



Programmable Safety Systems PSS-Range

Error List
Item No. 19 715



The spirit of safety.

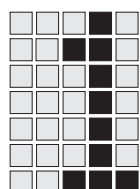
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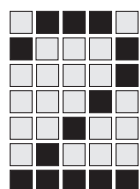
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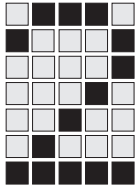
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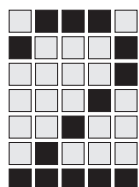
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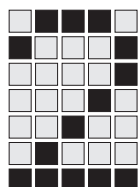


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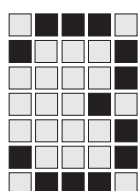


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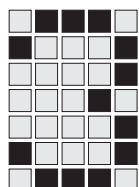
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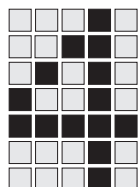
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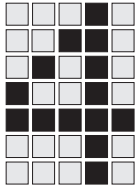


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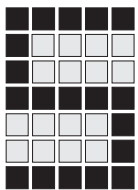
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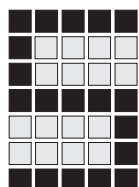
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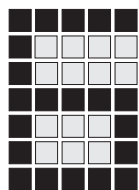
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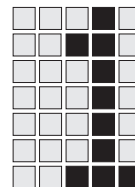


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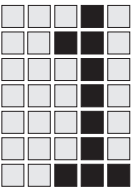
Introduction

This manual describes the error messages for the PSS-range of programmable safety systems. Error messages which specifically relate to modular block systems, such as MBS eccentric presses, are described in the relevant operating manuals.

The error list is divided into the following chapters:

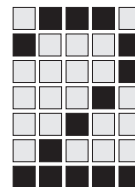
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- 2. FS Error Messages**
- 3. ST Error Messages**
- 4. SafetyBus p Error Messages**
- 5. DI8O8, DI16 Error Messages**
- 6. PSS(1) AI U5I1**

In each chapter, error messages are assigned to error classes.



Introduction

Notes



FS Error Messages

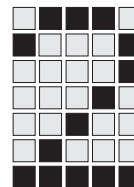
Hardware error in processor A

Error class F-01	Error no.	Description	Remedy
	03 . . 0E	Hardware error	Change PSS CPU
	0F 10	Faulty user program	Download user program to the PSS; if error continues: change PSS CPU
	11 . . 15	Hardware error	Change PSS CPU
	16	Error in power supply	Change PSS power supply
	17 . . 1A	Hardware error	Change PSS CPU

FS Error Messages

Hardware error in processor B

Error class F-02	Error no.	Description	Remedy
	01 . . . 07	Hardware error	Change PSS CPU
	08 09	Faulty user program	Download user program to the PSS; if error continues: change PSS CPU
	0A . . . 0C	Hardware error	Change PSS CPU
	0D	Error in the power supply	Change power supply
	0E . . . 11	Hardware error	Change PSS CPU



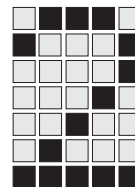
Hardware error in processor C

Error class F-03	Error no.	Description	Remedy
	01 02	Hardware error	Change PSS CPU
	03 04	Faulty user program	Download user program to the PSS; if error continues: change PSS CPU
	05 . . . 0F	Hardware error	Change PSS CPU
	10	Error in the power supply	Change power supply
	11 . . . 28	Hardware error	Change PSS CPU

FS Error Messages

Battery error

Error class F-04	Error no.	Description	Remedy
	01	Battery is depleted	Change battery. Leave voltage applied until the battery has been changed.



Configuration error

Error parameter: Slot

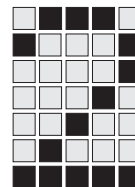
Error class F-05	Error no.	Description	Remedy
	01 02	Configuration error	Compare the registered hardware set up with the actual configuration. Adjust configuration in configurator or insert the correct module. Ensure all modules are inserted correctly.

FS Error Messages

Module error

Error parameter: Low byte: Slot
 High byte: 0 = Whole slot
 1 = Upper half
 2 = Lower half
 Error location: Assigned number of the faulty I/Os
 (coded bit by bit)

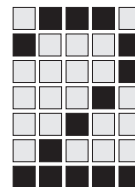
Error class F-06	Error no.	Description	Remedy
	01 . .	Error on PSS (1) DIO Z	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Load break? 4.) Does the test pulse wiring match the allocation in the configurator? Points 1-4 are OK, but error message still present: change DIO Z
	16 17	Error on PSS (1) DIF	1.) Check alarm conditions e.g. the alarm must appear for min. 1.5 ms 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuits at the inputs or test pulse wiring? Points 1-3 are OK, but error message still present: change DIF
	18	Error on PSS (1) DIO T	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T



Error class F-06	Error no.	Description	Remedy
	19 . . .	Error on PSS (1) DO/DOS/DIO T	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Short circuits at the inputs or test pulse wiring? 4.) Does the test pulse wiring match the allocation in the configurator? Points 1-4 OK, but error message still present: change module
	1A 1B . . .	Error on PSS (1) DIO T	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T
	22 23 . .	Error on PSS (1) DO/DOS	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? Points 1-2 are OK, but error message still present: change DO/DOS
	29 2A 2B	Error on PSS (1) DIF	1.) Check alarm conditions e.g. the alarm must appear for min. 1.5 ms 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuits at the inputs or test pulse wiring? Points 1-3 are OK, but error message still present: change DIF

FS Error Messages

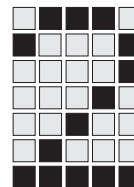
Error class F-06	Error no.	Description	Remedy
	2C 2D	Error on PSS (1) DIO T	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T
	2E . . .	Error on PSS (1) DIF	1.) Check alarm conditions, e.g. the alarm must appear for min. of 1.5 ms 2.) Does the test pulse wiring match the allocation in the configurator ? 3.) Short circuits at the inputs or the test pulse wiring? Points 1-3 are OK, but error message is still present: change DIF
	3E . .	Error on PSS (1) DI/DI 2	1.) Does the test pulse wiring match the allocation in the configurator? 2.) Short circuits at the inputs or the test pulse wiring? Points 1-2 OK, but error message still present: change DI/DI 2
	42		
	43	Error on PSS (1) DIO T	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or the test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T



Error class F-06	Error no.	Description	Remedy
	44 . . .	Error on PSS (1) DIF/DIO T	1.) Check the supply voltage to the module (voltage interrupt?) 2.) Check alarm conditions, e.g. the alarm must appear for min. of 1.5 ms 3.) Does the test pulse wiring match the allocation in the configurator? 4.) Short circuits at the inputs or test pulse wiring? 5.) Short circuit at the outputs or to 0 V or 24 V (DIO T)? Points 1-5 OK, but error message is still present: change module
	46 47	Error on PSS (1) DI/DI 2/DIO T	1.) Check the supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuits at the inputs or test pulse wiring? 4.) Short circuit at the outputs or to 0 V or 24 V (DIO T)? Points 1-4 OK, but error message is still present: change module
	48 . .	Error on PSS (1) AI	1.) Check the supply voltage to the module (voltage interrupt?) 2.) Short circuits at the inputs? 3.) Test value sent and read? Points 1-3 are OK, but error message is still present: change AI module
	51 52 . . . 60	Error on PSS (1) DOR	1.) Check the supply voltage to the module (voltage interrupt?) If point 1 is OK, but error message is still present: change DOR module

FS Error Messages

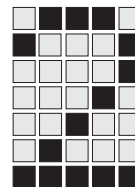
Error class F-06	Error no.	Description	Remedy
	61	Error on PSS (1) DIO T	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or the test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T
	62	Error on PSS (1) DIF	1.) Check alarm conditions, e.g. the alarm must appear for min. of 1.5 ms 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuits at the inputs or the test pulse wiring? Points 1-3 are OK, but error message still present: change DIF
	63	Error on an output module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or the test pulse wiring? 5.) Check alarm conditions, e.g. the alarm must appear for min. of 1.5 ms Points 1-5 OK, but error message still present: change module
	64	Faulty application	User program attempts to write to test pulse outputs; remove error from the user program



Error class F-06	Error no.	Description	Remedy
	65	Error on PSS (1) DOR	1.) Check supply voltage to the module (voltage interrupt?) Point 1 is OK, but error message still present: change DOR
	66 67	Error on PSS (1) DI/DI 2/DIO T	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or the test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T
	68 . . 70	Error on PSS (1) DOS	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? Points 1-2 OK, but error message still present: change DO/DOS
	71	Error on PSS (1) DI	1.) Does the test pulse wiring match the allocation in the configurator? 2.) Short circuits at the inputs or the test pulse wiring? Points 1-2 OK, but error message is still present: change DI/DI 2

FS Error Messages

Error class F-06	Error no.	Description	Remedy
	72	Error on PSS (1) DIO T	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or the test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T
	74		
	75	Not assigned	
	76	Error at the inputs	1.) Does the test pulse wiring match the allocation in the configurator? 2.) Short circuits at the inputs or test pulse wiring Points 1-2 are OK, but error still present, change the PSS or PSS CPU
	77	Error in the test pulse wiring of the inputs	1.) Does the test pulse wiring match the allocation in the configurator? 2.) Short circuits at the inputs or test pulse wiring Points 1-2 are OK, but error still present, change the PSS or PSS CPU
	78	Error on PSS (1) DIF module	1.) Check alarm conditions, e.g. the alarm must appear for min. of 1.5 s 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuits at the inputs or the test pulse wiring? Points 1-3 are OK, but error message still present: change



Defective user program

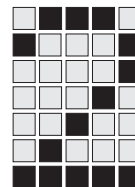
DIFError class	Error no.	Description	Remedy
F-07	01 . . . 05	User program damaged	Clear user program and reload into PSS ; if error continues: change PSS CPU

FS Error Messages

Selective shutdown errors

Error parameter: Low byte: Slot
 High byte: 0 = Whole slot
 1 = Upper half
 2 = Lower half
Error location: Assigned number of the faulty I/Os
 (coded bit by bit)

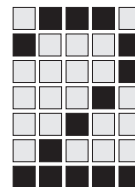
Error class F-08	Error no.	Description	Remedy
	00	Error on an output module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuits at the outputs or to 0 V or 24 V? Points 1-3 are OK, but error message still present: change module
	01	Error on PSS (1) DO module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? Points 1-2 are OK, but error message still present: change DO
	02	Error on PSS (1) DIF module	1.) Check alarm conditions, e.g. the alarm must appear for min. of 1.5 ms 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuits at the inputs or the test pulse wiring? Points 1-3 are OK, but error message still present: change DIF



Error class F-08	Error no.	Description	Remedy
	03	Error on CPU or on all output modules	1.) Check supply voltage to the modules (voltage interrupt?) Point 1 is OK, but error message is still present: if there is only one output module, change the module; if there are several output modules, change PSS CPU
	04	Error on an output module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? Points 1-2 OK, but error message still present: change module
	05	Module error	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Short circuits at the inputs or the test pulse wiring? Points1-3 OK, but error message still present: change module
	06	Error on a word module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuits at the inputs? 3.) Test value sent and read (by AI)? Points1-3 OK, but error message still present: change module

FS Error Messages

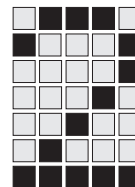
Error class F-08	Error no.	Description	Remedy
	07	Error on PSS (1) DIO T module	1.) Check the supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator ? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or the test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T
	08	Error on PSS (1) DIF module	1.) Check alarm conditions, e.g. the alarm must appear for min. of 1.5 s 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuits at the inputs or the test pulse wiring? Points 1-3 are OK, but error message still present: change DIF
	09	Error on PSS (1) DIO Z module	1.) Check the supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Load break? 4.) Does the test pulse wiring match the allocation in the configurator? Points 1-4 are OK, but error message still present: change DIO Z
	0A	Error on PSS (1) DOR module	1.) Check supply voltage to the module (voltage interrupt?) Point 1 is OK, but error message still present: change module



Error class F-08	Error no.	Description	Remedy
	0B	Error on the PSS (1) DOS module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? Points 1-2 are OK, but error message still present: change DOS
	0C	Error on the PSS (1) DIO Z module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Load break? 4.) Does the test pulse wiring match the allocation in the configurator? Points 1-4 are OK, but error message still present: change DIO Z
	0D	Error on an output module	1.) Check the supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? Points 1-3 OK, but error message still present: change module
	0E 0F	Error on a PSS (1) DIO Z module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Load break? 4.) Does the test pulse wiring match the allocation in the configurator? Points 1-4 are OK, but error message still present: change DIO Z

FS Error Messages

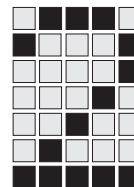
Error class F-08	Error no.	Description	Remedy
	10 11	Error on a PSS (1) DO/DOS module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? Points 1-2 are OK, but error message still present: change DO/ DOS module
	12	Error on a PSS (1) DIO Z module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Load break? Points 1-3 are OK, but error message still present: change DIO Z
	13 14	Error on a PSS (1) DIO T module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or the test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T
	15	Error on PSS (1) DOR module	1.) Check supply voltage to the module (voltage interrupt?) Point 1 is OK, but error message still present: change module



Error class F-08	Error no.	Description	Remedy
	16	Error on an output module or on the CPU	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Does test pulse wiring match the allocation in the configurator? Points 1-3 are OK, but error message still present: change output module or PSS CPU
	17	Error on an output module; 2nd output of an output pair is defective	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuits at the outputs or to 0 V or 24 V? 3.) Does test pulse wiring match the allocation in the configurator? Points 1-3 are OK, but error message still present: change output module
	18	Error on a PSS (1) DOS module; 2nd error within a group of 8	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? Points 1-2 are OK, but error, message still present: change DOS
	19	Error on a PSS (1) DIO Z module; 2nd error within a group of 8	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Load break? 4.) Does test pulse wiring match the allocation in the configurator? Points 1-4 are OK, but error message still present: change DIO Z

FS Error Messages

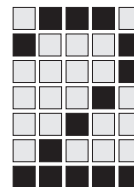
Error class F-08	Error No.	Description	Remedy
	1A	Error on PSS (1) DIF module	1.) Check alarm conditions e.g. the alarm must appear for min. of 1.5 ms 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuits at the inputs or test pulse wiring? Points 1-3 are OK, but error message still present: change DIF
	1B	Error on an input module	1.) Does the test pulse wiring match the allocation in the configurator? 2.) Short circuits at the inputs or test pulse wiring? Points 1-2 OK, but error message still present: change module
	1C	Error at a word module 2nd output segment defective	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuits at the inputs 3.) Test value sent and read (by AI)? Points 1-3 OK, but error message still present: change module
	1D 1E	Error on PSS (1) DIF module	1.) Check alarm conditions e.g. the alarm must appear for min. of 1.5 ms 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuits at the inputs or the test pulse wiring? Points 1-3 are OK, but error message still present: change DIF
	1F	Bit error signalled by user program	Check user program and reload into the PSS (SB 255)
	20	Word error signalled by user program	Check user program and reload into the PSS (SB 255)



Error class F-08	Error No.	Description	Remedy
	21 . . 25	Error on a word module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuits at the inputs 3.) Test value sent and read (by AI)? Points 1-3 OK, but error message still present: change module
	26 27	Error on an input module	1.) Does the test pulse wiring match the allocation in the configurator? 2.) Short circuits at the inputs or the signal wiring? Points 1-2 are OK, but error message still present: change input module
	28	Error on the CPU	Change CPU module
	29	Error on an output module	1.) Check the supply voltage to the module (voltage interrupt?) 2.) Short circuits at the outputs or to 0 V or 24 V? 3.) Does the test pulse wiring match the allocation in the configurator? Points 1-3 are OK, but error message still present: change output module
	2A	Error on the CPU	Change CPU module
	2B 2C	Error on an output module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuits at the outputs or to 0 V or 24 V? 3.) Short circuits at the inputs or the test pulse wiring? Points 1-3 are OK, but error message still present: change output module
	2D	Error on the CPU	Change CPU module

FS Error Messages

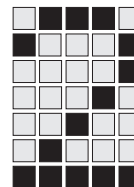
Error class F-08	Error no.	Description	Remedy
	2E . . . 31	Error on an output module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Does the test pulse wiring match the allocation in the configurator? Points 1-3 are OK, but error message still present: change output module
	34	Error on PSS (1) DIO Z module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Load break? 4.) Does the test pulse wiring match the allocation in the configurator? Points 1-4 are OK, but error, message still present: change DIO Z
	35	Error on PSS (1) DOR module	1.) Check supply voltage to the module (voltage interrupt?) Point 1 is OK, but error message still present: change DOR
	36	Error on PSS (1) DOS module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? Points 1-2 are OK, but error message still present: change DOS



