SIEMENS

Display messages

SINAMICS

G180

Compact inverter units, cabinet systems,
air-cooled and liquid cooled cabinet units

Edition 05/2020

www.siemens.com/drives

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SINAMICS

SINAMICS G180
Display messages

Software Version 11C0242/CR88

05/2020

4BS0576F-004

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠DANGER
indicates that death or severe personal injury **will** result if proper precautions are not taken.

⚠WARNING
indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠CAUTION
indicates that minor personal injury can result if proper precautions are not taken.

NOTICE
indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

⚠WARNING
Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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Table of contents

Introduction

1

This document is valid for SINAMICS® G180, from software version 11C0242/CR88 and higher.

1. Check the current software version on the inverter display in the menu "I INVERTER DATA/I device data/Version".
2. If the inverter software is higher than the version of the operating manual, download the current version from www.siemens.com.

Contact the Service Department of the manufacturer for more detailed information.

Safety instructions 2

⚠WARNING

Undesirable machine response

The machine can respond undesirably as a result of incorrect or modified parameterization. This can result in death, serious injury or material damage.

- Protect the parameterization (parameter assignments) against unauthorized access.
- Read and carefully follow the instructions in this document and all the relevant documents.
- If necessary, contact our Service-Center (Page 55).

2.1 Security information

Note

Industrial security

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Products and solutions from Siemens constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the Internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. using firewalls and/or network segmentation) are in place.

Additionally, Siemens' guidance on appropriate security measures should be taken into account. For more information about industrial security, please visit:

Industrial security (http://www.siemens.com/industrialsecurity).

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they become available, and that only the latest product versions are used. Use of product versions that are no longer supported, and failure to apply latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed at:

Industrial security (http://www.siemens.com/industrialsecurity).

List of messages

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
1004	Switch interlock	active		-	The FI is in the start-inhibiting status. Set the OFF1-command or set parameter "P-INV. BEHVIOUR:Switch interlock" to "off " (for operation via field bus however there is always an OFF1-command required)
1006	!! Emergency stop !!	Operation		-	Actually, an emergency stop command is set. Reset the emergency stop and then acknowledge the inverter.
1007	T1 of P-OPERATION/P-Off2 (NC)	T2 of P-OPERATION/P-Off2 (NC)		-	An OFF2-command is set. Reset the OFF2-command and then acknowledge the inverter. The default text is !! OFF2 !! Operation, however, can be parameterized absolutely free.
1108	mains	off		-	Voltage supply for power section missing resp. faulty. Check the main supply resp. the mains fuses.
1109	System	Mains off		-	Voltage supply for power section missing resp. faulty. Check the main supply resp. the mains fuses.
2004	Fault	S1:3 not off		-	Switch off S1:3 (under grey cover)
2023	! Parameter fault !	Pole pair=0 n-/f-Mot		-	The ratio of the parameters n-motor to f-motor in menu "P-MACHINE POWER CONV/P-motor data" is not plausible regarding number of pairs of poles (pair of poles = 0). Adjust parameter "n-motor" or "f-motor".
2024	! Parameter fault !	Alloc.: n/f-Mot SYN		-	The ratio of the parameters n-motor to f-motor in menu "P-MACHINE POWER CONV/P-motor data" is not plausible. The number of pairs of poles cannot be calculated. Adjust parameter "n-motor" or "f-motor".
2025	! Parameter fault !	Alloc.: n/f-Mot ASM		-	The ratio of the parameters n-motor to f-motor in menu "P-MACHINE POWER CONV/P-motor data" is not plausible. Parameter "n-motor" deviates widely from the synchronous speed. Adjust parameter "n-motor" or "f-motor".
2027	! Parameter fault !	R-BrakingRes.too low		-	Use a brake resistor with a higher resistance value (see technical data) and parameterize it, otherwise the brake transistor might be destroyed.
2036	Linkage too long	circle		-	Too many operator functions (e.g. signal generators MLD or self-holding functions) have been connected in line (max. 3). or operator functions were connected in a loop (e.g. input of a self-holding function with its output). Change parameter setting.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
2037	! Parameter fault !	Tacho 2-track		-	At pulse input -X2:27…29 a parameterization with a too high frequency is selected which the input-hardware is not able to detect. Recheck parameter "P-PULSE INPUT:/pulses/360". Reduce the parameter "P-PULSE INPUT:Max.plse."
2038	operation locked	n-motor <> Rotation		-	Only with FOC (field oriented control): The sense of rotation of the motor not corresponding with the parameterized one.Recheck parameter "P-DRIVE DATA/rotation", if it really corresponds with the actual speed. Recheck if maybe the rotating field was mixed up at the motor connections.
2043	operation locked	Cabinet heater		-	The control bit CabHeat. ON is activated but the temperature is still too low. Check the cabinet heating. Arrange higher ambient temperature.
2044	operation locked	CoolgWaterHeater			The control bit H20Heat.ON is activated but the temperature is still too low. Check the cooling water heating. Arrange higher ambient and cooling water temperature.
2045	!! Prewarning !!	actual speed	Wrg>Actual speed		The plausibility check of the speed sensor shows an alarm. Check the screen and the maximum cable length of the speed sensor. Improve the EMC-measures of the actual speed value signal.
2049	!! Prewarning !!	Fault Synch. MSC	Wrg>Synch. MSC		The MSC of all included inverters cannot be synchronized. Check the fiber optic cable lines connected at the PCB LSC -A51, plug U 9 ... 15. Adjust the same clock frequency of the MSC at all included inverters (parameter "P-MACHINE POWER CONV/P-MSC data:Clk.freq."). Switch off Random pattern (parameter "P-MACHINE POWER CONV/P-MSC data:Random Pattern=off")
2083	!! Prewarning !!	T-cabinet too low	Wrg>T-cab.t.low		Temperature at air intake of control cabinet too low (warning at 0°C). Heat up the operating environment;
2089	!! Prewarning !!	T-cooler 2 too low	Wrg>T-Cool.2 t.lo		Temperature at the measuring point 2 of the dissipator too low (warning at 0°C). Heat up the operating environment;
2090	!! Prewarning !!	T-cooler 3 too low	Wrg>T-Cool.3 t.lo		Temperature at the measuring point 3 of the dissipator too low (warning at 0°C). Heat up the operating environment;
2091	!! Prewarning !!	T-cooler 4 too low	Wrg>T-Cool.4 t.lo		Temperature at the measuring point 4 of the dissipator too low (warning at 0°C). Heat up the operating environment;
2092	!! Prewarning !!	T-cooler 5 too low	Wrg>T-Cool.5 t.lo		Temperature at the measuring point 5 of the dissipator too low (warning at 0°C). Heat up the operating environment;
2093	!! Prewarning !!	T-cooler 2 too high	Wrg>T-Cool.2 t.hi		Temperature at the dissipator 2 too high prewarning temperature depend-ing on the device). Cool down the operating environment; reduce the load; clean the air filter; recheck the fan
2094	!! Prewarning !!	T-cooler 3 too high	Wrg>T-Cool.3 t.hi		Temperature at the dissipator 3 too high prewarning temperature depend-ing on the device). Cool down the operating environment; reduce the load; clean the air filter; recheck the fan

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
2095	!! Prewarning !!	T-cooler 4 too high	Wrg>T-Cool.4 t.hi		Temperature at the dissipator 4 too high prewarning temperature depending on the device). Cool down the operating environment; reduce the load; clean the air filter; recheck the fan
2096	!! Prewarning !!	T-cooler 5 too high	Wrg>T-Cool.5 t.hi		Temperature at the dissipator 5 too high prewarning temperature depending on the device). Cool down the operating environment; reduce the load; clean the air filter; recheck the fan
2100	!! Prewarning !!	Current asymmetry U	Wrg>C-Asymm. U	-	This warning can appear only with inverters having several converter systems connected in parallel, if in the U-phase the current of one system deviates from the mean value by more than 10%. Recheck if the motor conductors are arranged symmetrically, if all motor connections are correctly put on and tightened. If you find no incorrectness's please inform our service station.
2101	!! Prewarning !!	Current asymmetry V	Wrg>C-Asymm. V	-	This warning can appear only with inverters having several converter systems connected in parallel, if in the V-phase the current of one system deviates from the mean value by more than 10%. Recheck if the motor conductors are arranged symmetrically, if all motor connections are correctly put on and tightened. If you find no incorrectness's please inform our service station.
2102	!! Prewarning !!	Current asymmetry W	Wrg>C-Asymm. W	-	This warning can appear only with inverters having several converter systems connected in parallel, if in the W-phase the current of one system deviates from the mean value by more than 10%. Recheck if the motor conductors are arranged symmetrically, if all motor connections are correctly put on and tightened. If you find no incorrectness's please inform our service station.
2103	!! Prewarning !!	T-heat sink asymm.	Wrg>T-Cooler asym	-	The distribution of temperature on the power heatsink is asymmetrical. Check the air intake filter for dirt resp. Check the fan of the device.
2104	!! Prewarning !!	T-CPU too low	Wrg>T-CPU too low	-	Temperature inside the inverter too low (warning given at 0°C). Heat up the operating environment. Temperature inside the inverter too high (prewarning at 70°C). Cool down the operating environment; reduce the load; clean the air filter; recheck the fan
2105	!! Prewarning !!	T-CPU too high	Wrg>T-CPU too hi		Temperature inside the cabinet too high prewarning temperature at 70°C). Cool down the operating environment; reduce the load; clean the air filter; recheck the fan
2106	!! Prewarning !!	T-cooler too high	Wrg>T-Cool. t.hi	-	Temperature at the dissipator too high prewarning temperature depending on the device). Cool down the operating environment; reduce the load; clean the air filter; recheck the fan
2107	!! Prewarning !!	T-cooler too low	Wrg>T-Cool. t.lo	-	Temperature at the measuring point of the dissipator too low (warning at 0°C). Heat up the operating environment;

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault suppression on	Description
2108	!! Prewarning !!	T-cooler 1 too low	Wrg>T-Cool.1 t.lo		Temperature at the measuring point 1 of the dissipator too low (warning at 0°C). Heat up the operating environment;
2109	!! Prewarning !!	T-cooler 1 too high	Wrg>T-Cool.1 t.hi		Temperature at the dissipator 1 too high prewarning temperature depending on the device). Cool down the operating environment; reduce the load; clean the air filter; recheck the fan
2110	!! Prewarning !!	Brake Res.Overload	Wrg>BrakeResOverl	-	Brake resistor overloaded. Reduce the regenerative load; use a brake resistor with a higher rating; line voltage too high (> 110%)
2112	!! Prewarning !!	PTC AI1	Wrg>PTC AI 1	-	This message can appear only if the analog input 1 is configured for thermistor evaluation. P-ANALOG INPUT/P-Analog input 1:AI-function = PTC. It is active when the thermistor has tripped. Recheck the PTC-sensor at terminal –X2:51-52. Recheck the device where the thermistor is installed.
2113	!! Prewarning !!	PTC AI2	Wrg>PTC AI 2	-	This message can appear only if the analog input 2 is configured for thermistor evaluation. "P-ANALOG INPUT/P-Analog input 2:AI-function = PTC". It is active when the thermistor has tripped. Recheck the PTC-sensor at terminal –X2:51-53. Recheck the device where the thermistor is installed.
2114	!! Prewarning !!	InputReactor 1	Wrg>InptReactor1	-	The temperature of the input reactor of the device has nearly reached the cutoff limit. Clean the air filter; recheck the fan of the device; recheck the temperature contact in the reactor: input at PCB Signals –A13-X81:6: 24V=good, 0V=warning. Reduce the load; cool down the operating environment.
2115	!! Prewarning !!	OutputReactor 1	Wrg>OutptReactor1	-	The temperature of the output reactor of the device has nearly reached the cutoff limit. Clean the air filter; recheck the fans of the device; recheck the temperature contact in the reactor: input at PCB Signals –A13-X81:7: 24V=good, 0V=warning; reduce the load; cool down the operating environment;

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
2116	!! Prewarning !!	P-Warning1/T = Cabinet heater Motor heater, MotorBearingTemp., MotorWindingTemp., Insulation Fault, Fan external, Cabinet fan, external, Set value < 4 mA, Motor, Transformer, I-asymm. motor, Circuit breaker, Fuse, Fusing mains 1, Fusing mains 2, Undervoltage, Overspeed, Underspeed, Motor stalled, set value lost, Set value limited, Setp/actv.dev, Ball valve open, Ball valve closed, Control voltage, Motor overpress., Switch high volt., Control transf., Ind. mains volt., Filter cabinet, Aux. devices, ResistOutpFilter, OutputReactor 2, InputReactor 2, EarthCurr., prog. Text1, prog. Text2, prog. Text3, prog. Text4, prog. Text5, prog. Text6, prog. Text7, prog. Text8, prog. Text9, prog. Text10	Wrg>CabinetHeater, Wrg>MotorHeater, Wrg>M-BearingTemp, Wrg>M-WindingTemp, Wrg>InsulationFlt, Wrg>Blower, Wrg>CabinetFan, Wrg>external, Wrg>SetValue <4mA, Wrg>Motor, Wrg>Transformer, Wrg>I-asymm.motor, Wrg>Circ. breaker, Wrg>Fuse, Wrg>Fusg. mains 1, Wrg>Fusg. mains 2, Wrg>Undervoltage, Wrg>Overspeed, Wrg>Underspeed, Wrg>motor stalled, Wrg>set val.lost, Wrg>SV limited, Wrg>Setp/actv.dev, Wrg>Ball valve op, Wrg>Ball valve cl, Wrg>Control volt., Wrg>Motor overpr., Wrg>Switch high V, Wrg>Contr transf., Wrg>Ind. mains V, Wrg>Filter cab., Wrg>Aux. devices, Wrg>R-OutptFilter, Wrg>OutptReactor2, Wrg>InptReactor2, Wrg>EarthCurr., Wrg>prog. Text1, Wrg>prog. Text2, Wrg>prog. Text3, Wrg>prog. Text4, Wrg>prog. Text5, Wrg>prog. Text6, Wrg>prog. Text7, Wrg>prog. Text8, Wrg>prog. Text9, Wrg>prog. Text10	-	This is a user-defined warning. It is parameterized as per "P-WARNINGS/P-Warning1/T = Text selection values". The text of the warning can either be selected from a number of standard texts (see left-hand column) or can be a programmed text. Normally it is not a warning concerning the inverter, it is rather concerning the installation into which the inverter is integrated.
2117	!! Prewarning !!	P-Warning 2/T= as no. 2116	as no. 2116	-	P-Warning 2: as no. 2116

