

Universal controller

DIN rail housing, display, 230 VAC power supply, 4 relays, 2 analog outputs, 5 PT1000 inputs, 1 0-10 V input, 1 4-20 mA input, 2 digital inputs, bus interface, clock, plug-in terminals.

The DC24D module is a universal controller that performs measurement, monitoring and control functions for the following applications

- control of cooling units (MT and LT refrigeration) with thermostatic expansion valve,
- compressor control,
- condenser control,
- hygrometry control,
- gas concentration control,
- management of air conditioning and lighting zones,
- input-output mode.

The module is mounted on DIN rails.

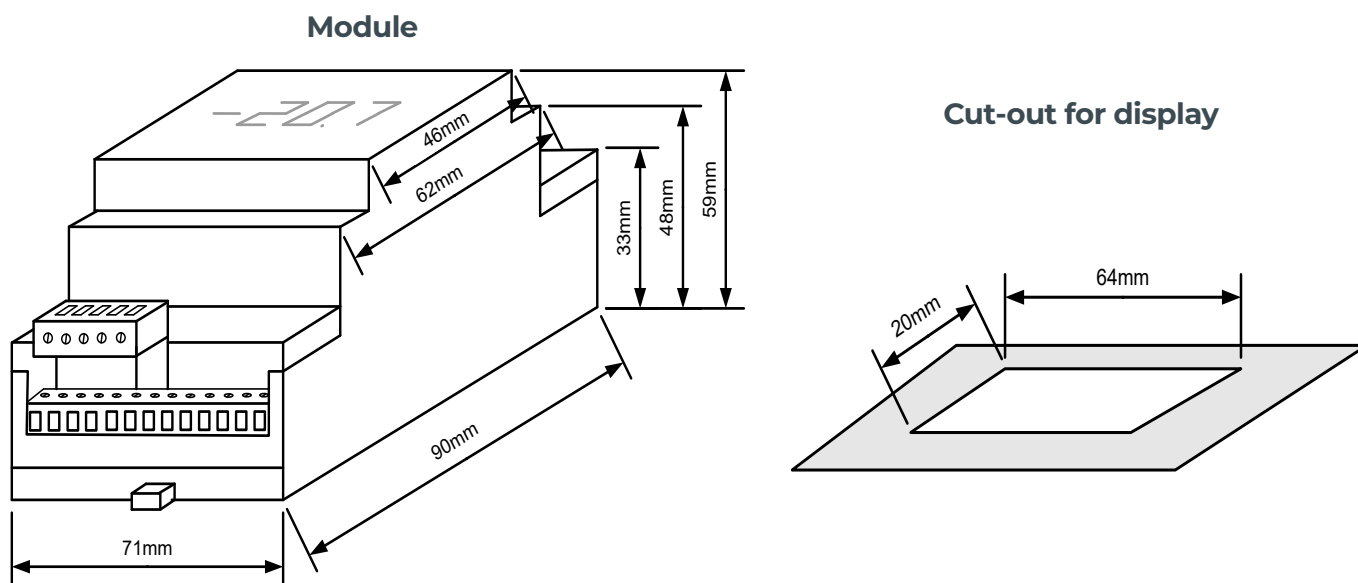
The DC24D module can be programmed from the Teleswin supervision software or directly from the keys on the front panel. The integrated display shows the values measured by the connected sensors and is used for programming the parameters.



APPLICATIONS

Medium temperature refrigerated units	yes
Low temperature refrigerated units	yes
Management of compressors	yes (up to 12 compressors with 3 extension modules)
Hygrometry	yes
Programmable inputs-outputs	yes
Concentration of gazes	yes
Air-conditioning - cooling/heating	yes
Management of lighting areas	yes

DIMENSIONS



FEATURES

Inputs

PT 1000	5 (also compatible with probes: NTC 10K/25°C, L.243, KTY81)
0-10 V	yes
4-20 mA	yes
Digital	2

Outputs

Relays	4
Analog	yes

Others

White display	yes
Power supply	230 VAC
Remote monitoring bus interface	yes
Clock	yes
Electronic expansion valve	no
Local bus for extensions	yes

TECHNICAL DATA

Power supply

Supply voltage 110-250 VAC, 50-60 Hz

Maximum input power 4 W

Protection rating 1

Contamination rating 2

Overvoltage category II

Conditions of use

Temperature 0-40° C

Humidity 0-80 % (without condensation)

Breaking capacity of relays outputs inductive load 6 A 250 VAC, resistive load 10 A 250 VAC

