



**AYK 550
AIR MODULATOR**

QUICK START

Supersedes: Nothing

Form: 100.42-NO1



QUICK START

AYK550-UH HVAC DRIVES (1...150HP)

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Safety



Warning! The AYK550 adjustable speed AC drive should **ONLY** be installed by a qualified electrician.



Warning! Even when the motor is stopped, dangerous voltage is present at the Power Circuit terminals U1, V1, W1 and U2, V2, W2 and, where present, UDC+, UDC-, BRK+ and BRK-.



Warning! Dangerous voltage is present when input power is connected. After disconnecting the supply, wait at least 5 minutes (to let the intermediate circuit capacitors discharge) before removing the cover.



Warning! Even when power is removed from the input terminals of the AYK550, there may be dangerous voltage (from external sources) on the terminals of the relay outputs R01...R03.



Warning! When the control terminals of two or more drive units are connected in parallel, the auxiliary voltage for these control connections must be taken from a single source which can either be one of the units or an external supply.



Warning! The AYK550-UH is not a field repairable unit. Never attempt to repair a malfunctioning unit; contact the factory or your local Authorized Service Center for replacement.



Warning! The AYK550 will start up automatically after an input voltage interruption if the external run command is on.



Warning! The heat sink may reach a high temperature. Consult York AYK550 Users Manual.



Warning! If the drive will be used in a floating network, remove screws at EM1 and EM3 (Frame size R1...R4), or F1 and F2 (Frame size R5 or R6). Consult YORK AYK550 Users Manual Form 100.42-O1 (604).

Note! For more technical information, contact the factory or your local YORK sales representative.

Use of Warnings and Notes

There are two types of safety instructions throughout this manual:

- Notes draw attention to a particular condition or fact, or give information on a subject.
- Warnings caution you about conditions which can result in serious injury or death and/or damage to the equipment. They also tell you how to avoid the danger. The warning symbols are used as follows:



Dangerous voltage warning warns of high voltage which can cause physical injury and/or damage to the equipment.

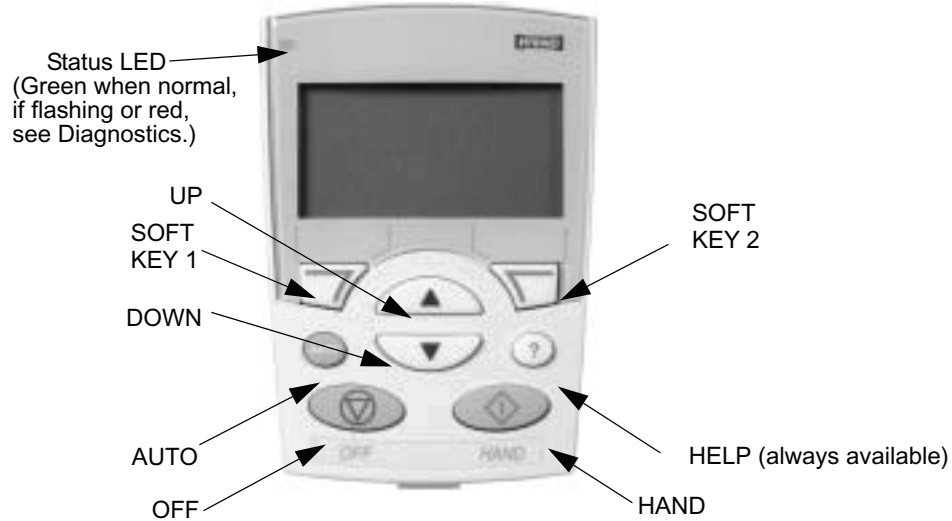


General warning warns about conditions, other than those caused by electricity, which can result in physical injury and/or damage to the equipment

Start-Up

HVAC Control Panel Features

The AYK550 HVAC control panel (ACS-CP-B) features:



X0201




- Language selection for the display
- Drive connection that can be made or detached at any time
- Start-up assistant to facilitate drive commissioning
- Copy function for moving parameters to other AYK550 drives
- Backup function for saving parameter sets
- Context sensitive help
- Real-time clock

General Display Features

Soft Key Functions

The soft key functions are defined by text displayed just above each key.

Display Contrast

To adjust display contrast, simultaneously press  and  or , as appropriate.


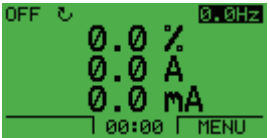




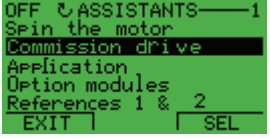


Start-Up

Start-Up can be performed in two ways:

- Using the Start-Up Assistant.
- Changing the parameters individually.

Start-Up by Using the Start-Up Assistant


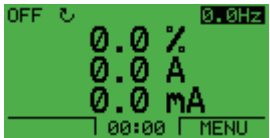






To start the Start-Up Assistant, follow these steps:













1	Select MENU to enter the main menu		
2	Select ASSISTANTS with the Up/Down buttons and select ENTER.	 	
3	Scroll to COMMISSION DRIVE with the Up/Down buttons.		
4	Change the values suggested by the assistant to your preferences and then press SAVE after every change.		

The Start-Up Assistant will guide you through the start-up.

Start-Up by Changing the Parameters Individually

To change the parameters, follow these steps:

1	Select MENU to enter the main menu.		
2	Select the Parameters mode with the UP/DOWN buttons and select ENTER to select the Parameters mode.	 	
3	Select the appropriate parameter group with the UP/DOWN buttons and select SEL	 	

4	Select the appropriate parameter in a group with the UP/DOWN buttons. Select EDIT to change the parameter value.	  	
5	Press the UP/DOWN buttons to change the parameter value.	 	
6	Select SAVE to store the modified value or select CANCEL to leave the set mode. Any modifications not saved are cancelled.		
7	Select EXIT to return to the listing of parameter groups, and again to return to the main menu.	 	