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
2118	!! Prewarning !!	P-Warning 3/T= as no. 2116	as no. 2116	-	P-Warning 3: as no. 2116
2119	!! Prewarning !!	P-Warning 4/T= as no. 2116	as no. 2116	-	P-Warning 4: as no. 2116
2120	!! Prewarning !!	P-Warning 5/T= as no. 2116	as no. 2116	-	P-Warning 5: as no. 2116
2121	!! Prewarning !!	P-Warning 6/T= as no. 2116	as no. 2116	-	P-Warning 6: as no. 2116
2122	!! Prewarning !!	P-Warning 7/T= as no. 2116	as no. 2116	-	P-Warning 7: as no. 2116
2123	!! Prewarning !!	P-Warning 8/T= as no. 2116	as no. 2116	-	P-Warning 8: as no. 2116
2124	!! Prewarning !!	P-Warning 9/T= as no. 2116	as no. 2116	-	P-Warning 9: as no. 2116
2125	!! Prewarning !!	P-Warning 10/T= as no. 2116	as no. 2116	-	P-Warning 10: as no. 2116
2126	!! Prewarning !!	P-Warning 11/T= as no. 2116	as no. 2116	-	P-Warning 11: as no. 2116
2127	!! Prewarning !!	P-Warning 12/T= as no. 2116	as no. 2116	-	P-Warning 12: as no. 2116
2128	!! Prewarning !!	P-Warning 13/T= as no. 2116	as no. 2116	-	P-Warning 13: as no. 2116
2129	!! Prewarning !!	P-Warning 14/T= as no. 2116	as no. 2116	-	P-Warning 14: as no. 2116
2130	!! Prewarning !!	P-Warning 15/T= as no. 2116	as no. 2116	-	P-Warning 15: as no. 2116
2131	!! Prewarning !!	P-Warning 16/T= as no. 2116	as no. 2116	-	P-Warning 16: as no. 2116
2132	!! Prewarning !!	P-Warning 17/T= as no. 2116	as no. 2116	-	P-Warning 17: as no. 2116
2133	!! Prewarning !!	P-Warning 18/T= as no. 2116	as no. 2116	-	P-Warning 18: as no. 2116
2134	!! Prewarning !!	P-Warning 19/T= as no. 2116	as no. 2116	-	P-Warning 19: as no. 2116
2135	!! Prewarning !!	P-Warning 20/T= as no. 2116	as no. 2116	-	P-Warning 20: as no. 2116
2136	!! Prewarning !!	Thermistor X3:92/93	Wrg>PTC X3:92/93	-	Only if OPTION Periphery 2 or 4 available. Thermistor input at terminal X3:92/93 has tripped. Device (usually the motor) is overloaded; reduce the load PTC-sensor of which is connected to terminal –X3:92/93, recheck.
2137	!! Prewarning !!	T-rectifier too low	Wrg>T-rect.t.low	-	Temperature at dissipator (measuring point rectifier) too low (tripping at 0°C). Heat up the operating environment;
2138	!! Prewarning !!	T-rectifier too high	Wrg>T-rect.t.high	-	Temperature at dissipator (measuring point rectifier) too high. Cool down the operating environment; reduce the load; clean the air filter; recheck the fan of the device
2139	!! Prewarning !!	T-cabinet too high	Wrg>T-cab.t.high	-	Temperature at air intake of control cabinet too high. Cool down the operating environment; reduce the load; clean the air filter; recheck the fan of the device
2144	!! Prewarning !!	Fault Synch. LSC	Wrg>Synch. LSC		If several inverters drive a motor/generator, all inverters must be synchronized. To this all inverters are linked via fiber optic cable, connected on PCB LSC -A51. Check this fiber optic cable connection. Check whether the parameters are the same in P-Mains power conv. at all inverters.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
2145	!!Suppressed fault!!	EarthCurrentMetering	FtS>I-EarthMeter.	-	All fault messages with the text !!Suppressed fault!! are faults that are normally causing a cutoff. By parameterizing function "P-MONITORING/P-Fault suppression/T = Text selection values", these monitoring actions however do no longer cause a cutoff but only provide an indication on the display. The explanations for what to do in case of the faults you will find below, under the respective fault.
2146	!!Suppressed fault!!	Temperature inside	FtS>Temp.inside	-	ditto
2147	!!Suppressed fault!!	Temp.Sensor Cool.1	FtS>TmpSens.Cool1	-	ditto
2148	!!Suppressed fault!!	Temp.Sensor Cool.2	FtS>TmpSens.Cool2	-	ditto
2149	!!Suppressed fault!!	Temp.Sensor Cool.3	FtS>TmpSens.Cool3	-	ditto
2150	!!Suppressed fault!!	Temp.Sensor Cool.4	FtS>TmpSens.Cool4	-	ditto
2151	!!Suppressed fault!!	Temp.Sensor Cool.5	FtS>TmpSens.Cool5	-	ditto
2152	!!Suppressed fault!!	TempSensorRectifier	FtS>TmpSensRectif	-	ditto
2153	!!Suppressed fault!!	TempSensorCabinet	FtS>TmpSensCabin.	-	ditto
2157	!!Suppressed fault!!	ResistOutpFilter	FtS>R-outpFilter	-	ditto
2158	!!Suppressed fault!!	IntermCircFuse	FtS>IC-fusing	-	ditto
2159	!!Suppressed fault!!	InputReactor 1	FtS>OutpReactor 1	-	ditto
2160	!!Suppressed fault!!	InputReactor 2	FtS>OutpReactor 2	-	ditto
2161	!!Suppressed fault!!	OutputReactor 1	FtS>InpReactor 1	-	ditto
2162	!!Suppressed fault!!	OutputReactor 2	FtS>InpReactor 2	-	ditto
2163	!!Suppressed fault!!	Diff. current input	FtS>DiffCurr	-	ditto
2164	!!Suppressed fault!!	Fault tacho	FtS>Fault Tacho	-	ditto
2165	!!Suppressed fault!!	T-CPU too high	FtS>T-CPU too hi	-	ditto
2166	!!Suppressed fault!!	T-CPU too low	FtS>T-CPU too low	-	ditto
2167	!!Suppressed fault!!	T-cooler too high	FtS>T-Cool. t.hi	-	ditto
2168	!!Suppressed fault!!	T-cooler too low	FtS>T-Cool.t.low	-	ditto
2169	!!Suppressed fault!!	T-rectifier too low	FtS>T-rect.t.low	-	ditto
2170	!!Suppressed fault!!	T-rectifier too high	FtS>T-rect.t.high	-	ditto
2171	!!Suppressed fault!!	T-cabinet too high	FtS>T-cab.t.high	-	ditto
2175	!!Suppressed fault!!	Interr. motor cable	FtS>Interr.M-cbl	-	ditto
2176	!!Suppressed fault!!	Diff set/act	FtS>Diff set/act	-	ditto

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
2177	!!Suppressed fault!!	Set/act-sign	FtS>Set/act-sign	-	ditto
2178	!!Suppressed fault!!	MainCntctr	FtS>Main contctr.	-	ditto
2179	!!Suppressed fault!!	Undervoltage	FtS>Undervoltage	-	ditto
2180	!!Suppressed fault!!	MainsPhaseRectifier1	FtS>MainsPh.Rec.1	-	ditto
2181	!!Suppressed fault!!	MainsPhaseRectifier2	FtS>MainsPh.Rec.2	-	ditto

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
2190	!!Suppressed fault!!	P-failure 1/T = Cabinet heater, Motor heater, MotorBearingTemp., MotorWindingTemp., Insulation Fault, Fan external, Cabinet fan, external, Set value < 4 mA, Motor, Transformer, Temp.Motor, Temp.Transform., I-asymm. motor, Circuit breaker, Fuse, Fusing mains 1, Fusing mains 2, Undervoltage, Overspeed, Underspeed, Motor stalled, set value lost, Setp/actv.dev, Ball valve open, Ball valve closed, Control voltage, Motor overpress., Switch high volt., Control transf., Ind. mains volt., Filter cabinet, Aux. devices, EarthCurr., prog. Text1, prog. Text2, prog. Text3, prog. Text4, prog. Text5, prog. Text6, prog. Text7, prog. Text8, prog. Text9, prog. Text10	FtS>CabinetHeater, FtS>Motor heater, FtS>M-BearingTemp, FtS>M-WindingTemp, FtS>InsulationFtS, FtS>Fan external, FtS>CabinetFan, FtS>external, FtS>SetValue <4mA, FtS>Motor, FtS>Transformer, FtS>Motor-Temp., FtS>Transf-Temp., FtS>I-asymm.motor, FtS>Circ. breaker, FtS>Fuse, FtS>Fusg. mains 1, FtS>Fusg. mains 2, FtS>Undervoltage, FtS>Overspeed, FtS>Underspeed, FtS>motor stalled, FtS>set val.lost, FtS>Setp/actv.dev, FtS>Ball valve op, FtS>Ball valve cl, FtS>Control volt., FtS>Motor overpr., FtS>Switch high V, FtS>Contr transf., FtS>Ind. mains V, FtS>Filter cab., FtS>Aux. devices, FtS>EarthCurr., FtS>prog. Text1, FtS>prog. Text2, FtS>prog. Text3, FtS>prog. Text4, FtS>prog. Text5, FtS>prog. Text6, FtS>prog. Text7, FtS>prog. Text8, FtS>prog. Text9, FtS>prog. Text10	-	ditto
2191	!!Suppressed fault!!	P-failure 2/T= as no. 2190	as no. 2190	-	ditto
2192	!!Suppressed fault!!	P-failure 3/T= as no. 2190	as no. 2190	-	ditto

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
2193	!!Suppressed fault!!	P-failure 4/T= as no. 2190	as no. 2190	-	ditto
2194	!!Suppressed fault!!	P-failure 5/T= as no. 2190	as no. 2190	-	ditto
2195	!!Suppressed fault!!	P-failure 6/T= as no. 2190	as no. 2190	-	ditto
2196	!!Suppressed fault!!	P-failure 7/T= as no. 2190	as no. 2190	-	ditto
2197	!!Suppressed fault!!	P-failure 8/T= as no. 2190	as no. 2190	-	ditto
2198	!!Suppressed fault!!	P-failure 9/T= as no. 2190	as no. 2190	-	ditto
2199	!!Suppressed fault!!	P-failure 10/T= as no. 2190	as no. 2190	-	ditto
2200	!!Suppressed fault!!	P-failure 11/T= as no. 2190	as no. 2190	-	ditto
2201	!!Suppressed fault!!	P-failure 12/T= as no. 2190	as no. 2190	-	ditto
2202	!!Suppressed fault!!	T-heat sink asymm.	FtS>T-Cooler asym		ditto
2225	!!Suppressed fault!!	MainsPhaseRectifier3	FtS>MainsPh.Rec.3		ditto
2226	!!Suppressed fault!!	MainsPhaseRectifier4	FtS>MainsPh.Rec.4		ditto
2228	!!Suppressed fault!!	Temp.-sensor Sig.Brd	FtS>T-Sens. Brd1		ditto
2229	!!Suppressed fault!!	Temp.-sensor brkUnit	FtS>T-Sens. Brd2		ditto
2235	!!Suppressed fault!!	T-cooler 1 too low	FtS>T-Cool.1 t.lo		ditto
2236	!!Suppressed fault!!	T-cooler 2 too low	FtS>T-Cool.2 t.lo		ditto
2237	!!Suppressed fault!!	T-cooler 3 too low	FtS>T-Cool.3 t.lo		ditto
2238	!!Suppressed fault!!	T-cooler 4 too low	FtS>T-Cool.4 t.lo		ditto
2239	!!Suppressed fault!!	T-cooler 5 too low	FtS>T-Cool.5 t.lo		ditto
2240	!!Suppressed fault!!	T-cooler 1 too high	FtS>T-Cool.1 t.hi		ditto
2241	!!Suppressed fault!!	T-cooler 2 too high	FtS>T-Cool.2 t.hi		ditto
2242	!!Suppressed fault!!	T-cooler 3 too high	FtS>T-Cool.3 t.hi		ditto
2243	!!Suppressed fault!!	T-cooler 4 too high	FtS>T-Cool.4 t.hi		ditto
2244	!!Suppressed fault!!	T-cooler 5 too high	FtS>T-Cool.5 t.hi		ditto
2248	!!Suppressed fault!!	T-cabinet too low	FtS>T-cab.t.low		ditto
2253	!!Suppressed fault!!	P-failure 13/T= as no. 2190	as no. 2190		ditto
2254	!!Suppressed fault!!	P-failure 14/T= as no. 2190	as no. 2190		ditto
2255	!!Suppressed fault!!	P-failure 15/T= as no. 2190	as no. 2190		ditto
2256	!!Suppressed fault!!	P-failure 16/T= as no. 2190	as no. 2190		ditto
2263	!!Suppressed fault!!	Overcurrent U	FtS>Overcurr. U		ditto

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
2264	!!Suppressed fault!!	Overcurrent V	FtS>Overcurr. V		ditto
2265	!!Suppressed fault!!	Overcurrent W	FtS>Overcurr. W		ditto
2266	!!Suppressed fault!!	Zero trace faulty	FtS>Zero trace		ditto
2275	!! Prewarning !!	Standby fan	Wrg>Stdst.fan		Fan monitoring has tripped. Re-engage the automatic circuit breakers –F8 and –F9; recheck the fan of the device; recheck input at PCB Signals –A13-X81:8 : 24V=good, 0V=warning
2292	!! Prewarning !!	SNTP sync.	Wrg>SNTP sync.		Synchronization of the internal clock via SNTP not successful. Check your network access, the parameterized IP-address and the acces-sibility of the NTP server.
2500	!! Fault !!	P-failure 13/T= as no. 3180	as no. 3180		P-failure 13: as no. 3180
2501	!! Fault !!	P-failure 14/T= as no. 3180	as no. 3180		P-failure 14: as no. 3180
2502	!! Fault !!	P-failure 15/T= as no. 3180	as no. 3180		P-failure 15: as no. 3180
2503	!! Fault !!	P-failure 16/T= as no. 3180	as no. 3180		P-failure 16: as no. 3180
2541	!! Fault !!	Overcurrent U	Flt>Overcurr. U		Overcurrent at inverter phase U; The inverter could not regulate the load changes. Adjust the acc. Time slowlier. Damp the load. Contact our service station.
2542	!! Fault !!	Overcurrent V	Flt>Overcurr. V		Overcurrent at inverter phase V; The inverter could not regulate the load changes. Adjust the acc. Time slowlier. Damp the load. Contact our service station.
2543	!! Fault !!	Overcurrent W	Flt>Overcurr. W		Overcurrent at inverter phase W; The inverter could not regulate the load changes. Adjust the acc. Time slowlier. Damp the load. Contact our service station.
2545	!! Fault !!	Zero trace faulty	Flt>Zero trace		With field-oriented control (FOC) and synchronous motors only: the re-quired zero line of speed sensor is not correctly connected or defective. Recheck the connected sensor with its wiring. Following sensors could be concerned: Sin-cos-output, wired to plug –X25. TTL-output, wired to plug -X25. HTL-output, wired to plug –X101
2600	!! Fault !!	P-failure 13/T= as no. 3180	as no. 3180		P-failure 13: as no. 3180
2601	!! Fault !!	P-failure 14/T= as no. 3180	as no. 3180		P-failure 14: as no. 3180
2602	!! Fault !!	P-failure 15/T= as no. 3180	as no. 3180		P-failure 15: as no. 3180
2603	!! Fault !!	P-failure 16/T= as no. 3180	as no. 3180		P-failure 16: as no. 3180
2641	!! Fault !!	Overcurrent U	Flt>Overcurr. U		as no. 2541, but not retained
2642	!! Fault !!	Overcurrent V	Flt>Overcurr. V		as no. 2542, but not retained
2643	!! Fault !!	Overcurrent W	Flt>Overcurr. W		as no. 2543, but not retained