Clock – reserve operating margin 4 days

Input 0-10 V range of measurement: 0-10 V

Input 4-20 mA range of measurement: 4-20 mA

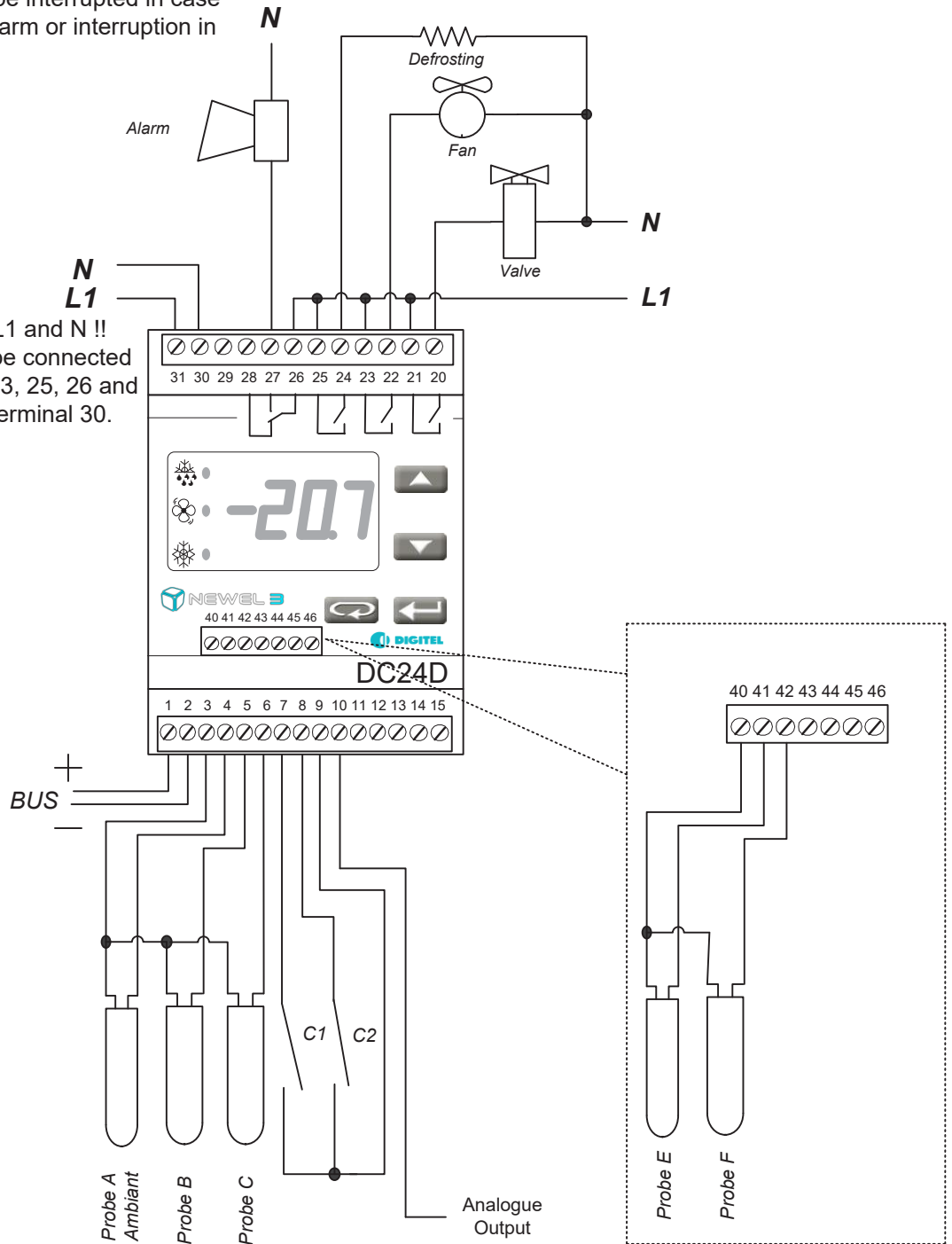
ASSEMBLY DIAGRAMS

DC24D in cooling units control mode

The contact between 26 and 28 will be interrupted in case of an alarm or interruption in supply



Do not invert L1 and N !!
Phase L1 must be connected to terminals 21, 23, 25, 26 and the neutral to terminal 30.