To complete the control connections by manually entering the parameters, see "Parameters Mode" in this section.

For detailed hardware description, see the "Technical Data" section.

Note! The current parameter value appears below the highlighted parameter.

Note! To view the default parameter value, press the UP/DOWN buttons simultaneously.

Note! The most typical and necessary parameters to change are parameter groups 99 Start-up data, 10 Start/Stop/Dir, 11 Reference Select, 20 Limits, 21 Start/Stop, 22 Accel/Decel, 26 Motor Control and 30 Fault Functions.

Note! To restore the default factory settings, select the application macro HVAC default.

Modes

The HVAC control panel has several different modes for configuring, operating and diagnosing the drive. The modes are:

- **Standard display mode** – Shows drive status information and operates the drive.
- **Parameters mode** – Edits parameter values individually.
- **Start-up assistant mode** – Guides the start-up and configuration.
- **Changed parameters mode** – Shows changed parameters.
- **Drive parameter backup mode** – Stores or uploads the parameters.
- **Clock set mode** – Sets the time and date for the drive.
- **I/O settings mode** – Checks and edits the I/O settings.

Standard Display Mode

Use the standard display mode to read information on the drive's status and to operate the drive. To reach the standard display mode, press EXIT until the LCD display shows status information as described below.

Status Information

Top. The top line of the LCD display shows the basic status information of the drive.

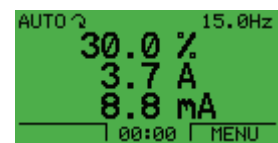
- HAND – Indicates that the drive control is local, that is, from the control panel.
- AUTO – Indicates that the drive control is remote, such as the basic I/O (X1) or fieldbus.
- ↻ – Indicates the drive and motor rotation status as follows:

Control panel display	Significance
Rotating arrow (clockwise or counterclockwise)	<ul style="list-style-type: none"> • Drive is running and at setpoint • Shaft direction is forward or reverse
Rotating arrow blinking	Drive is running but not at setpoint
Stationary arrow	Drive is stopped

- Upper right – shows the active reference.

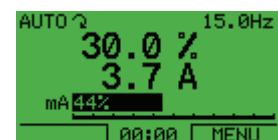
Middle. Using parameter group 34, the middle of the LCD display can be configured to display:

- One to three parameter values – The default display shows parameters 0103 (OUTPUT FREQ) in percentages, 0104 (CURRENT) in amperes and 0120 (AI1) in milliamperes.
- A bar meter rather than one of the parameter values.





Bottom. The bottom of the LCD display shows:

- Lower corners – show the functions currently assigned to the two soft keys.
- Lower middle – displays the current time (if configured to show the time).



Operating the Drive

AUTO/HAND – The very first time the drive is powered up, it is in the auto control (AUTO) mode, and is controlled from the Control terminal block X1.

To switch to hand control (HAND) and control the drive using the control panel, press and hold the  or  button.

- Pressing the HAND button switches the drive to hand control while keeping the drive running.
- Pressing the OFF button switches to hand control and stops the drive.

To switch back to auto control (AUTO), press and hold the  button.


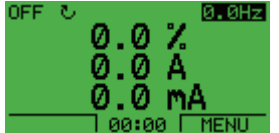











Hand/Auto/Off – To start the drive press the HAND or AUTO buttons, to stop the drive press the OFF button.





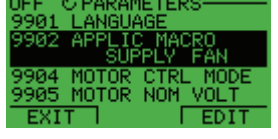
Reference – To modify the reference (only possible if the display in the upper right corner is in reverse video) press the UP or DOWN buttons (the reference changes immediately).

The reference can be modified in the local control mode, and can be parameterized (using Group 11 reference select) to also allow modification in the remote control mode.

Parameters Mode

To change the parameters, follow these steps:

1	Select MENU to enter the main menu.		
2	Select the Parameters mode with the UP/DOWN buttons, and select ENTER to select the Parameters mode.	 	
3	Select the appropriate parameter group with the UP/DOWN buttons and select SEL	 	
4	Select the appropriate parameter in a group with the UP/DOWN buttons. Select EDIT to change the parameter.	 	
5	Press the UP/DOWN buttons to change the parameter value.		

6	Select SAVE to store the modified value or select CANCEL to leave the set mode. Any modifications not saved are cancelled.		
7	Select EXIT to return to the listing of parameter groups, and again to return to the main menu.	 	

To complete the control connections by manually entering the parameters, see "Parameters Mode" in the this section.

For detailed hardware description, see the Appendix.

Note! The current parameter value appears below the highlighted parameter.


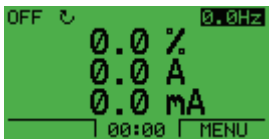







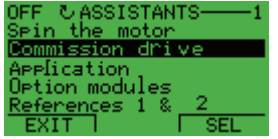
Note! To view the default parameter value, press the UP/DOWN buttons simultaneously.

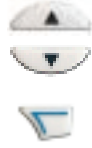

Note! The most typical and necessary parameters to change are parameter groups 99 Start-up data, 10 Start/Stop/Dir, 11 Reference Select, 20 Limits, 21 Start/Stop, 22 Accel/Decel, 26 Motor Control and 30 Fault Functions.

Note! To restore the default factory settings, select the application macro HVAC default.

Start-Up Assistant Mode

To start the Start-Up Assistant, follow these steps:

1	Select MENU to enter the main menu		
2	Select ASSISTANTS with the Up/Down buttons and select ENTER.	  	
3	Scroll to COMMISSION DRIVE with the Up/Down buttons and select SEL.	  	

