

Solid state, time delay relays from National feature standard time delays up to 10 hours, superior transient protection, low cost and 10 ampere DPDT relay output. Units have an operating temperature range of -10°F to +130°F. Many types not listed are available on special order.

T3 SERIES DELAY ON BREAK

Plug-in base. Time Delay Adjustment: Knob. Power Consumption: 3 watts. Repeatability: ±1%.

Mfr. No.	Time Delay, Seconds	Adj. Means	Input Volts	UL File #	CSA File #
T3K-00010-441	.1-10	Knob	120 AC	E 59090	LR 33434
T3K-00030-441	.3-30	Knob	120 AC	E 59090	LR 33434
T3K-00180-441	1.8-180	Knob	120 AC	E 59090	LR 33434
T3K-00005-461	.05-2	Knob	120 AC	E 59090	LR 33434
T3K-00010-461	.1-10	Knob	120 AC	E 59090	LR 33434
T3K-00030-461	.3-30	Knob	120 AC	E 59090	LR 33434
T3K-00060-461	.6-60	Knob	120 AC	E 59090	LR 33434
T3K-00120-461	1.2-120	Knob	120 AC	E 59090	LR 33434
T3K-00180-461	1.8-180	Knob	120 AC	E 59090	LR 33434
T3K-00300-461	3-300	Knob	120 AC	E 59090	LR 33434
T3K-00600-461	6-600	Knob	120 AC	E 59090	LR 33434
T3K-00900-461	9-900	Knob	120 AC	E 59090	LR 33434
T3K-01800-461	18-1800	Knob	120 AC	E 59090	LR 33434
T3K-03600-461	36-3600	Knob	120 AC	E 59090	LR 33434
T3K-00010-462	.1-10	Knob	24 DC	E 59090	LR 33434
T3K-00060-462	.6-60	Knob	24 DC	E 59090	LR 33434
T3K-00180-462	1.8-180	Knob	24 DC	E 59090	LR 33434
T3K-00010-466	.1-10	Knob	12 DC	E 59090	LR 33434
T3K-00060-466	.6-60	Knob	12 DC	E 59090	LR 33434
T3K-00180-466	1.8-180	Knob	12 DC	E 59090	LR 33434
T3K-00010-467	.1-10	Knob	24 AC	E 59090	LR 33434
T3K-00060-467	.6-60	Knob	24 AC	E 59090	LR 33434
T3K-00180-467	1.8-180	Knob	24 AC	E 59090	LR 33434



Series CKK



Series Z1



Series T3

Z3 SERIES DELAY ON BREAK

Printed circuit board construction. Time Delay Adjustment: Trim pot. Power Consumption: 3 watts. Repeatability: ±2%.

Mfr. No.	Time Delay, Seconds	Adj. Means	Input Volts	UL File #	CSA File #
Z3T-00010-061	.1-10	Pot.	120 AC	E 59090	LR 33434
Z3T-00060-061	.6-60	Pot.	120 AC	E 59090	LR 33434
Z3T-00180-061	1.8-180	Pot.	120 AC	E 59090	LR 33434
Z3T-00300-061	3-300	Pot.	120 AC	E 59090	LR 33434

K3 SERIES DELAY ON BREAK

Plug-in base. Time Delay Adjustment: Knob. Repeatability: ±2%.

Mfr. No.	Time Delay, Seconds	Adj. Means	Input Volts	UL File #	CSA File #
K3K-00005-661	.05-5	Knob	120 AC	E 59090	LR 33434
K3K-00010-661	.1-10	Knob	120 AC	E 59090	LR 33434
K3K-00060-661	.6-60	Knob	120 AC	E 59090	LR 33434
K3K-00120-661	1.2-120	Knob	120 AC	E 59090	LR 33434
K3K-00180-661	1.8-180	Knob	120 AC	E 59090	LR 33434

CKK SERIES REPEAT CYCLE

Plug-in base. Time Delay Adjustment: Knob. Power Consumption: 3 watts. Repeatability: ±2%.

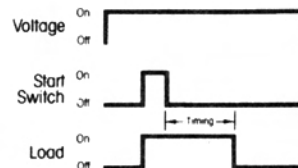
Mfr. No.	Time Delay, Seconds	Adj. Means	Input Volts	UL File #	CSA File #
CKK-00002-461	.05-2	Knob	120 AC	E 59090	LR 33434
CKK-00005-461	.05-5	Knob	120 AC	E 59090	LR 33434
CKK-00010-461	.1-10	Knob	120 AC	E 59090	LR 33434
CKK-00030-461	.3-30	Knob	120 AC	E 59090	LR 33434
CKK-00060-461	.6-60	Knob	120 AC	E 59090	LR 33434
CKK-00120-461	1.2-120	Knob	120 AC	E 59090	LR 33434
CKK-00180-461	1.8-180	Knob	120 AC	E 59090	LR 33434
CKK-00300-461	3-300	Knob	120 AC	E 59090	LR 33434
CKK-00600-461	6-600	Knob	120 AC	E 59090	LR 33434
CKK-01800-461	18-1800	Knob	120 AC	E 59090	LR 33434
CKK-03600-461	1 hr.	Knob	120 AC	E 59090	LR 33434
CKK-07200-461	2 hrs.	Knob	120 AC	E 59090	LR 33434
CKK-18000-461	5 hrs.	Knob	120 AC	E 59090	LR 33434
CKK-36000-461	10 hrs.	Knob	120 AC	E 59090	LR 33434
CKK-00010-462	.1-10	Knob	24 DC	E 59090	LR 33434
CKK-00030-462	.3-30	Knob	24 DC	E 59090	LR 33434
CKK-00060-462	.6-60	Knob	24 DC	E 59090	LR 33434
CKK-00180-462	1.8-180	Knob	24 DC	E 59090	LR 33434
CKK-00010-466	.1-10	Knob	12 DC	E 59090	LR 33434
CKK-00030-466	.3-30	Knob	12 DC	E 59090	LR 33434
CKK-00060-466	.6-60	Knob	12 DC	E 59090	LR 33434
CKK-00180-466	1.8-180	Knob	12 DC	E 59090	LR 33434

K2 SERIES SINGLE SHOT

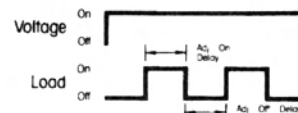
Plug-in base. Time Delay Adjustment: Knob. Power Consumption: 3 watts. Repeatability: ±2%.

Mfr. No.	Time Delay, Seconds	Adj. Means	Input Volts	UL File #	CSA File #
K2K-00005-661	.05-5	Knob	120 AC	E 59090	LR 33434
K2K-00010-661	.1-10	Knob	120 AC	E 59090	LR 33434
K2K-00060-661	.6-60	Knob	120 AC	E 59090	LR 33434
K2K-00120-661	1.2-120	Knob	120 AC	E 59090	LR 33434
K2K-00180-661	1.8-180	Knob	120 AC	E 59090	LR 33434

DELAY ON BREAK



Power is applied at all times. Upon closure of a normally open control switch, the output contacts transfer, and remain in this position as long as the switch is closed. When the control switch is opened, the time delay starts. At the end of the preset time delay, the contacts transfer back, and the timer is ready for a new cycle.



Upon application of power to the input terminals, the "off" delay is initiated. At the end of the "off" preset period, the contacts transfer from the "off" to the "on" position and the "on" delay starts. At the end of the preset "on" time, the contacts transfer back, and a new cycle begins. The cycles will continue to alternate until power is removed.