JEM INTERNATIONAL INC.
EQUIPMENT SALES | PARTS | MANUFACTURING

BAG KICKER ASSEMBLY AND INSTRUCTION MANUAL

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BAG KICKER

The purpose of a bag kicker assembly is to transfer bags from a vertical position on the bag closing conveyor to a horizontal position onto a separate conveyor. The kicker should transfer bags in a smooth motion, which is controlled by a pneumatic air cylinder.

Bags must be kicked off a smooth belt conveyor. A rough top belt will cause friction and uneven transfer of bags.

A typical cycle to kick and retract is 2.5 seconds; therefore, maximum output of a kicker is 24 bags per minute under ideal conditions.

The component parts of the system are as follows:

Framework

The metal framework is designed to fit on 12” (300 mm) wide smooth top belt conveyor, or the kicker can be supplied with its own conveyor. The framework is designed to fit on either side of the conveyor so the kicking can be to the operator’s side of the conveyor or away from the operator’s side. It is important to remember that kickers are designed to move bags 90° only.

Kicker Plate

The kicker plate assembly is connected to the framework by four (4) bearings. The kicker swivels in the bearings and is connected to an air cylinder at the rear center.

Pneumatic Cylinder

A single pneumatic cylinder has been supplied to have the kicker plate extend from its retracted position to reach the front edge of the bag closing conveyor when cylinder is fully extended. The pneumatic cylinder has been positioned and adjusted at the factory.

Valve and Speed Control

The speed of the air cylinder is controlled by the speed control which is located on the air cylinder quick exhaust valve. The speed in both the kick and the retract positions are controlled through a standard screwdriver adjustment and then locked down by jam nuts.

Photo Eye

The photo eye is designed to activate the system. Brochures describing the photo eye in detail are enclosed with equipment. The photo eye includes timers as it is extremely important to have the kicker kick the bag once it is in the proper position.

Photo Eye Timers

The delay timer is for the duration of time before the bag is kicked.

Once timed out, the kick plate returns to the home position.

Front Roller

The front roller assembly is designed to catch the upper half of the bag and hold it while the lower half of the bag is being pushed by the kicker. This lays the bag down to its rested position quicker. The

roller assembly is designed to move up and down on the main frame assembly according to bag height.

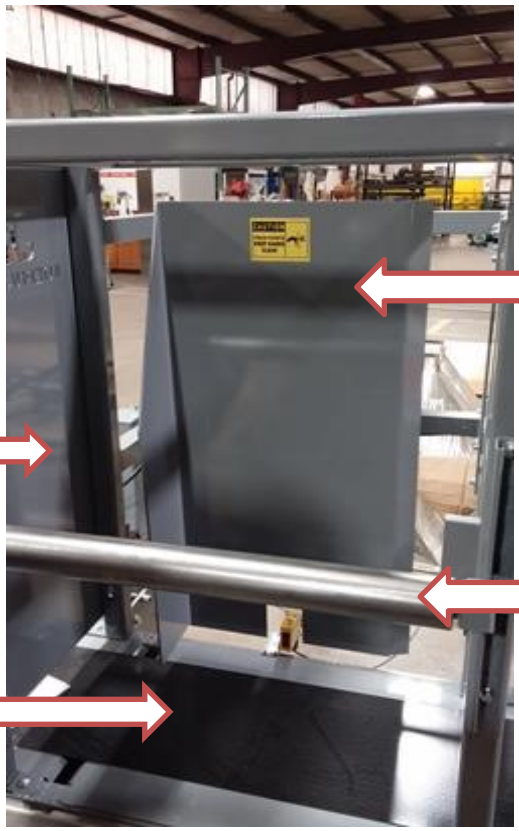
Bags do not kick uniformly; this is totally dependent on the type of material of which the bag is made and the product being filled into the bag. Trial and error is necessary to obtain the proper kick motion of each and every product.

Safety

The bag kicker will be activated when the bag passes the photo eye. The photo eye switch cannot identify a bag from an individual's hand, therefore, will activate once triggered to do so. A cover plate has been provided on one end of the system to prevent operator access from reaching the kicker assembly. DO NOT REMOVE THIS PLATE. However, on the other side where the bags enter into the system, it is not possible to install a safety cage or else the bags would not be able to pass. For this reason, it is extremely important for the operator to be aware that the system will automatically activate once the photo eye is triggered.

The discharge side of the system also must be left open, as bags will be kicked from the bag kicker conveyor onto another conveyor.

Do not attempt to service unit with air connected. Kicker will automatically operate once the photo eye is activated.



Kicker Plate

Safety Cover Plate

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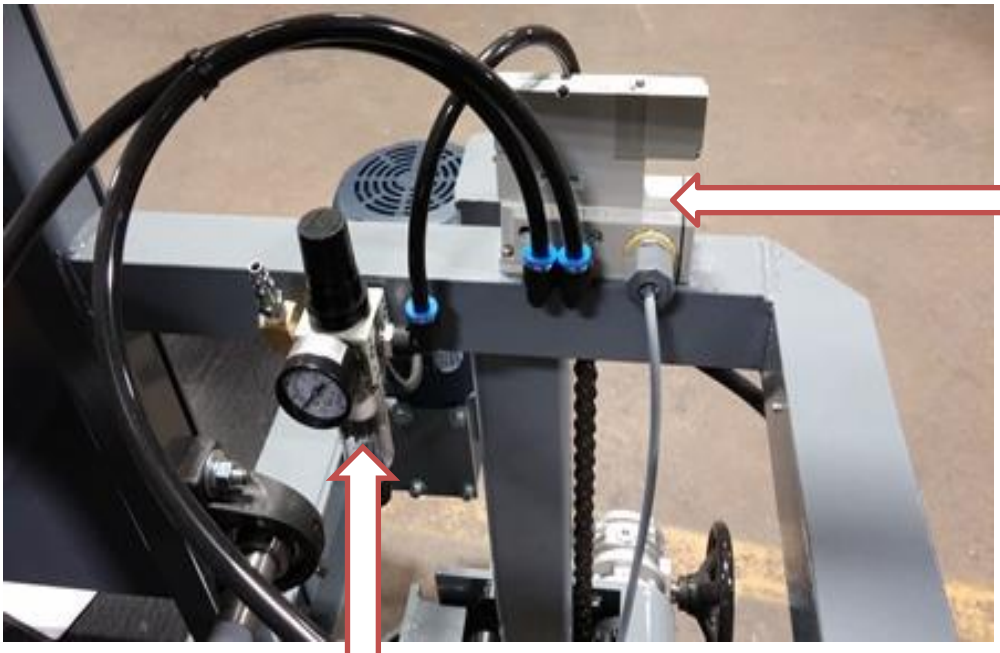
Smooth Top Conveyor Belt



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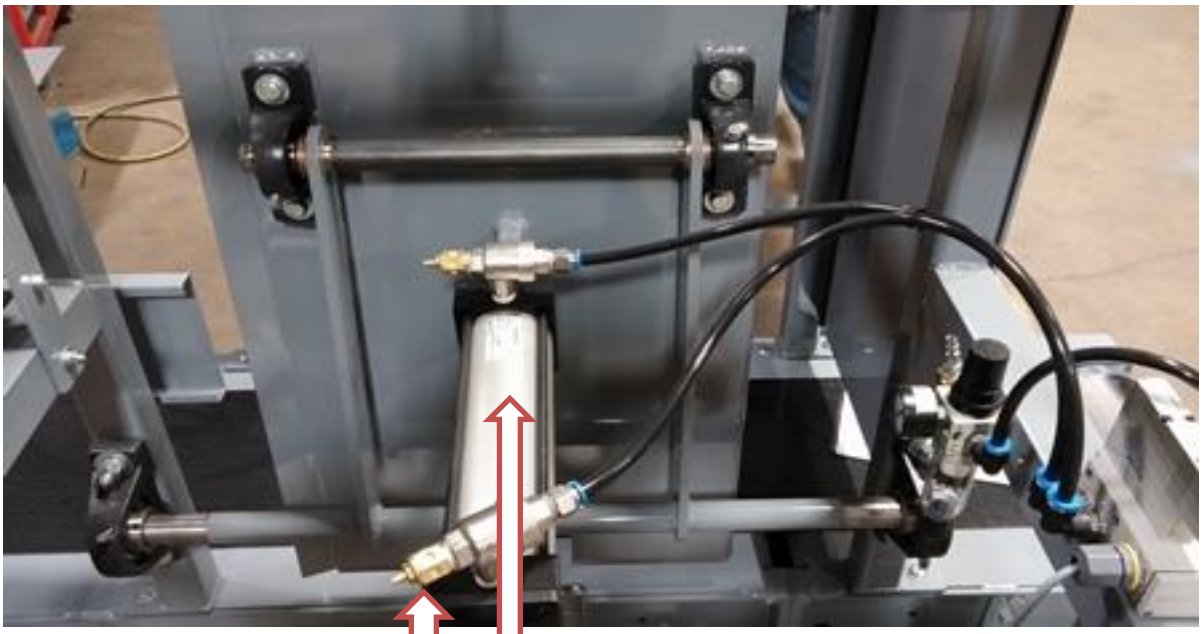


82A3MN SPEED CONTROL VALVE

8332652509

PHOTO EYE (PE) ADJUSTMENT

1. With power off, position the PE so the sensor side is aimed through the slot in the kick plate. Be sure it remains aimed through the slot as the kick plate moves forward and is fully extended. If this isn't true the PE may be triggered more than once causing multiple kicks.

