

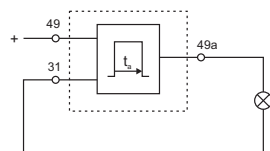
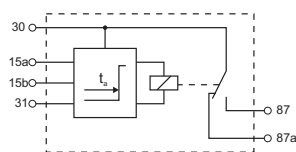
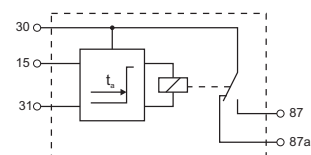
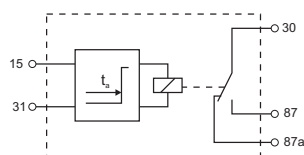
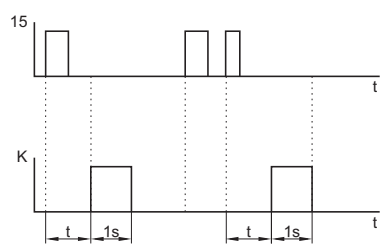
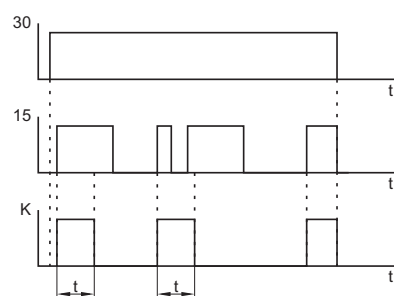
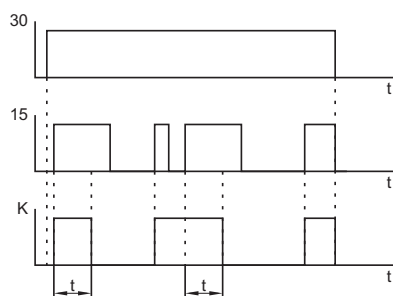
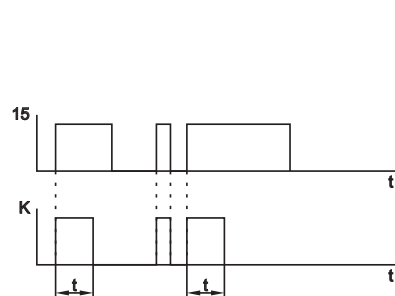
impulse relays



Impulse relays are a special versions of timer relays. With the connection to the operating voltage a switching event is started.

Part number	Characteristics
N2-1321-0001	12 V; 10/15 A; 1 s; no dry contact; circuit diagram: 2; function diagram: f
N2-1321-3000	12 V; 10/15 A; 1,3 s; dry contact; circuit diagram: 1; function diagram: d
N2-1323-0103	12 V; 20/20 A; 3 s; no dry contact; negative triggered; circuit diagram: 2; function diagram: f
N2-1323-5000	12 V; 10/15 A; 3,5 s; dry contact; circuit diagram: 1; function diagram: d
N2-1325-0103	12 V; 20/20 A; 5 s; no dry contact; negative triggered; circuit diagram: 2; function diagram: f
N2-1331-0000	12 V; 10/15 A; 10 s; dry contact; circuit diagram: 1; function diagram: d
N2-1331-5031	12 V; 10/15 A; 15 s; 2 impulse inputs; circuit diagram: 4; function diagram: f
N2-1334-0021	12 V; 10/15 A; 40 s; no dry contact; negative triggered, retriggerable; circuit diagram: 2; function diagram: e
N2-1336-0003	12 V; 10/15 A; 60 s; no dry contact; negative triggered; circuit diagram: 2; function diagram: f
N2-1346-0101	12 V; 20/20 A; 10 min; no dry contact; circuit diagram: 2; function diagram: f
N2-1346-0103	12 V; 20/20 A; 10 min; no dry contact; negative triggered; circuit diagram: 2; function diagram: f
N2-1353-6000	12 V; 10/15 A; 60 min; dry contact; circuit diagram: 1; function diagram: d
N2-1633-0009	12 V; 10/15 A; 1 ... 30 s; adjustable; no dry contact; positive triggered, retriggerable; output impulse 1s; circuit diagram: 2; function diagram: i
N2-2317-5000	24 V; 10/15 A; 0,75 s; dry contact; circuit diagram: 1; function diagram: d
N2-2321-0000	24 V; 10/15 A; 1 s; dry contact; circuit diagram: 1; function diagram: d
N2-2323-0020	24 V; 10/15 A; 3 s; no dry contact; retriggerable; circuit diagram: 2; function diagram: e
N2-2325-0000	24 V; 10/15 A; 5 s; dry contact; circuit diagram: 1; function diagram: d
N2-2331-0000	24 V; 10/15 A; 10 s; dry contact; circuit diagram: 1; function diagram: d
N2-2342-4000	24 V; 10/15 A; 4 min; dry contact; circuit diagram: 1; function diagram: d
N2-2343-0000	24 V; 10/15 A; 5 min; dry contact; circuit diagram: 1; function diagram: d
N2-3332-0200	20 s; fully electronic; circuit diagram: 5
N2-3332-0201	20 s; fully electronic; circuit diagram: 5

