



Emergency STOP relay

NST-3000DI

- Status-/fault indication via LEDs
- Configurable outputs
- Configurable delay
- Short circuit monitoring
- Suitable for light curtain applications

What can Duelco emergency stop relay

NST-3000DI offer you?

- Simplicity - Fast and easy installation via user friendly connection examples
- Cat. 4 safety level with 4 OSSD outputs
- Status-/fault indication. The LED signalling can reduce trouble shooting time

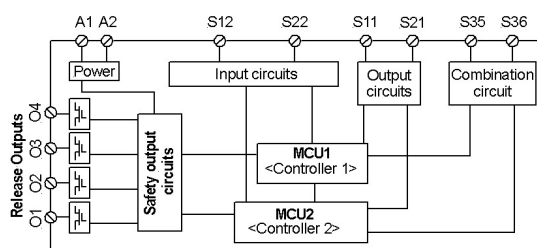
Technical facilities regarding safety requirements:

- Digital OSSD outputs
- Internal / external redundancy (for two-pole E-stop)
- Manual, automatic or monitored reset

User's advantages:

- Performance level e acc. to EN ISO 13849-1, cat. 4
- STOP category 0
- 4 x 400mA OSSD
- 2-channel operation with short circuit protection
- 1-channel operation
- Voltage versions: 24VDC
- No requirements concerning simultaneity between CH1 and CH2
- 18 mm slimline housing
- LED indication of supply + output status of K1, K2
- Complies with MD, EMC, LVD (98/37/EC, 89/336/EEC & 93/68/EEC)

Block diagram



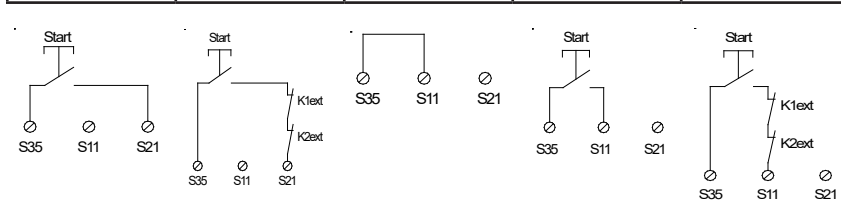
A1	S11	S12
○	○	○
S35	S21	S22
○	○	○
NST-3000DI		
○	PWR	
○	IN1	
○	IN2	
○	OUT	
○	○	○
O1	O2	O3
○	○	○
O4	S36	A2

Technical data NST-3000DI

Electrical data	
Supply voltage (NB! Common Power Supply)	24V DC
Voltage range	0,80 ... 1,2 U _n
Received power @ 24V DC without load	< 3 W
Frequency (AC-type)	50 ... 60 Hz
Power consumption	6mA / 24V DC
Inputs	
Input voltage	24V DC (>12V DC = HIGH; <2VDC = LOW)
Input current S12, S22, S35	> 6mA, normally 8mA
Filtering S12, S22 (SC4 only)	1 ms
Current S36	≤ 2mA
Power outputs OSSDs	
Type	OSSD
Number	4
Output voltage	24V DC
Drop of voltage	≤ 2V
Max load (no limit of the total current), short circuit proof, overcurrent proof	4 x 400mA
Trigger outputs S11, S21	
Output voltage	24V DC
Max. load, short circuit proof	≤ 50mA
Times	
Time to ready to operation	< 6s
Recovery time	< 500 ms
Times SC5 (ESPE Type 2)	
Response time for test	0,2..50ms
Response time end of test (rising edge on the test input)	140ms
Duration testing	195ms
Cycle testing	2s
Mechanical data	
Material of housing	Noryl V0
Dimension (W x H x D)	18 x 90 x 63 mm
Total weight	~ 65g
Storage	In a dry environment
Surroundings	
Ambient temperature	0..+55°C
Storage temperature	-25°C..+75°C
Humidity (no dewing)	< 75%
Protection terminals	IP 20
Protection Housing	IP 20
Wires and terminals	
Wires (cord)	0,2 mm ² - 1,5 mm ² (UL: Use 60/75°C copper wire only)
Fastening torque	0,5..0,6 Nm
Max. length of wire	250 m
Cable cross section	1,5 mm ²

Reset configuration:

R1	R2	R3	R4	R5
Manual start Start button monitored	Manual start With monitoring of external contactors	Automatic start	Automatic start Without monitoring of the start button	Automatic start Without monitoring of the start button and with monitoring of external contactors



Order information:

Description	Article no.
NST-3000DI 24V DC	42080005

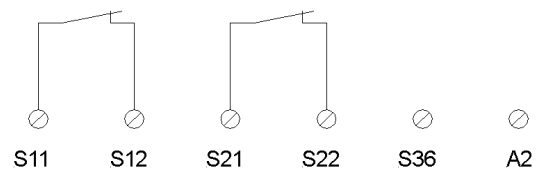
Duelco A/S - Aalborg
Systemvej 8
DK-9200 Aalborg SV

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Mommarkvej 5
DK-6400 Sønderborg

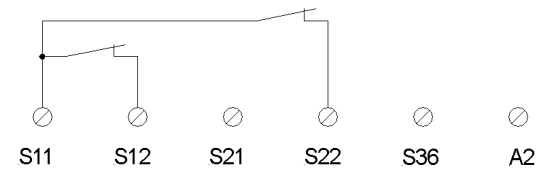
Tel. +45 7010 1007
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Connection examples:

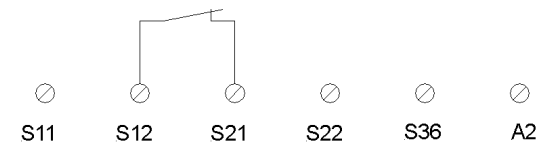
E-stop safety gate monitor, 2 channels - 4 wires



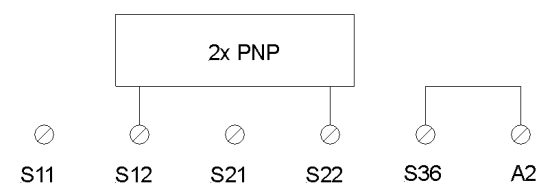
E-stop safety gate monitor, 2 channels - 3 wires



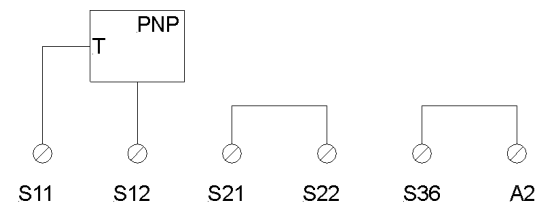
E-stop safety gate monitor, 1 channel - 2 wires



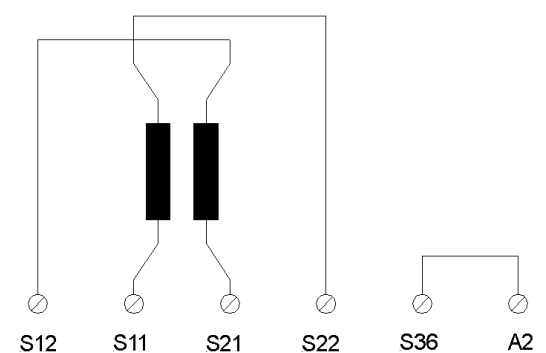
ESPE Type 4



ESPE Type 2



Safety mat



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