



**Continuous repeat cycle timing in a compact 1/8 DIN case... fast, easy analog dial setpoint adjustment**



The DA100 is a solid state ON/OFF repeat cycle timer housed in a 1/8 DIN, molded NORYL® case. The timer uses CMOS integrated circuits for the timing function. Sixteen time ranges are available in any combination of ON and OFF periods. Two knobs reference to a calibrated scale provide the individual time settings. Two front mounted pilot lights indicate timing status.

- All connections made through standard square base relay socket
- Available accessories for conversion into panel mount including a version with plug-in capability
- Standard unit times its OFF period first and provides an isolated double pole - double throw relay contact output
- Available options include ON-Time First timing and One-Cycle timing (previously required two time delay relays)

**OPERATION**

The timing base for each of the two timing states (ON time and OFF time) is generated by an internal oscillator set by a precision capacitor and a dial adjustable potentiometer. This allows accurate control over the long time ranges available with the DA100 series.

The DA100 alternately times its OFF and ON periods as long as power is applied to the control input terminal. The output contacts change state at the completion of each timing period. The DA100 resets when power is removed from the control input.

**SPECIFICATIONS**

Time Ranges:

Sym.	Dial Range	Minimum Setting	Sym.	Dial Range	Minimum Setting
10	3.5 Sec.	.37 Sec.	18	15 Min.	1.6 Min.
11	7 Sec.	.75 Sec.	19	30 Min.	3.2 Min.
12	15 Sec.	1.5 Sec.	20	60 Min.	6.4 Min.
13	30 Sec.	3 Sec.	21	120 Min.	12.8 Min.
14	60 Sec.	6 Sec.	22	4 Hr.	25.6 Min.
15	120 Sec.	12 Sec.	23	8 Hr.	51.2 Min.
16	4 Min.	24 Sec.	24	15 Hr.	1.7 Hr.
17	8 Min.	48 Sec.	25	30 Hr.	3.4 Hr.

**Operating Voltage/Frequency:**

120 VAC (+10 -15%), 50/60 Hz or 120 VDC (+10 -15%)  
 240 VAC (+10 -15%), 50/60 Hz or 240 VDC (+10 -15%)  
 24 VAC, 50/60 or 24 VDC

**Setting Accuracy:** Within ±10% of maximum range

**Repeatability (Constant Voltage & Temperature):**  
 ±0.1% of setting or 25 ms, whichever is longer

**Repeatability (Voltage & Temperature Variation):**  
 Variable Voltage: ±1% of setting  
 Variable Temperature: ±2% of setting  
 Variable Voltage and Temperature: ±3% of setting

**Reset Time:** 65 ms

**Cycle Progress:** Pilot lights during ON time and OFF time

**Power on Response:** 30 ms max. after line voltage applied to pins A and B

**Operating Temperature:** 0° to 60°C (+32° to +140°F)

**Output Rating:**

Relay: 10 amp steady state  
 Mechanical Life: over 20 million operations  
 Electrical Life: contingent upon load characteristics

**Power Interruption:**

Line voltage interruptions of 20 ms or less will not reset unit

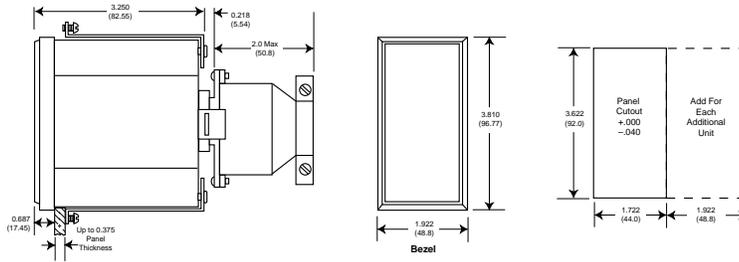
**Transient Voltage Immunity:** Unaffected by 50 microseconds, 600 V peak transients superimposed on the line input

**Vibration:** Unit function is unaffected by 2.5G sinusoidal vibration magnitude in both directions of three perpendicular mounting axes imposed from 10 to 100 Hz

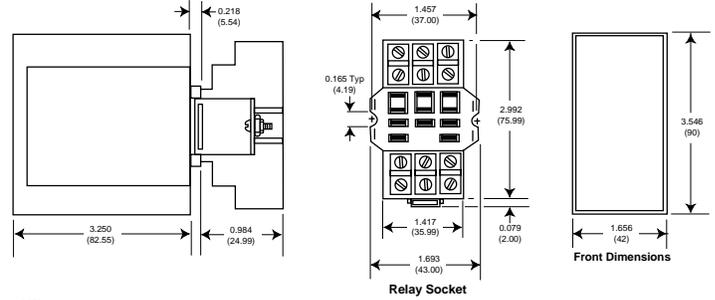
**Approvals:** UL Recognition E96337  
 CSA Certification L26861  
 FM Approved J10C8A4.AF

