

Specifications



The SCC-2 Control is a second generation Smart Conveyor Control that combines a Brushless DC motor control and intelligent conveyor zone control into one compact, cost-effective package. It is easy to install and can be configured for use in several different operating modes.

This controller may be used with either our 100 Watt or 125 Watt UniDrive® motors.

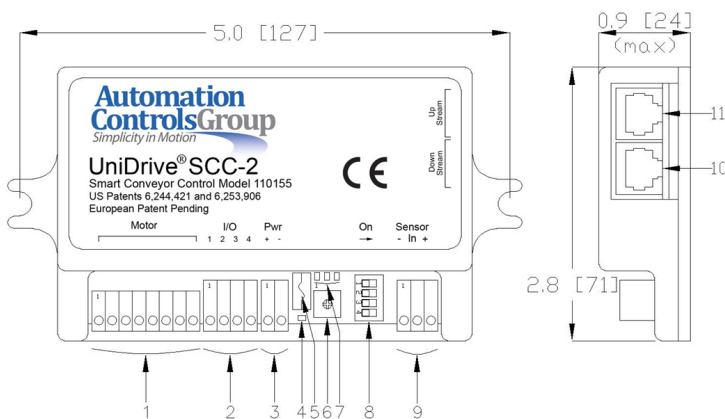
This product is most useful in typical level, unit handling roller conveyor applications. It can also be used with 5:1, 7.5:1, 10:1 or 20:1 PowerCube™ assemblies that provide a very compact motor/reducer package for light to medium duty pallet handling or industrial applications.

UniDrive® 110155 SCC-2 Smart Conveyor Control

Depending on the setup, the conveyor can operate in the most conservative (ZPA) zero pressure accumulation mode or in small gap (ZIP) mode for maximum throughput. Slug forward and slug reverse operating modes can be applied when accumulation is not required.

A complete installation manual is available to qualified conveyor original equipment manufacturers (OEMs) that will guide you through the installation, set-up, and the use of the indicator LEDs to troubleshoot any set-up errors.

1. UniDrive® Motor Connection Header
2. User Input-Output Connection Header (plug included)
3. +24V DC Power Input Header (plug included)
4. Blown Fuse Indicator (red LED)
5. Replaceable 10A Fuse
6. Speed Control Potentiometer
7. Diagnostic LEDs
8. Configuration Switches
9. PNP Presence Sensor Connection Header (plug included)
10. RJ-25 Connection to downstream control (plug & cable not included)
11. RJ-25 Connection to upstream control (plug & cable not included)



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Specifications

Electrical Specifications

Inputs

Input Voltage	<u>Minimum</u>	<u>Nominal</u>	<u>Maximum</u>
	22.0 VDC	24.0 VDC	28.0 VDC
Input Current	<u>Standby</u>	<u>Rated</u>	<u>Peak</u>
100W24 or 125W24 Motor Series	0.10 Amps	4.0 Amps	5.0 Amps

PNP Inputs

Voltage	<u>Minimum</u>	<u>Maximum</u>
18.0 VDC		28.0 VDC
Load		3.0 mA

Outputs

PNP Output	<u>Minimum</u>	<u>Maximum</u>
Voltage	Input -2 VDC	Input VDC
Current		350 mA
Inductive Loads Acceptable		

Environmental Specifications

Temperature Limits	<u>Minimum</u>	<u>Maximum</u>
Operating Temperature at Full Load 100% duty cycle	-4° F (-20°C)	72°F (22°C)
At 50% duty cycle	-4° F (-20°C)	86°F (30°C)
At 25% duty cycle	-4° F (-20°C)	104°F (40°C)
Storage Temperature	-40° F (-40°C)	158°F (70°C)
Humidity (non-condensing)	20%	90%

Control Functions

Speed Control

100W24 or 125W24 Motor Series	70 RPM (7.3 rad/s)	350 RPM (36.7 rad/s)*
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Speed Control Method

Default (Preset)	Single turn analog potentiometer
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Conveyor Operating Modes

Conventional Zero-Pressure Accumulation (ZPA)	Yes
Small Gap ZIP Mode (For Higher Throughput)	Yes
Entry Zone "Handshake" (PNP Input and Output Signals)	Yes
Exit Zone "Handshake" (PNP Input and Output Signals)	Yes
Slug Operation – Forward	Yes
Slug Operation – Reverse	Yes

Protection

	<u>Condition</u>	<u>Response</u>
Over Speed	Over 425 RPM	Apply Dynamic Braking
Stalled Motor	Under 35 RPM	Reduce Current to 2A
Over Voltage on Input	Over 28 VDC	Applies Dynamic Braking Immediately
Under Voltage on Input	Under 20 VDC	Applies Dynamic Braking - After 1 Second Motor Coasts

Braking Method

Dynamic Braking	Default Mode Brings Motor to a Halt Quickly
Zero-Motion Hold	Restricts Parcels on the Conveyor from Coasting

* to achieve 280-350 RPM at full rated torque a 125W24 motor must be used.

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