7.13   Electronic instrument DMC34

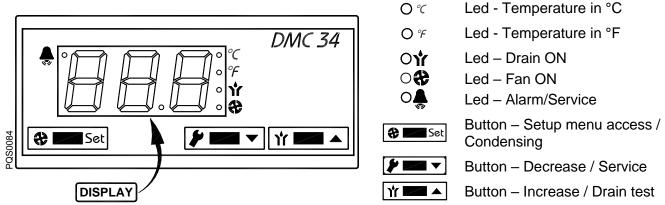|	
○ °C	Led - Temperature in °C
○ °F	Led - Temperature in °F
○ ⵌ	Led – Drain ON
○ ✿	Led – Fan ON
○ 🔔	Led – Alarm/Service
✿ ▬ Set	Button – Setup menu access / Condensing
🔧 ▬ ▼	Button – Decrease / Service
ⵌ ▬ ▲	Button – Increase / Drain test

The DMC34 displays DewPoint temperature, controls the condenser fan activation, handles a service reminder and keep record of the total hours of operation of the dryer.

7.13.1 How to switch on the dryer

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

During normal operation the display shows the DewPoint temperature.

The condensate drain test is always active using the button ⵌ▬▲.

7.13.2 How to switch off the dryer

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

7.13.3 How to display the operating parameters

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

Press and hold ✿▬Set button to display condensing pressure.

Press and hold 🔧▬▼ button to display hours until the next service.

Press and hold ✿▬Set + 🔧▬▼ buttons to display total hours of operation of the dryer (cannot be reset).

NOTE :   with led ○°C on temperatures are in °C and pressure in barg; with led ○°F on temperatures are in °F and pressure in psig.

The total hours of operation and the hours until the next service are shown in the field 0…999 hours and in thousands of hours from 01.0 hours on (example : if the display shows number 35 it means 35 hours; if the display shows number 3.5 it means 3500 hours).

7.13.4 How a service warning / alarm is displayed

A service warning / alarm is an unusual event that must recall the attention of the operators/maintenance technicians. It does not stop the dryer.

When a service warning / alarm is active, the ○🔔 led is flashing.

Service warnings / alarms are automatically reset as soon as the problem is solved and dryer is powered again. Scheduled Service reminder requires manual reset.

NOTE: the operator/maintenance technician must inspect the dryer and verify/solve the problem that generated the service warning.

Service Warning / Alarm	Description
○🔔 flashing + $PF1$ on display	PF1 - Probe 1 Failure : failure temperature probe BT1
○🔔 flashing + $PF2$ on display	PF2 - Probe 2 Failure : failure pressure probe BP2
○🔔 flashing + HdP on display	HdP - High DewPoint: DewPoint too high Set BT1>HdS, delay Hdd / Reset BT1<HdS-1°C (HdS-2°F)
○🔔 flashing + LdP on display	LdP - Low DewPoint : DewPoint too low Set BT1< -1°C (30°F), delay 5 minutes / Reset T1> 1°C (34°F)
○🔔 flashing + SrU on display	SrV - Service : maintenance service time expired SrV

7.13.5 How is controlled the condenser FAN

A pressure probe BP2 is located on the discharge side of the compressor. The condenser fan is activated (ON) when the BP2 pressure is higher than FANon setting (R134a approx. 11 barg/160 psig – R407C approx. 18 barg/260 psig) and led ○⚙ is ON. Condenser fan stops when BP2 pressure is lower than FANoff setting (R134a approx. 8 barg/115 psig – R407C approx. 14 barg/203 psig).

7.13.6 How is controlled the drain solenoid valve

Drain solenoid valve is activated (ON) for ton seconds (standard 2 seconds) every toF minutes (standard 1 minute). Led ○ 🛠 shows that condensate drain solenoid valve is ON.

The condensate drain test is always active using the button 🛠▬▲.

NOTE : if an electronic drainer is installed, DMC34 is set to keep always powered the drain output (ton =ON).

7.13.7 How to reset the service reminder timer

With dryer OFF keep pressed buttons ⊕▬Set + ⚡▬▼, power the dryer and switch it on using the ON-OFF switch (pos.1 paragraph 7.1).

After 5 seconds display shows SrU, release buttons ⊕▬Set + ⚡▬▼, keep pressed button 🛠▬▲ for 5 seconds. Timer has been reset and controller start to operate regularly.

Service reminder timing can be reset at any time, even before the timing has expired

7.13.8 Operation of the failure / alarm dry contact

The DMC34 is equipped with a dry contact (potential free) to display failure and/or alarm conditions.

✔ (23 24)   Dryer powered and no service warning / alarm is active.

✘ (23 24)   Dryer not powered or service warning / alarm is active.

7.13.9 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] + [�Y ▲] for at least 5 seconds to enter the setup menu. Access to the menu is confirmed by message **ton** on the display (first parameter of menu).

Keep [⊕ Set] pressed to display the value of the selected parameter and use arrows [🔧 ▼] and [�Y ▲] to change the value. Release the button [⊕ Set] to confirm the value and skip to following parameter.

Press [🔧 ▼] + [�Y ▲] to exit setup menu (if no button is pressed after 2 minutes the menu is exited automatically).

ID	Description	Limits	Resolution	Standard setup
ton	Ton – drain time ON : time ON condensate drain valve **ON = Electronic drainer installed**	ON-00 … 20 sec	1 sec	2
toF	ToF - drain time OFF : pause time for condensate drain valve	1 … 20 min	1 min	1
HdS	HdS – High DewPoint Setting : Alarm threshold for a high DewPoint (the alarm disappears when the temperature drop 1°C / 2°F below alarm 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 alarm enable delay	01 … 20 minutes	1 min	15
SrV	SrV - Service Setting: setting of service warning timer. 00 = service warning timer disabled.	00.0 … 20.0 (x 1000) hours	0.5 (x1000) hours	08.0
SrC	SrC – Service Contact : configuration of the alarm dry contact for the service warning timer. YES = activate the contact / NO = NOT activate the contact	YES / NO	-	YES
SCL	SCL - Scale: display scale of temperatures and pressure (°C = temperatures in °C and pressure in barg; °F = temperatures in °F and pressure in psig)	°C … °F	-	°C