Contents [hide]

1 TOSHIBA S15 Basic Preset Speed Control
2 Product Information
3 Basic Preset Speed Control
4 A STEP: Connections
5 B STEP: Programming
6 C STEP: Verification
7 Frequently Asked Questions
8 Documents / Resources
8.1 References

TOSHIBA

TOSHIBA S15 Basic Preset Speed Control

Product Information

Specifications

- Model: S15
- Application Note: 1.3.1
- Control Method: Preset Speed Control via discrete inputs
- Default Preset Speed Values: #1 – 0Hz, #2 – 0Hz

Basic Preset Speed Control

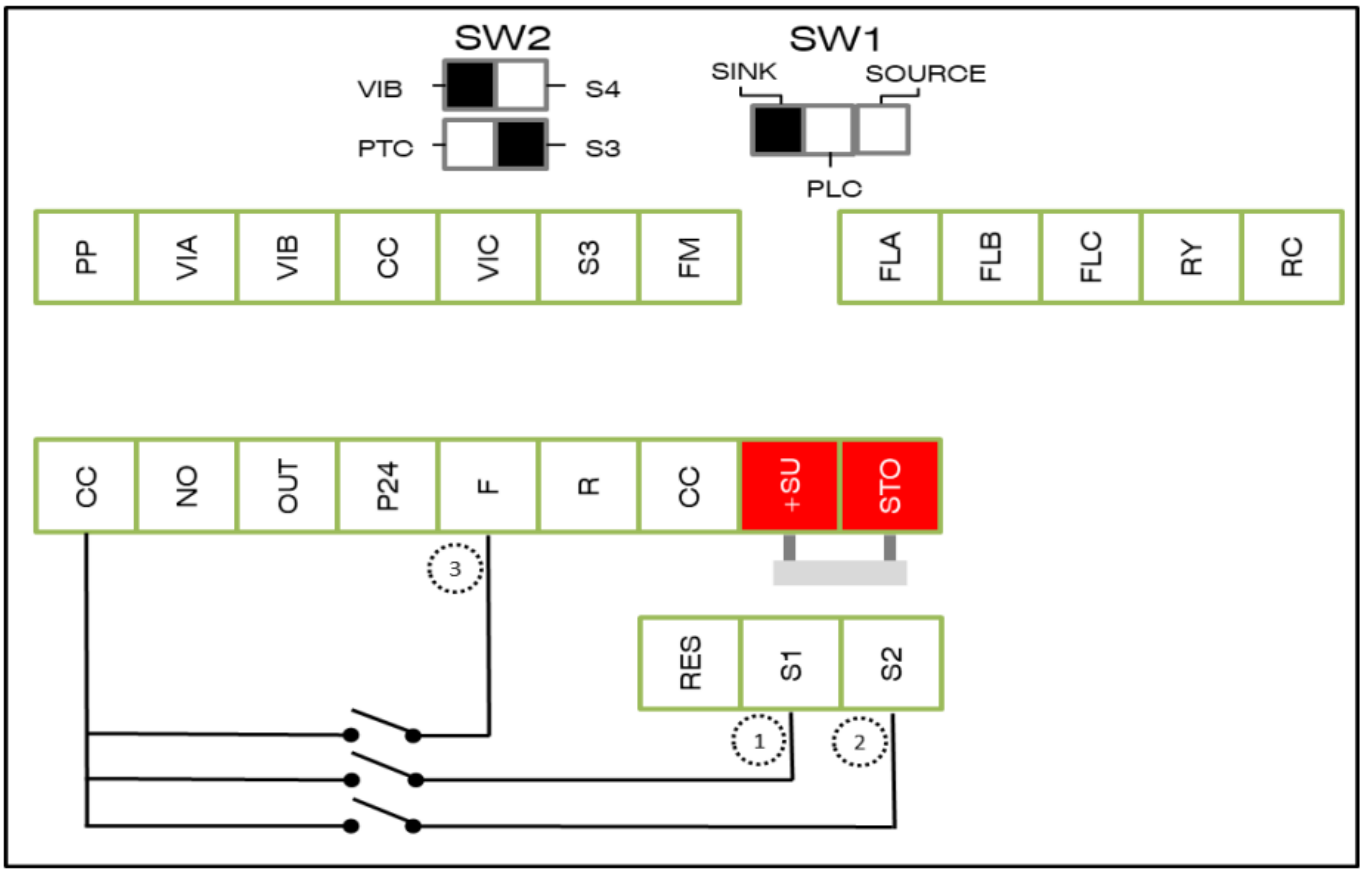
This guide explains how to control the S15 with preset speeds via discrete inputs.

A STEP: Connections

The S15 can be controlled via a preset speed command wired to a discrete input. To illustrate the binary nature of these inputs, only one switch is closed at a time in this example.

Connections for basic preset speed control are shown below:

1. Normally open switch that will be used to invoke Preset Speed #1.
2. Normally open switch that will be used to invoke Preset Speed #2.
3. Normally open switch that will be used for a Forward Run signal.



