

# PLATINUM®

## Event list product family TL (four-digit event report; 2011)

Author: Service

Type	Event code	Error description	Remedy	Cause		
				DC generator	Converter	Mains (AC)
1	900	Mains voltage (feed phase) exceeds measuring range	Disconnect converter <b>immediately</b> from mains and DC generator; make sure that connection was not established between 2 phases.			x
1	910	DC voltage too high	Check layout and stringing (2 strings in series instead of parallel?) Measure DC voltage before connecting to the converter. Disconnect from DC generator <b>immediately</b>	x		
1	920	Polarity of DC connection reversed	Correct polarity of the strings.	x		
1	930	Insulation resistance too low	Check insulation of the generator against earth (animal bite on cable, pinched cable, damaged modules,...).	x		
1	940	internal short circuit	Converter needs to be exchanged. Send repair request to PLATINUM service.		x	
1	950	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1010	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1020	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1060	internal system error	Converter needs to be exchanged. Send repair request to PLATINUM service.		x	
1	1061	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	x
1	1062	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	x
1	1063	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	x
1	1070	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1080	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	

# PLATINUM®

## Event list product family TL (four-digit event report; 2011)

Author: Service

Type	Event code	Error description	Remedy	Cause		
				DC generator	Converter	Mains (AC)
	1081	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
	1082	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
	1083	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
	1084	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
	1085	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
	1086	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
	1087	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
	1088	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
	1089	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
	1090	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1100	Relay error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1110	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1120	Frequency measuring not plausible (poss. bouncing mains voltage)	Check all contact points (tight fit of screws) on the mains side from the converter to the connection point (also automatic cut-outs)			x
1	1130	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	

# PLATINUM®

## Event list product family TL (four-digit event report; 2011)

Author: Service

Type	Event code	Error description	Remedy	Cause		
				DC generator	Converter	Mains (AC)
1	1140	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1200	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1210	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1220	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1250	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1270	internal system error	Perform reconfiguration, set correct country code		x	
1	1290	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1300	Connection phase (L) and neutral conductor (N) switched (or bad PE connection)	Set connection phase L and N correctly, check PE connection from converter to feeding point. Measure voltage between L1 and N		x	x
1	1310	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1340	Country code not yet set	Set country code, poss. perform reconfiguration (service menu)		x	
1	1350	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1380	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1400	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1401	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	

# PLATINUM®

## Event list product family TL (four-digit event report; 2011)

Author: Service

Type	Event code	Error description	Remedy	Cause		
				DC generator	Converter	Mains (AC)
1	1410	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1420	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1500	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
1	1510	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2010	Voltage limit for feeding amplitude (L1) exceeded	Check feeding phase for contact resistance/transition resistance, poss. contact mains operator if voltage is generally too high			x
2	2011	Voltage limit for feeding amplitude (L1) undercut	Check feeding phase for contact resistance/transition resistance, poss. contact mains operator if voltage is generally too low			x
2	2012	Voltage limit for amplitude (L2) exceeded	Check phase for contact resistance/transition resistance, poss. contact mains operator if voltage is generally too high			x
2	2013	Voltage limit for amplitude (L2) undercut	Check fuse phase L2, poss. contact mains operator if voltage is generally too low			x
2	2014	Voltage limit for amplitude (L3) exceeded	Check phase for contact resistance/transition resistance, poss. contact mains operator if voltage is generally too high			x
2	2015	Voltage limit for amplitude (L3) undercut	Check fuse phase L3, poss. contact mains operator if voltage is generally too low			x
2	2020	phase to phase voltage L12 exceeded	Check mains connection for contact resistance/transition resistance, poss. contact mains operator if voltage is generally too high			x
2	2021	phase to phase voltage L12 undercut	Check fuses on mains connection, poss. contact mains operator if voltage is generally too low			x
2	2030	phase to phase voltage L23 exceeded	Check mains connection for contact resistance/transition resistance, poss. contact mains operator if voltage is generally too high			x
2	2031	phase to phase voltage L23 undercut	Check fuses on mains connection, poss. contact mains operator if voltage is generally too low			x

# PLATINUM®

## Event list product family TL (four-digit event report; 2011)

Author: Service

Type	Event code	Error description	Remedy	Cause		
				DC generator	Converter	Mains (AC)
2	2040	phase to phase voltage L31 exceeded	Check mains connection for contact resistance/transition resistance, poss. contact mains operator if voltage is generally too high			x
2	2041	phase to phase voltage L31 undercut	Check fuses on mains connection, poss. contact mains operator if voltage is generally too low			x
2	2080	Mains voltage errors (e.g. voltage peak through switching another consumer)	Remedy error cause, check all contact points (tight fit of screws) on the mains side from the converter to the connection point (also automatic cut-outs)			x
	2090	Voltage limit for feeding amplitude (L1) exceeded (mains quality limit)	Check feeding phase for contact resistance/transition resistance, poss. contact mains operator if voltage is generally too high			x
2	2100	Frequency limit for feeding phase exceeded	poss. contact mains operator			x
2	2101	Frequency limit for feeding phase undercut	poss. contact mains operator			x
2	2110	Frequency limit for feeding phase undercut	poss. contact mains operator			x
2	2120	Frequency measuring not plausible (poss. bouncing mains voltage)	Check all contact points (tight fit of screws) on the mains side from the converter to the connection point (also automatic cut-outs)			x
2	2130	AFI error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.	x		
2	2140	AFI error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.	x		
2	2150	AFI error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.	x		
2	2160	AFI error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.	x		
2	2170	AFI error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.	x		
2	2180	AFI error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.	x		

