

## Timers

## Always up to the minute

The electronic relays are ideally suited for standard, monitoring and control tasks in order to control function processes down to the second. Depending on the application, multiple-voltage and multi-functional relays are available.

Decades of timer know-how are packed into a completely new, highly miniaturized generation of timers just 22.5 mm wide. Although the end of the timer has been being predicted for years now, as the PLC has spread, high quality timers with well thoughtout designs and universal application will continue to be needed in industrial automation.



Timers remain crucial – in less complex series machines, in later modifications, everywhere where other solutions would result in unnecessary engineering and hardware costs. For these applications Wieland offers a range of timers that provides everything you need. These devices unite diverse features with an efficiency that permits the fullest profitability – from procurement and warehousing through application and operation, and finally to disposal.

# Multiple-voltage ergonomic and Mobile

#### flare TIME series of timer relays

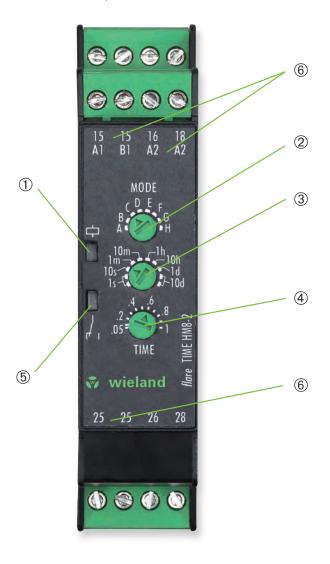
Our *flare* TIME family features universal application in the industrial automation sector. Up to 8 functions in just one relay cover all of your requirements and reduce inventory costs as well. Existing production processes can be easily expanded thanks to our *flare* TIME timer relay series, without incurring additional engineering and hardware costs. Our timer relays can be used in bakery machines, industrial washing machines, elevators and escalators, access controls and much more.

#### Features:

- Ambient temperatures from -25 °C to +60 °C
- Very high interference voltage resistance
- Output relays correspond to utilization category AC-15 and DC-13

#### The advantages:

- 1 Power LED with progress display
- 2 Function setting
- 3 Time range setting
- 4 Clear time setting
- ⑤ LED as status indicator of the change-over contact
- Double connection points internally connected (HM series)





**Electronic timer and switching relays** for DIN rails



Electronic timer and switching relays for panel mounting



Further products and technical details can be found at **www.wieland-electric.com** in our **e-catalog**.

## Electronic timer and switching relays for DIN rails multifunction

Description		<i>flare</i> TIME HM8-2-A	<i>flare</i> тіме НМ8-2U-А	<i>flare</i> TIME HM8-2P-A	<i>flare</i> TIME HM8-2PS-A	<i>flare</i> тіме НМ5-1-А	<i>flare</i> TIME M8-2	flare TIME M8-1	<b>flare</b> TIME M4-2	<b>flare</b> TIME M4-1	flare TIME-S
Part no.		81.020.0104.0	81.020.0105.0	81.020.0134.0	81.020.0135.0	81.020.0100.0	81.020.0003.0	81.020.0002.0	81.020.0001.0	81.020.0000.0	81.020.4100.0
Model	Multi-function	•	•	•	•	•	•	•	•	•	
	Multi-range	•	•	•	•	•	•	•	•	•	•
Function											
Timer relays	ON-delay	•	•	•	•	•	•	•	•	•	•
	OFF-delay	•	•	•	•		•	•			•
	ON-delay- and OFF-delay, symmetrical	•		•	•		•	•			
Interval ON	Interval ON	•	•	•	•	•	•	•	•	•	•
relay	Single shot 0.5 sec (rising edge)		•								
	Interval OFF		•								
	Interval ON and Interval OFF	•		•	•		•	•			
Repeat cycle	OFF start, symmetrical and selectable	•		•	•	•	•	•			•
timer	ON start, symmetrical and selectable	•		•	•	•	•	•	•	•	•
Watchdog	Cyclical signal monitoring		•								
Pulse relay	Pulse relay, ON-delay, Pulse output	•		•	•	•	•	•	•	•	
	Change relaystate (rising edge)		•								
	Invert relay state (rising edge)		•								
Contacts	Delayed changeover	2	1	2	1	1	21)	1	21)	1	1
	Immediate changeover		1		1		11)		11)		
Rated Voltage	Multi-voltage AC/DC 24 to 230 (240) V	•	•	•	•	•	•	•	•	•	
Special	Remote potentiometer connection			•	•						
Features	Double connection points (internally		•	•	•	•					
	connected) for trough cabling										
	Digital (D) or analog (A) settings	Α	Α	Α	Α	Α	Α	Α	Α	Α	
Housing	Surface mounting 22.5 mm	•	•	•	•	•	•	•	•	•	

