

Timers

48x48 digital timer

Type FMC01

CARLO GAVAZZI



FMC01

- 48x48mm programmable timer
- 2-line LCD display with indicators
- 9 programmable time ranges from 0.20 s to 99999 h
- 8 programmable timing functions
- 3 programmable activation modes
- Universal AC/DC inputs
- Relay output
- Long life battery power
- IP65

Product Description

48x48mm digital timer for flush mounting with 2 lines LCD display, with many indicators to show the set up of the device. Wide time range (up to 99999h) and 8 timing functions programmable via front keys. Connection by detachable screw-type connector.

Ordering Key

FMC 01 C W24

Housing _____
 Function _____
 Type _____
 Item number _____
 Output _____
 Input range _____

Stock items: FMC01CW24

Approvals



Measuring Specifications

Time ranges display selectable	0.02 to 999.99s 0.2 to 9999.9s 1 to 99999s 0.01 to 999.99min 0.1 to 9999.9min 1 to 99999min 0.01 to 999.99h 0.1 to 9999.9h 1 to 99999 h
Functions	ON DLY OFF DLY OS SS RC DLY RC RC DLY= RC=
	Delay on operate Delay on release One shot Single shot Asymmetrical recycler OFF first Asymmetrical recycler ON first Symmetrical recycler OFF first Symmetrical recycler ON first
Accuracy	+50 / -20ms or ±0.5% on set value (higher value counts)
Repeatability	0.3% on set value
Reset	Manual reset
	Push the red key or close the reset contact
Time and reset inputs	Optocouplers
	Voltage 12 to 240 VAC/DC ±10%
	Pulse duration ≥ 20 ms
	Impedance 180 kΩ

General Data

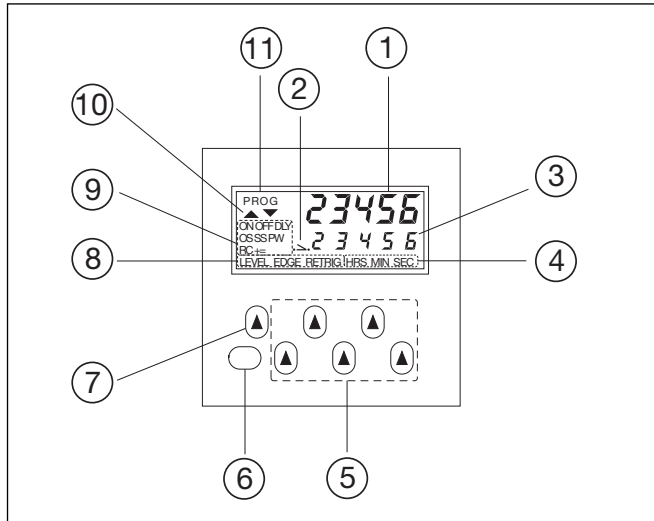
Number of digits	2 lines x 5 digits 7 segment LCD display
Line 1 digit height	6.5mm
Line 1 digit height	3.5mm
Indicator for activated output	Yes
Indicator for set function	Yes
Indicator for set activation mode	Yes
Electrical lock of front keys	Yes
Power supply	2 x 3V, 1/2AA replaceable lithium batteries (lifetime ≥10years or ≥50x10 ⁴ relay operations)
Degree of protection	IP 65 (front)
Pollution degree	2
Operating temperature	-10...+60°C / 14...140°F R.H. <80%, up to 31°C R.H. <50%, @ 40°C
Storage temperature	-25...+70°C / -13...158°F
Housing dimensions	48x48x83mm/1.89"x1.89"x3.27" (including rear connector)
Housing colour	Grey RAL 7021
Panel cut-out	45x45(+0.6 -0)mm /1.77"x1.77"(+0.02" -0)
Weight	~80g/2.82oz
Connector	Screw-type, detachable
Max. Screw tightening torque	0.6Nm
CE Marking	Yes
EMC	Electromagnetic Compatibility
	Immunity Acc. to EN 50081-2 / EN 55011 class B
	Emission Acc. to EN 50081-2

