

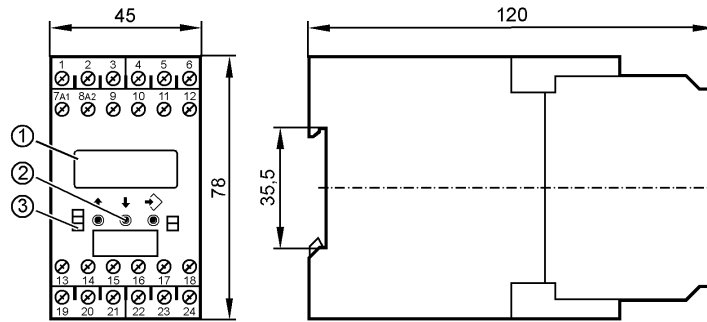
no longer available - archive entry replaced by: DD2605  
 Article available until 31 March 2014

**ecomat200**<sup>®</sup>  
 DD2105



MONITOR/FR-2N/110-240VAC/DC

Evaluation systems, power supplies



- 1: LCD display; 7/14-segment
- 2: Programming buttons
- 3: LEDs



Product characteristics

MONITOR

FR-2N

Housing for DIN rail mounting

NAMUR inputs with wire monitoring

2 relay outputs

2 transistor outputs

programmable

Test function without external frequency

Key function

Application

Application

double pulse evaluation system with  $\mu$ processor for frequency, rotational speed, speed and machine cycles

Switching function

1 switch point each for monitoring overspeed/underspeed and acceptable range

Electrical data

Nominal voltage [V]

110...240 AC (50...60 Hz) / 27 DC (typ. 24 DC)

Voltage tolerance [%]

-20...+10

Power consumption [VA]

5 (3 W)

Inputs

Inputs

NAMUR (EN 50227)

auxiliary supply: typ. 8.2 V DC; short-circuit protected

wire monitoring: < 0.1 mA / > 6.0 mA

input frequency (max): 5 kHz (corresponds to min. pulse length / space 0.1 ms)

Outputs

Relay

Contact rating

6 A (250 V AC); B300, R300

Transistor

Transistor outputs

pnp; external supply

switching voltage/current: 24 V DC / max. 15 mA; short-circuit protected

Measuring / setting range

Setting range [pulses/min.]

1...60000 (0.1...1000 Hz)

Accuracy / deviations

Measuring error [% of the final value]

< 1

Environment

**DD2105 - MONITOR - eclass: 27279213 / 27-27-92-13**

Ambient temperature	[°C]	-20...60
Storage temperature	[°C]	-25...80
Max. relative air humidity	[%]	75 (35°C)
Protection housing / terminals		IP 50 / IP 20
<b>Tests / approvals</b>		
EMC	EN 61010	: 2001
	EMC 89/336/EEC	
	EN 61000-6-3	: 2007
	EN 61000-6-2	: 2005
<b>Mechanical data</b>		
Housing materials		plastics
Weight	[kg]	0.354
<b>Displays / operating elements</b>		
Input pulses	LED	yellow (input pulses); red (wire fault)
Output status indication	LED	green (lights when the relay is energised / the transistor is closed)
Function display	LED	LCD display; 7/14-segment
<b>Electrical connection</b>		
Connection		dual-chamber terminals 2 x 2.5 mm <sup>2</sup> (2 x AWG 14)
<b>Wiring</b>		
1: DC Supply voltage (L-)		
2: DC Supply voltage (L+)		
3: supply transistor outputs (L+)		
4: error output 1		
5: 8.2 V DC Sensor supply 1 (L-)		
6: 8.2 V DC Sensor supply 1 (L+)		
7: AC Supply voltage (L1)		
8: AC Supply voltage (N)		
9: n.c.		
10: error output 2		
11: 8.2 V DC Sensor supply 2 (L-)		
12: 8.2 V DC Sensor supply 2 (L+)		
13: Relay 1 (common)		
14: Relay 1 (normally open)		
15: Relay 1 (normally closed)		
16: transistor output 1 pnp		
17: Reset 1 pnp		
18: Reset 2 pnp		
19: Relay 2 (common)		
20: Relay 2 (normally open)		
21: Relay 2 (normally closed)		
22: n.c.		
23: n.c.		
24: transistor output 2 pnp		
<b>Remarks</b>		
Remarks		overvoltage category II; degree of soiling 2
Pack quantity	[piece]	1

ifm efector, inc. • 1100 Atwater Drive • Malvern • PA 19355 — We reserve the right to make technical alterations without prior notice. — US — DD2105 — 06.12.2012

no longer available - archive entryreplaced by: DD2605

Article available until 31 March 2014