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault suppression on	Description
2645	!! Fault !!	Zero trace faulty	Flt>Zero trace		as no. 2545, but not retained
3000	!! Inverter fault !!	download texts	IF>download texts	-	The transmission of another display language from IMS to the inverter could not be completed correctly.ATTENTION: most probably all texts in the display are cancelled.Try again to transmit the new language. If the message appears again contact our service station.
3001	!! Inverter fault !!	Power section U+!	IF>Power.Sect.U+	-	Fault in converter phase U+ (e.g. power section, triggering, control electronics) Contact our service station; if necessary, replace the defective PCBs.
3002	!! Inverter fault !!	Power section U-!	IF>Power.Sect.U-	-	Fault in converter phase U+ (e.g. power section, triggering, control electronics) Contact our service station; if necessary, replace the defective PCBs.
3003	!! Inverter fault !!	Power section V+!	IF>Power.Sect.V+	-	Fault in converter phase V+ (e.g. power section, triggering, control electronics) Contact our service station; if necessary, replace the defective PCBs.
3004	!! Inverter fault !!	Power section V-!	IF>Power.Sect.V-	-	Fault in converter phase V+ (e.g. power section, triggering, control electronics) Contact our service station; if necessary, replace the defective PCBs.
3005	!! Inverter fault !!	Power section W+!	IF>Power.Sect.W+	-	Fault in converter phase W+ (e.g. power section, triggering, control electronics) Contact our service station; if necessary, replace the defective PCBs.
3006	!! Inverter fault !!	Power section W-!	IF>Power.Sect.W-	-	Fault in converter phase W+ (e.g. power section, triggering, control electronics) Contact our service station; if necessary, replace the defective PCBs.
3007	!! Inverter fault !!	Braking transistor	IF>BrakeTransist.	-	Fault at brake transistor (e.g. power section, triggering, control electronics) Contact our service station; if necessary, replace the defective PCBs.
3008	!! Inverter fault !!	Current asymmetry U	IF>C-asymmetry U	-	This fault can occur only at inverters with several converter systems connected in parallel, if the current of one system is so asymmetric in phase U, that the system becomes overloaded. Check whether the motor supply lines are set up symmetrically and if all motor connections are put on correctly and reliably tightened. In case you find no discrepancies please inform our service station.
3009	!! Inverter fault !!	Current asymmetry V	IF>C-asymmetry V	-	This fault can occur only at inverters with several converter systems connected in parallel, if the current of one system is so asymmetric in phase V, that the system becomes overloaded. Check whether the motor supply lines are set up symmetrically and if all motor connections are put on correctly and reliably tightened. In case you find no discrepancies please inform our service station.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault suppression on	Description
3010	!! Inverter fault !!	Current asymmetry W	IF>C-asymmetry W	-	This fault can occur only at inverters with several converter systems connected in parallel, if the current of one system is so asymmetric in phase W, that the system becomes overloaded. Check whether the motor supply lines are set up symmetrically and if all motor connections are put on correctly and reliably tightened. In case you find no discrepancies please inform our service station.
3011	!! Inverter fault !!	Commun.uP->DSP	IF>Comm.uP->DSP	-	Communication C161 (processor) to DSP (Digital Signal Processor) interfered. Contact our service station; if necessary, replace the defective PCBs.
3012	!! Inverter fault !!	Reset uP-Program	Reset uP-Prog.	-	Fault in the C161-program (e.g. stack overflow, wrong access to address etc.) Contact our service station; if necessary, replace the defective PCBs.
3013	!! Inverter fault !!	Reset uP-Commun.	Reset uP-Comm.	-	Fault in the communication with processor C161 (reset by DSP) Contact our service station; if necessary, replace the defective PCBs.
3014	!! Inverter fault !!	Reset uP-Watchdog	Reset uP-W-D.	-	Fault in the C161-program with release of Watchdog. Contact our service station; if necessary, replace the defective PCBs.
3015	!! Inverter fault !!	Reset uP-Interrupt	Reset uP-Int.	-	Fault in the C161-program owing to faulty interrupt-release. Contact our service station; if necessary, replace the defective PCBs.
3016	!! Inverter fault !!	Commun.DSP->uP	IF>Comm.DSP->uP	-	Communication DSP (Digital Signal Processor) to C161 (processor) interfered. Contact our service station; if necessary, replace the defective PCBs.
3017	!! Inverter fault !!	Current transformer	IF>CurrentTransf.	-	Hall-sensors –T1, 2, 3 defective. Recheck the plug at the sensors for disconnection. If necessary, contact our service station.
3018	!! Inverter fault !!	Power unit unknown	IF>Pow.Sec. unkn.	-	Coding of power section is unknown, (control electronics, plug connections, wrong wiring, existent type of device not supported by this software); Contact our service station.
3019	!! Inverter fault !!	Wrong power unit	IF>Pow.Sec. wrong	-	Coding of power section is not correct, (control electronics, plug connections, wrong wiring, existent type of device not fitting the originally parameterized control electronics); contact our service station.
3020	!! Inverter fault !!	Temperature inside	IF>Temp.inside	low	Fault temperature sensor for inverter interior. KTY82-110, -R2 on PCB –A1 Control electronics has a short or a disconnection. Recheck sensor –A1-R2, replace it if necessary.
3021	!! Inverter fault !!	Temp.Sensor Cool.1	IF>TmpSens.Cool.1	low	Fault in temperature sensor for dissipator 1. With compact devices: thermistor –B1 to input of PCB Driver –A12- X15:1-2 has a short or a disconnection. With cabinet mount devices: thermistor –B1 to input of PCB Signals –A13- X51:1-2 has a short or a disconnection. Recheck sensor B1, replace it if necessary.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3022	!! Inverter fault !!	Temp.Sensor Cool.2	IF>TmpSens.Cool.2	low	Fault in temperature sensor for dissipator 2. Thermistor –B2 to input of PCB Signals –A13- X52:1-2 has a short or a disconnection. Recheck sensor B2, replace it if necessary.
3023	!! Inverter fault !!	Temp.Sensor Cool.3	IF>TmpSens.Cool.3	low	Fault at temperature sensor for dissipator 3. Thermistor –B3 to input of PCB Signals –A13- X53:1-2 has a short or a disconnection. Recheck sensor B3, replace it if necessary.
3024	!! Inverter fault !!	Temp.Sensor Cool.4	IF>TmpSens.Cool.4	low	Fault at temperature sensor for dissipator 4. Thermistor –B4 to input of PCB Signals –A13- X54:1-2 has a short or a disconnection. Recheck sensor B4, replace it if necessary.
3025	!! Inverter fault !!	Temp.Sensor Cool.5	IF>TmpSens.Cool.5	low	Fault at temperature sensor for dissipator 5. Thermistor –B5 to input of PCB Signals –A13- X55:1-2 has a short or a disconnection. Recheck sensor B5, replace it if necessary.
3026	!! Inverter fault !!	TempSensorRectifier	IF>TmpSens.Rectif	low	Fault at temperature sensor for the dissipator at the rectifier am rectifier (top). Thermistor –B6 to input at PCB Signals –A13-X56:1-2 has a short or a disconnection. Check sensor B6, replace it if necessary.
3027	!! Inverter fault !!	TempSensorCabinet	IF>TmpSens.Cabin.	low	Fault at temperature sensor for inverter interior. Thermistor –B7 to input of PCB Signals –A13-X57:1-2 has a short or a disconnection. Check sensor B7, replace it if necessary.
3028	!! Inverter fault !!	Current control	IF>CurrentControl	-	PCB Current control defective. Replace the current control PCBs. Replace the 60-pole flat cable conductors between current control and PCB Control electronics. Contact our service station.
3029	!! Inverter fault !!	ResistOutpFilter	IF>R-outpFilter	mean	The temperature of the resistor of the output filter is too high. Clean the air filter; recheck the fans of the device. Recheck the temp.contact –B11: input at PCB Signals –A13-X81:9: 24V=good, 0V=fault. Cool down the operation environment; measure the length of the motor conductors, note the type of the motor conductors and contact our service station. Maybe the motor conductors are too long for the installed filter.
3030	!! Inverter fault !!	IntermCircFuse	IF>IC-fusing	high	The fuses for the intermediate circuit (ultra-quick action fuses) have tripped. Recheck the monitoring contact of F41/42: input at PCB Signals -A13-X81:10: 24V=good, 0V=fault. Take out the fuses and check with the ohmmeter whether the fuses have really tripped. After that contact our service station.
3031	!! Inverter fault !!	InputReactor 1	IF>InpReactor 1	low/ mean	The temperature of the input reactor L8 (L8.1) is too high. Clean the air filter; recheck the fans of the device. Recheck the temp.contact of the reactor: input at PCB Signals –A13-X81:16: 24V=good, 0V=fault. Cool down the operation environment.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3032	!! Inverter fault !!	InputReactor 2	IF>InpReactor 2	low/ mean	The temperature of the input reactor L8.2 is too high. Clean the air filter; recheck the fans of the device. Recheck the temp. contact of the reactor: input at PCB Signals –A13-X81:15: 24V=good, 0V=fault. Cool down the operation environment.
3033	!! Inverter fault !!	OutputReactor 1	IF>OutpReactor 1	low/ mean	The temperature of the output reactor L1 (L1.1) is too high. Clean the air filter; recheck the fans of the device. Recheck the temp.contact of the reactor: input at PCB Signals –A13-X81:12: 24V=good, 0V=fault. Cool down the operation environment; measure the length of the motor conductors, note the type of the motor conductors and contact our service station. Maybe the motor conductors are too long for the installed filter.
3034	!! Inverter fault !!	OutputReactor 2	IF>OutpReactor 2	low/ mean	The temperature of the output reactor L1.2 is too high. Clean the air filter; recheck the fans of the device. Recheck the temp.contact of the reactor: input at PCB Signals –A13-X81:11: 24V=good, 0V=fault. Cool down the operation environment; measure the length of the motor conductors, note the type of the motor conductors and contact our service station. Maybe the motor conductors are too long for the installed filter.
3035	!! Inverter fault !!	I2C-Bus	IF>I2C-Bus	-	The inverter-internal I2C-bus is defective. Contact our service station.
3036	!! Inverter fault !!	EarthCurrentMetering	IF>I-EarthMeter.	low	Summation current transformer –T20 not plausible. Check the cable to the current transformer. Contact our service station.
3037	!! Inverter fault !!	Ter. X81:13 inactiv	IF>X83:13 inactiv	-	By standard this input is not assigned. Check the documentation which monitoring is assigned to input –X81:13 of PCB Signals –A13. 24V=good, 0V=fault
3038	!! Inverter fault !!	Ter. X81:14 inactiv	IF>X83:14 inactiv	-	By standard this input is not assigned. Check the documentation which monitoring is assigned to input –X81:14 of PCB Signals –A13. 24V=good, 0V=fault
3039	!! Inverter fault !!	Test safe torque off	IF>Test STO	-	1. The test of the two shut down paths for safe standstill results in a fault. Always contact our service station as this involves a safety-relevant function. See also the inverter description 4BS0751, Chapter Options, board I/O. 2. You have set switch S3 on board I/O DI/DO to single-circuit trip and parameter "P-INVERTER DATA:STO" to two-circuit trip. Terminal input -X2:24 is simultaneously deactivated. Correct the setting. (NOTICE!: safety-related function)
3040	!! Inverter fault !!	Test PTC X3:90/91	IF>Test X3:90/91	-	One of the two disconnection paths for safe halt is defective. As it is a safety relevant function please do contact our service station. See also the description of the inverter 4BS0751, chapter Options, PCB Peripherals
3044	!! Inverter fault !!	PerformParameters	IF>PerformParam	-	Hardware fault PCB Control electronics or PCB Current control. Contact our service station.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3060	!! Fault !!	Interr. RS485 (X26)	Flt>RS485 (X26)		The fault occurs if: - the external display is not correctly connected to the RS485 interface -X26 or if it is disconnected - at "P-INTERFACES/P-RS485(X26)=failure" is set and - a RS485 setpoint source is parameterized. If there is an external display at the RS485-interface –X26, connect / commission as per description, chapter Communication / External display. If there is no external display, recheck the parameter setting in menus "P-SPEED DEFAULT, PROCESS CONTROL, CONTROL, CURRENT CONTROL/..Setpoint source". If a parameter is on RS485 or, under "P-OPERATION", if a parameter is on …..ext.Bdf relocate these parameters to another source.
3061	!! Fault !!	Diff. current motor	Flt>I-diff. Motor		The difference current supervision in the inverter has tripped. An earth current more than at "P-INVERTERDATA/P-monitoring/I-earth MSR" is flowing. Check where the earth fault is located. The earth fault can be located either in the inverter, downstream converter current transformers, in the motor conductors or in the motor. Possibly, the parameter "I-earth MSR" con adjusted to a higher level. In this case contact our service station.
3075	!! Fault !!	T-cabinet too low	Flt>T-cab.t.low		Temperature at air intake of control cabinet too low (trip at -5°C). Heat up the operating environment;
3077	!! Fault !!	T-cooler 2 too high	Flt>T-Cool.2 t.hi		Temperature at dissipator 2 too high (cut-off temp. depending on the device). Cool down the operation environment; reduce the load; clean the air filter; recheck the fan of the device.
3078	!! Fault !!	T-cooler 3 too high	Flt>T-Cool.3 t.hi		Temperature at dissipator 3 too high (cut-off temp. depending on the device). Cool down the operation environment; reduce the load; clean the air filter; recheck the fan of the device.
3079	!! Fault !!	T-cooler 4 too high	Flt>T-Cool.4 t.hi		Temperature at dissipator 4 too high (cut-off temp. depending on the device). Cool down the operation environment; reduce the load; clean the air filter; recheck the fan of the device.
3080	!! Fault !!	T-cooler 5 too high	Flt>T-Cool.5 t.hi		Temperature at dissipator 5 too high (cut-off temp. depending on the device). Cool down the operation environment; reduce the load; clean the air filter; recheck the fan of the device.
3081	!! Fault !!	T-cooler 1 too low	Flt>T-Cool.1 t.lo		Temperature at dissipator 1 too low (cut-off at -5° C). Heat up the operation environment;
3082	!! Fault !!	T-cooler 2 too low	Flt>T-Cool.2 t.lo		Temperature at dissipator 2 too low (cut-off at -5° C). Heat up the operation environment;
3083	!! Fault !!	T-cooler 3 too low	Flt>T-Cool.3 t.lo		Temperature at dissipator 3 too low (cut-off at -5° C). Heat up the operation environment;