4	Change the values suggested by the assistant to your preferences and then press SAVE after every change.		
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The Start-Up Assistant will guide you through the start-up.

The Start-Up Assistant guides you through the basic programming of a new drive. (You should familiarize yourself with basic control panel operation and follow the steps outlined above.) At the first start, the drive automatically suggests entering the first task, Language Select. The assistant also checks the values entered to prevent entries that are out of range.

The Start-Up Assistant is divided into tasks. You may activate the tasks one after the other, as the Start-Up Assistant suggests, or independently.

Note! If you want to set the parameters independently, use the Parameters mode.


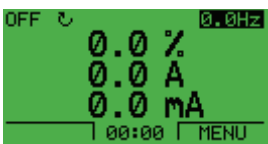




The order of tasks presented by the Start-up Assistant depends on your entries. The following task list is typical.

Task name	Description
Spin the motor	<ul style="list-style-type: none"> • Prompts for control panel display language selection. • Prompts for motor data. • Guides user through rotation check.
Commission drive	Prompts for motor data.
Application	Prompts for application macro selection.
References 1 & 2	<ul style="list-style-type: none"> • Prompts for the source of speed references 1 and 2. • Prompts for reference limits. • Prompts for frequency (or speed) limits.
Start/Stop Control	<ul style="list-style-type: none"> • Prompts for the source for start and stop commands. • Prompts for start and stop mode definition. • Prompts for acceleration and deceleration times.
Protections	<ul style="list-style-type: none"> • Prompts for current and torque limits. • Prompts for the use of Run enable and Start enable signals. • Prompts for the use of emergency stop. • Prompts for Fault function selection. • Prompts for Auto reset functions selection.
Constant Speeds	<ul style="list-style-type: none"> • Prompts for the use of constant speeds. • Prompts for constant speed values.
PID Control	<ul style="list-style-type: none"> • Prompts for PID settings. • Prompts for the source of process reference. • Prompts for reference limits. • Prompts for source, limits and units for the process actual value. • Defines the use of Sleep function.
Low Noise Setup	<ul style="list-style-type: none"> • Prompts for switching frequency. • Prompts for definition of Flux optimization. • Prompts for the use of Critical speeds.

Task name	Description
Panel Display	Prompts for display variable and unit settings.
Timed Functions	Prompts for the use of Timed functions.
Output	<ul style="list-style-type: none"> Prompts for the signals indicated through the relay outputs. Prompts for signals indicated through the analog outputs AO1 and AO2. Sets the minimum, maximum, scaling and inversion values.

Changed Parameters Mode

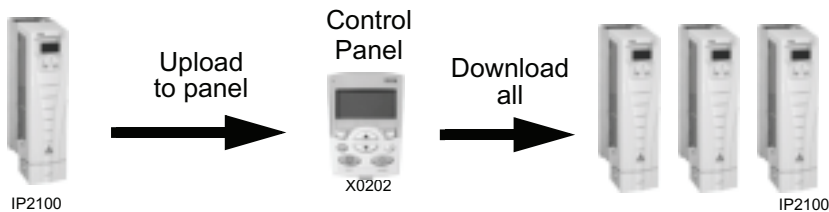
To view changed parameters, follow these steps:

1	Select MENU to enter the menu.		
2	Select CHANGED PAR with the UP/DOWN buttons and select ENTER.		
3	A list of changed parameters is displayed. Select EXIT to exit the parameters mode.		

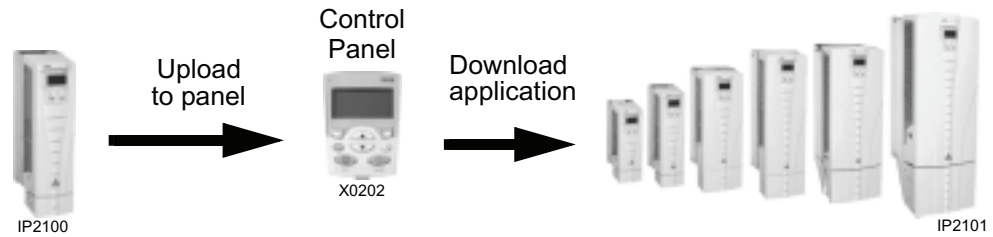
Drive Parameter Backup Mode

Use the parameter backup mode to export parameters from one drive to another. The parameters are uploaded from a drive to the control panel and downloaded from the control panel to another drive. Two options are available:


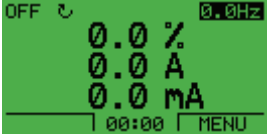











- Download all – copies all application and motor parameters to the drive. Useful where drives of the same size use the same application. Also useful to create a backup for recovery if drive parameters are corrupted or erased.





- Download application – copies only the application to the drive. Useful where drives of different sizes use the same application. Parameters 9905...9909, 1605, 1607, 5201, group 51 parameters and internal motor parameters are NOT copied.




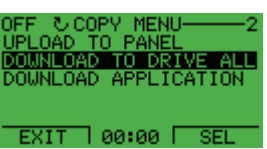




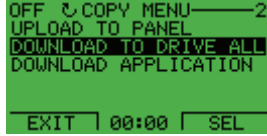


To upload parameters to control panel, follow these steps:








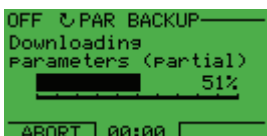
1	Select MENU to enter the main menu.		
2	Select PAR BACKUP with the UP/DOWN buttons and select ENTER.	 	
3	Scroll to Upload to Panel and select SEL.	 	
4	The text "Copying parameters" and a progress diagram is displayed. Select ABORT if you want to stop the process.		
5	The text "Parameter upload successful" is displayed and the control panel returns to the PAR BACKUP menu. Select EXIT to return to the main menu. Now you can disconnect the panel.		 