Check Your Work:

- Use monitor mode to verify the input terminals are activated when the switches are closed.
- Confirm the wiring matches the diagram above.

B STEP: Programming

In this example, program Preset Speed #1 to be 30 Hz and Preset Speed #2 to be 60 Hz.

1. Program Preset Speed #1 for 30 Hz.

Parameter	Description	Default Value	New Value
Sr1	Preset Speed #1	0Hz	30Hz

2. Program Preset Speed #2 for 60 Hz.

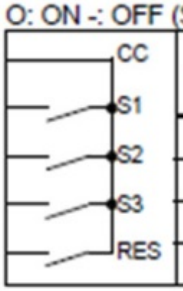
Parameter	Description	Default Value	New Value

Sr2	Preset Speed #2	0Hz	60Hz

Note: Preset speed inputs are binary, and follow the sequence of the table below.

Preset-speed logic input signal example: Slide switch SW1 = SINK side

O: ON -: OFF (Speed commands other than preset-speed commands are valid when all are OFF)



Terminal	Preset-speed														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
S1-CC	O	-	O	-	O	-	O	-	O	-	O	-	O	-	O
S2-CC	-	O	O	-	-	O	O	-	-	O	O	-	-	O	O
S3-CC	-	-	-	O	O	O	O	-	-	-	-	O	O	O	O
RES-CC	-	-	-	-	-	-	-	O	O	O	O	O	O	O	O

Note: Refer to Section 5.7 in the S15 Instruction Manual (E6582175) for additional information.

Check Your Work:

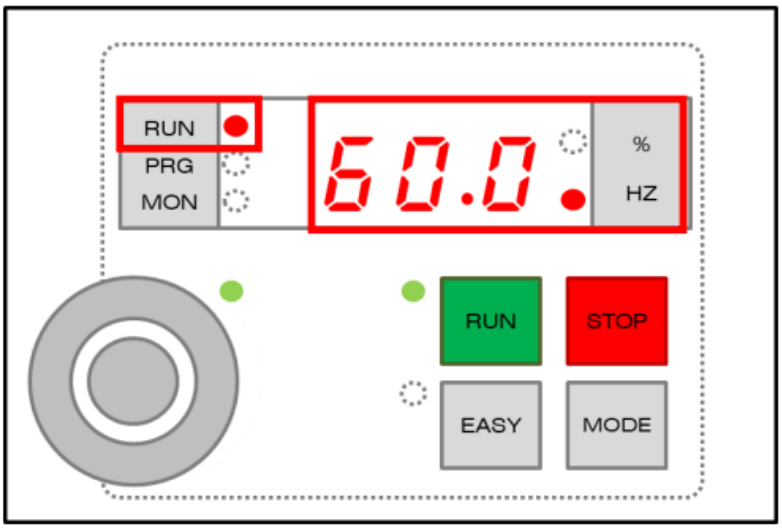
- Confirm Preset Speed is programmed to the correct frequency.
- By default, all Preset Speeds are 0 Hz.

C STEP: Verification

Follow these steps to verify operation of preset speed commands:

1. Close switch 3 to give the drive a forward run signal.
2. Close switch 1 or 2. (Only one of these two switches should be closed at any time.)
3. The drive should run to the corresponding speed shown in the table below.

Switch	Function	Display
3	Fwd Run	F highlights in top right corner.
1	Preset Speed #1	Output frequency is 30.0 Hz.
2	Preset Speed #2	Output frequency is 60.0 Hz.



Check Your Work:

- Confirm the drive runs when switch 3 and switch 1 or 2 are closed.
- Verify the output frequency.
- Confirm the drive decelerates to a stop when switch 3 is open.

Frequently Asked Questions

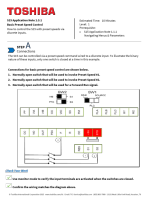
How can I confirm if the preset speeds are correctly set?

You can verify the programmed preset speeds by checking the output frequency displayed on the drive. Ensure the frequencies match the values set during programming.

What should I do if the drive does not run to the expected speed?

Double-check the wiring connections and ensure that only one switch is closed at a time as per the instructions. Verify that the preset speeds are correctly programmed and try again.

Documents / Resources

	TOSHIBA S15 Basic Preset Speed Control [pdf] User Manual S15_App_Note_1.3.1, S15 Basic Preset Speed Control, S15, Basic Preset Speed Control, Speed Control, Control

References

- User Manual

Toshiba

Basic Preset Speed Control, control, S15, S15 Basic Preset Speed Control, S15_App_Note_1.3.1, Speed Control, Toshiba

Leave a comment

Your email address will not be published. Required fields are marked *

Comment *

Name

Email

Website

Save my name, email, and website in this browser for the next time I comment.

Post Comment

Search:

e.g. whirlpool wrf535swhz

Search