

## ABB ACS310 Sürücü Arıza ve Hata Kodları

**ABB ACS310 sürücü arıza kodları** dokümanının içeriğinde sürücünüzün uyarı panelinde yer alan hata kodlarıyla ilgili tüm bilgilere ulaşabilirsiniz.

ADS mühendislik 2000 yılından beri yaptığı ABB sürücü servisi bayiliği sayesinde kazandığı tecrübe ile bütün ABB sürücülerinin tamirini ve upgared işlemlerini başarıyla yapmaktadır. ADS mühendislik arıza tespit için herhangi bir ücret talep etmemektedir. Tespit sonrası yollayacağımız rapor ve teklif ile arızanız size bildirilir. Teklifimiz kabul edilirse gerekli tamir, bakım ve temizlik işlemleri yapılır ve sürücünüz size gönderilir. Tamirde değiştirdiğimiz parçalar 1 yıl boyunca ADS mühendislik ve ABB garantisi altındadır.

**ACS310 sürücü hata kodları** ile ilgili destek taleplerinizi [servis@adsmuhendislik.com.tr](mailto:servis@adsmuhendislik.com.tr) adresinden bizlere ulaştırabilir ya da 444 237 4 numaralı telefondan bizlere ulaşabilirsiniz

### Alarm messages generated by the drive

CODE	ALARM	CAUSE	WHAT TO DO
2001	OVERCURRENT <i>0308</i> bit 0 (programmable fault function <i>1610</i> )	Output current limit controller is active.	Check motor load. Check acceleration time ( <i>2202</i> and <i>2205</i> ). Check motor and motor cable (including phasing). Check ambient conditions. Load capacity decreases if installation site ambient temperature exceeds 40 °C. See section <i>Derating</i> on page <i>338</i> .
2002	OVERVOLTAGE <i>0308</i> bit 1 (programmable fault function <i>1610</i> )	DC overvoltage controller is active.	Check deceleration time ( <i>2203</i> and <i>2206</i> ). Check input power line for static or transient overvoltage.
2003	UNDERVOLTAGE <i>0308</i> bit 2 (programmable fault function <i>1610</i> )	DC undervoltage controller is active.	Check input power supply.
2004	DIR LOCK <i>0308</i> bit 3	Change of direction is not allowed.	Check parameter <i>1003 DIRECTION</i> settings.
2005	IO COMM <i>0308</i> bit 4 (programmable fault function <i>3018</i> , <i>3019</i> )	Fieldbus communication break	Check status of fieldbus communication. See chapter <i>Fieldbus control with the embedded fieldbus</i> on page <i>287</i> . Check fault function parameter settings. Check connections. Check if master can communicate.
2006	AI1 LOSS <i>0308</i> bit 5 (programmable fault function <i>3001</i> , <i>3021</i> )	Analog input AI1 signal has fallen below limit defined by parameter <i>3021 AI1 FAULT LIMIT</i> .	Check fault function parameter settings. Check for proper analog control signal levels. Check connections.
2007	AI2 LOSS <i>0308</i> bit 6 (programmable fault function <i>3001</i> , <i>3022</i> )	Analog input AI2 signal has fallen below limit defined by parameter <i>3022 AI2 FAULT LIMIT</i> .	Check fault function parameter settings. Check for proper analog control signal levels. Check connections.

