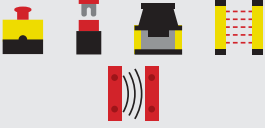


THE RIGHT SAFETY RELAY AT A GLANCE

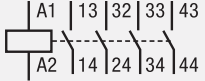
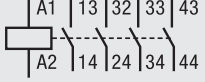
Here, you can quickly and easily find the right link between sensor and machine.

 Two-hand operation	 Safety solenoid switches	 Safety PS mat	 Contact extension
 E-Stop	 Protective sensors / safety light curtains	 Standstill monitoring	 Type 2 safety sensor, testable
 Safety switches and safety locking devices	 Safety laser scanners	 Time delay	 Type 4 safety sensor, testable

Sensor / application	Restart Manual / automatic	Contacts NO / NC	Additional functions	Performance Level	Product
Evaluation units					
		1 / 1		PL c	MSI-SR-2H1
		2 / 1		PL e	MSI-SR-2H21
	M / A	2 / -		PL d	MSI-SR-ES20
	M / A	3 / 1		PL e	MSI-SR-ES31
	M / A	2 / 1		PL e	MSI-MC310
	M / A	2 / -		PL e	MSI-MC311
	M / A	2 / 1		PL e	MSI-SR-LC21
	- / A	3 / 1		PL e	MSI-SR-LC31AR
	M / -	3 / 1		PL e	MSI-SR-LC31MR
	M / A	3 / 1		PL e	MSI-SR4
	M / A	2 / -	2 x sensor inputs	PL e	MSI-SR5
	M / A	2 / 1		PL e	MSI-SR-LC21M

Evaluation units with time function

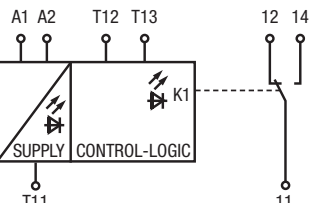
	M / A	2 / -	 ≤ 3 s / 1 contact	PL e / d	MSI-SR-LC21DT03
	M / A	2 / -	 ≤ 30 s / 1 contact	PL e / d	MSI-SR-LC21DT30
	M / A	2 / -	 ≤ 30 s / 2 contacts	PL e	MSI-DT30

Sensor / application	Restart Manual / automatic	Contacts NO / NC	Additional functions	Performance Level	Product
Monitoring of standstill / low speed					
	M / A	2 / 2 semiconductor	≤ 99 Hz	PL e	MSI-SR-SM420S
Contact extensions					
OSSD output extension	A / -	2 / 1		PL e	MSI-RM2
	A / -	3 / 2		PL e	MSI-SR-CM32
	A / -	4 / 3		PL d	MSI-SR-CM43
	A / -	5 / 2		PL e	MSI-CM52
	A / -	2 x (2 / 1)		PL e	MSI-SR-CM42R
	A / -	4 / 3	 = 3 s	PL d	MSI-SR-CM43DT03
Evaluation units for periodic testing					
	A / M	2 / 2		PL c	MSI-TR1
	A / M	2 / 2	130 ms filter	PL c	MSI-TR2
	A / M	2 / 2	 = 0.6 s / 1 signal	PL c	MSI-TS
	A / M	2 / 2		PL e	MSI-TRM
Muting controller (field module)					
	- / M	OSSD outputs		PL e	MSI-MD-FB

 Two-hand operation	 Safety solenoid switches	 Safety PS mat	 Automatic/manual
 E-Stop	 Protective sensors / safety light curtains	 Standstill monitoring	 Type 2 safety sensor, testable
 Safety switches and safety locking devices	 Safety laser scanners	 Time delay	 Type 4 safety sensor, testable

