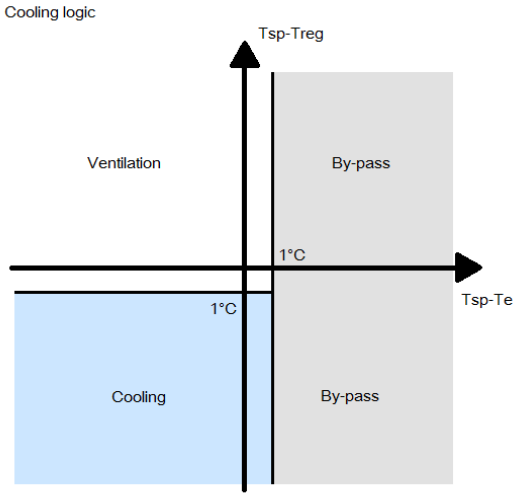
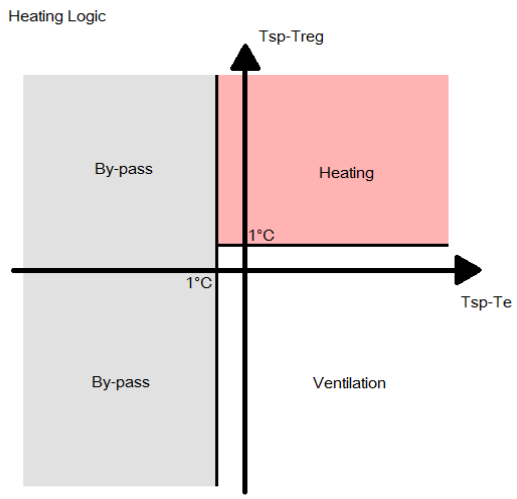
Control features:

- *Automatic / Manual 3 speed fan*
- *3 point cooling / changeover floating valve*
- *3 point heating floating valve*
- *ON-OFF Electric heater*
- *Post ventilation*
- *Free cooling - Free heating damper*
- *Alarm management and diagnostic*
  - *Sensor failure*
  - *Heater over temperature*
  - *Dirty filter alarm*
- *Clock program management*
- *Remote ON-OFF*
- *Remote display with internal sensor*

Control logic

In the following diagrams is explained the summer-winter control logic





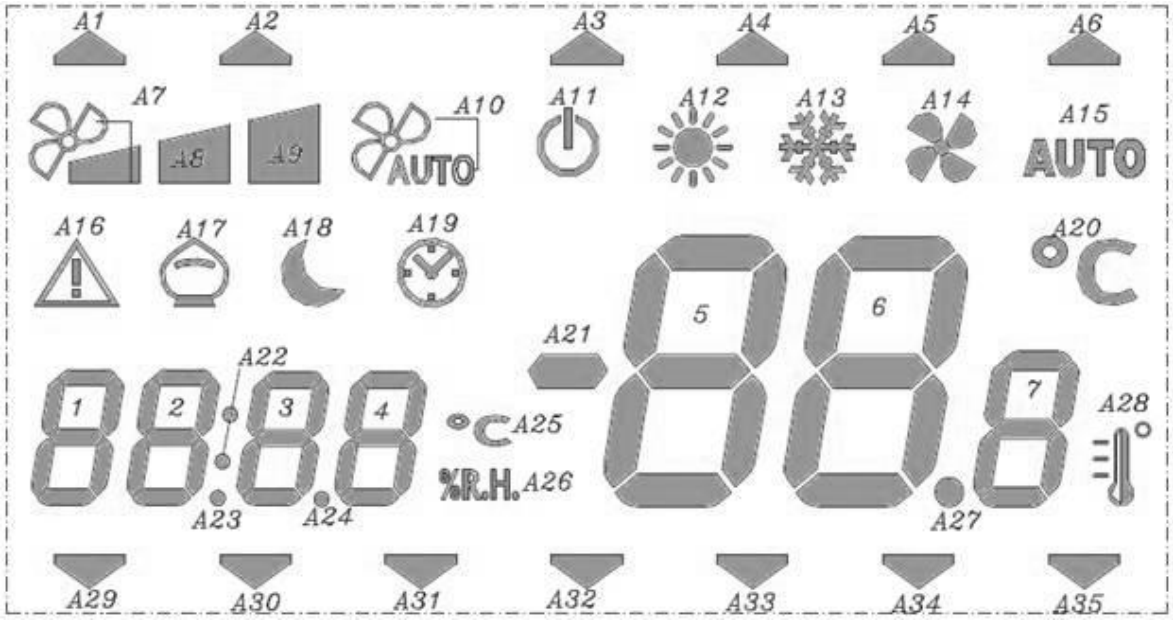
Treg = regulation probe temperature
Tsp = Set point temperature
Te = External probe temperature

Weekly program

For each day of the week it is possible to select between 4 programs:

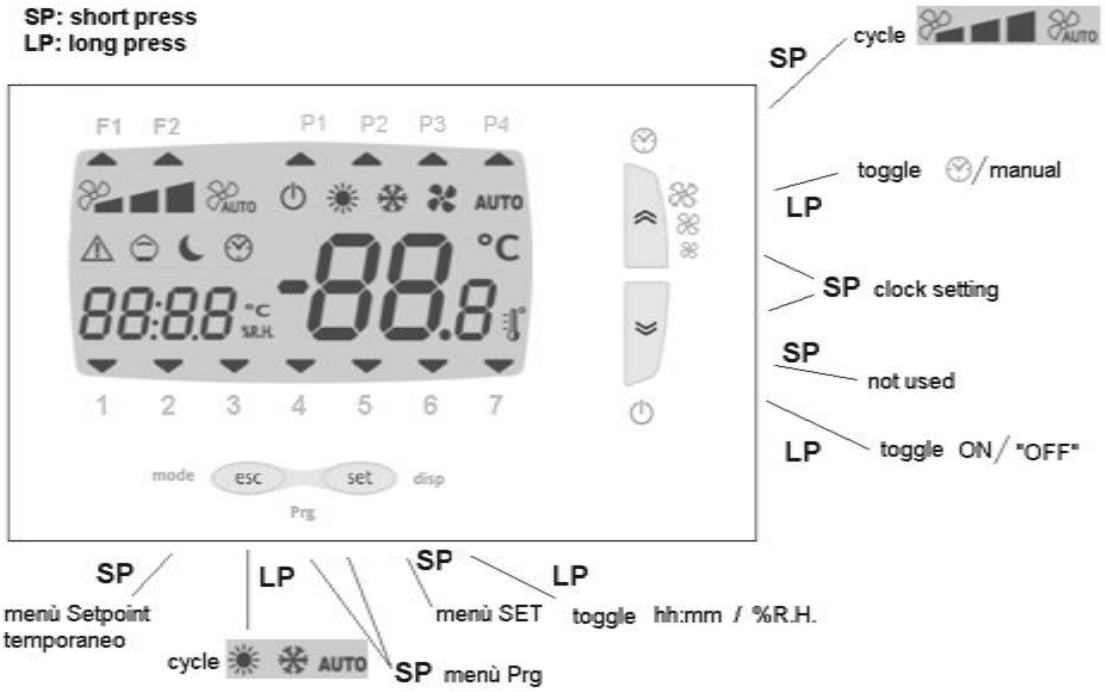
- *Program P1: the unit is turned ON in two different time range (for example one in the morning and one in the afternoon)*
- *Program P2: the unit turned ON in a single time range*
- *Program P3: the unit is turned ON all the day*
- *Program P4: the unit is turned OFF all the day*

Display



Icons:
A3-A6: Active weekly program
A7-A10: Fan speed
A11: ON: Manual OFF
BLINKING: Weekly program OFF
A12, A13, A15: Working mode / while setting: visualizing set point
A16: ON: active alarm
BLINKING: resettable alarm
A17: Freecooling/Freeheating
A19: Clock time viewing
A29-A35: Day of the week

Keyboard



Menu Prg List

Press together button "Esc" and "Set"

- *Prof: in this section there are the settings for the weekly program*
  - *ST1: start time of1st range of 1st program*
  - *EN1: end time of 1st range of 1st program*
  - *SE1 (summer): set-point of 1st range of 1st program*
  - *SE1 (winter): set-point of 1st range of 1st program*
  - *ST2: start time of 2nd range of 1st program*
  - *EN2: end time of 2nd range of 1st program*
  - *SE2 (summer): set-point of 2nd range of 1st program*
  - *SE2 (winter): set point of 2nd range of 1st program*
  - *ST: start time of 2nd program*
  - *END: end time of 2nd program*
  - *SET (summer): set-point of 2nd program*
  - *SET (winter): set-point of 2nd program*
- *Day: in this section there's the program assignment for each day*
  - *Mon: Monday program, possible value*
    - *P1*
    - *P2*
    - *P3*
    - *P4*
  - *Tue: Tuesday program*
  - *Wed: Wednesday program*
  - *Thu: Thursday program*
  - *Fri: Friday program*
  - *Sat: Saturday program*
  - *Sun: Sunday program*
- *Serv: in this section there is the controller configuration*
  - *PWD: insert service password (1)*

- ***Pcfg: plant configuration***
  - *0= 2 pipes system, unique changeover coil*
  - *1= 2 pipes system, cooling coil + electric heater*
  - *2= 4 pipes system, cooling coil + heating coil*
- ***Rprop: regulation probe***
  - *0= supply air sensor*
  - *1= display sensor*