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3084	!! Fault !!	T-cooler 4 too low	Flt>T-Cool.4 t.lo		Temperature at dissipator 4 too low (cut-off at -5° C). Heat up the operation environment;
3085	!! Fault !!	T-cooler 5 too low	Flt>T-Cool.5 t.lo		Temperature at dissipator 5 too low (cut-off at -5° C). Heat up the operation environment;
3094	Fault	T-rectifier too low	Flt>T-rect.t.low	mean	Temperature of the dissipator of the rectifier (top) too low (no tripping with -5°C). Heat up the operation environment.
3095	Fault	T-rectifier too high	Flt>T-rect.t.high	mean	Temperature of the dissipator of the rectifier too high (cutoff temperature depending on the capacity). Cool down the operation environment; reduce the load; clean the air filter; recheck the fans of the devices. For devices with 12 pulses or more: maybe the rectifier is overloaded an asymmetric current. Measure the input currents at the mains side with a tong-test instrument and contact our service station.
3096	Fault	T-cabinet too high	Flt>T-cab.t.high	mean	Temperature in the cabinet too high (cutoff with 55°C). Cool down the operation environment; reduce the load; clean the air filter; recheck the fans of the devices. In case of water-cooled devices: flow and return are possibly mixed up.
3100	Fault	Overvoltage	Flt>Overvoltage	-	Voltage in intermediate circuit too high. Line voltage too high: reduce the line voltage; extreme regenerative operation: set slower braking time or add a brake transistor/resistor; extremely fast braking time: set slower braking time.
3101	Fault	Undervoltage	Flt>Undervoltage	mean	Voltage in intermediate circuit too low. Line voltage failing totally: reconnect the line voltage; failure of a phase: recheck the line voltage in all three phases; fuse defective: replace the fuse.
3103	Fault	Earth fault	Flt>Earth fault	-	Earth fault at output side of motor or in motor supply line. Repair the earth fault; if necessary, contact our service station.
3104	Fault	S7 inactive	Flt>S7 inactive	-	1. If you have not installed any board I/O -A95 in your inverter, and you do not wish to use function "Safe torque off" or "ATEX motor temperature monitoring", then switch S7 on board CB08, -A1 must be closed. 2. If you have installed a board I/O -A95 in your inverter, then contact a service station or the factory. 3. When checking the "Safe torque off" function you obtain this fault when the 2nd safety circuit at -X2:24 responds. A board I/O 3 or 4 is installed. Switch S3 on board I/O DI/DO is closed, and therefore the two-circuit "Safe torque off" is activated per hardware. Parameter "P-INVERTER DATA/STO = X2:20" and therefore set to single circuit. Depending on the requirements of your specific application, you must set the parameters as well as also switch S3 to single or two-circuit trip. 4. Board PTC thermistor evaluation is not installed: Switch S12 on –A95 board I/O DI/DO must be closed. If, in this case, switch S12 is open, then also this fault is output. (NOTICE: safety-related function).

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault suppression on	Description
3105	Fault	SC phase U	Flt>Short Ph.U	-	Short in inverter phase U; repair short in conductor inverter output/motor or within the motor; if necessary, contact our service station.
3106	Fault	SC phase V	Flt>Short Ph.V	-	Short in inverter phase V; repair short in conductor inverter output/motor or within the motor; if necessary, contact our service station.
3107	Fault	SC phase W	Flt>Short Ph.W	-	Short in inverter phase W; repair short in conductor inverter output/motor or within the motor; if necessary, contact our service station.
3108	Fault	Fault tacho	Flt>Fault Tacho	high	With field-oriented control (FOC) only: the required speed sensor is not correctly connected or defective. Recheck the connected sensor with its wiring. Following sensors could be concerned: Sin-cos-output, wired to plug –X25. TTL-output, wired to plug –X25. HTL-output, wired to plug –X101
3113	Fault	T-CPU too high	Flt>T-CPU too hi	mean	Temperature on PCB Control electronics –A1 too high (cutoff at 75°C). Cool down the operation environment; reduce the load; clean the air filter.
3114	Fault	T-CPU too low	Flt>T-CPU too low	mean	Temperature on PCB Control electronics –A1 too low (cutoff at -5°C). Heat up operation environment.
3115	Fault	T-cooler too high	Flt>T-Cool. t.hi	mean	Temperature at dissipators too high (cut-off temp. depending on the device). Cool down the operation environment; reduce the load; clean the air filter; recheck the fan of the device.
3116	Fault	T-cooler too low	Flt>T-Cool.t.low	mean	Temperature at dissipators too low (cut-off at -5° C). Heat up the operation environment.
3117	Fault	T-cooler 1 too high	Flt>T-Cool.1 t.hi		Temperature at dissipator 1 too high (cut-off temp. depending on the device). Cool down the operation environment; reduce the load; clean the air filter; recheck the fan of the device.
3125	Fault	Diff set/act	Flt>Diff set/act	low	With field-oriented control (FOC) only: read-out inverter output frequency is not plausible regarding the speed that is fed-back by the speed sensor. Recheck the parameterizing at "P-MACHINE POWER CONF/P-motor data/Sensor" or "Pulses/360" or sensor signals. Recheck the connected sensor HTL/TTL or sincos at plugs –X25 or -X101, possibly the tracks are mixed up.
3126	Fault	Set/act-sign	Flt>Set/act-sign	low	With field-oriented control (FOC) only: the drive runs in opposite direction, related to the read-out rotating field. Cause e.g. wrong connection of the lines for the motor or the sensor : recheck the motor or sensor lines and connect correctly; Recheck whether the parameterizing at "P-MACHINE POWER CONF/P-motor data:Sensor" or at "Pulses/360" or the sensor signals correspond with the actually installed sensor.
3127	Fault	MainsPhaseRectifier1	Flt>MainsPh.Rec.1	high	A mains phase at inverter rectifier 1 has failed: recheck the mains fuses; measure the line voltage.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3128	Fault	MainsPhaseRectifier2	Flt>MainsPh.Rec.2	high	A mains phase at inverter rectifier 2 has failed: recheck the mains fuses; measure the line voltage.
3129	Fault	Interruption BUS	Flt>Interrpt. BUS	-	The fault occurs when: - the external bus is not correctly connected or is disconnected - at "P-INTERFACES/P-Fieldbus/Rct.BUS=fault" is parameterized and - a bus-setp. value or act. value resp. op.-source has been parameterized. If you have the bus, carry out the connection/ commissioning acc. to de-scription 4BS0751, chapter Options/bus-PCBs. Recheck the bus-status on the basis of the available control-LEDs on the bus-PCB. If you have got no bus at all, recheck the parameter setting at "P-INTERFACES/Op.-source=BUS" or "Reset-source=BUS", or in the menus "P-speed default, P-process control, P-T-control, P-current control" a parameter is set to BUS. relocate these parameters to another source.
3130	Fault	BUS Hardware	Flt>BUS Hardware	-	The fault occurs when: - the inverter-internal connection to the bus does not work correctly - at "P-INTERFACES/P-Fieldbus/Rct.BUS=fault" is parameterized and - a BUS-setp. value or act. value resp. operating source is parameterized. If you have got the bus, replace the bus-PCB and/or the PCB –A1 Control electronics and contact our service station. If you have got no bus at all, recheck the parameter setting at "P-INTERFACES:Op.-source=BUS" or "Reset-source=BUS". Or in menus "P-speed default, P-process control, P-T-control, P-current control" a pa-rameter is set to BUS. relocate these parameters to another source.
3131	Fault	Contr. AD missing	Flt>contr. AD	-	This error occurs when under "P-INTERFACE/P-Fieldbus/Contr. AD" the parameterized bit in the control word is not specified by your control, the reaction under "P-INTERFACE/P-Fieldbus/Rct. BUS = Fault" is parameter-ized and a setpoint, the actual value or the operating source are parame-terized to BUS. If you have a BUS interface in the device, set the corresponding control word bit of your control to 1. If you do not have a BUS interface in your control, then check the parameterization of "P-INTERFACE/Op.-source=BUS" or "Reset source=BUS" or the setpoint sources in the menus of the control modes (e.g. "P-speed default, P-process control, …"). BUS may not be actively selected here.
3132	Fault	MainCntctr	Flt>Main contctr.	high	With main contactor at the motor side only: The main contactor feedback does not fit the read-out main contactor command. Recheck the wiring of the circuit of the main contactor. Recheck the wiring of the main contactor feedback contact (make contact). It has to go to the terminal that is param-eterized at "P-OPERATION/Feedb.MC".

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3133	Fault	Diff. current input	Flt>DiffCurr	high	The summation current transformer –T20 has tripped. An earth current of min. 2…4A is flowing (depending on the device). Check where the earth fault is located. The earth fault can be located either in the inverter, down-stream converter T20, in the motor conductors or in the motor. Possibly, the capacitive leakage current of the motor conductor to earth is too high. In this case contact our service station.
3134	Fault	T-heat sink asymm.	Flt>T-Cooler asym		The distribution of temperature on the power heatsink is asymmetrical. Check the air intake filter for dirt resp. Check the fan of the device.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault suppression on	Description
3180	Fault	P-Failure1/T = Cabinet heater, Motor heater, MotorBearingTemp., MotorWindingTemp., Insulation Fault, Fan external, Cabinet fan, external, Set value < 4 mA, Motor, Transformer, Temp.Motor, Temp.Transform., I-asymm. motor, Circuit breaker, Fuse, Fusing mains 1, Fusing mains 2, Undervoltage, Overspeed, Underspeed, Motor stalled, set value lost, Setp/actv.dev, Ball valve open, Ball valve closed, Control voltage, Motor overpress., Switch high volt., Control transf., Ind. mains volt., Filter cabinet, Aux. devices, EarthCurr., prog. Text1, prog. Text2, prog. Text3, prog. Text4, prog. Text5, prog. Text6, prog. Text7, prog. Text8, prog. Text9, prog. Text10	Flt>CabinetHeater, Flt>Motor heater, Flt>M-BearingTemp, Flt>M-WindingTemp, Flt>InsulationFlt, Flt>Fan external, Flt>CabinetFan, Flt>external, Flt>SetValue <4mA, Flt>Motor, Flt>Transformer, Flt>Motor-Temp., Flt>Transf-Temp., Flt>I-asymm.motor, Flt>Circ. breaker, Flt>Fuse, Flt>Fusg. mains 1, Flt>Fusg. mains 2, Flt>Undervoltage, Flt>Overspeed, Flt>Underspeed, Flt>motor stalled, Flt>set val.lost, Flt>Setp/actv.dev, Flt>Ball valve op, Flt>Ball valve cl, Flt>Control volt., Flt>Motor overpr., Flt>Switch high V, Flt>Contr transf., Flt>Ind. mains V, Flt>Filter cab., Flt>Aux. devices, Flt>EarthCurr., Flt>prog. Text1, Flt>prog. Text2, Flt>prog. Text3, Flt>prog. Text4, Flt>prog. Text5, Flt>prog. Text6, Flt>prog. Text7, Flt>prog. Text8, Flt>prog. Text9, Flt>prog. Text10	mean	This concerns a user defined fault. It is parameterized acc. to "P-FAILURES/P-Failure1/T = Text selection values". Here, the text of the fault message can be out of a selection standard texts (see left-hand column) or a programmed text. Normally, this is not a fault that is to be looked for in the inverter, it is to be found in the installation into which the inverter is integrated.
3181	Fault	P-failure 2/T= as no. 3180	as no. 3180	mean	P-failure 2: as no. 3180
3182	Fault	P-failure 3/T= as no. 3180	as no. 3180	mean	P-failure 3: as no. 3180

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault suppression on	Description
3183	Fault	P-failure 4/T= as no. 3180	as no. 3180	mean	P-failure 4: as no. 3180
3184	Fault	P-failure 5/T= as no. 3180	as no. 3180	mean	P-failure 5: as no. 3180
3185	Fault	P-failure 6/T= as no. 3180	as no. 3180	mean	P-failure 6: as no. 3180
3186	Fault	P-failure 7/T= as no. 3180	as no. 3180	mean	P-failure 7: as no. 3180
3187	Fault	P-failure 8/T= as no. 3180	as no. 3180	mean	P-failure 8: as no. 3180
3188	Fault	P-failure 9/T= as no. 3180	as no. 3180	mean	P-failure 9: as no. 3180
3189	Fault	P-failure 10/T= as no. 3180	as no. 3180	mean	P-failure 10: as no. 3180
3190	Fault	P-failure 11/T= as no. 3180	as no. 3180	mean	P-failure 11: as no. 3180
3191	Fault	P-failure 12/T= as no. 3180	as no. 3180	mean	P-failure 12: as no. 3180
3192	Fault	Interruption RS485	Flt>InterrpRS485	-	The fault occurs if: - the external display is not correctly connected to the RS485 interface or if it is disconnected - at P-INTERFACES/ P-RS485/RktRS485=failure is set and - a RS485 setpoint source is parameterized. If there is an external display at the RS485-interface –X51, connect / commission as per description 4BS0751, chapter Communication / External display. If there is no external display, recheck the parameter setting in menus "P-speed default, P-process control, P-T-control, P-current control:..Setpoint source". If a parameter is on "RS485" or, under "P-OPERATION", if a parameter is on "…..ext.Bdf" relocate these parameters to another source.
3194	Fault	Thermistor X3:90/91	Flt>PTC X3:90/91	-	The device, normally the motor whose thermistor is connected to terminals –X3:90/91, is getting too hot. Recheck the motor. Recheck the machine, usually the motor is overloaded.
3195	Fault	Safe torque off trig	Flt>STO tr.	-	This message is only output if parameter "P-INVERTER DATA/STO = X2:20/24" is set for a two-circuit trip. One contact of the external safe torque off must act on –X2:20, the second on –X2: 24. For this fault, one circuit has a fault condition. Carefully check both safe torque off circuits. NOTICE: Safety function; in case of doubt, contact our service station.
3200	!! Inverter fault !!	download texts	IF>download texts	-	as no. 3000, but not retained
3201	!! Inverter fault !!	Power section U+!	IF>Power.Sect.U+		as no. 3001, but not retained
3202	!! Inverter fault !!	Power section U-!	IF>Power.Sect.U-		as no. 3002, but not retained
3203	!! Inverter fault !!	Power section V+!	IF>Power.Sect.V+		as no. 3003, but not retained
3204	!! Inverter fault !!	Power section V-!	IF>Power.Sect.V-		as no. 3004, but not retained
3205	!! Inverter fault !!	Power section W+!	IF>Power.Sect.W+		as no. 3005, but not retained