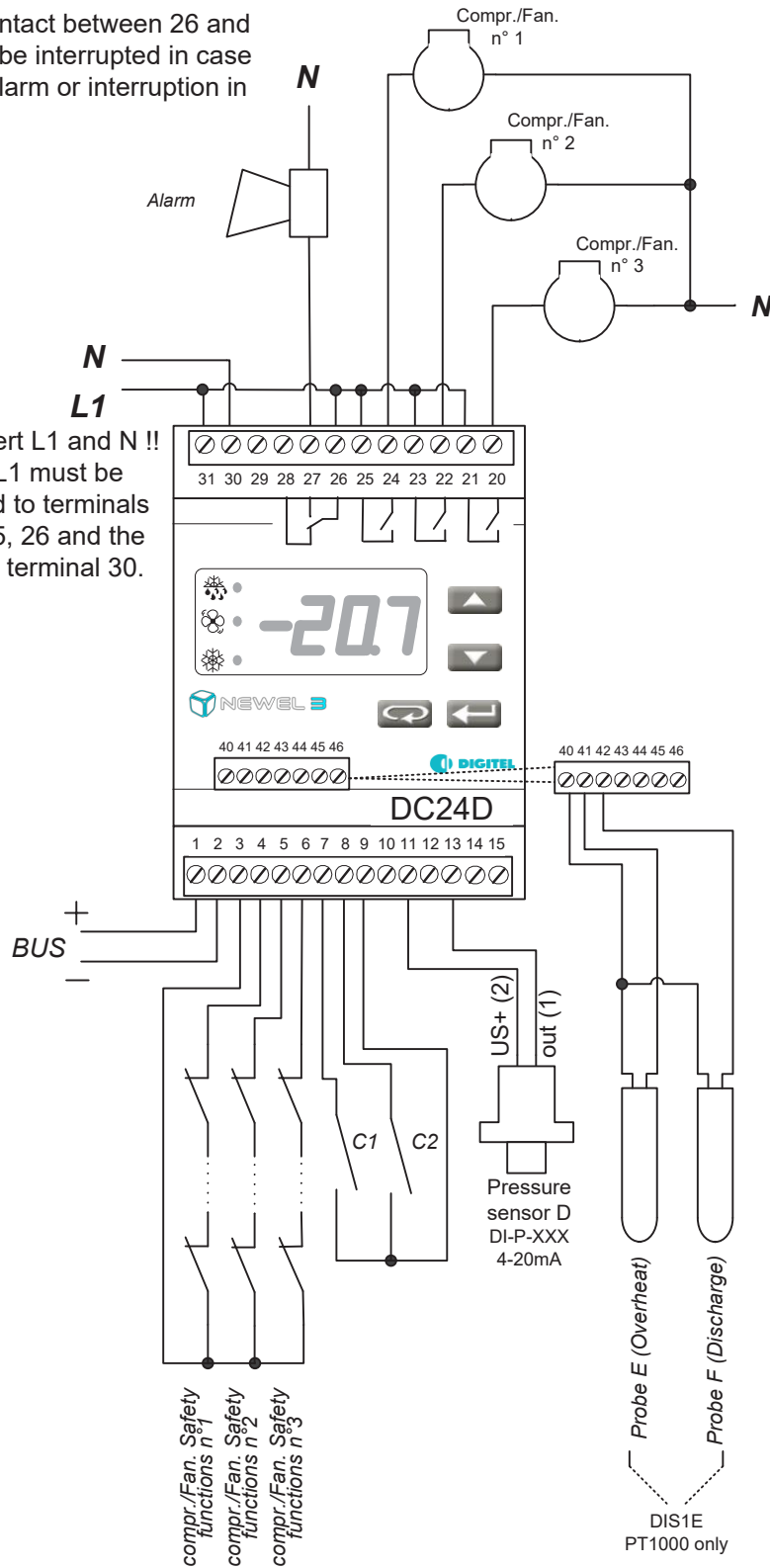
v1.1 / 15.11.2016

DC24D in compressor and condenser control mode

The contact between 26 and 28 will be interrupted in case of an alarm or interruption in supply



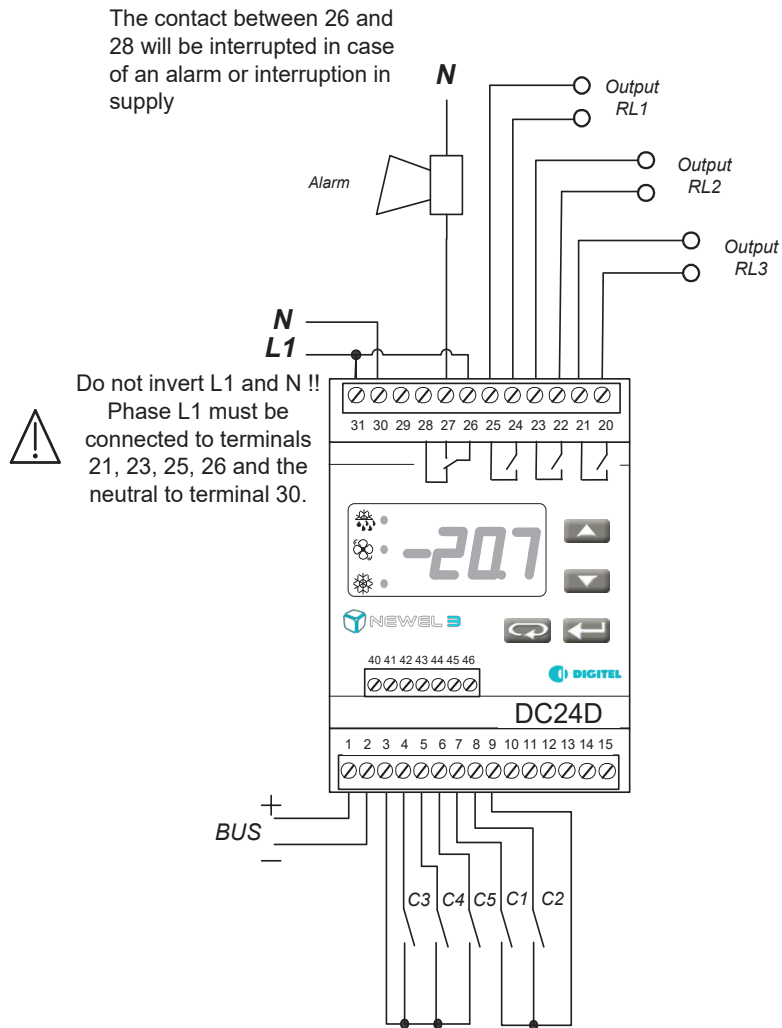
Do not invert L1 and N !!
Phase L1 must be connected to terminals 21, 23, 25, 26 and the neutral to terminal 30.



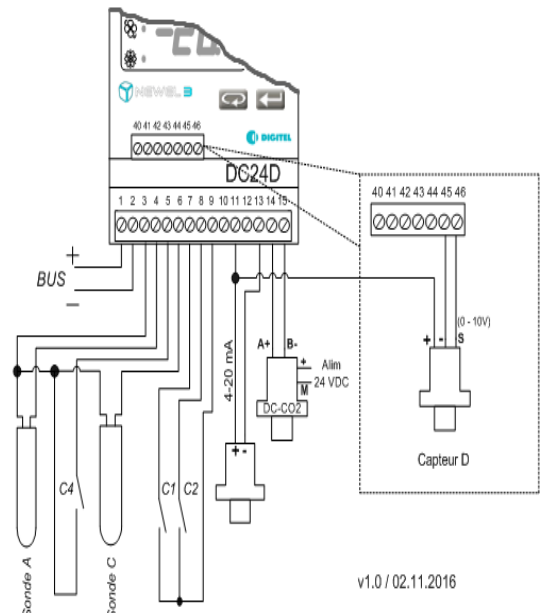
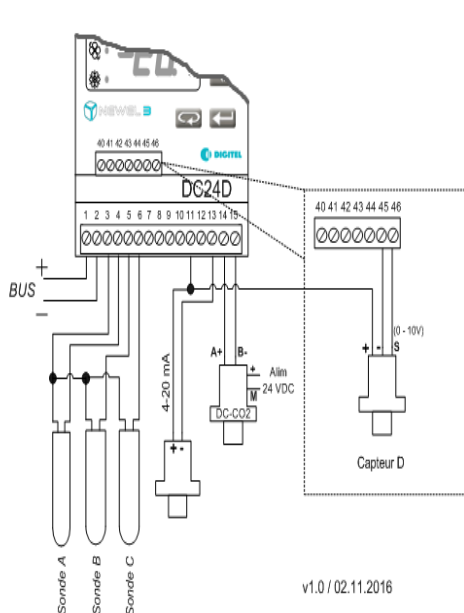
v1.1 / 30.07.2019