CODE	ALARM	CAUSE	WHAT TO DO
2008	PANEL LOSS <i>0308</i> bit 7 (programmable fault function <i>3002</i> )	Control panel selected as active control location for drive has ceased communicating.	Check panel connection. Check fault function parameters. Check control panel connector. Refit control panel in mounting platform. If drive is in external control mode (REM) and is set to accept start/stop, direction commands or references through control panel: Check group <i>10 START/STOP/DIR</i> and <i>11 REFERENCE SELECT</i> settings.
2009	DEVICE OVERTEMP <i>0308</i> bit 8	Drive IGBT temperature is excessive. Alarm limit is 120 °C.	Check ambient conditions. See also section <i>Derating</i> on page <i>338</i> . Check air flow and fan operation. Check motor power against drive power.
2010	MOTOR TEMP <i>0308</i> bit 9 (programmable fault function <i>3005...3009 / 3503</i> )	Motor temperature is too high (or appears to be too high) due to excessive load, insufficient motor power, inadequate cooling or incorrect start-up data.	Check motor ratings, load and cooling. Check start-up data. Check fault function parameters.
		Measured motor temperature has exceeded alarm limit set by parameter <i>3503 ALARM LIMIT</i> .	Check value of alarm limit. Check that actual number of sensors corresponds to value set by parameter <i>3501 SENSOR TYPE</i> . Let motor cool down. Ensure proper motor cooling: Check cooling fan, clean cooling surfaces, etc.
2012	MOTOR STALL <i>0308</i> bit 11 (programmable fault function <i>3010...3012</i> )	Motor is operating in stall region due to eg excessive load or insufficient motor power.	Check motor load and drive ratings. Check fault function parameters.
2013 1)	AUTORESET <i>0308</i> bit 12	Automatic reset alarm	Check parameter group <i>31 AUTOMATIC RESET</i> settings.
2014 1)	AUTOCHANGE <i>0308</i> bit 13	PFC Autochange function is active.	See parameter group <i>81 PFC CONTROL</i> , section <i>PFC control macro</i> on page <i>110</i> and section <i>SPFC control macro</i> on page <i>111</i> .
2015	PFC I LOCK <i>0308</i> bit 14	PFC Interlocks are active.	Drive cannot start <ul style="list-style-type: none"> <li>any motor (when Autochange is used)</li> <li>the speed regulated motor (when Autochange is not used).</li> </ul> See parameter group <i>81 PFC CONTROL</i> .
2018 1)	PID SLEEP <i>0309</i> bit 1	Sleep function has entered sleeping mode.	See parameter groups <i>40 PROCESS PID SET 1... 41 PROCESS PID SET 2</i> .

CODE	ALARM	CAUSE	WHAT TO DO
2021	START ENABLE 1 MISSING <i>0309</i> bit 4	No Start enable 1 signal received	Check parameter <i>1608 START ENABLE 1</i> settings. Check digital input connections. Check fieldbus communication settings.
2022	START ENABLE 2 MISSING <i>0309</i> bit 5	No Start enable 2 signal received	Check parameter <i>1609 START ENABLE 2</i> settings. Check digital input connections. Check fieldbus communication settings.
2023	EMERGENCY STOP <i>0309</i> bit 6	Drive has received emergency stop command and ramps to stop according to ramp time defined by parameter <i>2208 EMERG DEC TIME</i> .	Check that it is safe to continue operation. Return emergency stop push button to normal position.
2025	FIRST START <i>0309</i> bit 8	Motor identification magnetization is on. This alarm belongs to normal start-up procedure.	Wait until drive indicates that motor identification is completed.
2026	INPUT PHASE LOSS <i>0309</i> bit 9 (programmable fault function <i>3016</i> )	Intermediate circuit DC voltage is oscillating due to missing input power line phase or blown fuse. Alarm is generated when DC voltage ripple exceeds 14% of nominal DC voltage.	Check input power line fuses. Check for input power supply imbalance. Check fault function parameters.
2027	USER LOAD CURVE <i>0309</i> bit 10	Condition defined by <i>3701 USER LOAD C MODE</i> has been valid longer than half of the time set by <i>3703 USER LOAD C TIME</i> .	See parameter group <i>37 USER LOAD CURVE</i> .
2028	START DELAY <i>0309</i> bit 11	Start delay in progress	See parameter <i>2113 START DELAY</i> .
2030	INLET LOW <i>0309</i> bit 13	Pressure at pump/fan inlet too low	Check for a closed valve on the inlet side of the pump/fan. Check piping for leaks. See parameter group <i>44 PUMP PROTECTION</i> .
2031	OUTLET HIGH <i>0309</i> bit 14	Pressure at pump/fan outlet too high	Check piping for blocks. See parameter group <i>44 PUMP PROTECTION</i> .
2032	PIPE FILL <i>0309</i> bit 15	Pipe fill in progress	See parameters <i>4421...4426</i> .