2. Turn the power on.
   Disconnect the air pressure to the kick valve
   Use an empty product bag. Move it in front of the PE about half way across the belt. The red light should come on. Now move the bag in front of the PE all the way across the belt (furthest point). The red light should go out. Adjust the "sensitivity" control until these conditions are true.

3. Be sure the air pressure is still turned off.
   Adjust the conveyor belt speed to 40 feet per minute or as required by your operation. Place a full product bag on the conveyor.
   Adjust the "Delay" control so the yellow light turns on as the bag contacts the end of the kick plate.
   Adjust the "Time" control until the yellow light stays on for 1 to 2 seconds.

4. Turn the air pressure on and place a full product bag on the conveyor and allow it to be kicked off the conveyor. Fine adjust "Time" so that the bag transfers fully, but returns without time loss.

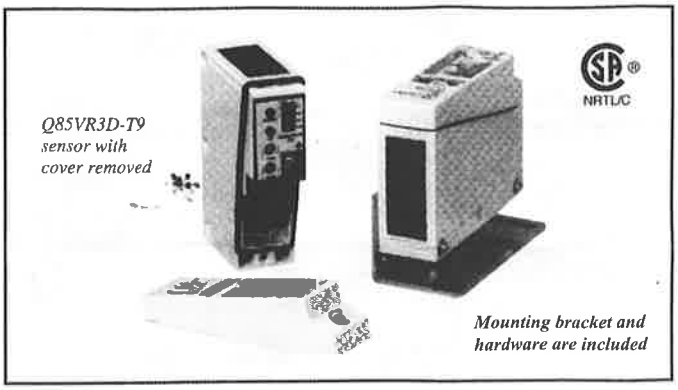
5. You may need to repeat steps 2 to 4 until the kicker is set to your needs.

Q85 Series Short-Range Diffuse Sensors

ac/dc sensors with e/m relay output and optional timing logic

BANNER
the photoelectric specialist

- **Economical short-range diffuse (proximity) sensors in rugged, NEMA-6P (IEC IP67) Cycolac® ABS housings**
- **Sensing range of 10 inches (250 mm) referenced to a 90% reflectance white test card**
- **Operates from 24 to 240 volts ac ~~or 12 to 240 volts dc~~; totally self-contained**
- **SPDT electromechanical relay output device; choice of on/off output or programmable timing logic**
- **Wiring chamber with two conduit entrances for mounting versatility**
- **LED indicators for OUTPUT ON and LIGHT SENSED (AID™ signal strength indicator system, see text)**



Q85s are compact, economical, infrared diffuse (proximity) mode photoelectric sensors in rugged NEMA-6P rated ABS housings. They are ideally suited to conveyor control and similar applications. The timing logic functions offered in the "T9" models provide additional control capabilities over and above the basic model's ON/OFF (no delay) function. All Q85 sensors feature a convenient wiring chamber with two conduit entrances for ease of connection, positioning, and mounting. Sensing range is 10 inches (250 mm), referenced to a 90% reflectance white test card.

Q85 Series sensors operate from either 24-240V ac or 12-240V dc and draw 2 watts maximum. They have SPDT electromechanical relay output, and are available with a choice of either ON/OFF or programmable timing output logic. Models with programmable timing logic ("T9" models) provide eight switch-selectable logic functions: ON/OFF (no delay), ON delay, OFF delay, ON/OFF delay, one-shot (pulse), on-delayed one-shot, limit timer, and on-delayed limit timer. The adjustable time range for delay functions and pulse length is 0.1 to 5 seconds (see page 2). All models feature a SENSITIVITY control for precise adjustment of sensing gain.

Two top-mounted LED indicators are provided, and are visible through a window in the wiring chamber's gasketed cover. A red indicator (Banner's exclusive, patented AID™ system*) lights whenever the sensor "sees" the reflection of its own modulated light source, and pulses at a rate proportional to the strength of the received light signal. A yellow output indicator lights whenever the Q85's output is energized.

Q85 Series sensors have rugged yellow Cycolac® ABS housings with ultrasonically-welded acrylic lenses. A gasketed ABS cover protects the wiring chamber and the timing and sensitivity adjustment controls inside. Two 1/2-14 NPSM conduit entrances are provided, and a plug and gasket are included for a possible unused entrance. Q85 Series sensors are rated NEMA 1, 2, 3, 3S, 4, 4X, 6, 6P, 12, and 13 (IEC IP67). An 11-gauge plated steel mounting bracket and two plated mounting bolts and nuts (see photo above and drawing on page 2) are included.

*Alignment Indicating Device system, US patent number 4356393

Specifications, Q85 Series Short-range Diffuse Sensors

Sensing range:
10 inches (250 mm), referenced to a 90% reflectance white test card.

Sensing beam: infrared, 880 nanometers.

Supply voltage: 24 to 240V ac, 50/60 Hz or 12 to 240V dc (2 watts maximum). No polarity for power supply hookup.

Models and Output Configurations:
Q85VR3D = SPDT e/m relay, on/off output
Q85VR3D-T9 = SPDT e/m relay, with programmable timer

Output relay specifications:
Maximum switching power (resistive load): 90W, 750VA. Install transient suppressor (MOV) across contacts that switch inductive loads.
Maximum switching voltage (resistive load): 250V ac or 30V dc.
Maximum switching current (resistive load): 3A.
Minimum voltage and current: 5V dc, 10 mA.
Mechanical life: 50,000,000 operations.
Electrical life at full resistive load: 100,000 operations.
Maximum switching speed: 25 operations per second.
Closure time (no timing logic in use): 20 milliseconds max.
Release time (no timing logic in use): 20 milliseconds max.
Repeatability (no timing logic in use): 1 millisecond.

All sensors are protected against false pulse on power-up. (False pulse protection circuit causes a 100 millisecond delay on power-up.)

Adjustments: All models have a single-turn SENSITIVITY control potentiometer, accessible beneath the ABS wiring chamber cover. Timing logic (T9 models only) is configured at a DIP switch. Pulse length and delay are set by a single-turn potentiometer (accessible under the wiring chamber cover). The adjustable time range for both functions is 0.1 to 5 seconds; both functions are automatically set to the same value. T9 models also have a light/dark operate switch.

Status Indicators: LEDs, one red and one yellow, both top-mounted. **Red** AID™ system (Alignment Indicating Device, US patent #4356393) indicator LED lights whenever the sensor "sees" its own modulated light, and pulses at a rate proportional to the strength of the light signal. **Yellow** indicator lights whenever the sensor's output is energized.

Construction:
Yellow Cycolac® ABS housing, plated steel hardware. Acrylic lens. ABS cover for wiring/adjustments access. Rated NEMA 1, 2, 3, 3S, 4, 4X, 6, 6P, 12, and 13; IEC IP67. It is the customer's responsibility to maintain NEMA 6P integrity at the conduit entrance(s) in use. Maximum wire size (for connection to wiring terminals) is #14 AWG.

Operating temperature range: -25° to +55°C (-13° to +131°F).

Maximum relative humidity: 90% at 50°C (non-condensing).

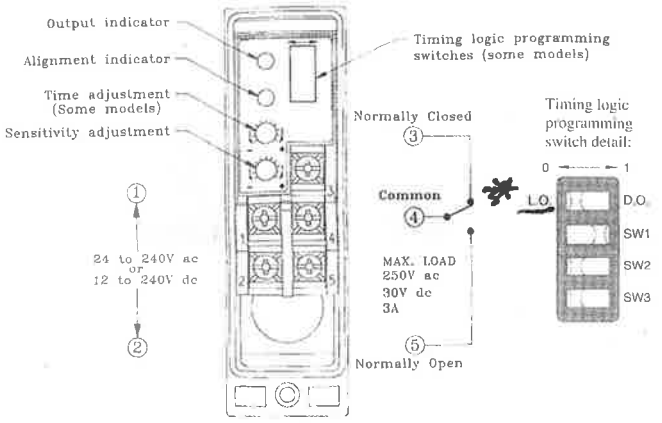
Cycolac® is a registered trademark of General Electric Co.

Printed in USA

P/N 31675L3A

Hookup and timing logic selection

Hookup to the ac line and the external load is made at the five terminals inside the wiring chamber (see drawing below). There is no polarity for power supply hookup. Output is an SPDT electromechanical relay.



