

EAN code  
FA3-612M: 8595188135276

- FA3-612M is a unit (actuator) designed to control fan coil units using analogue / digital inputs and analog / relay outputs.
- Analog inputs for temperature, voltage or current measurement (Uref reference voltage can also be used).
- The digital inputs are galvanically isolated with positive logic (Sink) in the 24-230V AC / DC voltage range.
- Analog outputs 0-10V.
- Connection to the installation BUS.
- Buttons for closing / opening the valve, fan and heating relay.
- The LEDs on the front panel indicate FAN, RE, VALVE1, VALVE2, OVER-RANGE, and OVERLOAD status.
- FA3-066M in 6-MODULE version is designed for mounting into a switchboard, on DIN rail EN60715.

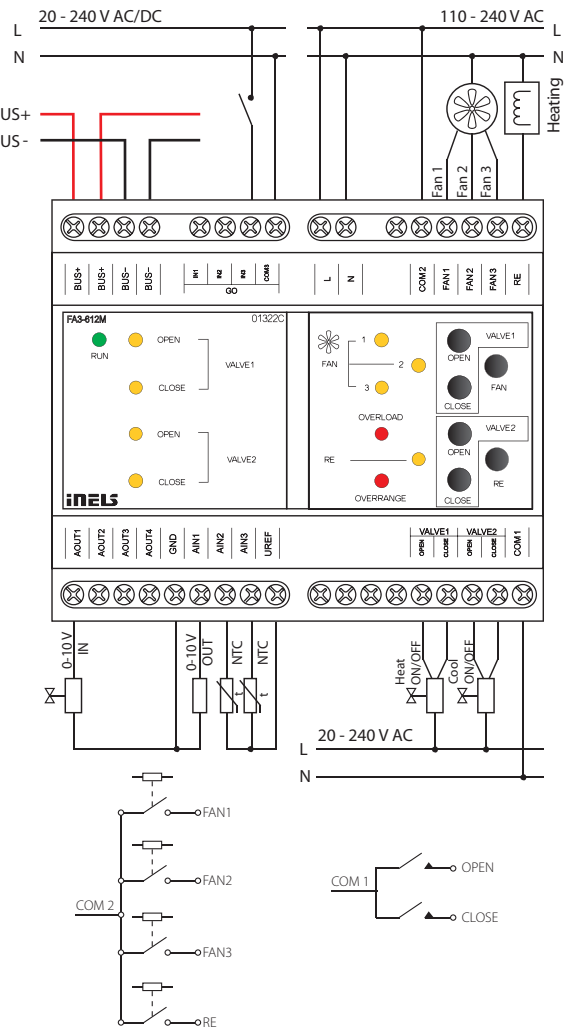
**Technical parameters FA3-612M**

Input	
<b>Analog inputs:</b>	3x voltage, current or temperature input
Number of inputs:	3
Galv. separation from inner circuits:	No
Diagnostic:	indication red LED OVERRANGE (exceeding the range, interruption of a sensor or overload of Uref output)
Common terminal:	GND
Converter resolution:	14 bits
Input resistance	
- for voltage ranges:	approx. 150 kΩ
- for current ranges:	100 Ω
Types of inputs / measuring ranges*:	<b>Voltage (U):</b> 0 ÷ +10 V (U) ; 0 ÷ +2 V (U) <b>Current (I):</b> 0 ÷ +20 mA (I) ; ÷ +20 mA (I) <b>temperature:</b> input at ext. temperature sensor TC, TZ, Ni1000**, Pt1000**, Pt100** see accessories / according to used sensor from -30°C to 250°C
<b>Digital inputs:</b>	3x switching or expansion, positive logic (SINK)
Input voltage:	20 - 240 V AC (50 - 60 Hz) / DC
Galv. separation from internal circuits:	Yes
Common lead:	GO COM3
Outputs	
<b>Analog:</b>	4x (A_OUT1 - A_OUT4)
Voltage analog. output / max. Current:	4x 0(1) - 10 V / 10 mA
<b>Uref reference voltage outputs</b>	
Voltage / Current Uref:	10 V DC / 100 mA
Output overload indication:	red LED OVERLOAD
<b>SSR (Electronic Relay):</b>	4x (VALVE1 - VALVE2)
Switching voltage:	20 - 240 V AC
Switching capacity:	480 VA
Peak current:	20 A, t ≤ 16 ms
Output indication:	yellow LED
<b>Relay 6A:</b>	4x (FAN1-FAN3, RE)
Switching voltage:	250 V AC, 24 V DC
Switching capacity:	1500 VA / AC1; 300 VA / AC15; 180 W/DC, AC3
Relay outputs separated from from all internal circuits:	reinforced Insulation (Cat. II surges by EN 60664-1)
Minimum switching load:	500 mW (12 V / 10 mA)
Mechanical life:	10x10 <sup>6</sup>
Electrical life AC1:	6x10 <sup>4</sup>
Output indication:	yellow LED
Communication	
Installation BUS:	BUS
Status indication unit:	green LED RUN
Power supply	
Supply voltage / tolerance / rated current:	27 V DC, -20 / +10 %, 5 mA
Supply voltage of power section (relay tolerance / nominal current:	AC 230V (50 Hz), -15 / +10 %, 20 mA
Dissipated power:	max. 1 W

