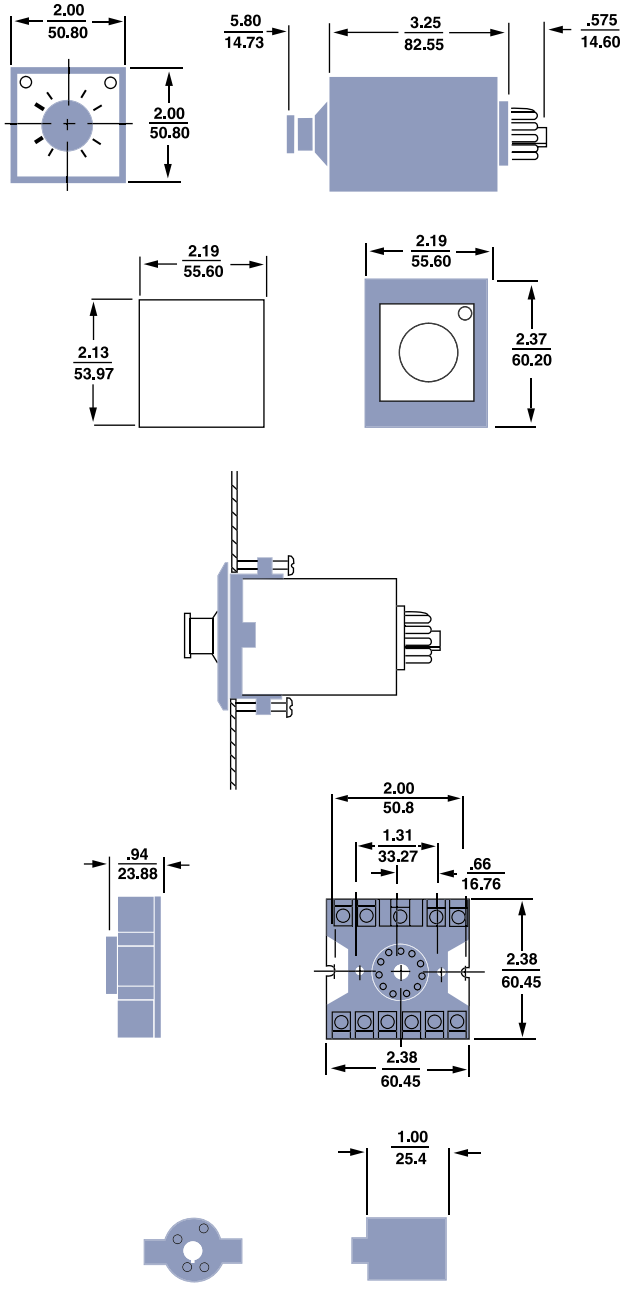
DIMENSIONS:
INCHES
MILLIMETERS

Series 314

Plug-In Multi-Range Off-Delay/Interval TDR



11 PIN MOUNT SOCKET

The ATC 314 is an economical multi-range solid-state TDR with two models; one for off-delay (delay-on-break) and one for interval-on-delay operation. With three dial-selected adjustable ranges, it provides any timing period between 0.035 and 100 SEC with excellent repeat accuracy even with wide changes in voltage, temperature and reset time.

OPERATION

OFF-DELAY MODEL

Presuming the AC line is energizing the unit continuously, when the start switch is closed the relay energizes, the pilot light goes on and the unit resets. Opening the start switch begins the timing cycle. A relaxation oscillator runs at a rate determined by the set pot. When the oscillator count is equal to the level set by the range switch, a digital count circuit is satisfied and the unit times out.

At time out, the timing circuit and relay are de-energized and the pilot light goes **off**. Closing the start switch resets the unit. After a power failure (or on first startup) the unit will go to the timed out condition (relay de-energized) until the unit is reset by closing the start switch to begin a new cycle.

INTERVAL-ON-DELAY MODEL

Timing begins when the *start* switch is closed; simultaneously the relay is energized and the pilot light goes **on**. Either a momentary/sustained start or a sustained start input can be used (see wiring). Reset is accomplished by de-energizing the unit. At time-out, the timing circuit and relay are de-energized and the pilot light goes **off**.