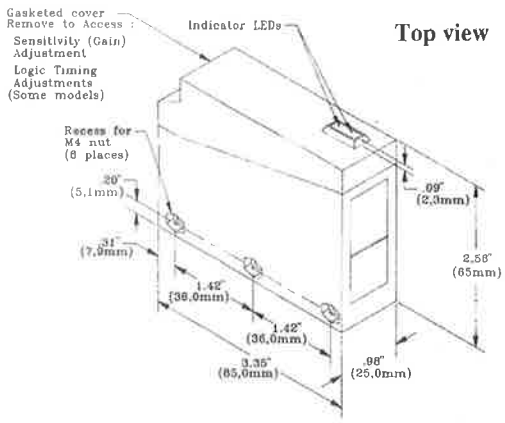
The **output timing logic function (on sensor models with T9 model number suffix)** is selected at the *timing logic programming switches*, according to the table (right). The output timing logic delays are set at the single-turn *time adjustment* potentiometer. When the timing function involves more than one time (as in ON and OFF delay, ON-delayed one-shot, and ON-delayed limit timer functions), the potentiometer sets both times to the same value.

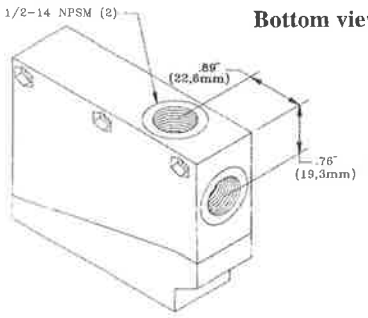
Logic function	Switch:	SW1	SW2	SW3
ON and OFF delays (both)		0	0	0
ON delay (only)		0	0	1
OFF delay (only)		0	1	0
No delays		0	1	1
ON delayed one-shot		1	0	0
ON delayed limit timer		1	0	1
One-shot		1	1	0
Limit timer		1	1	1

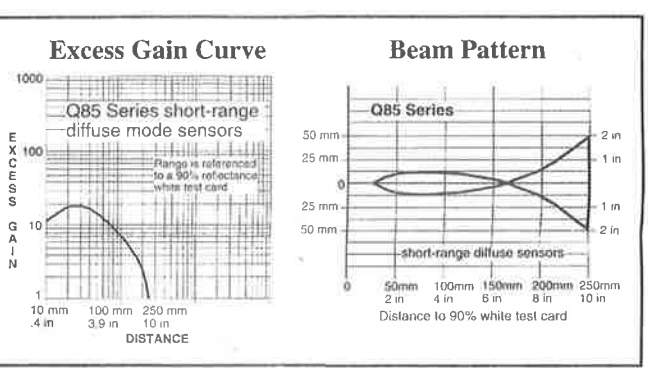
With the *light/dark operate switch* (T9 models) set to **light operate (L.O.)**, the sensor's electromechanical output relay is energized when the sensor sees the reflection of its own modulated light. In the **dark operate (D.O.)** position, the output is energized when the sensor does not see the reflection of its modulated light source.

Sensor sensitivity is set at the single-turn *sensitivity* adjustment potentiometer.

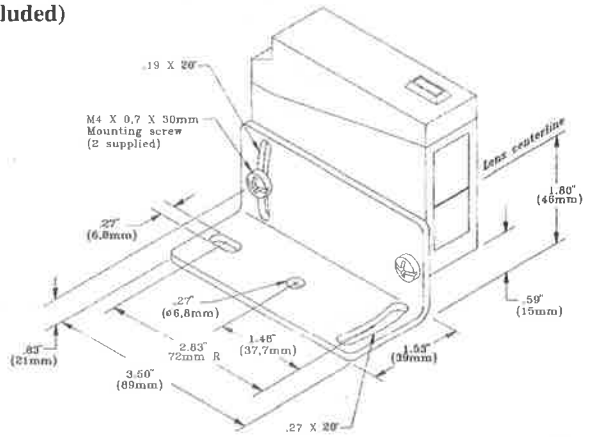
Dimensions, Q85 diffuse mode sensors







Shown with mounting bracket (included)



WARNING This photoelectric presence sensor does NOT include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can result in *either* an energized or a de-energized sensor output condition.

Never use this product as a sensing device for personnel protection. Its use as a safety device may create an unsafe condition which could lead to serious injury or death. Only MACHINE-GUARD and PERIMETER-GUARD Systems, and other systems so designated, are designed to meet OSHA and ANSI machine safety standards for point-of-operation guarding devices. No other Banner sensors or controls are designed to meet these standards, and they must NOT be used as sensing devices for personnel protection.

Printed in USA Banner Engineering Corp. 9714 10th Ave. No. Minneapolis, MN 55441 Tel. (763) 544-3164 FAX (763) 544-3573

ENGLISH

Quick Start Guide - ATV312

S1A1094202

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Read and understand this quick start guide before performing any procedure with this drive.
- The user is responsible for compliance with all international and national electrical code requirements with respect to grounding of all equipment.
- Many parts of this drive, including the printed circuit boards, operate at the line voltage. DO NOT TOUCH. Use only electrically insulated tools.
- DO NOT touch unshielded components or terminal strip screw connections with voltage present.
- DO NOT short across terminals PA/+ and PC/- or across the DC bus capacitors.
- Before servicing the drive:
  - Disconnect all power, including external control power that may be present.
  - Place a "DO NOT TURN ON" label on all power disconnects.
  - Lock all power disconnects in the open position.
  - WAIT 15 MINUTES to allow the DC bus capacitors to discharge.
  - Measure the voltage of the DC bus between the PA/+ and PC/- terminals to ensure that the voltage is less than 42 Vdc.
  - If the DC bus capacitors do not discharge completely, contact your local Schneider Electric representative. Do not repair or operate the drive
- Install and close all covers before applying power or starting and stopping the drive.

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

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this product.

Information below is designed to use **single drive** connected to **single motor with a motor cable length less than 50 meters (164 ft).**
In any other case, consult the ATV312 installation manual (BBV46391) and programming manual (BBV46385) on www.schneider-electric.com.

❶ Check the delivery of the drive

- Remove ATV312 from the packaging and check that it has not been damaged.

⚠ WARNING

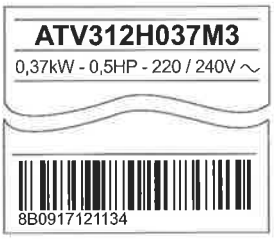
DAMAGED DRIVE EQUIPMENT

Do not operate or install any drive or drive accessory that appears damaged.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

- Check that the drive reference printed on the label matches the delivery note and corresponding purchase order.

Write the drive Model Reference: _____ _____and Serial Number: _____

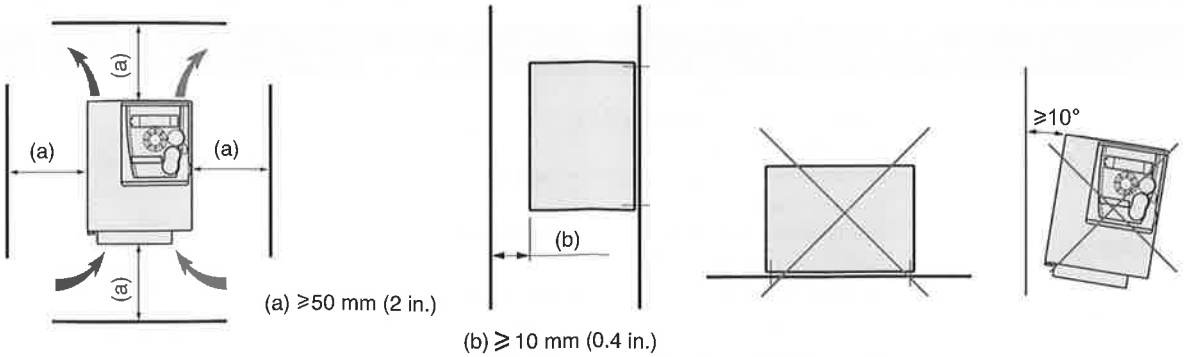


❷ Check the line voltage compatibility

- Check that the **line voltage** is compatible with the supply range of the drive.
  Line voltage _____ Volts / Drive voltage range _____ Volts
  Drive range: ATV312••••M2 = 200/240 V single phase / ATV312••••M3=200/240 V three-phase
  ATV312••••N4 = 380/500 V three-phase / ATV312••••S6 = 525/600 V three-phase

❸ Mount the drive vertically

For a surrounding air temperature up to 50 °C (122 °F)



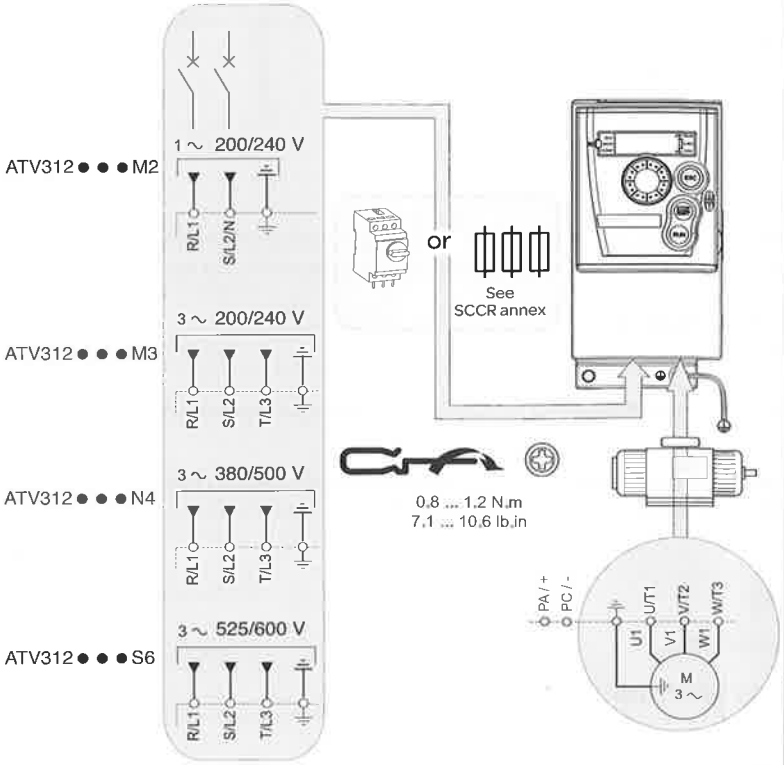
(a) ≥50 mm (2 in.)

