MICROCHILLER 2

Manual
001721A02

Issue
06.05

Replaces

User guide



Version USER





User Interface

Green 3 digit display (plus sign and decimal point), amber operating signals and red alarm signal.



Meaning of the symbols on the display

:

Symbol	Colour	Meaning		Reference refrigerant	
		with LED on	with LED flashing	circuit	
1,2	Amber	Compressor 1 and/or 2 On	Start demand	1	
3,4	Amber	Compressor 3 and/or 4 On	Start demand	2	
0	Amber	At least one compressor on		1 and/or 2	
	Amber	Pump/air outlet fan on			
8	Amber	Condenser fan on			
*** ***	Amber	Defrost active	Defrost demand	1 and/or 2	
	Amber	Heater on			
•	Red	Alarm active			
券	Amber	Heat pump mode (P6=0)		1 and 2	
×	Amber	Chiller mode (P6=0)			

Keys and functions associated with the buttons

Key	Button Unit status	Button press mode		
Prg mute	Loading default values	Press at power on		
	Go up a sub-group inside the programming area, until exiting (saving changes to E2PROM)	Press once		
	In the event of alarms, mute the buzzer (if present) and deactivate the alarm relay	Press once		
Sel	Access the direct parameters	Press for 5 s		
	Select item inside the programming area and display value of direct parameters / confirm the changes to the parameter	Press once		
Prg mute + Sel	Program parameters after entering password	Press for 5 s		
永	Select top item inside the programming area	Press once or press and hold		
	Increase value	Press once or press and hold		
	Switch from standby to chiller mode (P6=0) and vice-versa	Press for 5 s		
*	Select bottom item inside the programming area	Press once or press and hold		
	Decrease value	Press for 5 s		
	Switch from standby to heat pump mode (P6=0) and vice-versa	Press for 5 s		
\$* ⁺ ₩	Manual alarm reset	Press for 5 s		
	Immediately reset the hour counter (inside the programming area)	Press for 5 s		
<u>Sel</u> + 余	Force manual defrost on both circuits	Press for 5 s		

Parameters table

The parameters are divided into 4 different types, according to their level of access by the user (password) and their function.

ATTENTION:



The calibration parameters are set in the factory and there is no need to modify them. If it proves necessary to alter settings, contact the technical assistance of BLUE SERVICE. The warranty will be immediately terminated if the calibration parameters are arbitrarily modified.



Display Indication	Parameter description	Display Indication	Parameter description			
b01	Value read by probe B1	c10	Compressor 1 hour meter			
b02	Value read by probe B2	c11	Compressor 2 hour meter			
b03	Value read by probe B3	c12	Compressor 3 hour meter			
b04	Value read by probe B4 bar	c13	Compressor 4 hour meter			
b05	Value read by probe B5	c15	Evaporator pump/fan 1 hour meter			
b06	Value read by probe B6	c16	Evaporator pump/fan 2 hour meter			
b07	Value read by probe B7	r01	Cooling set point			
b08	Value read by probe B8 bar	r02	Cooling differential			
b09	Driver 1 evaporator temperature	r03	Heating set point			
b10	Driver 1 evaporator pressure	r04	Heating differential			
b11	Driver 1 superheating	r21	Second cooling set point from external contact			
b12	Driver 1 saturation temperature	r22	Second heating set point from external contact			
b13	Driver 1 valve position	H06	Cooling/Heating digital input			
b14	Driver 2 evaporator temperature	H07	ON/OFF digital input			
b15	Driver 2 evaporator pressure	H96	Software version Driver 2			
b16	Driver 2 superheating	H97	Software version Driver 1			
b17	Driver 2 saturation temperature	H98	Expansion software version			
b18	Driver 2 valve position	H99	Software			
b19	Temp. probe at the outlet of the external coil c1					
b20	Temp. probe at the outlet of the external coil c12					

The following parameters have direct access and can be displayed and modified by the user:

Remote ON-OFF Enabling

The potential free contact for "**remote ON-OFF** " must be connected to the terminals shown on the wiring diagram with "**IE**" or "**IE1**" and on the control the input must be enabled.

Procedure to enable the input on the control:



Enabling "ON-OFF remote" it is not possible to change the operating mode of unit if the digital input is open.

Remote SUMMER-WINTER Enabling

The potential free contact for "**remote SUMMER-WINTER**" must be connected to the terminals shown on the wiring diagram with "**E/I**" or "**IE2**" and on the control the input must be enabled.

Procedure to enable the input on the control::



Enabling "**remote SUMMER-WINTER**" it is not possible to change the operating mode of unit if the digital input is open.

Common alarm contacts

The common alarm contacts are indicated in the wiring diagram with the terminals "**100-101**" or "**90-91**" and are normally open contacts which changes the status when any alarm occurs in the unit.

Alarms and displays

When an alarm occurs, the control acts as follows:

enables the buzzer (if available) enables the alarm relay the temperature flashes displays alternatively the alarm code and the temperature

Alarm	Alarm type	Compressor	Pump	Fan	Heater	Valve	Alarm	Warning
HP1	High pressure	OFF Compressors circuit 1		ON x 60"			ON	
HP2	High pressure	OFF Compressors circuit 2		ON x 60"			ON	
LP1	Low pressure	OFF Compressors circuit 1		OFF			ON	
LP2	Low pressure	OFF Compressors circuit 2		OFF			ON	
TP	General overload	OFF	OFF	OFF			ON	
tC1	Circuit 1overload	OFF Compressors circuit 1		OFF			ON	
tC2	Circuit 2 overload	OFF Compressors circuit 2		OFF			ON	
FL	Flow switch	OFF	OFF	OFF			ON	
E1	Probe B1	OFF	OFF	OFF	OFF		ON	
E2	Probe B2	OFF	OFF	OFF	OFF		ON	
E3	Probe B3	OFF	OFF	OFF	OFF		ON	
E4	Probe B4	OFF	OFF	OFF	OFF		ON	
E5	Probe B5	OFF	OFF	OFF	OFF		ON	
E6	Probe B6	OFF	OFF	OFF	OFF		ON	
E7	Probe B7	OFF	OFF	OFF	OFF		ON	
E8	Probe B8	OFF	OFF	OFF	OFF		ON	
A1	Frost circuit 1			OFF	ON		ON	
A2	Frost circuit 2			OFF	ON		ON	

ATTENTION:

If alarms other than those described above are displayed, contact the service organisation.



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Technical data may change without notice 001721A02 - Issue 06.05 / Supersedes --.--

