

Digital Counters

48 x 48 Multifunction Counter

Types DMF6



DMF6

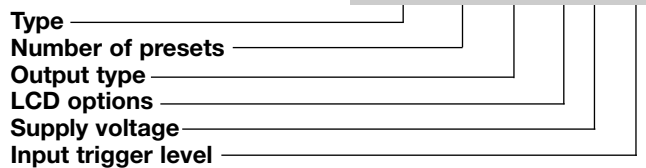
- Programmable as counter, tachometer or timer
- Relay or optocoupler output
- Scalable display
- Plug-in screw terminal block
- Wide operating temperature range: -20...+65°C/-4...149°F
- DIN 48x48
- IP65

Product Description

This multifunction counter has a fast counting input and can be used for a wide range of applications: batch counting with subtraction of faulty pieces, cut to length, speed regulation, ratio measuring, run time.

Ordering Key

DMF6 1 A10 0 3 00



Stock items:	1 Preset	2 Presets
	DMF61A100300	DMF62A100300
	DMF61A100000	DMF62A100000
	DMF61A102300	DMF62A102300
	DMF61A102000	DMF62A102000

Approvals



Number of Presets

1	1 preset
2	2 presets

Output Type

A10	Relays
A11 (only DMF62)	Optocoupler

LCD Options

0	No backlighting
1	Green backlighting
2	LED look, negative, red backlighting
3	Multicolour backlighting

Supply Voltage

0	90...260VAC
3	10...30VDC (with reverse polarity protection)

Input Trigger Type

00	Standard (also fixed voltage input available upon request)
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Input Specifications

Polarity	Programmable for all inputs in common PNP or NPN
Resistance	~ 5kΩ
Count frequency	max. 55kHz
Monitoring/reset input	MPI, lock, gate, reset
Min pulse duration of the inputs	10ms/1ms
Switching levels with AC-supply HTL-level	Low: 0...4VDC High: 12...30VDC
Switching levels with DC-supply HTL-level	Low: 0...0.2xU _B High: 0.6xU _B ...30VDC
Pulse shape	Variable, Schmitt-Trigger characteristics

Package Content

1	Instrument DMF6
1	Mounting clip
1	Screw terminal block 8 pins
1	Screw terminal block 7 pins
1	Multilingual operating manual