(b) ≥ 10 mm (0.4 in.)

See installation manual (BBV46391) on www.schneider-electric.com for other thermal conditions.

❹ Connect power wiring

- Wire the drive to the ground.
- Check circuit breaker rating or fuse rating (see SCCR annex)
- Check that the motor voltage is compatible with the drive voltage.
  Motor voltage _____Volts.
- Wire the drive to the motor.
- Wire the drive to the line supply.



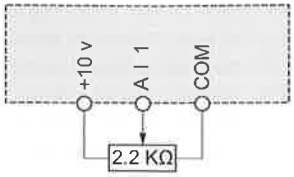
❺ Connect control wiring and select control configuration:

(5.1) or (5.2)

(5.1) [REMOTE configuration] (Control by **external** reference)

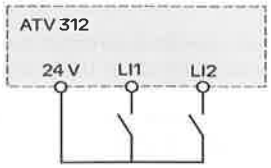
- Ensure SW1 = "SOURCE"

- **Wire the speed reference:**



- **Wire the command:**

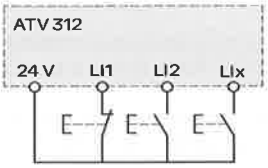
Control command 2-wire:



LI1: forward
LI2: reverse

OR

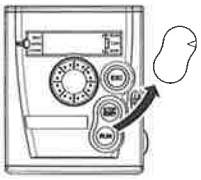
Control command 3-wire:



LI1: stop
LI2: forward
LIx: reverse

- Next steps, do: ❻+❼+❽+(9.1)

(5.2) [LOCAL configuration] (control by **internal** reference).



Do: ❻+❼+❽+(9.2)

❻ Apply power to the drive

- Ensure that Logic Inputs are not active (see Li1, Li2, Lix).
- Apply power to the drive.
- At first power up, the drive displays nSt (3-wire control) or rdy (2-wire control), after pushed ENT drive displays bFr.
- On next start-ups, the drive displays nSt or rdy.

❼ Set motor parameters

- Refer to the motor nameplate for the following parameter settings.

Menu	Code	Description	Factory setting	Customer setting
drC- [MOTOR CONTROL]	bFr	[Standard mot. freq]: Standard motor frequency (Hz)	50. 0	
	UnS	[Rated motor volt.]: Nominal motor voltage on motor nameplate (V)	drive rating	
	FrS	[Rated motor freq.]: Nominal motor frequency on motor nameplate (Hz)	50. 0	
	nCr	[Rated mot. current.]: Nominal motor current on motor nameplate (A)	drive rating	
	nSP	[Rated motor speed]: Nominal motor speed on motor nameplate (rpm)	drive rating	
	COS	[Motor 1 Cosinus Phi.]: Nominal motor cos φ on motor nameplate	drive rating	

❼ Set motor parameters (continued)

- Set tUn parameter to YES.

Menu	Code	Description	Factory setting	Customer setting
drC - [MOTOR CONTROL]	tUn	[Auto Tunning]: Auto-Tunning for UnS, FrS, nCr, nSP, nPr and COS	nO	

⚠⚠ DANGER

HAZARD OF ELECTRIC SHOCK OR ARC FLASH

- During auto-tuning, the motor operates at rated current.
- Do not service the motor during auto-tuning.

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

⚠ DANGER

UNINTENDED EQUIPMENT OPERATION

- The Nominal Motor Parameters UnS, FrS, nCr, nSP, nPr and COS must be correctly configured before starting auto-tuning.
- If one or more of these parameters is modified after auto-tuning has been performed, tUn will return to nO and the procedure must be repeated.

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

❽ Set basic parameters

Menu	Code	Description	Factory setting	Customer setting
SEt - [SETTINGS]	ACC	[Acceleration]: Acceleration time (s)	3.0	
	dEC	[Deceleration]: Deceleration time (s)	3.0	
	LSP	[Low speed]: Motor frequency at minimum reference (Hz)	0.0	
	HSP	[High speed]: Motor frequency at maximum reference (Hz)	50.0	
	ItH	[Mot. therm. current]: Nominal current on motor nameplate (A)	drive rating	
I-O - [INPUTS / OUTPUTS CFG]	rrS	[Reverse assign.]: Reverse assignment	LI2	
FUn -> PSS - [PRESET SPEEDS]	PS2	[2 preset speeds]: Preset speeds	LI3	
	PS4	[4 preset speeds]: Preset speeds	LI4	
FUn -> SAI - [SUMMING INPUTS]	SA2	[Summing ref. 2] Analog input	AI2	

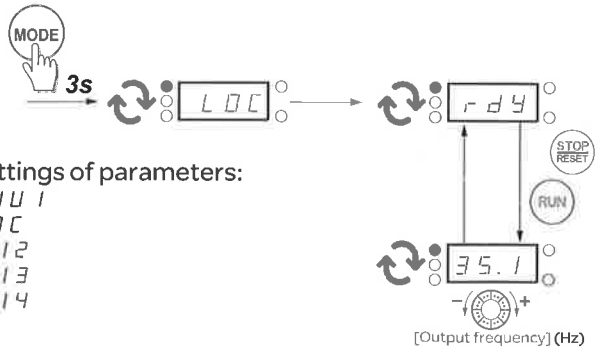
❾ Set control choice

Menu	Code	Description	5.1 [REMOTE configuration]	5.2 [LOCAL configuration]	Customer Setting
CtL - [COMMAND]	Fr1	[Ref.1 channel]: Reference control	AI1 (factory setting), AI2, AI3	AIU1	
I-O - [INPUTS / OUTPUTS CFG]	tCC	[2/3 wire control]: Command control	2C : 2-wire (factory setting) 3C : 3-wire	LOC	

❾1 [REMOTE configuration] (Factory setting)

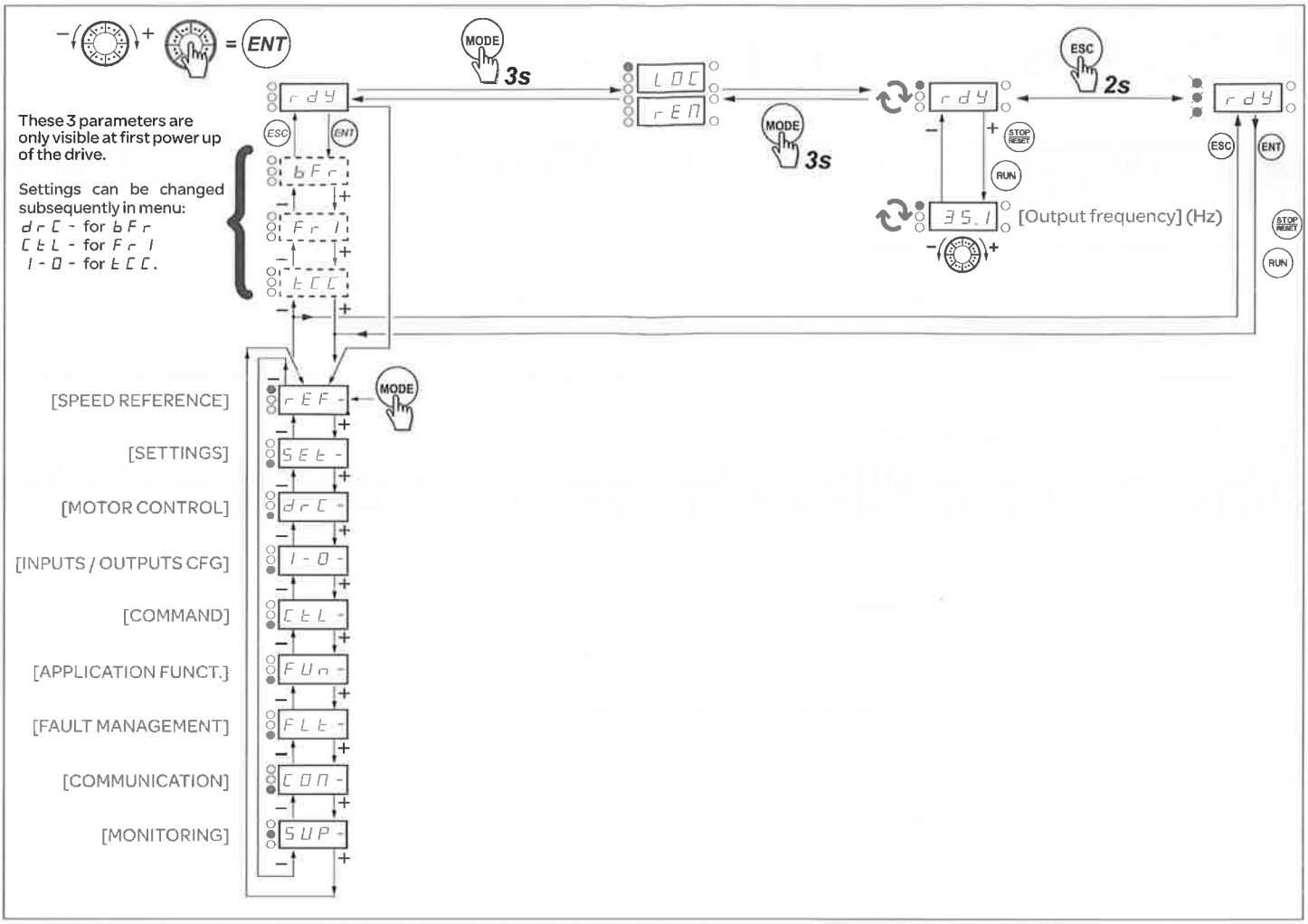
Factory settings of parameters:
Fr1 = AI1
tCC = 2C

