

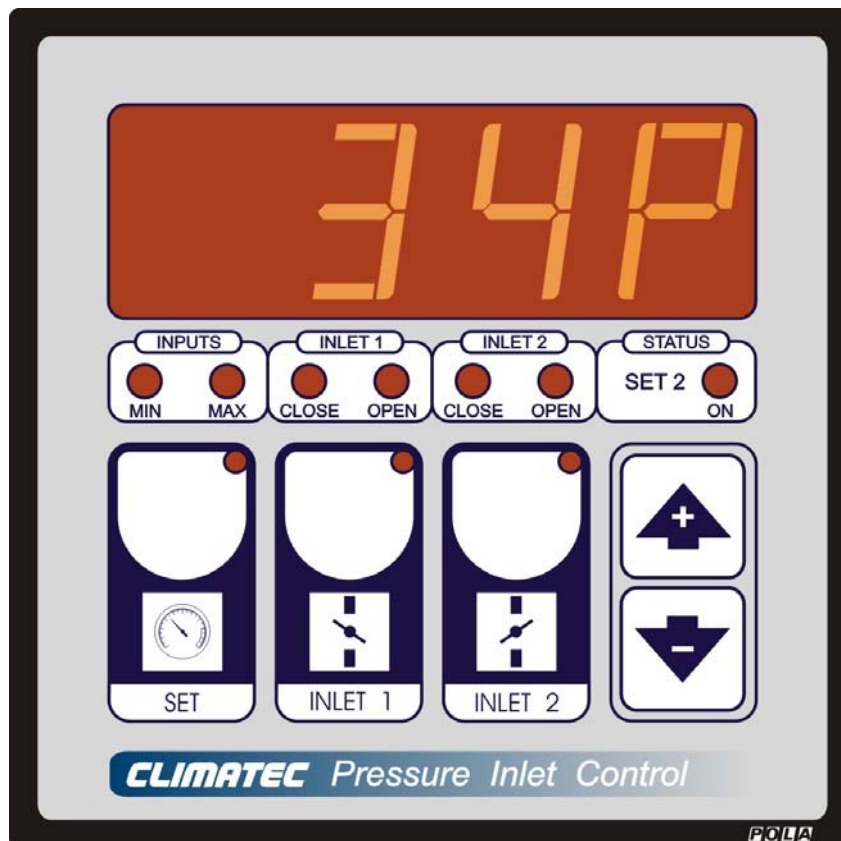
CLIMATEC

Pressure Inlet Controller

CLT4

Version 4.0

HANDBOOK



MAIN SETTINGS (RUN MODE)



Press **SET**.
Display will change to show the set pressure.
Press + or - to adjust.



Press **SET** again.
Display will change to show the minimum inlet position.
Press + or - to adjust.
(This setting is only used when the *Minimum Input* contact is open.)



Press **SET** again.
Display will change to show the maximum inlet position.
Press + or - to adjust.
(This setting is only used when the *Maximum Input* contact is open.)



Press **SET** again.
Display will change to show the *SEt.2* pressure setting.
Press + or - to adjust.
This setting is controlled based upon an external signal from, for example a HP11 thermostat. This can provide a "cold outside temperature" pressure setting.
(This setting is only used when the *SEt.2 Input* contact is closed.)



Press **SET** again to return to the current pressure reading.



VIEWING



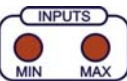
Press **INLET 1**.
INLET 1 button indicator will illuminate and the display will change to show the current position of inlet 1.



Press **INLET 2**.
INLET 2 button indicator will illuminate and the display will change to show the current position of inlet 2.



If **INLET 2** is disabled (*n.inL=1* (see **COSt** settings)) and **INLET 2** is pressed the display will change to indicate no operation:



These lamps illuminate to indicate the control condition.
When **MIN** is lit this indicates that the *minimum set position* is active. When this light is not lit the *minimum set position* is set at 0%
When **MAX** is lit this indicates that the *maximum set position* is active. When this light is not lit the *maximum set position* is set at 100%.



These lamps illuminate to show the current state of the inlet control.



When **CLOSE** is lit this indicates that the controller is closing the inlet.
When **OPEN** is lit this indicates that the controller is opening the inlet.



This lamp is illuminated when the *SEt.2 Input Contact* is made. When this lamp is lit the controller runs the inlets to the *SEt.2 pressure setting* (See **MAIN SETTINGS**).