Error class F-08	Error no.	Description	Remedy
	37 . . . 3C	Error on PSS (1) DIO Z module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? 3.) Load break? 4.) Does the test pulse wiring match the allocation in the configurator? Points 1-4 are OK, but error message still present: change DIO Z
	3D . . 3F	Error on a word module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuits at the inputs? 3.) Test value sent and read (by AI)? Points 1-3 OK, but error message still present: change module
	40	Error on the CPU	Change CPU module
	41 . . 44	Error on module	1.) Check alarm conditions, e.g. the alarm must appear for min. of 1.5 s 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuits at the inputs or the test pulse wiring? Points 1-3 are OK, but error message still present: change DIF
	45 46	Error on a word module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuits at the inputs? 3.) Test value sent and read (by AI)? Points 1-3 are OK, but error message still present: change module

FS Error Messages

Error class F-08	Error no.	Description	Remedy
	48 . . .	Error on PSS (1) DIF module	1.) Check alarm conditions, e.g. the alarm must appear for min. of 1.5 ms 2.) Does the test pulse wiring match the allocation in the configurator 3.) Short circuits at the inputs or the test pulse wiring? Points 1-3 are OK, but error message still present: change DIF
	4C		
	4D	Error on PSS (1) DIO Z module	1.) Check supply voltage to the module (voltage interrupt? 2.) Short circuits at the outputs or to 0 V or 24 V? 3.) Load break? 4.) Does the test pulse wiring match the allocation in the configurator ? Points 1-4 are OK, but error message still present: change DIO Z
	4E 4F	Error on PSS (1) DOR module	1.) Check supply voltage to the module (voltage interrupt? Point 1 is OK, but error message is still present: change DOR
	50 51	Error on PSS (1) DOS module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuits at the outputs or to 0 V or 24 V? Points 1-2 are OK, but error message still present: change DOS



Error class F-08	Error no.	Description	Remedy
	52	Error on PSS (1) DIO Z module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuits at the outputs or to 0 V or 24 V? 3.) Load break? 4.) Does the test pulse wiring match the allocation in the configurator? Points 1-4 are OK, but error message still present: change DIO Z
	53 54	Error on an output module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? Points 1-2 are OK, but error message still present: change output module
	55 56 57	Configuration error	Compare true layout with set layout and either adapt configuration or change layout
	58 59	Error on an output module	1.) Check supply voltage to the module (voltage interrupt?) 2.) Short circuit at the outputs or to 0 V or 24 V? Points 1-2 are OK, but error message still present: change output module
	60 61	Error on the CPU	Change CPU module

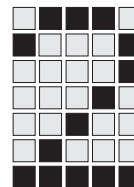
FS Error Messages

Word module error

Error parameters: Low byte: Slot
 High byte: 0 = Whole slot
 1 = Upper half
 2 = Lower half

Error location: Assigned number of the faulty I/Os
(coded bit by bit)

Error class F-09	Error no.	Description	Remedy
	01 . . . 0E	Error on word module	1.) Tolerance set is too low 2.) Incorrect match algorithm (e.g. match instead of min.- max.) if no error is present in the configuration: change the module
	0F	Word error signalled from application program	Check user program and change if necessary



Scan time exceeded

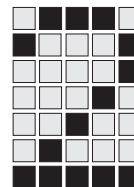
Error class F-0C	Error no.	Description	Remedy
	01	Block run time exceeded	Increase the block run time in the configurator or optimise the user program
	02	Maximum scan time exceeded	Scan time is the same as the block run times for the FS and ST user program and the processing time for the operating system; optimise user program, e.g. reduce alarm load

FS Error Messages

Process interrupt overflow

Error parameter: Alarm-OB

Error class F-12	Error no.	Description	Remedy
	01	Too many alarms (Alarm queue overflow)	1.) Reduce alarm load 2.) Make the segments shorter 3.) Optimise user program



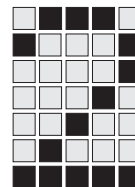
Alarm errors

Error class F-14	Error no.	Description	Remedy
	01	Alarm triggered although no module with alarm capabilities installed	Remove sources of interference from the working environment: if error continues: change PSS CPU
	02	Alarm source cannot be determined	1.) Increase alarm pulse 2.) Remove sources of interference from the working environment
	03	Alarm reaction time exceeded	1.) Increase alarm reaction time in the configurator 2.) Reduce alarm load 3.) Optimise user program

FS Error Messages

Messages

Error class F-20	Error no.	Description	Remedy
	01	Cold start: FS program starting up	---
	03	STOP: FS program switched to STOP	---
	05	STOP: FS program switched to "No FS"	Read from error stack and contact Pilz technical support
	06	Minimum scan time exceeded	1.) Increase min. scan time in the configurator 2.) Optimise in user program
	07	Internal system time exceeded	---
	08	Error stack cleared	Replace the battery Leave voltage applied until the battery has been replaced!
	09 0A 0B	System error	Contact Pilz technical support
	0C	Fleeting voltage drop out	Check mains voltage
	0D 0E	CPU defective	Change PSS CPU
	0F	System error	Contact Pilz technical support
	10	Faulty user program	Enable alarm at end of cycle (AF-command)
	11 12	Alarm source cannot be detected	1.) Increase alarm pulse 2.) Remove sources of interferences from the working environment
	13	AS-command in Alarm-OB	Clear AS-command from Alarm-OB (not permitted in alarm-OB)
	14	AF-command in Alarm-OB	Clear AF-command from Alarm-OB (not permitted in alarm-OB)



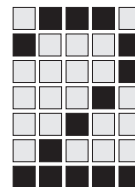
Error class F-20	Error no.	Description	Remedy
	15 16	Deactivation data cleared	Replace the battery. Leave the voltage applied until the battery has been replaced!
	1D	Start reactivation	---
	1E	Acknowledge reactivation error	---
	1F	Acknowledge reactivation	---
	20	Reactivation through operator	---
	22	Maximum scan time exceeded on start-up	---
	23	Maximum scan time exceeded in STOP	---
	24	Reactivation completed successfully	---

FS Error Messages

Addressing error in the user program

Error parameter: Timer number
Error location: Block in which the error occurred

Error class F-21	Error no.	Description	Remedy
	13	Command SE: timer was started with a negative value	Enter positive value for time value
	21	Byte division by 0	Change user program
	22	Byte division overflow	Reduce dividend
	32	Word division overflow	Reduce dividend
	33	Periphery word access to pulsed input in alarm-OB	No periphery accesses permitted in alarm-OBs



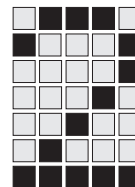
Error accessing data blocks

Error parameter: Block ID for selected DB
Error location: Block in which the error occurred

Error class F-22	Error no.	Description	Remedy
	01	Command "L DR": DW lies outside the current DB	Check the length of the DB, rectify program
	02	Command "L DL": DW lies outside the current DB	Check the length of the DB, rectify program
	03	Command "T DR": DW lies outside the current DB	Check the length of the DB, rectify program
	04	Command "T DL": DW lies outside the current DB	Check the length of the DB, rectify program
	05	Command "AND DR": DW lies outside the current DB	Check the length of the DB, rectify program
	06	Command "AND DL": DW lies outside the current DB	Check the length of the DB, rectify program
	09	Command "OR DR": DW lies outside the current DB	Check the length of the DB, rectify program
	0A	Command "OR DL": DW lies outside the current DB	Check the length of the DB, rectify program
	0D	Command "XOR DR": DW lies outside the current DB	Check the length of the DB, rectify program
	0E	Command "XOR DL": DW lies outside the current DB	Check the length of the DB, rectify program

FS Error Messages

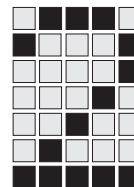
Error class F-22	Error no.	Description	Remedy
	0F	Command "+ DR": DW lies outside the current DB	Check the length of the DB, rectify program
	10	Command "+ DL": DW lies outside the current DB	Check the length of the DB, rectify program
	11	Command "- DR": DW lies outside the current DB	Check the length of the DB, rectify program
	12	Command "- DL": DW lies outside the current DB	Check the length of the DB, rectify program
	13	Command "* DR": DW lies outside the current DB	Check the length of the DB, rectify program
	14	Command "* DL": DW lies outside the current DB	Check the length of the DB, rectify program
	15	Command ": DR": DW lies outside the current DB	Check the length of the DB, rectify program
	16	Command ": DL": DW lies outside the current DB	Check the length of the DB, rectify program
	17	Command "I DR": DW lies outside the current DB	Check the length of the DB, rectify program
	18	Command "I DL": DW lies outside the current DB	Check the length of the DB, rectify program
	19	Command "D DR": DW lies outside the current DB	Check the length of the DB, rectify program
	1A	Command "D DL": DW lies outside the current DB	Check the length of the DB, rectify program



Error class F-22	Error no.	Description	Remedy
	1B	Command "> DR": DW lies outside the current DB	Check the length of the DB, rectify program
	1C	Command "> DL": DW lies outside the current DB	Check the length of the DB, rectify program
	1F	Command "!= DR": DW lies outside the current DB	Check the length of the DB, rectify program
	20	Command "!= DL": DW lies outside the current DB	Check the length of the DB, rectify program
	23	Command "< DR": DW lies outside the current DB	Check the length of the DB, rectify program
	24	Command "< DL": DW lies outside the current DB	Check the length of the DB, rectify program
	30	Command "L DW": DW lies outside the current DB	Check the length of the DB, rectify program
	31	Command "T DW": DW lies outside the current DB	Check the length of the DB, rectify program
	32	Command "AND DW": DW lies outside the current DB	Check the length of the DB, rectify program
	34	Command "OR DW": DW lies outside the current DB	Check the length of the DB, rectify program
	36	Command "XOR DW": DW lies outside the current DB	Check the length of the DB, rectify program
	37	Command "+ DW": DW lies outside the current DB	Check the length of the DB, rectify program

FS Error Messages

Error class F-22	Error no.	Description	Remedy
	38	Command "- DW": DW lies outside the current DB	Check the length of the DB, rectify program
	39	Command "* DW": DW lies outside the current DB	Check the length of the DB, rectify program
	3A	Command ": DW": DW lies outside the current DB	Check the length of the DB, rectify program
	3B	Command "I DW": DW lies outside the current DB	Check the length of the DB, rectify program
	3C	Command "D DW": DW lies outside the current DB	Check the length of the DB, rectify program
	3D	Command "> DW": DW lies outside the current DB	Check the length of the DB, rectify program
	3F	Command "!= DW": DW lies outside the current DB	Check the length of the DB, rectify program
	41	Command "< DW": DW lies outside the current DB	Check the length of the DB, rectify program
	51	Actual parameter for DR is invalid	Check actual parameter, rectify program
	52	Actual parameter for DL is invalid	Check actual parameter, rectify program
	53	Command "T =para": DR lies outside the current DB	Check the length of the DB, rectify program
	54	Command "T =para": DL lies outside the current DB	Check the length of the DB, rectify program



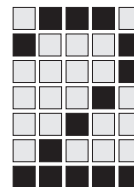
Error class F-22	Error no.	Description	Remedy
	61	Command "L =para": DW lies outside the current DB	Check length of the DB, rectify program
	62	Command "T =para": DW lies outside the current DB	Check length of the DB, rectify program
	63	Command "I =para": DW lies outside the current DB	Check length of the DB, rectify program
	64	Command "D =para": DW lies outside the current DB	Check length of the DB, rectify program
	65	Command "A DB" is missing	Select a data block with "A DB" before accessing a data word

FS Error Messages

Error accessing read-only data blocks

Error parameter: Block ID for selected DB
Error location: Block in which the error occurred

Error class F-23	Error no.	Description	Remedy
	01	Command "T DR": transferring to read-only DB	Remove read-only or select correct DB
	02	Command "T DL": transferring to read-only DB	Remove read-only or select correct DB
	11	Command "T DW": transferring to read-only DB	Remove read-only or select correct DB
	12	Command "I DW": transferring to read-only DB	Remove read-only or select correct DB
	13	Command "D DW": transferring to read-only DB	Remove read-only or select correct DB
	20	Command "T =para": transferring to read-only DB	Remove read-only or select correct DB
	21	Command "T =para": transferring to read-only DB	Remove read-only or select correct DB
	31	Command "T =para": transferring DW to read-only DB	Remove read-only or select correct DB
	32	Command "I =para": transferring DW to read-only DB	Remove read-only or select correct DB
	33	Command "D =para": transferring DW to read-only DB	Remove read-only or select correct DB



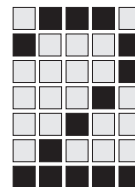
Error setting parameters for FBs and SBs

Error parameter: Call up block
Error location: Block called up

Error class F-24	Error no.	Description	Remedy
	01	Actual parameter (bit) lies outside the permitted range	Check and rectify actual parameter
	02	Actual parameter (byte) lies outside the permitted range	Check and rectify actual parameter
	03	Actual parameter (word) lies outside the permitted range	Check and rectify actual parameter
	13	Command "SE =para": Actual parameter lies outside the permitted range	Check and rectify actual parameter
	16	Command "ZV =para": Actual parameter lies outside the permitted range	Check and rectify actual parameter
	18	Command "R =para": Actual parameter lies outside the permitted range	Check and rectify actual parameter
	19	Command "R =para": Timer address is incorrect	Check and rectify actual parameter
	1A	Command "R =para": Counter address is incorrect	Check and rectify actual parameter
	21	Command "T =para": Byte-actual parameter lies outside the permitted range	Check and rectify actual parameter

FS Error Messages

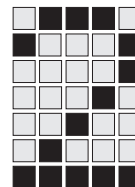
Error class F-24	Error no.	Description	Remedy
	22	Command "I =para": Byte-actual parameter lies outside the permitted range	Check and rectify actual parameter
	23	Command "D =para": Byte-actual parameter lies outside the permitted range	Check and rectify actual parameter
	31	Command "T =para": Word-actual parameter lies outside the permitted range	Check and rectify actual parameter
	32	Command "I =para": Word-actual parameter lies outside the permitted range	Check and rectify actual parameter
	33	Command "D =para": Word-actual parameter lies outside the permitted range	Check and rectify actual parameter
	34	Command "A =para": Actual parameter DB lies outside the permitted range	Check and rectify actual parameter
	35	Command "T =para": Actual parameter ZW lies outside the permitted range	Check and rectify actual parameter
	36	Command "S =para": Bit-write access to flag range above the special flag	Flag range > do not use last special flag in the user program; rectify parameter
	37	Command "S =para": Write access to read-only flags	Check and rectify actual parameter



Error class F-24	Error no.	Description	Remedy
	38	Command "S =para": Input bit set is not permitted	Only output bit can be set; rectify parameter
	39	Command "R =para": Bit-write access to flag range above the special flag	Flag range > do not use last special flag in the user program; rectify parameter
	3A	Command "R =para": Bit-write access to read- only flag	Check and rectify parameter
	3B	Command "R =para": Resetting of input bit is nt permitted	Check and rectify parameter
	3C	Command "T =para": Byte-write access to flag range above the special flag	Flag range > do not use last special flag in the user program; rectify parameter
	3D	Command "T =para": Byte-write access to read-only flags	Check and rectify parameter
	3E	Command "T =para": Word-write access to flag range above the special flags	Flag range > do not use last special flag in the user program; rectify parameter
	3F	Command "T =para": Word write access to read-only flags	Check and rectify parameter
	40	Command "I =para": Byte-write access to flag range above the special flags	Flag range > do not use last special flag in the user program; rectify parameter
	41	Command "I =para": Byte write access to read-only flags	Check and rectify parameter
	42	Command "I =para": Incrementing input byte is not permitted	Check and rectify parameter

FS Error Messages

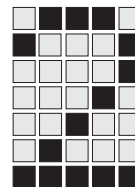
Error class F-24	Error no.	Description	Remedy
	43	Command "D =para": Byte-write access to flag range above the special flags	Flag range > do not use last special flag in user program; rectify parameter
	44	Command "D =para": Byte-write access to read-only flags	Check and rectify parameter
	45	Command "D =para": Decrementing input byte is not permitted	Check and rectify parameter
	46	Command "I =para": Word-write access to flag range above the special flag	Flag range > do not use last special flag in user program; rectify parameter
	47	Command "I =para": Word-write access to read-only flags	Check and rectify parameter
	48	Command "I =para": Incrementing input word is not permitted	Check and rectify parameter
	49	Command "D =para": Word-write access to flag range above the special flag	Flag range > do not use last special flag in user program; rectify parameter
	4A	Command "D =para": Word write-access to read-only flags	Check and rectify parameter
	4B	Command "D =para": Decrementing input word is not permitted	Check and rectify parameter
	4C	Command "S =para", "! =para", "=N =para": Actual parameter lies outside the permitted range	Check and rectify parameter