DC24D in inputs /outputs mode

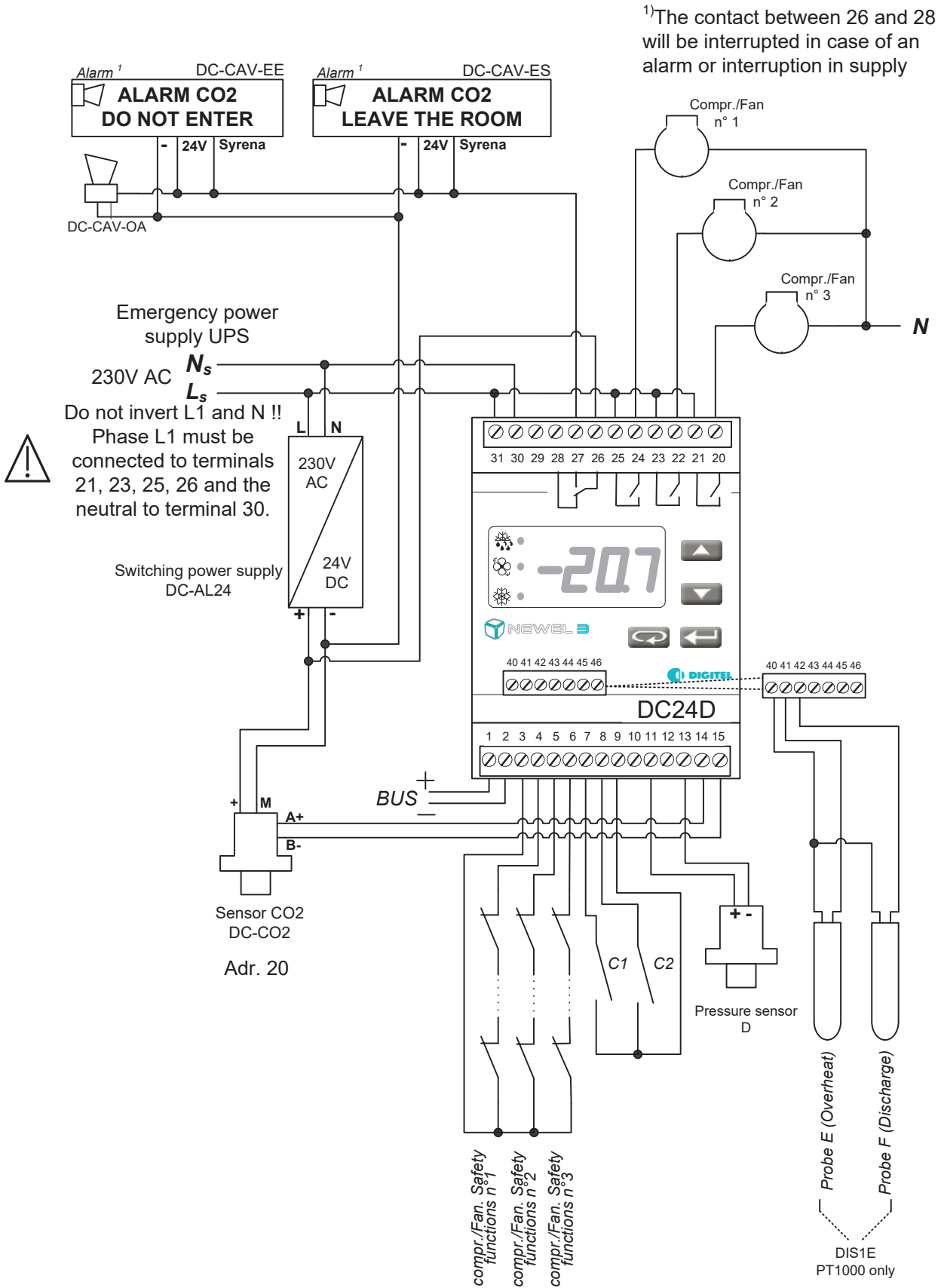
In this operating mode, inputs 4 to 6 can be used as digital inputs or as analog inputs for PT1000 temperature probes. It is also possible to connect 0-10 V, 4-20 mA or DC-CO₂ gas sensors (DC24D/DE).