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3206	!! Inverter fault !!	Power section W-!	IF>Power.Sect.W-		as no. 3006, but not retained
3207	!! Inverter fault !!	Braking transistor	IF>BrakeTransist.		as no. 3007, but not retained
3208	!! Inverter fault !!	Current asymmetry U	IF>C-asymmetry U		as no. 3008, but not retained
3209	!! Inverter fault !!	Current asymmetry V	IF>C-asymmetry V		as no. 3009, but not retained
3210	!! Inverter fault !!	Current asymmetry W	IF>C-asymmetry W		as no. 3010, but not retained
3211	!! Inverter fault !!	Commun.uP->DSP	IF>Comm.uP->DSP		as no. 3011, but not retained
3212	!! Inverter fault !!	Reset uP-Program	Reset DSP Prog.		as no. 3012, but not retained
3213	!! Inverter fault !!	Reset uP-Commun.	Reset DSP Commun.		as no. 3013, but not retained
3214	!! Inverter fault !!	Reset uP-Watchdog	Reset DSP W-D		as no. 3014, but not retained
3215	!! Inverter fault !!	Reset uP-Interrupt	Reset DSP Int.		as no. 3015, but not retained
3216	!! Inverter fault !!	Commun.DSP->uP	IF>Comm.DSP->uP		as no. 3016, but not retained
3217	!! Inverter fault !!	Current transformer	IF>CurrentTransf.		as no. 3017, but not retained
3218	!! Inverter fault !!	Power unit unknown	IF>Pow.Sec. unkn.		as no. 3018, but not retained
3219	!! Inverter fault !!	Wrong power unit	IF>Pow.Sec. wrong		as no. 3019, but not retained
3220	!! Inverter fault !!	Temperature inside	IF>Temp.inside		as no. 3020, but not retained
3221	!! Inverter fault !!	Temp.Sensor Cool.1	IF>TmpSens.Cool.1		as no. 3021, but not retained
3222	!! Inverter fault !!	Temp.Sensor Cool.2	IF>TmpSens.Cool.2		as no. 3022, but not retained
3223	!! Inverter fault !!	Temp.Sensor Cool.3	IF>TmpSens.Cool.3		as no. 3023, but not retained
3224	!! Inverter fault !!	Temp.Sensor Cool.4	IF>TmpSens.Cool.4		as no. 3024, but not retained
3225	!! Inverter fault !!	Temp.Sensor Cool.5	IF>TmpSens.Cool.5		as no. 3025, but not retained
3226	!! Inverter fault !!	TempSensorRectifier	IF>TmpSens.Rectif		as no. 3026, but not retained
3227	!! Inverter fault !!	TempSensorCabinet	IF>TmpSens.Cabin.		as no. 3027, but not retained
3228	!! Inverter fault !!	Current control	IF>CurrentControl		as no. 3028, but not retained
3229	!! Inverter fault !!	ResistOutpFilter	IF>R-outpFilter		as no. 3029, but not retained
3230	!! Inverter fault !!	IntermCircFuse	IF>IC-fusing		as no. 3030, but not retained
3231	!! Inverter fault !!	InputReactor 1	IF>InpReactor 1		as no. 3031, but not retained
3232	!! Inverter fault !!	InputReactor 2	IF>InpReactor 2		as no. 3032, but not retained
3233	!! Inverter fault !!	OutputReactor 1	IF>OutpReactor 1		as no. 3033, but not retained
3234	!! Inverter fault !!	OutputReactor 2	IF>OutpReactor 2		as no. 3034, but not retained
3235	!! Inverter fault !!	I2C-Bus	IF>I2C-Bus		as no. 3035, but not retained

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3236	!! Inverter fault !!	EarthCurrentMetering	IF>I-EarthMeter.		as no. 3036, but not retained
3237	!! Inverter fault !!	Ter. X81:13 inactiv	IF>X83:13 inactiv		as no. 3037, but not retained
3238	!! Inverter fault !!	Ter. X81:14 inactiv	IF>X83:14 inactiv		as no. 3038, but not retained
3239	!! Inverter fault !!	Test safe torque off	IF>Test STO		as no. 3039, but not retained
3240	!! Inverter fault !!	Test PTC X3:90/91	IF>Test X3:90/91		as no. 3040, but not retained
3244	!! Inverter fault !!	PerformParameters	IF>PerformParam		as no. 3044, but not retained
3260	!! Fault !!	Interr. RS485 (X26)	Flt>RS485 (X26)		as no. 3060, but not retained
3261	!! Fault !!	Diff. current motor	Flt>I-diff. Motor		as no. 3061, but not retained
3275	!! Fault !!	T-cabinet too low	Flt>T-cab.t.low		as no. 3075, but not retained
3277	!! Fault !!	T-cooler 2 too high	Flt>T-Cool.2 t.hi		as no. 3077, but not retained
3278	!! Fault !!	T-cooler 3 too high	Flt>T-Cool.3 t.hi		as no. 3078, but not retained
3279	!! Fault !!	T-cooler 4 too high	Flt>T-Cool.4 t.hi		as no. 3079, but not retained
3280	!! Fault !!	T-cooler 5 too high	Flt>T-Cool.5 t.hi		as no. 3080, but not retained
3281	!! Fault !!	T-cooler 1 too low	Flt>T-Cool.1 t.lo		as no. 3081, but not retained
3282	!! Fault !!	T-cooler 2 too low	Flt>T-Cool.2 t.lo		as no. 3082, but not retained
3283	!! Fault !!	T-cooler 3 too low	Flt>T-Cool.3 t.lo		as no. 3083, but not retained
3284	!! Fault !!	T-cooler 4 too low	Flt>T-Cool.4 t.lo		as no. 3084, but not retained
3285	!! Fault !!	T-cooler 5 too low	Flt>T-Cool.5 t.lo		as no. 3085, but not retained
3294	!! Fault !!	T-rectifier too low	Flt>T-rect.t.low		as no. 3094, but not retained
3295	!! Fault !!	T-rectifier too high	Flt>T-rect.t.high		as no. 3095, but not retained
3296	!! Fault !!	T-cabinet too high	Flt>T-cab.t.low		as no. 3096, but not retained
3300	!! Fault !!	Overvoltage	Flt>Overvoltage		as no. 3100, but not retained
3301	!! Fault !!	Undervoltage	Flt>Undervoltage		as no. 3101, but not retained
3303	!! Fault !!	Earth fault	Flt>Earth fault		as no. 3103, but not retained
3304	!! Fault !!	S7 inactive	Flt>S7 inactive		as no. 3104, but not retained
3305	!! Fault !!	SC phase U	Flt>Short Ph.U		as no. 3105, but not retained
3306	!! Fault !!	SC phase V	Flt>Short Ph.V		as no. 3106, but not retained
3307	!! Fault !!	SC phase W	Flt>Short Ph.W		as no. 3107, but not retained
3308	!! Fault !!	Fault tacho	Flt>Fault Tacho		as no. 3108, but not retained
3313	!! Fault !!	T-CPU too high	Flt>T-CPU too hi		as no. 3113, but not retained

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3314	!! Fault !!	T-CPU too low	Flt>T-CPU too low		as no. 3114, but not retained
3315	!! Fault !!	T-cooler too high	Flt>T-Cool. t.hi		as no. 3115, but not retained
3316	!! Fault !!	T-cooler too low	Flt>T-Cool.t.low		as no. 3116, but not retained
3317	!! Fault !!	T-cooler 1 too high	Flt>T-Cool.1 t.hi		as no. 3117, but not retained
3325	!! Fault !!	Diff set/act	Flt>Diff set/act		as no. 3125, but not retained
3326	!! Fault !!	Set/act-sign	Flt>Set/act-sign		as no. 3126, but not retained
3327	!! Fault !!	MainsPhaseRectifier1	Flt>MainsPh.Rec.1		as no. 3127, but not retained
3328	!! Fault !!	MainsPhaseRectifier2	Flt>MainsPh.Rec.2		as no. 3128, but not retained
3329	!! Fault !!	Interruption BUS	Flt>Interrpt. BUS		as no. 3129, but not retained
3330	!! Fault !!	BUS Hardware	Flt>BUS Hardware		as no. 3130, but not retained
3331	!! Fault !!	Contr. AD missing	Flt>contr. AD		as no. 3131, but not retained
3332	!! Fault !!	Main contactor	Flt>Main contctr.		as no. 3132, but not retained
3333	Fault	Diff. current input	Flt>DiffCurr		as no. 3133, but not retained
3380	!! Fault !!	P-failure 1/T= as no. 3180	as no. 3180		as no. 3180, but not retained
3381	!! Fault !!	P-failure 2/T= as no. 3180	as no. 3180		as no. 3180, but not retained
3382	!! Fault !!	P-failure 3/T= as no. 3180	as no. 3180		as no. 3180, but not retained
3383	!! Fault !!	P-failure 4/T= as no. 3180	as no. 3180		as no. 3180, but not retained
3384	!! Fault !!	P-failure 5/T= as no. 3180	as no. 3180		as no. 3180, but not retained
3385	!! Fault !!	P-failure 6/T= as no. 3180	as no. 3180		as no. 3180, but not retained
3386	!! Fault !!	P-failure 7/T= as no. 3180	as no. 3180		as no. 3180, but not retained
3387	!! Fault !!	P-failure 8/T= as no. 3180	as no. 3180		as no. 3180, but not retained
3388	!! Fault !!	P-failure 9/T= as no. 3180	as no. 3180		as no. 3180, but not retained
3389	!! Fault !!	P-failure 10/T= as no. 3180	as no. 3180		as no. 3180, but not retained
3390	!! Fault !!	P-failure 11/T= as no. 3180	as no. 3180		as no. 3180, but not retained
3391	!! Fault !!	P-failure 12/T= as no. 3180	as no. 3180		as no. 3180, but not retained

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3392	!! Fault !!	Interruption RS485	Flt>InterrpRS485		The fault occurs if: - the external display is not correctly connected to the RS485 interface or if it is disconnected - at P-INTERFACES/ P-RS485/RktRS485=failure is set and - a RS485 setpoint source is parameterized. If there is an external display at the RS485-interface –X51, connect / commission as per description 4BS0751, chapter Communication / External display. If there is no external display, recheck the parameter setting in menus "P-speed default, P-process control, P-T-control, P-current control:..Setpoint source. If a parameter is on "RS485" or, under "P-OPERATION", if a parameter is on "…..ext.Bdf" relocate these parameters to another source.
3394	!! Fault !!	Thermistor X3:90/91	Flt>PTC X3:90/91		as no. 3194, but not retained
3395	!! Fault !!	Safe torque off trig	Flt>STO tr.		as no. 3195, but not retained
3397	!! Fault !!	T-heat sink asymm.	Flt>T-Cooler asym		as no. 3134, but not retained
3451	!! OFF 2 !!	Interruption BUS	OFF2>Interrpt.BUS	-	The fault occurs if: - the external bus is not correctly connected or if it is disconnected - at "P-INTERFACES/P-Fieldbus/Rct.BUS=OFF2" is set and - a BUS-setpoint or actual value resp. operating source is parameterized. If there is the bus, connect / commission as per description 4BS0751, chapter Options/Bus-PCBs. Check the status of the bus by means of the available control-LEDs on the bus-PCB. If there is no bus at all, recheck the parameterizing at "P-INTERFACES/op.-source=BUS" or "Reset-source=BUS", or in menus "P-speed default, P-process control, P-T-control, P-current control" a parameter is set on BUS. Relocate these parameters to another source.
3452	!! OFF 2 !!	BUS Hardware	OFF2>BUS Hardware	-	The fault occurs if: - the inverter internal connection to the bus does not work correctly - at "P-INTERFACES/P-Fieldbus/Rct.BUS=OFF2" is set and - a BUS-setpoint or actual value resp. operating source is parameterized. If there is a bus, replace the bus-PCB and/or PCB –A1 Control electronics and contact our service station. If there is no bus at all, recheck the parameterizing at "P-INTERFACES/Op.-source=BUS" or "Reset-source=BUS", or in menus "P-speed default, P-process control, P-T-control, P-current control" a parameter is set on BUS.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3453	!! OFF 2 !!	Contr. AD missing	OFF2>contr. AD	-	This error occurs when under "P-INTERFACE/P-Fieldbus/Contr. AD" the parameterized bit in the control word is not specified by your control, the reaction under "P-INTERFACE/P-Fieldbus/Rct. BUS = Fault" is parameterized and a setpoint, the actual value or the operating source are parameterized to BUS. If you have a BUS interface in the device, set the corresponding control word bit of your control to 1. If you do not have a BUS interface in your control, then check the parameterization of "P-INTERFACE/Op.-source=BUS" or "Reset source=BUS" or the setpoint sources in the menus of the control modes (e.g. "P-speed default, P-process control, …"). BUS may not be actively selected here.
3454	!! OFF 2 !!	Interruption RS485	OFF2>InterrpRS485	-	The fault occurs if: - the external display is not correctly connected to the RS485 interface or if it is disconnected - at "P-INTERFACES/P-RS485/RktRS485=failure" is set and - a RS485 setpoint source is parameterized. If there is an external display at the RS485-interface –X51, connect / commission as per description 4BS0751, chapter Communication / External display. If there is no external display, recheck the parameter setting in menus "P-speed default, P-process control, P-T-control, P-current control:..Setpoint source". If a parameter is on "RS485" or, under "P-OPERATION", if a parameter is on "…..ext.Bdf" relocate these parameters to another source.
3455	!! OFF 2 !!	Interr. RS485 (X26)	OFF2>IntRS485 X26		The fault occurs if: - the external display is not correctly connected to the RS485 interface or if it is disconnected - at "P-INTERFACES/P-Fieldbus/Rct.BUS=failure is set and - a RS485 setpoint source is parameterized. If there is an external display at the RS485-interface –X51, connect / commission as per description 4BS0751, chapter Communication / External display. If there is no external display, recheck the parameter setting in menus "P-speed default, P-process control, P-T-control, P-current control:..Setpoint source". If a parameter is on "RS485" or, under "P-OPERATION", if a parameter is on "…..ext.Bdf" relocate these parameters to another source.
3461	!! Emergency stop !!	Interruption BUS	ESt>Interrpt.BUS	-	As message no. 3451, at "P-INTERFACES/P-Fieldbus/Rct.BUS=fast stop" parameterized
3462	!! Emergency stop !!	BUS Hardware	ESt>BUS Hardware	-	As message no. 3452, at "P-INTERFACES/P-Fieldbus/Rct.BUS=Emergency stop" parameterized