CODE	ALARM	CAUSE	WHAT TO DO
2033	INLET VERY LOW <i>0310</i> bit 0	Pressure at pump/fan inlet too low	Check for a closed valve on the inlet side of the pump/fan. Check piping for leaks. See parameter group <i>44 PUMP PROTECTION</i> .
2034	OUTLET VERY HIGH <i>0310</i> bit 1	Pressure at pump/fan outlet too high	Check piping for blocks. See parameter group <i>44 PUMP PROTECTION</i> .
2038 <sup>1)</sup>	MOTOR HEATING	Motor heating is active.	See parameter <i>2115 MOT. HEATING SEL</i> .

<sup>1)</sup> Even when the relay output is configured to indicate alarm conditions (eg parameter *1401 RELAY OUTPUT 1* = 5 (*ALARM*) or 16 (*FLT/ALARM*)), this alarm is not indicated by a relay output.

## Alarms generated by the Basic control panel

The Basic control panel indicates control panel alarms with a code, A5xxx.

ALARM CODE	CAUSE	WHAT TO DO
5001	Drive is not responding.	Check panel connection.
5002	Incompatible communication profile	Contact your local ABB representative.
5010	Corrupted panel parameter backup file	Retry parameter upload. Retry parameter download.
5011	Drive is controlled from another source.	Change drive control to the local control mode.
5012	Direction of rotation is locked.	Enable change of direction. See parameter <a href="#">1003 DIRECTION</a> .
5013	Panel control is disabled because start inhibit is active.	Start from the panel is not possible. Reset the emergency stop command or remove the 3-wire stop command before starting from the panel. See section <a href="#">3-wire macro</a> on page <a href="#">105</a> and parameters <a href="#">1001 EXT1 COMMANDS</a> , <a href="#">1002 EXT2 COMMANDS</a> and <a href="#">2109 EMERG STOP SEL</a> .
5014	Panel control is disabled because of drive fault.	Reset drive fault and retry.
5015	Panel control is disabled because the local control mode lock is active.	Deactivate the local control mode lock and retry. See parameter <a href="#">1606 LOCAL LOCK</a> .
5018	Parameter default value is not found.	Contact your local ABB representative.
5019	Writing non-zero parameter value is prohibited.	Only parameter reset is allowed.
5020	Parameter or parameter group does not exist or parameter value is inconsistent.	Contact your local ABB representative.
5021	Parameter or parameter group is hidden.	Contact your local ABB representative.
5022	Parameter is write protected.	Parameter value is read-only and cannot be changed.
5023	Parameter change is not allowed, when drive is running.	Stop drive and change parameter value.
5024	Drive is executing a task.	Wait until task is completed.
5025	Software is being uploaded or downloaded.	Wait until upload/download is complete.
5026	Value is at or below minimum limit.	Contact your local ABB representative.
5027	Value is at or above maximum limit.	Contact your local ABB representative.
5028	Invalid value	Contact your local ABB representative.

ALARM CODE	CAUSE	WHAT TO DO
5029	Memory is not ready.	Retry.
5030	Invalid request	Contact your local ABB representative.
5031	Drive is not ready for operation, eg due to low DC voltage.	Check input power supply.
5032	Parameter error	Contact your local ABB representative.
5040	Parameter download error. Selected parameter set is not in current parameter backup file.	Perform upload function before download.
5041	Parameter backup file does not fit into memory.	Contact your local ABB representative.
5042	Parameter download error. Selected parameter set is not in current parameter backup file.	Perform upload function before download.
5043	No start inhibit	
5044	Parameter backup file restoring error	Check that file is compatible with drive.
5050	Parameter upload aborted	Retry parameter upload.
5051	File error	Contact your local ABB representative.
5052	Parameter upload has failed.	Retry parameter upload.
5060	Parameter download aborted	Retry parameter download.
5062	Parameter download has failed.	Retry parameter download.
5070	Panel backup memory write error	Contact your local ABB representative.
5071	Panel backup memory read error	Contact your local ABB representative.
5080	Operation is not allowed because the drive is not in the local control mode.	Switch to the local control mode.
5081	Operation is not allowed because of active fault.	Check cause of fault and reset fault.
5083	Operation is not allowed because parameter lock is on.	Check parameter <b>1602 PARAMETER LOCK</b> setting.
5084	Operation is not allowed because drive is performing a task.	Wait until task is completed and retry.
5085	Parameter download from source to destination drive has failed.	Check that source and destination drive types are same, ie ACS310. See the type designation label of the drive.
5086	Parameter download from source to destination drive has failed.	Check that source and destination drive type designations are the same. See type designation labels of the drives.