SPECIFICATIONS

MODELS
Choice of two:
Off-delay mode
Interval mode

RANGES AND MINIMUM SETTING
Three dial-selected adjustable ranges:
0.035 - 1.0 sec
0.18 - 10 sec
1.8 - 100 sec

REPEAT ACCURACY
Varies as a function of line voltage and temperature but not of reset time (see Recycle Characteristics):
± 1% of setting or 2.0 ms, when temperature is constant and line voltage is constant or varies within limits*
± 4% of setting or 2.0 ms, when line voltage is constant and temperature varies within limits*
± 6% of setting or 2.0 ms, when line voltage and temperature vary within limits*
*Variations of line voltage must be within 95 and 132V; of temperature between 0° and 70°C (32° and 158°F); and reset/start time must be at least 75 msec.

RESET
OFF DELAY: 75 msec during timing or after time-out.
START
INTERVAL-ON-DELAY: 45 msec (for momentary start wiring)

POWER INTERRUPTION EFFECT
OFF DELAY: A power failure over 5 msec during timing will cause relay drop-out. If power is restored in up to 75 msec, the unit will re-energize its relay and continue timing. If the power loss is over 75 msec the unit will lock in to the timed-out (relay de-energized) position until reset.
INTERVAL-ON-DELAY: A power failure over 5 msec causes relay drop-out. Restoring power in up to 75 msec will re-energize the relay and timing will continue. A power loss over 75 msec will always reset the timer fully.

LOAD RELAY:
TYPE: DPDT, hard wired
LIFE: 50,000,000 operation (no load)
CONTACT RATING: 7A resistive at 120 or 240V 1/10 HP at 120V

POWER REQUIREMENTS
120 VAC: 95 to 132V, 50/60 Hz, 0.02A
240 VAC: 190 to 264, 50/60 Hz, 0.02A

SETTING ACCURACY
10% at full scale.

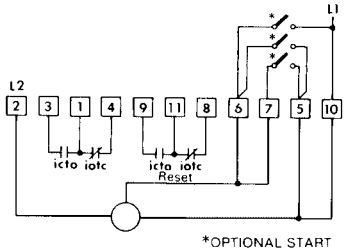
TEMPERATURE RATING
0 to 70° C (32 to 158° F)
MOUNTING
PLUG-IN 11-PIN BASE; mounts in any position
OPTIONAL: surface-mounting socket
panel-mounting bezel kit
plug-on socket kit

HOUSING
Dust, moisture and impact-resistant molded plastic case

WEIGHT
NET: 6 oz.
SHIPPING: 10 oz.

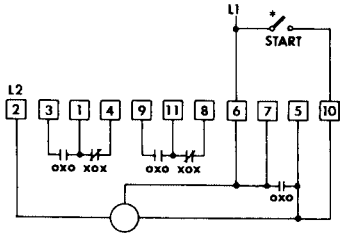
APPROVALS
See Agency Listing on inside back cover of catalog.

WIRING



OFF-DELAY(Delay on Break)
(Drawn power off-relay de-energized)

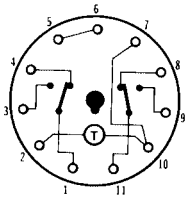
*OPTIONAL START SWITCH WIRING



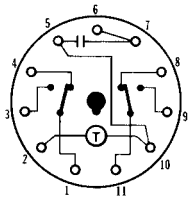
INTERVAL-ON-DELAY
Momentary or Sustained Start
Sustained Start*

*Replace start switch with jumper for sustained start only

TERMINAL WIRING



OFF DELAY



INTERVAL-ON-DELAY

ORDERING CODE

314B	134	Q	2	C

BASIC TYPE

RANGE
134 Three dial-selected ranges (1 sec., 10 sec., 100 sec.)
000 Special

VOLTAGE & FREQUENCY
Q 120VAC, 50/60 Hz
R 240VAC, 50/60 Hz
T 24V, 50/60 Hz

ARRANGEMENT
2 Off-delay mode
3 Interval mode

FEATURES
C Standard
K Special

ACCESSORIES
0000-825-63-00 Surface mounting socket
0319-025-06-00 Retaining clip for use with socket
0319-261-44-00 Panel mount bezel kit
0314-260-07-00 Panel mount socket kit

Before starting your design, read the safety statement on the inside back cover of the ATC catalog.