

**Addendum to ACH550-UH User's Manual Rev G (3AUA0000004092)  
 ACH550-PCR/PDR User's Manual Rev A (3AUA0000031590)  
 ACS550-U1 User's Manual Rev F (3AUA00000001418)  
 ACS550-PX User's Manual Rev D (3AUA0000012131)**

**Maximum Wire Size Capacities and Tightening Torques for Power Connection Terminals**

The change of the base drive power terminal block used in some ACH550 and ACS550 units results in a change to the maximum wire size and tightening torque information shown in the above referenced User's Manuals

**Drive's Power Connection Terminals**

The following table provides specifications for the drive's power connection terminals and replaces the table in the ACS550-U1 and ACH550-UH User's Manuals.

Frame Size	U1, V1, W1						Earthing PE Terminal			
	U2, V2, W2									
	BRK+, UDC+ Terminals									
	Min. Wire Size		Max. Wire Size		Torque		Max. Wire Size		Torque	
	mm <sup>2</sup>	AWG	mm <sup>2</sup>	AWG	Nm	lb-ft	mm <sup>2</sup>	AWG	Nm	lb-ft
R1 <sup>1</sup>	0.75	18	16	6	1.3	1	16	6	1.3	1
R2 <sup>1</sup>	0.75	18	16	6	1.3	1	16	6	1.3	1
R3 <sup>1</sup>	2.5	14	25	3	2.7	2	25	3	2.7	2
R4 <sup>1</sup>	10	8	50	1/0	5.6	4	50	1/0	5.6	4
R5	16	6	70	2/0	15	11	70	2/0	15	11
R6	95 <sup>2</sup>	3/0	185	350 MCM	40	30	185	350 MCM	40	30
R7	16	6	185	350 MCM	40	30	Attach appropriate ring lugs to ground wires and mount with, up to five 13/32 bolts.			
R8	16	6	2x240	2x500 MCM	57	42				

1. Do not use aluminum cable with frame sizes R1...R4.
2. See the following section for smaller wire sizes on frame size R6.

The Motor Terminal data contained in the Power Connection Terminals section of the ACS550-PC/PD and ACH550-PCR/PDR User's Manuals is replaced with the information contained in the above table.



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**Derating**

The drives load capacity (current) must be derated for certain situations, as defined below. When the drives output current is derated for the below situations, you must also change parameter 2003 (MAX CURRENT) from the default value of  $1.8 \times I_{2n}$  to not more than the derating factor  $\times I_{2n}$ . Operation of the drive above this de-rated value will cause nuisance trips and subsequent drive failure. It is also recommended that parameter 2017 (MAX TORQUE 1) be changed from the default value of  $\pm 300\%$  to a value commensurate to the desired maximum torque for the machine or process.

**Single phase supply derating**

For 208...240V series drives (ACx550-xx-xxxAx-2), a single phase supply can be used. In this situation, the drives continuous output current ( $I_{2n}$  for normal duty or  $I_{2hd}$  for heavy duty) must be reduced by a factor of 50%. When commissioning the drive, ensure the motor nominal current entered into parameter 9906 (MOTOR NOM CURR) is equal to or less than the derated continuous output current based on connection to a single phase supply.

Note: For additional information regarding derating for ambient temperature and altitude refer to this section in the user's manual.

Code	Description	Code
3007	<p><b>MOT LOAD CURVE</b>            Sets the maximum allowable operating load of the motor.</p> <ul style="list-style-type: none"> <li>- With the default value 100%, motor overload protection is functioning when the constant current exceeds 127% of the parameter 9906 MOTOR NOM CURR value.</li> <li>- The default overloadability is at the same level as what motor manufacturer's typically allow in the 30°C (86°F) ambient temperature and 100 m (3300 ft) altitude. When the ambient temperature exceeds 30°C (86°F) or the installation altitude is over 1000 m (3300 ft), decrease the parameter 3007 value according to the motor manufacturer's recommendation.</li> </ul> <p><b>Example:</b> If the constant protection level needs to be 115% of the motor nominal current, set parameter 3007 value to 91% (= <math>115/127 \times 100\%</math>)</p>	

Code	Description
1201	<p>13 = DI3,4,5 - Selects one of seven Constant Speeds (1...7) using DI3, DI4, and DI5            - See above (DI1,2,3) for code.</p> <p>14 = DI4,5,6 - Selects one of seven Constant Speeds (1...7) using DI4, DI5 and DI6            - See above (DI1,2,3) for code.</p> <p>15...18 = TIMED FUNC 1...4 - Selects Constant Speed 2 when Timed Function is active. See <i>Group 36: TIMED FUNCTIONS</i>.</p> <p>19 = TIMED FUN1&amp;2 - Selects a constant speed depending on the state of Time Functions 1&amp;2. See parameter 1209.</p>