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3463	!! Emergency stop !!	Contr. AD missing	ESt>contr. AD	-	As message no. 3453, at "P-INTERFACES/P-Fieldbus/Rct.BUS=Emergency stop" parameterized
3464	!! Emergency stop !!	Interruption RS485	ESt>InterrptRS485	-	As message no. 3454, at "P-INTERFACES/P-RS485/Rct.RS485=Emergency stop" parameterized
3465	!! Emergency stop !!	Interr. RS485 (X26)	ESt>Int.RS485 X26		As message no. 3455, at "P-INTERFACES/P-RS485/Rct.RS485=Emergency stop" parameterized
3471	!! OFF 1 !!	Interruption BUS	OFF1>Interrpt.BUS	-	As message no. 3451, at "P-INTERFACES/P-Fieldbus/Rct.BUS=OFF1" parameterized
3472	!! OFF 1 !!	BUS Hardware	OFF1>BUS Hardware	-	As message no. 3452, at "P-INTERFACES/P-Fieldbus/Rct.BUS=OFF1" parameterized
3473	!! OFF 1 !!	Contr. AD missing	OFF1>contr. AD	-	As message no. 3453, at "P-INTERFACES/P-Fieldbus/Rct.BUS=OFF1" parameterized
3474	!! OFF 1 !!	Interruption RS485	OFF2>Interrpt.BUS	-	As message no. 3454, at "P-INTERFACES/P-Fieldbus/Rct.BUS=OFF1" parameterized
3475	!! OFF 1 !!	Interr. RS485 (X26)	OFF2>InterrpRS485		As message no. 3455, at "P-INTERFACES/P-Fieldbus/Rct.BUS=OFF1" parameterized
3600	Controller release	missing			A run command is active; however, the controller is not released. Connect the controller release to –X2:8 (or if not available, insert a jumper) check parameter "P-OPERATION/P-ContrlRelease", which act on additional inputs for controller release. Then also check these inputs.
3601	Sensor adjustm.	in process		-	Presently, an "automatic" sensor adjustment is carried out. Wait for the sensor adjustment.
3602	Auto-Tuning	in process		-	In this connection, the inverter measures the connected motor and optimizes automatically its motor parameter.
3603	Sensor adjustm.	faulty		-	The "automatic" sensor adjustment cannot be carried out successfully. Carry out "P-motor data/Sensor adjustm." again or set "P-motor data/Sensor offset" manually.
3604	Auto-Tuning	faulty		-	Auto-tuning cannot be carried out automatically. Connect the motor correctly to the inverter and carry out Auto-tuning again. Simple speed controls, e.g. for pumps or ventilators may work perfectly even without Auto-tuning. If there is a problem, contact out service station.
3605	Sensor adjustm.	no contr. Release		-	Tue automatic sensor adjustment could not be carried out as the controller release is missing. Remedy: perform "P-motor data/Sensor adjustm." again or set "P-motor data/Sensor offset" manually.
3606	Fault	Write errror EEPROM		-	Fault upon parameterizing: Correct writing on EEPROM was not possible; repeat the parameterizing.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault suppression on	Description
3607	Terminal X2:8	inactive		-	There is no ON-command parameterized to terminal -X2:8. At terminal -X2:8 however, there is inverter-internal a cutoff by hardware always available. Bridge terminal -X2:8 or set an ON-command on this terminal.
3608	Main contactor	off		-	Normal operational status: the inverter is switched off, thus, also the main contactor is disconnected. Normally the inverter will start upon the next ON-command.
3609	Contactor feedback	missing		-	The inverter needs a feedback contact of the main contactor. The make contact must be connected to that terminal, which is parameterized under "P-OPERATION/Feedb.MC".
3610	Mains voltage	faulty		-	The inverter is equipped with a main contactor function. Upon inverter start the contactor operates. The acknowledgement goes back to the inverter. The line voltage monitoring is getting active and recognizes a mains failure. Recheck all phases of the line voltage before the main contactor; Maybe check also the circuit of the main contactor drive: does the main contactor engage yet before the mains are connected?
3611	Store	Factory param		-	Message that appears only on first inverter initialization.
3612	Input power failure	active		-	The input that locks all inputs in case of a line voltage failure (with the effect that no undesired fault messages are appearing) is active.Recheck the control voltage; recheck the input circuit parameterized at "P-OPERATION/MainsFlt". Here, only a relay/voltage measuring relay should be connected, to monitor the control voltage.
3615	!! OFF 2 !!	After STO act.		-	The safe torque off command was again set to GOOD. This message indicates that the inverter remains in the OFF 2 state, and despite the ON commands entered, it does not automatically restart. You can exit OFF 2 with a reset or an OFF 1. If you wish that, after a "Safe torque off" with an ON command the inverter automatically restarts, then you must switch over parameter, "P-INVERTER DATA/P-Monitoring/STO" from "Store" to "Auto.reset".
3616	Safe torque off	active		-	Via terminals X2:19/:20, currently the "Safe torque off" function is initiated.
3617	Wait test STO	X2:8 inactive		-	You have manually activated the test of the two switch-off signal paths for the "Safe torque off" function using parameter "P-EXTRAS/Test STO/PTC". The test cannot be performed as long as terminal -X2:8 is deenergized. The inverter waits to perform the test until the terminal is energized. Jumper terminal -X2:8, or issue an appropriate on command.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3618	Wait test STO	Main contactor off		-	You have manually activated the test of the two switch-off signal paths for the "Safe torque off" function using parameter "P-EXTRAS/Test STO/PTC". The test cannot be performed as long as a line contactor has not been closed. The inverter waits to perform the test until the line contactor has closed. Check the circuit of the main contactor coil and that of the feedback signal contact. Check the parameterization of the main contactor function under "P-OPERATION/Feedb.MC" and "P-INV. BEHAVIOUR/MCfunc".
3619	Test safe torque off	in process		-	Presently, the internal plausibility test for the safe halt is running (max. 5s) Wait for the test result.
3620	Test PTC X3:90/91	in process		-	Presently, the internal plausibility test for the electronic cutoff path for the thermistor is running (max. 5s). Wait for the test result.
3621	!! OFF 1 !!	Operation		-	Command OFF1 is active. You can check under "P-OPERATION/P-OFF1(NC)", which input is responsible for this cutoff.
3623	Download Parameter	active			This message occurs if parameters are downloaded from IMS to inverter. If this message is not gone automatically after some minutes, please start the download again.
3625	Mains synchronization	completed			Only in Control mode mains synchronization: Information, that mains synchronization is successful finished
3633		Vlt. Sig.Brd. nOK			The 24V-feed in of the signals board -A13 is not ok. Check the 24V-feed in at the terminals -A13-X7:1 and :2(M)
3700		Software fault			Use old software version and contact our service station.
3701		no inverter off !			Stop inverter with control release, e.g. for parameterization
3702		not possible !			This message occurs only via interface, when wrong parameters indicated. Please use only correct parameters.
3703		Para. protected !			It is not possible to change parameters because of the parameter protection. Please deactivate the parameter protection.
3704		Write errror EEPROM			Cancel the last changings and contact our service station.
3705		Read error EEPROM			Cancel the last changings and contact our service station.
3706		Write errror RTC			Cancel the last changings and contact our service station.
3707		Read error RTC			Cancel the last changings and contact our service station.
3708		RAM-fault!			Cancel the last changings and contact our service station.
3709		Illegal value!			This message occurs only via interface, when wrong parameters indicated. Please use only correct parameters.
3710		Omniscience fault!			Cancel the last changings and contact our service station.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3711		S1:1/4 off, S1:3 on?			This message occurs only at IMS, when the switches are wrong, e.g. for transfer a new language to the inverter. Please switch the switches correct.
3717	Initialization	in process	Initialization		This message occurs only some seconds after switch on the control voltage. Is the message longer available, switch off/on the control voltage and contact our service station.
3718		no inverter off !			Stop inverter with control release, e.g. for parameterization.
3719		Par.val.n.chngeable!			This message occurs only via interface, when wrong parameters indicated. Please use only correct parameters.
3720	Prim. initialization	in process			This message occurs only max. 60 seconds after primary initialization of the inverter. Is the message longer available, start again the primary initialization. Is the result the same, please contact our service station.
3721	new hardware	S1:1 engaging		-	The inverter has found a new hardware (e.g. PCB Peripherals). This new hardware must be logged in also in the EEPROM. That is only possible when the parameterizing release is given. Give a short parameterizing release. S1.1 shortly ON (10s), then OFF again.
3723		Sub-index faulty!			This message occurs only via interface, when wrong subindex of parameters indicated. Please use only correct subindex.
3725		bootloader version!			This message occurs only via interface, when wrong bootloader is used, e.g. at upload of other inverter languages. Please contact our service station.

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3890	P-message 1/T1 = Line without characters, Line with ----------, Automat.operation, Autom.disconnect., OFF 2, Set value < 4 mA, Interlocking, I-asymm. motor, Circuit breaker, no Release, Fuse, Fusing mains 1, Fusing mains 2, Undervoltage, Overspeed, Underspeed, Motor stalled, set value lost, Set value limited, Setp/actv.dev, Ball valve open, Ball valve closed, Control voltage, Motor overpress., Switch high volt., Control transf., Ind. mains volt., Filter cabinet, Aux. devices, EarthCurr., !! OFF 2 !!, Switch interlock, prog. Text 1, prog. Text 2, prog. Text 3, prog. Text 4, prog. Text 5, prog. Text 6, prog. Text 7, prog. Text 8, prog. Text 9, prog. Text 10	P-message 1/T2 = Line without characters, Line witz----------, Automat.operation, Autom.disconnect., OFF 2, Set value < 4 mA, activ, I-asymm. motor, Circuit breaker, missing, Fuse, Fusing mains 1, Fusing mains 2, Undervoltage, Overspeed, Underspeed, Motor stalled, set value lost, Set value limited, Setp/actv.dev, Ball valve open, Ball valve closed, Control voltage, Motor overpress., Switch high volt., Control transf., Ind. mains volt., Filter cabinet, Aux. devices, EarthCurr., Operation, prog. Text 1, prog. Text 2, prog. Text 3, prog. Text 4, prog. Text 5, prog. Text 6, prog. Text 7, prog. Text 8, prog. Text 9, prog. Text 10		-	This is a user defined operation message. It is parameterized as per "P-MESSAGES/P-message 1/T1 = Text selection values" respectively "P-MESSAGES/P-message 1/T2 = Text selection values". The text of the message can be taken from a selection of standard texts (see left-hand column) or may be a programmed text. Usually it is an operation message, indicating external or clearly defined statuses of the inverter. To be able to trace further how the message has been released you have to recheck parameter "P-MESSAGES/P-message 1/inp."
3891	P-message 2/T1= as no. 3890	P-message 2/T2= as no. 3890		-	P-message 2: as no. 3890
3892	P-message 3/T1= as no. 3890	P-message 3/T2= as no. 3890		-	P-message 3: as no. 3890
3893	P-message 4/T1= as no. 3890	P-message 4/T2= as no. 3890		-	P-message 4: as no. 3890

Msg-Number	Display line 1	Display line 2	Text for event memory entry	Fault sup-pression on	Description
3894	P-message 5/T1= as no. 3890	P-message 5/T2= as no. 3890		-	P-message 5: as no. 3890
3895	P-message 6/T1= as no. 3890	P-message 6/T2= as no. 3890		-	P-message 6: as no. 3890
3896	P-message 7/T1= as no. 3890	P-message 7/T2= as no. 3890		-	P-message 7: as no. 3890
3897	P-message 8/T1= as no. 3890	P-message 8/T2= as no. 3890		-	P-message 8: as no. 3890
3899	T-Off ramp active				The parametrized torque ramp after a failure is active. Wait until the drive stands. If the signal is still available after approx. 10 minutes, please contact our service station.
4041	!! Ctrl.inhib. !!	Interruption BUS	CLK>Interrpt.BUS		As message no. 3451, at "P-INTERFACES/P-Fieldbus/Rct.BUS=Control inhibit" parameterized
4042	!! Ctrl.inhib. !!	BUS Hardware	CLK>BUS Hardware		As message no. 3452, at "P-INTERFACES/P-Fieldbus/Rct.BUS=Control inhibit" parameterized
4043	!! Ctrl.inhib. !!	Contr. AD missing	CLK>contr. AD		As message no. 3453, at "P-INTERFACES/P-Fieldbus/Rct.BUS=Control inhibit" parameterized
4044	!! Ctrl.inhib. !!	Interruption RS485	CLK>InterrptRS485		As message no. 3454, at "P-INTERFACES/P-RS485/Rct.RS485=Control inhibit" parameterized
4045	!! Ctrl.inhib. !!	Interr. RS485 (X26)	CLK>Int.RS485 X26		As message no. 3455, at "P-INTERFACES/P-RS485/Rct.RS485=Control inhibit" parameterized
4051	!! Speed OFF !!	Interruption BUS	SPD>Interrpt.BUS		As message no. 3451, at "P-INTERFACES/P-Fieldbus/Rct.BUS=Speed off" parameterized
4052	!! Speed OFF !!	BUS Hardware	SPD>BUS Hardware		As message no. 3452, at "P-INTERFACES/P-Fieldbus/Rct.BUS=Speed off" parameterized
4053	!! Speed OFF !!	Contr. AD missing	SPD>contr. AD		As message no. 3453, at "P-INTERFACES/P-Fieldbus/Rct.BUS=Speed off" parameterized
4054	!! Speed OFF !!	Interruption RS485	SPD>InterrptRS485		As message no. 3454, at "P-INTERFACES/P-RS485/Rct.RS485=Speed off" parameterized
4055	!! Speed OFF !!	Interr. RS485 (X26)	SPD>Int.RS485 X26		As message no. 3455, at "P-INTERFACES/P-RS485/Rct.RS485=Speed off" parameterized

Assignment of the message groups for the bit generators

4

In the function of the bit generators "P-BIT GENERATOR1 to 20", you can also select message groups "MessGr ..." in addition to various single messages.

The following table shows the assignment of the various messages, warnings, faults and inverter faults to the message groups.