# PLATINUM®

## Event list product family TL (four-digit event report; 2011)

Author: Service

Type	Event code	Error description	Remedy	Cause		
				DC generator	Converter	Mains (AC)
2	2190	AFI error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2200	Excess temperature on power semiconductors	Check ventilation (dirt build-up/clogging of cooling ribs, air circulation blocked). Select cooler suspension site (shadow, ventilation, etc.) Once the WR is cooled down, it will connect again.		x	
2	2210	Inside temperature too high	Check ventilation (dirt build-up/clogging of cooling ribs, air circulation blocked). Select cooler suspension site (shadow, ventilation, etc.) Once the WR is cooled down, it will connect again.		x	
2	2220	Excess temperature on choke coil	Check ventilation (dirt build-up/clogging of cooling ribs, air circulation blocked). Select cooler suspension site (shadow, ventilation, etc.) Once the WR is cooled down, it will connect again.		x	
2	2230	Inside temperature too high	Check ventilation (dirt build-up/clogging of cooling ribs, air circulation blocked). Select cooler suspension site (shadow, ventilation, etc.) Once the WR is cooled down, it will connect again.		x	
2	2260	Current limit exceeded	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	x
2	2261	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	x
2	2262	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	x
2	2263	Mains error (isolated operation)	Check fuses and contacts on mains connection.	x	x	
2	2270	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2280	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2281	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2290	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2300	Temperature sensor on power semiconductor defect	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	

# PLATINUM®

## Event list product family TL (four-digit event report; 2011)

Author: Service

Type	Event code	Error description	Remedy	Cause		
				DC generator	Converter	Mains (AC)
2	2310	Temperature sensor choke coil defect	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2320	Inside temperature sensor defect	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2330	Inside temperature sensor defect	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2340	Error relay cut-off	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2341	Error relay cut-off	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2342	Error relay cut-off	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2350	Error relay cut-off	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2360	Error relay connection	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2370	Error relay connection	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2380	Error relay connection	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2390	Error DC measuring AC side offset	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2401	Error DC measuring AC side	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2402	Error DC measuring AC side	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2410	Excess DC current	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	

# PLATINUM®

## Event list product family TL (four-digit event report; 2011)

Author: Service

Type	Event code	Error description	Remedy	Cause		
				DC generator	Converter	Mains (AC)
2	2411	Internal excess DC current	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2420	Excess DC voltage	Check layout and stringing (2 strings in series instead of parallel?) Measure DC voltage before connecting to the converter.	x		
2	2421	Excess internal DC voltage	If error recurs repeatedly, check DC cables for external errors.	x	x	
2	2450	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2460	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.			
2	2470	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2500	Internal communication error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2511	Internal communication error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2512	Internal communication error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2513	Internal communication error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2530	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2541	Error relay connection	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2550	Internal communication error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	



# PLATINUM®

## Event list product family TL (four-digit event report; 2011)

Author: Service

Type	Event code	Error description	Remedy	Cause		
				DC generator	Converter	Mains (AC)
2	2570	Communication error phase balancer	If phase balancer is activated, check cable, ensure that AC supply of all 3 converters is OK. With individual converters, check phase balancer setting - must be deactivated.		x	x
2	2580	Communication error phase balancer	Check phase balancer settings			
2	2690	Internal memory error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2700	Internal memory error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2710	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2720	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2730	internal system error	Disconnect converter from DC generator and mains. Wait until device has discharged (approx. 3 min.) and connect again. In case error occurs again: Contact PLATINUM service, have error code and serial number ready.		x	
2	2740	Voltage from generator too low	Check (measure) DC voltage on generator Check layout and stringing	x		
2	2900	Accompanying message when converter shuts off due to an error	See corresponding simultaneous error code in the event list		x	
2	2980	Self-test error (only with certain country codes, e.g. Italy)	Self- test only works during feed operation, meaning when AC and DC have the corresponding values.		x	
3	3010	Sudden DC voltage drop	Check DC plug connections and DC shut-off, may also occur at sundown		x	
4	4000	Internal information reset, only entered in events list	No intervention necessary, for information only, can be recorded e.g. when activating AC supply		x	
4	4001	Information reset, only entered in events list	No intervention necessary, for information only, can be recorded e.g. when activating AC supply		x	
4	4002	Information reset, only entered in events list	No intervention necessary, for information only, can be recorded e.g. when activating AC supply		x	

# PLATINUM®

## Event list product family TL (four-digit event report; 2011)

Author: Service

Type	Event code	Error description	Remedy	Cause		
				DC generator	Converter	Mains (AC)
4	4020	Information "sunrise", is only entered in events list when reaching the generator voltage feeding threshold	no intervention necessary, for information only		x	
4	4030	Information "sundown", is only entered in events list when undercutting the feeding threshold (capacity)	no intervention necessary, for information only		x	
4	4090	Information, AC measuring values outside of admissible limits.	no intervention necessary, for information only		x	
4	4120	Parameters were changed.	no intervention necessary, for information only		x	
4	4130	Parameters were changed.	no intervention necessary, for information only		x	
4	4170	Capacity limitation through phase balancer was configured.	no intervention necessary, for information only		x	
4	4180	Capacity limitation cancelled by phase balancer.	no intervention necessary, for information only		x	
4	4230	Self-test completed successfully (only certain country codes, e.g. Italy)	no intervention necessary, for information only		x	
4	4500	Information reset (e.g. after mains failure) only entered in events list	no intervention necessary, for information only		x	
4	4600	Software update was performed.	no intervention necessary, for information only		x	
4	4610	Software update was performed.	no intervention necessary, for information only		x	