ALARM CODE	CAUSE	WHAT TO DO
5087	Parameter download from source to destination drive has failed because parameter sets are incompatible.	Check that source and destination drive information are same. See parameters in group <a href="#">33 INFORMATION</a> .
5088	Operation has failed because of drive memory error.	Contact your local ABB representative.
5089	Download has failed because of CRC error.	Contact your local ABB representative.
5090	Download has failed because of data processing error.	Contact your local ABB representative.
5091	Operation has failed because of parameter error.	Contact your local ABB representative.
5092	Parameter download from source to destination drive has failed because parameter sets are incompatible.	Check that source and destination drive information are same. See parameters in group <a href="#">33 INFORMATION</a> .



## Fault messages generated by the drive

CODE	FAULT	CAUSE	WHAT TO DO
0001	OVERCURRENT (2310) <i>0305</i> bit 0	Output current has exceeded trip level.	Check motor load. Check acceleration time ( <i>2202</i> and <i>2205</i> ). Check motor and motor cable (including phasing). Check ambient conditions. Load capacity decreases if installation site ambient temperature exceeds 40 °C. See section <i>Derating</i> on page <i>338</i> .
0002	DC OVERVOLT (3210) <i>0305</i> bit 1	Excessive intermediate circuit DC voltage. DC overvoltage trip limit is 420 V for 200 V drives and 840 V for 400 V drives.	Check that overvoltage controller is on (parameter <i>2005 OVERVOLT CTRL</i> ). Check input power line for static or transient overvoltage. Check deceleration time ( <i>2203</i> , <i>2206</i> ).
0003	DEV OVERTEMP (4210) <i>0305</i> bit 2	Drive IGBT temperature is excessive. Fault trip limit is 135 °C.	Check ambient conditions. See also section <i>Derating</i> on page <i>338</i> . Check air flow and fan operation. Check motor power against drive power.
0004	SHORT CIRC (2340) <i>0305</i> bit 3	Short circuit in motor cable(s) or motor	Check motor and motor cable.
0006	DC UNDERVOLT (3220) <i>0305</i> bit 5	Intermediate circuit DC voltage is not sufficient due to missing input power line phase, blown fuse, rectifier bridge internal fault or too low input power.	Check that undervoltage controller is on (parameter <i>2006 UNDERVOLT CTRL</i> ). Check input power supply and fuses.
0007	AI1 LOSS (8110) <i>0305</i> bit 6 (programmable fault function <i>3001</i> , <i>3021</i> )	Analog input AI1 signal has fallen below limit defined by parameter <i>3021 AI1 FAULT LIMIT</i> .	Check fault function parameter settings. Check for proper analog control signal levels. Check connections.
0008	AI2 LOSS (8110) <i>0305</i> bit 7 (programmable fault function <i>3001</i> , <i>3022</i> )	Analog input AI2 signal has fallen below limit defined by parameter <i>3022 AI2 FAULT LIMIT</i> .	Check fault function parameter settings. Check for proper analog control signal levels. Check connections.



