

Altistart® 22 Soft Starters in Motor Control Centers Class 8998

Retain for future use.

Introduction

This quick start guide provides simple application instructions for programming the Altistart® 22 Soft Starter provided in a Schneider Electric Motor Control Center (MCC). It replaces Quick Start Guide S1A1038801 for open-style soft starters. Use this guide, instruction bulletin 80459-641-01, and the equipment drawings shipped with the MCC for installation, operation, and maintenance of the MCC unit.

If you need more information about the Altistart 22 Soft Starter, see Altistart 22 user manual BBV51330 on www.schneider-electric.com, or contact your local Schneider Electric representative for a printed copy.

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E.
- This equipment must be installed and serviced only by qualified electrical personnel.
- Turn off all power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors, and covers before turning on power to this equipment.

Failure to follow these instructions will result in death or serious injury.

DANGER

UNINTENDED EQUIPMENT OPERATION

Before operating the Altistart 22 Soft Starter:


- Read and understand Altistart 22 user manual BBV51330 before changing any parameters from the factory defaults. Refer to the parameter settings on page 4 of this quick start guide, and to additional documentation provided with the unit.
- If the soft starter is reinitialized using the total or partial factory setting function, reprogram it to the parameter settings on page 4 of this Quick Start Guide and on the Elementary Diagram shipped with the MCC unit.
- If the soft starter or the main control board of the soft starter is replaced, reprogram the soft starter according to the instructions in the "Programming" section of Altistart 22 user manual BBV51330.

Failure to follow these instructions will result in death or serious injury.

1 Check the Soft Starter Load

Confirm that the motor being connected to the soft starter has the same or a lower horsepower (HP) rating as the soft starter unit. The HP rating of the soft starter unit is shown on the unit identification label (Figure 1), located on the inside wall of the unit.

Figure 1: Unit Identification Label

	F.O. NO.	12345678-001.001	UNIT LOC	1A	
	WIRING DIAGRAM	E12345678-001-04-1			
	3 HP	VOLTS	480 AC	PHASE	3
	AMPS	PLANT	46	ASSEMBLER	
FOR DISCONNECT ASSY. AND THERMAL NOS. SEE INSTALLATION AND MAINTENANCE MANUAL					
80438-001-02 MADE IN USA					

2 Connect the Load to the Soft Starter

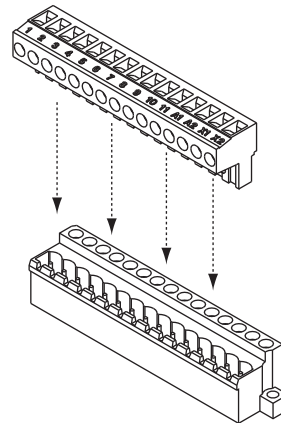
In most cases, the cables for the motor load will connect to the soft starter load terminals, labeled 2/T1 - 4/T2 - 6/T3. The terminals are located at the lower end of the soft starter device. On units with an optional full voltage emergency starter, the motor load cables connect to the starter overload terminals or motor load terminal block.

- Refer to the circuit diagram of the unit to confirm which options are included with your unit, and the motor connection points.
- Tighten the load cable terminals to the recommended torque value shown on the load torque label located adjacent to the terminals.

3 Connect the Control

Wire necessary control command inputs and auxiliary contacts as indicated on the circuit diagram for the unit. MCC soft starter units include a pull-apart field terminal block (Figure 2) for control connections. The terminal block is designated "FTB" on the circuit diagram.

Figure 2: Pull-Apart Field Terminal Block



④ Turn on Control Power

Refer to the circuit diagram for the soft starter unit to determine if the source for the 120 Vac control power is an internal control transformer or a separate source.

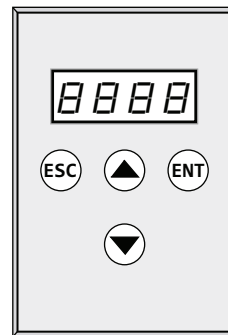
- If an internal control transformer is provided, energize the control power on the unit by moving the disconnect handle from the OFF to the ON position.
- If a separate 120 Vac control is supplied, energize the control source.

NOTE: If a start command is given when mains power is not present, the soft starter will detect a fault (USF).

⑤ Adjust *In* Motor-Rated Current

- Using the door-mounted keypad (Figure 3), press the scroll down button (▼) to reach the *conf* menu.
- Push the ENT button.
- Push the scroll down button (▼) to reach the *In* parameter.
- Determine the motor full load amps (FLA) from the motor nameplate.
- Set *In* to the motor FLA value using the scroll up/down buttons (▲ ▼).
- Push the ENT button to validate the *In* value.

