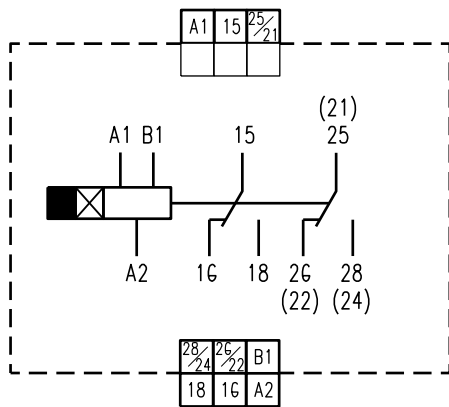


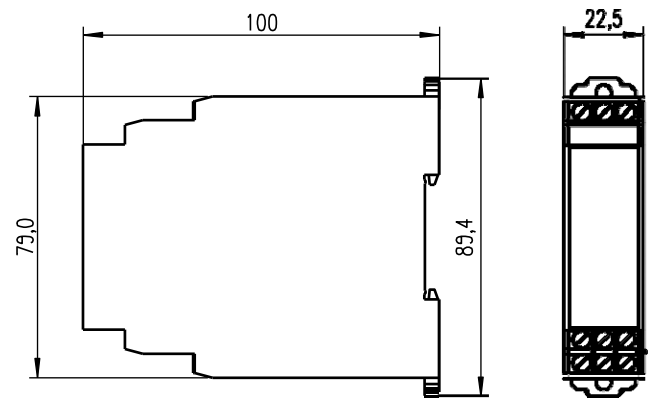
**flare TIME M8-2**

**flare TIME M8-2**  
 Multifunctional Time Relay  
 24-240 V AC/DC  
 81.020.0003.0

- Multi-functional Time Relay
- 8 selectable operating modes
- Multi range time settings
  - 8 time ranges
- Synchronous / Time controlled mode selectable (for output 2)
- Multiple voltage supply 20.4 ... 264 V AC/DC
- Mounting width 22.5 mm



Block diagram



Dimensional diagram

**Technical Data**

flare TIME M8-2		Order no. 81.020.0003.0
<b>Input / Control</b>		
Rated supply voltage A1-A2	[U <sub>I,N</sub> ]	24 ... 240 V AC/DC
Voltage range		20.4 ... 265 V AC/DC
Line frequency AC		50/60 Hz
Rated power consumption	[P <sub>I,max</sub> ]	6.6 VA @ 240 V AC, 1.2 W @ 24 V DC
<b>Output / Switching Contact</b>		
Contacts		2 changeover contacts
Contact load max.		5 A at 250 V AC / 5 A at 24 V DC, ohmic load
Contact output minimum load		10 mA at 5 V DC
Switching voltage max.		250 V AC / 30 V DC
Rated breaking capacity		see Fig. 1 Load limiting curve (d = distance to adjacent modules)
Contact material		AgNi
Life cycle		100 x 10 <sup>3</sup> operations (5 A at 250 V AC, ohmic load, 360 operations/h)
<b>Time Ranges / Operating Modes</b>		
Time ranges		0.1 s / 1 s / 10 s / 1 m / 10 m / 1 h / 10 h / 100 h
Accuracy of operating time		max. ±1 % of full scale
Setting error		max. ±10 % of full scale ±0.05 s
Minimum input signal width		50 ms (start input)
Influence of voltage		max. ±0.5 % of full scale
Influence of temperature		max. ±2 % of full scale

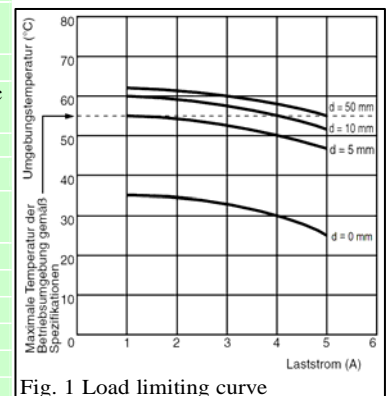


Fig. 1 Load limiting curve

## flare TIME M8-2

### Technical Data

flare TIME M8-2		Order no. 81.020.0003.0
Operating modes (Fig. 2 - e) (4 time functions)		A: ON Delay B: Flicker OFF start C: Single shot and OFF delay B2: Flicker ON start D: OFF delay E: Single shot J: ON delayed single shot, fixed time G: ON/OFF delay
Operating modes for output 2 (Fig. 2 - f) (2 modes)		INST: synchronous to supply voltage TIME: time controlled output
Change of operating mode (Fig. 2 - e)		Without power supply, else error
<b>Functional Display</b>		(see Fig. 2 Control and display elements)
LED relay control (Fig. 2 - d)		
Operating voltage off		LED off / n. o. contact open
Operating voltage on		LED slow flashing / n. o. contact open
time running		LED fast flashing / n. o. contact open
time expired		LED on / n. o. contact closed
LED relay contact (Fig. 2 - c)		
Contact open		LED off
Contact closed		LED on
<b>Isolation Property</b>		
Dielectric strength (input/output)		2.000 V AC (50/60 Hz, for 1 min)
Insulation resistance (A1, A2 / contacts)		min 100 MΩ at 500 V DC
<b>Approvals and Standards</b>		
UL		cURus
CE		EMV 2004/108/EC; Low voltage 2006/95/EC
Safety Standard		EN61812-1
Product Standard		EN61812-1
EMV immunity		EN61000-4-2, /-4-3, /-4-4, /-4-5
EMV emission		EN61000-3-2, /-3-3, EN55011 Class B
<b>Operation / Dimensions / Wiring</b>		
Operating temperature range	[T <sub>U</sub> ]	-20 ... +55 °C
Storage temperature range	[T <sub>U</sub> ]	-40 ... +70 °C
Humidity in operation		25 ... 85 % RH
Dimensions (W x H x D)		22.5 x 100 x 79.0 mm
Weight		ca. 120 g
Housing material		Plastic
Mounting on		35 mm rail acc. EN 60715
Cooling		Free convection
IP protection		IP20
Clamp type		Screw clamp
Connector cross section (min.)	solid/stranded	0.2 mm <sup>2</sup> (AWG24)
Connector cross section (max.)	solid/stranded	2.5 mm <sup>2</sup> (AWG14)
Strip length		8 mm max.
Recommended torque		0.49 Nm
<b>Terminal Connections</b>		
A1 - A2		Supply voltage
B1 - A2		Control / Start input
15, 16, 18		Changeover contact (relay 1)
25 (21), 26 (22), 28 (24)		Changeover contact (relay 2)
<b>Control Elements</b>		(see Fig. 2 Control and display elements)
a - turn switch		Time range (0.1 s, ..., 100 h)
b - turn potentiometer		Time duration (0 ... 12 x time range)
e - turn switch		Operating mode / time function
f - turn switch		Operating mode for output 2

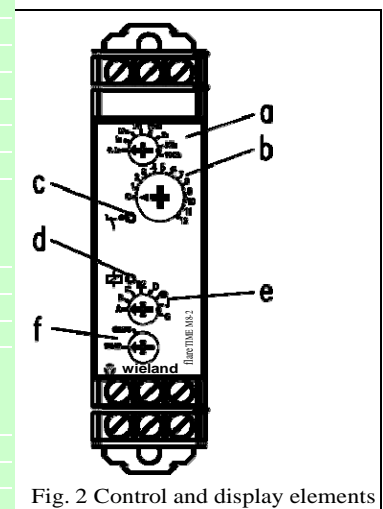


Fig. 2 Control and display elements