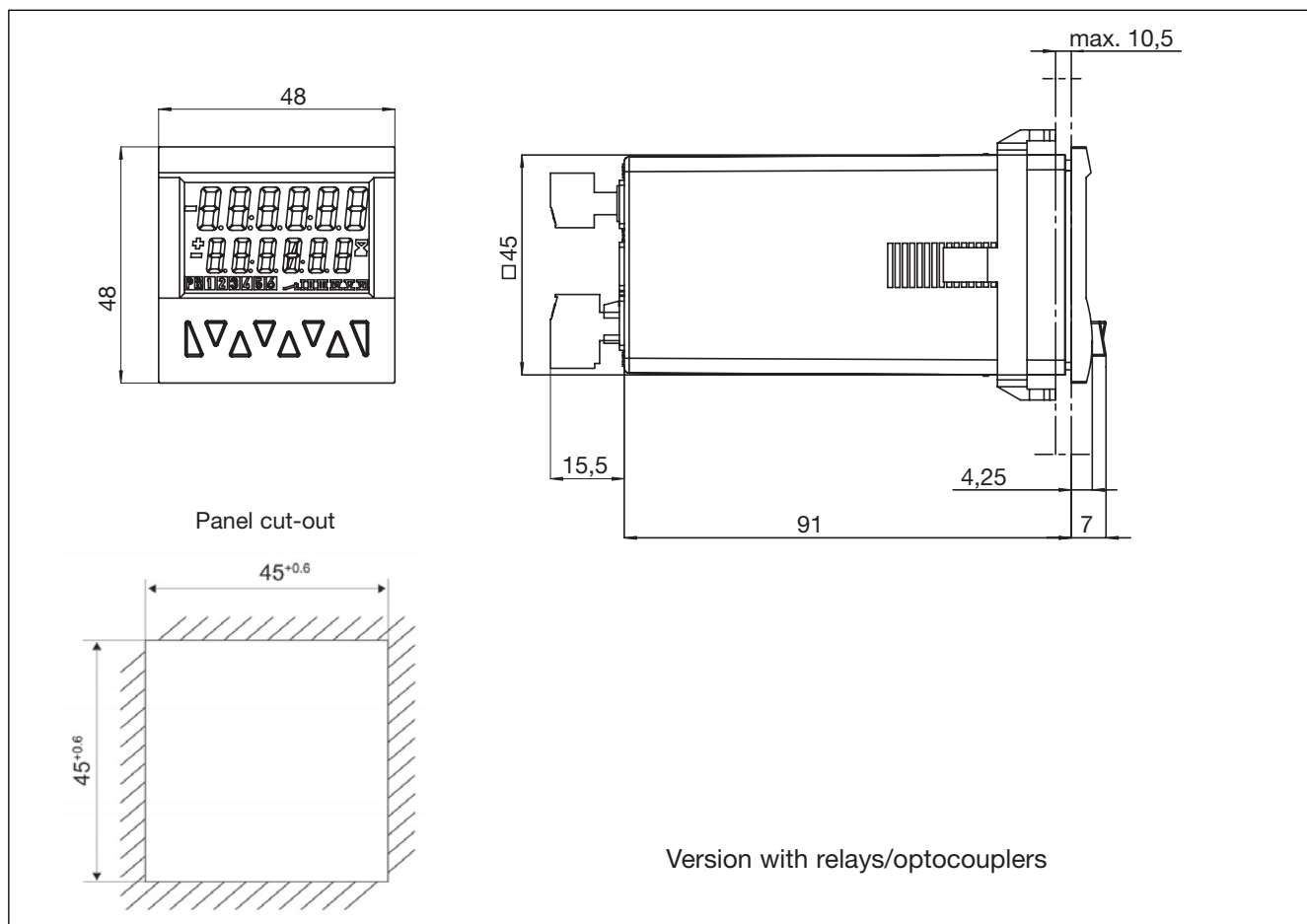
Output Specifications

Max. Switching voltage	250VAC / 110VDC
Max. Switching current	3A AC / A DC
Min. Switching current	30mA DC
Max. Switching capacity	750VA / 90W
Output 1	
Mech. service life	2 x 10 ⁷ cycles
N° of cycles @ 3A/250VAC	1 x 10 ⁵
N° of cycles @ 3A/30VDC	1 x 10 ⁵
Relays	Programmable as normally open (NO) or normally closed (NC)
Output 2	
Mech. service life	20 x 10 ⁶ cycles
N° of cycles @ 3A/250VAC	5 x 10 ⁴
N° of cycles @ 3A/30VDC	5 x 10 ⁴
Relays with changeover contact or NPN optocoupler	
Switching power	30VDC/10mA
U _{CESAT} @ IC = 10mA	Max. 2.0V
U _{CESAT} @ IC = 5mA	Max. 0.4V
Reaction time	
Relay	~7ms
Optocoupler	~1ms
Response time of the frequency counter	100 / 600ms
Data retention	min. 10years, E ² PROM

