

Input modules - universal with totalizer

- QFUN4: 4 isolated universal inputs
- QFUN6: 6 isolated universal inputs

On customer's request, it is possible to install modules equipped with 4 or 6 universal isolated inputs (incl. totalizer on 0/4 ÷ 20 mA input). Each module includes a sensor for cold junction compensation. It is one of the most advanced input modules, available for the MultiCon. With its help user can make many different kind of measurements in each channel. This module can measure: voltage, current, flow (analog), temperatures (TC or RTD), digital signals (TTL or HTL).



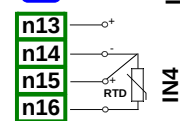
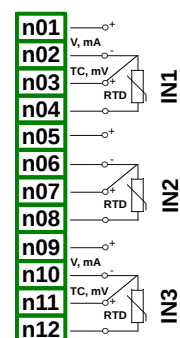
QFUN4

QFUN6

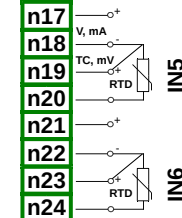
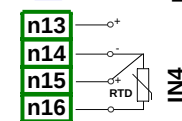
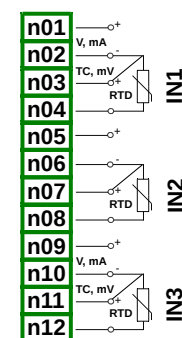
QFUN modules parameters are:

- Name - read-only input name given by the device,
- Unit - read-only field („°C”, „mA”, „V”, „Ohm” or „mV”), depending on Mode parameter settings,
- Mode - allows to set operation mode, eg. select a type of thermocouple or mV measurement range or other,
- Low limit - defines measurement level below which in logical channel „Lo” state will be displayed,
- High limit - defines measurement level above which in logical channel „Hi” state will be displayed,
- Wire compensation - menu which allows to compensate measurement errors, which can be caused by wrong sensor readings, options: compensation mode (allows to choose parameter which will be used in compensation process), disable (compensation is not active), manual (allows to compensate sensor constant offset),
- Actual temperature - parameter in which user enters actual temperature near the sensor, which is measured by more reliable thermometer.

MODULE PIN ASSIGNMENT

QFUN4
4 universal inputs

Pin description:
IN_T : Cold Junction
temperature
sensor

QFUN6
6 universal inputs

TECHNICAL DATA

	QFUN4	QFUN6
Number of inputs	4 (isolated)	6 (isolated)
Measurement ranges		
current inputs:	0 ÷ 20 mA, 4 ÷ 20 mA	0 ÷ 20 mA, 4 ÷ 20 mA
voltage inputs:	0 ÷ 5V, 1 ÷ 5V, 0 ÷ 10V, 2 ÷ 10V, 0 ÷ 30V, -10 ÷ 25mV, -10 ÷ 100mV, 0 ÷ 600mV	0 ÷ 5V, 1 ÷ 5V, 0 ÷ 10V, 2 ÷ 10V, 0 ÷ 30V, -10 ÷ 25mV, -10 ÷ 100mV, 0 ÷ 600mV
digital inputs:	TTL (Lo: 0 ÷ 0.8V; Hi: 2 ÷ 5.5V), HTL (Lo: 0 ÷ 4.2V; Hi: 11.5 ÷ 30V)	TTL (Lo: 0 ÷ 0.8V; Hi: 2 ÷ 5.5V), HTL (Lo: 0 ÷ 4.2V; Hi: 11.5 ÷ 30V)
thermocouple inputs:	J, K, S, T, N, R, B, E (PN-EN), L (GOST)	J, K, S, T, N, R, B, E (PN-EN), L (GOST)
RTD inputs: (2, 3, 4-wire)	Pt100, Pt500, Pt1000 (PN-EN), Pt'50, Pt'100, Pt'500 (GOST), Ni100, Ni500, Ni1000 (PN-EN), Cu50, Cu100 (PN-83M-53852), Cu'50, Cu'100 (PN-83M-53852)	Pt100, Pt500, Pt1000 (PN-EN), Pt'50, Pt'100, Pt'500 (GOST), Ni100, Ni500, Ni1000 (PN-EN), Cu50, Cu100 (PN-83M-53852), Cu'50, Cu'100 (PN-83M-53852)
resistance input:	0-300 Ω, 0-3 kΩ	0-300 Ω, 0-3 kΩ
Sampling period	current, voltage, thermocouple inputs: 450 ms RTD, resistance inputs: 920 ms	current, voltage, thermocouple inputs: 450 ms RTD, resistance inputs: 920 ms
Precision	0,15% @ 25°C (for -10 ÷ 25 mV); 0,1% @ 25°C (others ranges)	0,15% @ 25°C (for -10 ÷ 25 mV); 0,1% @ 25°C (others ranges)
Input impedance	current inputs: <65 Ω (30 Ω typ.) voltage inputs: >100 kΩ (while maintaining correct polarization) TC inputs: ≥6 MΩ, RTD inputs: 4 kΩ	current inputs: <65 Ω (30 Ω typ.) voltage inputs: >100 kΩ (while maintaining correct polarization) TC inputs: ≥6 MΩ, RTD inputs: 4 kΩ
Weight	64 g	82 g
Part number	M99-EFUN4-001	M141-EFUN6-001