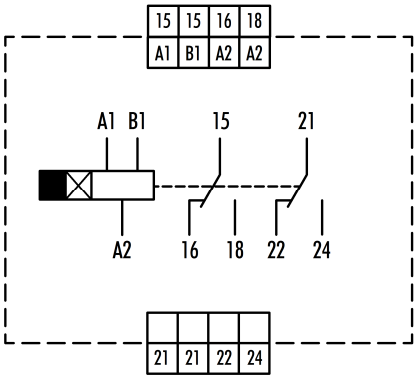
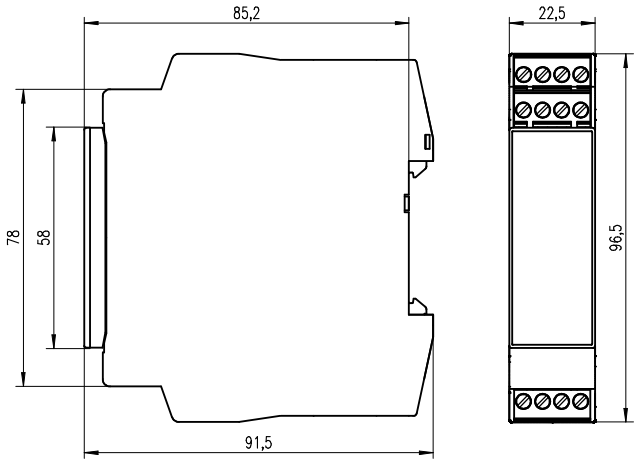


flare TIME HM8-2U-A
Multi-function Time Relay
24-240 V AC/DC
81.020.0105.0

- Multi-function time relay
- 8 selectable functions
- Multi-range settings
- 8 time ranges
- Multi voltage range 20,4 ... 264 V AC/DC
- Mounting width 22,5 mm



Block diagram



Dimensional diagram

Technical Data

flare TIME HM8-2U-A	Order no. 81.020.0105.0
Input / Control	
Rated supply voltage [U_{I_N}]	24 ... 240 V AC/DC
Supply voltage range	20,4 ... 264 V AC/DC
Line frequency AC	50/60 Hz
Rated power consumption AC/DC ca. [$P_{I\ max}$]	3.5 VA @ 230 V AC; 1,2 W @ 24 V DC
Input current at control input B1	< 1,5 mA
Output / Switching contact	
Contacts	2 changeover contacts
Max. current	5 A, 250 V AC / 5 A, 24 V DC
Min. current	100 mA
Min. switching load	500 mW
Max. switching voltage	275 V AC
Min. switching voltage	5 V
Utilization category acc. EN60947-5-1:2004	AC-15: U_e 230 V AC, I_e 1,4 A DC-13: U_e 24 V DC, I_e 1A
Contact material	AgSnO
Life cycle	100 x 10^3 operations
Time ranges / Operating modes	
Time range (8 time ranges)	0,05 ... 1 s / 0,5 ... 10 s / 3 s ... 1 min / 30 s ... 10 min / 3 min ... 1 h / 30 min ... 10 h / 72 min ... 1 d / 12 h ... 10 d
Accuracy of operating time	±1 % ±10 ms
Recovery time	100 ms

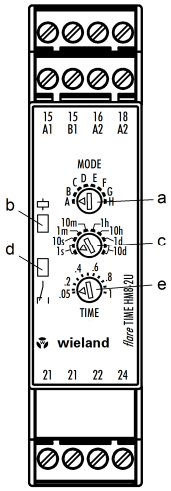
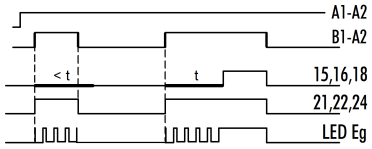