CODE	FAULT	CAUSE	WHAT TO DO
0009	MOT OVERTEMP (4310) 0305 bit 8 (programmable fault function 3005...3009 / 3504)	Motor temperature is too high (or appears to be too high) due to excessive load, insufficient motor power, inadequate cooling or incorrect start-up data.	Check motor ratings, load and cooling. Check start-up data. Check fault function parameters.
		Measured motor temperature has exceeded fault limit set by parameter 3504 <b>FAULT LIMIT</b> .	Check value of fault limit. Check that actual number of sensors corresponds to value set by parameter 3501 <b>SENSOR TYPE</b> . Let motor cool down. Ensure proper motor cooling: Check cooling fan, clean cooling surfaces, etc.
0010	PANEL LOSS (5300) 0305 bit 9 (programmable fault function 3002)	Control panel selected as active control location for drive has ceased communicating.	Check panel connection. Check fault function parameters. Check control panel connector. Refit control panel in mounting platform. If drive is in external control mode (REM) and is set to accept start/stop, direction commands or references through control panel: Check group 10 <b>START/STOP/DIR</b> and 11 <b>REFERENCE SELECT</b> settings.
0012	MOTOR STALL (7121) 0305 bit 11 (programmable fault function 3010...3012)	Motor is operating in stall region due to eg excessive load or insufficient motor power.	Check motor load and drive ratings. Check fault function parameters.
0014	EXT FAULT 1 (9000) 0305 bit 13 (programmable fault function 3003)	External fault 1	Check external devices for faults. Check parameter 3003 <b>EXTERNAL FAULT 1</b> setting.
0015	EXT FAULT 2 (9001) 0305 bit 14 (programmable fault function 3004)	External fault 2	Check external devices for faults. Check parameter 3004 <b>EXTERNAL FAULT 2</b> setting.
0016	EARTH FAULT (2330) 0305 bit 15 (programmable fault function 3017)	Drive has detected earth (ground) fault in motor or motor cable.	Check motor. Check motor cable. Motor cable length must not exceed maximum specifications. See section <b>Motor connection data</b> on page 348. <b>Note:</b> Disabling earth fault (ground fault) may void the warranty.

CODE	FAULT	CAUSE	WHAT TO DO
0018	THERM FAIL (5210) <a href="#">0306</a> bit 1	Drive internal fault. Thermistor used for drive internal temperature measurement is open or short circuited.	Contact your local ABB representative.
0021	CURR MEAS (2211) <a href="#">0306</a> bit 4	Drive internal fault. Current measurement is out of range.	Contact your local ABB representative.
0022	SUPPLY PHASE (3130) <a href="#">0306</a> bit 5	Intermediate circuit DC voltage is oscillating due to missing input power line phase or blown fuse. Trip occurs when DC voltage ripple exceeds 14% of nominal DC voltage.	Check input power line fuses. Check for input power supply imbalance. Check fault function parameters.
0024	OVERSPEED (7310) <a href="#">0306</a> bit 7	Motor is turning faster than highest allowed speed due to incorrectly set minimum/maximum speed. Operating range limits are set by parameters <a href="#">2007 MINIMUM FREQ</a> and <a href="#">2008 MAXIMUM FREQ</a> .	Check minimum/maximum frequency settings. Check adequacy of motor braking torque.
0026	DRIVE ID (5400) <a href="#">0306</a> bit 9	Internal drive ID fault	Contact your local ABB representative.
0027	CONFIG FILE (630F) <a href="#">0306</a> bit 10	Internal configuration file error	Contact your local ABB representative.
0028	SERIAL 1 ERR (7510) <a href="#">0306</a> bit 11 (programmable fault function <a href="#">3018</a> , <a href="#">3019</a> )	Fieldbus communication break	Check status of fieldbus communication. See chapter <a href="#">Fieldbus control with the embedded fieldbus</a> on page <a href="#">287</a> . Check fault function parameter settings. Check connections. Check if master can communicate.
0029	EFB CON FILE (6306) <a href="#">0306</a> bit 12	Configuration file reading error	Contact your local ABB representative.
0030	FORCE TRIP (FF90) <a href="#">0306</a> bit 13	Trip command received from fieldbus	See appropriate communication module manual.