1) = 1 delayed and 1 immediate changeover or 2 delayed changeovers, adjustable



### Electronic timer and switching relays for DIN rails

#### flare TIME M

- Multi-function timer
- Multi-range time
- Wide input voltage range 20.4 ... 264 V AC/DC
- 4 or 8 selectable time functions
- 1 or 2 change-over contacts 5 A



flare TIME M4-1 (4 time functions / 1 contact) flare TIME M4-2 (4 time functions / 2 contacts)		81.020.0000.0 81.020.0001.0		
flare TIME M8-1 (8 time functions / 1 contact)		81.020.0002.0		
flare TIME M8-2 (8 time functions / 2 contacts)		81.020.0003.0		
Technical data				
Input voltage range	20,4 264 V AC/DC			
Time range	0.1 s 1200 h			
Time functions	4 or 8			
Number of change-over contacts	1 or 2			
Maximum switching current	5 A			
Mechanical life time	10 x 10 <sup>6</sup>			
Electrical life time AC1	$0.1 \times 10^6$			
Isolation voltage of input/output	2 kV			
Connection clamps	Screw clamp	Screw clamp		
Wire range fine-stranded/solid	0.14 - 2.5 mm <sup>2</sup> (AWG 2	0.14 - 2.5 mm <sup>2</sup> (AWG 26-14)		
Degree of protection / mounting rail	IP 20 / TS 35 (EN60715)			
Dimensions (mm) W x H x D	22.5 x 89.4 x 100			
Operation temperature range	-20 +55 °C			
Approvals	( € c <b>%2.</b> us			
Approvals	(			

#### flare TIME HM

- Multi-function timer
- Multi-range time
- Wide input voltage range 20.4 ... 264 V AC/DC
- 5 or 8 selectable time functions
- Pluggable clamps
- Wide temperature range
- 1/2 change-over contacts 5 A; HM8-2PS-A 1 delayed, 1 immediate changeover



<b>flare</b> TIME HM5-1-A (5 time functions / 1 contact)	81.020.0100.0			
flare TIME HM8-2-A (8 time functions / 2 contacts)	81.020.0104.0			
flare TIME HM8-2U-A (4 time- / 4 special functions / 2 contacts)		81.020.0105.0		
flare TIME HM8-2P-A (with remote control connection)		81.020.0134.0		
flare TIME HM8-2PS-A (with remote control connection)	,			
Technical data				
	20.4 20.4 \/ A0/D0			
Input voltage range	20,4 264 V AC/DC			
Time range	0.05 s 240 h			
Time functions	5 or 8			
Number of change-over contacts	1 or 2			
Maximum switching current	5 A			
Mechanical life time 20 x 10 <sup>6</sup>				
Electrical life time AC1	0.1 x 10 <sup>6</sup>			
Isolation voltage of input/output	2 kV			
Connection clamps	Pluggable screw clamp			
Wire range fine-stranded/solid	0.2 - 2.5 mm <sup>2</sup> (AWG 24-14)			
Degree of protection / mounting rail IP 20 / TS 35 (EN60)		15)		
Dimensions (mm) W x H x D	22.5 x 96.5 x 91.5			
Operation temperature range	-40 +60 °C			
Approvals	( € cUL)us			
Accessoires				
Remote control		F0.000.0031.9		

#### flare TIME TWIN-1

- Multi-range repeat cycle timer
- Multi-range time
- ON- or OFF-start settable
- Time ON and OFF seperate adjustable
- Wide input voltage range 20.4 ... 264 V AC/DC
- 1 change-over contacts 5 A



Туре	Part No.
flare TIME TWIN-1	81.020.0011.0
Technical data	
Input voltage range	20,4 264 V AC/DC
Time range	0.1 s 1200 h
Time functions	ON- or OFF-start
Number of change-over contacts	1
Maximum switching current	5 A
Mechanical life time	10 x 10 <sup>6</sup>
Electrical life time AC1	$0.1 \times 10^6$
Isolation voltage of input/output	2 kV
Connection clamps	Screw clamp
Wire range fine-stranded/solid	0.14 - 2.5 mm <sup>2</sup> (AWG 26-14)
Degree of protection / mounting rail	IP 20 / TS 35 (EN60715)
Dimensions (mm) W x H x D	22.5 x 89.4 x 100
Operation temperature range	-20 +55 °C
Approvals	( € <sub>2</sub> <b>UP</b> <sub>2</sub> ∋ )