Error class F-24	Error no.	Description	Remedy
	4D	Command "R =para", Actual parameter lies outside the permitted range	Check and rectify parameter
	4F	Command "L =para", XW-address on word module lies outside the permitted range	Check and rectify parameter
	50	Command "T =para", XW-address on word module lies outside the permitted range	Check and rectify parameter
	51	Command "SE =para": Incorrect timer address as actual parameter	Check and rectify actual parameter
	52	Command "ZR =para": Incorrect counter address as actual parameter	Check and rectify actual parameter
	53	Command "ZV =para": Incorrect counter address as actual parameter	Check and rectify actual parameter
	54	Command "L =para": Bit-actual parameter lies outside the permitted range	Check and rectify actual parameter
	55	Command "L =para": Timer address lies outside the permitted range	Check and rectify bit
	56	Command "L =para": Counter address lies outside the permitted range	Check and rectify bit parameter for counters
	57	Command "L =para": Byte actual parameter lies outside the permitted range	Check and rectify byte parameter

FS Error Messages

Error class F-24	Error no.	Description	Remedy
	58	Command "L =para": Word actual parameter lies outside the permitted range	Check and rectify word parameter
	59	Command "L =para": Counter address lies outside the permitted range	Check and rectify word parameter for counters



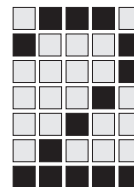
Indirect addressing error

Error parameter: Flag word in which the indirect address appears
Error location: Block in which the error was detected

Error class F-25	Error no.	Description	Remedy
	01	Indirect address of the flag bit lies outside the permitted range	Rectify flag where the indirect address is incorrect
	02	Indirect address of the input bit lies outside the permitted range	Rectify flag where the indirect address is incorrect
	03	Indirect address of the output bit lies outside the permitted range	Rectify flag where the indirect address is incorrect
	04	Indirect address of the timer bit lies outside the permitted range	Rectify flag where the indirect address is incorrect
	05	Indirect address of the counter bit lies outside the permitted range	Rectify flag where the indirect address is incorrect
	13	Command "SE T(...)": Indirect address of the timer lies outside the permitted range	Rectify flag where the indirect address is incorrect
	16	Command "ZV Z(...)": Indirect address of the counter lies outside the permitted range	Rectify flag where the indirect address is incorrect
	17	Command "ZR Z(...)": Indirect address of the counter lies outside the permitted range	Rectify flag where the indirect address is incorrect
	18	Command "R T(...)": Indirect address of the timer lies outside the permitted range	Rectify flag where the indirect address is incorrect

FS Error Messages

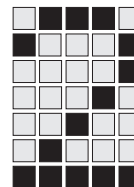
Error class F-25	Error no.	Description	Remedy
	19	Command "R Z(...)": Indirect address of the counter lies outside the permitted range	Rectify flag where the indirect address is incorrect
	1A	Command "SE T(...)": Indirect address of the timer lies outside the permitted range	Rectify flag where the indirect address is incorrect
	21	Indirect address of the flag byte lies outside the permitted range	Rectify flag where the indirect address is incorrect
	22	Indirect addressed of the input byte lies outside the permitted range	Rectify flag where the indirect address is incorrect
	23	Indirect address of the output byte lies outside the permitted range	Rectify flag where the indirect address is incorrect
	24	Indirect address of the data byte-word lies outside permitted range	Rectify flag where the indirect address is incorrect
	31	Indirect address of the flag word lies outside the permitted range	Rectify flag where the indirect address is incorrect
	32	Indirect address of the input word lies outside the permitted range	Rectify flag where the indirect address is incorrect
	33	Indirect addressed output word lies outside the permitted range	Rectify flag where the indirect address is incorrect
	34	Indirect address of the counter word lies outside the permitted range	Rectify flag where the indirect address is incorrect



Error class F-25	Error no.	Description	Remedy
	36	Command "L XW(...)": Indirect address of XW (word module) lies outside the permitted range	Rectify flag where the indirect address is incorrect
	50	Command "I MW(...)": Indirect address of the flag word lies outside the permitted range	Rectify flag word in the increment command where the indirect address is incorrect
	51	Command "I AW(...)": Indirect address of the output word lies outside the permitted range	Rectify output word in the increment command where the indirect address is incorrect
	52	Command "D MW(...)": Indirect address of the flag word lies outside the permitted range	Rectify flag word in the decrement command where the indirect address is incorrect
	53	Command "D AW(...)": Indirect address of the output word lies outside the permitted range	Rectify output word in the decrement command where the indirect address is incorrect
	54	Command "A DB(...)": Indirect address of the DB lies outside the permitted range	Rectify data block call up where the indirect address is incorrect
	55	Command "D MW(...)": Word-write access to read-only flags	Check and rectify parameter
	56	Command "I MW(...)": Word-write access to read-only flag	Check and rectify parameter
	57	Indirect bit-write access to read-only flags	Check and rectify parameter

FS Error Messages

Error class F-25	Error no.	Description	Remedy
	58	Indirect byte write access to read-only flags	Check and rectify parameter
	59	Indirect word write access to read-only flags	Check and rectify parameter
	5A	Command "T XW(...)": Indirect address of XW (word module) lies outside the permitted range	Rectify access to word module where the indirect address is incorrect



Block errors

Error parameter: Block ID for missing block
Error location: Block which calls up the missing block

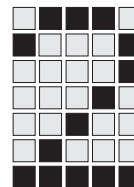
Error class F-26	Error no.	Description	Remedy
	01 . . . 14	Block not loaded in user program	Contact Pilz technical support; Use a new programmng device (latest PG version)

FS Error Messages

Parameter errors

Error parameter: Call-up block
Error location: Block called up

Error class F-27	Error no.	Description	Remedy
	01	Formal and actual parameters do not match (type, number, sequence)	Adjust the call-ups to suit the block header, or if required, amend the block header and adjust the call-ups accordingly.



Block nesting error

Error location:

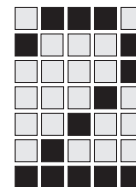
Block in which the error occurred

Error class F-28	Error no.	Description	Remedy
	01	Nesting level exceeded by starting an OB (CAL OB)	Check block nesting levels and reduce the level
	03	Nesting level exceeded by starting a PB (CAL PB)	Check block nesting levels and reduce the level
	05	Nesting level exceeded by starting a FB (CAL FB)	Check block nesting levels and reduce the level
	07	Nesting level exceeded by starting a SB (CAL SB)	Check block nesting levels and reduce the level

FS Error Messages

Operating system errors (processor A)

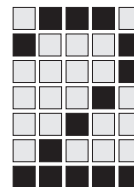
Error class F-70	Error no.	Description	Remedy
	01 . . . 0D	Major system error	Contact Pilz technical support
	0E	Switch on processor A is not at STOP, but an adjacent processor has registered a STOP	Restart system, if error message continues: change PSS CPU
	0F . . . 13	Major system error	Contact Pilz technical support
	14		Message for internal purposes
	15 . . . 18	Major system error	Contact Pilz technical support
	19	CRC is incorrect	Transfer program again, if error continues: change PSS CPU
	1A . . . 1F	Major system error	Contact Pilz technical support
	20 21	Error in the Programming device	Use latest PG version
	22	Major system error	Contact Pilz technical support
	23		Message for internal purposes



Error class F-70	Error no.	Description	Remedy
	24	Major system error	Contact Pilz technical support
	25		Message for internal purposes
	26 . . . 32	Major system error	Contact Pilz technical support
	33	Incorrect CRC	Transfer program, if error continues: change PSS CPU
	40 . . . 42	Major system error	Contact Pilz technical support
	43	CPUs attempt to call-up different alarm-OBs	Reduce alarm load, if error continues: change PSS CPU
	44	Major system error	Contact Pilz technical support
	46	Internal table has changed	Transfer program, if error continues: change PSS CPU
	47		Message for internal purposes
	48 . . . 63	Major system error	Contact Pilz technical support
	64	Error on DIF module	Change DIF
	65 . . . 71	Major system error	Contact Pilz technical support

FS Error Messages

Error class F-70	Error no.	Description	Remedy
	72	Too many errors simultaneously	Restart PSS
	73 . . . 7F	Major system error	Contact Pilz technical support



Synchronisation error (processor A)

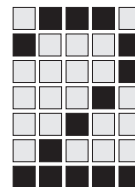
Error parameter: Synchronisation location

Error class F-71	Error no.	Description	Remedy
	01 02	Major system error	Contact Pilz technical support

FS Error Messages

Error in adjacent CPU (processor A)

Error class F-72	Error no.	Description	Remedy
	01 . . . 26	Major system error	Contact Pilz technical support
	27 28	Defective CPU	Change PSS CPU
	29 32	Major system error	Contact Pilz technical support



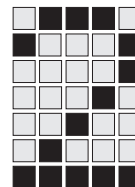
Error reading the PII (processor A)

Error class F-73	Error no.	Description	Remedy
	04	PII cannot be determined	Increase the number of read attempts; if error continues: change input module
	05	PII for DIF cannot be determined	Increase the number of read attempts; reduce interrupt load; if error continues: change DIF
	06 07	PII cannot be determined	Increase the number of read attempts; if error continues: change input module

FS Error Messages

Configuration error (processor A)

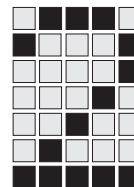
Error class F-74	Error no.	Description	Remedy
	02 . . . 06	Error in the operating system or programming device	Check contents of the configurator, if entries are correct, use a new programming device (use latest PG version)
	07	Entry in the configurator is invalid	Rectify basic data in the configurator
	08	Invalid slot entered in the configurator for the test pulse module	Enter valid slot in the configurator
	09	Slot entered in configurator as the slot for test pulse module contains no pulsed outputs	Check PSS configuration and adjust, or adjust the entry in the configurator to the layout
	0A	FS user program is not loaded	Download FS user program into PSS
	0B	Max. number of test pulses in the configurator does not match the number used	Rectify the number of test pulses in the configurator
	0C	Two adjacent inputs are being tested with the same test pulse	Re-enter the test pulse allocation in the configurator
	0D	Highest test pulse number used is not permitted	Re-enter the number of test pulses in the configurator
	0E	Alarm-OBs configuration is not consecutive	Re-enter alarm-OBs in the configurator
	0F	Alarm-OB loaded, which is not configured	Check user program
	10	Invalid slot number configured for alarm configuration	Check PSS configuration and check the details in the configurator for the slot for the DIF module



Error class F-74	Error no.	Description	Remedy
	12	Invalid edge configuration, process alarm-OB must be activated with a rising and falling pulse edge	Check alarm-OB configuration
	13	Edge configuration is invalid	Check alarm-OB configuration
	14 . . 17	Error in alarm configuration or the programming device	Check contents of configurator, if entries are correct: contact Pilz technical support; use new programming device
	18	Min. scan time is greater than the max. permitted scan time	Re-enter the minimum scan time in the configurator
	19 1A	Error in the operating system or programming device	Check contents of configurator, if entries are correct: contact Pilz technical support; use new programming device
	1B	Read segments have been defined on a slot that does not have a word module	Check the read/write segments in the configurator
	1C	Start address for read segments is too high	Check the read segments for the word module in the configurator
	1D	Read segments overlap	Check the read segments for the word module in the configurator
	1E	Segment length is invalid	Check the read segments for that word module in the configurator
	1F	Read segment extends beyond the module	Check the read segments for that word module in the configurator
	20	Alignment algorithm is invalid	Check alignment algorithm for that word module in the configurator

FS Error Messages

Error class F-74	Error no.	Description	Remedy
	21	Double word read segment lies outside the double word address	Check the read segments for that word module in the configurator
	22	Word modules are not in ascending order	Enter word modules in the configurator in ascending order
	23	Match point is invalid	Check match-point for the word modules in the configurator
	24	A word module has an invalid slot	Check configuration, check read and write segments in the configurator
	25	Slots for output segments are not in ascending order	Check read and write segments in the configurator
	26	Output segments have been defined on a slot that has no word module	Check read and write segments in the configurator
	27	Start address for output segments is too high	Check output segments for word module in the configurator
	28	Output segments overlap	Check output segments for word module in the configurator
	29	Segment length is invalid	Check output segments for word module in the configurator
	30	Output segment extends beyond the module	Check output segments for word module in the configurator
	31	Double word output segment lies outside the double word address	Check output segments for word module in the configurator
	32	Word modules are not in ascending order	Enter the word modules in configurator in ascending order
	33	Output point is invalid	Check output-point for the word module in the configurator

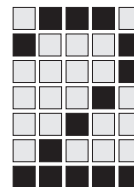


Error class F-74	Error no.	Description	Remedy
	34	Both DI and DIF inputs tested with the same test pulse	Check test pulse allocation in the configurator
	35	More than 2 DIF in the set layout configuration	Check configuration, change the configuration in the configurator
	36	Test module entered but pulse number is FF	Check configuration or test pulse allocation in the configurator
	37	Program cannot be run on this PSS	Use correct CPU module
	38 . . 47	Selective shutdown configuration error	Contact Pilz technical support; use new programming device (latest PG version)
	48	A module is not supported by the operating system	Change PSS CPU
	49 . . 4B	Selective shutdown configuration error	Contact Pilz technical support; use new programming device (latest PG version)

FS Error Messages

Programming device error (processor A)

Error class F-75	Error no.	Description	Remedy
	01 . . . 04	Error in the PG	Contact Pilz technical support; use new PG (latest PG version)



Compiler error message (processor A)

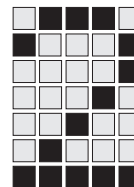
Error parameter: Line number
Error location: Block

Error class F-76	Error no.	Description	Remedy
	01 24 7F	Error in the PG	Contact Pilz technical support; use new PG (latest PG version)

FS Error Messages

Program load error (processor A)

Error class F-77	Error no.	Description	Remedy
	01	Too many blocks have been loaded	Reduce blocks to a maximum of 511
	02 03	PG communication error	Reload the user program into the PSS, remove the communication, error: if the error continues: contact Pilz technical support; use new PG
	04	User program damaged	Reload user program into the PSS, if the error continues: contact Pilz technical support; use new PG
	05 06	PG communication error	Reload user program into the PSS, remove communication error, if error continues: contact Pilz technical support; use new PG
	07		Message for internal purposes
	08	Memory for the application program is full	Clear memory (Flash-EPROM), reload the user program into the PSS, if error continues: reduce the size of the application program
	09	PSS program has not been loaded	Only load the program created using the programming device for the PSS
	0A	PG communication error	Reload user program into the PSS, if the error continues: contact Pilz technical support; use new PG device



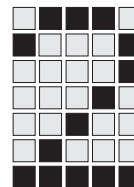
Error class F-77	Error no.	Description	Remedy
	0B 0C	Approved block is defective	Obtain block from original disk, re-link program and transfer
	0D	DB 002 does not have write-protection	Enter new configuration; link FS user program and transfer to the PSS, if error continues: contact Pilz technical support; possibly use new programming device

FS Error Messages

Link program error (processor A)

Error parameter: Block

Error class F-78	Error no.	Description	Remedy
	01 . . . 03	Link error	Clear user program, Re-load user program into the PSS, if error continues: contact Pilz technical support. Change PSS CPU or programming device



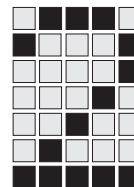
Error in the process image of outputs (PIO) system error (processor A)

Error class F-79	Error no.	Description	Remedy
	01 . . . 0A	Major system error	Contact Pilz technical support

FS Error Messages

System error (processor A)

Error class F-7A	Error no.	Description	Remedy
	00 . . . 07	Major system error	Contact Pilz technical support



Fatal system error (processor A)

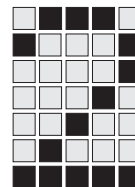
Error parameter: Adjacent error number

Error class F-80	Error no.	Description	Remedy
	01 . . . 04	Major system error	Contact Pilz technical support