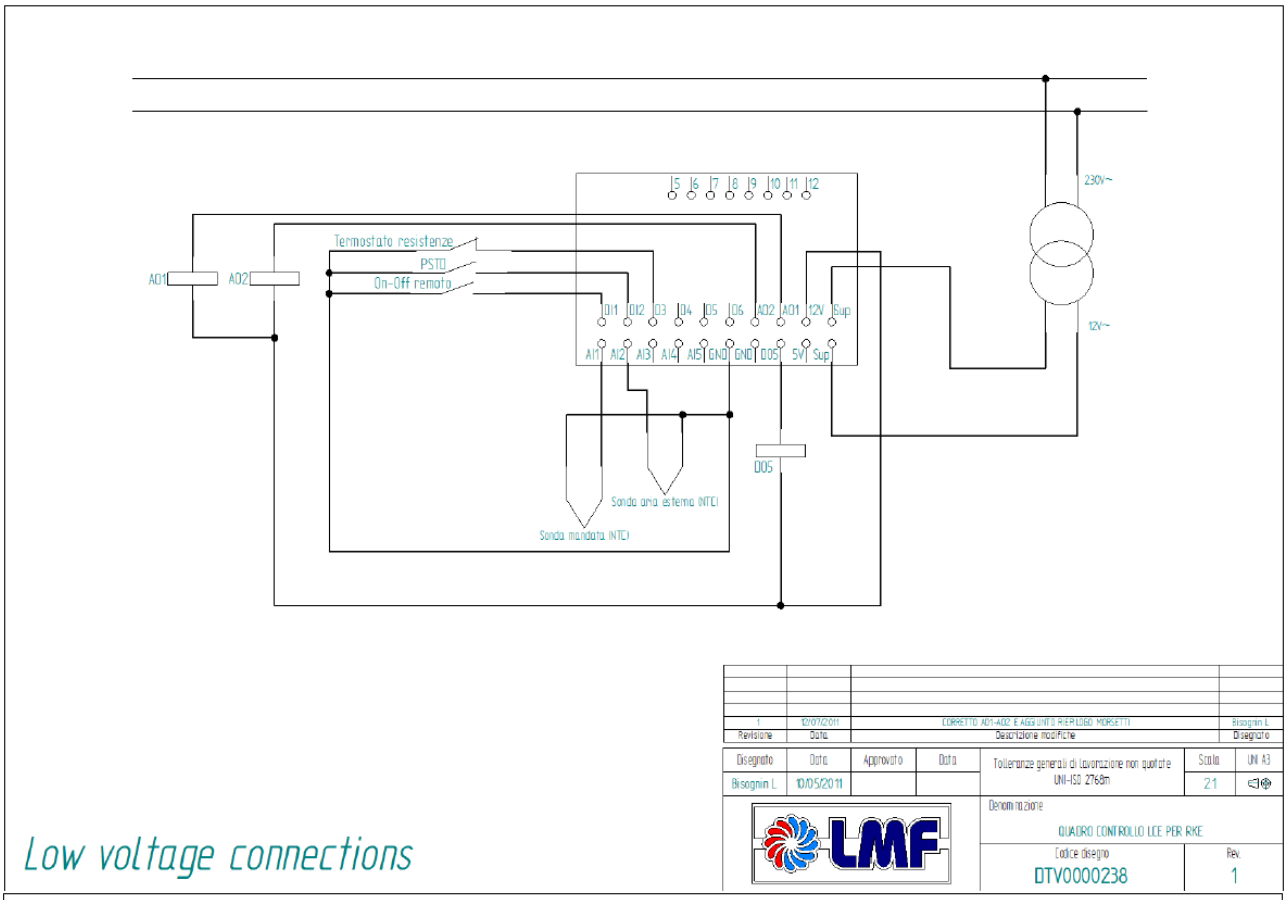
Menu Set List

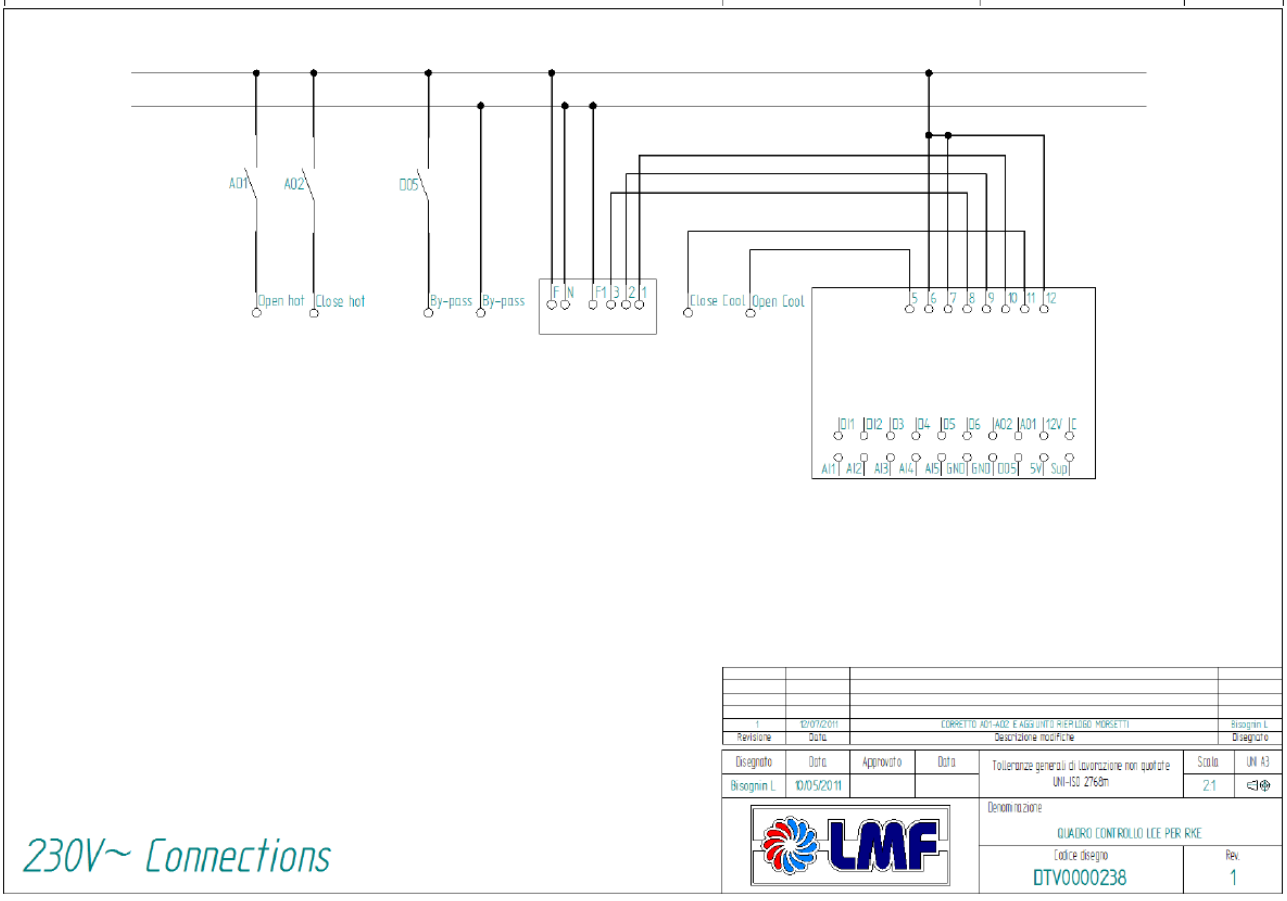
Press button "Set"

