TECHNICAL DOCUMENTATION

FEATURES

- Up to four blocks to control 2-pipe fan coil units.
- Manual output operation with push button and LED status indicator.
- 20 logic functions.
- · Output timing.
- Total data saving on KNX bus failure.
- Size 90 x 60 x 140 mm (8 DIN units).
- DIN rail mounting (EN 50022), with fixing clamp.
- Integrated KNX BCU.
- Possibility of connecting different phases in adjacent outputs.
- Conformity with the CE directives (CE-mark on the right side).

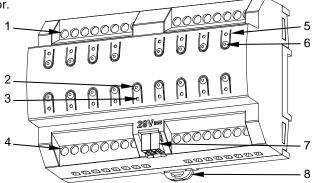


Figure 1: MAXinBOX FANCOIL 4CH2P v2

Upper outputs	Programming/Test button	Programming/Test LED	Lower outputs
5. Output status LED indicator	Output control button	7. KNX connector	8. Fixing clamp

Programming/Test button: short press to set programming mode. If this button is held while plugging the device into the KNX bus, it enters the safe mode. If this button is held for more than 3 seconds, the device enters the test mode.

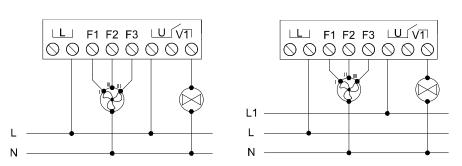
Programming/Test LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. The manual mode is indicated by the green color. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it starts a blue blinking sequence.

CONCEPT Type of device						
Type of device		CONCEPT		DESCRIPTION		
Type of device		Electric operation control device	Electric operation control device			
Voltage (typical)		29VDC SELV				
	Voltage range		2131VDC	2131VDC		
KNX supply	Maximum consumption	Voltage	mA	mW		
1 1 7		29VDC (typical)	4.05	117.45		
		24VDC ¹	10	240		
	Connection type		Typical TP1 bus connector for	Typical TP1 bus connector for 0.80mm Ø rigid cable		
External power supply		Not required				
Operation temperature			0°C +55°C			
Storage temperature		-20°C +55°C	-20°C +55°C			
Operation humidity		5 95% (No condens.)	5 95% (No condens.)			
Storage humidity		5 95% (No condens.)				
Complementary characteristics		Class B	Class B			
Protection class / Overvoltage category		II / III (4000V)				
Operation type		Continuous operation	Continuous operation			
Device action type		Type 1	Type 1			
Electrical stress period		Long				
Degree of protection / Pollution degree		IP20 / 2 (clean environment)				
Installation			Independent device to be mounted inside electrical panels with DIN rail (EN			
		50022)				
Minimum clearances		Not required				
Response on KNX bus failure		Data saving according to parameterization				
Response on KNX bus restart		Data recovery according to parameterization				
Operation indicator			Programming LED indicates programming mode (red) and test mode (green). Output status LED indicators reflect current output state.			
Weight		451g				
PCB CTI index		175V				
Housing material / Ball pressure test temperature			PC FR V0 halogen free / 75°C	PC FR V0 halogen free / 75°C (housing) - 125°C (connectors)		

¹ Maximum consumption in the worst case scenario (KNX Fan-In model)

OUTPUTS SPECIFICATIONS AND CONNECTIONS				
CONCEPT		DESCRIPTION		
Number of fancoil blocks		4		
Output type / Disconnection type		Potential-free outputs through bistable relays / Micro-disconnection		
Rated current per output		AC 8(4)A @ 250VAC (2000VA) DC 5A @ 30VDC (150W)		
Maximum load per output	Resistive	2000W		
	Inductive	1000VA		
Different phases connection		Possibility of connecting different phases. It is not allowed to connect power supplies of different order, SELV with NO SELV, in the same block		
Maximum current per block		32A		
Short-circuit protection		NO		
Overload protection		NO		
Connection method		Screw terminal block		
Cable cross-section		1.5-4mm ² (IEC) / 26-10AWG (UL)		
Outputs per common		3/1 (per fan/per valve)		
Maximum response time		15ms		
Mechanical lifetime (min. cycles)		3 000 000		

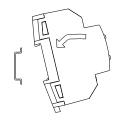
WIRING DIAGRAMS

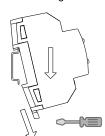


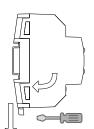
⚠ In order to ensure the expected status of the relays, please check that the device is connected to the KNX bus before energizing the power circuit.

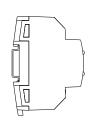
Figure 2: One-valve fancoil wiring example (from left to right): onephase and different phases connection

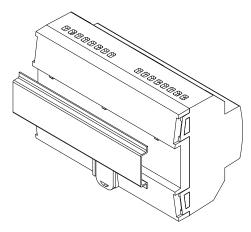




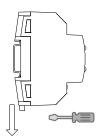


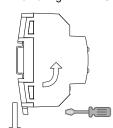






Removing MAXinBOX FANCOIL 4CH2P v2 from DIN rail:







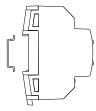


Figure 3: Mounting MAXinBOX FANCOIL 4CH2P v2 on DIN rail

SAFETY INSTRUCTIONS

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- Do not connect the mains voltage nor any other external voltage to any point of the KNX bus; it would represent a risk for the entire KNX system. The facility must have enough insulation between the mains (or auxiliary) voltage and the KNX bus or the wires of other accessories, in case of being installed.
- Once the device is installed (in the panel or box), it must not be accessible from outside.
- Keep the device away from water and do not cover it with clothes, paper or any other material while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at http://zennio.com/weee-regulation.