## MOUNTING

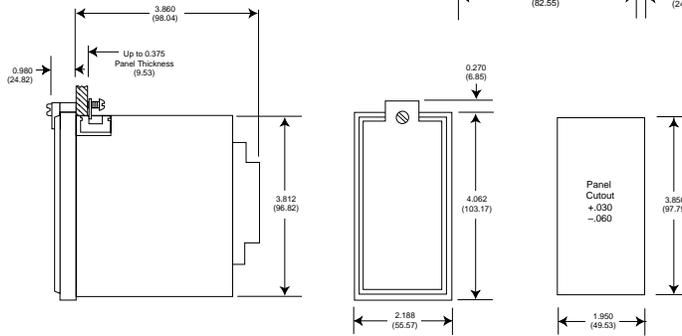
### Panel Mount:



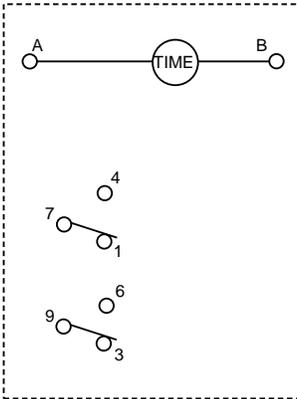
### Surface Mount:



### Plug-In Mount:



## DA100 TERMINAL ASSIGNMENTS



## ACCESSORIES

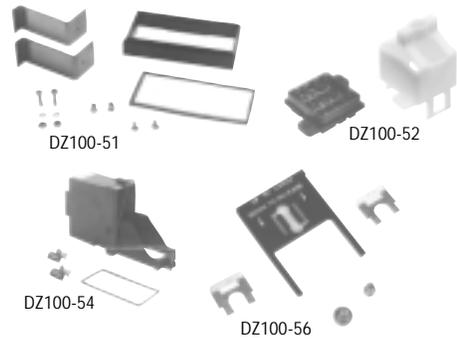
**DZ100-51 Bezel Kit** for panel mounting. Kit includes bezel, bezel gasket, brackets and mounting hardware.

**DZ100-52 Strain Relief Kit** provides cable connection to panel mounted unit. Includes H11496 strain relief and 4270-0621 socket and hardware.

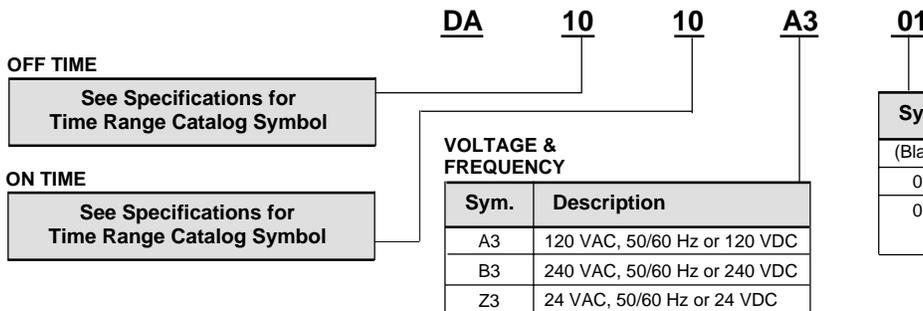
**DZ100-54 Plug-in Housing** for panel mounting units with plug-in convenience. Kit includes housing and mounting brackets.

**DZ100-56 Latch and Latch Release Kit** for surface mounting. Kit includes latch, spacer, latch release and mounting hardware (use with 60SR3BO5 Relay Socket).

**60SR3BO5 Square Base Relay Socket**



## ORDERING INFORMATION



### OFF TIME

See Specifications for Time Range Catalog Symbol

### ON TIME

See Specifications for Time Range Catalog Symbol

### VOLTAGE & FREQUENCY

Sym.	Description
A3	120 VAC, 50/60 Hz or 120 VDC
B3	240 VAC, 50/60 Hz or 240 VDC
Z3	24 VAC, 50/60 Hz or 24 VDC

### FEATURES

Sym.	Description
(Blank)	Standard, OFF Time First, DPDT Relay Output
01	ON Time First
03	One Cycle Only (OFF Time First) (Requires factory components)