MSI-SR-2H1 Evaluation unit

Type III A



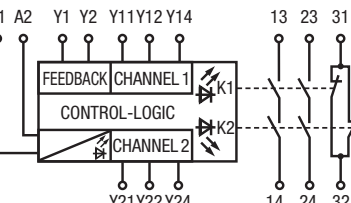
PL c

20 ms
5 A

Synchronous actuation

MSI-SR-2H21 Evaluation unit

Type III C



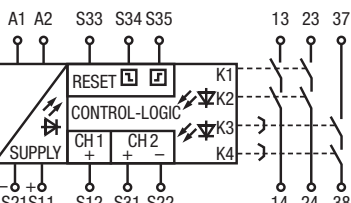
PL e

EDM

50 ms
6 A

Synchronous actuation

MSI-SR-LC21DT03/30 Evaluation unit +



PL e

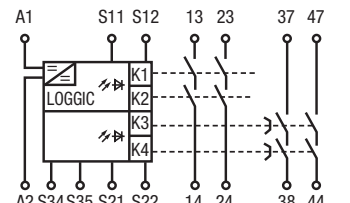
A M

EDM

25 ms
6 A

≤ 3/30 s

MSI-DT30 Evaluation unit +



PL e

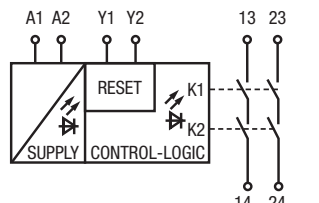
A M

EDM

20 ms
6 A

≤ 30 s

MSI-SR-ES20 Evaluation unit



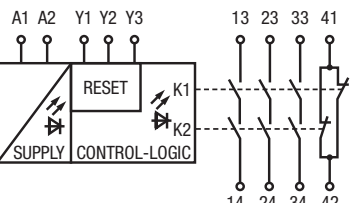
PL d

A M

EDM

70 ms
6 A

MSI-SR-ES31 Evaluation unit



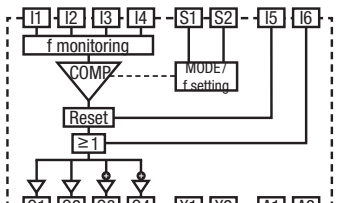
PL e

A M

EDM

60 ms
8 A

MSI-SR-SM420S Standstill monitoring



PL d

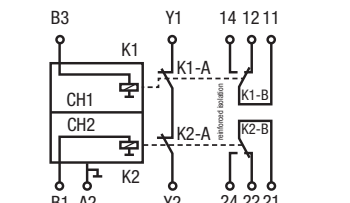
A M

EDM

–
2 A

Monitoring frequency 0.5 – 99 Hz

MSI-RM2 Output extension for OSSDs

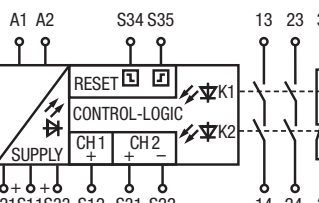


PL e

A

10 ms
3 A

MSI-SR-LC21 Evaluation unit



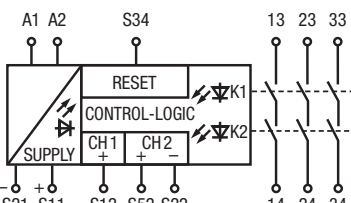
PL e

A M

EDM

25 ms
6 A

MSI-SR-LC31AR/MR Evaluation unit



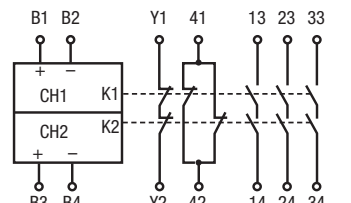
PL e

A M AR MR

EDM

10 ms
8 A

MSI-SR-CM32 Output extension for OSSDs

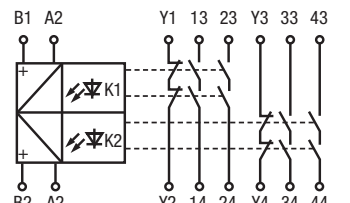


PL e

A

20 ms
6 A

MSI-SR-CM42R Contact extension



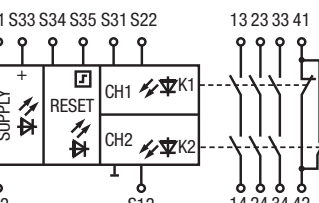
PL e

A

15 ms
6 A

2 parallel extensions

MSI-SR4 Evaluation unit



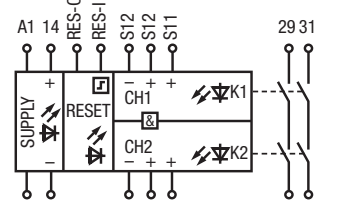
PL e

A M

EDM

10 ms
3 A

MSI-SR5 Evaluation unit



PL e

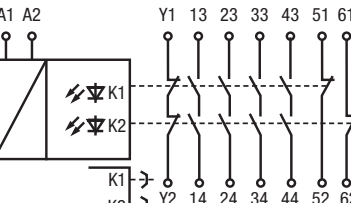
A M

EDM

10 ms
2 A

Input for 2 sensors

MSI-SR-CM43/CM43DT03 Contact extension / +



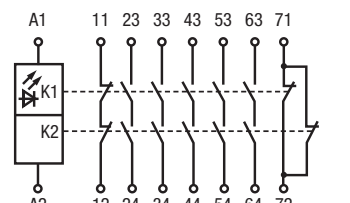
PL d

A

40 ms
6 A

DT03: 3 s

MSI-CM52 Contact extension

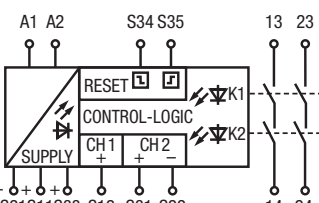


PL e

A

20 ms
6 A

MSI-SR-LC21M Evaluation unit



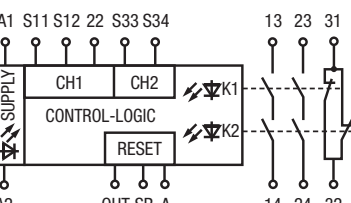
PL e

A M

EDM

25 ms
6 A

MSI-MC-310/311 Evaluation unit



PL e

A M

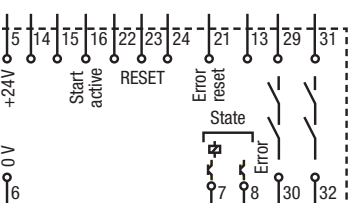
EDM

20 ms
3 A

MC-310:
1 NC contact,
1 NO contact
MC 311:
2 NC contacts

MC-310 only: 31/32

MSI-T1/2/S Evaluation unit for periodic testing



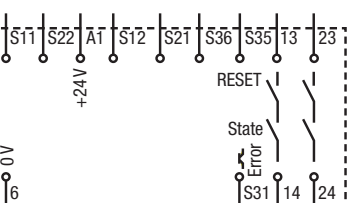
PL c

A M

EDM

20 ms
2 A

MSI-TRM Evaluation unit for periodic testing



PL e

A M

EDM

130 ms
3 A