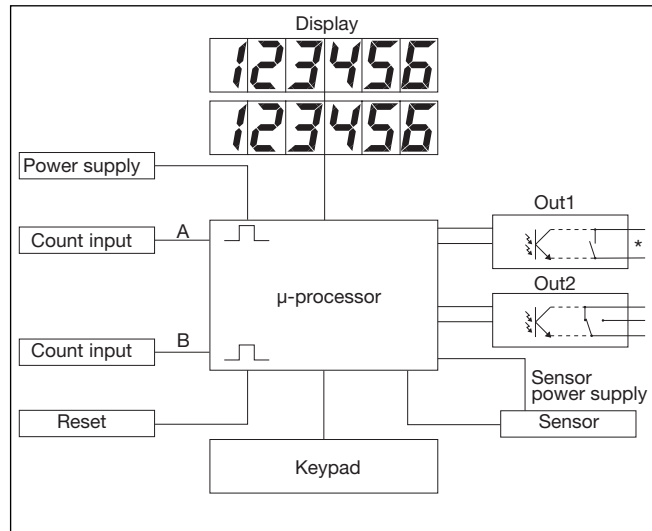
General Data

Display	2 x 6 digits LCD
Viewing angle	Frontal
Colour of digit figures	LCD or Negative LCD
Current consumption	
AC	8VA
DC	1.5W
Operating temperature	-20...+65°C/-4...149°F
Storage temperature	-25...+50°C/-13...167°F
Mounting position	Panel mounting
Housing colour	Grey RAL 7021
Dimensions	48x48 acc. to DIN 43700 STD
Weight	125g/4.41oz
Protection degree	IP65 (front)
EMC	acc. to directive 89/36/ENG
emitted:	EN61000-6-4 EN550011 class B
immunity:	EN61000-6-2

Dimensions (mm/inches)

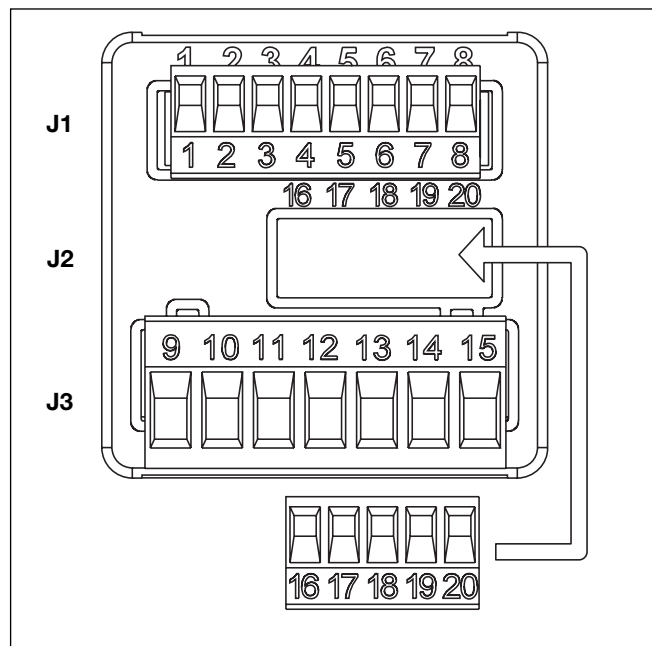


Block Diagram



* programmable as NO or NC (non latching relay, in case of power loss the relay becomes NO)

Connections



J1 Terminal block

- 1 Sensor voltage supply
AC: 24VDC / 80mA
DC: UB interconnected
- 2 GND (0VDC)
- 3 INP A (Signal input A)
- 4 INP B (Signal input B)
- 5 RESET (Reset input)
- 6 LOCK (Key locking input)
- 7 GATE (Gate input)
- 8 MPI (User input)

J2 Optional Terminal block

- 16 ... 20: expandability with additional cards

J3 Terminal block

- 9 Relay contact C./Collector
- 10 Relay contact N.O./Emitter
- 11 Relay contact C./Emitter
- 12 Relay contact N.O./not assigned
- 13 Relay contact N.C./ Collector
- 14 AC: 90..260VAC N~
DC: 10..30VDC
- 15 AC: 90..260VAC L~
DC: GND (0VDC)

Optionals

Available expansion cards

- 4 inputs
- 4 additional optocoupler outputs
- 2 additional relays outputs
- RS 485/232 communication interface