## Electronic timer and switching relays for DIN rails

#### flare TIME OFF-1

- OFF delayed timer
- No auxiliary voltage necessary
- 2 time ranges setable
- 1 change-over contacts 5 A



Туре	Part No.		
flare TIME OFF-1	81.020.0010.0		
Technical data			
Input voltage range	170 264 V AC		
Time range	1 120 s		
Time functions	OFF delay		
Number of change-over contacts	1		
Maximum switching current	5 A		
Mechanical life time	10 x 10 <sup>6</sup>		
Electrical life time AC1	$0.1 \times 10^6$		
Isolation voltage of input/output	2 kV		
Connection clamps	Screw clamp		
Wire range fine-stranded/solid	0.14 - 2.5 mm <sup>2</sup> (AWG 26-14)		
Degree of protection / Mounting rail	IP 20 / TS 35 (EN60715)		
Dimensions (mm) W x H x D	22.5 x 89.4 x 100		
Operation temperature range	-20 +55 °C		
Approvals	( € c <b>=X</b> ′us		

#### **flare** TIMER-S

- Multi-function timer
- Spring clamp
- 1 change-over contact 6 A
- ON-delay and OFF-delay
- One shot and flashing



Type	Part No.
flare TIMER-S-250V6A	81.020.4100.0
Technical data	
Input voltage range	24 V DC +25%/-20%
Time range	0.1 300 s
Number of change-over contacts	1
Maximum switching current	6 A
Mechanical life time	$2 \times 10^7$
Electrical life time at 24 V DC / 2 A	$0.6 \times 10^6$
Electrical life time at 230 V AC / 6 A	0.8 x 10 <sup>5</sup>
Isolation voltage of input/output	4 kV
Connection clamps	Spring clamp
Wire range fine-stranded/solid	0.25 - 1.5 mm <sup>2</sup> (AWG 24-16) /
	0.25 - 2.5 mm <sup>2</sup> (AWG 24-14)
Degree of protection / Mounting rail	IP 20 / TS 35 (EN60715)
Dimensions (mm) W x H x D	6.2 x 89 x 70mm
Operation temperature range	0 +50 °C
Approvals	<b>⊕ ⊕</b> <sub>Ex</sub>

### Electronic time relay for front panel mounting

#### flare TIME FM15-1

- Multi-function timer
- High-contrast color display
- 15 time functions
- Front panel mounting 48 x 48 mm
- Wide temperature range
- 1 change-over contact 5 A



Туре	Part No.	Part No.			
<b>flare</b> TIME FM15-1 (24 V)	81.020.0020.0				
<b>flare</b> TIME FM15-1 (230 V)		81.020.0021.0			
Technical data					
Input voltage range	4.530 V DC 85264 V AC/D				
Time range 0.001 s 999 h					
Time functions	15				
Number of change-over contacts	1				
Maximum switching current 5A					
Mechanical life time	10 x 106				
Electrical life time AC1	0.1 x 106				
Isolation voltage of input/output	2 kV				
Connection clamps	Screw clamp				
Wire range fine-stranded/solid	0.14 - 2,5 mm <sup>2</sup> (AWG 26-14)				
Degree of protection	IP20 / IP 66 (optional)				
Dimensions (mm) W x H x D	48 x 48 x 65 48 x 48 x 85,5				
Operation temperature range	-10 +55 °C				
Approvals	C € cŪlus				

#### flare TIME FM6-2

- Multi-function timer
- 7-segment display, red
- 6 selectable functions
- Front panel mounting 72 x 72 mm
- Simple operation with the push/rotary button
- 2 change-over contacts, potential-free



Туре	Part No.
flare TIME FM6-2	81.020.0025.0
Technical data	
Supply voltage	90 to 265 V AC/DC
Configurable time ranges	hh:mm / mm : ss
Setting ranges	0:01 to 99:59 hours / 0:01 to 99:59 minutes
Time functions	ON delay, OFF delay, Interval ON, Interval OFF, impulse generator starting with break, impulse generator starting with impulse
Behavior in case of voltage failure	Time retentivity (settable)
Number of changeover contacts	2
Switching capacity	max. 250 V AC, 5 A
Service life	> 100,000 switching cycles
Insulation voltage	Input / output / supply: 2 kV
Electrical isolation	All inputs, outputs and supply voltage
IP rating front / rear	IP54 / IP20
Housing front/panel cutout dimensions	72 x 72 mm / 68 x 68 mm
Operating temperature range	-25 +60°C
Conformity	EN 61812-1:2012
Approvals	(€