9.3 List of Machince Safety Notification

No.	Notification	Explanation / remedy
01	Warning	A "warning" appears in the display (directly below the mains voltage information during the process). The message can be combined with the parameters of voltage, current or speed and the "high" or "low" specification. The message shows that the limit value specified in the monitoring limits for the alarm were overshot or undershot for the corresponding parameter. Example: "Warning: Low speed": The limit value of the weld speed specified for the alarm was reached during the "low-current time". This can be overshooting or undershooting. If one of the abort values is also reached, the process is aborted and another message is output.
02	Gas problem	The process was aborted due to a problem with the gas. - Check hoses, bottle and pressure reducer. - Check sensor even if the gas is flowing in the sufficient quantity. The message also appears outside the welding process when the gas is switched on (gas/coolant button is on) but no gas is flowing.
03	Cooling water problem	The process was aborted due to a problem with the cooling water. -Check hoses, coolant level in tank and pump operation. -Check sensor even if the coolant is flowing in the sufficient quantity. -Check Coolant flow: check cooloant return from machine for testing). The message also appears outside the welding process when the gas is switched on (gas/coolant button is on) but no water is flowing.
04	Error in ext. input	If device connected to external error input triggered the error. If a device is not connected to the external error input: -Deactivate monitoring function in the system settings.
05	Current fault	Used in connection with a deviation of the weld current. Example: "Warning: Low current fault", see message 01
06	Current abort	The weld current has overshot or undershot the limits defined for aborting in the monitoring limits and the process was interrupted. -Check limit values: Possibly set too close together. Excessive resistance in weld circuit (ground connection, rotor, current water cable): The machine can no longer keep the programmed weld current (setpoint value) stable within the specified limits.
07	Low	The limit value set for the low pulse of the corresponding parameter was reached; see also message 01.
08	Voltage	The message appears as "Warning: Voltage". The limit values specified in the monitoring limits for the alarm were overshot or undershot. -Check limit values and heed information in "Monitoring functions" see Sec. 8.9, Page 54. Cause for excessive arc voltage: • High transition resistances in weld circuit (plug, ground contact etc.) For cassette heads: Worn current water cable.
09	Voltage abort	The limit values for aborting with regard to arc voltage specified in the monitoring limits are overshot or undershot. -Check limit values and heed information in "Monitoring functions" see Sec. 8.9, Page 50. Cause for excessive arc voltage: • High transition resistances in weld circuit (plug, ground contact etc.) For cassette heads: Worn current water cables.

Nr.	Notification	Explanation / remedy
10	speed	Supplement to "Warning". The limit values specified in the monitoring limits (warning) of the speed were overshot or undershot. -Check limit values. -Check weld head speed. -Carry out motor calibration if necessary.
11	Speed abort	The weld speed has overshot or undershot the limit values specified for abortion in the monitoring limits and the process was aborted. Check limit values; they may be too close together. Possible causes for speed aborting: Mechanically blocked, jamming or defective weld heads -Check whether the weld head can be moved manually (or with the remote control). -Carry out motor calibration if necessary.
12	Time limit for highvoltage ignition exceeded	After the ignition device was switched on, an arc was not ignited within approx. 3 seconds. The process is interrupted. Causes for failed arc ignition: • Fault in marginal conditions of the process, e.g. forgotten ground connection
13	Inverter	Fault in serial communication (RS232) between PC controller and inverter. -Switch machine off and then, after 30 seconds, switch it on again. Is the fault still occurring? -Contact your specialist dealer or ORBIMATIC.
14	Arc has cut out	Arc ignition was successful, but the arc cut out during the process. Causes: • Interruption of welding circuit (contact problems, ground terminal). • Excessively low currents (low pulse may not be under 5 A for standard applications!). • Excessively low final current. • Arc gap too large. • For open heads: Strong draft causes arc to cut out.
15	Short-circuit (current flowing, but no voltage)	The electrode has contacted the workpiece during the process. This leads to a reduction of the arc voltage below the "standard" value (from approx. 10 V); the system detects a short-circuit regardless of the settings in the monitoring limits. -Eliminate short-circuit. -Re-grind electrode. -Grind out any tungsten inclusions in the weld seam
16	Forming gas pressure	When used with forming gas pressure regulation. The actual value of the pressure deviates too strongly from the specified setpoint value (warning or process abortion). Causes: • Actual value too low; see interior pressure reading in display. • Possible excessively low input pressure from bottle manometer. - Ensure that there are no excessively large gaps (pipe joint?). -Ensure that the plugs are sealing tightly so that pressure can build up. -Set the pressure regulator on the BUP box to max. 10 bar if applicable. -Correct input pressure from bottle manometer if applicable. See also: Operating instructions of the BUP unit itself.

