Overview – Basic Devices

Type	SNO 4083KM	SNO 4062K/KM	SNO 4063K/KM	SNA 4043K/KM	SNA 4044K/KM	SNA 4063K/KM	SNA 4064K/KM
Page	32	34	36	38	38	40	40
Application	PL e SK4	PL e SK4	PL e SK4	PL e SK4	PL e SK4	PL e SK4	PL e SK4
	SIL 3	SIL 3	SIL 3	SIL 3	SIL 3	SIL 3	SIL 3
	MAGNET TYPE 4/2 2)	MAGNET TYPE 4/2	MAGNET TYPE 4/2	MAGNET TYPE 4/2	MAGNET TYPE 4/2	MAGNET TYPE 4/2	MAGNET TYPE 4/2
		2)	2)	EN 81	EN 81	EN 81	EN 81
	EN 81						
Input Circuits	IN	IN	IN 2)	IN	IN	IN	IN
	IN IN	IN	IN	IN	IN	IN	IN
	CROSSMON	CROSSMON	CROSSMON	CROSSMON	CROSSMON	CROSSMON	CROSSMON
	CH1 tsync CH2 0,5 1,5						
Start	SAFE START AUTO-RESET	AUTO-RESET	AUTO-RESET	AUTO-RESET	AUTO-RESET		
	RESET	RESET RESET	RESET RESET	RESET	RESET	RESET	RESET
		COMBI RESET 3)	COMBI RESET 3)				
Contacts	SAFE 3	SAFE 2	SAFE 3	SAFE 3	SAFE 4	SAFE 3	SAFE 4
	1	1		1		1	
Characteristics	MONO FLOP	MONO FLOP	MONO FLOP	MONO FLOP	MONO FLOP	MONO FLOP	MONO FLOP
	DIAGNOSIS						
Rated voltage DC (V)	24	24	12 24	24	24	24	24
Rated voltage AC (V)	115-230		24 115-120 230	24 42-48 115-120 230	24 42-48 115-120 230	24 42-48 115-120 230	24 42-48 115-120 230

[1] application-dependent
[2] 24 V devices only
[3] possible only in isolated cases and according to the risk assessment of the machine functions

	SNO 4003K	SNO 1012K	SNS 4074K/4084K	SVM 4001K	SNT 4M63K	SNZ 4052K	SNZ 1022K
	42	44	46	48	50	52	54
	PL e SK4 [1]	PL d SK3	PL e SK4	PL e SK4	PL e SK4	PL e SK4	PL c SK1
	SIL 3 [1]	SIL 2	SIL 3	SIL 3	SIL 3	SIL 3	SIL 1
					MAGNET		
	IN	IN	IN		IN	2xIN	IN
	IN	IN	IN		IN IN		
	CROSSMON	CROSSMON	CROSSMON		CROSSMON	CROSSMON	CROSSMON
						CH1 tsync CH2 0,5	CH1 tsync CH2 0,5
	AUTO-RESET	AUTO-RESET	AUTO-RESET	AUTO-RESET	AUTO-RESET	AUTO-RESET	AUTO-RESET
	RESET RESET	RESET	RESET RESET		RESET RESET		
	SAFE 3	SAFE 2	SAFE 4	SAFE 2	SAFE 3	SAFE 2	SAFE 1
	1		2			1	
				DIAGNOSIS		C	A
	24	24	24	24	24	24	24
	24 115-120 230	24			24 115-120 230	24 115-120 230	24 115-230

[1] 1)