Fig. 1 Control and display elements

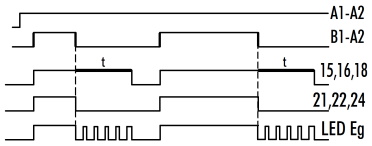
flare TIME HM8-2U-A

Technical Data

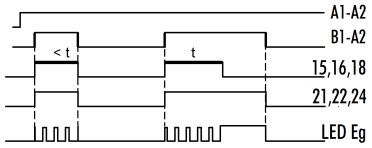
flare TIME HM8-2U-A	Order no. 81.020.0105.0
Minimum pulse duration	50 ms
Accuracy	±10 % of end value
Operation modes / Timer modes (8 functions), selectable via "MODE" switch (Fig. 1 - a)	A: On delay B: OFF delay C: Single shot (rising edge) D: Single shot (falling edge) E: Change relay-state (rising edge) F: Invert relay state (rising edge) G: Watchdog H: Single shot 0,5 sec (rising edge)
Changing operation mode	without power supply, else error
Functional Display	
LED Time control (Fig. 1 - b)	
time running	LED flashing / n.o. contact open
time elapsed	LED on / n.o. contact closed
LED Relay contact (Fig. 1 - d)	
contact open	LED off
contact closed	LED on
Isolation Property	
Isolations voltage (input/output)	2.000V AC
Isolations resistance (at open contacts)	1.000V AC
Approvals and Standards	
Vibration (10Hz -55Hz,5g at 55Hz)	acc. IEC 60068-2-6
Shock (5g at 30ms)	acc. IEC 60068-2-27
EMV immunity	IEC 61000-4-2 / -4-3 / -4-4 / -4-5
EMV emission	EN 55011
Operation / Dimensions / Wiring	
Operating temperature range	-40 ... +60 °C
Storage temperature range	-40 ... +60 °C
Dimensions (W x H x D)	22.5 x 96.5 x 91.5 mm
Weight	ca. 120 g
Montage on	35 mm rail acc. EN60715
Mounting orientation	any
IP protections	IP 20
Clamp type	pluggable screw clamp
Connector cross section solid/stranded or solid /stranded with cable end sleeve	2 x 0,14 ... 0,75 mm² / 1 x 0,14 ... 2,5 mm²
Strip length	8 mm
Torque	0.5 ... 0.6 Nm
Terminal Connections	
A1 - A2	Supply voltage
B1 - A2	Control / Start input
15, 16, 18	Changeover contact (Relay 1)
21, 22, 24	Changeover (Relay 2)
Control and Display Elements	(see Fig. 1 Control and display elements)
a - turn switch	Operating mode / function
c - turn switch	Time base (1 s ... 10 d)
e - turn potentiometer	Time duration (0,05 ... 1 x time base)



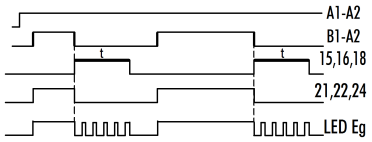
MODE A: On delay



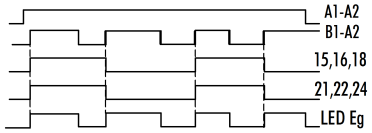
MODE B: OFF delay



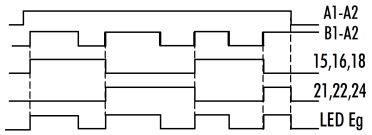
MODE C: Single shot (rising edge)



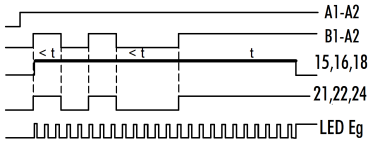
MODE D: Single shot (falling edge)



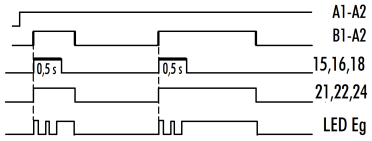
MODE E: Change relay-state



MODE F: Invert relay state



MODE G: Watchdog



MODE H: Single shot