FS Error Messages

Operating system call up errors

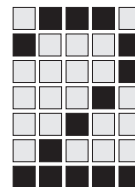
Error class F-81	Error no.	Description	Remedy
	01	Too many test slices have been set	Enter max. 99 test slices in DB 003, DW 220
	02	Alignment algorithm: (SB 255, FUNK 21) Slot number is invalid	Correct the slot number in DB 003
	03	Alignment algorithm: (SB 255, FUNK 21) No word module on slot	Check configuration; Correct the slot number in DB 003
	04	Alignment algorithm (SB 255, FUNK 21): Segment number is invalid	Correct match segment number in DB 003
	05	Alignment algorithm (SB 255, FUNK 21): Alignment algorithm number is invalid	Correct alignment algorithm number in DB 003
	06	Alignment algorithm (SB 255, FUNK 21): Match segment does not exist	Correct match segment number in DB 003
	07	Called up SB 255 with invalid function	Check function number
	08	Read segment (SB 255, FUNK 25): Segment number is invalid	Correct read segment number in DB 003
	09	(SB 255, FUNK 25): Match segment does not exist	Correct match segment number in DB 003
	0A	Read segments (SB 255, FUNK 25): Segment number is invalid	Correct read segment numbers in DB 003



Error class F-81	Error no.	Description	Remedy
	0B	(SB 255, FUNK 25): Word module not on slot entered	Correct slot number in DB003
	0C	Write segment (SB 255, FUNK 23): Segment number is invalid	Correct write segment number in DB 003
	0D	Write segment (SB 255, FUNK 23): Write segment does not exist	Correct write segment number in DB 003
	0E	Write segment (SB 255, FUNK 23): Slot number is invalid	Correct slot number in DB 003
	0F	(SB 255, FUNK 23): Word module not on slot entered	Correct slot number in DB 003
	18	Invalid start address for CRC-calculation in SB 001	Correct input parameter STRT
	19	Invalid end address for CRC-calculation in SB 001	Choose the address range for CRC- checksum so that the last value is in the permitted address range
	1A	ID-Number for CRC- calculation is invalid	
	1D	Call SB 255, FUNK 100, but selective shutdown has not been defined	Set selective shutdown in the configurator or correct the function
	1E	Call SB 255, FUNK 100: Selected signal group not available	Check signal groups
	1F	Call SB 255, FUNK 100: Selected signal group not deactivated yet	Deactivate the signal group, then acknowledge with FUNK = 100

FS Error Messages

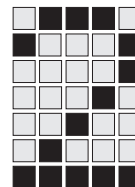
Error class F-81	Error no.	Description	Remedy
	20	Call SB 255, FUNK 100: Run time for deadman timer is too long	Reduce run time for deadman timer
	21	Call SB 255, FUNK 101: But selective shutdown has not been defined	Set selective shutdown in the configurator or correct the function
	22	Call SB 255, FUNK 101: Selected signal group not available	Check signal groups
	23	Call SB 255, FUNK 102, But selective shutdown has not been defined	Set selective shutdown in the configurator or correct the function
	24	Call SB 255, FUNK 102: Selected signal group not available	Check signal groups
	25	Call SB 255, FUNK 102: Selected signal group not yet deactivated	Deactivate the signal groups, then acknowledge with FUNK = 100
	27	Call SB 255, FUNK 103, But selective shutdown has not been defined	Set selective shutdown in the configurator or correct the function
	28	Call SB 255, FUNK 103: No module on slot entered	Check configuration or correct the slot number in DB 003
	29	Call SB 255, FUNK 104, But selective shutdown has not been defined	Set selective shutdown in the configurator or correct the function
	2A	Call SB 255, FUNK 104: No module on slot entered, invalid slot	Check configuration or the entry in DB 003
	2B	Call SB 255, FUNK 104: Word module not on slot entered	Check configuration or the entry in DB 003
	2C	Call SB 255, FUNK 104: Segment has not been defined	Check configuration or read/write segment in DB 003



Error class F-81	Error no.	Description	Remedy
	2D	Call SB 255, FUNK 105, but selective shutdown is not defined	Set selective shutdown in the configurator or correct the function
	2E	Call SB 255, FUNK 105, called up in alarm-OB	Do not carry out reactivation with FUNK 105 in alarm-OB
	2F	Call SB 255, FUNK 106, But selective shutdown is not defined	Set selective shutdown in the configurator or correct the function
	31	Call SB 255, FUNK 106, Called up in alarm-OB	Do not carry out reactivation with FUNK 106 in alarm-OB
	32	Call SB 255, FUNK 106: Called up in OB 120	Remove call up from OB120
	33	Call SB 255, FUNK 106: Although reactivation is already active	Correct user program
	34	Call SB 255, FUNK 106: Selected signal group is not available	Check signal groups
	35	Call SB 255, FUNK 106: Selected signal group has not been deactivated	Only deactivated signal groups can be reactivated, check signal groups
	36	Call SB 255, FUNK 106: Reactivation although signal group type 0 is not to be reactivated	Check user program, and if required reactivate all signal groups simultaneously
	37	Call SB 255, FUNK 106: Reactivating a module that has been shut down, pulsed inputs, signal group type 1 or type 2 on faulty module	Check user program, and if required reactivate all signal groups simultaneously
	39	Call SB 255, FUNK 107: But selective shutdown is not defined	Set selective shutdown in the configurator or correct the function

FS Error Messages

Error class F-81	Error no.	Description	Remedy
	3A	Call SB 255, FUNK 107: Called up in alarm-OB	Reactivation error acknowledgement do not carry out with FUNK 107 in an alarm-OB
	3B	Call SB 255, FUNK 107: Although reactivation is not active	Reactivation error acknowledgement carry out only after a reactivation error
	3C	Call SB 255, FUNK 107: Although no reactivation error is present	Reactivation error acknowledgement carry out only after a reactivation error
	3E	Call SB 255, FUNK 108: But selective shutdown has not been defined	Set selective shutdown in the configurator or correct the function
	3F	Call SB 255, FUNK 108: Called up in alarm-OB	Reactivation acknowledgement should not be carried out with FUNK 108 in alarm-OB
	40	Call SB 255, FUNK 108: Although reactivation is not active	Reactivation acknowledgement should only be carried out once reactivation is complete
	41	Call SB 255, FUNK 108: Reactivation error	Only acknowledge reactivation if a reactivation error has not occurred
	42	Call SB 255, FUNK 108: Reactivation acknow- ledgement although reactivation not complete	Carry out reactivation and then acknowledge
	44	Call SB 255, FUNK 109: But selective shutdown has not been defined	Set selective shutdown in the configurator or correct the function
	45	Call SB 255, FUNK 109: Signal group number is invalid	Check signal group number and correct in DB 003
	46	Call SB 255, FUNK 109: reaction type selected is invalid	Correct the reaction type in DB 003



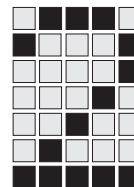
Error class F-81	Error no.	Description	Remedy
	47	Call SB 255, FUNK 109: Deactivation interrupted as the reaction type is too large	Reaction type of the signal group for the 2nd deactivation must be smaller than that for the 1st, change reaction type in DB 003
	49	User interface: Config. DB too short	Check configuration DB (DB no. must appear in DB 003)
	4A	User interface: Send DB too short	Check send DB (DB no. must appear in DB 003)
	4B	User interface: Receive DB too short	Check receive DB (DB no. must appear in DB 003)
	4C	Call SB 255, FUNK 103: Word module is on the slot entered	Check configuration, adjust parameters; FUNK 103 only for bit modules
	4D	Call SB 255, FUNK 104: Call-up is invalid	Check user program, only call-up parameters 0 ... 5 are permitted (see DB 003/DW 201)
	4E	Reactivation prevents self-check, reactivation is not acknowledged	Once reactivation is complete, acknowledge using FUNK 108

FS Error Messages

Test pulse error (processor A)

Error parameter: Pulse number (coded bit by bit)

Error class F-82	Error no.	Description	Remedy
	01 . . . 03	Error on PSS (1) DIO T	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the output or to 0 V or 24 V? 4.) Short circuits at the inputs or test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T



Debug error (processor A)

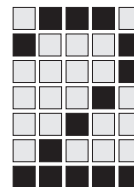
Error class F-83	Error no.	Description	Remedy
	01 . . . 7F	Debug error	Contact Pilz technical support

FS Error Messages

Word module match error (processor A)

Error parameter: High byte: Slot number
 Low byte: Number of read segments

Error class F-84	Error no.	Description	Remedy
	01 . . . 0E	Error on word module	1.) Tolerance set is too low 2.) Incorrect alignment algorithm (e.g. match instead of min.- max.) if there is no error in the configuration: change module



Operating system error (B)

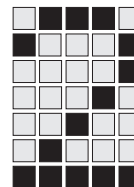
Error class F-90	Error no.	Description	Remedy
	01 . . . 10	Major system error	Contact Pilz technical support
	11	Switch on processor B is not at STOP, but an adjacent processor has registered a STOP	Restart system, if error message continues: change PSS CPU
	12 . . . 20	Major system error	Contact Pilz technical support
	21 22	Internal table error	Reload program into the PSS, if the error continues: contact Pilz technical support
	25 . . . 33	Major system error	Contact Pilz technical support
	34		Message for internal purposes
	35 . . . 37	Internal table error	Reload program into the PSS, if the error continues: contact Pilz technical support
	38 . . . 7C	Major system error	Contact Pilz technical support

FS Error Messages

Synchronisation error (processor B)

Error parameter: Synchronisation location

Error class F-91	Error no.	Description	Remedy
	00	Error within the operating system	Contact Pilz technical support



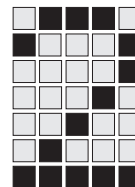
Error in adjacent CPU (processor B)

Error class F-92	Error no.	Description	Remedy
	00 . . . 36	Major system error	Contact Pilz technical support

FS Error Messages

Error reading the process image of inputs PII (processor B)

Error class F-93	Error no.	Description	Remedy
	00	PII cannot be determined	Increase number of read attempts; if error continues: change the module
	01	PII for DIF cannot be determined	Increase number of read attempts; reduce interrupt load; if error continues: change DIF module
	04 05	PII cannot be determined	Increase number of read attempts; if error continues: change input module
	06	PII for DIF cannot be determined	Increase number of read attempts; reduce interrupt load; if error continues: change DIF module

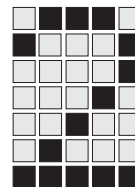


Configuration error

Error class F-94	Error no.	Description	Remedy
	01 . . . 03	Programming device error	Check contents of the configurator, if entries are correct: contact technical support at Pilz; use new programming device (use latest PG version)
	04	Memory range for read/write DBs is full	Reduce the number of read/write data blocks
	05 06	Programming device error	Check contents of the configurator, if entries are correct: contact Pilz technical support; use new programming device (use latest PG version)
	07	Invalid slot has been entered in configurator for the test pulse module	Enter valid slot in the configurator
	08	Slot entered for the test output module contains no pulsed outputs	Check PSS configuration and adjust or amend the entry in the configurator to suit the configuration
	09	FS application program has not been loaded	Download user program into PSS
	0A	Max. number of test pulses in the configurator does not correspond with those used	Correct the number of test pulses in the configurator
	0B	Two adjacent inputs are tested with the same test pulse	Correct the test pulse allocation in the configurator
	0C	Highest test pulse number used is not permitted	Correct the test pulse allocation in the configurator

FS Error Messages

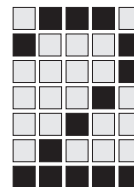
Error class F-94	Error no.	Description	Remedy
	0D	Configuration of alarm-OB is not consecutive	Enter alarm-OBs in the configurator consecutively
	0E	Alarm-OB has been loaded which has not been configured	Check user program; if error continues: contact Pilz technical support; use new programming device
	0F	Invalid slot number has been entered for the alarm configuration	Check PSS configuration, check the slot for the PSS DIF in the configurator
	10	Slot entered for the DIF in the configurator does not contain a DIF module	Check PSS configuration, check the slot for the PSS DIF in the configurator
	11	Edge configuration is invalid, process alarm OB must be activated with a rising and falling pulse edge	Check the configuration for the alarm OBs
	12	Invalid edge configuration	Check the configuration for the alarm OBs
	13 . . . 16	Alarm configuration error	Check contents of configurator, if entries are correct: contact Pilz technical support; use new programming device
	17	Min. scan time is greater than the max. permitted scan time	Correct minimum scan time in the configurator
	18 19	Programming device error	Check contents of configurator, if entries are correct: contact Pilz technical support; use new programming device
	1A	Read segments defined for a slot on which a word module is not located	Check read segments in the configurator



Error class F-94	Error no.	Description	Remedy
	1B	Start address for read segments is too large	Check read segment for the word module in the configurator
	1C	Read segments overlap	Check read segment for the word module in the configurator
	1D	Segment length is invalid	Check read segment for the word module in the configurator
	1E	Write segment extends beyond the module	Check read segment for the word module in the configurator
	1F	Alignment algorithm is invalid	Check alignment algorithm for the word module in the configurator
	20	Double word read segment begins with an uneven (odd) address	Check read segments for word modules
	21	Word modules are not in ascending order	Enter word modules in ascending order in the configurator
	22	Match-time point is invalid	Check match time point for the word module in the configurator
	23	Slot for the word module is invalid	Check configuration, check read and write segments in the configurator
	24	Slots for the write segments are not in ascending order	Check write segments in the configurator
	25	Write segments have been defined on a slot that has no word module	Check write segments in the configurator
	26	Start address for read segments is too large	Check write segments for the word module in the configurator
	27	Write segments overlap	Check write segments for the word module in the configurator
	28	Segment length is invalid	Check write segments for the word module in the configurator
	29	Write segment extends beyond the module	Check write segments for the word modules in the configurator

FS Error Messages

Error class F-94	Error no.	Description	Remedy
	2A	Double-word write segment lies outside the double-word address	Check write segment for the word module in the configurator
	2B	Word modules have not been entered in ascending order	Enter the word modules in the configurator in ascending order
	2C	Output time point is invalid	Check output time point for the word module in the configurator
	2D	The same pulse is testing the DI and DIF inputs	Check test pulse allocation in the configurator
	2E	More than 2 DIF in the set layout	Check configuration, amend set layout in the configurator
	2F	Pulse module entered, but pulse number = FF	Check configuration or test pulse allocation in the configurator
	30	Operating system version is invalid	Use correct PSS CPU, program cannot be executed using this PSS.
	31 . . . 49	Error in selective shutdown configuration	Check configuration, if no error is present: contact Pilz technical support; use new programming device (latest PG version)



Compiler error messages (processor B)

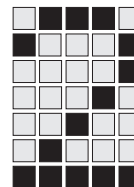
Error parameter: Line number
Error location: Block

Error class F-96	Error no.	Description	Remedy
	01	Programming device error	Contact Pilz technical support; use new programming device (latest PG version)
	.		
	.		
	.		
	0D		

FS Error Messages

Program load error (processor B)

Error class F-97	Error no.	Description	Remedy
	01 02	Programming device error	Contact Pilz technical support; use new programming device (latest PG version)
	03	Too many blocks have been loaded	Reduce the number of blocks to a maximum of 511
	04	Memory range for application program is full	Clear the memory (Flash-EPROM), Transfer user program again, if error continues: reduce the size of the user program
	05	Faults/interference affecting the download cable	Reload user program into the PSS, remove download cable, if errors continue: contact Pilz technical support; use new programming device (latest PG version)
	06	P10 block was loaded	To program the PSS only use a programming device suitable for the PSS (not a P10 PG)
	07 08	Programming device error	Contact Pilz technical support; use a new programming device (latest PG version)
	09	Configuration error	See additional error messages in the error stack
	0A	Programming device error	Contact Pilz technical support; use new programming device (latest PG version)



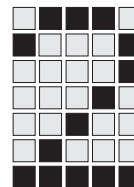
Error class F-97	Error no.	Description	Remedy
	0B	Program error	See error stack
	0C 0D	Major system error	Contact Pilz technical support; Use new programming device (latest PG version)
	0E	Program error	See error stack
	10 11	An approved block is defective	Obtain the block from the original, disk, relink the program and transfer to PSS
	12	Error in the programming device	Contact Pilz technical support; use new programming device (latest PG version)

FS Error Messages

Program link error (processor B)

Error parameter: Block

Error class F-98	Error no.	Description	Remedy
	01 . . . 03	Link error	Clear user program, Reload user program into the PSS, if error continues: Contact Pilz technical support; use new PSS CPU module or new programming device



Error in process image of outputs PIO (processor B)