For glossary, see cover page 120

Overview – Basic Devices with time function

Type	SNV 4063KL	SNV 4063KP	SNV 4074SL	SNV 4076SL	SNV 4274SL	SNV 4074ST		
Page	56	58	60	60	62	62		
Application	PL e SK4 [1]	PL e SK4 [1]	PL e SK4	PL e SK4	PL e SK4	PL e SK4		
	SIL 3 [1]	SIL 3 [1]	SIL 3	SIL 3	SIL 3	SIL 3		
	TYPE 4/2	TYPE 4/2	TYPE 4/2	TYPE 4/2	TYPE 4/2	TYPE 4/2		
	n M t	n M t	n M t	n M t	n M t	n M t		
Input Circuits	IN	IN	IN	IN	IN	IN		
	IN	IN	IN	IN	IN	IN		
	CROSSMON	CROSSMON	CROSSMON	CROSSMON	CROSSMON	CROSSMON		
			CH1 tsync CH2 1,0	CH1 tsync CH2 1,0	CH1 tsync CH2 1,0	CH1 tsync CH2 1,0		
Start	AUTO-RESET	AUTO-RESET	SAFE START AUTO-RESET	SAFE START AUTO-RESET	SAFE START AUTO-RESET	SAFE START AUTO-RESET		
	RESET RESET	RESET RESET	RESET RESET	RESET RESET	RESET RESET	RESET RESET		
	COMBI RESET							
Contacts	SAFE 2 SAFE 1	SAFE 2 SAFE 1	SAFE 2 SAFE 2	SAFE 3 SAFE 3	SAFE 2 SAFE 2	SAFE 2 SAFE 2		
			2 2	1	2 2	1		
Characteristics	OFF-DELAY	ON-DELAY	OFF-DELAY	OFF-DELAY	OFF-DELAY RE-TRIGGER	ON-DELAY		
			DIAGNOSIS MONO FLOP	DIAGNOSIS MONO FLOP	DIAGNOSIS MONO FLOP	DIAGNOSIS MONO FLOP		
Rated voltage DC (V)	24	24	24	24	24	24		
Rated voltage AC (V)			115-230	115-230	115-230	115-230		

[1] applies to undelayed contacts; the following applies to delayed contacts: PL d / category 3 / SILCL 2
[2] depends on the category of the basic device or the safety analysis

Contact-Expansion Relais

	SNE 1	SNE 4003K	SNE 4004K	SNE 4004KV	SNE 4012K	SNE 4024K	SNE 4028S
	64	66	68	68	70	70	72
	PL e SK4 2)	PL e SK4 2)	PL d SK3 2)	PL d SK3 2)	PL e SK4 2)	PL e SK4 2)	PL e SK4 2)
	SIL 3 2)	SIL 3 2)	SIL 2 2)	SIL 2 2)	SIL 3 2)	SIL 3 2)	SIL 3 2)
	TYPE 4/2	TYPE 4/2					TYPE 4/2
					EN 81	EN 81	
	IN	IN	IN	IN	IN	IN	IN
		IN					IN
		CROSSMON					CROSSMON
	SAFE 2	SAFE 3	SAFE 4	SAFE 4	SAFE 2	SAFE 4	SAFE 8
		1	1	1			1
				OFF-DELAY			
	24	24	24	24	24	24	24
			24				24 115-230

For glossary, see cover page 120

Glossary

Emergency stop monitoring
Floating contacts

Protective gate monitoring
Floating contacts

Position monitoring
Magnetic switch

Safety light grid / -light curtain
acc. to EN 61496 BWS Type 4 / Type 2

Two-hand control
according to EN 574

Controlled Stop
according to EN 60204-1 stop category 1

Standstill and motion monitoring

Safety shut-off mat monitoring
(4-wire principle, short-circuiting)

Valve position monitoring

Contact expansion

Machine building industry

Elevator systems
in accord. with EN 81-1

Combustion plants
according to EN 50156-1

Process technology
according to IEC 61511

Finger protection

Hand protection

Arm protection

Access protection

Personal protection

Single-channel input circuit
1 NC contact or semiconducto

Two-channel input circuit
2 NC contacts or semiconductors

Two-channel input circuit, antivalent
1 NO / 1 NC contacts or semiconductors

Cross monitoring
between two input circuits

Synchro-check
between two input circuits

Safe Start
Start command is accepted only when
the input circuits are closed

Combi-reset
Automatic start possible after voltage failure,
based on the risk analysis

Automatic Reset
after application of the voltage and/or after safety
request

Manual Reset
in the case of a rising edge at the reset input

Reset button monitoring
in the case of a falling edge at the reset input

Contacts (NO/NC)
safe semiconductor outputs

Alarm contacts

Safe changeover contacts

Safe semi conductor outputs

Safe OFF-delay

Safe ON-delay

Monoflop
for rapid tactile applications

Reset of time lapse
for OFF-delayed contacts

Expanded diagnostics