v1.0 / 01.09.2014

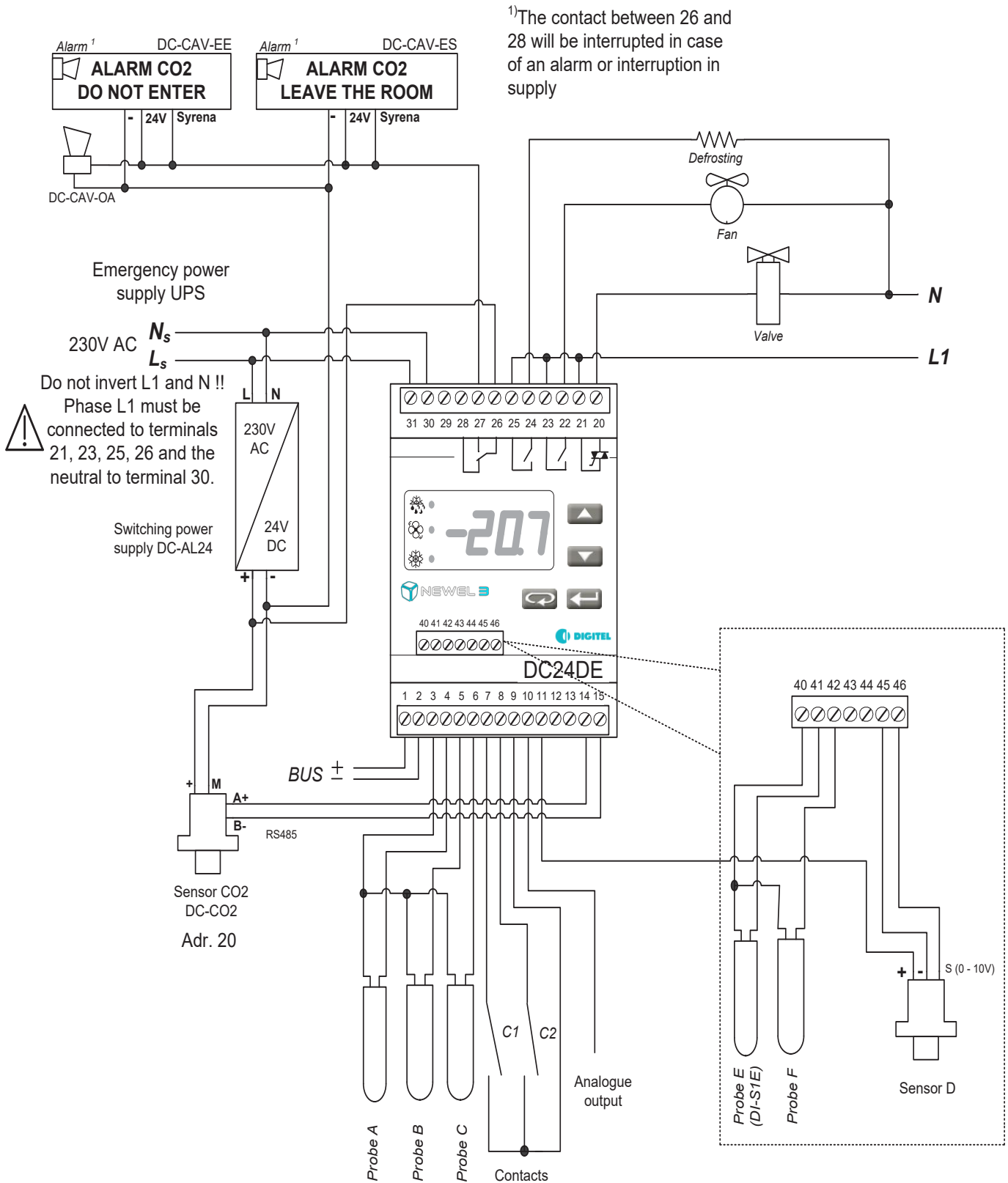


DC24D in compressor control mode and CO2 monitoring



v1.0 / 25.10.16

DC24D in cold room control mode and CO2 monitoring



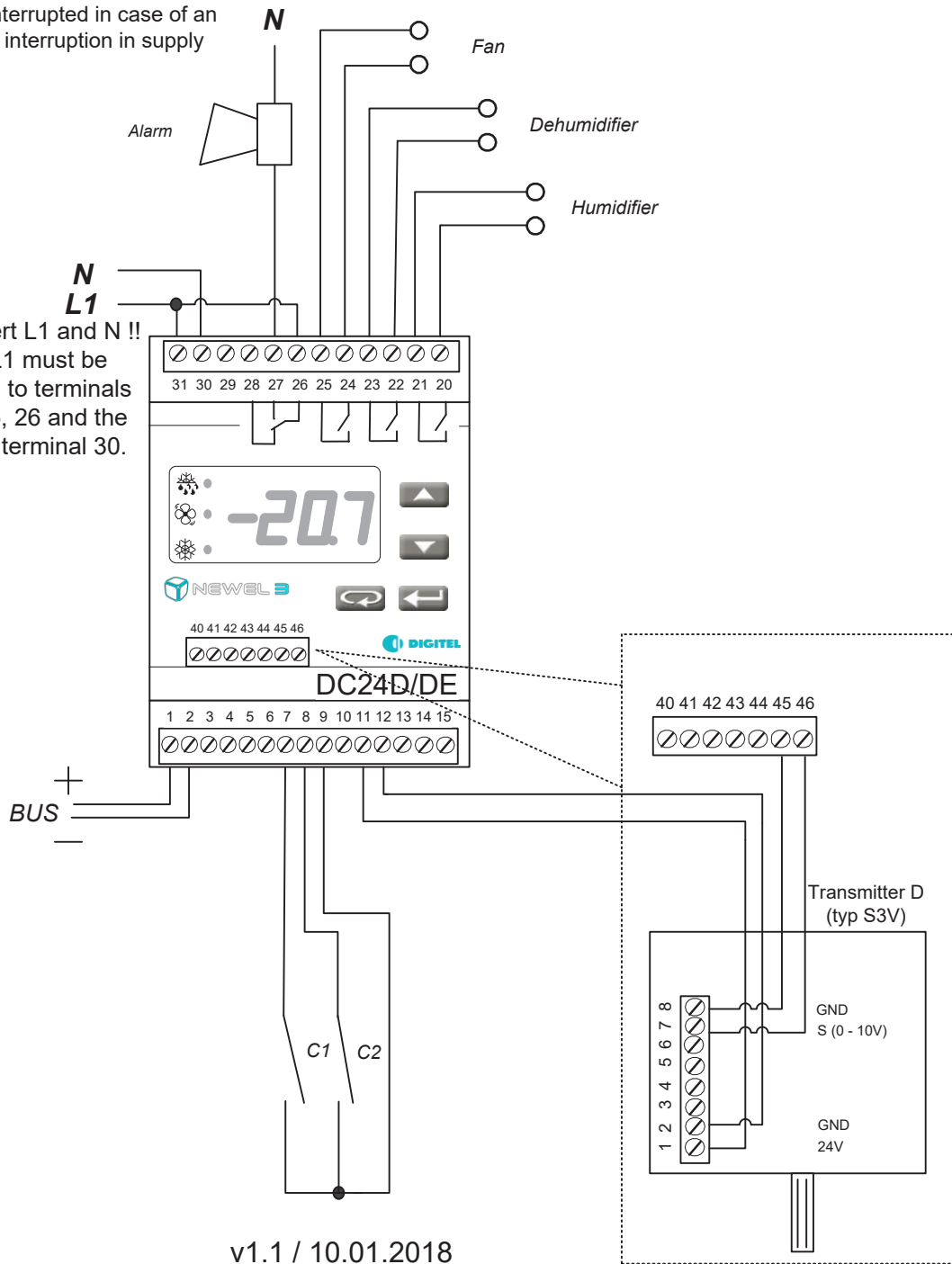
1) The contact between 26 and 28 will be interrupted in case of an alarm or interruption in supply