INLET 1 POTENTIOMETER CALIBRATION PROCEDURE

Press and hold **INLET 1**.

Display will change to show the start of the calibration procedure:

Continue to hold **INLET 1** until the display changes to read the potentiometer readout:

Release **INLET 1**.

The controller will drive the inlet fully closed (ensure that the auto-manual switch is in the auto position).

When the inlets are in the fully closed position and the potentiometer readout has stopped moving press **INLET 1**. The controller will drive the inlet fully open.

When the inlets are in the fully open position and the potentiometer readout has stopped moving press **INLET 1**.

The calibration procedure is complete.

The display will change to show the current inlet position.

INLET 2 POTENTIOMETER CALIBRATION PROCEDURE

Press and hold **INLET 2**.

Display will change to show the start of the calibration procedure:

Continue to hold **INLET 2** until the display changes to read the potentiometer readout:

Release **INLET 2**.

The controller will drive the inlet fully closed (ensure that the auto-manual switch is in the auto position).

When the inlets are in the fully closed position and the potentiometer readout has stopped moving press **INLET 2**. The controller will drive the inlet fully open.

When the inlets are in the fully open position and the potentiometer readout has stopped moving press **INLET 2**.

The calibration procedure is complete.

The display will change to show the current inlet position.

COS_t SETTINGS



To enter **COS_t** settings press and hold the + & - keys until **COS_t** is displayed.

Press **INLET 2** to scroll through the settings, using the + & - keys to adjust the setting values as required.



Setting	Default Value	Your Value	Description	Notes
<i>n.b.</i>	6P		Neutral band (Pascal)	*1
<i>t.oF</i>	5"		Waiting time between inlet movements	
<i>ProG</i>	3%		% inlet movement	*2
<i>L.n.b.</i>	2%		Inlet Movement % neutral band	
<i>IntE</i>	1"		Pressure reading integration time	
<i>PC.1</i>	0		Resistance of Inlet 1 potentiometer in Close position	
<i>PO.1</i>	1000		Resistance of Inlet 1 potentiometer in Open position	
<i>PC.2</i>	0		Resistance of Inlet 2 potentiometer in Close position	
<i>PO.2</i>	1000		Resistance of Inlet 2 potentiometer in Open position	
<i>tYPE</i>	=1		Type of pressure input	*3
<i>n.inL</i>	=2		Number of inlets	
<i>Ad.Pr</i>	0.0		Pressure sensor correction	

*1) For more details see *Operating Diagram*.

*2) The amount the inlet will move after each waiting time (*t.oF*).

*3) *tYPE=1* DP59/W Pressure Sensor (0-300 Pascal = 0-3 mBar)
tYPE=2 Climatec Pressure Sensor (0-100 Pascal = 0-1 mBar)

To return to **Run Mode** press **INLET 1**.

PRESET PROGRAMS



On delivery this processor is programmed with the following (variable) settings:

Set.P = 40P, **P.---** = 0%, **P.--** = 100%, **Set.2 = 40P**

The **COS_t** values are shown in **COS_t Programming** section.

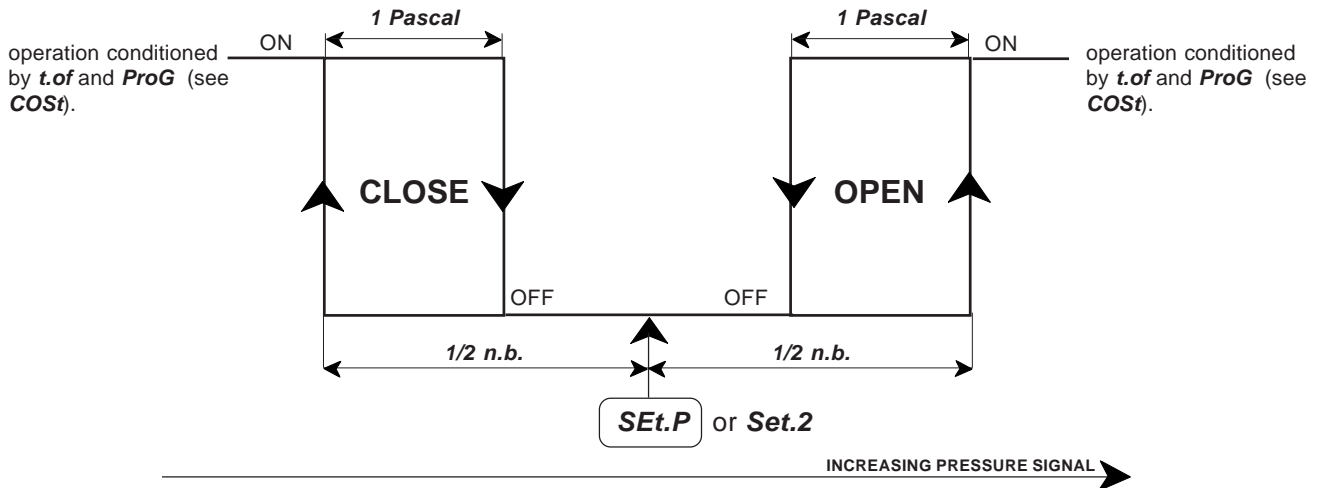
To return to these settings at any time:

Power off the processor, press and hold **INLET 2** and switch the power on:

After 2 seconds **boot** message will be displayed:
 release **INLET 2**.



OPERATING DIAGRAM



External conditioning:

C1= Change set input contact (from *SEt.P* to *SEt.2* value).

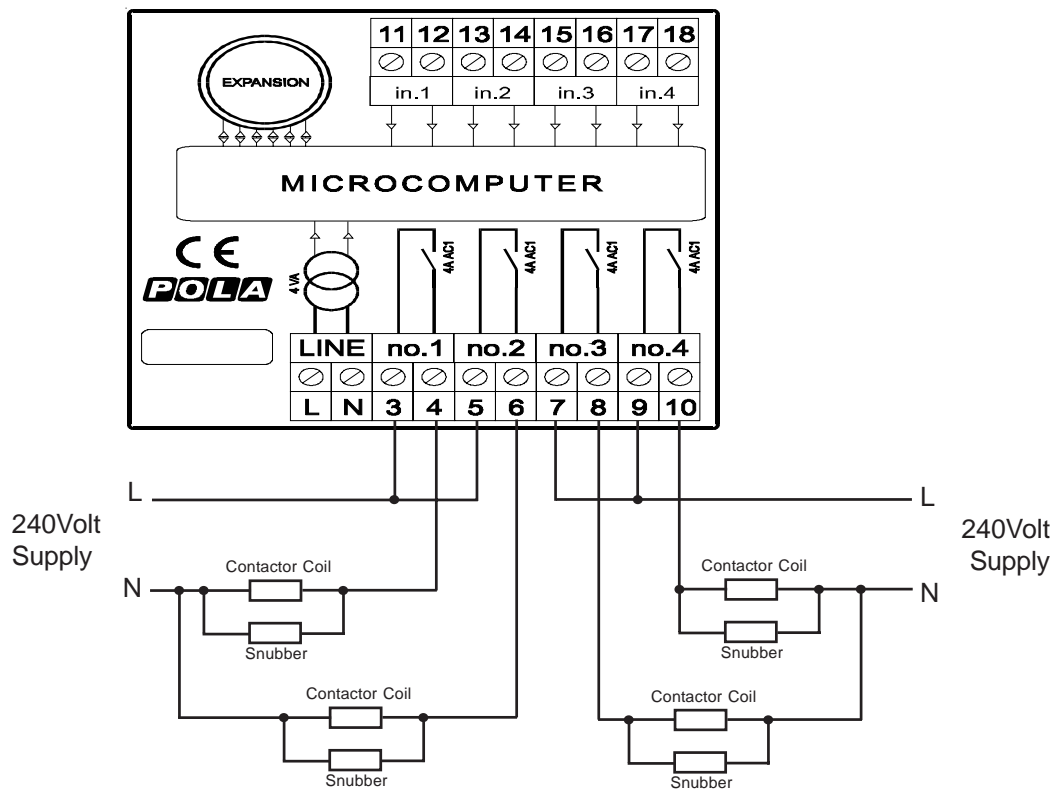
C2= Minimum % input contact (minimum opening is conditioned from *P.---* setting).

C3= Maximum % input contact (maximum opening is conditioned from *P.---* setting).

SNUBBER DIAGRAM

If operating 240 volt relays or contactors, you must:

- Ensure that common feed (terminals 3, 5, 7 & 9) is supplied via a 4 amp fuse.
- A snubber network (supplied as an extra) is connected across the coil of the contactor.



IF IN DOUBT PLEASE CALL CLIMATEC SYSTEMS FIRST.