Part number	Characteristics
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accessories

- standard relay sockets (S. 116)
- bracket K9-2901-0000 (S. 112)

special timer relays



Part number	Characteristics
N2-2038-5000	24 V; 10/15 A; 85 s; dry contact; negative triggered; reclosing locked: 55 s
N2-2038-5001	24 V; 10/15 A; 85 s; dry contact; positive triggered; reclosing locked: 55 s

accessories

- standard relay sockets (S. 116)
- bracket K9-2901-0000 (S. 112)

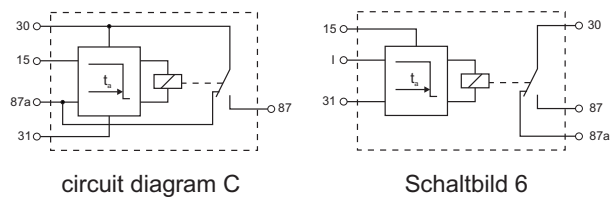
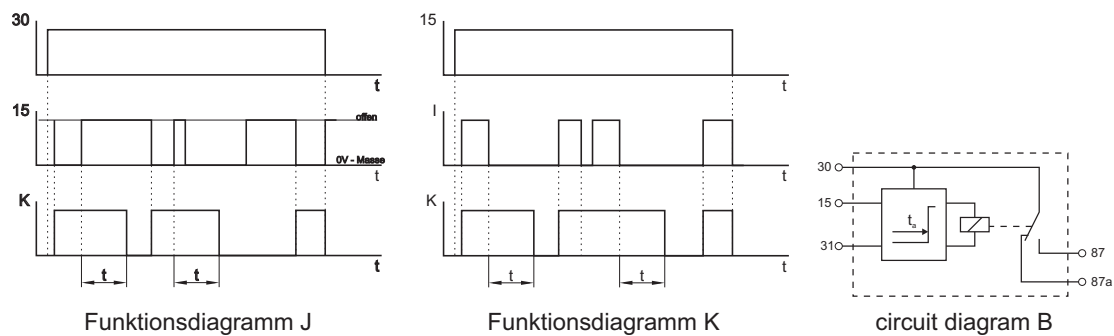
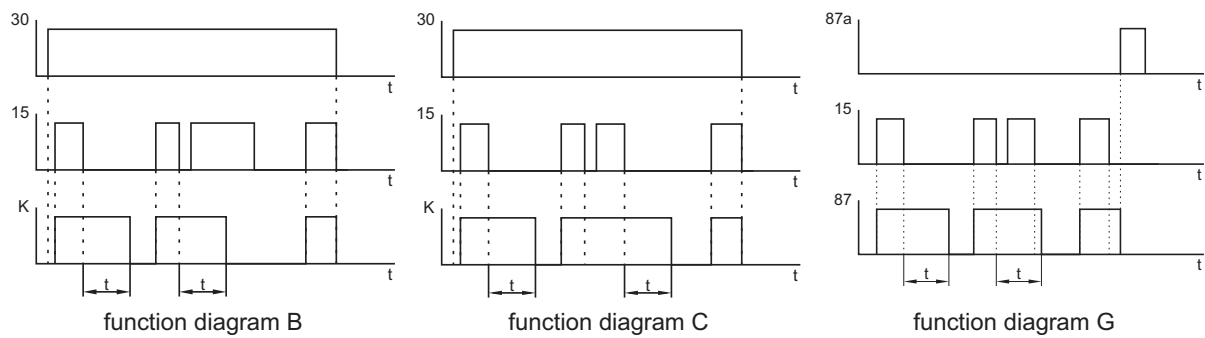
switch- off delayed timer relays



Timer relays are usefue! to delay switching operations. Both switch- on and switch- off delayed versions ar available.

