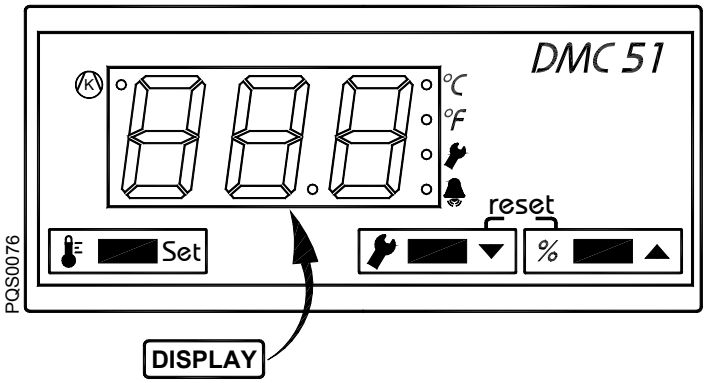
7.12 Electronic instrument DMC51



○ °C	Led - temperature in °C
○ °F	Led - temperature in °F
○ Ⓚ	Led - compressor ON
○ 🔔	Led – Alarm
○ 🔧	Led - service warning
Set	Button – access configuration menu / Discharge temp.
🔧 ▼	Button – decrease / service
% ▲	Button – increase / % energy saved

The DMC51 controls the alarms and the settings of the dryer operations.

7.12.1 How to switch on the dryer

Power the dryer and switch it on using the ON-OFF switch (pos. 1 paragraph 7.1).

7.12.2 How to switch off the dryer

Switch it off using the ON-OFF switch (pos. 1 paragraph 7.1).

7.12.3 How to display the operating parameters

During normal operation, the display shows the dew point temperature (in °C or °F).

Led ○Ⓚ shows that the compressor is ON.

Press the Set button and keep it pressed to display the compressor discharge temperature (probe T2 if installed).

Press the 🔧 ▼ button and keep it pressed to display the hours remaining until the next maintenance.

Press the Set + 🔧 ▼ buttons simultaneously and keep them pressed to display the total number of operating hours of the dryer (ie when dryer is powered).

Press the % ▲ button and keep it pressed to display the % of energy saved.

Note: The temperatures are indicated in °C or °F (LED ○ °C or ○ °F is on).
The total operating hours and the hours until the next maintenance are indicated in the field 0...999 hours, and in thousand hours from 1.0 hours onwards (example: when the display shows 35, this means 35 hours and when the display shows 3.5, this means 3,500 hours).
The % of energy saved is calculated considering the running hours of the compressor against the operating hours of the dryer (example: during 10 hours of powered dryer, compressor has ran for 4 hours, display shows 60% of energy saved).

7.12.4 How a service warning is displayed

A service warning is an exceptional event and requires the attention of the operator/service technician. The dryer will not be stopped.

When a service warning is active, the Led flashes.

When a service warning is no longer active but not reset yet (so it has been stored) Led is continuously on.
In both cases the display shows the dew point temperature and the service warnings which are active or which are no longer active but not yet reset.

Service warnings are NOT automatically reset.

To **RESET** the service warning, the Led must be continuously on (not flashing), keep pressed simultaneously Set + buttons for three seconds. Only the stored service warning will be reset.

Service warnings which are still active continue to be indicated by the Led flashing.

NOTE: the operator/service technician must check the dryer and eliminate the problem that caused the service warning.

Service warning	Description
HdP	HdP – High dew point: dew point too high, higher than the adjusted HdS value
LdP	LdP – Low dew point: dew point too low Setting T1< -1°C (30°F) delay five minutes / reset T1> -0.5°C (31°F)
SrU	SrV - Service: maintenance service time expired SrV

7.12.5 How an alarm is displayed

An alarm is an exceptional event which, to avert damage from to the machine and the operator, always leads to the dryer stop.

When an alarm is active, the LED flashes.

When an alarm is no longer active but not reset yet (so it has been stored) Led is continuously on (in any case, the dryer remains OFF).
In both cases the display shows oFF and the alarms which are active or which are no longer active but not yet reset.

Alarms are NOT automatically reset.

To **RESET** the alarm, the Led must be continuously on (not flashing), keep pressed simultaneously Set + buttons for three seconds. Only the stored alarm will be reset. Alarms which are still active continue to be indicated by the Led flashing.

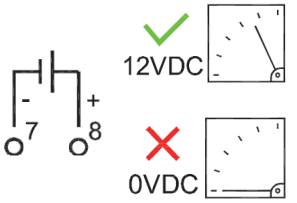
The dryer will start automatically subsequent to the reset of the alarms.

NOTE: the operator/service technician must check the dryer and eliminate the problem that caused the alarm.

Alarm	Description
LP	LP – Low pressure: the refrigerant low-pressure switch LPS has tripped.
Hdt	Hdt – High outlet temperature: compressor outlet temperature outside the safety limit Setting T2> 110°C (230°F) delay one minute / reset T2< 90°C (194°F)
ICE	ICE - ICE / Icing: Temperature in the exchanger (probe T1) is too low and leads to icing of the condensate. Setting T1< -2°C (28°F) delay one minute / reset T1> 0°C (32°F)
toC	toC – Too many Cycles : compressor has been cycled On/OFF unusually too often (stopped more than 5 times before reaching its minimum ON time)
PF 1	PF1 – Probe 1 failure: failure probe T1
PF2	PF2 – Probe 2 failure: failure probe T2

7.12.6 Operation of the service warning / alarm signal

The DMC 51 is equipped with a 12Vdc signal (max 15 mA) to indicate service warning or alarm conditions.



Dryer is switched on, no service warning and no alarm (active and not yet reset) are indicated.

Dryer is off or a service warning or an alarm (active and not yet reset) is indicated.

7.12.7 How to change the operating parameters – SETUP menu

The setup menu can be used to change the dryer's operating parameters.

Only qualified personnel must be allowed to access to the setup menu. The manufacturer is not responsible for malfunctioning or failure due to modification to the operating parameters.

With dryer ON simultaneously press buttons Set + % for at least 5 seconds to enter the setup menu.

Access to the menu is confirmed by message HdS on the display (first parameter of menu).

Keep Set pressed to display the value of the selected parameter and use arrows and % to change the value. Release the button Set to confirm the value and skip to following parameter.

Press + % to exit setup menu (if no button is pressed after 30 seconds the menu is exited automatically).

ID	Description	Limits	Resolution	Standard setup
HdS	HdS - High DewPoint Setting : service warning threshold for a high DewPoint (the service warning disappears when the temperature drop 0.5°C / 1°F below set point)	0.0…25.0 °C or 32 … 77 °F	0.5 °C or 1 °F	20 or 68
Hdd	Hdd - High DewPoint Delay : high DewPoint service warning enable delay	00 … 20 minutes	1 min	15
SrV	SrV - Service Setting : setting of service warning timer. 0.0 = service warning timer disabled.	0.0 … 9.0 (x 1000) hours	0.1 (x1000) hours	8.0
SCL	SCL - Scale: display scale of temperatures.	°C … °F	-	°C or °F
ESS	ESS – Energy Saving Set: selection if dryer run in energy saving cycle. YES = Energy saving mode is active (cycling mode). nO = Energy saving mode is not active (Hot Gas by-pass sytem)	YES…nO	-	YES