Output Specifications

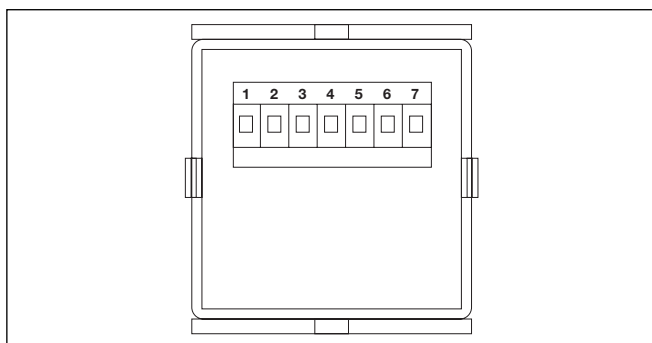
Output	SPST relay	Mechanical life	≥50 x10 ⁶ operations
Rated insulation voltage	250 VAC	Electrical life	≥10 ⁵ operations (@ 8A, cosφ= 1)
Contact ratings (AgCdO)	μ	Response time	≤20ms
Resistive loads	AC 1 8A @ 250VAC	Dielectric strength	≥1.5kVAC(rms) (contact/electronics)
	DC 12 5A @ 30VDC	Dielectric voltage	
Small inductive loads	AC 15 5A @ 250VAC		
	DC 13 3.5 @ 30VDC		

Front Panel Description

1. Time value display	6 LCD digits, 6.5mm high	10. Indicator for timing direction	▲ up ▼ down
2. Indicator for activated	output	11. Programming phase	PROG
3. Set time display	6 LCD digits, 3.5mm high		
4. Selected time range	SEC (seconds) MIN (minutes) HRS (hours)		
5. Front keys	5 keys to increase the set time value		
6. Reset key	To reset the unit when timing up or the set time when timing down; to confirm the selected steps on the sub-routine program		
7. Key for programming	To confirm the selected phase step on the routine program		
8. Selected activation mode	LEVEL TRIG EDGE TRIG EDGE RETRIG		
9. Selected function	ON DLY, OFF DLY, OS, SS, RC DLY, RC, RC DLY=, RC=		



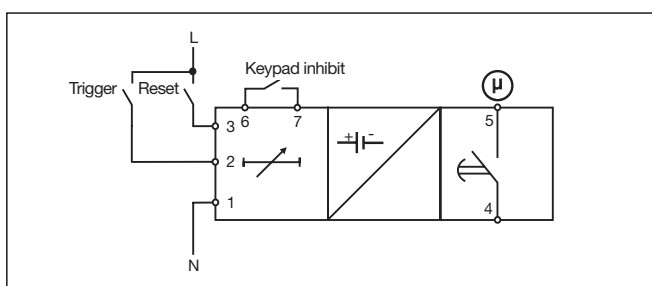
Connections



- 1 Common for terminal 2 and 3
- 2* Timing input, programmable as level or edge triggered
- 3* Reset input
- 4/5 Voltage free relay contacts, programmable as NO or NC
- 6/7 Connect together to disable front panel keys

* These inputs can be 12...260V AC/DC.
For DC input the polarity is unimportant.