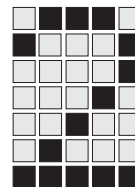
Error class F-99	Error no.	Description	Remedy
	01 . . . 09	Major system error	Contact Pilz technical support

FS Error Messages

Test pulse error in processor B

Error parameter: Pulse number (coded bit by bit)

Error class F-A2	Error no.	Description	Remedy
	01 . . . 03	Error on PSS (1) DIO T	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or the test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T



Debug error in processor B

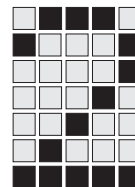
Error class F-A3	Error no.	Description	Remedy
	01	Debug error	Contact Pilz technical support

FS Error Messages

Word module match error (processor B)

Error parameter: High byte: Slot number
 Low byte: Number of read segments

Error class F-A4	Error no.	Description	Remedy
	00 . . . 0D	Word module error	1.) Tolerance has been set too low 2.) Incorrect alignment algorithm (e.g. match instead of min.- max.) if no error is present in the configuration: change the module



Operating system error (processor C)

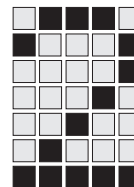
Error class F-B0	Error no.	Description	Remedy
	00 . . . 17	Major system error	Contact Pilz technical support
	18	Switch on processor C is not at STOP, but the adjacent CPU has registered STOP	Restart system, if error messages continue: change PSS CPU
	19 . . . 1C	Major system error	Contact Pilz technical support
	1D		Message for internal purposes
	1E . . . 26	Major system error	Contact Pilz technical support
	27		Message for internal purposes
	28 . . . 30	Major system error	Contact Pilz technical support
	31	Block is not available	Reload program, if error continues: change PSS
	32 . . . 5D	Major system error	Contact Pilz technical support

FS Error Messages

Synchronisation error (processor C)

Error parameter: Synchronisation location

Error class F-B1	Error no.	Description	Remedy
	00 . . . 2C	Major system error	Contact Pilz technical support



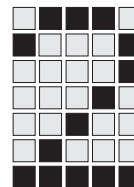
Error in adjacent CPU from processor C

Error class F-B2	Error no.	Description	Remedy
	00 . . . 06	Major system error	Contact Pilz technical support
	07 . . . 19	Major system error	Contact Pilz technical support
	1A	Error on word module	Change word module
	1C . . . 20	Major system error	Contact Pilz technical support
	21	Cause of the alarm cannot be determined	Alarms must appear for a minimum of 1.5 ms
	22 23	Major system error	Contact Pilz technical support

FS Error Messages

Error reading the PII

Error class F-B3	Error no.	Description	Remedy
	00	PII cannot be determined	Increase number of read attempts; if error continues; change input module
	02	PII for DIF cannot be determined	Increase number of read attempts; if error continues; Change DIF module
	05 06	Test time for DI module is too short	Increase test time in the configurator; if error continues: contact Pilz technical support
	0B	Major system error	Contact Pilz technical support
	32 33	PII cannot be determined	Increase number of read attempts; if error continues; change input module
	34	PII for DIF cannot be determined	Increase number of read attempts; if error continues; change DIF module

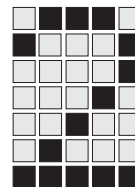


Configuration error in processor C

Error class F-B4	Error no.	Description	Remedy
	01 02	Major system error	Contact Pilz technical support
	03 . . . 08	Programming device error	Check contents of the configurator, if entries are correct: contact Pilz technical support, use new programming device (latest PG version)
	09	Too many read/write DBs have been loaded	Reduce the number of read/write-DBs
	0A	Programming device error	Check contents of the configurator, if entries are correct: contact Pilz technical support, use new programming device (latest PG version)
	0B	Input in the configurator is invalid	Check contents of the configurator
	0C	Min. scan time is greater than the max. scan time	Correct scan time in the configurator
	0D . . . 17	Programming device error	Check contents of the configurator, if entries are correct: contact Pilz technical support, use new programming device (latest PG version)
	18	Incorrect CRC-checksum	Transfer program

FS Error Messages

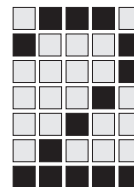
Error class F-B4	Error no.	Description	Remedy
	19	Programming device error (alarm-OB is missing)	Check contents of the configurator, if entries are correct: contact Pilz technical support; use new programming device (latest PG version)
	1A 1B	DIF has been configured incorrectly	Check contents of the configurator, check user program
	1C	Alarm-OB has been configured for a slot that contains no DIF	Check the configuration for the alarm-OBs and the layout
	1D	More alarm-OBs configured than inputs on DIF	Check the configuration for the alarm-OBs
	1E	Edge configuration is invalid	Check the configuration for the alarm-OBs
	1F	Alarm configuration is not entered in ascending order	Enter the slots for alarm processing in the configurator in ascending order
	20	Slot number for the alarm configuration is invalid	Check the PSS configuration, check the slots defined for the DIF in the configurator
	21	Alarm-OBs are not configured consecutively	Enter alarm-OBs in the configurator consecutively
	22	Alarm-OB loaded which was not configured	Check user program
	23	Slot entered in the configurator for the pulse module is invalid	Enter a slot in the configurator that is valid
	24	Pulse module not in the slot entered in the configurator	Check the PSS configuration and adjust or amend the entry in the configurator to match the configuration
	25	Number for the highest test pulse used is invalid	Correct the number of the test pulse in the configurator



Error class F-B4	Error no.	Description	Remedy
	26	Highest test pulse used does not match the highest test pulse entered in the configurator	Correct the entry for the test pulse number in the configurator
	27	Two adjacent inputs are tested with the same test pulse	Correct the test pulse allocation in the configurator
	28	Word module is not on the slot entered in the configurator	Check configuration and enter the slot number correctly in the configurator
	29	Slot number for the word module is invalid	Enter the slot number correctly in the configurator
	2A	Slots for the read segments are not in ascending order	Check read segments in the configurator
	2B	Read segment length is too long	Correct the read segment length in the configurator (1 or 2 words)
	2C	Address range for word module exceeded	Check address range in the configurator (max. offset + segment length)
	2D	Segment with 2 words is not at a double word address	Change offset in the configurator, the offset must be divisible by 4
	2E	Read segments overlap	Check read segments in the configurator
	2F	Alignment algorithm is invalid	Check alignment algorithm in the configurator
	30	Compare match algorithm, but the tolerance does not = 0	Set tolerance to 0 in the configurator
	31	Read time point is invalid	Correct read time point in the configurator
	32	Write segment for a slot has been defined, but no word module on the slot	Check read segments in the configurator

FS Error Messages

Error class F-B4	Error no.	Description	Remedy
	33	Slot number for the word module is invalid	Check write segment in the configurator
	34	Write segments are not in ascending order	Enter write segments in the configurator in ascending order
	35	Length of the write segment is too long	Correct length of the write segments in the configurator (1 or 2 words)
	36	Address range for the word modules exceeded	Correct address range (max. offset + segment length) in the configurator
	37	Segment with 2 words starts with an unequal address	Change the offset in the configurator, offset must be divisible 4
	38	Write segments overlap	Check write segments in the configurator
	39	Output time point is invalid	Correct the output time point in the configurator
	3B 3C	FS application program is not loaded	Reload the FS user program
	3D	A pulse is testing DI and DIF inputs	Check the test pulse allocation configurator
	3E	More than 2 DIF modules in the set layout	Check configurator, amend the set configuration in the configurator
	3F	Pulse module entered, but pulse number = FF	Check configuration or test pulse allocation in the configurator
	40 41	Operating system version is invalid	Use correct CPU-module, program cannot be run on this PSS
	42 . . . 4E	Error in the configuration for selective shutdown	Check configuration, if no errors present: contact Pilz technical support; use new programming device (latset PG version)



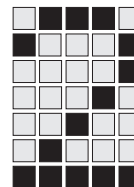
Error class F-B4	Error no.	Description	Remedy
	4F	Operating system error	Change PSS CPU
	50	DO outputs have not been allocated a reaction type ≥ 12	Check configuration, if errors are not present: contact Pilz technical support: use new programming device (latest PG version)
	51	Selective shutdown DB is not read-only	Check configuration, if errors are not present: contact Pilz technical support: use new programming device (latest PG version)

FS Error Messages

Compiler error messages (processor C)

Error parameter: Line number
Error location: Block

Error class F-B6	Error no.	Description	Remedy
	01 . . 27	Programming device error	Contact Pilz technical support Use new programming device (latest PG version)

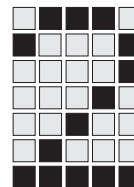


Program load error (processor C)

Error class F-B7	Error no.	Description	Remedy
	01 . . . 04	Communication/transfer error on the programming device or system error	Reload user program and transfer to the PSS, if error continues: contact Pilz technical support; use new programming device (latest PG version)
	05	Communication/transfer error on the programming device	Reload user program and transfer into the PSS, remove interference from transmission, environment, if error continues: contact Pilz technical support; use new programming device (latest PG version)
	06	P 10 block was loaded	To program the PSS, only use a programming device suitable for a PSS (not P10 PG)
	07	Programming device error	Reload user program and transfer into the PSS; if error continues: contact Pilz technical support; use new programming device (latest PG version)
	08	Memory range for application program is full	Clear memory (Flash-EEPROM) , reload user program, if error continues: reduce the size of the user program
	09	Too many blocks have been loaded	Reduce the number of blocks

FS Error Messages

Error class F-B7	Error no.	Description	Remedy
	0A . . . 0E	PG transfer error	Reload user program into the PSS, if error continues: contact Pilz technical support; use new programming device (latest PG version)
	0F	Adjacent CPU has detected an error	See error stack
	10	Memory range for user program is full	Clear memory (Flash-EPROM) , transfer user program, if error continues: reduce the size of the user program
	11 12	Approved block is defective	Obtain the block from the original disk, relink and transfer into the PSS
	13	DB002 is not read only	Ensure DB 002 is read only



Error in PIO system error (processor C)

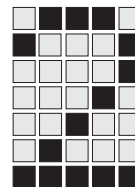
Error class F-B9	Error no.	Description	Remedy
	00 . . . 07	Major system error	Contact Pilz technical support

FS Error Messages

Test pulse error (processor C)

Error parameter: Pulse number (coded bit by bit)

Error class F-C2	Error no.	Description	Remedy
	01 . . . 03	Error on PSS (1) DIO T	1.) Check supply voltage to the module (voltage interrupt?) 2.) Does the test pulse wiring match the allocation in the configurator? 3.) Short circuit at the outputs or to 0 V or 24 V? 4.) Short circuits at the inputs or the test pulse wiring? Points 1-4 are OK, but error message still present: change DIO T



Word module match error (processor C)

Error parameter: High byte: Slot number
 Low byte: Number of read segments

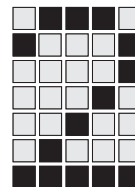
Error class F-C4	Error no.	Description	Remedy
	01 . . . 0D	Word module error	1.)Tolerance has been set too low 2.) Incorrect alignment algorithm (e.g. match instead min.- max.) if there are no errors in the configuration: change the module

FS Error Messages

Information on selective shutdown

Error parameter: Reaction type for deactivation
Error location: Signal group number

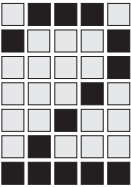
Error class F-D0	Error no.	Description	Remedy
	01	Signal group deactivated, error or deadman timer has elapsed	For information only
	02	Deadman timer has elapsed	For information only
	03	Error timer elapsed	For information only
	04	Signal group has been deactivated by the user	For information only
	05	Signal group is to be deactivated with the same reaction type	For information only
	06	Signal group has been deactivated by the user	For information only
	07	Error timer for signal group is disabled	For information only



Selective shutdown acknowledgement error

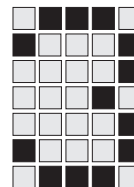
Error parameter: Signal group number
Error location: Deactivation-OB

Error class F-D1	Error bo.	Description	Remedy
	01	Acknowledgement error during deactivation	Acknowledge deactivation in an deactivation-OB



FS Error Messages

Notes



ST Error Messages

Hardware error

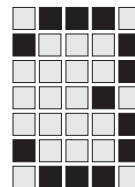
Error class S-01	Error no.	Description	Remedy
	01	Error has occurred while clearing the program cartridge	Clear user program, if error continues: change program cartridge; on PSS 3056/3032 models the PSS will need to be changed.
	02	Error has occurred while writing to the program cartridge (write)	Clear user program, if error continues: change program cartridge; on PSS 3056/3032 models the PSS will need to be changed.
	03		
	04	Real-time clock defective	Change PSS CPU

ST Error Messages

Battery error

Error-OB: OB 029

Error class S-04	Error no.	Description	Remedy
	01	Battery is depleted	Replace battery. When replacing the battery, ensure data is not lost. The PSS-CPU may be powered down for a max. 5 min., before data is lost.



configuration error

Error parameter: Slot

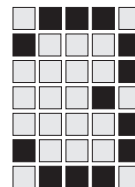
Error class S-05	Error no.	Description	Remedy
	01 02	Module configuration error	1.) Is the correct module inserted? 2.) Using the programming device, check the set/true configuration and either change the module or adjust the set layout to the true layout Points 1-2 are OK but error message still present: change the module

ST Error Messages

Module error

Error parameter: Slot

Error class S-06	Error no.	Description	Remedy
	01 . . . 04	Error on extension rack module	Check supply voltage to the extension rack, if all is OK: change the module



User program error

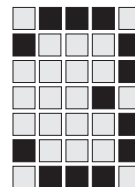
Error parameter: Block ID

Error class S-07	Error no.	Description	Remedy
	01	Error detected in at least one block	Clear defective block(s) and reload: start program, if error message continues: clear program cartridge and download all blocks
	02	End of the block table could not be found	Clear all blocks and transfer again
	03	Unknown block ID found in block table	Clear all blocks and transfer again
	04	Unknown block number found in block table	Clear all blocks and transfer again
	05	Block has been loaded twice	Clear all blocks and transfer again
	06	Number of blocks found no longer agrees	Clear all blocks and transfer again
	07/08	Valid program cartridge does not exist	Clear all blocks and transfer again
	09	Program cartridge is not available	Insert program cartridge
	0A	Error found in user program	See entry in the error stack

ST Error Messages

Error with program cartridge

Error class S-08	Error no.	Description	Remedy
	04	Program cartridge was removed	Insert program cartridge and restart standard section
	05	Incorrect programming adapter plugged in	Use programming adapter suitable for PSS
	06	Incorrect program cartridge type plugged in	Use correct program cartridge type
	07	No flash-program cartridge in PSS programming adapter	Insert flash-program cartridge into PSS programming adapter
	08	PSS program cartridge is not valid	Program cartridge has been formatted due to clearing
	09	Error with the structure of the data block table	Program cartridge has been formatted due to clearing



Power failure

Error class S-0B	Error no.	Description	Remedy
	02	Power supply(ies) for extension rack not ready for operation in time for the start of the user program	1.) Check power-LEDs for all power supplies and switch on those that are switched off 2.) Check power voltage Points 1-2 are OK, but error message still present: change the PSS standard power supply on the expander module rack
	03	Power failure on the extension rack module has been detected during a cycle change	1.) Check power-LEDs for all power supplies and switch on those that are switched off 2.) Check power voltage Points 1-2 are OK, but error message still present: change the PSS standard power supply for the extension rack module

ST Error Messages

Scan time exceeded

Error location: Block in which the scan time is exceeded

Error class S-0C	Error no.	Description	Remedy
	01 02	Scan time for the ST application program has been exceeded	Search the ST user program section which has caused the error and optimise or accelerate the program. The user program may be caught in a loop
	03	Scan time exceeded OB 020/OB 022	Optimise or accelerate the ST user program

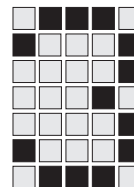


Error class S-0F	Error no.	Description	Remedy
	01	There is no XW-module at the given XW-address	Check the configuration of XW module with the configuration error and correct if required or check the ST user program for incorrect access address and correct if necessary; if all is healthy: change the XW module
	04	Addressable module registers an invalid address width (XW module)	Contact Pilz technical support; Use new module
	05	Address range of an addressable module lies outside the permitted address range	Check base address of the module and correct in DB 005
	06	The number of addressable modules is invalid	Limit number of addressable modules
	07	The address range for two addressable modules overlap	Check base address of the module and correct in DB 005
	09	Two addressable modules have the same base address	Check the base address for the modules and correct in DB 005
	0A	Base address of an addressable module is not a common multiple of the assigned address range	Check base address of the modules and correct in DB 005

