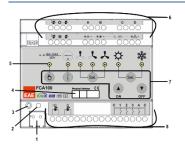
EAE

Device Overview



- 1. KNX Connection
- 2. Ph. Address Programming Button
- 3. Ph. Address Programming LED
- 4. Physical Address Label
- 5. Indicator LEDs
- 6. Triac and 0-10V Outputs
- 7. Selection Buttons
- 8. Temperature and Binary Inputs

Description

EAE KNX Fan Coil Actuator FCA100 is designed to work with 2-pipe or 4-pipe Fan coil systems. The device can be operated manually via push buttons. It can be programmed via ETS4 or above. Fan Coil Actuator has;

- Triac controlled Valve Output
- Relay controlled Fan Output
- 0-10V controlled Valve Output
- 0-10V controlled Fan Output
- Auxiliary Output
- Temperature Input
- Binary Input

Technical Data

P 20	Type of		
Power supply	•	IP 20	EN 60 529
Connections	Safety class	II	EN 61 140
External supply - - Connections - Screw terminals 0,53,31 mm² solid and stranded wire 0,53,31 mm² stranded wire with ferrule - Max tightening torque 0.5 Nm - KNX Bus connect terminal Outputs - Count 11 outputs - Non-floating Yes - Rated Voltage 250 V AC; 50/60 Hz - Rated Current 0.5 A - Switching voltage 250 V AC; 50/60 Hz - Switching current 250 V AC 16A / AC 1 - Switching current 250 V AC 16A / AC 1 - Switching current 250 V AC 16A (200μF) - Amainum switching power 4000 VA - Mechanical life > 1 x 106 - Maximum switching power 4000 VA - Mechanical life > 1 x 106 - Surce/Sink Source Inputs - Number 6 Inputs - Source/Sink Source Inputs - Number 5 Inputs - Current (for binary input) 1 mA - Cable length < 300 m Temp. Input - Sensor Type <th>Power supply</th> <th>- Voltage</th> <th>21V 30V DC, SELV</th>	Power supply	- Voltage	21V 30V DC, SELV
Connections - Screw terminals 0,53,31 mm² solid and stranded wire 0,53,31 mm² stranded wire with ferrule 0,53,31 mm² stranded wire with ferrule 0,53,31 mm² solid and stranded wire with ferrule 0,53,31 mm² solid and stranded wire with ferrule 0.5. Nm Count 11 outputs Non-floating Yes - Rated Voltage 250 V AC; 50/60 Hz - Rated Current 0.5 A - Short-Circuit Protection Yes - Switching current 250 V AC 16A / AC 1 - Switching current 250 V AC, capacitive load 16A (200μF) - Maximum switching power 4000 VA - Mechanical life > 1 x 10 ⁶ - Current Limit 1.4 mA 0-10 V - Signal 010V DC - Source/Sink Source Inputs - Number 6 Inputs Generic Input - Scanning Voltage (for binary input) 5 V pulsed - Cable length < 300 m Temp. Input - Sensor Type NTC Installation - 35mm mounting rail EN 60 715 Cipe (a) and prg. Button → College (b) Annual Button → College (c) Annual Bu		- Current consumption	≤ 10 mA
- Screw terminals - Max tightening torque - Max tightening torque - KNX - Count - KNX - Count - Sun-floating - Non-floating - Rated Voltage - Rated Voltage - Rated Current - Short-Circuit Protection - Switching current 250 V AC - Switching virrent 250 V AC - Switching current 250 V AC - Switching current 250 V AC - Switching to manual mode - Sel. Button- → Switching to manual mode - Fan speed and Heat/Cool change - Switching to manual mode - Fan speed and Heat/Cool change - Switching to manual mode - Sel. Button- → Switching valve 0 N / OFF - Switch Button- → Switching valve 0 N / OFF - Switch Button- → Switching valve 0 N / OFF - Switch Button- → Switching valve Control - Switching to manual mode - Fan speed and Heat/Cool change - Switching valve Control - Switching valve Control - Switching to manual mode - Fan speed and Heat/Cool change - Switching valve 0 N / OFF - Switching to manual mode - Fan speed and Heat/Cool change - Switching valve 0 N / OFF - Switching valve Control - Switching to manual mode - Fan speed and Heat/Cool change - Switching valve 0 N / OFF - Switching va	External supply	-	-
- KNX Bus connect terminal - Count 11 outputs - Non-floating Yes - Rated Voltage 250 V AC; 50/60 Hz - Rated Current 0.5 A - Short-Circuit Protection Yes - Switching voltage 250 V AC; 50/60 Hz - Switching current 250 V AC - Switching power - Machanical life > 1 x 10° - Current Limit 1.4 mA - Signal 010V DC - Source/Sink Source Inputs - Number 6 inputs - Scanning Voltage (for binary input) 1 mA - Cable length < 300 m Temp. Input - Sensor Type NTC Installation - SSmm mounting rail EN 60 715 - LED (red) and prg. Button → Sel. Buttons → Sel. Buttons → Sel. Buttons → Sel. Buttons → Switching to manual mode - Source Switching to manual mode - Source Switching to manual mode - Sel. Buttons →	Connections	- Screw terminals	
Outputs - Count 11 outputs - Non-floating Yes - Rated Voltage 250 V AC; 50/60 Hz - Rated Current 0.5 A - Short-Circuit Protection Yes - Switching current 250 V AC 16A / AC 1 - Switching current 250 V AC, capacitive load 4MO0 VA - Mechanical life > 1 x 10 ⁶ - Current Limit 1.4 mA 0-10 V - Signal 010V DC - Source/Sink Source Inputs - Number 6 Inputs - Scanning Voltage (for binary input) 5 V pulsed - Current (for binary input) 1 mA - Cable length < 300 m Temp. Input - Sensor Type NTC Installation - 35mm mounting rail EN 60 715 Installation - LED (red) and prg. Button → Sel. Buttons → Sel. B		- Max tightening torque	0.5 Nm
Triac - Non-floating		- KNX	Bus connect terminal
Rated Voltage	Outputs	- Count	11 outputs
- Rated Current - Short-Circuit Protection - Switching voltage - Switching current 250 V AC - Switching power - Machanical life - Current Limit - Signal - Sounce Sink - Sounce - Sounce Sink - Suitch Button - Scanning Voltage (for binary input) - Current (for binary inpu	Triac	- Non-floating	Yes
- Rated Current		- Rated Voltage	250 V AC; 50/60 Hz
Switching voltage		- Rated Current	0.5 A
- Switching current 250 V AC - Switching current 250 V AC, capacitive load - Maximum switching power - Mechanical life - Current Limit - Current Limit - Signal - Source/Sink - Source - Number - Scanning Voltage (for binary input) - Current (for binary input) - Cable length - Sensor Type - Cable length - Sensor Type - Sel. Buttons		- Short-Circuit Protection	Yes