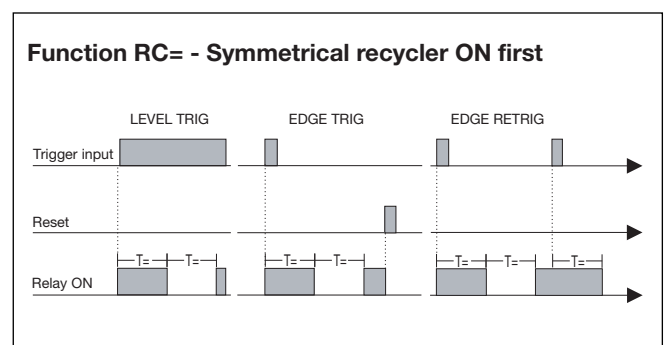
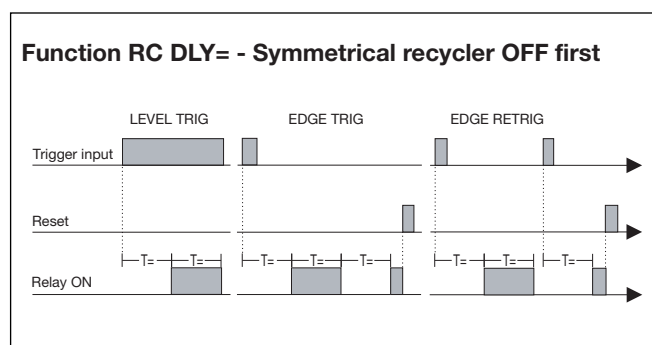
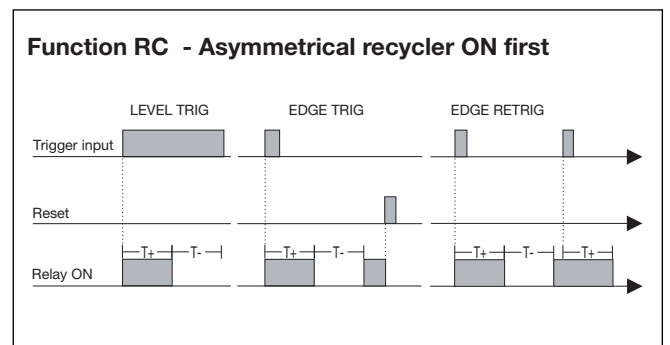
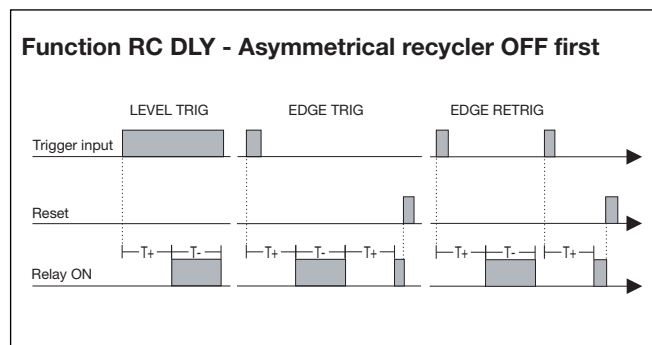
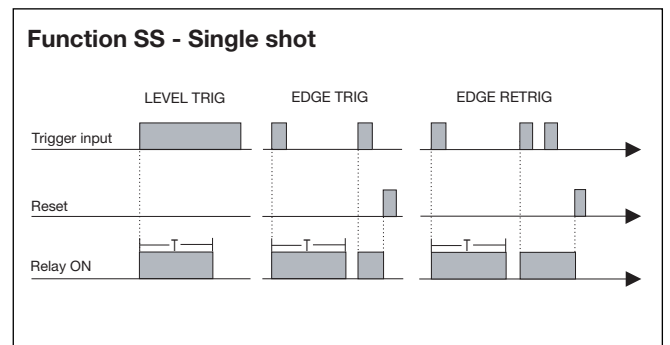
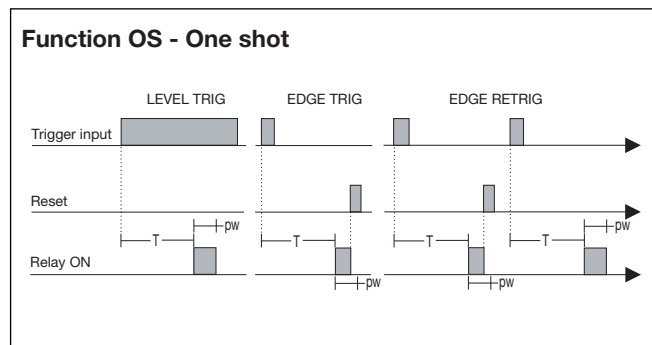
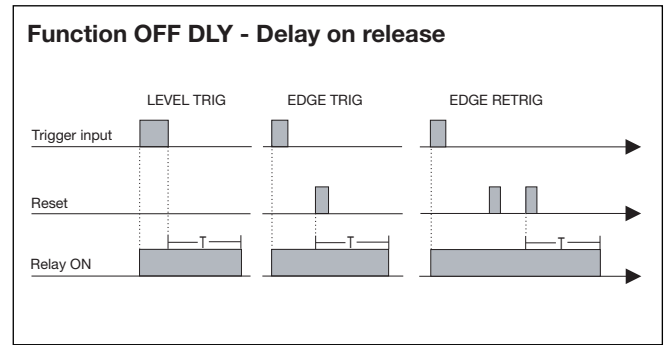
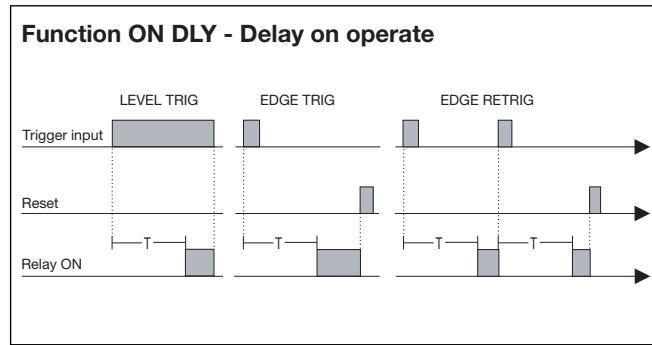
Wiring Diagram



