

## DUELCO - NST-2009D SAFETY RELAY WITH TIMED OUTPUTS

42080021

NST2009D 24VAC/DC ESTP RLY+TIM

- Safety Category 4 (PLe)
- 2 NO safety outputs + 1 NC signal output
- 2 NO delayed outputs (0 - 600 sec)
- Status-/fault indication via LEDs
- Short circuit monitoring



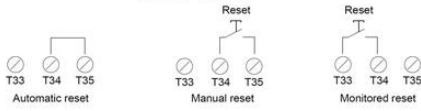
### PRODUCT DESCRIPTION

Flexible safety relay with time delayed outputs for the highest safety category.

### SPECIFICATIONS

|                        |            |
|------------------------|------------|
| Supply voltage         | 24 V AC/DC |
| Tolerance              | ±10%       |
| Safety outputs NO      | 4          |
| Signal output NC       | 1          |
| IP Class Housing       | IP40       |
| IP Class Connection    | IP20       |
| Temperature range from | -25 °C     |
| Temperature range to   | 50 °C      |
| Safety category        | 4          |
| PL                     | e          |
| Approvals              | CE, cULus  |

# RESET TYPES



TIME DELAY TABLE - 0 - 600 SEC.

|      | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | A   | B   | C   | D   | E   | F |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| 0.05 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1   | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 |   |
| 0.25 | 0.5 | 1   | 1.5 | 2   | 2.5 | 3   | 3.5 | 4   | 4.5 | 5   | 6   | 7   | 8   | 9   | 10  |   |
| 1.5  | 3   | 6   | 9   | 12  | 15  | 18  | 21  | 24  | 27  | 30  | 36  | 42  | 48  | 54  | 60  |   |
| 15   | 30  | 60  | 90  | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 360 | 420 | 480 | 540 | 600 |   |

STATUS TABLE, LED'S

| LED-05 | LED-K1   | LED-K2   | LED-K3   | LED-K4   | Interpretation / Possible Fault (depends on which connection example is being used) |
|--------|----------|----------|----------|----------|-------------------------------------------------------------------------------------|
| ON     | OFF      | OFF      | OFF      | OFF      | Supply OK                                                                           |
| OFF    | OFF      | OFF      | OFF      | OFF      | Supply not connected or missing / bad connection                                    |
| ON     | Blinking | Blinking | Blinking | Blinking | Monitoring circuit has not detected any faults and the relay is ready for reset     |
| ON     | ON       | ON       | ON       | ON       | Relay activated                                                                     |
| ON     | OFF      | OFF      | ON       | ON       | Emergency stop activated, time delay still active                                   |