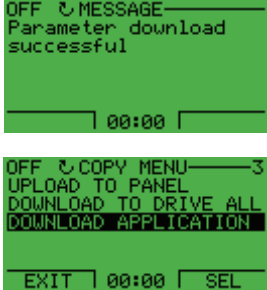
To download all parameters to drive, follow these steps:

1	Select MENU to enter the menu.		
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2	Select PAR BACKUP with the UP/DOWN buttons.		
3	Scroll to Download to drive all and select SEL.		
4	The text "restoring parameters" is displayed. Select ABORT if you want to stop the process.		
5	After the download stops, the message "Parameter download successful" is displayed and the control panel goes back to PAR BACKUP menu. Select EXIT to return to the main menu.		 

To download application to drive, follow these steps:

1	Select MENU to enter the menu.		
2	Select PAR BACKUP with the UP/DOWN buttons.		
3	Scroll to DOWNLOAD APPLICATION and select SEL.		
4	The text "Downloading parameters (partial)" is displayed. Select ABORT if you want to stop the process.		


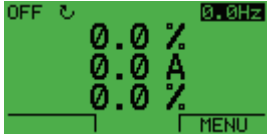








<p>5</p>	<p>The text "Parameter download successful" is displayed and the control panel returns to PAR BACKUP menu. Select EXIT to return to the main menu.</p>		
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Note! If upload or download of parameters is aborted, the partial parameter set is not implemented.

Clock Set Mode


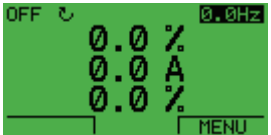










The clock set mode is used for setting the time and date for the internal clock of the AYK550. In order to use the timer functions of the AYK550, the internal clock has to be set first. Date is used to determine weekdays and is visible in Fault logs.

To set the clock, follow these steps:

<p>1</p>	<p>Select MENU to enter the main menu.</p>		
<p>2</p>	<p>Scroll to Clock Set with the UP/DOWN buttons and select ENTER to enter the Clock Set mode.</p>		
<p>3</p>	<p>Scroll to Clock Visibility with the UP/DOWN buttons and select SEL to change the visibility of the clock.</p>		
<p>4</p>	<p>Scroll to Show Clock with the UP/DOWN buttons and select SEL to make the clock visible.</p>		
<p>5</p>	<p>Scroll to Set Time with the UP/DOWN buttons and select SEL.</p>		


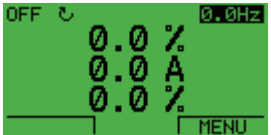














I/O Settings Mode

To view and edit the I/O settings, follow these steps:

1	Select MENU to enter the main menu.		
2	Scroll to I/O Settings with the UP/DOWN buttons and select ENTER.		
3	Scroll to the I/O setting you want to view with the UP/DOWN buttons and select SEL.		
4	Select the setting you want to view with the UP/DOWN buttons and select OK.		
5	You can change the value with the UP/DOWN buttons and save it by selecting SAVE. If you do not want to change the setting, select CANCEL.		
6	Select EXIT to return to the main menu.		

I/O Settings Mode

To view and edit the I/O settings, follow these steps:

1	Select MENU to enter the main menu.		
2	Scroll to I/O Settings with the UP/DOWN buttons and select ENTER.	 	
3	Scroll to the I/O setting you want to view with the UP/DOWN buttons and select SEL.	 	
4	Select the setting you want to view with the UP/DOWN buttons and select OK.	 	
5	You can change the value with the UP/DOWN buttons and save it by selecting SAVE. If you do not want to change the setting, select CANCEL.	 	
6	Select EXIT to return to the main menu.		

Application Macros

Overview

Macros change a group of parameters to new, predefined values designed for specific applications. Use macros to minimize the need for manual editing of parameters. Selecting a macro sets all other parameters to their default values, except:

- Group 99: Start-up Data parameters
- The PARAMETER LOCK 1602
- The PARAM SAVE 1607
- Groups 50...52 serial communication parameters
- Group 29: Maintenance triggers

After selecting a macro, additional parameter changes can be made manually using the control panel.

Application macros are enabled by setting the value for parameter 9902 APPLIC MACRO. By default, HVAC default (value 1) is the enabled macro.

General Considerations

The following considerations apply for all macros:

- When using a direct speed reference in AUTO mode, connect the speed reference to analog input 1 (AI1), and provide the START command using digital input 1 (DI1). In HAND/OFF mode, the control panel provides the speed reference and START command.
- When using process PID, connect the feedback signal to analog input 2 (AI2). As a default, the control panel sets the Setpoint, but analog input 1 can be used as an alternate source. You can set up process PID using parameters (Group 40) or using the PID control assistant (recommended).


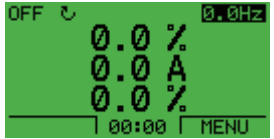







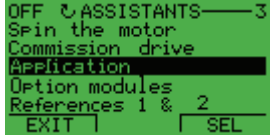




Application / Macro Listing

This section describes the following macros:

9902 Value	Macro	9902 Value	Macro
1	HVAC default	8	Internal timer
2	Supply fan	9	Internal timer with constant speeds
3	Return fan	10	Floating point
4	Cooling tower fan	11	Dual setpoint PID
5	Condenser	12	Dual setpoint PID with constant speeds
6	Booster pump	13	E-bypass
7	Pump alternation	14	Hand Control

Selecting an Application Macro

To select a macro, follow these steps:

1	Select MENU to enter the main menu.		
2	Select ASSISTANTS with the Up/Down buttons and select ENTER.	  	
3	Scroll to APPLICATION and select ENTER.	  	
4	Select a macro with the Up/Down buttons and select SAVE.	  	