INSTALLATION

For correct installation, follow the instructions below very carefully.

It is recommended to install the controller properly so that it complies with current regulations, and also to use a max 4Amp.F fuse to prevent the relay output contacts from getting damaged and ensure they stay in perfect running order (terminals 3-4... 9-10 of the **HP** module connector).

How to connect the potentiometers and Input contacts

Connect the potentiometer provided as shown in the diagram below: connect the 1 Kohm potentiometer (max 10Kohm) applied to the flap motor.

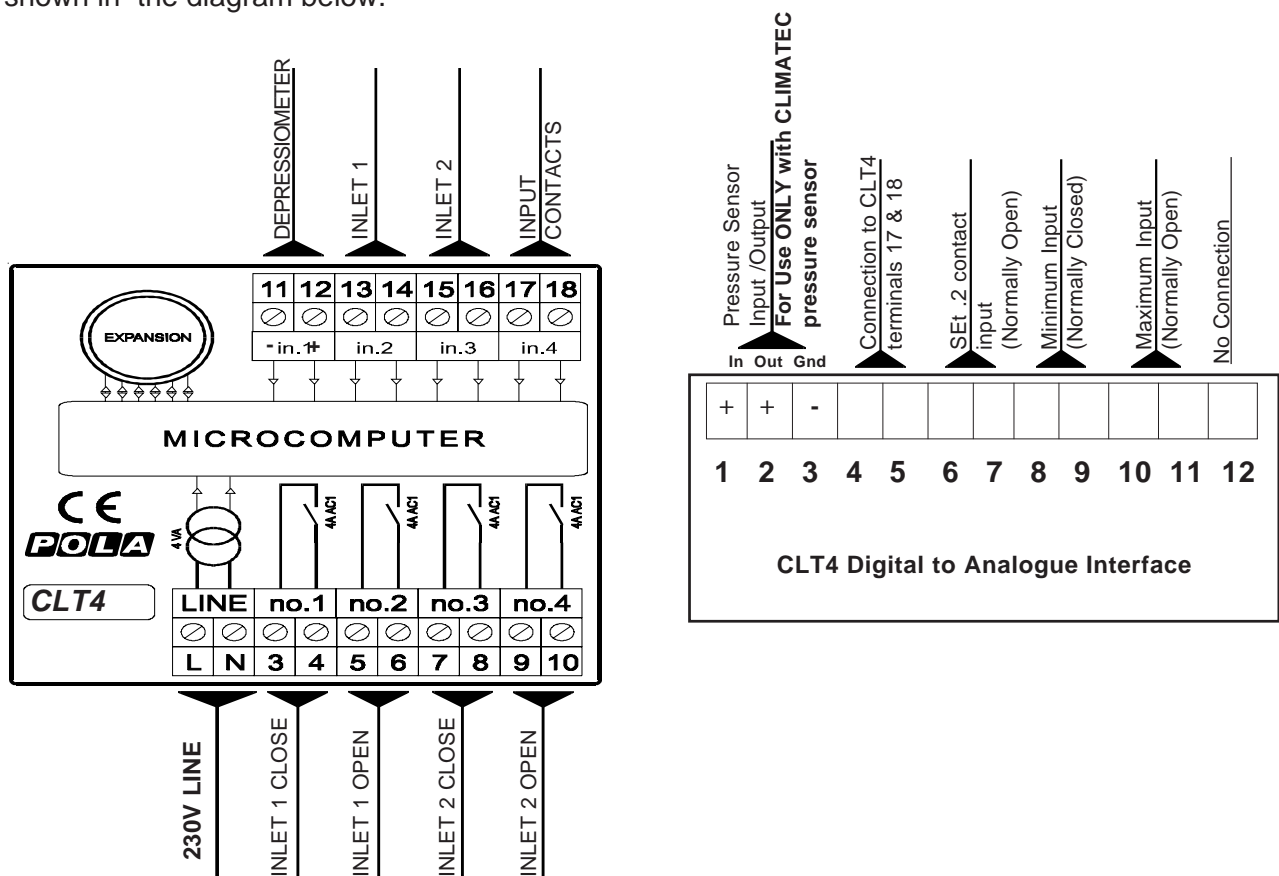
For remote connections use a standard 0.5-square millimetre two-pole wire for each potentiometer, taking great care over the connections, by insulating and sealing any joins carefully.