CODE	FAULT	CAUSE	WHAT TO DO
0031	EFB 1 (FF92) <a href="#">0307</a> bit 0	Error from the embedded fieldbus (EFB) protocol application. The meaning is protocol dependent.	See chapter <a href="#">Fieldbus control with the embedded fieldbus</a> on page 287.
0032	EFB 2 (FF93) <a href="#">0307</a> bit 1		
0033	EFB 3 (FF94) <a href="#">0307</a> bit 2		
0034	MOTOR PHASE (FF56) <a href="#">0306</a> bit 4	Motor circuit fault due to missing motor phase or motor thermistor relay (used in motor temperature measurement) fault.	Check motor and motor cable. Check motor thermistor relay (if used).
0035	OUTP WIRING (FF95) <a href="#">0306</a> bit 15 (programmable fault function <a href="#">3023</a> )	Incorrect input power and motor cable connection (ie, input power cable is connected to drive motor connection).  The fault can be erroneously declared if the drive is faulty or the input power is a delta grounded system and the motor cable capacitance is large.	Check input power connections.
0036	INCOMPATIBLE SW (630F) <a href="#">0307</a> bit 3	Loaded software is not compatible.	Contact your local ABB representative.
0038	USER LOAD CURVE (FF6B) <a href="#">0307</a> bit 4	Condition defined by <a href="#">3701 USER LOAD C MODE</a> has been valid longer than the time set by <a href="#">3703 USER LOAD C TIME</a> .	See parameter group <a href="#">37 USER LOAD CURVE</a> .
0039	UNKNOWN EXTENSION (7086) <a href="#">0307</a> bit 5	Option module not supported by the drive firmware is connected to the drive.	Check connections.
0040	INLET VERY LOW (8A81) <a href="#">0307</a> bit 6	Pressure at pump/fan inlet too low	Check for a closed valve on the inlet side of the pump/fan. Check piping for leaks. See parameter group <a href="#">44 PUMP PROTECTION</a> .
0041	OUTLET VERY HIGH (8A83) <a href="#">0307</a> bit 7	Pressure at pump/fan outlet too high	Check piping for blocks. See parameter group <a href="#">44 PUMP PROTECTION</a> .

CODE	FAULT	CAUSE	WHAT TO DO
0042	INLET LOW (8A80) <i>0307</i> bit 8	Pressure at pump/fan inlet too low	Check for a closed valve on the inlet side of the pump/fan. Check piping for leaks. See parameter group <i>44 PUMP PROTECTION</i> .
0043	OUTLET HIGH (8A82) <i>0307</i> bit 9	Pressure at pump/fan outlet too high	Check piping for blocks. See parameter group <i>44 PUMP PROTECTION</i> .
0101	SERF CORRUPT (FF55) <i>0307</i> bit 14	Drive internal error	Write down fault code and contact your local ABB representative.
0103	SERF MACRO (FF55) <i>0307</i> bit 14		
0201	DSP T1 OVERLOAD (6100) <i>0307</i> bit 13		
0202	DSP T2 OVERLOAD (6100) <i>0307</i> bit 13		
0203	DSP T3 OVERLOAD (6100) <i>0307</i> bit 13		
0204	DSP STACK ERROR (6100) <i>0307</i> bit 12		
0206	CB ID ERROR (5000) <i>0307</i> bit 11		
1000	PAR HZRPM (6320) <i>0307</i> bit 15	Incorrect frequency limit parameter setting	Check parameter settings. Check that following applies: <ul style="list-style-type: none"> <li>• <i>2007 MINIMUM FREQ</i> &lt; <i>2008 MAXIMUM FREQ</i></li> <li>• <i>2007 MINIMUM FREQ</i> / <i>9907 MOTOR NOM FREQ</i> and <i>2008 MAXIMUM FREQ</i> / <i>9907 MOTOR NOM FREQ</i> are within range.</li> </ul>
1001	PAR PFC REF NEG (6320) <i>0307</i> bit 15	Incorrect PFC parameters	Check parameter group <i>81 PFC CONTROL</i> settings. Check that following applies: <ul style="list-style-type: none"> <li>• <i>2007 MINIMUM FREQ</i> &gt; 0 when <i>8123</i> is <i>ACTIVE</i> or <i>SPFC ACTIVE</i>.</li> </ul>