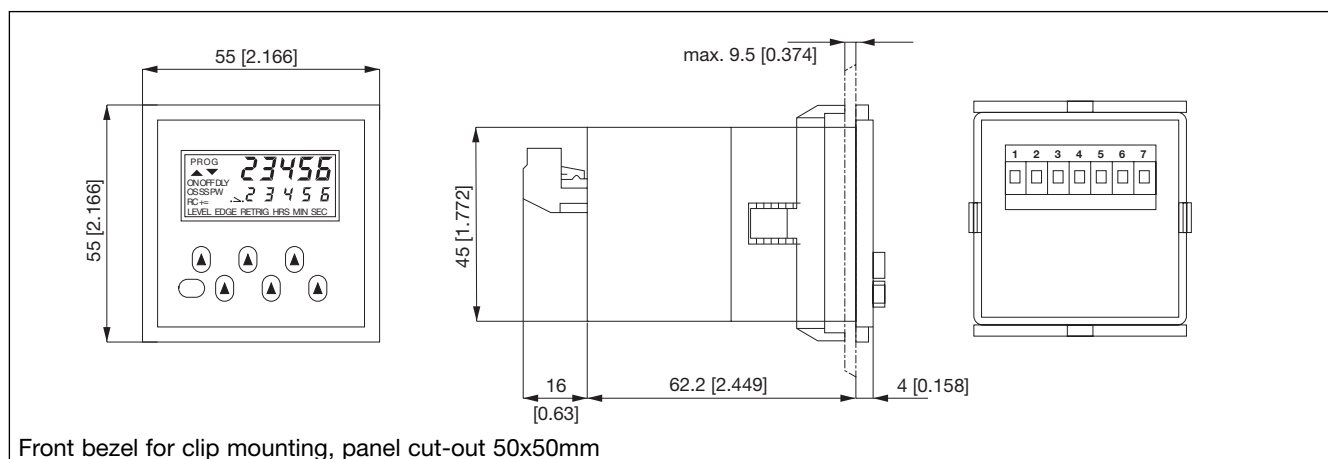
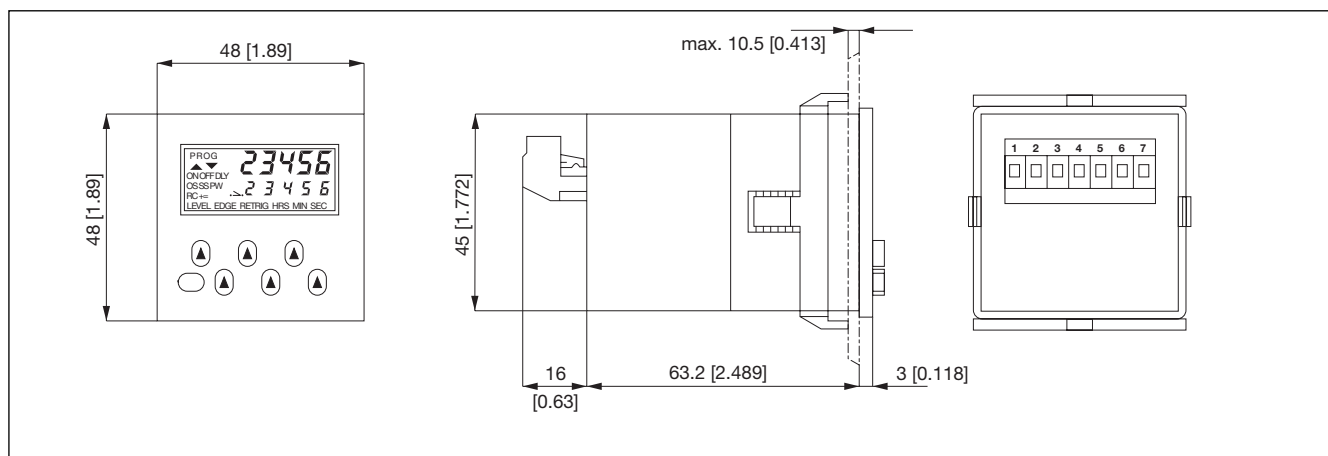
Package Content