DC24D in humidity control mode (0-10V)

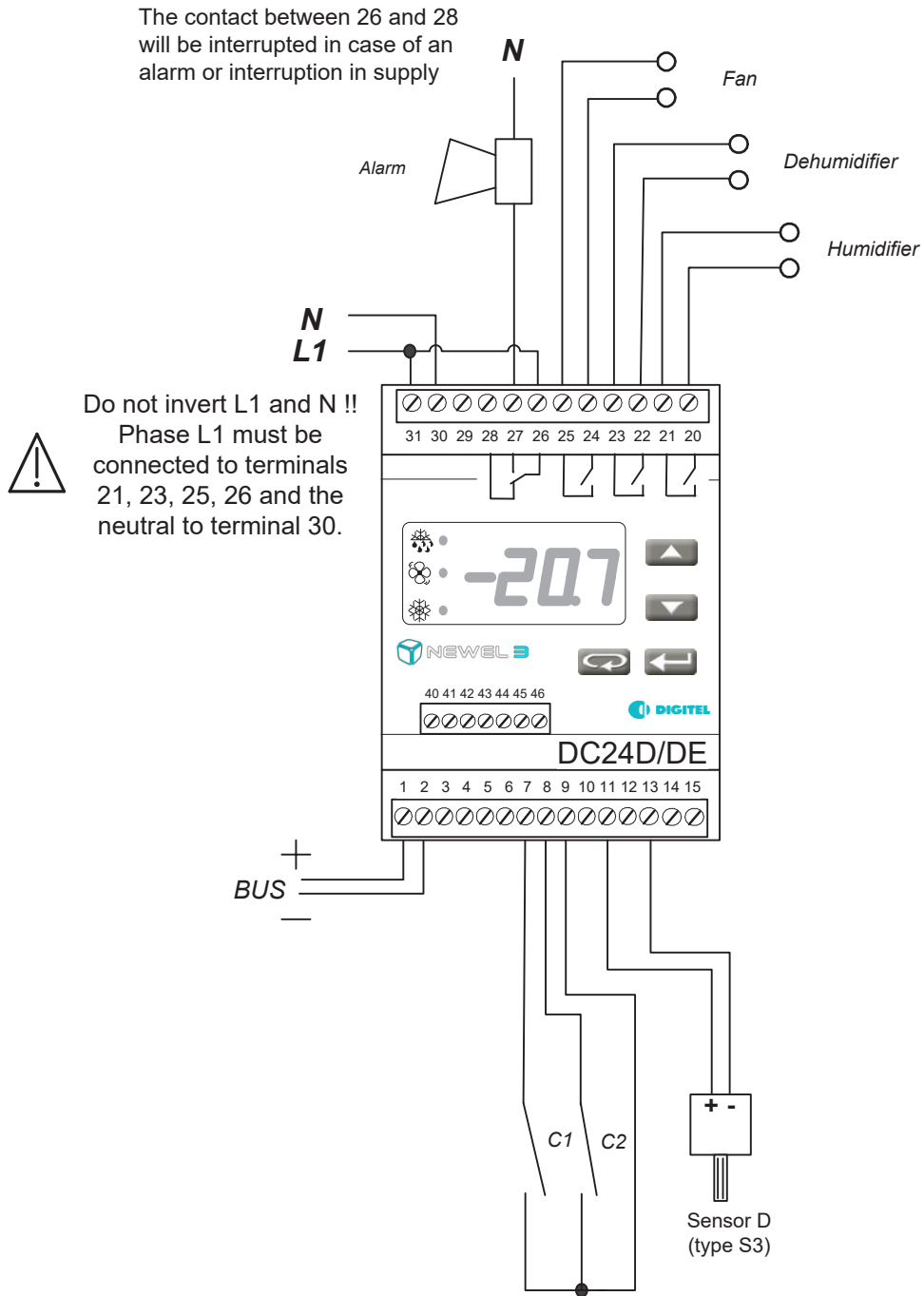
The contact between 26 and 28 will be interrupted in case of an alarm or interruption in supply



Do not invert L1 and N !!
Phase L1 must be connected to terminals 21, 23, 25, 26 and the neutral to terminal 30.