Part number	Characteristics
N2-1215-0012	12 V; 10/15 A; 0,5 s; dry contact; retriggerable; circuit diagram: 6; function diagram: k
N2-1217-5000	12 V; 10/15 A; 0,75 s; no dry contact; circuit diagram: 2; function diagram: b
N2-1217-5011	12 V; 10/15 A; 0,75 s; no dry contact; extended temperature range; circuit diagram: 2; function diagram: b
N2-1222-5000	12 V; 10/15 A; 2,5 s; no dry contact; circuit diagram: 2; function diagram: b
N2-1222-5001	12 V; 10/15 A; 2,5 s; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-1225-0000	12 V; 10/15 A; 5 s; no dry contact; circuit diagram: 2; function diagram: b
N2-1225-0001	12 V; 10/15 A; 5 s; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-1231-0000	12 V; 10/15 A; 10 s; no dry contact; circuit diagram: 2; function diagram: b
N2-1231-0001	12 V; 10/15 A; 10 s; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-1231-0103	12 V; 20/20 A; 10 s; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-1231-5000	12 V; 10/15 A; 15 s; no dry contact; circuit diagram: 2; function diagram: b
N2-1232-5000	12 V; 10/15 A; 25 s; no dry contact; circuit diagram: 2; function diagram: b
N2-1233-0000	12 V; 10/15 A; 30 s; no dry contact; circuit diagram: 2; function diagram: b
N2-1233-0002	12 V; 30 s; no dry contact; negative triggered; circuit diagram: 2; function diagram: j
N2-1241-2001	12 V; 10/15 A; 2 min; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-1241-8112	12 V; 25/25 A; 3 min; dry contact; retriggerable; waterproof
N2-1243-0000	12 V; 10/15 A; 5 min; no dry contact; circuit diagram: 2; function diagram: b
N2-1243-0001	12 V; 10/15 A; 5 min; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-1246-0100	12 V; 20/20 A; 10 min; no dry contact; circuit diagram: 2; function diagram: b
N2-1246-0101	12 V; 20/20 A; 10 min; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-1249-0007	12 V; 10/15 A; 15 min; no dry contact; with delete input; circuit diagram: 3; function diagram: g
N2-1525-0001	12 V; 10/15 A; 0,5 ... 5 s; adjustable; no dry contact; retriggerable; circuit diagram: 2; function diagram: c

Part number	Characteristics
N2-1533-0001	12 V; 10/15 A; 1 ... 30 s; adjustable; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-1543-0101	12 V; 20/20 A; 10 ... 300 s; adjustable; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-1549-0000	12 V; 10/15 A; 60 ... 900 s; adjustable; no dry contact; circuit diagram: 2; function diagram: b
N2-1549-0001	12 V; 10/15 A; 60 ... 900 s; adjustable; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-2217-5000	24 V; 10/15 A; 0,75 s; no dry contact; circuit diagram: 2; function diagram: b
N2-2217-5011	24 V; 10/15 A; 0,75 s; no dry contact; retriggerable; extended temperature range; circuit diagram: 2; function diagram: c
N2-2221-1000	24 V; 10/15 A; 1,1 s; no dry contact; circuit diagram: 2; function diagram: b
N2-2222-5000	24 V; 10/15 A; 2,5 s; no dry contact; circuit diagram: 2; function diagram: b
N2-2225-0000	24 V; 10/15 A; 5 s; no dry contact; circuit diagram: 2; function diagram: b
N2-2226-0000	24 V; 10/15 A; 6 s; no dry contact; circuit diagram: 2; function diagram: b
N2-2231-0000	24 V; 10/15 A; 10 s; no dry contact; circuit diagram: 2; function diagram: b
N2-2231-5000	24 V; 10/15 A; 15 s; no dry contact; circuit diagram: 2; function diagram: b
N2-2231-5101	24 V; 20/20 A; 15 s; no dry contact; retriggerable; circuit diagram: 2; function diagram: C
N2-2233-5100	24 V; 30/30 A; 35 s; no dry contact; circuit diagram: 2; function diagram: b
N2-2233-5101	24 V; 30/30 A; 35 s; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-2234-5000	24 V; 10/15 A; 45 s; no dry contact; circuit diagram: 2; function diagram: b
N2-2236-0001	24 V; 10/15 A; 60 s; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-2241-5001	24 V; 10/15 A; 2,5 min; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-2241-8112	24 V; 20/20 A; 3 min; dry contact; retriggerable; waterproof; function diagram: c
N2-2243-0000	24 V; 10/15 A; 5 min; no dry contact; circuit diagram: 2; function diagram: b
N2-2543-0001	24 V; 10/15 A; 10 ... 300 s; adjustable; no dry contact; retriggerable; circuit diagram: 2; function diagram: c
N2-2549-0001	24 V; 10/15 A; 60 ... 900 s; adjustable; no dry contact; retriggerable; circuit diagram: 2; function diagram: c



accessories

- standardrelay sockets (S. 116)
- bracket K9-2901-0000 (S. 112)