Restoring Defaults

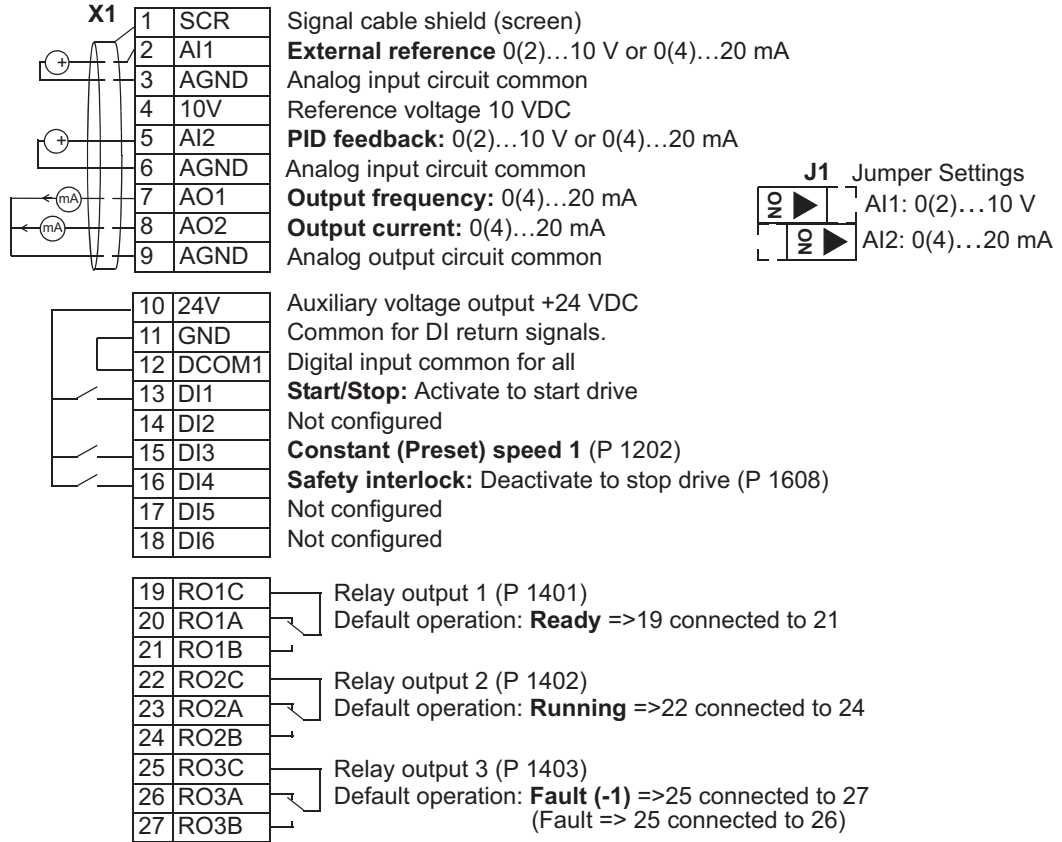
To restore the factory default settings, select the application macro HVAC Default.

Control Wiring

Each macro has specific requirements for control wiring. For general details about the AYK550 control wiring terminals, see “Control Terminal Descriptions” on page 238. Specific wiring requirements are included with each macro description.

HVAC Default

This macro provides the factory default parameter settings for the AYK550-UH. Factory defaults can be restored at any time by setting parameter 9902 to 1. The diagram below shows typical wiring using this macro. When using direct speed reference in AUTO mode or process PID, see "General Considerations" on page 16.



Parameters Changed Relative to HVAC Default			
Parameter	Value	Parameter	Value
None (Default macro)			

Note! YORK Drives are pre-configured using the "HVAC" default macro. Changing user macros may require changes to factory control wiring.

Note! To program critical skip frequencies to eliminate mechanical "system" resonance and vibrations, see Parameter Group 25.