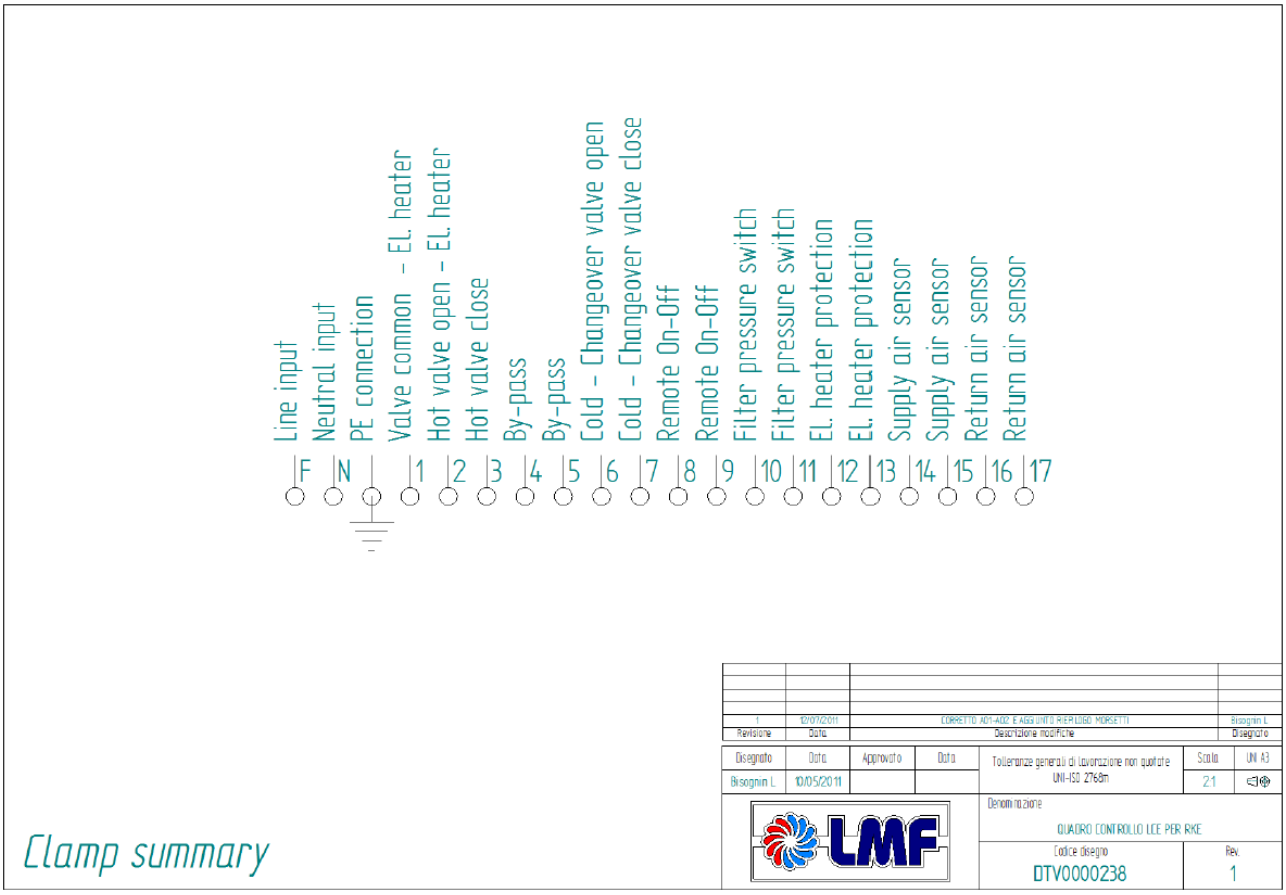
- *Manual summer set-point*
- *Manual winter set-point*
- *Alarm folder:*
  - *Er01: Regulation sensor failure; effects:*
    - *The unit is turned off*
    - *Automatic reset alarm*
  - *Er02: External air sensor failure; effects:*
    - *Free-cooling mode disabled*
    - *Automatic reset alarm*
  - *Er03: Display sensor failure; effects:*
    - *If Rprop=1 the unit is turned off*
    - *If Rprop=0 alarm not shown*
  - *Er04: Dirty filter alarm; effect*
    - *None*
  - *Er05: Electric heater over-temperature; effects:*
    - *Electric heater disabled*
    - *Fan activated*

