Notice

03/05/2021

Carel CSE Central and Southern Europe

µChiller

News and updates

Dear Colleagues,

This is to inform you of some news regarding the uChiller family products. Specifically:

- Availability of a new adapter kit to support the replacement of mCH2 and mCH2 SE.

- New firmware release available starting from April 2021.

1. New connector part numbers available

A new adapter kit is now available for the uChiller family. This simplifies the replacement of the old mCH2 SE and mCH2 devices with the new product.

Using this accessory, installers can replace these two products in just a few minutes, utilising the existing wiring in the unit's electrical panel. The new part number is:

Code	Description
UCHCONPMC0	ADAPTER KIT FOR MCH2

The adapter kit documentation is currently in working progress. It will be available by the end of May.

2.   New product release

We are also pleased to inform you that the new uChiller revision for AHUs is now available (release 3.1.1).
The main changes introduced in this new version are:

• Automatic set point changeover.
• Heater management has been introduced to support control in air/water and water/water applications.

2.1.   New functions

NEW

Automatic set point change-Over
Questa funzione permette il cambio di stato estate/inverno in modo automatico in funzione del sensore selezionato.
Con change over abilitato non sono presi in considerazione l'eventuale ingresso estate inverno.
La funzione è disponibile solo per il modello Legacy.
Di seguito la lista dei parametri introdotti per gestire questa nuova funzione.

Code	Description	Visibility	Default
U083	Type of Changeover 0:Disabled 1:Outside air temperature 2:Return air temperature	App only	0:disable
U084	Changeover threshold (Type 1)	App only	23.0°C
U085	Changeover dead zone	App only	2.0°C
U086	Minimum changeover set point limit (°C)	App only	0°C
U087	Maximum changeover set point limit (°C)	App only	80°C
U035	Changeover delay	App only	15 min
SEtU	Automatic set point (Type 2 and Type 3)	Display and app	23.0°C

NEW

Auxiliary electric heaters
This version introduces management of supplementary heaters to support control for air/water and water/water units in heating mode.
The function was previously only available for air/air units.

Product manual
The productmanual is currently in working progress. It will be available by the end of May.

2.2.   Improvements

- Management of analogue and digital outputs when not configured.
  Some uChiller functions from this version are disabled if the corresponding sensor is not configured.
- Applica Mobile main dashboard changed.
  From this version, the currently-used control temperature is displayed at the top right. Previously, the return water temperature was always displayed.
- Various improvements to frost protection management. For more details, see the manual.
- Changes to the following parameters:
  - a C012 Minimum compressor On time (s)
  - b C013 Minimum compressor Off time (s)
  - c C014 Minimum time between consecutive compressor starts (s)

  From this version, the minimum value has been set to zero.
- Alarms A29, A62, A83 - A87 are now visible from Applica and Applica Desktop.
- Applica mobile/tablet and PGDx have been updated to support the new features.

2.3.   Bug fixes

- Configuration problem fixed on the second user pump.
  Now two pumps can be configured correctly on circuit 1.
- Problem solved on P/N UCHBE00001150.
  From this version, the compressor in the second circuit starts correctly.
- Problem fixed with the configuration of analogue inputs S4/S5 in the 2nd circuit.
  Previously, these inputs could only be configured as pressure.
- Problem fixed with the hour counter for the pumps, compressors and fans, which in the previous versions did not display the correct information.
- Malfunction fixed with the supply fan on air/air units (Legacy model) in heating mode. Previously, if the unit was switched off before the minimum compressor ON time, the fan stopped immediately while the compressor continued running until the end of the set time.
- The alarms A08 and A10 in the Air / Air units (Legacy model), respectively the main fan overload switch and the main fan flow switch, are now manually reset. Previously they were handled as signal-only alarms.
- Valve pre-positioning problem fixed in manual mode.
  In previous versions, the valve completed pre-positioning correctly only if the initial opening percentage was 100%.
- Solved a problem on the 16-bit supervision database (Hd07 = 1)

If using the functions described above, it is recommended to upgrade to version 3.1.4.

Below is the COMPLETE and UPDATED list of µChiller part numbers and the new revision number on the label of uChiller products starting from April 2021.

	Part number	Description	Revision
Panel models	UCHBP00000190	uCHILLER, PANEL, NFC	1.112
	UCHBP00000200	uCHILLER, PANEL, NFC AND BTE	1.112
	UCHBP00N00191	uCHILLER, PANEL NEUTRAL , NFC MULTIPLE PACKAGE (20 PCS)	1.112
	UCHBP00N00201	uCHILLER, PANEL NEUTRAL , NFC AND BTE MULTIPLE PACKAGE (20 PCS)	1.112
Legacy models	UCHBP000X0190	UCHILLER, PANEL, NFC, MCH2 COMPATIBLE	1.112
	UCHBP000X0200	uCHILLER, PANEL, NFC AND BTE, MCH2 COMPATIBLE	1.112
	UCHBD000X1230	UCHILLER, DIN MOUNTING, MCH2 COMPATIBLE	1.012
DIN rail models	UCHBD00001230	uCHILLER, DIN MOUNTING	1.012
	UCHBDE0001150	uCHILLER ENHANCED, DIN MOUNTING	1.012
	UCHBD00N01231	uCHILLER, DIN MOUNTING NEUTRAL, MULTIPLE PACKAGE (10 PCS)	1.012
	UCHBDE0N01151	uCHILLER ENHANCED, DIN MOUNTING NEUTRAL, MULTIPLE PACKAGE (10 PCS)	1.012
	UCHBDH0001150	uCHILLER HE, DIN MOUNTING	1.012
	UCHBDH0N01151	uCHILLER HE, DIN MOUNTING NEUTRAL, MULTIPLE PACKAGE	1.012
Expansion for second circuit	UCHBE00001230	uCHILLER IO EXP FOR SECOND CIRCUIT	1.012
	UCHBE00001150	uCHILLER ENHANCED IO EXP FOR SECOND CIRCUIT	1.012
	UCHBE00N01231	uCHILLER IO EXP FOR SECOND CIRCUIT NEUTRAL, MULTIPLE PACKAGE (10 PCS)	1.012
	UCHBE00N01151	uCHILLER ENHANCED IO EXP FOR SECOND CIRCUIT NEUTRAL, MULTIPLE PACKAGE (10 PCS)	1.012

Following the new functions implemented, the new versions of pGDX HMI and models for connecting µChiller to Carel local and remote supervisory systems are also available in KSA. In particular:

Prodotto	File name
pGDX HMI application	UpdatePackagePGDx_STSTD_HECH_BLDC_v3_1_4.zip
boss family model	HECH_3_1_4.xml
CloudGate model	HECH_3_1_4_16bit.xls

Please do not hesitate to contact me for any further information.
Best regards

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