

SINAMICS Safety Integrated Functions | Overview Drives and License Concept

	Basic Safety (Integrated)			Extended Safety (License required)								Advanced Safety (License required)					
SINAMICS	STO	SS1 ¹⁾	SBC	SS1 ²⁾	SS2	SOS	SBT	SLS	SLA	SSM	SDI	SLP	SP	SCA	SMT (ATEX)	F-DI ³⁾	PROFIsafe
G115D (SIL2)	●							●								yes	yes
G120D (SIL2)	●	●						●		●	●					yes	yes
G120C (SIL2)	●															yes	yes
G120X (SIL3)	●															yes	-
G120 modular (SIL2)	●	●	●	●				●		●	●					yes	yes
V90 (SIL2)	●															yes	-
G130/G150/S150 (SIL2)	●	●	●	●	●	●	●	●		●	●					yes	yes
S120 (SIL2)	●	●	●	●	●	●	●	●	●	●	●	●	●	●		yes	yes

Color Code

●

 Safety **without safety capable** encoder

●

 Safety **with safety capable** encoder

●

 Safety **with or without safety capable** encoder

	Basic Safety (Integrated)			Extended Safety (License required)								Advanced Safety (License required)					
SINAMICS	STO	SS1 ¹⁾	SBC	SS1 ²⁾	SS2	SOS	SBT	SLS	SLA	SSM	SDI	SLP	SP	SCA	SMT (ATEX)	F-DI ³⁾	PROFIsafe
G200 (SIL3)	●	●														yes	-
G210 (SIL3)	●	●		●				●		●	●				●	yes	yes
G210X (SIL3)	●	●													●	yes	yes
S200 (SIL3) S200 Spindle (SIL3)	●	●														yes	-
S210 (SIL3)	●	●	●	●	●	●	●	●	●	●	●					yes	yes
G220 (SIL3)	●	●		●	●	●		●	●	●	●				●	yes	yes
S220 (SIL3)	●	●	●	●	●	●	●	●	●	●	●					yes	yes

Based on current SINAMICS Runtime

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 V6.7

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 V5.2 SP3

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 V4.7 SP14

1) **SS1¹⁾**: Time-controlled (SS1-t)

2) **SS1²⁾**: Monitored (SS1-r / SS1-a)

3) **Safety inputs (F-DI)**: To connect direct for example an E-Stop Button or similar at the drive, or to use the F-DI as a decentralized peripheral safety input, e.g. for controllers (via PROFIsafe)

Disclaimer

Subject to change without prior notice.
Errors and omissions excepted.