## STA Series, Specification Grade Discrete Plug-in, Time Delay Relay With QC Terminals



Product Facts
■ On-Delay, Off-Delay, Interval and Accumulating On-Delay timing modes

- 13 timing ranges from 0.1 sec. to 48 hr .

■ 10A DPDT output contacts

- Knob, fixed or external timing adjustment
- QC plug-in terminals save space, two LEDs show status
■ File 3520, File E60363, File LR51332



## Timing Specifications

Timing Modes -
On-Delay, Off-Delay, Interval and Accumulating On-Delay.
Timing Ranges - 6 to 180 cycles; 0.1 to $3 / 0.5$ to 15 / 1 to $30 / 2$ to 60 / 4 to $120 / 6$ to 180 / 10 to 300 sec.; 0.33 to 10 / 0.5 to 15 / 1 to 30 min.; 1 to 6 / 2 to 48 hr. (All are $+5 \%,-0 \%$ of maximum values).
Timing Adjustment - Knob or fixed time (internal fixed resistor) - all models; customer supplied external potentiometer or resistor - On-Delay and Interval models only.

## Accuracy -

Repeat Accuracy - $\pm .5 \% \pm 0.004 \mathrm{sec}$.
Overall Accuracy - $\pm 2 \%$ throughout operating temperature and voltage ranges.
Reset Time - 30 ms . min. (between deenergization and reenergization without affecting accuracy.)
Relay Operate Time - Off-Delay mode: 35 ms .; Interval mode - 20 ms .
Relay Release Time - On-Delay and Accumulating On-Delay modes 20 ms

Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/aboratories and review them to ensure the product meets the requirements for a given application.



Off-Delay \& Accumulating On-Delay Fixed or Knob Adjust

EXT. RES.



Wiring Diagrams (Bottom Views)

Contact Data @ $25^{\circ} \mathrm{C}$
Arrangements-2 Form C (DPDT).
Rating - 10A @ 28VDC or 120VAC, resistive; $1 / 3 \mathrm{HP}$ @ 120/240VAC; 345VA. Same polarity.
Expected Mechanical Life 10 million operations
Expected Electrical Life - 500,000
operations, min., at rated resistive load.
Initial Dielectric Strength -
$1,000 \mathrm{VAC}$ plus twice the nominal voltage for one minute.

Input Data @ $\mathbf{2 5}^{\circ} \mathrm{C}$
Voltage - See Ordering Information section for details.
Power Requirement - 3W max.
Transient Protection -
Non-repetitive transients of the following magnitudes will not cause spurious operation of affect function and accuracy.

| Operating <br> Voltage | $<0.1 \mathrm{~ms}$ | $<1 \mathrm{~ms}$ |
| :---: | :---: | :---: |
| All except <br> $12 ~ \& ~ 24$ | $3,000 \mathrm{~V}$ | 2,500 |
| $12 \& 24$ | Consult <br> Factory |  |

Environmental Data
Temperature Range -
Storage - $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$
Operating - $-30^{\circ} \mathrm{C}$ to $+65^{\circ} \mathrm{C}$

## Mechanical Data

Mounting/Termination -
Quick connect terminals fit either
27E121 or 27E893 (snap-on) socket (order separately).
Status Indication — Power On LED and Output Contacts LED (optional).
Weight - 4.2 oz. (119g) approximately.

Ordering Information (All "X's" must be included to complete part number)


| Operating Voltage $(+10 \%,-15 \%)$ | Timing Adjustment $X A=$ Knob Adjust |
| :---: | :---: |
| $\mathrm{A}=120 \mathrm{VAC}, 50 / 60$ | XB $=$ External |
| Hz. / 120VDC | Potentiometer or |
| $\mathrm{E}=24 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$. | resistor (Operating |
| / 24VDC | modes 1 and 3 only). |
| $\mathrm{F}=48 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$. | XF =Fixed Times -Specify |
| / 48VDC | time delay in seconds |
| $Q=12 V D C$ | per the following |
|  | examples: |
|  | XF9.000 $=9 \mathrm{sec}$. |
|  | XF99.00 $=99 \mathrm{sec}$. |
|  | XF999.0 $=9999 \mathrm{sec}$ |
|  | XF1000 $=1000 \mathrm{sec}$ |

Authorized distributors are likely to stock the following:
None at present.

Dimensions are in millimeters unless otherwise specified.

For additional support numbers please visit www.te.com