Figure 3: Typical Door-Mounted Keypad



⑥ Adjust Full Voltage Emergency Starter Overload (if supplied)

- Refer to the circuit diagram for the soft starter unit to determine if a Full Voltage Emergency Starter option is included.
- The optional full voltage starter includes a Class 20, ambient temperature-compensated, bimetallic, motor overload relay. Adjust the dial on the bimetallic overload relay to match the motor FLA.

7 Review Factory Settings

The Altistart 22 is factory configured for most standard applications. If the factory configuration is not suitable for your application, or if you have problems starting the motor, refer to Altistart 22 user manual BBV51330 on www.schneider-electric.com.

NOTE: The Altistart 22 is initially programmed to show only the “easy start up” parameters listed in the following table. If further parameter adjustments are required, access the "Advanced mode" parameters by setting the Advanced mode, *LAc*, parameter from *oFF* to *On*.

Menu	Code	Description	Factory Setting	Customer Setting
Conf Configuration	<i>Icl</i>	Soft starter rated current	According to the soft starter rating	
	<i>dLtA</i>	Connection type (Line or delta)	<i>Line 1</i>	
	<i>Uln</i>	Line voltage	According to the main supply voltage	
	<i>In</i>	Motor rated current	According to the National Electrical Code® (NEC®)	
	<i>Cod</i>	Setting lock	<i>nLoC</i> (not locked)	
	<i>LAc</i>	Advanced mode	<i>oFF</i>	
Set Adjustments	<i>t90</i>	Initial voltage	30 % of input voltage	
	<i>ILt</i>	Current limit	300 % of <i>In</i> for standard duty 350 % of <i>In</i> for severe duty	
	<i>tLS</i>	Max start time	15 seconds	
	<i>ACC</i>	Acceleration time	10 seconds	
	<i>dEC</i>	Deceleration time	<i>FrEE</i> (Freewheel)	
	<i>Edc</i>	Final torque	0	
	<i>tHP</i>	Motor thermal protection	10 (class 10) for standard duty 20 (class 20) for severe duty	

¹ Do not change this setting for the ATS22xxxS6U series of soft starters; the ATS22xxxS6U series is not rated for inside delta applications.

For troubleshooting or repair assistance, call 1-888-SquareD or contact your local Schneider Electric representative. For soft starter spare parts, refer to Altistart 22 user manual BBV51330 on www.schneider-electric.com.



California Proposition 65 Warning—Nickel Compounds and Bisphenol A (BPA)

Advertencia de la Proposición 65 de California— compuestos de níquel y Bisfenol A (BPA)

Avertissement concernant la Proposition 65 de Californie— composés de nickel et Bisphénol A (BPA)

⚠️ WARNING: This product can expose you to chemicals including Nickel compounds, which are known to the State of California to cause cancer, and Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

⚠️ ADVERTENCIA: Este producto puede exponerle a químicos incluyendo compuestos de níquel, que son conocidos por el Estado de California como causantes de cáncer, y Bisfenol A (BPA), que es conocido por el Estado de California como causante de defectos de nacimiento u otros daños reproductivos. Para mayor información, visite www.P65Warnings.ca.gov.

⚠️ AVERTISSEMENT: Ce produit peut vous exposer à des agents chimiques, y compris composés de nickel, identifiés par l'État de Californie comme pouvant causer le cancer, et Bisphénol A (BPA) reconnus par l'État de Californie comme pouvant causer des malformations congénitales ou autres troubles de l'appareil reproducteur. Pour de plus amples informations, prière de consulter www.P65Warnings.ca.gov.

All trademarks are the property of Schneider Electric SE, its subsidiaries, and affiliated companies.

Schneider Electric USA, Inc.
800 Federal Street
Andover, MA 01810 USA
888-778-2733
www.schneider-electric.us

Todas las marcas comerciales son propiedad de Schneider Electric SE, sus filiales y compañías afiliadas.

Importado en México por:
Schneider Electric México, S.A. de C.V.
Av. Ejercito Nacional No. 904
Col. Palmas, Polanco 11560 México, D.F.
55-5804-5000
www.schneider-electric.com.mx

Toutes les marques commerciales sont la propriété de Schneider Electric SE, ses filiales et compagnies affiliées.

Schneider Electric Canada, Inc.
5985 McLaughlin Road
Mississauga, ON L5R 1B8 Canada
800-565-6699
www.schneider-electric.ca