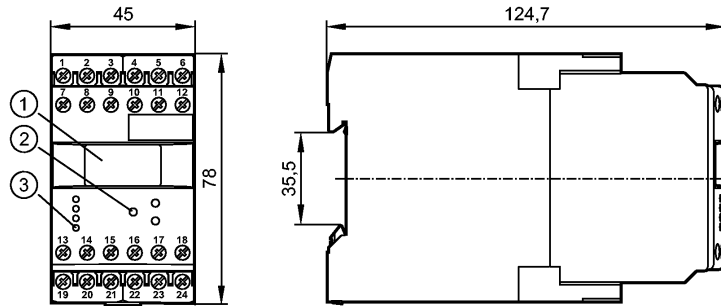


DD2505

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

Evaluation systems, power supplies



- 1: OLED display
- 2: Programming buttons
- 3: LEDs



Product characteristics

MONITOR

FR-2

Housing for DIN rail mounting

2 relay outputs

2 transistor outputs

programmable

Test function without external frequency

Key function

Application

Application	double pulse evaluation system with μ 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)
Sensor supply	[V]	19.6...27.7 DC SELV, \leq 150 mA

Inputs

Digital	2
Inputs	<p>pnp/npn; NAMUR (24 V) auxiliary supply: typ. 24 V DC / 150 mA; short-circuit protected threshold pnp: > 12 V on; < 5 V off threshold npn: > 15 V off; < 8 V on input frequency (max): 5 kHz (corresponds to min. pulse length / space 0.1 ms)</p>

Outputs

Relay	
Relay	2
Contact rating	6 A (250 V AC); B300, R300
Transistor	
Digital	2
Transistor outputs	<p>pnp; external supply switching voltage/current: 24 V DC / max. 150 mA; short-circuit protected</p>

Measuring / setting range

Setting range	[pulses/min.]	1...60000 (0.1...1000 Hz)
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Accuracy / deviations	
Measuring error [% of the final value]	< 1
Environment	
Ambient temperature [°C]	-40...60
Storage temperature [°C]	-40...85
Max. relative air humidity [%]	80 (31°C), linearly decreasing to 50 % (40 °C)
Protection housing / terminals	IP 50 / IP 20
Tests / approvals	
EMC	EN 61010 2011 EMC 89/336/EEC EN 61000-6-2 2005 EN 61000-6-4 2007
Mechanical data	
Housing materials	plastics
Weight [kg]	0.347
Displays / operating elements	
Input pulses LED	yellow
Output status indication LED	green (lights when the relay is energised / the transistor is closed)
Display	OLED display 128 x 64 dots luminous
Electrical connection	
Connection	dual-chamber terminals 2 x 2.5 mm ² (2 x AWG 14)
Wiring	
1: DC Supply voltage (L-) 2: DC Supply voltage (L+) 3: supply transistor outputs (L+) 4: sensor signal 1 pnp 5: DC Sensor supply (L+) 6: DC Sensor supply (L-) 7: AC Supply voltage (L) 8: AC Supply voltage (N) 9: n.c. 10: sensor signal 1 npn 11: sensor signal 2 pnp 12: sensor signal 2 npn 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	
Remarks	
Remarks	overvoltage category II; degree of soiling 2
Pack quantity [piece]	1