 6 Set to -10 for the control to take the set values on P and I.
- Note 7 If the loop is without NCE: At least one control unit on the loop must be switched from AUTO to the projected speed.
- Note 8 General group affiliation; Binary input [00000000]; Spe cified in decimal.
- Note 9 If in fire zone; 0 = controls as usual; 1 = closed during fire; 2 = open during fire.
- Note 10 For motor testing and damper calibration; confirm min and max positions with <Confirm>.
- Note 11 Selecting Reset will restart with logout; counters and other set values are retained.
- Note 12 Causes logout and resets settings and counters to factory defaults. The exception is Node-ID, which is not reset.
- Note 13 Logout: Set values and counters are retained.