❾2 [LOCAL configuration]

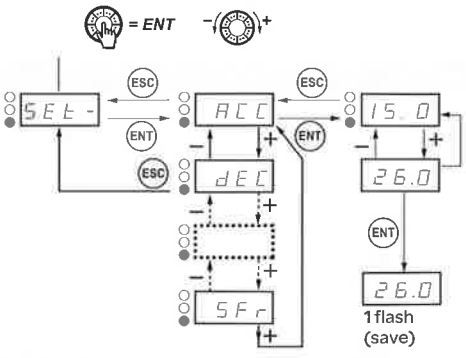


Factory settings of parameters:
Fr1 = AIU1
tCC = LOC
rrS = LI2
PS2 = LI3
PS4 = LI4

Menus structure



Parameter selection



Refer to the programming manual (BBV46385) for comprehensive menu descriptions.

A dash appears after menu codes to differentiate them from parameter codes.
Example:
[SETTINGS] (SEt-), ACC parameter.

ANNEX

ANNEX for ATV312 Quick Start Guide

S1B1632800

Short-Circuit Current Ratings (SCCR) and branch circuit protection

The table shows recommended fuse ratings for UL and CSA requirements. The components are for use together in accordance with standard UL508

ATV312 Drive										Short-Circuit Current Ratings					
Input Voltage +10%/-15% 60 Hz Y		(kW)	(HP)	Reference [6]	Input AIC Rating (kA)	Minimun Inductance (mH)	Line Reactor Reference	Output Interrupt Rating: (kA) [1]		With Circuit Breaker		With GV●P		With Fuses	
										PowerPact Z1, Z2	SCCR (kA) [3] X	GV2P/3P Type E [3,4] Z1, Z2	SCCR (kA)	Fuse (A) [5] Z1, Z2	SCCR (kA) [2,3] X
Three-phase with or without line reactor															
208/230V Three-phase	Without line reactor	0.18	0.25	ATV312H018M3	5	-	-	100		HxL36015	22	-	-	3	22
		0.37	0.5	ATV312H037M3	5	-	-	100		HxL36015	22	-	-	6	22
		0.55	0.75	ATV312H055M3	5	-	-	100		HxL36015	22	-	-	10	22
		0.75	1	ATV312H075M3	5	-	-	100		HxL36015	22	-	-	10	22
		1.1	1.5	ATV312HU11M3	5	-	-	100		HxL36015	22	-	-	15	22
		1.5	2	ATV312HU15M3	5	-	-	100		HxL36015	22	-	-	15	22
		2.2	3	ATV312HU22M3	5	-	-	100		HxL36020	22	-	-	20	22
		3	-	ATV312HU30M3	5	-	-	100		HxL36020	22	-	-	25	22
		4	5	ATV312HU40M3	5	-	-	100		HxL36030	22	-	-	35	22
		5.5	7.5	ATV312HU55M3	22	-	-	100		HxL36040	22	-	-	50	22
		7.5	10	ATV312HU75M3	22	-	-	100		HxL36060	22	-	-	60	22
		11	15	ATV312HD11M3	22	-	-	100		HxL36070	22	-	-	80	22
		15	20	ATV312HD15M3	22	-	-	100		HxL36090	22	-	-	110	22
	With line reactor	0.18	0.25	ATV312H018M3	5	3	RL-00401	100		HxL36015	65	GV2P07	65	3	22
		0.37	0.5	ATV312H037M3	5	3	RL-00401	100		HxL36015	65	GV2P08	65	6	22
		0.55	0.75	ATV312H055M3	5	3	RL-00401	100		HxL36015	65	GV2P10	65	10	22
		0.75	1	ATV312H075M3	5	3	RL-00401	100		HxL36015	65	GV2P10	65	10	22
		1.1	1.5	ATV312HU11M3	5	1.5	RL-00801	100		HxL36015	65	GV2P14	65	15	22
		1.5	2	ATV312HU15M3	5	1.5	RL-00801	100		HxL36015	65	GV2P14	65	15	22
		2.2	3	ATV312HU22M3	5	1.25	RL-01201	100		HxL36020	65	GV3P18 / 13	65	20	22
		3	-	ATV312HU30M3	5	1.25	RL-01801	100		HxL36020	65	GV3P18	65	25	22
		4	5	ATV312HU40M3	5	1.25	RL-01801	100		HxL36030	65	GV3P25	65	35	22
		5.5	7.5	ATV312HU55M3	22	0.5	RL-02501	100		HxL36040	65	GV3P40/ 32	65	50	22
		7.5	10	ATV312HU75M3	22	0.4	RL-03501	100		HxL36060	65	GV3P50	65	60	22
		11	15	ATV312HD11M3	22	0.3	RL-04501	100		HxL36070	65	GV3P65	65	80	22
		15	20	ATV312HD15M3	22	0.2	RL-08001	100		HxL36090	65	-	-	110	22
400/480 V Three-phase	Without line reactor	0.37	0.5	ATV312H037N4	5	-	-	100		HxL36015	22	-	-	3	22
		0.55	0.75	ATV312H055N4	5	-	-	100		HxL36015	22	-	-	6	22
		0.75	1	ATV312H075N4	5	-	-	100		HxL36015	22	-	-	6	22
		1.1	1.5	ATV312HU11N4	5	-	-	100		HxL36015	22	-	-	10	22
		1.5	2	ATV312HU15N4	5	-	-	100		HxL36015	22	-	-	10	22
		2.2	3	ATV312HU22N4	5	-	-	100		HxL36015	22	-	-	15	22
		3	-	ATV312HU30N4	5	-	-	100		HxL36015	22	-	-	15	22
		4	5	ATV312HU40N4	5	-	-	100		HxL36015	22	-	-	20	22
		5.5	7.5	ATV312HU55N4	22	-	-	100		HxL36020	22	-	-	30	22
		7.5	10	ATV312HU75N4	22	-	-	100		HxL36030	22	-	-	35	22
		11	15	ATV312HD11N4	22	-	-	100		HxL36035	22	-	-	50	22
		15	20	ATV312HD15N4	22	-	-	100		HxL36050	22	-	-	70	22
	With line reactor	0.37	0.5	ATV312H037N4	5	12	RL00201	100		HxL36015	65	GV2P07	65	3	100
		0.55	0.75	ATV312H055N4	5	12	RL00201	100		HxL36015	65	GV2P07	65	6	100
		0.75	1	ATV312H075N4	5	12	RL00201	100		HxL36015	65	GV2P08	65	6	100
		1.1	1.5	ATV312HU11N4	5	6.5	RL00402	100		HxL36015	65	GV2P08	65	10	100
		1.5	2	ATV312HU15N4	5	6.5	RL00402	100		HxL36015	65	GV2P10	65	10	100
		2.2	3	ATV312HU22N4	5	5	RL00803	100		HxL36015	65	GV2P14	65	15	100
		3	-	ATV312HU30N4	5	3	RL00802	100		HxL36015	65	GV2P14	65	15	100
		4	5	ATV312HU40N4	5	3	RL00802	100		HxL36015	65	GV3P13	65	20	100
		5.5	7.5	ATV312HU55N4	22	2.5	RL01202	100		HxL36020	65	GV3P18	65	30	100
		7.5	10	ATV312HU75N4	22	1.5	RL01802	100		HxL36030	65	GV3P25	65	35	100
		11	15	ATV312HD11N4	22	1.2	RL02502	100		HxL36035	65	GV3P32	65	50	100
		15	20	ATV312HD15N4	22	0.8	RL03502	100		HxL36050	65	GV3P40	65	70	100

Footnotes are on the reverse side.