Relay	Relay	- Switching voltage	250 V AC; 50/60 Hz
Relay		- Switching current 250 V AC	16A / AC 1
- Mechanical life		_	16Α (200μF)
- Current Limit 1.4 mA - Signal 010V DC - Source/Sink Source Inputs - Number 6 Inputs - Scanning Voltage (for binary input) 2. Current (for binary input) 1 mA - Cable length 300 m Temp. Input - Sensor Type NTC Installation - 35mm mounting rail 5 No 6715 - LED (red) and prg. Button 7 Sel. Button 7 Sel. Button 7 Sel. Button 7 Sel. Button 7 Switching to manual mode 7 Sensor Nore 1 Switching Valve ON / OFF Sel. Button 7 Switch Button 7 Sel. Button 8 Switching Valve ON / OFF Seltons 7 Switching Valve ON / OFF Seltons 7 Switching Valve ON / OFF Seltons 8 Switching Valve ON / OFF Seltons 8 Seltons 8 Seltons 9 Switching Valve ON / OFF Swi		- Maximum switching power	4000 VA
O-10 V Signal Source Source/Sink Source Inputs - Number - Scanning Voltage (for binary input) - Current (for binary input) - Cable length - Cable length - Sensor Type Installation Temp. Input - Sensor Type NTC Installation - Semm mounting rail - LED (red) and prg. Button - Sel. Buttons - Sel. Buttons - Sel. Buttons - Switch Button - Switch But Button - Switch But		- Mechanical life	> 1 x 10 ⁶
Source Source		- Current Limit	1.4 mA
Inputs	0-10 V	- Signal	010V DC
Generic Input - Scanning Voltage (for binary input) - Current (for binary input) - Cable length - Cable length - Cable length - Sensor Type NTC Installation - Sensor Type NTC - Sensor Type NTC - Sensor Type NTC - Sensor Type - Sensor		- Source/Sink	Source
S V pulsed	Inputs	- Number	6 Inputs
- Current (for binary input) 1 mA - Cable length < 300 m Temp. Input - Sensor Type	Consolia lanut	- · ·	5 V pulsed
Temp. Input - Sensor Type NTC Installation - 35mm mounting rail EN 60 715 - LED (red) and prg. Button → For physical address - Manual Button → Sel. Buttons → Sel. Buttons → Switching to manual mode - Sol. Buttons → Switching Valve ON / OFF - Switch Button → Auxiliary Output Control Temp. Range - Ambient -5° C + 45° C - Storage -25° C + 55° C Humidity - max. air humidity 85 % no moisture condensation Dimensions Width W in mm 108 mm Width W in units 6 modules Weight 0,395 kg Box Plastic, polycarbonate, color grey CE In accordance with the EMC guideline and low voltage Application Communications objects Number of addresses(max)	Generic input	- Current (for binary input)	1 mA
Installation - 35mm mounting rail - LED (red) and prg. Button → - Sel. Button → - Sel. Buttons → - Switching to manual mode - Fan speed and Heat/Cool change - Switching Valve ON / OFF Auxiliary Output Control - Storage - 25° C + 45° C - Storage - 25° C + 55° C - Storage - 25° C + 55° C - Storage - Midth W in mm - Midth W in units - M		- Cable length	< 300 m
- LED (red) and prg. Button→ - Manual Button→ - Sel. Buttons- → - Switching to manual mode - Fan speed and Heat/Cool change - Switching Valve ON / OFF - Switching Valve ON / OFF - Switching Valve ON / OFF - Auxiliary Output Control Temp. Range - Ambient - Storage - 25° C + 45° C - Storage - 25° C + 55° C Humidity - max. air humidity - max. air humidity - max. air humidity - Midth W in mm - Width W in units - Weight - O,395 kg - Box - Plastic, polycarbonate, color grey - Plastic, polycarbonate, color grey - Plastic, polycarbonate, color grey - CE - In accordance with the EMC guideline and low voltage - Application - Communications objects - Number of addresses(max)	Temp. Input	- Sensor Type	NTC
Operating elements - Manual Button	Installation	- 35mm mounting rail	EN 60 715
- Storage -25° C +55° C Humidity - max. air humidity 85 % no moisture condensation Dimensions 66 x W x 90mm Width W in mm 108 mm Width W in units 6 modules Weight 0,395 kg Box Plastic, polycarbonate, color grey CE In accordance with the EMC guideline and low voltage Application Communications objects Number of addresses(max)		- Manual Button→ - Sel. Buttons→ - ON / OFF Buttons	Switching to manual mode Fan speed and Heat/Cool change Switching Valve ON / OFF
Humidity - max. air humidity 85 % no moisture condensation Dimensions 66 x W x 90mm Width W in mm 108 mm Width W in units 6 modules Weight 0,395 kg Box Plastic, polycarbonate, color grey CE In accordance with the EMC guideline and low voltage Application Communications objects Number of addresses(max)	Temp. Range	- Ambient	
Dimensions Width W in mm 108 mm Width W in units 6 modules Weight 0,395 kg Box Plastic, polycarbonate, color grey CE In accordance with the EMC guideline and low voltage Application Communications objects Number of addresses(max)		- Storage	
Width W in mm 108 mm Width W in units 6 modules Weight 0,395 kg Box Plastic, polycarbonate, color grey CE In accordance with the EMC guideline and low voltage Application Communications objects Number of addresses(max)		- max. air humidity	
Weight 0,395 kg Box Plastic, polycarbonate, color grey CE In accordance with the EMC guideline and low voltage Application Communications objects Number of addresses(max)	Dimensions		
Weight 0,395 kg Box Plastic, polycarbonate, color grey CE In accordance with the EMC guideline and low voltage Application Communications objects Number of addresses(max)			===
Box Plastic, polycarbonate, color grey CE In accordance with the EMC guideline and low voltage Application Communications objects Number of addresses(max)		Width W in units	6 modules
CE In accordance with the EMC guideline and low voltage Application Communications objects Number of addresses(max)	Weight	0,395 kg	
Application Communications objects Number of addresses(max)	Box	Plastic, polycarbonate, color grey	
	CE	In accordance with the EMC g	uideline and low voltage
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Operation and Display