How to connect the line

Connect line on terminals **L-N**; protect supply with adequate fuse.

How to connect the contacts

Connect terminals **3-4...9-10** on the terminal block (contacts up to 4AMP.AC1) to the inlet power pack as shown in the diagram below.



Climatec Systems Limited, Ledbury, Herefordshire. HR8 2JQ.

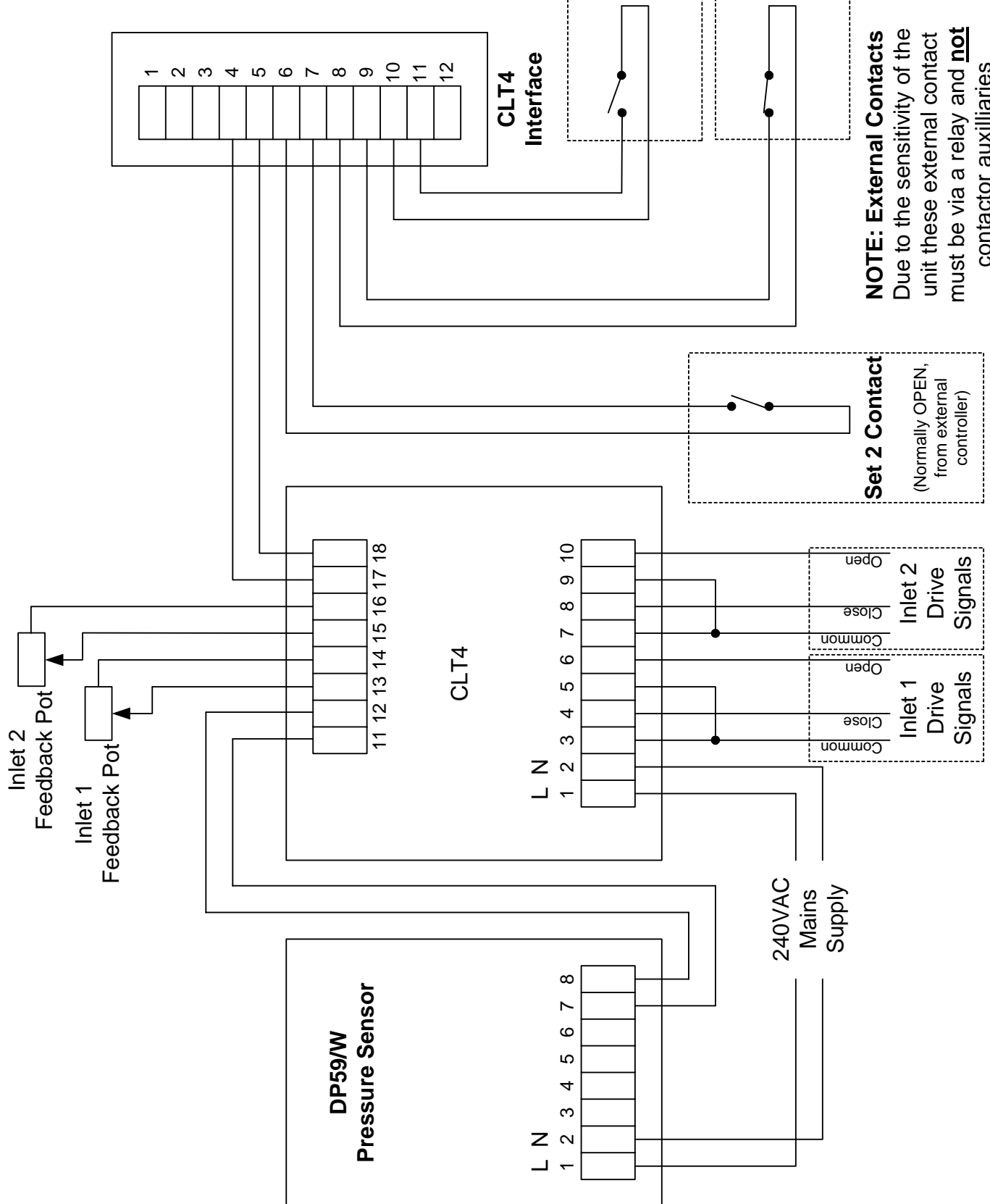
www.climatec.co.uk

As it company policy to continually improve the products the Manufacturers reserve the right to make any modifications thereto without prior notice. They cannot be held liable for any damage due to malfunction.



