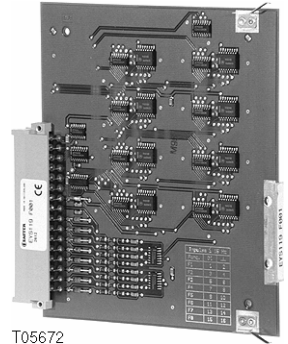


nova106: Function card for pulse metering

This function card, which has eight inputs, counts the pulses that are emitted by potential-free contacts, opto-couplers or transistors. The interrogation voltage is provided by the rack's processor and power-supply card and fulfils the regulations on extra-low voltages. The maximum permissible frequency is 15 pulses per second (15 Hz). The counter reading is updated approx. every 25 seconds in the automation station's memory. The pulse inputs can be stepped down (in the form of a ratio) via the software. Application: for counting pulses (energy and flow measurements, continuity checks, quantity counting etc.).



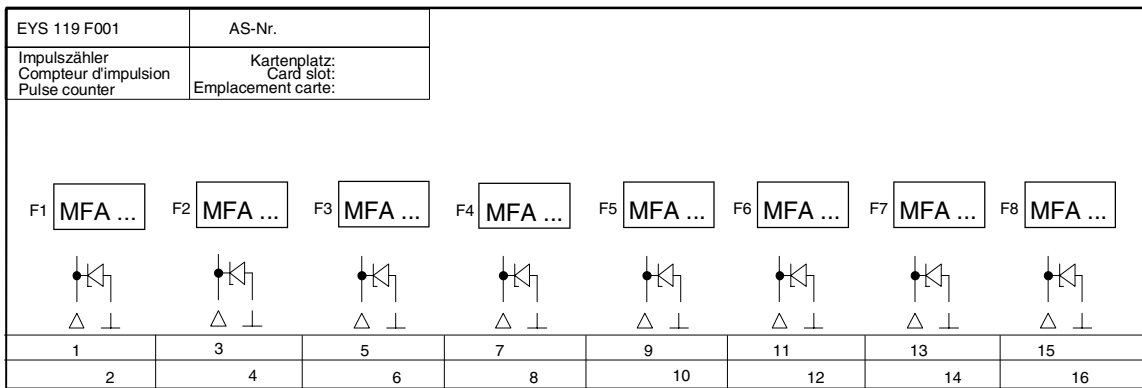
T05672

Type	Description	Weight [g]
EYS 119 F001	Function card for pulse metering	120
Technical details		
Number of inputs	8	Permissible ambient temp.:
Type of inputs	potential-free contacts opto-coupler transistor (open collector)	Normal operation 0...45 °C Transport and storage temp. -25...70 °C
Input frequency	< 20 Hz	Ambient conditions:
Max. output current of the inputs	1.2 mA with respect to earth	Humidity 10...90 %rh without condensation
De-bounce time	20 ms	Wiring diagram A04583
Max permissible cable resistance	1 kΩ (including cable)	Fitting instructions MV 505535
Protection against extraneous voltage	up to 24 V \simeq	Complies with:-
Power supply	from rack	EMC directive 89/336/EEC EN 61000-6-1/ EN 61000-6-2 EN 61000-6-3/ EN 61000-6-4
Max. current	10 mA	
Power loss, max.	approx. 0.1 W	

Engineering notes

Potential-free contacts, opto-couplers or transistors with open collector can be connected to the inputs of this card. 24 V DC is applied to the terminals. Closed contacts draw the input to earth and let a current of 1 mA flow. The maximum frequency is 15 Hz. A de-bounce time of 20 ms is envisaged so that the switching contacts are correctly received. The pulse is registered when the circuit is made and can remain present indefinitely. The card's internal counter is interrogated every cycle and stored in DW 2 as a dual partial sum. The summation to form the counter value is done by the software after 30 seconds at the latest via the station's processor in DW 6. Through using the FP format, the counter value can amount to 2.147×10^9 .

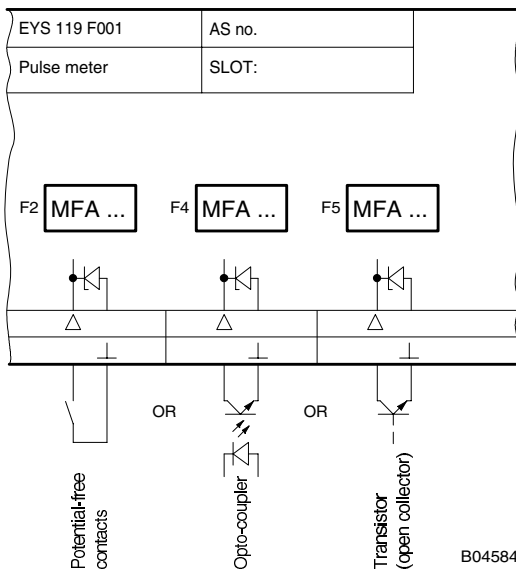
Wiring diagram



A04583a

In cases where the industry standard (EN 61000-6-2) has to be met, the power cables should be no longer than 30 m.

Wiring detail



B04584