ATV312 Drive									Short-Circuit Current Ratings					
Input Voltage +10%/-15% 60 Hz Y		(kW)	(HP)	Reference [6]	Input AIC Rating (kA)	Minimun Inductance (mH)	Line Reactor Reference	Output Interrupt Rating: (kA) [1]	With Circuit Breaker		With GV●P		With Fuses	
									PowerPact Z1, Z2	SCCR (kA) [3] X	GV2P/3P Type E [3,4] Z1, Z2	SCCR (kA)	Fuse (A) [5] Z1, Z2	SCCR (kA) [2,3] X
Three-phase with line reactor														
575/600 V Three-phase	With line reactor	0.75	1	ATV312H075S6	5	20	RL-00202	100	FAL36015	22	-	-	6	22
		1.5	2	ATV312HU15S6	5	9	RL-00403	100	FAL36015	22	-	-	6	22
		2.2	3	ATV312HU22S6	5	6.5	RL-00402	100	FAL36015	22	-	-	10	22
		4	5	ATV312HU40S6	5	5	RL-00803	100	FAL36025	22	-	-	15	22
		5.5	7.5	ATV312HU55S6	22	2.5	RL-01202	100	FAL36040	22	-	-	20	22
		7.5	10	ATV312HU75S6	22	2.5	RL-01202	100	FAL36050	22	-	-	25	22
		11	15	ATV312HD11S6	22	1.5	RL-01802	100	FAL36070	22	-	-	35	22
		15	20	ATV312HD15S6	22	1.2	RL-02502	100	FAL36080	22	-	-	45	22
Single-phase with or without line reactor														
208/230 V Single-phase	Without line reactor	0.18	0.25	ATV312H018M2	1	-	-	100	-	-	-	-	6	22
		0.37	0.5	ATV312H037M2	1	-	-	100	-	-	-	-	10	22
		0.55	0.75	ATV312H055M2	1	-	-	100	-	-	-	-	10	22
		0.75	1	ATV312H075M2	1	-	-	100	-	-	-	-	15	22
		1.1	1.5	ATV312HU11M2	1	-	-	100	-	-	-	-	20	22
		1.5	2	ATV312HU15M2	1	-	-	100	-	-	-	-	20	22
		2.2	3	ATV312HU22M2	1	-	-	100	-	-	-	-	30	22
		4	5	ATV312HU75M3	2	-	-	100	HxL36060	22	-	-	60	22
		5.5	7.5	ATV312HD11M3	2	-	-	100	HxL36070	22	-	-	80	22
		7.5	10	ATV312HD15M3	2	-	-	100	HxL36090	22	-	-	110	22
	With line reactor	4	5	ATV312HU75M3	22	0.75	RL-03502	100	HxL36060	65	GV3P50	65	60	22
		5.5	7.5	ATV312HD11M3	22	0.375	RL-05502	100	HxL36070	65	GV3P65	65	80	22
		7.5	10	ATV312HD15M3	22	0.278	RL-08002	100	HxL36090	65	-	-	110	22
400/480 V Single-phase	Without line reactor	0.37	0.5	ATV312H075N4	5	-	-	100	HxL36015	22	-	-	6	22
		0.55	0.75	ATV312HU11N4	5	-	-	100	HxL36015	22	-	-	10	22
		0.75	1	ATV312HU15N4	5	-	-	100	HxL36015	22	-	-	10	22
		1.1	1.5	ATV312HU22N4	5	-	-	100	HxL36015	22	-	-	15	22
		1.5	2	ATV312HU30N4	5	-	-	100	HxL36015	22	-	-	15	22
		2.2	3	ATV312HU40N4	5	-	-	100	HxL36015	22	-	-	20	22
		2.2	3	ATV312HU55N4	22	-	-	100	HxL36020	22	-	-	30	22
		4	5	ATV312HU75N4	22	-	-	100	HxL36030	22	-	-	35	22
		5.5	7.5	ATV312HD11N4	22	-	-	100	HxL36035	22	-	-	50	22
		7.5	10	ATV312HD15N4	22	-	-	100	HxL36050	22	-	-	70	22
	With line reactor	0.37	0.5	ATV312H075N4	5	5.79	RL-00402	100	HxL36015	65	GV2P08	65	6	22
		0.55	0.75	ATV312HU11N4	5	4.27	RL-00402	100	HxL36015	65	GV2P08	65	10	22
		0.75	1	ATV312HU15N4	5	4.27	RL-00803	100	HxL36015	65	GV2P10	65	10	22
		1.1	1.5	ATV312HU22N4	5	2.77	RL-00802	100	HxL36015	65	GV2P14	65	15	22
		1.5	2	ATV312HU30N4	5	2.77	RL-00802	100	HxL36015	65	GV2P14	65	15	22
		2.2	3	ATV312HU40N4	5	1.68	RL-01202	100	HxL36015	65	GV3P13	65	20	22
		2.2	3	ATV312HU55N4	22	1.29	RL-01802	100	HxL36020	65	GV3P18	65	30	22
		4	5	ATV312HU75N4	22	0.912	RL-02502	100	HxL36030	65	GV3P25	65	35	22
		5.5	7.5	ATV312HD11N4	22	0.694	RL-03502	100	HxL36035	65	GV3P32	65	50	22
		7.5	10	ATV312HD15N4	22	0.569	RL-04502	100	HxL36050	65	GV3P40	65	70	22

Suitable for use on a circuit capable of delivering not more than___**X**___rms symmetrical kiloAmperes,___**Y**___Volts maximum, when protected by___**Z1**___with a maximum rating of___**Z2**___.

1. The Altivar 312 has a 100k SCC rating on the output of the drive as many other drives are rated. In addition to providing a rating based on shorting the output of the drive, these short-circuit rating have been obtained by testing the weakest point internal to the ATV312 per UL508C. These ratings allow proper coordination of short-circuit protection. The amp rating of the short-circuit protection devices in the table are maximum values. Smaller amp sizes may be used.

2. Ratings also apply to ATV312 Type 1 product, ie: an ATV312 fitted with a conduit box.

3. Ratings apply to an ATV312 mounted in a non-ventilated Type 1, 3R, 4(X) or 12 rated enclosure. Minimum enclosure volume is 3.375 times the drive volume.

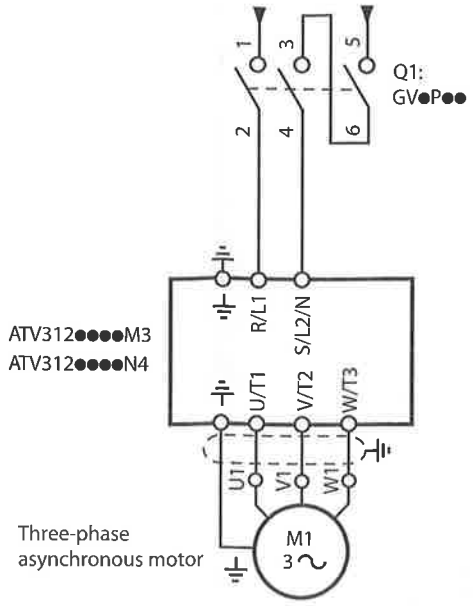
4. 480 V ratings are for Wye connected electrical distribution systems. GV2P●● self protected manual combination starter must be used with GV2GH7 insulating barrier to meet UL 508 Type E rating. GV3P●● must be used with GV3G66 and GVAM11 in order to meet UL508 rating.

5. Fuse type can be Class J, fast acting or time delay, or Class CC.

6. Available also for **B** products. Example: ATV312H018M3**B**

Wiring three-phase ATV312 on single-phase power supply

When using GV2P or GV3P manual self-protected combination starters for single-phase input applications, wire the drive as illustrated :



ESPAÑOL

Guía de inicio rápido - ATV312

S1A1094502

⚠⚠ PELIGRO

PELIGRO DE DESCARGA ELÉCTRICA, EXPLOSIÓN O ARCO ELÉCTRICO

- Lea detenidamente esta guía de instalación rápida antes de realizar ningún procedimiento con este variador.
- El usuario es responsable del cumplimiento de todos los requisitos de los códigos eléctricos internacionales y nacionales relacionados con la correcta conexión a masa de todo el equipo.
- Muchas piezas de este variador, incluidas las placas de circuito impreso, funcionan a la tensión de red. NO TOCAR. Utilice sólo herramientas con aislante eléctrico.
- NO TOQUE componentes no apantallados ni las conexiones de tornillos en regleta cuando haya tensión.
- NO cortocircuite entre los bornes PA/+ y PC/- o entre los condensadores del bus de CC.
- Antes de realizar el mantenimiento del variador:
  - Desconecte toda la alimentación eléctrica, incluida la alimentación del control externo que pueda estar presente.
  - Coloque una etiqueta de "NO CONECTAR" en todos los seccionadores.
  - Bloquee todos los seccionadores en la posición abierta.
  - ESPERE 15 MINUTOS para que los condensadores del bus de CC se descarguen.
  - Mida la tensión del bus de CC entre los bornes PA/+ y PC/- para asegurarse de que la tensión sea inferior a 42 Vdc.
  - Si los condensadores del bus de CC no se descargan completamente, póngase en contacto con su representante local de Schneider Electric. No repare ni haga funcionar el variador.
- Instale y cierre todas las cubiertas antes de aplicar alimentación o de arrancar y parar el variador.