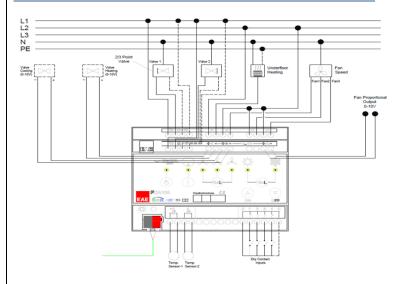
-Programming LED

Red LED lights up after the programming button is pressed.

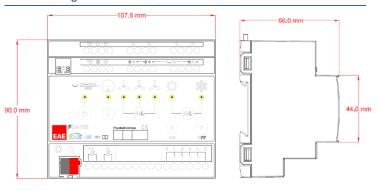
-Indicator LEDs

Yellow LED lights are indicating the manual mode, auxiliary, fan speed and control mode status.

Connection Example



Scale Drawings



Commissioning

Determination of the physical address and setting of parameters are actualized with Engineering Tool Software (ETS4 or higher). ".knxprod" file must be imported to the ETS. Please check website for latest ".knxprod" file.

www.eaetechnology.com

A detailed information about parameter configuration can be found in Product Manual of device.

Installation and commissioning of device may only be implemented by trained electricians. The relevant standards, directives, regulations and instructions must be observed when planning and implementing the electrical installation.

- -When connecting the device make sure that the device is isolated!
- -Protect the device against moisture, dirt and damage during transport, storage and operation!
- -Do not operate the device out of the specified technical data which is stated.
- -The device may only be operated in closed enclosures (Distribution boards etc.)

Cleaning

If device becomes dirty, only a dry cloth can be used for cleaning. It is not suitable to use wet cloths, caustics and solvents.