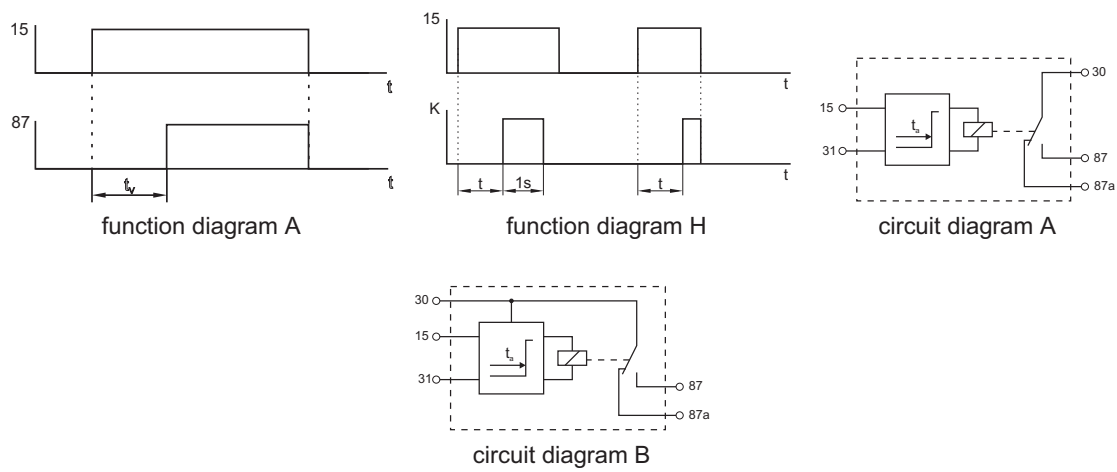
switch- on delayed timer relays



Timer relays are useful to delay switching operations. Both switch- on and switch- off delayed versions are available.

Part number	Characteristics
N2-1117-5000	12 V; 10/15 A; 0,75 s; dry contact; circuit diagram: 1; function diagram: a
N2-1117-5001	12 V; 10/15 A; 0,75 s; no dry contact; circuit diagram: 2; function diagram: a
N2-1117-5010	12 V; 10/15 A; 0,75 s; no dry contact; extended temperature range; circuit diagram: 2; function diagram: a
N2-1122-0000	12 V; 10/15 A; 2 s; dry contact; circuit diagram: 1; function diagram: a
N2-1124-0000	12 V; 10/15 A; 4 s; dry contact; circuit diagram: 1; function diagram: a
N2-1125-0000	12 V; 10/15 A; 5 s; dry contact; circuit diagram: 1; function diagram: a
N2-1132-0000	12 V; 10/15 A; 20 s; dry contact; circuit diagram: 1; function diagram: a
N2-1151-8000	12 V; 10/15 A; 30 min; dry contact; circuit diagram: 1; function diagram: a
N2-1425-0000	12 V; 10/15 A; 0,5 ... 5 s; adjustable; dry contact; circuit diagram: 1; function diagram: a
N2-1433-0000	12 V; 10/15 A; 5 ... 30 s; adjustable; dry contact; circuit diagram: 1; function diagram: a
N2-1449-0000	12 V; 10/15 A; 60 ... 900 s; adjustable; dry contact; circuit diagram: 1; function diagram: a
N2-2115-0901	24 V; 10/15 A; 0,5 s; dry contact; circuit diagram: 1; function diagram: a
N2-2117-5000	24 V; 10/15 A; 0,75 s; dry contact; circuit diagram: 1; function diagram: a
N2-2117-5001	24 V; 10/15 A; 0,75 s; no dry contact; circuit diagram: 2; function diagram: a
N2-2117-5010	24 V; 10/15 A; 0,75 s; dry contact; extended temperature range; circuit diagram: 1; function diagram: a
N2-2121-1001	24 V; 10/15 A; 1,1 s; no dry contact; circuit diagram: 2; function diagram: a
N2-2122-0000	24 V; 10/15 A; 2 s; dry contact; circuit diagram: 1; function diagram: a
N2-2125-0000	24 V; 10/15 A; 5 s; dry contact; circuit diagram: 1; function diagram: a
N2-2128-0000	24 V; 10/15 A; 8 s; dry contact; circuit diagram: 1; function diagram: a
N2-2131-0000	24 V; 10/15 A; 10 s; dry contact; circuit diagram: 1; function diagram: a
N2-2131-5000	24 V; 10/15 A; 15 s; dry contact; circuit diagram: 1; function diagram: a
N2-2141-2012	24 V; 10/15 A; 2 min; dry contact; waterproof; circuit diagram: 1; function diagram: h