YORK Defaults

GROUP 98 OPTIONS		9802 Comm Prot Sel	Not Sel
GROUP 99 START-UP DATA		9901 Language	English (AM)
		9902 Applic Macro	HVAC Default
		9904 Motor Ctrl Mode	Scalar:Freq
		9905 Motor Nom Volt	V
		9906 Motor Nom Curr	A
		9907 Motor Nom Freq	60 Hz
		9908 Motor Nom Speed	
		9909 Motor Nom power	hp
		9910 ID Run	Off
GROUP 01 OPERATING DATA		0102 Speed	
		0103 Output Freq	
		0104 Current	
		0105 Torque	
		0106 Power	
		0107 DC Bus Voltage	
		0109 Output Voltage	
		0110 Drive Temp	
		0111 External Ref 1	
		0112 External Ref 2	
		0113 Ctrl Location	
		0114 Run Time (R)	
		0115 kWh Counter (R)	
		0116 Appl Blk Output	
		0118 DI 1-3 Status	
		0119 DI 4-6 Status	
		0120 AI 1	
		0121 AI 2	
		0122 RO 1-3 Status	
		0123 RO 4-6 Status	
		0124 AO 1	
		0125 AO 2	
		0126 PID 1 Output	
		0127 PID 2 Output	
		0128 PID 1 Setpnt	
		0129 PID 2 Setpnt	
		0130 PID 1 Fbk	
		0131 PID 2 Fbk	
		0132 PID 1 Deviation	
		0133 PID 2 Deviation	
		0134 Comm RO Word	
		0135 Comm Value 1	
		0136 Comm Value 2	
		0137 Process Variable 1	
		0138 Process Variable 2	
		0139 Process Variable 3	
		0140 Run Time	
		0141 MWh Counter	
		0142 Revolution Cntr	
		0143 Drive On Time Hi	
		0144 Drive On Time Lo	
		0145 Motor Temp	
GROUP 03 FB ACTUAL SIGNALS		0301 FB Command Word 1	0000 hex
		0302 FB Command Word 2	0000 hex
		0303 FB Sts Word 1	0000 hex
		0304 FB Sts Word 2	0000 hex
		0305 Fault Word 1	0000 hex
		0306 Fault Word 2	0000 hex
		0307 Fault Word 3	0000 hex
		0308 Alarm Word 1	0000 hex
		0309 Alarm Word 2	0000 hex
GROUP 04 FAULT HISTORY		0401 Last Fault	No Record
		0402 Fault Time 1	0 d
		0403 Fault Time 2	00:00:00
		0404 Speed At Fit	0 rpm
		0405 Freq At Fit	0.0 Hz
		0406 Voltage At Fit	0.0 V
		0407 Current At Fit	0.0 A
		0408 Torque At Fit	0.0%
		0409 Status At Fit	0000 hex
		0410 DI 1-3 At Fit	0 0 0
		0411 DI 4-6 At Fit	0 0 0
		0412 Previous Fault 1	No Record
		0413 Previous Fault 2	No Record
GROUP 10 START/STOP/DIR		1001 Ext1 Commands	DI1
		1002 Ext2 Commands	DI1
		1003 Direction	Forward
GROUP 11 REFERENCE SELECT		1101 Keypad Ref Sel	Ref1 (Hz/rpm)
		1102 Ext1/Ext2 Sel	Ext1
		1103 Ref1 Select	AI1
		1104 Ref1 Min	1542
		1105 Ref1 Max	60.0 Hz
		1106 Ref2 Select	PID1out
		1107 Ref2 Min	0.0%
		1108 Ref2 Max	100.0%
GROUP 12 CONSTANT SPEEDS		1201 Const Speed Sel	D3
		1202 Const Speed 1	6.0 Hz
		1203 Const Speed 2	12.0 Hz
		1204 Const Speed 3	18.0 Hz
		1205 Const Speed 4	24.0 Hz
		1206 Const Speed 5	30.0 Hz
		1207 Const Speed 6	48.0 Hz
		1208 Const Speed 7	60.0 Hz
		1209 Timed Mode Sel	CS1/CS2
GROUP 13 ANALOG INPUTS		1301 Minimum AI1	20%
		1302 Maximum AI1	100.0%
		1303 Filter AI1	0.1 s
		1304 Minimum AI2	20.0%
		1305 Maximum AI2	100.0%
		1306 Filter AI2	0.1 s
GROUP 14 RELAY OUTPUTS		1401 Relay Output 1	Ready
		1402 Relay Output 2	Run
		1403 Relay Output 3	Fault (-1)
		1404 Relay 1 On Delay	0.0 s
		1405 Relay 1 Off Delay	0.0 s
		1406 Relay 2 On Delay	0.0 s
		1407 Relay 2 Off Delay	0.0 s
		1408 Relay 3 On Delay	0.0 s
		1409 Relay 3 Off Delay	0.0 s
		1410 Relay Output 4	Not Sel
		1411 Relay Output 5	Not Sel
		1412 Relay Output 6	Not Sel
		1413 Relay 4 On Delay	0.0 s
		1414 Relay 4 Off Delay	0.0 s
		1415 Relay 5 On Delay	0.0 s
		1416 Relay 5 Off Delay	0.0 s
		1417 Relay 6 On Delay	0.0 s
		1418 Relay 6 Off Delay	0.0 s
GROUP 15 ANALOG OUTPUT		1501 AO1 Content Sel	Output Freq
		1502 AO1 Content Min	0.0 Hz
		1503 AO1 Content Max	60.0 Hz
		1504 Minimum AO1	4.0 mA