Message group				Single message	MessGr flt. gen.	MessGr flt. syst.	MessGr flt. DCcrt	MessGr flt>T-ins.	MessGr flt<T-ins.	MessGr flt>T-cool	MessGr flt<T-cool	MessGr flt T-reac	MessGr flt. PS	MessGr flt. curr	MessGr ft<V-mains	MessGr ft FW/CB08	MessGr wrg. gen.	MessGr wrg. syst.	MessGr wrg>T-ins.	MessGr wrg<T-ins.	MessGr wrg>T-cool	MessGr wrg<T-cool	MessGr wrg T-reac	MessGr suppr.flt.	MessGr no ON
Msg-Nr	Text in line 1	Text in line 2	Selection text																						
2004	Fault	S1:3 not off																							x
2038	Operation locked	n-motor <> Rotation																							x
2043	Operation locked	Cabinet heater																							x
2044	Operation locked	CoolgWaterHeater																							x
2045	!! Prewarning !!	actual speed	Wrg>Actual speed	x													x								
2049	!! Prewarning !!	Fault Synch. MSC															x								
2083	!! Prewarning !!	T-cabinet too low																x		x					
2089	!! Prewarning !!	T-cooler 2 too low																x				x			
2090	!! Prewarning !!	T-cooler 3 too low																x				x			
2091	!! Prewarning !!	T-cooler 4 too low																x				x			
2092	!! Prewarning !!	T-cooler 5 too low																x				x			
2093	!! Prewarning !!	T-cooler 2 too high																x			x				
2094	!! Prewarning !!	T-cooler 3 too high																x			x				
2095	!! Prewarning !!	T-cooler 4 too high																x			x				
2096	!! Prewarning !!	T-cooler 5 too high																x			x				
2100	!! Prewarning !!	Current asymmetry U																x							
2101	!! Prewarning !!	Current asymmetry V																x							
2102	!! Prewarning !!	Current asymmetry W																x							

Message group				Single message	MessGr flt. gen.	MessGr flt. syst.	MessGr flt. DCcrt	MessGr flt>T-ins.	MessGr flt<T-ins.	MessGr flt>T-cool	MessGr flt<T-cool	MessGr flt T-reac	MessGr flt. PS	MessGr flt. curr	MessGr ft<V-mains	MessGr ft FW/CB08	MessGr wrg. gen.	MessGr wrg. syst.	MessGr wrg>T-ins.	MessGr wrg<T-ins.	MessGr wrg>T-cool	MessGr wrg<T-cool	MessGr wrg T-reac	MessGr suppr.flt.	MessGr no ON
Msg-Nr	Text in line 1	Text in line 2	Selection text																						
2103	!! Prewarning !!	T-heat sink asymm.	Wrg>T-Cooler asym	x														x							
2104	!! Prewarning !!	T-CPU too low															x			x					
2105	!! Prewarning !!	T-CPU too high															x		x						
2106	!! Prewarning !!	T-cooler too high																x			x				
2107	!! Prewarning !!	T-cooler too low																x				x			
2108	!! Prewarning !!	T-cooler 1 too low																x				x			
2109	!! Prewarning !!	T-cooler 1 too high																x			x				
2110	!! Prewarning !!	Brake Res.Overload															x								
2112	!! Prewarning !!	PTC AI1															x								
2113	!! Prewarning !!	PTC AI2															x								
2114	!! Prewarning !!	InputReactor 1																x					x		
2115	!! Prewarning !!	OutputReactor 1																x					x		
2116	!! Prewarning !!	"P-warning 1: T"	Warn.function 1	x														x							
2117	!! Prewarning !!	"P-warning 2: T"	Warn.function 2	x														x							
2118	!! Prewarning !!	"P-warning 3: T"	Warn.function 3	x														x							
2119	!! Prewarning !!	"P-warning 4: T"	Warn.function 4	x														x							
2120	!! Prewarning !!	"P-warning 5: T"	Warn.function 5	x														x							
2121	!! Prewarning !!	"P-warning 6: T"	Warn.function 6	x														x							
2122	!! Prewarning !!	"P-warning 7: T"	Warn.function 7	x														x							
2123	!! Prewarning !!	"P-warning 8: T"	Warn.function 8	x														x							
2124	!! Prewarning !!	"P-warning 9: T"	Warn.function 9	x														x							
2125	!! Prewarning !!	"P-warning 10: T"	Warn.function 10	x														x							
2126	!! Prewarning !!	"P-warning 11: T"	Warn.function 11	x														x							
2127	!! Prewarning !!	"P-warning 12: T"	Warn.function 12	x														x							
2128	!! Prewarning !!	"P-warning 13: T"	Warn.function 13	x														x							
2129	!! Prewarning !!	"P-warning 14: T"	Warn.function 14	x														x							
2130	!! Prewarning !!	"P-warning 15: T"	Warn.function 15	x														x							

Message group				Single message	MessGr flt. gen.	MessGr flt. syst.	MessGr flt. DCcrt	MessGr flt>T-ins.	MessGr flt<T-ins.	MessGr flt>T-cool	MessGr flt<T-cool	MessGr flt T-reac	MessGr flt. PS	MessGr flt. curr	MessGr ft<V-mains	MessGr ft FW/CB08	MessGr wrg. gen.	MessGr wrg. syst.	MessGr wrg>T-ins.	MessGr wrg<T-ins.	MessGr wrg>T-cool	MessGr wrg<T-cool	MessGr wrg T-reac	MessGr suppr.flt.	MessGr no ON
Msg-Nr	Text in line 1	Text in line 2	Selection text																					
2131	!! Prewarning !!	"P-warning 16: T"	Warn.function 16	x														x						
2132	!! Prewarning !!	"P-warning 17: T"	Warn.function 17	x														x						
2133	!! Prewarning !!	"P-warning 18: T"	Warn.function 18	x														x						
2134	!! Prewarning !!	"P-warning 19: T"	Warn.function 19	x														x						
2135	!! Prewarning !!	"P-warning 20: T"	Warn.function 20	x														x						
2136	!! Prewarning !!	Thermistor X3:92/93															x							
2137	!! Prewarning !!	T-rectifier too low																x				x		
2138	!! Prewarning !!	T-rectifier too high	Wrg>T-rect.t.high	x														x			x			
2139	!! Prewarning !!	T-cabinet too high																x	x					
2144	!! Prewarning !!	Fault Synch. LSC															x							
2145	!!Suppressed fault!!	EarthCurrentMetering																					x	
2146	!!Suppressed fault!!	Temperature inside																					x	
2147	!!Suppressed fault!!	Temp.Sensor Cool.1																					x	
2148	!!Suppressed fault!!	Temp.Sensor Cool.2																					x	
2149	!!Suppressed fault!!	Temp.Sensor Cool.3																					x	
2150	!!Suppressed fault!!	Temp.Sensor Cool.4																					x	
2151	!!Suppressed fault!!	Temp.Sensor Cool.5																					x	
2152	!!Suppressed fault!!	TempSensorRectifier																					x	
2153	!!Suppressed fault!!	TempSensorCabinet																					x	
2157	!!Suppressed fault!!	ResistOutpFilter																					x	
2158	!!Suppressed fault!!	IntermCircFuse																					x	
2159	!!Suppressed fault!!	InputReactor 1																					x	
2160	!!Suppressed fault!!	InputReactor 2																					x	
2161	!!Suppressed fault!!	OutputReactor 1																					x	
2162	!!Suppressed fault!!	OutputReactor 2																					x	
2163	!!Suppressed fault!!	Diff. current input																					x	
2164	!!Suppressed fault!!	Fault tacho																					x	

Message group				Single message	MessGr flt. gen.	MessGr flt. syst.	MessGr flt. DCcrt	MessGr flt>T-ins.	MessGr flt<T-ins.	MessGr flt>T-cool	MessGr flt<T-cool	MessGr flt T-reac	MessGr flt. PS	MessGr flt. curr	MessGr ft<V-mains	MessGr ft FW/CB08	MessGr wrg. gen.	MessGr wrg. syst.	MessGr wrg>T-ins.	MessGr wrg<T-ins.	MessGr wrg>T-cool	MessGr wrg<T-cool	MessGr wrg T-reac	MessGr suppr.flt.	MessGr no ON
Msg-Nr	Text in line 1	Text in line 2	Selection text																						
2165	!!Suppressed fault!!	T-CPU too high																						x	
2166	!!Suppressed fault!!	T-CPU too low																						x	
2167	!!Suppressed fault!!	T-cooler too high																						x	
2168	!!Suppressed fault!!	T-cooler too low																						x	
2169	!!Suppressed fault!!	T-rectifier too low																						x	
2170	!!Suppressed fault!!	T-rectifier too high																						x	
2171	!!Suppressed fault!!	T-cabinet too high																						x	
2175	!!Suppressed fault!!	Interr. motor cable																						x	
2176	!!Suppressed fault!!	Diff set/act																						x	
2177	!!Suppressed fault!!	Set/act-sign																						x	
2178	!!Suppressed fault!!	MainCntctr																						x	
2179	!!Suppressed fault!!	Undervoltage																						x	
2180	!!Suppressed fault!!	MainsPhaseRectifier1																						x	
2181	!!Suppressed fault!!	MainsPhaseRectifier2																						x	
2190	!!Suppressed fault!!	"P-failure 1: T"																						x	
2191	!!Suppressed fault!!	"P-failure 2: T"																						x	
2192	!!Suppressed fault!!	"P-failure 3: T"																						x	
2193	!!Suppressed fault!!	"P-failure 4: T"																						x	
2194	!!Suppressed fault!!	"P-failure 5: T"																						x	
2195	!!Suppressed fault!!	"P-failure 6: T"																						x	
2196	!!Suppressed fault!!	"P-failure 7: T"																						x	
2197	!!Suppressed fault!!	"P-failure 8: T"																						x	
2198	!!Suppressed fault!!	"P-failure 9: T"																						x	
2199	!!Suppressed fault!!	"P-failure 10: T"																						x	
2200	!!Suppressed fault!!	"P-failure 11: T"																						x	
2201	!!Suppressed fault!!	"P-failure 12: T"																						x	
2202	!!Suppressed fault!!	T-heat sink asymm.																						x	

Message group				Single message	MessGr flt. gen.	MessGr flt. syst.	MessGr flt. DCcrt	MessGr flt>T-ins.	MessGr flt<T-ins.	MessGr flt>T-cool	MessGr flt<T-cool	MessGr flt T-reac	MessGr flt. PS	MessGr flt. curr	MessGr ft<V-mains	MessGr ft FW/CB08	MessGr wrg. gen.	MessGr wrg. syst.	MessGr wrg>T-ins.	MessGr wrg<T-ins.	MessGr wrg>T-cool	MessGr wrg<T-cool	MessGr wrg T-reac	MessGr suppr.flt.	MessGr no ON
Msg-Nr	Text in line 1	Text in line 2	Selection text																						
2225	!!Suppressed fault!!	MainsPhaseRectifier3																						x	
2226	!!Suppressed fault!!	MainsPhaseRectifier4																						x	
2228	!!Suppressed fault!!	Temp.-sensor Sig.Brd																						x	
2229	!!Suppressed fault!!	Temp.-sensor brkUnit																						x	
2235	!!Suppressed fault!!	T-cooler 1 too low																						x	
2236	!!Suppressed fault!!	T-cooler 2 too low																						x	
2237	!!Suppressed fault!!	T-cooler 3 too low																						x	
2238	!!Suppressed fault!!	T-cooler 4 too low																						x	
2239	!!Suppressed fault!!	T-cooler 5 too low																						x	
2240	!!Suppressed fault!!	T-cooler 1 too high																						x	
2241	!!Suppressed fault!!	T-cooler 2 too high																						x	
2242	!!Suppressed fault!!	T-cooler 3 too high																						x	
2243	!!Suppressed fault!!	T-cooler 4 too high																						x	
2244	!!Suppressed fault!!	T-cooler 5 too high																						x	
2248	!!Suppressed fault!!	T-cabinet too low																						x	
2253	!!Suppressed fault!!	"P-failure 13: T"																						x	
2254	!!Suppressed fault!!	"P-failure 14: T"																						x	
2255	!!Suppressed fault!!	"P-failure 15: T"																						x	
2256	!!Suppressed fault!!	"P-failure 16: T"																						x	
2263	!!Suppressed fault!!	Overcurrent U																						x	
2264	!!Suppressed fault!!	Overcurrent V																						x	
2265	!!Suppressed fault!!	Overcurrent W																						x	
2266	!!Suppressed fault!!	Zero trace faulty																						x	
2275	!! Prewarning !!	Standby fan																x							
2292	!! Prewarning !!	SNTP sync.															x								
2500	!! Fault !!	"P-failure 13: T"	Flt.function 13	x		x																			
2501	!! Fault !!	"P-failure 14: T"	Flt.function 14	x		x																			

Message group				Single message	MessGr flt. gen.	MessGr flt. syst.	MessGr flt. DCcrt	MessGr flt>T-ins.	MessGr flt<T-ins.	MessGr flt>T-cool	MessGr flt<T-cool	MessGr flt T-reac	MessGr flt. PS	MessGr flt. curr	MessGr ft<V-mains	MessGr ft FW/CB08	MessGr wrg. gen.	MessGr wrg. syst.	MessGr wrg>T-ins.	MessGr wrg<T-ins.	MessGr wrg>T-cool	MessGr wrg<T-cool	MessGr wrg T-reac	MessGr suppr.flt.	MessGr no ON
Msg-Nr	Text in line 1	Text in line 2	Selection text																						
2502	!! Fault !!	"P-failure 15: T"	Flt.function 15	x		x																			
2503	!! Fault !!	"P-failure 16: T"	Flt.function 16	x		x																			
2541	!! Fault !!	Overcurrent U				x								x											
2542	!! Fault !!	Overcurrent V				x								x											
2543	!! Fault !!	Overcurrent W				x								x											
2545	!! Fault !!	Zero trace faulty	Flt>Zero trace	x	x																				
2705	!! Inverter fault !!	SC brake unit				x							x												
2706	!! Inverter fault !!	Driver phase U				x							x												
2707	!! Inverter fault !!	Driver phase V				x							x												
2708	!! Inverter fault !!	Driver phase W				x							x												
2709	!! Inverter fault !!	Driver brake unit				x							x												
3000	!! Inverter fault !!	download texts			x											x									
3001	!! Inverter fault !!	Power section U+!				x							x												
3002	!! Inverter fault !!	Power section U-!				x							x												
3003	!! Inverter fault !!	Power section V+!				x							x												
3004	!! Inverter fault !!	Power section V-!				x							x												
3005	!! Inverter fault !!	Power section W+!				x							x												
3006	!! Inverter fault !!	Power section W-!				x							x												
3007	!! Inverter fault !!	Braking transistor				x							x												
3008	!! Inverter fault !!	Current asymmetry U				x							x												
3009	!! Inverter fault !!	Current asymmetry V				x							x												
3010	!! Inverter fault !!	Current asymmetry W				x							x												
3011	!! Inverter fault !!	Commun.uP->DSP			x											x									
3012	!! Inverter fault !!	Reset uP-Program			x											x									
3013	!! Inverter fault !!	Reset uP-Commun.			x											x									
3014	!! Inverter fault !!	Reset uP-Watchdog			x											x									
3015	!! Inverter fault !!	Reset uP-Interrupt			x											x									