1	Instrument FMC01
1	Seal
1	Screw terminal
1	Front bezel for screw mounting, panel cut-out 50x25mm
1	Front bezel for clip mounting, panel cut-out 50x50mm
1	Spring Clip
1	Template for panel cut-out
1	Multilingual operating manual

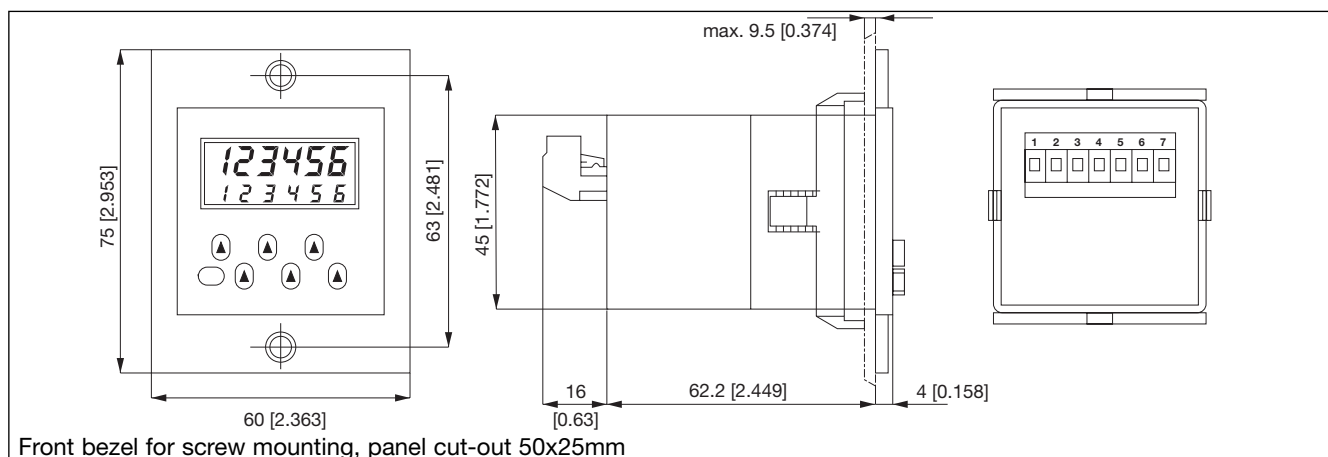
Operating Diagram



Dimensions (mm/inches)



Front bezel for clip mounting, panel cut-out 50x50mm



Front bezel for screw mounting, panel cut-out 50x25mm