No.	Notification	Explanation / remedy
17	Error code	Internal read-write error in the software. "Error code" is followed by the error in "plain text" (see messages 18 through 29) or a two-digit number. -Contact ORBIMATIC service.
18	An error has occurred! Please contact our Support	
19	Parameter error	
20	Drive not found	Plain-text message which can appear with the "Error code" message (message 17). -Contact ORBIMATIC if the problem cannot be resolved.
21	File not found	
22	Path not found	
23	Folder full	
24	Drive full	
25	Drive not ready	
26	Write protection	
27	File access error	
28	The name contains invalid character	
29	Program can not be opened under that name	
30	The version of the file does not match. The file was changed!	Reload / copy / correct file.
31	Additional program cannot be created!	For messages with "90%" specifications: Resources almost used up. Additional data can still be saved. Recommendation: -Clean up system by deleting or externally saving data which is no longer required. The number of folders and procedures per folder is limited to 100, however.
32	Over 90% ofresources used up for procedures!	
33	Other folders can not to be created!	
34	Over 90% of resources for Folder consumed!	
35	The program can not Loading!	Procedure cannot be loaded after switch-on. When the machine is switched on, the last used program is loaded. If this is not possible (e.g. memory card removed), the default program is loaded. -Contact ORBIMATIC if the problem cannot be resolved.
36	The program can not be saved!	Problem with saving the programs. The error appears in "plain text" (see messages 18 to 29) or as a two-digit number Number.
37	File with inverter characteristic cannot be opened! Default values are used.	File with characteristics cannot be read. Current adjustment of the machine ineffective. A file is stored on the internal memory of the machine. During calibration, a digital adjustment is carried out, where the differences between the setpoint and actual values and the measured values of a calibrated measuring unit can be recorded point by point and saved in a file. If the file is not readable, the error coefficients are given the default value (1). This makes the current adjustment carried out by ORBIMATIC ineffective. -For applications which provide data monitoring and actual value recording, stop working with the machine. -Contact ORBIMATIC to restore the calibration data.

No	Notification	Explanation / remedy
38	Auto programming failed! The auto programming file may be missing or corrupt.	Auto programming error. Causes: • The combination of pipe diameter and wall thickness lie outside the value range of auto programming (e.g. wall thicknesses over 4 mm) -Use other parameters. • Data of the database on the internal Storage card not present or not readable -Contact ORBIMATIC to restore the data.
39	External storage medium not found! The card reader may not have a card inserted	Access to external memory card not possible. -Check if the USB stick is detected by the system. (diskette symbol in the display). -Remove the USB stick, wait a moment and insert it again. possibly use another connection. -Check whether the memory card is defective or has an unreadable format. -Contact ORBIMATIC service if the problem cannot be resolved.
40	Error when saving log	Software conflicts due to damaged files or files with unreadable contents. The message is followed by the error in "plain text" (see messages 18 through 29) or as a two-digit number.
41	Procedure file cannot be opened!	
42	Log file cannot be opened!	
43	Some currents are set too high. They cannot be achieved with a 115 V mains voltage! (OM 165 CA only)	Machine connected to mains network of less than 200 V AC. The maximum weld current is limited to 120 A. Procedure with higher weld current has been started.
44	An error occurred while reading the file FAILURES.TXT!	Internal error log (Failures.txt file) is missing or damaged.
45	No weld head connected!	Procedure started, no weld head connected to the machine. Weld head is connected? • Weld head not encoded • Voltage supply to weld head defective. The operating buttons in the weld head are not working. -Contact ORBIMATIC service.
46	Incorrect weld head connected!	The currently connected weld head is not the same as the weld head in the started procedure. -Select connected weld head in the procedure.– or – -Connect the weld head selected in the procedure to the machine. Are the weld head models identical, but the message appears anyway? -Contact ORBIMATIC service.
47	The procedure contains parameters which lie outside the limit values for the selected weld head!	Weld head changed in procedure. Weld head does not match the one in the parameters. The weld head list of the machine contains the parameters of the weld heads which can be connected to the machine, e.g. the maximum rotation of the rotor, the maximum pipe diameter to be welded and the maximum permissible current. -Adjust parameters of the program to the selected weld head.
48	motor current >> collision detection standard. Motor Motor current time	Gearbox stiff -Check head -Possibly. Repair the gearbox
49	Electrode change warning	-Replace electrode.

No	Notification	Explanation / remedy
50	Calibration error ("Calibration canceled due to execution error ; calibration canceled due to operational error; Calibration aborted due to Parameter error ")	Perform calibration again or restart the machine.
51	Error copying programs or protocols	Pay attention to possible write protection; the drive is may not ready.
52	Printer error, unable to communicate with a printer	-Check connection to printer. -Check network connection. -Update printer list.
53	Incorrect Setting	-Check entries.
54	Shared folder failed be created / integrated	Check if the shared folder is set to public. -Check if input data is correct. -Check if the IP address range matches.
55	Touchscreen could not be changed	Restart the machine
56	CAN Timeout error	Click away with "Okay". If welding process is not possible: -Contact the Orbitalum Service.
57	Required power higher as maximum current of inverter	Check current settings. If this error message appears more frequently: -Contact the Orbitalum Service.
58	Welding head parameters for Wire are wrong	Check wire settings.