		1505 Maximum AO1	20.0 mA
		1506 Filter AO1	0.1 s
		1507 AO2 Content Sel	Current
		1508 AO2 Content Min	0.0 Hz
		1509 AO2 Content Max	60.0 Hz
		1510 Minimum AO2	4.0 mA
		1511 Maximum AO2	20.0 mA
		1512 Filter AO2	0.1 s
GROUP 16 SYSTEM CONTROLS		1601 Run Enable	Not Sel
		1602 Parameter Lock	Open
		1603 Pass Code	0
		1604 Fault Reset Sel	Keypad
		1605 User Par Set Chg	Not Sel
		1606 Local Lock	Not Sel
		1607 Parameter Save	Done
		1608 Start Enable 1	DI4
		1609 Start Enable 2	Not Sel
GROUP 17 OVERRIDE		1701 Override Sel	(DI6)
		1702 Override Freq	0.0 Hz
		1705 Override	Off
GROUP 20 LIMITS		2003 Max Current	1.1*In
		2006 Undervolt ctrl	Enable (Time)
		2007 Minimum Freq	15 Hz
		2008 Maximum Freq	60.0 Hz
GROUP 21 START/STOP		2101 Start Function	Flying
		2102 Stop Function	Coast
		2103 DC Magn Time	0.30 s
		2104 DC Hold	Not Sel
		2106 DC Crr Ref	0%
		2107 DC Brake Time	0.0 s
		2108 Start Inhibit	Off
		2109 Em Stop Sel	Not Sel
		2110 Torq Boost Curr	100%
GROUP 22 ACCEL/DECEL		2201 Acc/Dec 1/2 Sel	Not Sel
		2202 Acceler Time 1	30.0 s
		2203 Deceler Time 1	30.0 s
		2204 Ramp Shape 1	Linear
		2205 Acceler Time 2	60.0 s
		2206 Deceler Time 2	60.0 s
		2207 Ramp Shape 2	Linear
		2208 Em Dec Time	1.0 s
		2209 Ramp Input 0	Not Sel
GROUP 23 SPEED CONTROL		2301 Prop Gain	3.00
		2302 Integration Time	2.50 s
		2303 Derivation Time	ms
		2304 Acc Compensation	0.00 s
		2305 Autotune Run	Off
GROUP 24 TORQUE CONTROL		2401 Torq Ramp Up	0.00 s
		2402 Torq Ramp Down	0.00 s
GROUP 25 CRITICAL SPEEDS		2501 Crit Speed Sel	Off
		2502 Crit Speed 1 Lo	0.0 Hz
		2503 Crit Speed 1 Hi	0.0 Hz
		2504 Crit Speed 2 Lo	0.0 Hz
		2505 Crit Speed 2 Hi	0.0 Hz
		2506 Crit Speed 3 Lo	0.0 Hz
		2507 Crit Speed 3 Hi	0.0 Hz
GROUP 26 MOTOR CONTROL		2601 Flux Opt Enable	On
		2602 Flux Braking	Off
		2603 IR Comp Volt	0 V
		2604 IR Comp Freq	50%
		2605 V/F Ratio	Square
		2606 Switching Freq	4 kHz
		2607 Switch Freq Ctrl	On
		2608 Slip Comp Ratio	0%
GROUP 29 MAINTENANCE TRIG		2901 Cooling Fan Trig	0.0 kh
		2902 Cooling Fan Act	0.0 kh
		2903 Revolution Trig	0 Mrev
		2904 Revolution Act	1 Mrev
		2905 Run Time Trig	0.0 kh
		2906 Run Time Act	0.0 kh
		2907 User MWh Trig	0.0 MWh
		2908 User MWh Act	0.0 MWh
GROUP 30 FAULT FUNCTIONS		3001 AI<Min Function	Not Sel
		3002 Panel Comm Error	Fault
		3003 External Fault 1	Not Sel
		3004 External Fault 2	Not Sel
		3005 Mot Therm Prot	Fault
		3006 Mot Therm Time	1050 s
		3007 Mot Load Curve	100%
		3008 Zero Speed Load	70%
		3009 Break Point	35 Hz
		3010 Stall Function	Not Sel
		3011 Stall Frequency	20.0 Hz
		3012 Stall Time	20 s
		3013 Underload Func	0
		3014 Underload Time	20 s
		3015 Underload Curve	1
		3017 Earth Fault	Enable
		3018 Comm Fault Func	Not Sel
		3019 Comm Fault Time	10.0 s
		3021 AI1 Fault Limit	0.0%
		3022 AI2 Fault Limit	0.0%
GROUP 31 AUTOMATIC RESET		3101 NR of Trials	5
		3102 Trial Time	30.0 s
		3103 Delay Time	6.0 s
		3104 AR Overcurrent	Disable
		3105 AR Overvoltage	Enable
		3106 AR Undervoltage	Enable
		3107 AR AI<Min	Enable
		3108 AR External Fit	Enable
GROUP 32 SUPERVISION		3201 Superv1 Param	Output Freq
		3202 Superv1 Lim Lo	60.0 Hz
		3203 Superv1 Lim Hi	60.0 Hz
		3204 Superv2 Param	Current
		3205 Superv2 Lim Lo	A
		3206 Superv2 Lim Hi	A
		3207 Superv3 Param	100.0%
		3208 Superv3 Lim Lo	100.0%
		3209 Superv3 Lim Hi	100.0%
GROUP 33 INFORMATION		3301 FW Version	141B hex
		3302 LP Version	0000 hex
		3303 Test Date	0.00
		3304 Drive rating	hex