**Connection**

Terminal:	max. 2.5 mm <sup>2</sup> /1.5 mm <sup>2</sup> with sleeve
Operating conditions	
Operating temperature:	-20 to +55 °C
Storing temperature:	-30 to +70 °C
Protection degree:	IP20 device, IP40 mounting in the switchboard
Overvoltage category:	II.
Pollution degree:	2
Operating position:	any
Installation:	switchboard on DIN rail EN 60715
Design:	6-MODULE
Dimensions and weight	
Dimensions:	90 x 105 x 65 mm
Weight:	307 g

**Connection**





















\* selectable for each input individually by configuration in the user program iDM3.  
\*\* The FA3-612M / Pt version is available for these sensors.

# Loadability of contacts



















Minimum load		
Relay contact	mV	V/mA
AgSnO <sub>2</sub>	1000	10/100

Minimum load		
Relay contact	mV	V/mA
AgNi	300	5/10



















## GCR3-11, GCH3-31, GMR3-61, SA3-02B, SA3-06M, SA3-012M, WMR3-21

Type of load	 $\cos \varphi \geq 0.95$								
Contact material	AC1	AC2	AC3	AC5a uncompensated	AC5a compensated	AC5b	AC6a	AC7b	AC12
AgSnO <sub>2</sub> contact 8A	250V / 8A	250V / 2.5A	250V / 1.5A	230V / 1.5A (345VA)	230V / 1.5A (345VA) till max output C=14uF	250W	250V / 4A	250V / 1A	250V / 1A
Type of load									
Contact material	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
AgSnO <sub>2</sub> contact 8A	x	250V / 3A	250V / 3A	24V / 8A	24V / 3A	24V / 2A	24V / 8A	24V / 1A	x



















## CU3-04M (RE7 - RE-10), LBC3-02M, SA3-01B, SA3-02M, SA3-04M, SA3-022M (RE7 - RE-10), EA3-022M (RE7 - RE-10), JA3-018M (U/D1 - U/D9)

Type of load	 $\cos \varphi \geq 0.95$								
Contact material	AC1	AC2	AC3	AC5a uncompensated	AC5a compensated	AC5b	AC6a	AC7b	AC12
AgSnO <sub>2</sub> contact 16A	250V / 16A	250V / 5A	250V / 3A	230V / 3A (690VA)	230V / 3A (690VA) till max output C=14uF	1500W	x	250V / 3A	250V / 10A
Type of load									
Contact material	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
AgSnO <sub>2</sub> contact 16A	250 / 6A	250V / 6A	250V / 6A	24V / 16A	24V / 6A	24V / 4A	24V / 16A	24V / 2A	24V / 2A





## SA3-02B/Ni\*, SA3-06M/Ni\*, SA3-012M/Ni\*

Type of load	 $\cos \varphi \geq 0.95$								
Contact material	AC1	AC2	AC3	AC5a uncompensated	AC5a compensated	AC5b	AC6a	AC7b	AC12
AgNi contact 8A	250V / 8A	250V / 2.5A	250V / 1.5A	230V / 1.5A (345VA)	x	400W	x	250V / 1.5A	250V / 5A
Type of load									
Contact material	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
AgNi contact 8A	250 / 3A	250V / 3A	250V / 3A	24V / 8A	24V / 3A	24V / 2A	24V / 8A	24V / 1A	24V / 1A

## SA3-01B/Ni\*, SA3-06M/Ni\*, SA3-04M/Ni\*

Type of load	 $\cos \varphi \geq 0.95$								
Contact material	AC1	AC2	AC3	AC5a uncompensated	AC5a compensated	AC5b	AC6a	AC7b	AC12
AgNi contact 16A	250V / 16A	250V / 5A	250V / 3A	230V / 3A (690VA)	x	800W	x	250V / 3A	250V / 10A
Type of load									
Contact material	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
AgNi contact 16A	250 / 6A	250V / 6A	250V / 6A	24V / 16A	24V / 6A	24V / 4A	24V / 16A	24V / 2A	24V / 2A

## JA3-018M (U/D1 - U/D9), CU3-04M (RE1 - RE6, OUT1 - OUT2, RE11 - RE16), SA3-022M (RE1 - RE6, OUT1 - OUT2, RE11 - RE16, SHUTTER), EA3-022M (RE1 - RE6, OUT1 - OUT2, RE11 - RE16, SHUTTER), FA3-612M (FAN1 - FAN3, RE)

Type of load	 $\cos \varphi \geq 0.95$			
Contact material	AC1	AC3	AC15	DC1
AgNi contact 6A	250V / 6A	230V / 0.8A	230V / 1.3A	30V / 3A 110V / 0.2A 220V / 0.12A

Demonstrated symbols are informative.

\*Products with AgNi contact only up on request for extra charge.