ST Error Messages

Missing program cartridge

Error class S-10	Error no.	Description	Remedy
	01	Program cartridge is missing	Insert program cartridge



Operating status messages

Error class S-20	Error no.	Description	Remedy
	01	ST user program was started	For information only
	02	ST user program was stopped	For information only
	13	Retentive data is invalid	PSS carried out a reset and all retentive data is cleared Change battery in power supply
	14	Reset was carried out	For information only

ST Error Messages

Invalid operands in the user program

Error location: Block in which the invalid operand occurred

Low byte: Block number

High byte: Block type

Error class S-21	Error no.	Description	Remedy
	01	Invalid operand with DEF-command	Rectify ST user program
	02	Invalid operand with DUF-command	Rectify ST user program
	21	Division by 0 during a byte operation	Rectify ST user program
	22	Dividend too high during a division command	Reduce dividend
	31	Division by 0 during word-division command	Rectify ST user program
	32	Dividend too high during dividend command	Reduce dividend



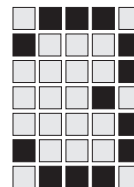
Error accessing data blocks

Error parameter: Number of the data block selected
 Error location: Block in which the incorrect access occurred
 Low Byte: Block number
 High Byte: Block type

Error class S-22	Error no.	Description	Remedy
	01	Command "L DR": Data word lies outside the current DB	Check the length of the current DB, rectify ST user program or set correct DB
	02	Command "L DL": Data word lies outside the current DB	Check the length of the current DB, rectify ST user program or set correct DB
	03	Command "T DR": Data word lies outside the current DB	Check the length of the current DB, rectify ST user program or set correct DB
	04	Command "T DL": Data word lies outside the current DB	Check the length of the current DB, rectify ST user program or set correct DB
	05	Command "AND DR": Data word lies outside the current DB	Check the length of the current DB, rectify ST user program or set correct DB
	06	Command "AND DL": Data word lies outside the current DB	Check the length of the current DB, rectify ST user program or set correct DB
	09	Command "OR DR": Data word lies outside the current DB	Check the length of the current DB, rectify ST user program or set correct DB
	0A	Command "OR DL": Data word lies outside the current DB	Check the length of the current DB, rectify ST user program or set correct DB
	0D	Command "XOR DR": Data word lies outside the current DB	Check the length of the current DB, rectify ST user program or set correct DB
	0E	Command "XOR DL": Data word lies outside the current DB	Check the length of the current DB, rectify ST user program or set correct DB

ST Error Messages

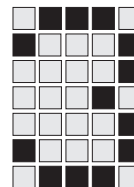
Error class S-22	Error no.	Description	Remedy
	0F	Command "+ DR": Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB
	10	Command "+ DL ": Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB
	11	Command "- DR": Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB
	12	Command "- DL": Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB
	13	Command "* DR" Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB
	14	Command " * DL": Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB
	15	Command ": DR": Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB
	16	Command ": DL": Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB
	17	Command "I DR": Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB
	18	Command "I DL": Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB
	19	Command "D DR" Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB
	1A	Command "D DL": Data word lies outside the current DB	Check length of the current DB, rectify ST user program or set the correct DB



Error class S-22	Error no.	Description	Remedy
	1B	Command "> DR": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB
	1C	Command "> DL": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB
	1F	Command "!= DR": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB
	20	Command "!= DL": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB
	23	Command "< DR": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB
	24	Command "< DL": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB
	30	Command "L DW": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB
	31	Command "T DW": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB
	32	Command "AND DW": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB
	34	Command "OR DW": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB
	36	Command "XOR DW": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB
	37	Command "+ DW": Data word lies outside current DB	Check length of current DB, rectify ST user program or set correct DB

ST Error Messages

Error class S-22	Error no.	DEscription	Remedy
	38	Command "- DW": Data word lies outside the current DB	Check length of current DB, rectify ST user program or set correct DB
	39	Command "* DW": Data word lies outside the current DB	Check length of current DB, rectify ST user program or set correct DB
	3A	Command ": DW": Data word lies outside the current DB	Check length of current DB, rectify ST user program or set correct DB
	3B	Command "I DW": Data word lies outside the current DB	Check length of current DB, rectify ST user program or set correct DB
	3C	Command "D DW": Data word lies outside the current DB	Check length of current DB, rectify ST user program or set correct DB
	3D	Command "> DW": Data word lies outside the current DB	Check length of current DB, rectify ST user program or set correct DB
	3F	Command "!= DW": Data word lies outside the current DB	Check length of current DB, rectify ST application program or set correct DB
	41	Command "< DW": Data word lies outside the current DB	Check length of current DB, rectify ST user program or set correct DB
	51	Actual parameter for DR is invalid	Check actual parameter rectify ST user program
	52	Actual parameter for DL is invalid	Check actual parameter rectify ST user program
	53	Command "T =para": DR lies outside the current DB	Check length of current DB, rectify ST application program or set correct DB
	54	Command "T =para": DL lies outside the current DB	Check length of current DB, rectify ST user program or set correct DB



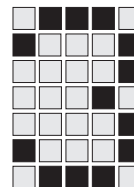
Error class S-22	Error no.	Description	Remedy
	61	Actual parameter for DW is invalid	Check the length of current DB, rectify ST user program or set correct DB
	62	Command "T =para": Data word lies outside the current DB	Check the length of current DB, rectify ST user program or set correct DB
	63	Command "I =para": Data word lies outside the current DB	Check the length of current DB, rectify ST user program or set correct DB
	64	Command "D =para": Data word lies outside the current DB	Check the length of current DB, rectify ST user program or set correct DB
	65	Command "A DB" is missing	Always select a DB with "A DB" before the first data word access rectify ST user program

ST Error Messages

Error attempting to write to a read-only data block

Error parameter: Number of data block selected
Error location: Block in which the incorrect access occurred
Low byte: Block number
High byte: Block type

Error class S-23	Error no.	Description	Remedy
	01	Command "T DR": transferring to read- only DB	Remove read-only or select the correct DB
	02	Command "T DL": transferring to read- only DB	Remove read-only or select the correct DB
	03	Command "I DR": access to read- only DB	Remove read-only or select the correct DB
	04	Command "I DL": access to read- only DB	Remove read-only or select the correct DB
	05	Command "D DR": access to read- only DB	Remove read-only or select the correct DB
	06	Command "D DL": access to read- only DB	Remove read-only or select the correct DB
	11	Command "T DW": transferring to read- only DB	Remove read-only or select the correct DB
	12	Command "I DW": access to read- only DB	Remove read-only or select the correct DB
	13	Command "D DW": access to read - only DB	Remove read-only or select the correct DB
	21	Command "T =para": Byte-access to read- only DB	Remove read-only or select the correct DB



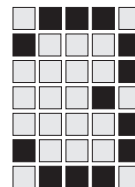
Error class S-23	Error no.	Description	Remedy
	31	Command "T =para": Word access to read-only DB	Remove read-only or select correct DB
	32	Command "I =para": Word access to read-only DB	Remove read-only or select correct DB
	33	Command "D =para": Word access to read-only DB	Remove read-only or select correct DB

ST Error Messages

Parameter error

Error parameter: Block ID for the call up block
Error location: Block ID for the block called up
Low byte: Block number
High byte: Block type

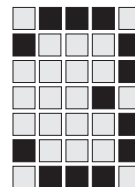
Error class S-24	Error no.	Description	Remedy
	01	Actual parameter (bit) lies outside the permitted range	Check actual parameter and rectify ST user program
	02	Actual parameter (byte) lies outside the permitted range	Check actual parameter and rectify ST user program
	03	Actual parameter (word) lies outside the permitted range	Check actual parameter and rectify ST user program
	13	Command "SE =para": Actual parameter lies outside the permitted range	Check actual parameter and rectify ST user program
	16	Command "ZV =para": Actual parameter lies outside the permitted range	Check actual parameter and rectify ST user program
	17	Command "ZR =para": Actual parameter lies outside the permitted range	Check actual parameter and rectify ST user program
	18	Command "R =para": Actual parameter lies outside the permitted range	Check actual parameter and rectify ST user program
	21	Command "T =para": Byte-actual parameter lies outside the permitted range	Check actual parameter and rectify ST user program



Error class S-24	Error no.	Description	Remedy
	22	Command "I =para": Byte-actual parameter lies outside the permitted range	Check actual parameter and rectify ST user program
	23	Command "D =para": Byte-actual parameter lies outside the permitted range	Check actual parameter and rectify ST user program
	31	Command "T =para": Word-actualparameter lies outside the permitted range	Check actual parameter and rectify ST user program
	32	Command "I =para": Word-actual parameter lies outside the permitted range	Check actual parameter and rectify ST application program
	33	Command "D =para": Word-actual parameter lies outside the permitted range	Check actual parameter and rectify ST user program
	34	Command "A =para": Actual parameter DB lies outside the permitted range	Check actual parameter and rectify ST user program
	40	Command "R =para": timer-number lies outside the permitted range	Check actual parameter and rectify ST user program
	41	Command "R =para": Counter number lies outside the permitted range	Check actual parameter and rectify ST user program
	42	Command "T =para": Word-actual parameter lies outside the permitted range	Check actual parameter and rectify ST user program

ST Error Messages

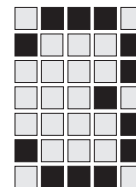
Error class S-24	Error no.	Description	Remedy
	43	Command "S =para": Bit-write access to a reserved range	Check actual parameter and rectify ST user program
	44	Command "S =para": Bit-write access to a write-protected flag	Check actual parameter and rectify ST user program
	45	Command "S =para": Setting input bit is not permitted	Only output bit can be set, check actual parameter and rectify ST user program
	46	Command "R =para": Bit-write access to a reserved range	Check actual parameter and rectify ST user program
	47	Command "T =para": Bit write access to a read-only flags	Check actual parameter and rectify ST user program
	48	Command "R =para": Resetting input bit is not permitted	Only output bit can be reset, check actual parameter and rectify ST user program
	49	Command "T =para": Byte write access to a reserved range	Check actual parameter and rectify ST user program
	4A	Command "T =para": Byte write access to a read-only range	Check actual parameter and rectify ST user program
	4B	Command "T =para": Word write access to a reserved range	Check actual parameter and rectify ST user program
	4C	Command "T =para": Word write access to a read-only flag range	Check actual parameter and rectify ST user program



Error class S-24	Error no.	Description	Remedy
	4D	Command "I =para": Byte write access to a reserved range	Check actual parameter and rectify ST user program
	4E	Command "I =para": Byte write access to a read-only flag range	Check actual parameter and rectify ST user program
	4F	Command "I =para": Incrementing input byte is not permitted	Only an output byte can be incremented, check actual parameter and rectify ST user program
	50	Command "D =para": Byte-write access to a reserved range	Check actual parameter and rectify ST user program
	51	Command "D =para": Byte-write access to read-only flag range	Check actual parameter and rectify ST user program
	52	Command "D =para": Decremeting input byte is not permitted	Only an output byte can be decremented, check actual parameter and rectify ST user program
	53	Command "I =para": Word-write access to a reserved range	Check actual parameter and rectify ST user program
	54	Command "I =para": Word write access to a read-only flag range	Check actual parameter and rectify ST user program
	55	Command "I =para": Incrementing input word is not permitted	Only an output word can be decremented, check actual parameter and rectify ST user program

ST Error Messages

Error class S-24	Error no.	Description	Remedy
	56	Command "D =para": Word-write access to a reserved range	Check actual parameter and rectify ST user program
	57	Command "D =para": Word-write access to a read-only flag range	Check actual parameter and rectify ST user program
	58	Command "D =para": Decrementing input word is not permitted	Only an output word can be decremented, check actual parameter and rectify ST user program
	59	Invalid contents in the actual parameter of a bit-command (S, =, =N, or =para)	Check actual parameter and rectify ST user program
	5A	Command "R =para": Bit-actual parameter lies outside the permitted range	Check actual parameter and rectify ST user program
	5B	Command "L =para": XW-address on word module lies outside the permitted range	Check actual parameter and rectify ST user program
	5C	Command "T =para": XW-address on word module lies outside the permitted range	Check actual parameter and rectify ST user program
	5D	Command "SE =para": Incorrect timer-address as actual parameter	Check actual parameter and rectify ST user program
	5E	Command "ZR =para": Incorrect counter address as actual parameter	Check actual parameter and rectify ST user program



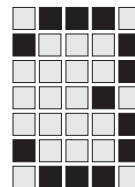
Error class S-24	Error no.	Description	Remedy
	5F as actual	Command "ZV =para": Incorrect counter address parameter	Check actual parameter and rectify ST user program
	60	Command "L =para": Bit-actual address lies outside the permitted range	Check bit-parameter and rectify ST user program
	61	Command "L =para": Timer address lies outside the permitted range	Check bit actual parameter for timer and rectify ST user program
	62	Command "L =para": Counter address lies outside the permitted range	Check bit actual parameter for counter and rectify ST user program
	63	Command "L =para": Byte-actual address lies outside the permitted range	Check byte parameter and rectify ST user program
	64	Command "L =para": Word-actual address lies outside the permitted range	Check word parameter and rectify ST user program
	65	Command "L =para": Counter address lies outside the permitted range	Check word actual parameter for counter and rectify ST user program

ST Error Messages

Indirect addressing error

Error parameter: Flag in which the indirect address appears
Error location: Block in which the error occurred
Low byte: Block number
High byte: block type

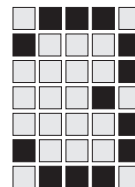
Error class S-25	Error no.	Description	Remedy
	01	An indirect address of a flag bit lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	02	An indirect address of a input bit lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	03	An indirect address of a output bit lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	04	An indirect address of a timer bit lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	05	An indirect address of a counter bit lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	13	Command "SE T(...)": Indirect address of a timer lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	16	Command "ZV Z(...)": Indirect address of a counter lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program



Error class S-25	Error no.	Description	Remedy
	17	Command "ZR Z(...)": Indirect address of a counter lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	18	Command "R T(...)": Indirect address of a timer lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	19	Command "R Z(...)": Indirect address of the counter lies outside the permitted range	Check which indirect address is incorrect and rectify the ST application program
	20	An indirect address of a flag byte lies outside the permitted range	Check which indirect address is incorrect and rectify the ST application program
	22	An indirect address of a input byte lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	23	An indirect address of a output byte lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	31	An indirect address of a flag word lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	32	An indirect address of an input word lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program
	33	An indirect address of an output word lies outside the permitted range	Check which indirect address is incorrect and rectify the ST user program

ST Error Messages

Error class S-25	Error no.	Description	Remedy
	35	An indirect address for a counter word lies outside the permitted range	Check which indirect address is incorrect for the counter word and rectify the ST user program
	50	Command "I MW(...)": Indirect address for a flag word lies outside the permitted range	Check which indirect address is incorrect for the flag word in the increment command and rectify the ST user program
	51	Command "I AW(...)": Indirect address for a output word lies outside the permitted range	Check which indirect address is incorrect for the flag word in the increment command and rectify the ST user program
	52	Command "D MW(...)": Indirect address for a flag word lies outside the permitted range	Check which indirect address is incorrect for the flag word in the decrement command and rectify the ST user program
	53	Command "D AW(...)": Indirect address for an output word lies outside the permitted range	Check which indirect address is incorrect for the flag word in the decrement command and rectify the ST user program
	54	Command "D MW(...)": Word-write access to read-only flag range	Check which indirect address is incorrect for the flag word in the decrement command and rectify the ST user program
	55	Command "I MW(...)": Word-write access to read-only flag range	Check which indirect address is incorrect for the flag word in the increment command and rectify the ST user program
	56	Indirect bit-write access to read-only flags	Check which indirect address is incorrect and rectify ST user program



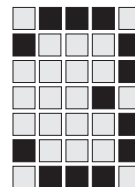
Error class S-25	Error no.	Description	Remedy
	57	Indirect byte-write access to a read-only flag	Check which indirect address is incorrect and rectify ST user program
	58	Indirect word-write access to a read-only flag	Check which indirect address is incorrect and rectify ST user program
	59	Command "L XW(...)": Indirect address of an XW-module lies outside the permitted range	Check which indirect address is incorrect for the XW-module and rectify the ST user program
	60	Command "T XW(...)": Indirect address of an XW-module lies outside the permitted range	Check which indirect address is incorrect and rectify ST user program

ST Error Messages

Block error

Error parameter: Block ID for missing block
Error location: Block which calls up the missing block