Wiring diagram

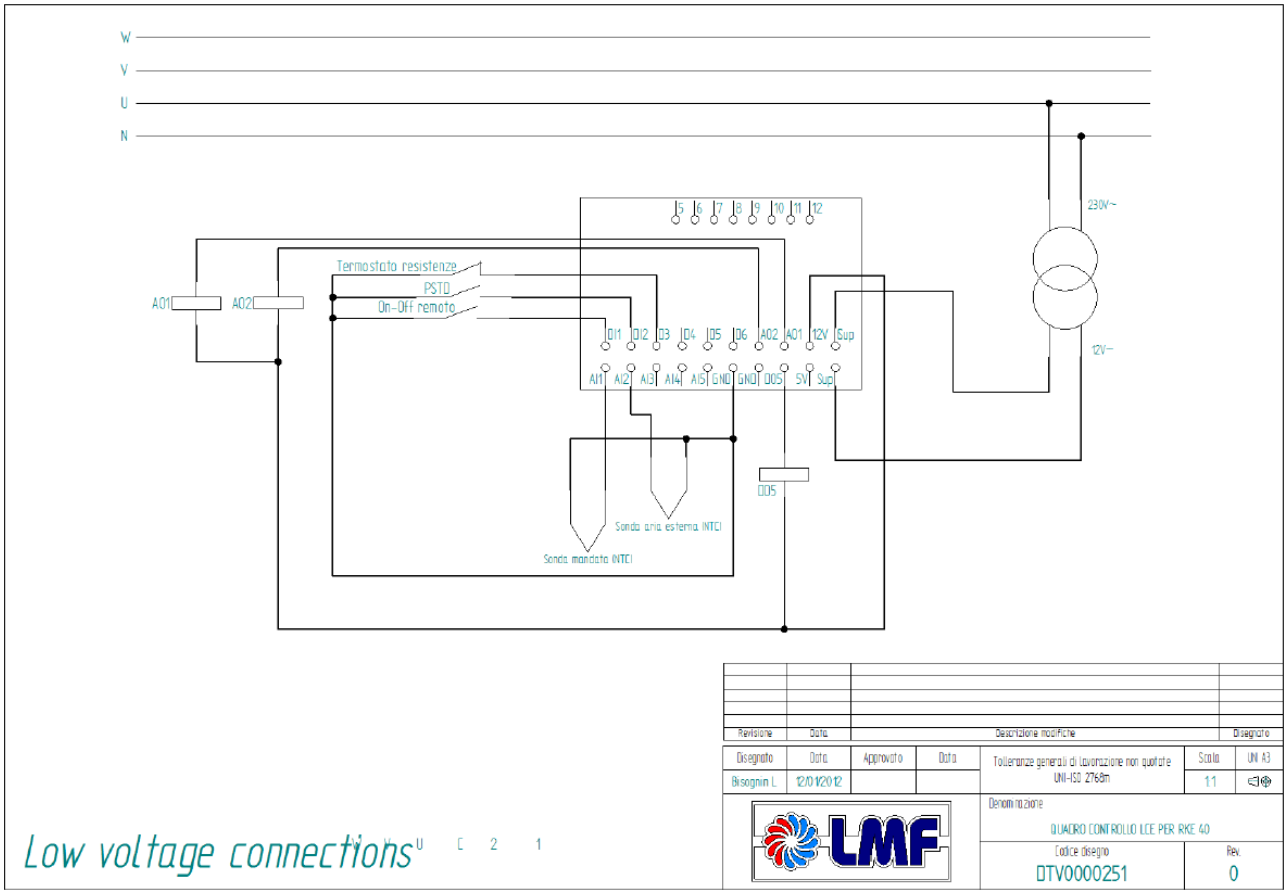
For model RKE 03-30

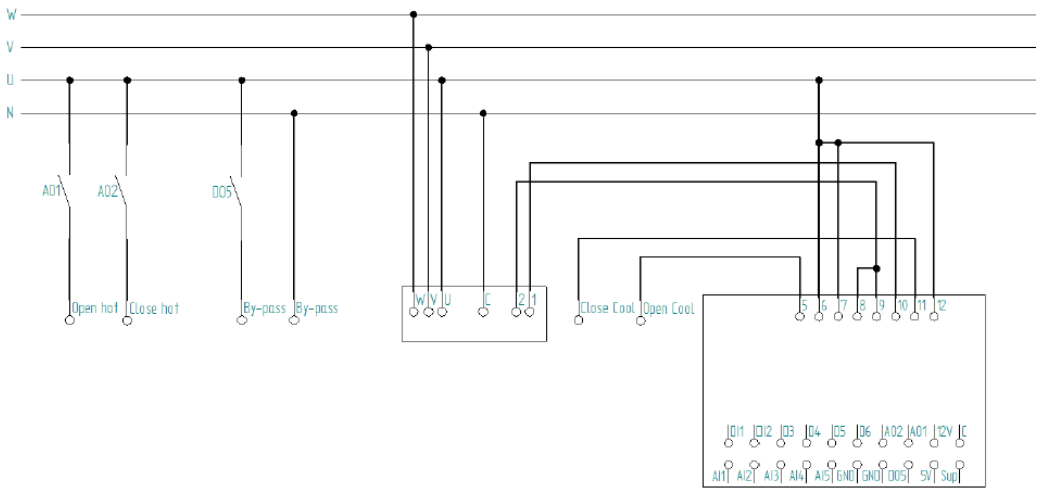






For model RKE 40





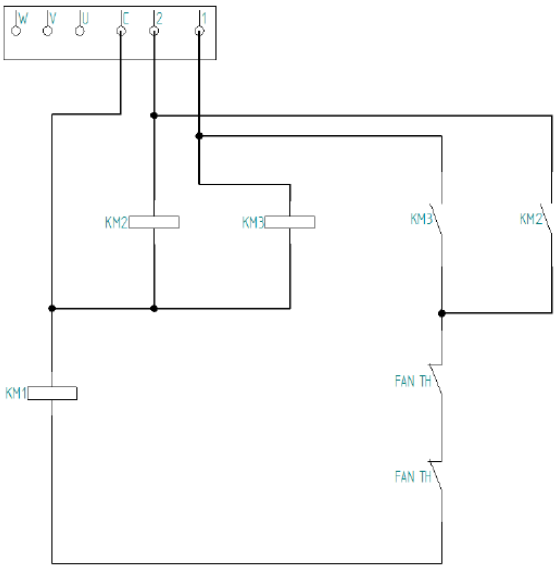
Revisione	Data	Descrizione modifiche	Disegnato