Part number	Characteristics
N2-2143-0000	24 V; 10/15 A; 5 min; dry contact; circuit diagram: 1; function diagram: a
N2-2425-0000	24 V; 10/15 A; 0,5 ... 5 s; adjustable; dry contact; circuit diagram: 1; function diagram: a
N2-2425-0008	24 V; 10/15 A; 0,3 ... 5 s; adjustable; dry contact; output impulse 1s; circuit diagram: 1; function diagram: h
N2-2431-2000	24 V; 10/15 A; 1 ... 12 s; adjustable; dry contact; circuit diagram: 1; function diagram: a
N2-2433-0000	24 V; 10/15 A; 1 ... 30 s; adjustable; dry contact; circuit diagram: 1; function diagram: a
N2-2443-0000	24 V; 10/15 A; 10 ... 300 s; adjustable; dry contact; circuit diagram: 1; function diagram: a



accessories

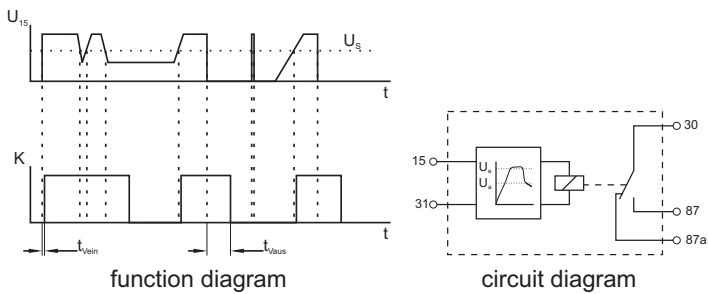
- standardrelay sockets (S. 116)
- bracket K9-2901-0000 (S. 112)

voltage controls



Voltage controls supervise the voltage supported to electrical customers. If the voltage drops under a defined value the relay switches off. If the switch- on value is passed the relay switches on. To avoid wobbling the switching function is delayed. Please ask for your special version.

Part number	Characteristics
N3-1013-0000	12 V; 40/60 A; switch- on voltage: 13,6/13 V; switch- on delay: 0/0 s
N3-1115-3000	12 V; 10/15 A; adjustable switching: U(on) 11...16V, U(off)=U(on)-0,7V; switch- on delay: 5/5 s
N3-2019-0000	24 V; 10/15 A; switch- on voltage: 22/19 V; switch- on delay: 5/5 s
N3-2022-2001	24 V; 25/25 A; switch- on voltage: 25,1/22,2 V; switch- on delay: 0,1/10 s
N3-2024-0001	24 V; 25/25 A; switch- on voltage: 25,5/24 V; switch- on delay: 0,1/10 s
N3-2129-3000	24 V; 10/15 A; adjustable switching: U(on) 19...30V, U(off)=U(on)-0,7V; switch- on delay: 1/10 s



accessories

- standardrelay sockets (S. 116)
- bracket K9-2901-0000 (S. 112)

wiper- wash- relays



Wiper- wash relays control the windshield wiper system. With adjustable moduls the interval time is programmable.

Part number	Characteristics
N5-1003-0001	12 V; 10/15 A; standard intervall time: 5 s; min. interval time: 2 ... 20 s; relay switched- on time (interval mode): 0,5 s
N5-1004-0002	12 V; 20/20 A; standard intervall time: 5 s; min. interval time: 2 ... 30 s; relay switched- on time (interval mode): 0,5 s; programmable
N5-1005-0001	12 V; 10/15 A; standard intervall time: 5 s; relay switched- on time (interval mode): 0,5 s
N5-2003-0001	24 V; 10/15 A; standard intervall time: 5 s; min. interval time: 2 ... 20 s; relay switched- on time (interval mode): 0,5 s; programmable
N5-2003-0002	24 V; 30/30 A; standard intervall time: 5 s; min. interval time: 2 ... 20 s; relay switched- on time (interval mode): 0,5 s; programmable
N5-2004-0001	24 V; 10/15 A; standard intervall time: 5 s; min. interval time: 2 ... 30 s; relay switched- on time (interval mode): 0,5 s; programmable
N5-2005-0001	24 V; 10/15 A; standard intervall time: 5 s; relay switched- on time (interval mode): 0,5 s
N5-2005-0002	24 V; 10/15 A; standard intervall time: 5 s; relay switched- on time (interval mode): 0,8 s

accessories

- standardrelay sockets (S. 116)
- bracket K9-2901-0000 (S. 112)