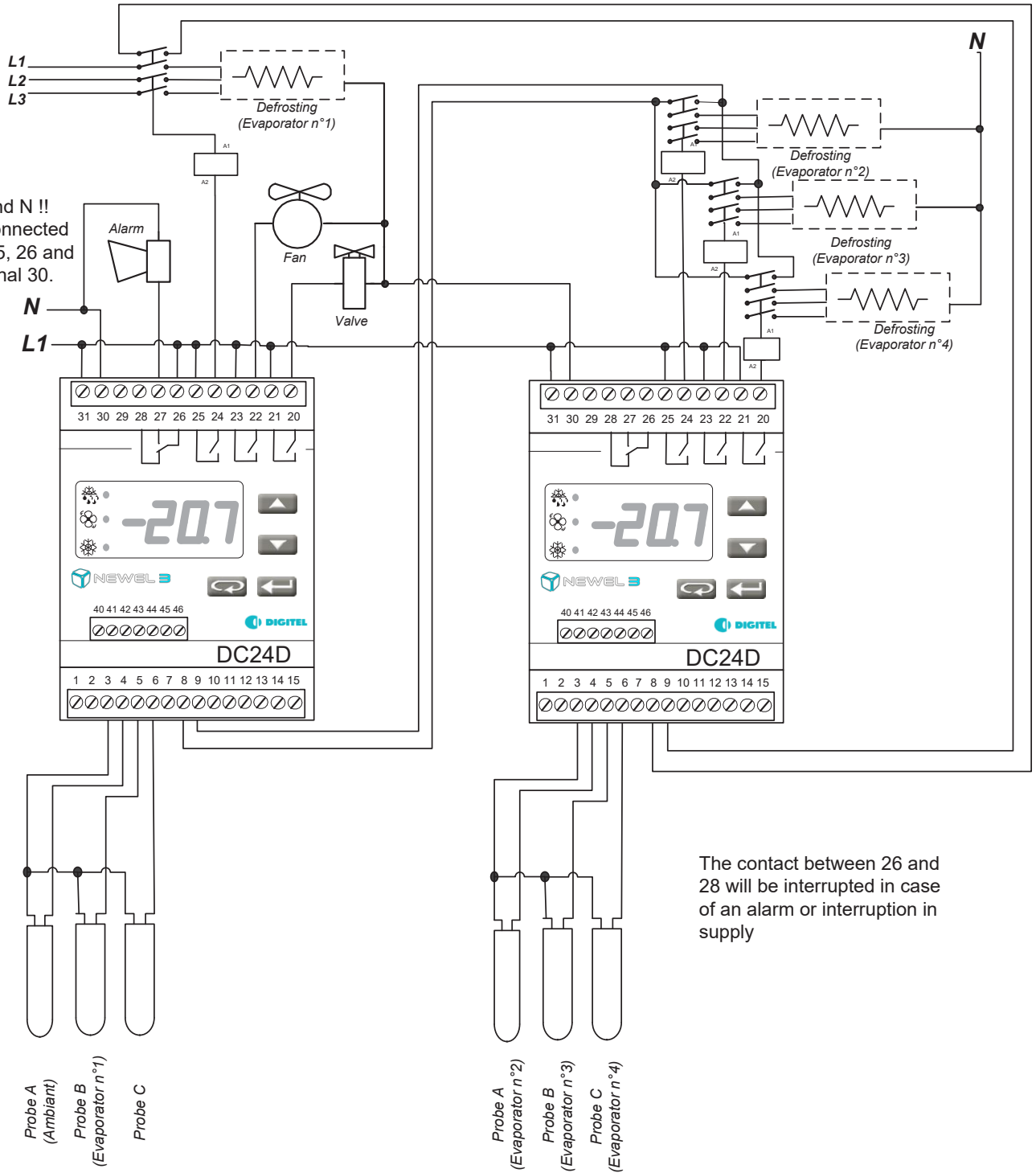


DC24D in humidity control mode (4-20mA)