Disegnato	Data	Approvato	Data	Tolleranze generali di lavorazione non quotate UNI-ISO 2768m	Scala	UNI A3
Bisognin L.	12/01/2012				1:1	

Denominazione: QUADRO CONTROLLO LCE PER RKE 40

Codice disegno	Rev.
DTV0000251	0

230 - 400V~ Connections



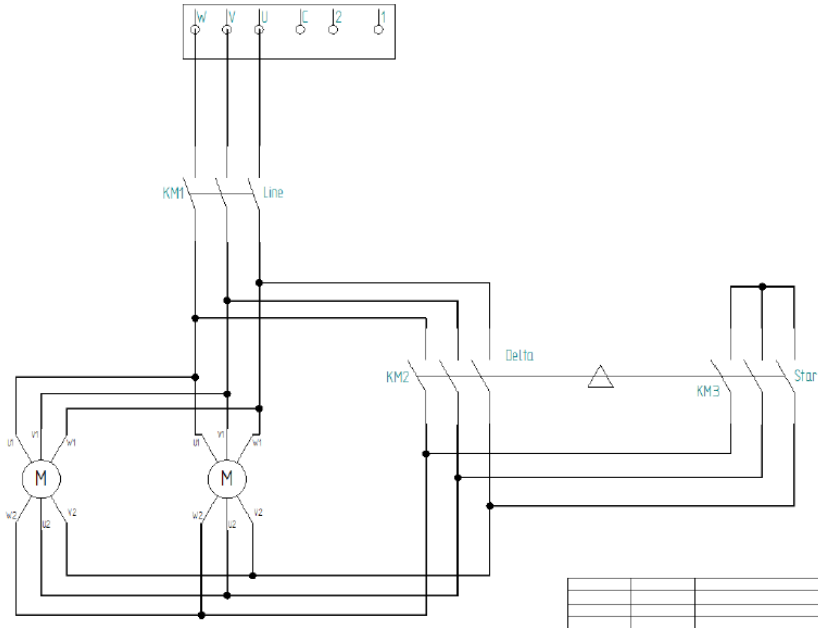
Revisione	Data	Descrizione modifiche	Disegnato

Disegnato	Data	Approvato	Data	Tolleranze generali di lavorazione non quotate UNI-ISO 2768m	Scala	UNI A3
Bisognin L.	12/01/2012				1:1	

Denominazione: QUADRO CONTROLLO LCE PER RKE 40

Codice disegno	Rev.
DTV0000251	0

Fan low power connection



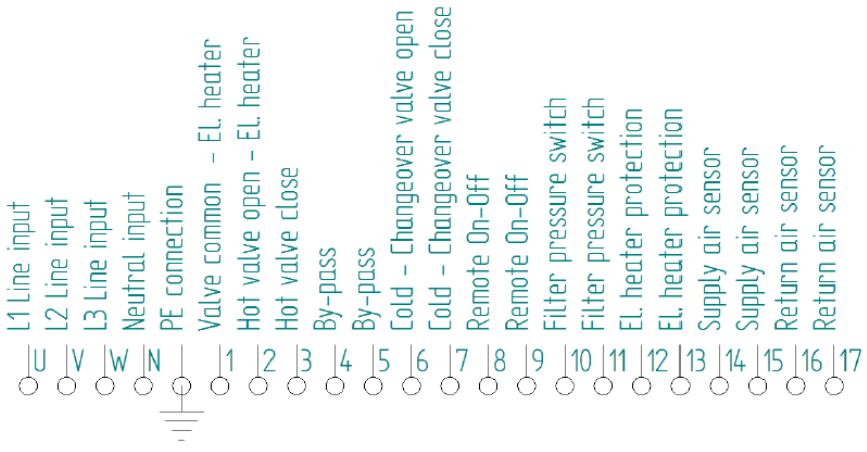
Revisione	Data	Descrizione modifiche	Disegnato

Disegnato	Data	Approvato	Data	Tolleranze generali di lavorazione non quotate UNI-ISO 2768m	Scala	UNI A3
Bisognin L.	12/01/2012				1:1	