Message group				Single message	MessGr flt. gen.	MessGr flt. syst.	MessGr flt. DCcrt	MessGr flt>T-ins.	MessGr flt<T-ins.	MessGr flt>T-cool	MessGr flt<T-cool	MessGr flt T-reac	MessGr flt. PS	MessGr flt. curr	MessGr ft<V-mains	MessGr ft FW/CB08	MessGr wrg. gen.	MessGr wrg. syst.	MessGr wrg>T-ins.	MessGr wrg<T-ins.	MessGr wrg>T-cool	MessGr wrg<T-cool	MessGr wrg T-reac	MessGr suppr.flt.	MessGr no ON
Msg-Nr	Text in line 1	Text in line 2	Selection text																						
3016	!! Inverter fault !!	Commun.DSP->uP			x											x									
3017	!! Inverter fault !!	Current transformer				x							x												
3018	!! Inverter fault !!	Power unit unknown			x																				
3019	!! Inverter fault !!	Wrong power unit			x																				
3020	!! Inverter fault !!	Temperature inside			x			x																	
3021	!! Inverter fault !!	Temp.Sensor Cool.1				x																			
3022	!! Inverter fault !!	Temp.Sensor Cool.2				x																			
3023	!! Inverter fault !!	Temp.Sensor Cool.3				x																			
3024	!! Inverter fault !!	Temp.Sensor Cool.4				x																			
3025	!! Inverter fault !!	Temp.Sensor Cool.5				x																			
3026	!! Inverter fault !!	TempSensorRectifier				x																			
3027	!! Inverter fault !!	TempSensorCabinet				x																			
3028	!! Inverter fault !!	Current control				x																			
3029	!! Inverter fault !!	ResistOutpFilter	IF>R-outpFilter	x		x																			
3030	!! Inverter fault !!	IntermCircFuse	IF>IC-fusing	x		x	x																		
3031	!! Inverter fault !!	InputReactor 1	IF>InpReactor 1	x		x						x													
3032	!! Inverter fault !!	InputReactor 2	IF>InpReactor 2	x		x						x													
3033	!! Inverter fault !!	OutputReactor 1	IF>OutpReactor 1	x		x						x													
3034	!! Inverter fault !!	OutputReactor 2	IF>OutpReactor 2	x		x						x													
3035	!! Inverter fault !!	I2C-Bus				x										x									
3036	!! Inverter fault !!	EarthCurrentMetering			x																				
3037	!! Inverter fault !!	Ter. X81:13 inactive				x																			
3038	!! Inverter fault !!	Ter. X81:14 inactive				x																			
3039	!! Inverter fault !!	Test safe torque off	IF>Test STO	X	x																				
3040	!! Inverter fault !!	Test PTC X3:90/91			x																				
3044	!! Inverter fault !!	PerformParameters			x																				
3060	!! Fault !!	Interr. RS485 (X26)			x																				

Message group				Single message	MessGr flt. gen.	MessGr flt. syst.	MessGr flt. DCcrt	MessGr flt>T-ins.	MessGr flt<T-ins.	MessGr flt>T-cool	MessGr flt<T-cool	MessGr flt T-reac	MessGr flt. PS	MessGr flt. curr	MessGr flt<V-mains	MessGr ft FW/CB08	MessGr wrg. gen.	MessGr wrg. syst.	MessGr wrg>T-ins.	MessGr wrg<T-ins.	MessGr wrg>T-cool	MessGr wrg<T-cool	MessGr wrg T-reac	MessGr suppr.flt.	MessGr no ON
Msg-Nr	Text in line 1	Text in line 2	Selection text																						
3061	!! Fault !!	Diff. current motor	Flt>I-diff. Motor	X	x																				
3075	!! Fault !!	T-cabinet too low				x			x																
3077	!! Fault !!	T-cooler 2 too high				x				x															
3078	!! Fault !!	T-cooler 3 too high				x				x															
3079	!! Fault !!	T-cooler 4 too high				x				x															
3080	!! Fault !!	T-cooler 5 too high				x				x															
3081	!! Fault !!	T-cooler 1 too low				x					x														
3082	!! Fault !!	T-cooler 2 too low				x					x														
3083	!! Fault !!	T-cooler 3 too low				x					x														
3084	!! Fault !!	T-cooler 4 too low				x					x														
3085	!! Fault !!	T-cooler 5 too low				x					x														
3094	Fault	T-rectifier too low				x					x														
3095	Fault	T-rectifier too high	Flt>T-rect.t.high	X		x				x															
3096	Fault	T-cabinet too high				x		x																	
3100	Fault	Overvoltage	Flt>Overvoltage	X	x		x																		
3101	Fault	Undervoltage	Flt>Undervoltage	X	x		x																		
3103	Fault	Earth fault	Flt>Earth fault	X		x																			
3104	Fault	S7 inactive			x																				
3105	Fault	SC phase U				x								x											
3106	Fault	SC phase V				x								x											
3107	Fault	SC phase W				x								x											
3108	Fault	Fault tacho	Flt>Fault Tacho	X	x																				
3113	Fault	T-CPU too high			x			x																	
3114	Fault	T-CPU too low			x				x																
3115	Fault	T-cooler too high				x				x															
3116	Fault	T-cooler too low				x					x														
3117	Fault	T-cooler 1 too high				x				x															

Message group				Single message	MessGr flt. gen.	MessGr flt. syst.	MessGr flt. DCcrt	MessGr flt>T-ins.	MessGr flt<T-ins.	MessGr flt>T-cool	MessGr flt<T-cool	MessGr flt T-reac	MessGr flt. PS	MessGr flt. curr	MessGr ft<V-mains	MessGr ft FW/CB08	MessGr wrg. gen.	MessGr wrg. syst.	MessGr wrg>T-ins.	MessGr wrg<T-ins.	MessGr wrg>T-cool	MessGr wrg<T-cool	MessGr wrg T-reac	MessGr suppr.flt.	MessGr no ON
Msg-Nr	Text in line 1	Text in line 2	Selection text																						
3125	Fault	Diff set/act			x																				
3126	Fault	Set/act-sign			x																				
3127	Fault	MainsPhaseRectifier1				x									x										
3128	Fault	MainsPhaseRectifier2				x									x										
3129	Fault	Interruption BUS			x																				
3130	Fault	BUS Hardware			x																				
3131	Fault	Contr. AD missing			x																				
3132	Fault	MainCntctr				x																			
3133	Fault	Diff. current input	Flt>DiffCurr	x	x																				
3134	Fault	T-heat sink asymm.				x				x															
3162	!! Fault !!	MainsPhaseRectifier3				x									x										
3163	!! Fault !!	MainsPhaseRectifier4				x									x										
3180	!! Fault !!	"P-failure 1: T"	Flt.function 1	x		x																			
3181	!! Fault !!	"P-failure 2: T"	Flt.function 2	x		x																			
3182	!! Fault !!	"P-failure 3: T"	Flt.function 3	x		x																			
3183	!! Fault !!	"P-failure 4: T"	Flt.function 4	x		x																			
3184	!! Fault !!	"P-failure 5: T"	Flt.function 5	x		x																			
3185	!! Fault !!	"P-failure 6: T"	Flt.function 6	x		x																			
3186	!! Fault !!	"P-failure 7: T"	Flt.function 7	x		x																			
3187	!! Fault !!	"P-failure 8: T"	Flt.function 8	x		x																			
3188	!! Fault !!	"P-failure 9: T"	Flt.function 9	x		x																			
3189	!! Fault !!	"P-failure 10: T"	Flt.function 10	x		x																			
3190	!! Fault !!	"P-failure 11: T"	Flt.function 11	x		x																			
3191	!! Fault !!	"P-failure 12: T"	Flt.function 12	x		x																			
3192	Fault	Interruption RS485			x																				
3194	Fault	Thermistor X3:90/91			x																				
3195	Fault	Safe torque off trig	Flt>STO tr.	x	x																				

Message group				Single message	MessGr flt. gen.	MessGr flt. syst.	MessGr flt. DCcrt	MessGr flt>T-ins.	MessGr flt<T-ins.	MessGr flt>T-cool	MessGr flt<T-cool	MessGr flt T-reac	MessGr flt. PS	MessGr flt. curr	MessGr ft<V-mains	MessGr ft FW/CB08	MessGr wrg. gen.	MessGr wrg. syst.	MessGr wrg>T-ins.	MessGr wrg<T-ins.	MessGr wrg>T-cool	MessGr wrg<T-cool	MessGr wrg T-reac	MessGr suppr.flt.	MessGr no ON
Msg-Nr	Text in line 1	Text in line 2	Selection text																						
3451	!! OFF 2 !!	Interruption BUS																							x
3452	!! OFF 2 !!	BUS Hardware																							x
3453	!! OFF 2 !!	Contr. AD missing																							x
3454	!! OFF 2 !!	Interruption RS485																							x
3455	!! OFF 2 !!	Interr. RS485 (X26)																							x
3461	!! Emergency stop !!	Interruption BUS																							x
3462	!! Emergency stop !!	BUS Hardware																							x
3463	!! Emergency stop !!	Contr. AD missing																							x
3464	!! Emergency stop !!	Interruption RS485																							x
3465	!! Emergency stop !!	Interr. RS485 (X26)																							x
3471	!! OFF 1 !!	Interruption BUS																							x
3472	!! OFF 1 !!	BUS Hardware																							x
3473	!! OFF 1 !!	Contr. AD missing																							x
3474	!! OFF 1 !!	Interruption RS485																							x
3475	!! OFF 1 !!	Interr. RS485 (X26)																							x
3597	System	DC V-diff. too high																							x
3598	System	Feedb.AC ctctr.missg																							x
3599	System	Feedb.DC ctctr.missg																							x
3607	Terminal X2:8	inactive																							x
3609	Contactor feedback	missing																							x
3610	Mains voltage	faulty																							x
4041	!! Ctrl.inhib. !!	Interruption BUS																							x
4042	!! Ctrl.inhib. !!	BUS Hardware																							x
4043	!! Ctrl.inhib. !!	Contr. AD missing																							x
4044	!! Ctrl.inhib. !!	Interruption RS485																							x
4045	!! Ctrl.inhib. !!	Interr. RS485 (X26)																							x
4051	!! Speed OFF !!	Interruption BUS																							x

Message group				Single message	MessGr flt. gen.	MessGr flt. syst.	MessGr flt. DCcrt	MessGr flt>T-ins.	MessGr flt<T-ins.	MessGr flt>T-cool	MessGr flt<T-cool	MessGr flt T-reac	MessGr flt. PS	MessGr flt. curr	MessGr ft<V-mains	MessGr ft FW/CB08	MessGr wrg. gen.	MessGr wrg. syst.	MessGr wrg>T-ins.	MessGr wrg<T-ins.	MessGr wrg>T-cool	MessGr wrg<T-cool	MessGr wrg T-reac	MessGr suppr.flt.	MessGr no ON
Msg-Nr	Text in line 1	Text in line 2	Selection text																						
4052	!! Speed OFF !!	BUS Hardware																							x
4053	!! Speed OFF !!	Contr. AD missing																							x
4054	!! Speed OFF !!	Interruption RS485																							x
4055	!! Speed OFF !!	Interr. RS485 (X26)																							x

Service & Support

A

A.1 Siemens Industry Online Support

Technical questions or additional information n

If you have any technical questions or require additional information, please contact Technical Support (https://support.industry.siemens.com/cs/ww/en/sc/2090)

Please have the following data ready:

- Type
- Serial number

You can find this data on the rating plate.

Contact person

If you wish to request on-site service or order spare parts, please contact your local office. This office will contact the responsible service center on your behalf. You can find your contact person in the relevant contact database:

www.siemens.com/yourcontact (www.siemens.com/yourcontact)

A.2 Contacts in Ruhstorf an der Rott location (Germany)

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94099 Ruhstorf

Germany

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24-hour hotline:
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0.06 €/min. from land lines of the German Telekom, mobile phone prices may differ).

FAX +49 8531 39 569

Technical support: driveservice.rhf.de@siemens.com
Spare parts: drivespares.rhf.de@siemens.com
Repair: driverepair.rhf.de@siemens.com

Spare parts on the Internet:

Spares on Web (www.siemens.com/sow)

List of abbreviations

B

ARM	"Acorn Risc Machine": Microprocessor architecture
ATEX	"Atmosphère explosible": Synonym for the two EC explosion protection Directives: ATEX Product Directive 94/9/EC and ATEX Safety Directive 1999/92/EC
ASM	Induction machine
BeO	Beryllium oxide: toxin. Relevant for the disposal
BGR	Health and safety at work regulations
BGV	Regulations of the German Trade Association
CD	"Compact Disc": Optical storage medium for digital storage of music and data.
CB08	Control electronics board
DASM	Dual-fed induction machine
DIL	"Dual In-Line Package": Type of packaging (Package) for electronic components
DSP	Digital signal processor
DVC	"Decisive Voltage Class": Classification of the voltage range used to determine protective measures against electric shock hazards
ESD	Electrostatically Sensitive Devices
EMF	Electromotive force
EMC	Electromagnetic compatibility
EN	"Europäische Norm": European standards are rules that have been ratified by one of the three European standardization committees.
Ex	Explosion-proof area
FOC	Field-oriented control
FRT	"Fault Ride Trough":
FI	Frequency inverter
GSD	"General Station Description", original "device master data": One data format for PROFIBUS and PROFINET devices
HVRT	"High Voltage Ride Trough"
IEC	"International Electrotechnical Commission": Standards committee for electrical engineering
IGBT	"Insulated Gate Bipolar Transistor": Type of power semiconductor
IMS	"Inverter Management Software": You can also parameterize the inverter with this software using a PC, save parameter sets, etc. You can download the software at no cost from the manufacturer's website.
LED	"Light Emitting Diode", Light Emitting Diode
LHF	"Line Harmonics Filter": Reduces the low-frequency line harmonics of 6-pulse rectifier circuits
LSB	"Least Significant Bit": Least significant bit of a binary number
LVRT	"Low Voltage Ride Trough": A voltage dip is ridden through
MLFB	"Maschinenlesbare Fabrikate Bezeichnung": Product Order No.
MSB	"Most Significant Bit": Most significant bit of a binary number
MSC	Machine-side converter
NAMUR	Originally "Normenarbeitsgemeinschaft für Meß- und Regeltechnik in der chemischen Industrie": International user association for automation in the process industry

NC	"Normally Closed", NC contact
NO	"Normally Opened", NO contact
LSC	Line-side converter
NRTL	"Nationally Recognized Testing Laboratory": American testing facilities that provide product safety testing and certification services to manufacturers
NYY, NYCWY	Cable types
PCB	Polychlorinated biphenyls: toxins. Relevant for the disposal.
PELV	"Protective Extra Low Voltage", protective extra-low voltage (PELV). previously function extra-low voltage with safe isolation
PMM	permanent magnet machine
PERM	Permanent-magnet synchronous motors
PL	Specification of the Performance Level according to DIN EN ISO 13849-1:2015
PCS	Process control system
PPO	Parameter process data object: Part of a PROFIBUS profile
PTC	"Positive Temperature Coefficient", Positive Temperature Coefficient: PTC thermistor
RS 232, RS 485, RS 422	Standards for serial interfaces
RTU	"Remote Terminal Unit": Remote terminal unit
SELV	"Safety Extra Low Voltage": Safety extra low voltage
PLC	Programmable Logic Controller
STW	Control word
Sub-D	Actually "D-Sub": common type of a connector system for data connections
SVC	"Space Vector Control": space vector modulation, a technique to control rotating electrical machinery based on pulse width modulation.
TCP	"Transmission Control Protocol": a network protocol
TÜV	"Technischer Überwachungsverein": A body that carries out technical safety checks as prescribed by national laws or regulations
UL	"Underwriters Laboratories": certification organization for product safety in the USA
USB	"Universal Serial Bus": Serial bus system
UPS	Uninterruptible power supply
VDE	Association for Electrical, Electronic & Information Technologies
De-ionized water	Fully de-ionized water
ZLU	Supplementary supply agreements for inverter drives in power plants
ZSW	Status word

Index

Further information

Siemens:
www.siemens.com

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www.siemens.com/online-support

IndustryMall:
www.siemens.com/industrymall

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