HVAC controller

relay outputs for 3 speed fan and valves

Model number:	**FC-1-IQ**
Mounting:	in-field, inside fan-coil, junction box or dry-wall
Dimensions:	108×86×45.5mm

Applications

- fan-coil control
- 3 speed ceiling fans
- radiator
- floor heating

Features

- simple configuration
- flexible: for various types of convectors and valves
- fallback mode: ensure operation even when bus is broken

Safety standards

EN 50081-1, EN 61000-6-2, EN 60730-1, EN 60730-2-1
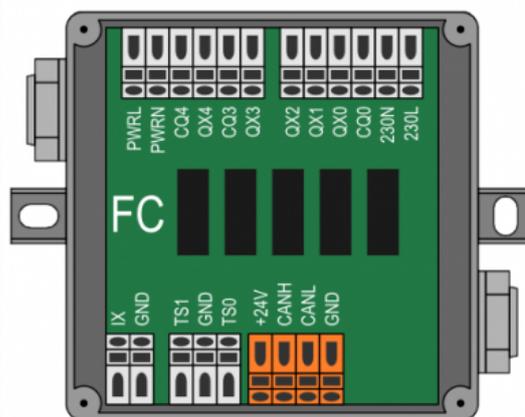
General description

FC-1-IQ is main actuator for TH units. It can drive fully featured fan-coils for wide range of convectors with electromechanical valves and 3 speed fan motor It can be used for controlling practically any heating/cooling system including: hot-water radiator valve, ceiling fan, ceiling/floor heating valve, electrical radiator power relay and AC's.
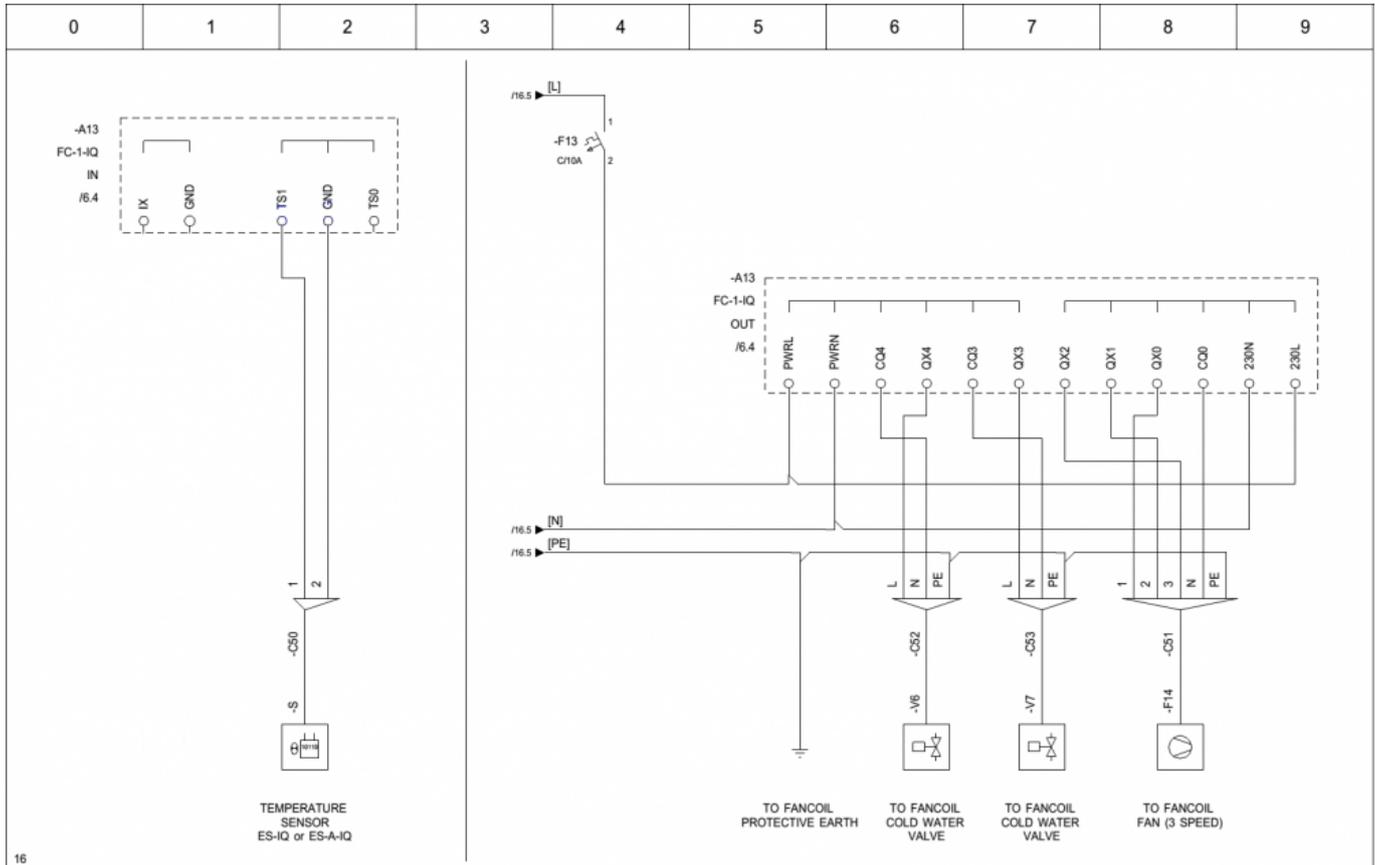
Technical specification

Relay outputs:	3A/250V
Temperature measurement	external sensor ES or ES-A
Power supply:	24V/45mA
Operating temperature:	0..45°C
Storage temperature:	-20..75°C
Relative humidity:	0..95% n/c

Terminals

Valves power supply - Live	**PWRL**	QX3 & QX4 common
Valves power supply - Neutral	**PWRN**	CQ3 & CQ4 common
Cold water valve - Neutral	**CQ4**	Neutral output (directly connected to PWRN)
Cold water valve - Live	**QX4**	Relay output
Hot water valve - Neutral	**CQ3**	Neutral output (directly connected to PWRN)
Hot water valve - Live	**QX3**	Relay output
Fan - 3rd speed	**QX2**	Relay output
Fan - 2nd speed	**QX1**	Relay output
Fan - 1st speed	**QX0**	Relay output
Fan - Neutral	**CQ0**	Neutral output (directly connected to PWRN)
Fan power supply - Live	**230N**	CQ0 common
Fan power supply - Neutral	**230L**	QX0 - QX2 common
Not used	**IX**	Digital input
Not used	**GND**	Digital input common
External temperature sensor 2 input	**TS1**	Temperature sensor ES / ES-A input
External temperature sensor GND (common)	**GND**	Temperature sensors common
External temperature sensor 1 input	**TS0**	Temperature sensor ES / ES-A input
IEX2 bus	**GND**	IEX2 bus
	CANL	
	CANH	
	+24V	

When installing: "Autoaddress" button will link FC-1-IQ unit with lowest serial number with thermostat with lowest serial number and so on.

TEMPERATURE SENSOR ES-IQ or ES-A-IQ	TO FANCOIL PROTECTIVE EARTH	TO FANCOIL COLD WATER VALVE	TO FANCOIL FAN (3 SPEED)

Rev	Revision text		Signature	Date	Last changed by GK		HC-IQ Automation	Drawing number	Installation	=
					Last changed 14/9/2015	Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina	FC-1-IQ Inputs / Outputs	001	Location	+
					Print date 14/9/2015		HIQ wiring	Pages 17	Page number	17