Denominazione: QUADRO CONTROLLO LCE PER RKE 40

Codice disegno: DTV0000251 — Rev.: 0

Fan power connection



Revisione	Data	Descrizione modifiche	Disegnato

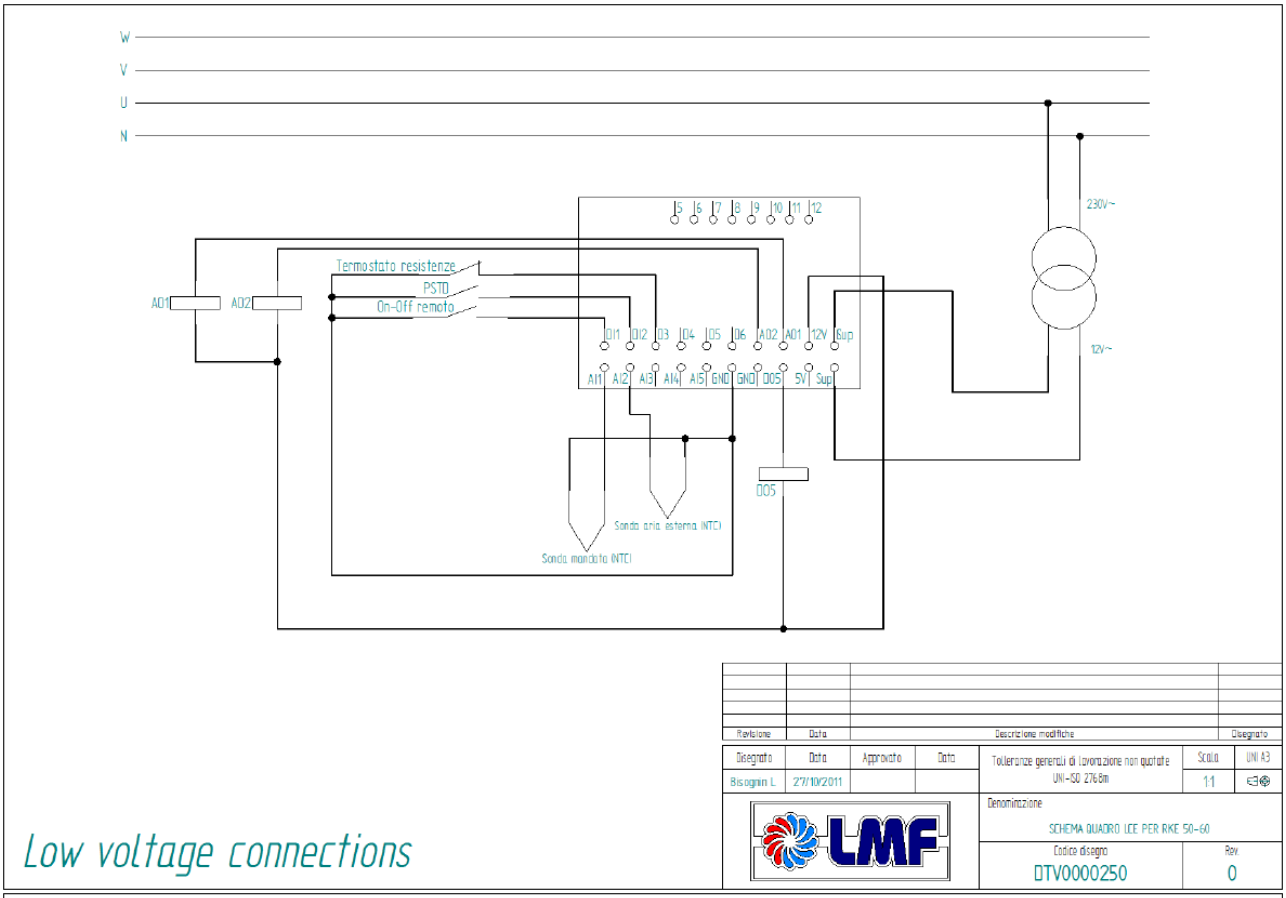
Disegnato	Data	Approvato	Data	Tolleranze generali di lavorazione non quotate UNI-ISO 2768m	Scala	UNI A3
Bisognin L.	12/01/2012				1:1	

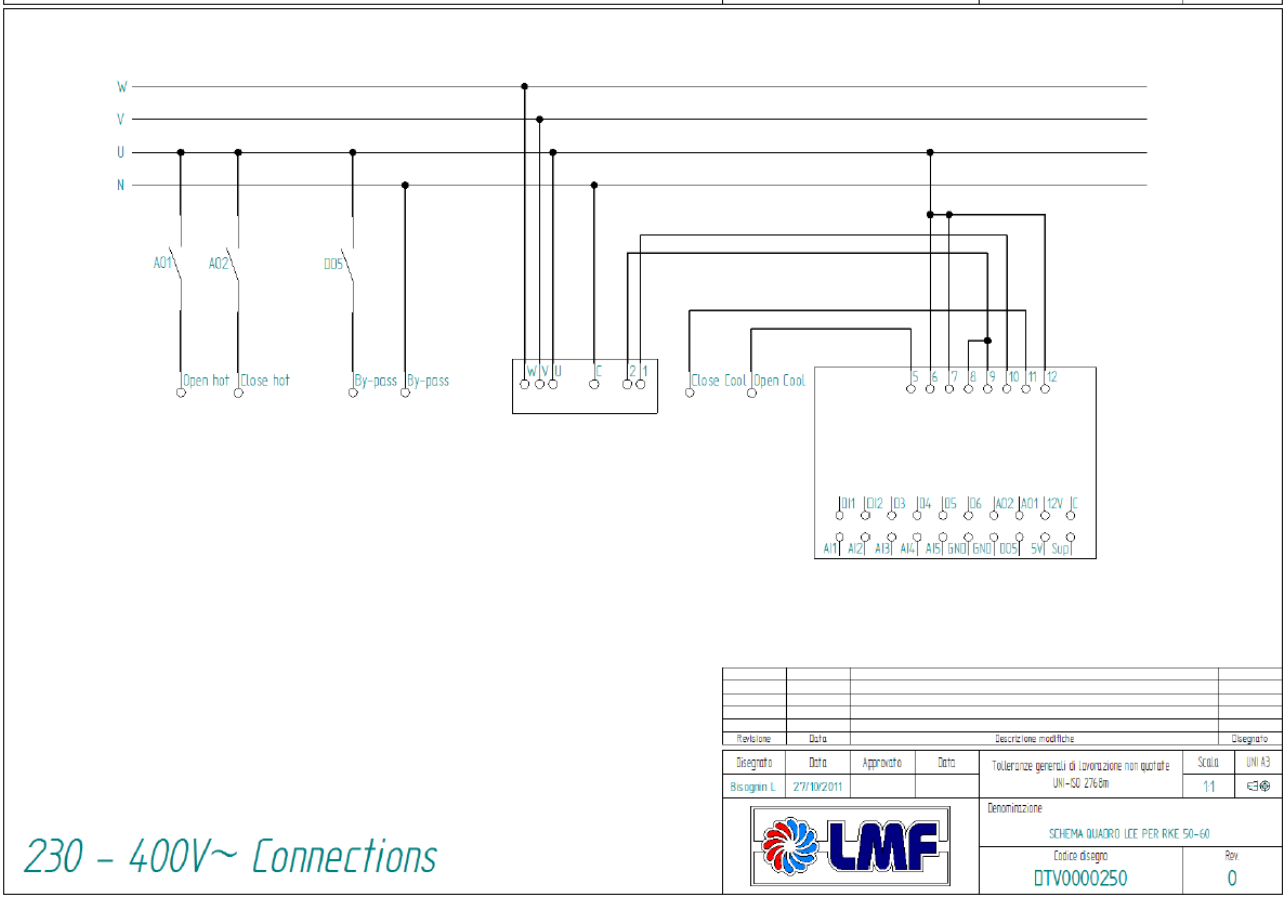
Denominazione: QUADRO CONTROLLO LCE PER RKE 40