Si no se respetan estas instrucciones, se producirán lesiones graves o incluso la muerte.

Sólo personal cualificado deberá llevar a cabo la instalación, manejo, reparación y mantenimiento de los equipos eléctricos. Schneider Electric no asume las responsabilidades que pudieran surgir como consecuencia de la utilización de este producto.

La siguiente información está diseñada para utilizar un **único variador** conectado a un **solo motor con una longitud de cable de motor inferior a 50 metros (164 ft).**
En cualquier otro caso, consulte la guía de instalación (BBV46393) y programación (BBV46387) del ATV312 en www.schneider-electric.com.

❶ Comprobación de la entrega del variadorr

- Retire el ATV312 del embalaje y compruebe que no presenta daños.

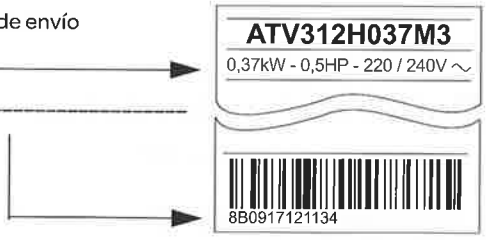
⚠ ADVERTENCIA

EQUIPO DAÑADO

No maneje ni instale ningún variador o accesorio del variador que parezca estar dañado.

Si no se respetan estas instrucciones pueden producirse graves lesiones, daños materiales o incluso la muerte.

- Asegúrese de que la referencia del variador impresa en la etiqueta coincide con la del albarán de envío correspondiente a la orden de pedido.



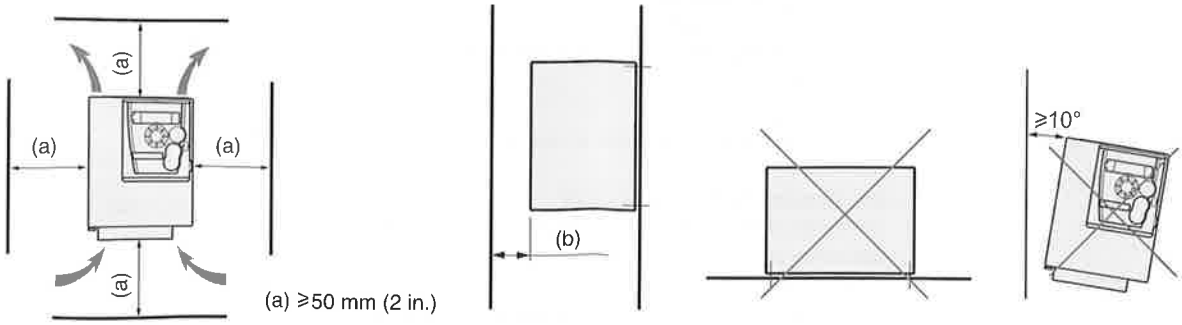
Escriba la referencia del modelo de variador: _____ y el número de serie: _____

❷ Comprobación de la compatibilidad de la tensión de red

- Verifique que la **tensión de red** sea compatible con el rango de alimentación del variador.
  Tensión de red _____ voltios / Rango de tensiones del variador _____ voltios.
  Rango del variador: ATV312••••M2 = 200/240 V monofásico / ATV312••••M3=200/240 V trifásico
  ATV312••••N4 = 380/500 V trifásico / ATV312••••S6 = 525/600 V trifásico.

❸ Instalación del variador verticalmente

Para una temperatura del aire circundante de hasta 50 °C (122 °F).



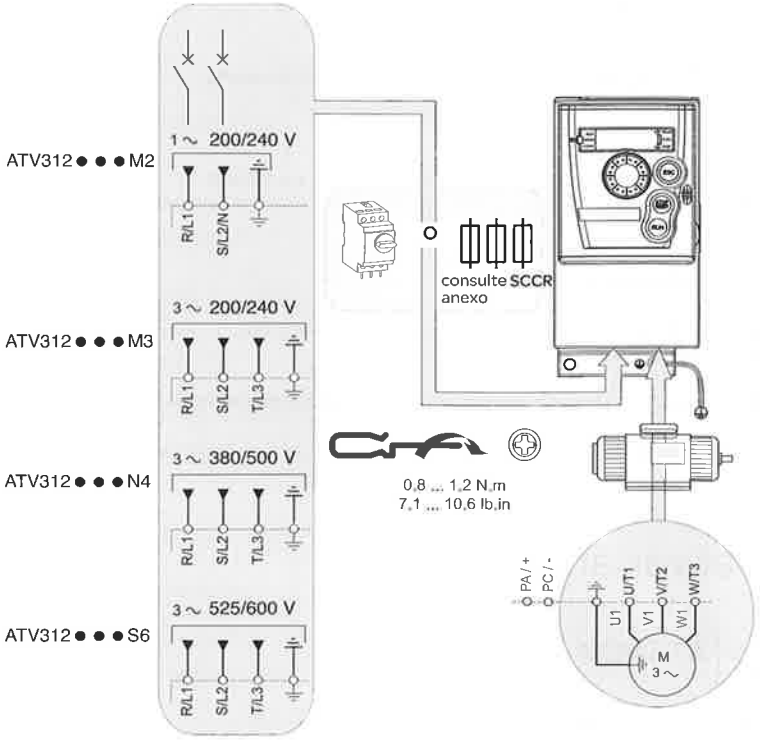
(a) ≥50 mm (2 in.)

(b) ≥ 10 mm (0.4 in.)

Para otras condiciones térmicas, consulte el manual de instalación (BBV46393) en www.schneider-electric.com.

❹ Conexión del variador: Alimentación

- Conecte el variador a la masa.
- Compruebe el calibre del disyuntor o del fusible (consulte SCCR anexo).
- Compruebe que la tensión del motor es compatible con la tensión del variador. Tensión del motor: _____ voltios.
- Conecte el variador al motor.
- Conecte el variador a la alimentación de red.

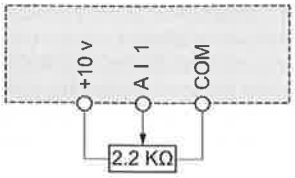


❺ Cableado de control y selección del control configuración: (51) o (52)

(51) [Configuración Remoto] (Control por referencia **externa**)

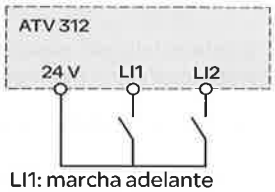
- verificar SW1 = "SOURCE"

- **Cableado de la referencia de velocidad:**



- **Cableado del control:**

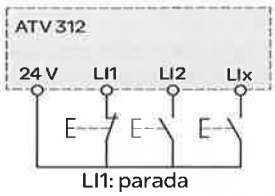
El control utiliza 2 hilos:



LI1: marcha adelante
LI2: march-a atrás

o

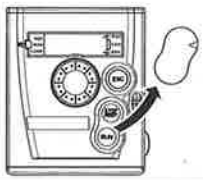
El control utiliza 3 hilos:



LI1: parada
LI2: marcha adelante
LIx: marcha atrás

- Etapas siguientes, hacer: ❻+❼+❽+(91)

(52) [Configuración Local] (Control por referencia **interna**).



hacer: ❻+❼+❽+(92)

❻ Alimentación del variador

- Compruebe que las entradas lógicas utilizadas no están activas (Consultar Li1, Li2, Lix).
- Alimente el variador.
- La primera vez que se enciende, el variador muestra nSt (control de 3 hilos) o rdY (control de 2 hilos); después de pulsar ENT el variador mostrará bFr.
- En los siguientes arranques, el variador mostrará nSt o rdY.

❼ Ajuste de los parámetros del motor

- Consulte la placa de características del motor para ajustar los parámetros siguientes.

Menú	Código	Descripción	Ajuste de fábrica	Ajuste de cliente
drC- [CONTROL DEL MOTOR]	bFr	[Frec. estándar motor]: Frecuencia estándar del motor (Hz)	50. 0	
	UnS	[Tensión nom. motor]: Tensión nominal del motor en la placa de características del motor (V)	Calibre del variador	
	FrS	[Frec. nom. motor]: Frecuencia nominal del motor en la placa de características del motor (Hz)	50. 0	
	nCr	[Int. Nominal Motor]: Corriente nominal del motor en la placa de características del motor (A)	Calibre del variador	
	nSP	[Vel. Nominal Motor]: Velocidad nominal del motor en la placa de características del motor (rpm)	Calibre del variador	
	COS	[Motor 1 cos fi]:	Calibre del	

❼ Ajuste de los parámetros del motor (continuación)

- Ajuste el parámetro tUn a YES.