Error class S-26	Error no.	Description	Remedy
	01	OB to be called up is not loaded.	Reload the OB or remove the block call-up
	03	PB to be called up is not loaded	Reload the PB or remove the block call-up
	05	FB to be called up is not loaded.	Reload the FB or remove the block call-up
	07	SB to be called up is not loaded	Reload SB or remove the block call-up
	11	A selected DB does not exist	Reload DB or remove block call-up
	12	A DB selected through parameters does not exist	Reload DB or remove block call-up
	13	An DB selected indirectly does not exist	Reload DB or remove block call-up



Parameter error

Error parameter: Call up block
Error location: Block called up

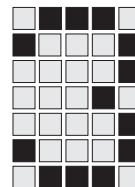
Error class S-27	Error no.	Description	Remedy
	02	When "CAL FB" was called up the formal and actual parameters do not match (type, number, sequence)	Adapt call ups to suit the amended block header or amend block header
	06	When "CAL SB" was called up the formal and actual parameters do not match (type, number, sequence)	Adapt call ups to suit the amended block header or amend block header

ST Error Messages

Block nesting error

Error location: Block in which the error has occurred

Error class S-28	Error no.	Description	Remedy
	01	Nesting level exceeded by starting an OB (CAL OB)	Check the block nesting levels Reduce the block nesting levels
	03	Nesting level exceeded by stating a PB (CAL PB)	Check the block nesting levels Reduce the block nesting levels
	05	Nesting level exceeded by starting an FB (CAL FB)	Check the block nesting levels Reduce the block nesting levels
	07	Nesting level exceeded by starting an SB (CAL SB)	Check the block nesting levels Reduce the block nesting levels



Timer error

Error parameter: Timer number
Error location: Block in which the timer is used
Low byte: Block number
High byte: Block type

Error class S-2A	Error no.	Description	Remedy
	01	A timer was started with a negative value entered in the accumulator	Load a positive value into the accumulator before the SE-command

ST Error Messages

Compiler error messages

Error parameter: Line number
Error location: BLock ID
Low byte: Block number
High byte: Block type

Error class S-76	Error no.	Description	Remedy
	01	Undefined interim code	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	02	Undefined parameters	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	03	Input address is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	04	Output address is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	05	Flag address is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU



Error class S-76	Error no.	Description	Remedy
	06	Input byte address is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	07	Output byte address is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	08	Flag byte address is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	09	Input word address is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	0A	Output word address is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	0B	PW address is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU

ST Error Messages

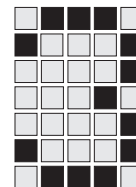
Error class S-76	Error no.	Description	Remedy
	0C	XW-addresses are invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG and CPU
	0D	Flag word address is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG and CPU
	0E	Address indicator for indirect addressing is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG and CPU
	0F	Flag (byte or word) is read-only	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG and CPU
	11	Segment number is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG and CPU
	12	Data block is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG and CPU



Error class S-76	Error no.	Description	Remedy
	13	Undefined parameters	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	14	Too many parameters with block call up	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	15	Internal compiler error while calculating the target address for a jump	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	16	Segment is not available	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	17	Undefined time base	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU
	18	Undefined timer number	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or CPU

ST Error Messages

Error class S-76	Error no.	Description	Remedy
	19	Undefined counter number	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or PSS CPU
	1A	BE-command is missing	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or PSS CPU
	1B	Undefined operating system call up	Remove operating system call-up from the application program
	1C	Link table overflow	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or PSS CPU
	1D	Overflow of the execute code buffer for the ST processor	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or PSS CPU
	1E	Too many jumps in the block	Reduce number of jumps
	1F	Max. possible number of open brackets has been reached	Reduce number of bracket commands "("
	20	")"-command, although no more brackets are open	Remove ")"-command



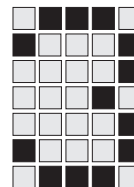
Error class S-76	Error no.	Description	Remedy
	21	Command cannot be used within bracketed expression	Clear all blocks and transfer again if error continues: contact Pilz technical support and possibly change PG or PSS CPU
	22	Undefined program block called up	Clear all blocks and transfer again if error continues: contact Pilz technical support and possibly change PG or PSS CPU
	23	Parameter size is not bit, byte or word	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change PG or PSS CPU
	24	PB address is invalid	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or PSS CPU
	7F	Command not implemented	Clear all blocks and transfer again, if error continues: contact Pilz technical support and possibly change the PG or PSS CPU

ST Error Messages

Load program error

Error parameter: Block ID

Error class S-77	Error no.	Description	Remedy
	01	Too many blocks have been loaded into the program cartridge	Reduce the number of blocks in the program
	02	Block length in the block header does not match the number in the data transferred	Transfer the block again, if error continues: contact Pilz technical support
	03	Block is not an ST block	Create block with ST programming device and re-send
	04	The DB has a reserved DB-number which may not be loaded	Rename DB, create block with ST programming device and re-send
	05	DB 004 or DB 005 does not match its set length	Set DB to correct length
	06	CRC-checksum for the block is incorrect	Remove the interferences from the transfer cable and re-send
	07	ST user program memory is full	Clear program cartridge and transfer project once more; possibly reduce the application program or use a larger program cartridge
	08	Operating system call up is invalid	Contact Pilz technical support
	09	OB, FB or PB created in assembler code	Create block in PSS-Code
	0A	Read/Write DB-range is full	Reduce the number of read/write DBs



Fatal error

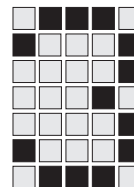
Error parameter: Fatal error number

Error class S-80	Error no.	Description	Remedy
	01	ST section has detected a fatal error in the operating system	Contact Pilz technical support

ST Error Messages

Operating system call up error

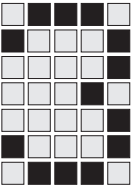
Error class S-81	Error no.	Description	Remedy
	01	ST user program transferred an invalid parameter to SB 254	Rectify ST user program



Debug error

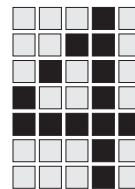
Error parameter: Status of start-up manager

Error class S-83	Error no.	Description	Remedy
	01	A module called up by the start-up manager signals back as not ready	Increase ST-block run time; if error continues: contact Pilz technical support
	02	A module called up by the start-up manager does not keep to the time conditions	Increase ST block run time; if the error continues: contact Pilz technical support
	03	The start-up manager was offset to an invalid status	Contact Pilz technical support



ST Error Messages

Notes



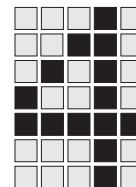
SafetyBUS p- Error Messages

This chapter describes SafetyBUS p errors. Errors can occur in individual bus subscribers as well as on the bus system as a whole. The error parameter will indicate on which bus subscriber the error has occurred. The error description for the device error (bus subscriber) is stored in the local error stack for the device and must be read using the PG. Device errors are described in a separate chapter.

Up to two parameters are assigned to each device error. The parameters contain the error location. Two error locations can be displayed, for example, in error class 31, error number 0: a device address and an I/O-Group number. In this example the device address in parameter 2 determines the device which caused the I/O-Group stated in parameter 1 to STOP. If only one parameter is required to locate an error, it is the second parameter that is used. The first parameter remains unused. In addition, there are errors which are managed without parameters. Please note, if you are displaying errors on the CPU-display, always display both parameters using the error stack button.

Error class F-30 – User stop

Error no.	Error parameter	Description	Remedy
00	I/O-Group- No.Device-Adr.	Stop via user program or operating the FS selector switch RUN/STOP	-
01	-	I/O Group stopped due to too many alarms	In the user program reduce the number of alarms to be processed



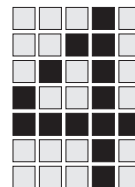
F-31

Error class F-31 – Internal error

Error no.	Error parameter	Description	Remedy
00	I/O-Group-No. Device-Adr.	MD, LD or I/O D caused a STOP of the given I/O-Group	Display error stack of the Device in the PG, see error description for the device
01	I/O-Group-No. Device-Adr.	Error in the LD (PSS caused all assigned I/O-Groups to STOP)	Display PSS error stack, see PSS FS error messages for error description
02	System error no. Device-Adr.	Internal system error in LD (PSS)	Change PSS or PSS CPU
03	System error no. Device-Adr.	Internal system error in LD (PSS)	Change PSS or PSS CPU
04	-	Not assigned	
05	System error no. Device-Adr	Internal system error in LD (PSS)	Change PSS or PSS CPU
06	-	Not assigned	
07	-	Not assigned	
08	Item No.* ¹ Device-Adr.	Write access via indirect or parameterised address on a non-configured Device-Adr.	Check addressing in the user program
09	System error no. Device-Adr.	Domain request from an address that is not configured or invalid	Check parameter in call up of SB 255, permitted addresses: 32 ... 95
0A	System error no. Device-Adr.	Domain-transfer to LD which is not a master or is an invalid address range	Check parameter in call up of SB 255, permitted addresses: 32 ... 95
0B . . 0C	-	Internal system error	Contact Pilz technical support

*¹ 0: I/OD A, 1: I/OD B

Error no.	Error parameter	Error in LD (PSS)	Remedy
0D	-		Display previous entry in the PSS error stack, see PSS FS error messages



F-32

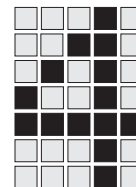
Error class F-32 – Periphery error

Error no.	Error parameter	Description	Remedy
00	I/O-Group-No. Device-Adr.	MD, LD or I/O D caused a STOP of the given I/O-Group	Display error stack of the device in the PG, see error description for the device

Error class F-33 – Bus error

Error no.	Error parameter	Description	Remedy
00	I/O-Group-No. Device-Adr.	MD, or I/O D caused a STOP of the given I/O-Group	Display error stack of the Device in the PG, see error description for the device
01	- Device-Adr.	No message from the LD as Cycle-Timeout is too short or there is an error in the LD (PSS)	Change Cycle-Timeout in the configurator or display the PSS error stack, see PSS FS-error messages
02	- Device-Adr.	No message from the LD or I/OD, as Cycle-Timeout is too short or there is an error in the device	Change Cycle-Timeout in the configurator or display the PSS error stack, see PSS FS error messages or device error messages
03	- Device-Adr.	Unknown or defective device on the bus	Display device error stack, see device error messages or remove the unit from the bus
04	- Device-Adr.	Unknown or defective device on the bus	Display device error stack, see device error messages or remove the unit from the bus
05	- Device-Adr	Internal system error	Change PSS or PSS CPU
06	Item No.* ¹ Device-Adr.	No message from the LD or I/OD as the Event-Timeout is too short or there us an error in the device	Change Event-Timeout in the configurator or display the PSS error stack, see PSS FS error messages or device error messages
07	- Device-Adr.	Internal system error	Change PSS or PSS CPU

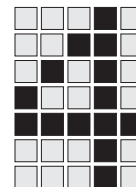
*1 0: I/OD A, : I/OD B



F-33

Error no.	Error parameter	Description	Remedy
08	I/O-Group-No. Device-Adr.	Domain-Timeout from the LD or I/OD too short or an error in the device	Change Domain-Timeout in the configurator or display the device error stack, see device error messages
09	I/O-Group-No. Device-Adr.	Domain-Timeout from the LD or I/OD too short or an error in the Device	Change Domain-Timeout in the configurator or display the device error stack, see device error messages
0A	Domain No. Device-Adr.	Domain-Timeout from the LD or I/OD too short or an error in the Device	Change Domain-Timeout in the configurator or display the device error stack, see device error messages
0B	Domain No. Device-Adr.	Domain-Timeout from the LD or I/OD too short or an error in the Device	Change Domain-Timeout in the configurator or display the device error stack, see device error messages
0C	- Device-Adr	Error in the LD	Display device error stack, see device error messages.
0D	- Device-Adr	Error in the MD	Display device error stack, see device error messages
0E	- Device-Adr	LD (PSS) cannot send	Check whether: Short-circuit on the bus cable, correct termination, unknown device on the bus; if no remedy helps Change PSS
0F	-Device-Adr	2 MDs on the bus	Only one MD permitted. Configure 2nd MD as LD
10	- Device-Adr	2 LDs on the bus have the same address	Change address of the given LD or remove LD from the bus.

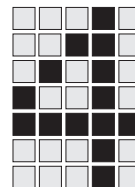
Error no.	Error parameter	Description	Remedy
11	- Device-Adr.	Error when transferring a project	Check configuration, delete the PSS program memory, transfer user program, if no remedy helps: change PSS or PSS CPU
12	- Device-Adr.	Domain-Timeout of the MD (PSS) too short or an error in the MD (PSS)	Increase Domain-Timeout in the configurator or display the PSS error stack, see PSS FS-error messages
13	- Device-Adr.	Bus configuration in the LD does not correspond with the configuration of the MD	Change configuration, delete PSS program memory, transfer user program
14 . . . 20	- Device-Adr.	Internal system error	Change PSS.
21	-	Not assigned	
22	- Device-Adr.	2 LDs or I/ODs on the bus have the same address	Display device error stack or disconnect the device
23 . . . 25	- Device-Adr.	Internal system error	Change PSS
26	- Device-Adr.	Bus configuration is incorrect or the MD or LD is defective	Check configuration, delete the PSS program memory, transfer user program, if no remedy helps: change the PSS or PSS CPU



F-33

Error no.	Error parameter	Description	Remedy
27 . . . 29	- Device-Adr.	Too many PSS systems switched on simultaneously or an internal system error	Switch on PSS systems consecutively or before the start of the program, initialise a group start once only (with LD „FE“, with MD „FF“); if there is no remedy: change PSS or PSS CPU
2A	- Device-Adr.	Bus configuration is incorrect or the MD or LD is defective	Check configuration, delete the PSS program memory, transfer user program, if no remedy helps: change PSS or PSS CPU
2B . . . 30	- Device-Adr.	Error when transferring a project in the LD	Check configuration, delete the PSS program memory, transfer user program, if no remedy helps: change PSS or PSS CPU
31	- Device-Adr.	Internal system error	Change PSS or PSS CPU
32	- Device-Adr.	I/O-Group configuration is incorrect or the LD is defective	Check configuration, delete the PSS program memory, transfer user program, if no remedy helps: change PSS or PSS CPU
33	- Device-Adr.	Internal system error	Change PSS or PSS CPU
34	-	Not assigned	
35	- Device-Adr.	Internal system error	Change PSS or PSS CPU
36	-	Not assigned	
37	-	Not assigned	
38	- Device-Adr.	Internal system error	Change PSS or PSS CPU

Error no.	Error parameter	Description	Remedy
39	- Device-Adr.	Telegram has not transferred or internal system error	Repeat group start, read from the device error stack, if no remedy helps: change the device
3A	- Device-Adr.	LD or I/OD are no longer on the bus or are defective	Read from the device error stack; if no remedy helps: change the device
3B	- Device-Adr.	2 LDs or I/ODs on the bus have the same address	Display device error stack or remove the device from the bus.
3C . . . 44	- Device-Adr.	Internal system error	Change PSS or PSS CPU
45	- Device-Adr.	MD configured incorrectly or is defective	Check configuration, delete the PSS program memory, transfer user program, if no remedy helps: change PSS or PSS CPU
46 . . . 4C	- Device-Adr.	Internal system error	Change PSS or PSS CPU
4D	I/O-Group-No. Device-Adr.	Error in the MD	Display PSS error stack, see PSS FS error messages
4E 4F	I/O-Group-No. Device Adr.	Several devices are on the bus without a device addresss	Remove all the devices from the bus, connect one device and establish the address; then connect the next one, establish the address etc.