CODE	FAULT	CAUSE	WHAT TO DO
1003	PAR AI SCALE (6320) <a href="#">0307</a> bit 15	Incorrect analog input AI signal scaling	Check parameter group <a href="#">13 ANALOG INPUTS</a> settings. Check that following applies: <ul style="list-style-type: none"> <li>• <a href="#">1301 MINIMUM AI1</a> &lt; <a href="#">1302 MAXIMUM AI1</a></li> <li>• <a href="#">1304 MINIMUM AI2</a> &lt; <a href="#">1305 MAXIMUM AI2</a>.</li> </ul>
1004	PAR AO SCALE (6320) <a href="#">0307</a> bit 15	Incorrect analog output AO signal scaling	Check parameter group <a href="#">15 ANALOG OUTPUTS</a> settings. Check that following applies: <ul style="list-style-type: none"> <li>• <a href="#">1504 MINIMUM AO1</a> &lt; <a href="#">1505 MAXIMUM AO1</a>.</li> </ul>
1006	PAR EXT RO (6320) <a href="#">0307</a> bit 15	Incorrect extension relay output parameters	Check parameter settings. Check that following applies: <ul style="list-style-type: none"> <li>• MREL relay output extension module is connected to the drive.</li> <li>• <a href="#">1402...1403 RELAY OUTPUT 2 ... RELAY OUTPUT 3</a> and <a href="#">1410 RELAY OUTPUT 4</a> have non-zero values.</li> </ul> <p>See <i>MREL-01 relay output extension module user's manual</i> (3AUA0000035974 [English]).</p>
1012	PAR PFC IO 1 (6320) <a href="#">0307</a> bit 15	I/O configuration for PFC not complete	Check parameter settings. Following must apply: <ul style="list-style-type: none"> <li>• There are enough relays parameterized for PFC.</li> <li>• No conflict exists between parameter group <a href="#">14 RELAY OUTPUTS</a>, parameter <a href="#">8117 NR OF AUX MOT</a> and parameter <a href="#">8118 AUTOCHNG INTERV</a>.</li> </ul>
1013	PAR PFC IO 2 (6320) <a href="#">0307</a> bit 15	I/O configuration for PFC not complete	Check parameter settings. Following must apply: <ul style="list-style-type: none"> <li>• The actual number of PFC motors (parameter <a href="#">8127 MOTORS</a>) matches the PFC motors in parameter group <a href="#">14 RELAY OUTPUTS</a> and parameter <a href="#">8118 AUTOCHNG INTERV</a>.</li> </ul>
1014	PAR PFC IO 3 (6320) <a href="#">0307</a> bit 15	I/O configuration for PFC not complete. The drive is unable to allocate a digital input (interlock) for each PFC motor.	See parameters <a href="#">8120 INTERLOCKS</a> and <a href="#">8127 MOTORS</a> .
1015	PAR USER DEFINED U/F (6320) <a href="#">0307</a> bit 15	Incorrect voltage to frequency (U/f) ratio voltage setting.	Check parameter <a href="#">2610 USER DEFINED U1...2617 USER DEFINED F4</a> settings.

CODE	FAULT	CAUSE	WHAT TO DO
1016	PAR USER LOAD C (6320) 0307 bit 15	Incorrect user load curve parameter setting	<p>Check parameter settings. Following must apply:</p> <ul style="list-style-type: none"> <li>• 3704 LOAD FREQ 1 &lt; 3707 LOAD FREQ 2 &lt; 3710 LOAD FREQ 3 &lt; 3713 LOAD FREQ 4 &lt; 3716 LOAD FREQ 5</li> <li>• 3705 LOAD TORQ LOW 1 &lt; 3706 LOAD TORQ HIGH 1</li> <li>• 3708 LOAD TORQ LOW 2 &lt; 3709 LOAD TORQ HIGH 2</li> <li>• 3711 LOAD TORQ LOW 3 &lt; 3712 LOAD TORQ HIGH 3</li> <li>• 3714 LOAD TORQ LOW 4 &lt; 3715 LOAD TORQ HIGH 4</li> <li>• 3717 LOAD TORQ LOW 5 &lt; 3718 LOAD TORQ HIGH 5.</li> </ul>
1017	PAR SETUP 1 (6320) 0307 bit 15	It is not allowed to use frequency input signal and frequency output signal simultaneously.	<p>Disable frequency output or frequency input:</p> <ul style="list-style-type: none"> <li>• change transistor output to digital mode (value of parameter 1804 TO MODE = DIGITAL), or</li> <li>• change frequency input selection to other value in parameter groups 11 REFERENCE SELECT, 40 PROCESS PID SET 1, 41 PROCESS PID SET 2 and 42 EXT / TRIM PID.</li> </ul>