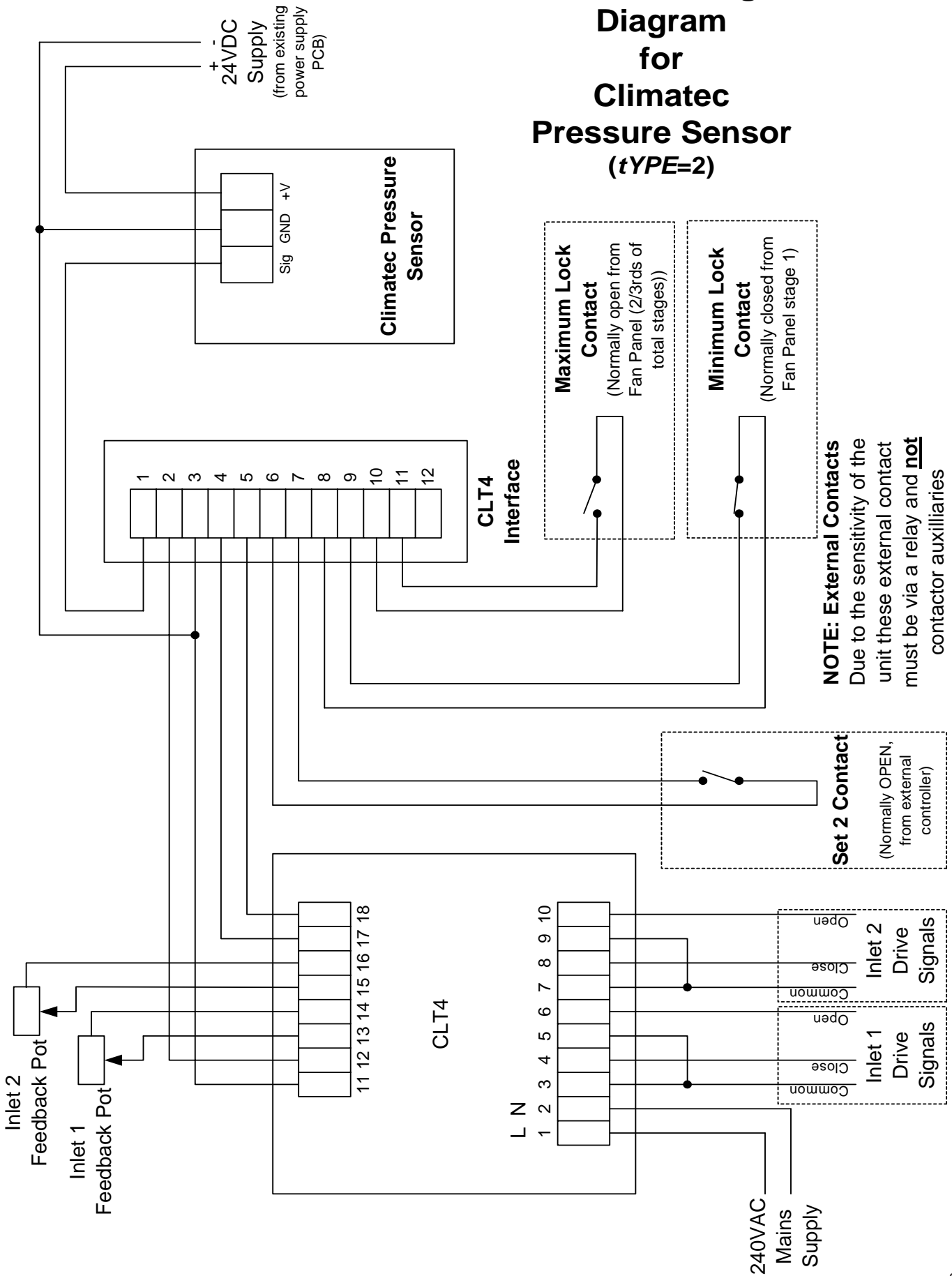
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CLT4 Wiring Diagram for DP59/W Pressure Sensor (tYPE=1)



NOTE: External Contacts
Due to the sensitivity of the unit these external contact must be via a relay and **not** contactor auxiliaries

CLT4 Wiring Diagram for Climatec Pressure Sensor (tYPE=2)



NOTE: External Contacts
 Due to the sensitivity of the unit these external contact must be via a relay and not contactor auxiliaries