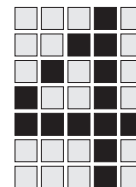
F-33

Error no.	Error parameter	Error parameter	Remedy
50 . . . 58	Domain-No. Device-Adr.	Unknown or defective device on the bus	Display the device error stack, see the error messages or remove the device from the bus

SafetyBUS p – Error Messages

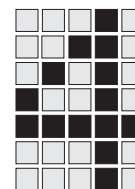
Error class F-34 - Configuration error

Error no.	Error parameter	Description	Remedy
00	-	Not assigned	
01 . . . 03	-	Error during program transfer or program memory is defective	Check configuration, delete the PSS program memory, transfer user program, if no remedy helps: change PSS or PSS CPU
04	-	Not assigned	
05	-	Error during program transfer or program memory is defective	Check configuration, delete the PSS program memory, transfer user program, if no remedy helps: change PSS or PSS CPU
06	-	Not assigned	
07 . . . 0D	-	Error during program transfer or program memory is defective	Check configuration, delete the PSS program memory, transfer user program, if no remedy helps: change PSS or PSS CPU
0E . . . 0F	-	Error during program transfer or program memory is defective	Check configuration, delete the PSS program memory, transfer user program, if no remedy helps: change PSS or PSS CPU
10	-	Not assigned	
11	-	Error during program transfer or program memory is defective	Check configuration, delete the PSS program memory, transfer user program, if no remedy helps: change PSS or PSS CPU



F-34

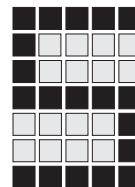
Error no.	Error parameter	Description	Remedy
12 . . . 1C	-	Not assigned	
1D	-	Error during program transfer or program memory is defective	Check configuration, delete the PSS program memory, transfer user program, if remedy does not help: change PSS or PSS CPU
1E . . . 2F	-	Error during program transfer or program memory is defective	Check configuration, delete the PSS program memory, transfer user program, if remedy does not help: change PSS or PSS CPU
30 . . . 35	-	Error during program transfer	Delete PSS program memory, transfer user program; if remedy does not help; change PSS or PSS CPU
36 . . . 45	-	Error during program transfer or program memory is defective	Check configuration, delete the PSS program memory, transfer user program, if remedy does not help: change PSS or PSS CPU
46 . . . 48	-	Error during program transfer or program memory is defective	Check configuration, delete the PSS program memory, transfer user program, if remedy does not help: change PSS or PSS CPU
49	-	Internal system error	Change PSS or PSS CPU



SafetyBUS p – Error Messages

F-34

Error no.	Error parameter	Description	Remedy
4A . . . 4B	-	Error during program transfer or program memory is defective	Check configuration, delete the PSS program memory, transfer user program, if remedy does not help: change PSS or PSS CPU
4C . . . 4F	-	Timeout values are incorrect	Rectify Timeout-values, delete PSS program memory, transfer user program; if remedy does not help; change the device
50	-	Transfer rate is not permitted	Rectify transfer rate, delete PSS program memory, transfer user program; if remedy does not help; change the device
51	-	Error during program transfer or program memory is defective	Check and rectify configuration, delete the PSS program memory, transfer user program, if remedy does not help: change PSS or PSS CPU
52 . . . 5B	-	Error during program transfer	Delete PSS program memory, transfer user program; if remedy does not help; change PSS or PSS CPU
5C	-	Error during program transfer or program memory is defective	Check and rectify configuration, delete the PSS program memory, transfer user program, if remedy does not help: change PSS or PSS CPU
5D	Device-Adr. Bus version no.	Device does not support a transfer rate of 500 kBit	Change the device (for permitted transfer rates, refer to the device's operating manual



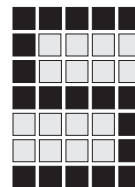
DI8O8, DI16 Error Messages

This chapter describes the error messages for the decentralised modules DI8O8 and DI16. The error message can be read via the PSS using the programming device (PG).

Most errors contain error parameters which can be used to locate the error. These parameters can be displayed using the error display in the PG. Many of these parameters have no relevance to you the user, they are used to help Pilz determine the cause of any errors. If you require support from Pilz or need to send the device back to rectify the error, please state any error parameters that are given.

Error class F-01

Error no.	Description	Remedy
00 . . . 04	Internal error	Change device
05 . . . 09	Not assigned	
0A	Internal error	Change device
0B	Not assigned	
0C . . . 10	Internal error	Change device
11	Not assigned	
12 . . . 13	Internal error	Change device



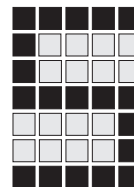
F-02

Error class F-02

Error no.	Description	Remedy
00 . . . 05	Internal error	Change device
06 . . . 08	Not assigned	
09 . . . 18	Internal error	Change device

Error class F-03

Error no.	Description	Remedy
00 . . . 0B	Internal error	Change device.
0C	Not assigned	
0D . . . 0E	Internal error	Change device.



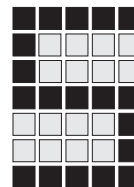
F-04

Error class F-04

Error no.	Description	Remedy
00	Hardware error	Contact Pilz technical support
01 . . . 02	Not assigned	
03 . . . 05	Hardware error	Contact Pilz technical support
06 . . . 09	Not assigned	
0A	Internal error	Change device

Error class F-05

Error no.	Description	Remedy
00 . . . 01	Internal error	Change device
02	Not assigned	
03	Internal error	Change device



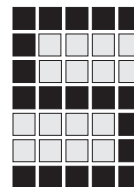
F-06

Error class F-06

Error no.	Description	Remedy
00 . . . 03	Internal error	Change device.
04	Noise due to voltage swings.	Check earth connection; check supply voltage "Supply" and supply voltage for the load "Load Supply"
05	Internal message	If the message occurs frequently, contact Pilz technical support.

Error class F-07

Error no.	Description	Remedy
01	Hardware error	Change device
02 . . . 0C	Not assigned	
0D . . . 0E	Internal error	Change device



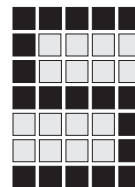
F-08

Error class F-08

Error no.	Description	Remedy
00	Power on	If the message occurs frequently, contact Pilz technical support
01	Internal error	Change device
02 . . . 04	Not assigned	
05	Internal error	Change device

Error class F-10

Error no.	Description	Remedy
00	not assigned	
01 . . . 02	Internal error	Change device
03	not assigned	
04 . . . 06	Internal error	Change device
07	Establishing the current transfer rate has failed.	Check bus cabling; check whether the address setting in the devices agrees with the configuration; if this does not help: contact Pilz technical support
08	Internal error	Change device



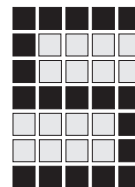
F-11

Error class F-11

Error no.	Description	Remedy
00 . . . 01	Internal error	Change device

Error class F-12

Error no.	Description	Remedy
00	Domain-Timeout exceeded	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
01	Error in bus configuration	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
02 . . . 03	Error in the device configuration	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
04	Bus connection interrupted or LD for I/O-Group no longer available	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
05 . . . 06	Irregularity in telegram transport	If the message occurs frequently, contact Pilz technical support
07	I/O-Group stop	If the message occurs frequently, contact Pilz technical support
08	Bus connection interrupted or MD no longer available	Check bus cabling; check whether the address setting in the devices agrees with the configuration; if no remedy helps: contact Pilz technical support
09	Bus error	Change device

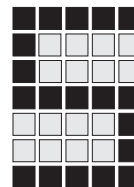


F-12

Error no.	Description	Remedy
0A	Domain-Timeout	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
0B	Event-Timeout exceeded	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
0C	The Device-Address of this unit is also being used by another device	Check bus cabling; check whether the address setting in the devices agrees with the configuration; if this does not help: contact Pilz technical support
0D	Telegram transport is disrupted	If the message occurs frequently, contact Pilz technical support
0E	Device-configuration for I/O-Group is incorrect	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact technical support

Error class F-13

Error no.	Description	Remedy
00	Internal error	Change device



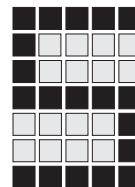
F-14

Error class F-14

Error no.	Description	Remedy
00	Too many telegrams received	Check and rectify configuration, delete the PSS program memory, transfer user program, if no remedy helps: Contact Pilz technical support

Error class F-15

Error no.	Description	Remedy
00	Hardware error	Change device
01 . . . 05	Telegram transport is disrupted	Check bus cabling; check whether the address setting in the devices agrees with the configuration; if no remedy helps: Contact Pilz technical support
06	Device-Address was altered during operation	Check bus cabling; check whether the address setting in the devices agrees with the configuration; if this does not help: contact Pilz technical support



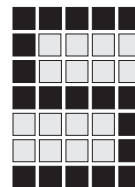
F-60

Error class F-60

Error no.	Description	Remedy
00 . . . 04	Internal error	Change device

Error class F-61

Error no.	Description	Remedy
00	Internal error	Change device



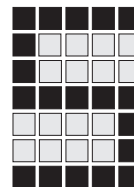
F-62

Error class F-62

Error no.	Description	Remedy
00 . . . 03	Internal error	Change device

Error class F-63

Error no.	Description	Remedy
00	Error in the device configuration	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
01	Not assigned	
02	Error in the device configuration	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
03	User program tries to access outputs if an input module.	Check and rectify user program, delete program memory and transfer user program again



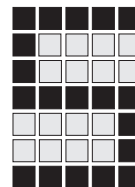
F-64

Error class F-64

Error no.	Description	Remedy
00	Error while testing inputs with test pulses	Check I/Os for short-circuits; check connection between inputs and test pulses
01	Output status could not be defined	Check I/Os for short-circuits; check connection between inputs and test pulses
02	Output status could not be defined during output test	Check I/Os for short-circuits; check connection between inputs and test pulses
03	I/O-Group warm start not possible due a previous major output error	Check I/Os for short-circuits; check connection between inputs and test pulses; switch off the voltage to the device and switch on again
04	Error while testing inputs with test pulses	Check I/Os for short-circuits; check connection between inputs and test pulses

Error class F-65

Error no.	Description	Remedy
00 . . . 11	Hardware error	Change device



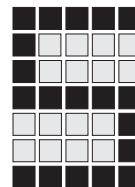
F-66

Error class F-66

Error no.	Description	Remedy
00 . . . 03	Internal error	Change device
04	Hardware error	Change device
05 . . . 07	Internal error	Change device
08 . . . 09	Not assigned	
0A . . . 0C	Internal error	Change device

Error class F-67

Error no.	Description	Remedy
00	Load supply is missing	Check earth connection; check supply voltage "Supply" and supply voltage for the load "Load Supply"



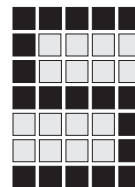
F-68

Error class F-68

Error no.	Description	Remedy
00 . . . 01	Configuration data is too complex.	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support

Error class F-81

Error no.	Description	Remedy
00 . . . 09	Internal error	Change device.
0A . . . 12	Not assigned	
13	Internal error	Change device.



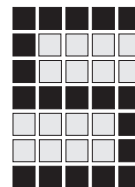
F-82

Error class F-82

Error no.	Description	Remedy
00 . . . 08	Internal error	Change device
09 . . . 14	Not assigned	
15	Internal error	Change device
16 . . . 18	Not assigned	
19 . . . 1A	Internal error	Change device

Error class F-83

Error no.	Description	Remedy
00 . . . 06	Internal error	Change device
07 . . . 0B	Not assigned	
0C . . . 0F	Internal error	Change device



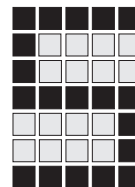
F-84

Error class F-84

Error no.	Description	Remedy
00 . . . 02	Hardware error	Change device
03 . . . 04	Not assigned	
05	Hardware error	Change device

Error class F-85

Error no.	Description	Remedy
00 . . . 02	Internal error	Change device



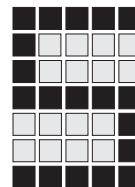
F-88

Error class F-88

Error no.	Description	Remedy
00 . . . 04	Not assigned	
05	Internal error	Change device

Error class F-90

Error no.	Description	Remedy
00	Not assigned	
01 . . . 02	Internal error	Change device
03	Not assigned	
04	Internal error	Change device



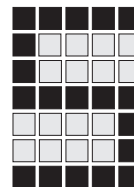
F-91

Error class F-91

Error no.	Description	Remedy
00	Not assigned	
01	Internal error	Change device

Error class F-92

Error no.	Description	Remedy
00	Domain-Timeout exceeded	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
01	Error in bus configuration	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
02 . . . 03	Error in the device configuration	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
04	Bus connection interrupted or LD for I/O-Group no longer available	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
05 . . . 06	Bus error	Change device
07	I/O-Group stop	If the message occurs frequently, contact Pilz technical support
08	Bus connection interrupted or MD no longer available	Check bus cabling; check whether the address setting in the devices agrees with the configuration; if this does not help: contact Pilz technical support
09	Bus error	Change device

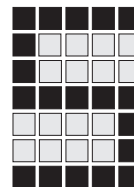


F-92

Error no.	Description	Remedy
0A	Domain-Timeout	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
0B	Event-Timeout exceeded	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
0C	Not assigned	
0D	Telegram transport is disrupted	If the message occurs frequently, contact Pilz technical support
0E	Device configuration for I/O-Group is incorrect	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact technical support

Error class F-93

Error no.	Description	Remedy
00	Internal error	Change device



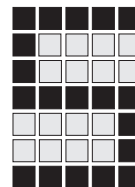
F-94

Error class F-94

Error no.	Description	Remedy
00 . . . 05	Not assigned	
06	Device-Address was altered during operation	Check bus cabling; check whether the address setting in the devices agrees with the configuration; if this does not help: contact Pilz technical support.

Error class F-E0

Error no.	Description	Remedy
00 . . . 01	Internal error	Change device
02	Not assigned	
03 . . . 04	Internal error	Change device



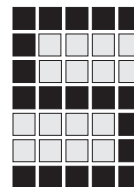
F-E1

Error class F-E1

Error no.	Description	Remedy
00	Internal error	Change device

Error class F-E2

Error no.	Description	Remedy
00	Internal error	Change device
01	Not assigned	
02 . . . 04	Internal error	Change device



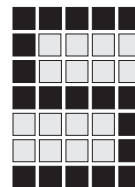
F-E3

Error class F-E3

Error no.	Description	Remedy
00	Error in the device configuration	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support.
01	Bus error	Change device
02	Error in the device configuration	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support
03	User program tries to access outputs of an input module	Check and rectify user program, delete program memory and transfer user program again

Error class F-E4

Error no.	Description	Remedy
00	Error while testing inputs with test pulses	Check I/Os for short-circuits; check connection between inputs and test pulses
01	Output status could not be defined	Check I/Os for short-circuits; check connection between inputs and test pulses
02	Output status could not be defined during output test	Check I/Os for short-circuits; check connection between inputs and test pulses
03	I/O-Group warm start not possible due a previous major output error	Check I/Os for short-circuits; check connection between inputs and test pulses; switch off the voltage to the device and switch on again
04	Error while testing inputs with test pulses	Check I/Os for short-circuits; check connection between inputs and test pulses



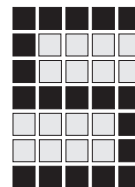
F-E5

Error class F-E5

Error no.	Description	Remedy
00	Hardware error	Change device.
01	Not assigned	
02 . . . 11	Hardware error	Change device.

Error class F-E6

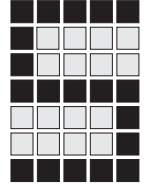
Error no.	Description	Remedy
00 . . . 03	Internal error	Change device
04	Hardware error	Change device
05 . . . 0C	Internal error	Change device



F-E7

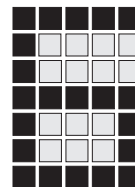
Error class F-E7

Error no.	Description	Remedy
00	Load supply is missing	Check earth connection; check supply voltage "Supply" and supply voltage for the load "Load Supply"



Error class F-E8

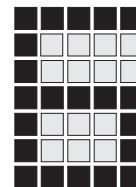
Error no.	Description	Remedy
00	Configuration data is too complex.	Check and rectify configuration, delete the PSS program memory, transfer user program, if this does not help: contact Pilz technical support



Error Messages PSS(1) AI U5I1

An error on the module PSS(1) AI U5I1 is displayed (as with all module errors) using the error class 06. The error numbers 48 ... 51 in this error class relate to the AI-module (see also PSS FS-error messages).

If an error occurs, an additional parameter is given for the PSS(1) AI U5I1 that describes the error. The meaning of these parameters is described in the following chapter.



Error Messages PSS(1) AI U5I1

Error class 06

Error no.	Error parameter	Description	Remedy
48 . . . 51	01... 03	Parameter is invalid	Check user program, use SB 105
	04 ... 09	Match error	Increase tolerance, if this does not help: change the module
	0A	Parameter is invalid	Check user program, use SB 105
	0B	Module is defective	Change module
	0C ... 17	Match error	Increase tolerance, if this does not rectify the error: change the module
	18	Configuration change during minimum value formation	Check user program, use SB 105
	19	Not assigned	
	1A	Match error	Increase tolerance, if this does rectify the error: change the module
	1B	Not assigned	
	1C	External voltage supply is missing	Apply supply voltage
	1D, 1E	System error	Change module
	1F	Start/Stop of a function which was not started/selected	Check user program, use SB 105
	20	System error	Change module
	21	Not assigned	
	22	Parameter is invalid	Check user program , use SB 105
	23 ... 7F	Not assigned	
	80 ... A1	System error	Change module
	FE	Message for internal purposes	
	FF	System error	Change module

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