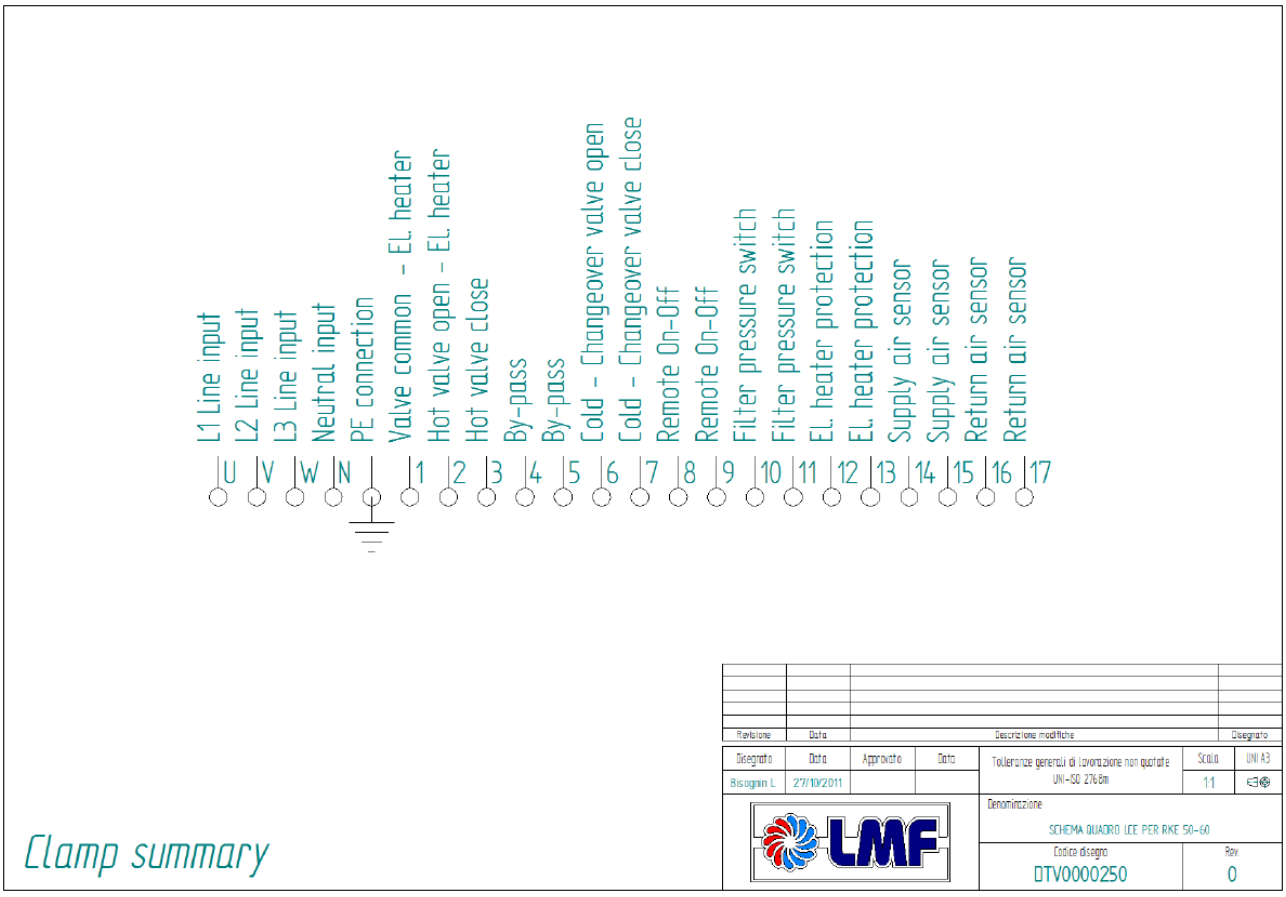
Codice disegno: DTV0000251 — Rev.: 0

Clamp summary

For model RKE 50-60






L1 Line input
L2 Line input
L3 Line input
Neutral input
PE connection
Valve common - EL heater
Hot valve open - EL heater
Hot valve close
By-pass
By-pass
Cold - Changeover valve open
Cold - Changeover valve close
Remote On-Off
Remote On-Off
Filter pressure switch
Filter pressure switch
EL heater protection
EL heater protection
Supply air sensor
Supply air sensor
Return air sensor
Return air sensor
U
V
W
N
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
Clamp summary
Revisione
Data
Descrizione modifiche
Disegnato
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Approvato
Data
Bisognin L.
27/10/2011
Tolleranze generali di lavorazione non quotate
UNI-ISO 2768m
Scala
1:1
UNI A3
Denominazione
SCHEMA QUADRO LCE PER RKE 50-60
Codice disegno
DTV0000250
Rev.
0