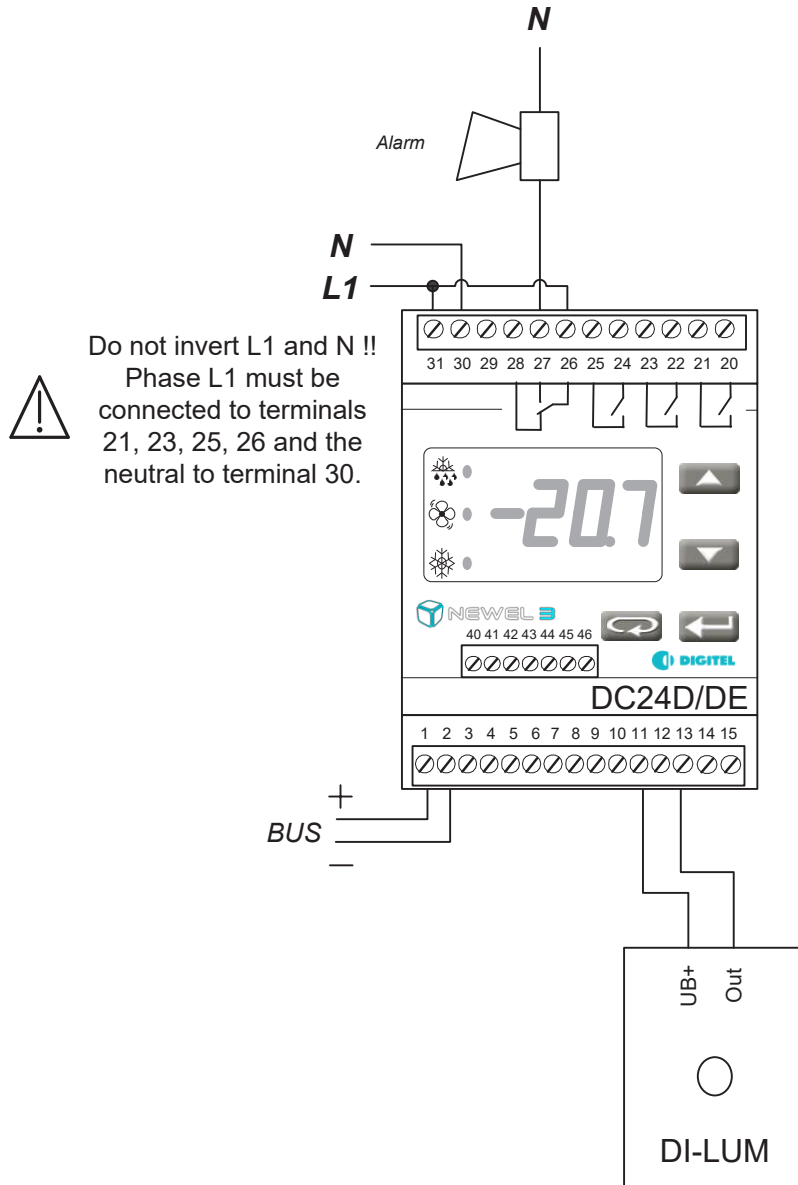


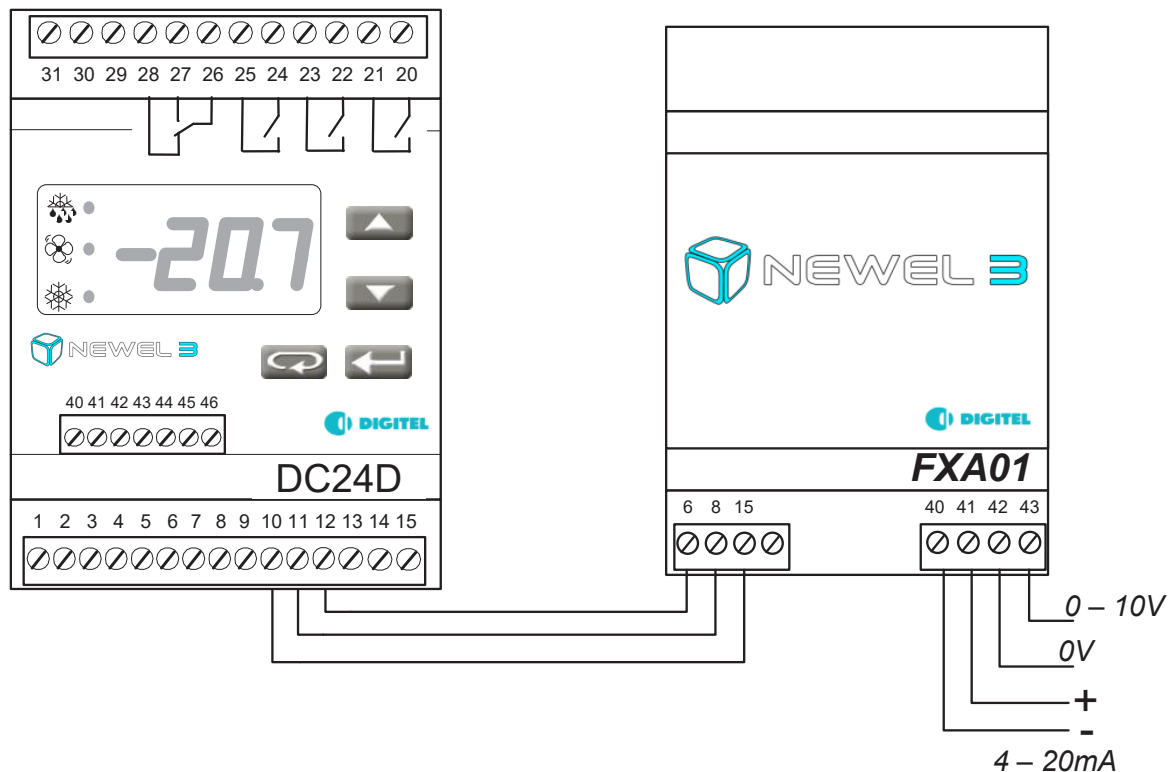
DC24D in cooling unit mode with several evaporators

port L1 and N !!
must be connected
1, 23, 25, 26 and
to terminal 30.



DC24D in light sensor control mode





About us

Digitel provides high-end control, monitoring and remote management solutions for installations requiring a high degree of performance: refrigeration, heat recovery, controlled atmosphere chamber, growth chamber or special and customized installations.

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