continued . . .

YORK Defaults

GROUP 34 PANEL DISPLAY		GROUP 41 PROCESS PID SET 2		GROUP 81 PFC CONTROL	
3401 Signal1 Param	Output Freq	4101 Gain	2.5	8103 Reference Step 1	0.0%
3402 Signal1 Min	0.0 Hz	4102 Integration Time	3.0 s	8104 Reference Step 2	0.0%
3403 Signal1 Max	500.0 Hz	4103 Derivation Time	0.0 S	8105 Reference Step 3	0.0%
3404 Output1 Dsp Form	+0.0%	4104 PID Deriv Filter	1.0 S	8109 Start Freq 1	60.0 Hz
3405 Output1 Unit	%	4105 Error Value Inv	No	8110 Start Freq 2	60.0 Hz
3406 Output1 Min	0.0%	4106 Units	%	8111 Start Freq 3	60.0 Hz
3407 Output1 Max	833.3%	4107 Unit Scale	0.0%	8112 Low Freq 1	30.0 Hz
3408 Signal2 Param	Current	4108 % Value	0.0%	8113 Low Freq 2	30.0 Hz
3409 Signal2 Min	0.0 A	4109 100% Value	100.0%	8114 Low Freq 3	30.0 Hz
3410 Signal2 Max	1.1* A	4110 Set Point Set	Keypad	8115 Aux Mot Start D	5.0 s
3411 Output2 Dsp Form	+0.0	4111 Internal Setpnt	40.0%	8116 Aux Mot Stop D	3.0 s
3412 Output2 Unit	A	4112 Setpoint Min	0.0%	8117 Nr Of Aux Mot	1
3413 Output2 Min	0.0 A	4113 Setpoint Max	100.0%	8118 Autochnng Interv	Not Sel
3414 Output2 Max	1.1* A	4114 Fbk Sel	Act1	8119 Autochnng Level	50.0%
3415 Signal3 Param	AI 1	4115 Fbk Multiplier	0.000	8120 Interlocks	D14
3416 Signal3 Min	0.0%	4116 Act1 Input	AI2	8121 Reg Bypass Ctrl	No
3417 Signal3 Max	100.0%	4117 Act2 Input	0%	8122 PFC Start Delay	0.50 s
3418 Output3 Dsp Form	+0.0	4118 Act1 Minimum	0%	8123 PFC Enable	Not Sel
3419 Output3 Unit	mA	4119 Act1 Maximum	100%	8124 Acc in Aux Stop	Not Sel
3420 Output3 Min	0.0 mA	4120 Act2 Minimum	0%	8125 Dec in Aux Start	Not Sel
3421 Output3 Max	20.0 mA	4121 Act2 Maximum	100%	8126 Timed Autochnng	Not Sel
		4122 Sleep Selection	Not Sel	8127 Motors	2
		4123 PID Sleep Level	0.0 Hz		
		4124 PID Sleep Delay	60.0 s		
		4125 Wake-Up Dev	0.0%		
		4126 Wake-Up Delay	0.50 s		
GROUP 35 MOTOR TEMP MEAS		GROUP 42 EXT/TRIM PID			
3501 Sensor Type	None	4201 Gain	1.0		
3502 Input Selection	AI1	4202 Integration Time	60.0 s		
3503 Alarm Limit	0	4203 Derivation Time	0.0 s		
3504 Fault Limit	0	4204 PID Deriv Time	1.0 s		
		4205 Error Value Inv	No		
		4206 Units	%		
		4207 Unit Scale	1		
		4208 9% Value	0.0%		
		4209 100% Value	100.0%		
		4210 Set Point Set	AI1		
		4211 Internal Setpnt	40.0%		
		4212 Setpoint Min	0.0%		
		4213 Setpoint Max	100.0%		
		4214 Fbk Sel	Act1		
		4215 Fbk Multiplier	0.000		
		4216 Act1 Input	AI2		
		4217 Act2 Input	AI2		
		4218 Act1 Minimum	0%		
		4219 Act1 Maximum	100%		
		4220 Act2 Minimum	0%		
		4221 Act2 Maximum	100%		
		4228 Activate	Not Sel		
		4229 Offset	0.0%		
		4230 Trim Mode	Not Sel		
		4231 Trim Scale	100.0%		
		4232 Correction Src	PID2ref		
GROUP 36 TIMED FUNCTIONS		GROUP 51 EXT COMM MODULE			
3601 Timers Enable	Not Sel	5101 FBA Type	Not Defined		
3602 Start Time 1	12:00:00 AM	5192 FBA Par 2...26	0		
3603 Stop Time 1	12:00:00 AM	5127 FBA Par Refresh	Done		
3604 Start Day 1	Monday	5128 FILE CPI FW Rev	0000 hex		
3605 Stop Day 1	Monday	5129 FILE Config ID	0000 hex		
3606 Start Time 2	12:00:00 AM	5130 FILE Config Rev	0000 hex		
3607 Stop Time 2	12:00:00 AM	5131 FBA Status	Idle		
3608 Start Day 2	Monday	5132 FBA CPIFW Rev	0000 hex		
3609 Stop Day 2	Monday	5133 FBA Appl FW Rev	0000 hex		
3610 Start Time 3	12:00:00 AM				
3611 Stop Time 3	12:00:00 AM				
3612 Start Day 3	Monday				
3613 Stop Day 3	Monday				
3614 Start Time 4	12:00:00 AM				
3615 Stop Time 4	12:00:00 AM				
3616 Start Day 4	Monday				
3617 Stop Day 4	Monday				
3622 Boost Sel	Not Sel				
3623 Boost Time	00:00:00				
3626 Timer 1 Src	Not Sel				
3627 Timer 2 Src	Not Sel				
3628 Timer 3 Src	Not Sel				
3629 Timer 3 Src	Not Sel				
		GROUP 52 PANEL COMM			
		5201 Station ID	1		
		5202 Baud Rate	9.6 kb/s		
		5203 Parity	8N1		
		5204 OK Messages	0		
		5205 Parity Errors	0		
		5206 Frame Errors	0		
		5207 Buffer Overruns	0		
		5208 CRC Errors	0		
GROUP 40 PROCESS PID SET 1		GROUP 53 EFB PROTOCOL			
4001 Gain	2.5	5301 EFB Protocol ID	0000 hex		
4002 Integration Time	3.0 s	5302 EFB Station ID	1		
4003 Derivation Time	0.0 s	5303 EFB Baud Rate	9.6 kb/s		
4004 PID Derivation Filter	1.0 s	5304 EFB Parity	8N1		
4005 Error Value Inv	No	5305 EFB Ctrl Profile	YORK Drives		
4006 Units	%	5306 EFB OK Messages	0		
4007 Unit Scale	1	5307 EFB CRC Errors	0		
4008 0% Value	0.0%	5308 EFB UART Errors	0		
4009 100% Vluce	100.0%	5309 EFB Status	Idle		
4010 Set Point Sel	Keypad	5310 EFB Par 10-20	0		
4011 Internal Setpnt	40.0%				
4012 Setpoint Min	0.0%				
4013 Setpoint Max	100.0%				
4014 Fbk Sel	Act1				
4015 Fbk Multiplier	0.000				
4016 Act1 Input	AI2				
4017 Act2 Input	AI2				
4018 Act1 Minimum	0%				
4019 Act1 Maximum	100%				
4020 Act2 Minimum	0%				
4021 Act2 Maximum	100%				
4022 Sleep Selection	Not Sel				
4023 PID Sleep Level	0.0 Hz				
4024 PID Sleep Delay	60.0 s				
4025 Wake-Up Dev	0.0%				
4026 Wake-Up Delay	0.50 s				
4027 PID Param Set	Set 1				