Menú	Código	Descripción	Ajuste de fábrica	Ajuste de cliente
drC - [CONTROL DEL MOTOR]	tUn	[Autoajuste]: Autoajuste para UnS, FrS, nCr, nSP, nPr y COS.	nO	

⚠⚠ PELIGRO

PELIGRO DE DESCARGA ELÉCTRICA O ARCO ELÉCTRICO

- Durante el autoajuste, el motor funciona a corriente nominal.
- No manipule el motor durante el autoajuste.

Si no se respetan estas instrucciones, se producirán lesiones graves o incluso la muerte.

⚠ PELIGRO

FUNCIONAMIENTO INADECUADO DEL EQUIPO

- Los parámetros nominales del motor UnS, FrS, nCr, nSP, nPr y COS deben configurarse correctamente antes de iniciar el autoajuste.
- Si uno o más de estos parámetros se modifican después de que se haya realizado el autoajuste, tUn volverá a nO y deberá repetirse el proceso.

Si no se respetan estas instrucciones, se producirán lesiones graves o incluso la muerte.

❽ Ajuste de los parámetros básicos

Menú	Código	Descripción	Ajuste de fábrica	Ajuste de cliente
SEt - [AJUSTES]	ACC	[Aceleración]: Tiempo de aceleración (s)	3.0	
	dEC	[Deceleración]: Tiempo de deceleración (s)	3.0	
	LSP	[Velocidad mínima]: Frecuencia del motor con referencia mínima (Hz)	0.0	
	HSP	[Vel. máxima]: Frecuencia del motor con referencia máxima (Hz)	50.0	
	ItH	[I térmica motor]: Corriente nominal del motor en la placa de características del motor (A)	Calibre del variador	
I-O - [ENTRADAS/SALIDAS]	rrS	[Asig. marcha atrás]: Asignación de marcha atrás	LI2	
FUn -> PSS - [VEL. PRESELECC..]	PS2	[2 vel. preselecc.]: Velocidades preseleccionadas	LI3	
	PS4	[4 vel. preselecc.]: Velocidades preseleccionadas	LI4	
FUn -> SAI - [ENTRADAS SUMATORIAS]	SA2	[Ref. sumat. 2] Entrada analógica	AI2	

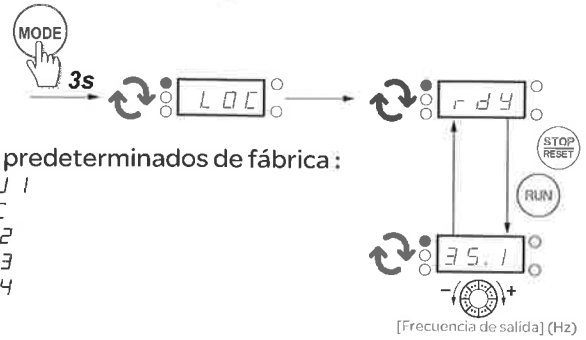
❾ Ajuste de los parámetros de control

Menú	Código	Descripción	5.1 [Configuración Remoto]	5.2 [Configuración Local]	Ajuste de cliente
CtL - [CONTROL]	Fr1	[Canal Ref. 1]: Control de referencia	AI1 (Ajuste de fábrica), AI2, AI3	AIU1	
I-O - [ENTRADAS/SALIDAS]	tCC	[Control 2/3 hilos]: Control de comandos	2C: 2 hilos (Ajuste de fábrica) 3C: 3 hilos	LOC	

❾1 [Configuración Remoto] (Ajuste de fábrica)

Parámetros predeterminados de fábrica:
Fr1 = AI1
tCC = 2C

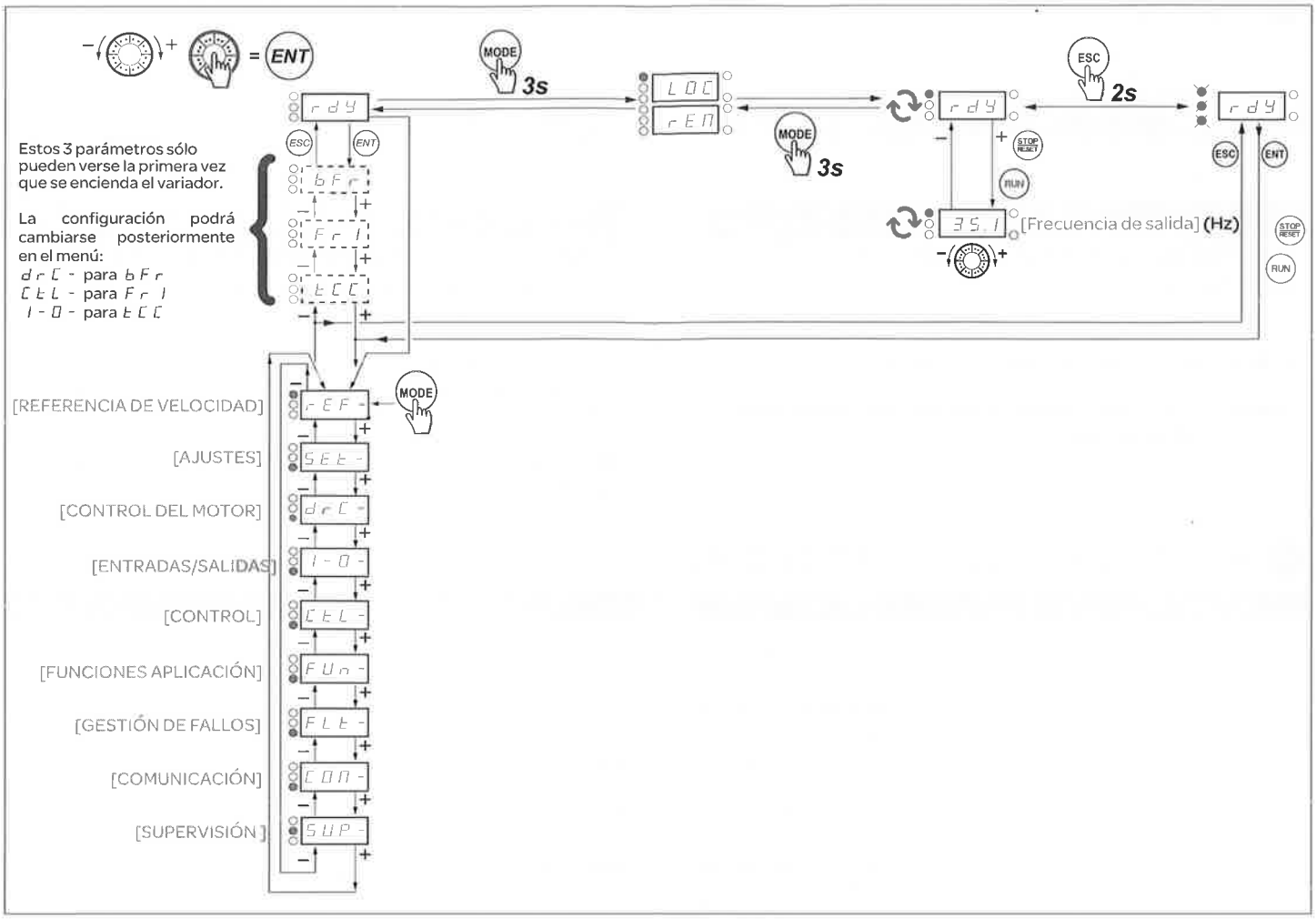
❾2 [Configuración Local]



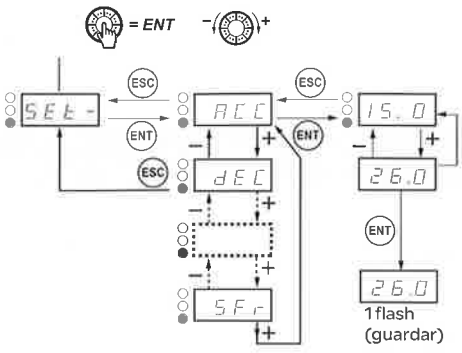
Parámetros predeterminados de fábrica:
Fr1 = AIU1
tCC = LOC
rrS = LI2
PS2 = LI3
PS4 = LI4

❿ Arranque del motor

Estructura de menús



Selección de parámetro



Consulte el manual de programación (BBV46387) para una descripción completa del menú.

Después de los códigos de menú aparece una raya para diferenciarlos de los códigos de parámetro.
Por ejemplo:
[AJUSTES] (SEt-), parámetro ACC.

FRANÇAIS

Guide de démarrage rapide - ATV312

S1A1094302

⚠ ⚠ DANGER

RISQUE D'ÉLECTROCUTION, D'EXPLOSION OU D'ARC ÉLECTRIQUE

- Vous devez lire et comprendre ce guide d'installation rapide avant de suivre toute procédure relative à ce variateur.
- L'utilisateur est tenu de s'assurer de la conformité avec toutes les exigences des réglementations internationales et nationales concernant la mise à la terre de tous les équipements.
- Plusieurs pièces de ce variateur, notamment les circuits imprimés, fonctionnent à la tension réseau. NE LES TOUCHEZ PAS. Utilisez uniquement des outils isolés électriquement.
- NE touchez PAS les composants non blindés ou les connexions des vis du bornier lorsqu'une tension est présente.
- NE mettez PAS en court-circuit les bornes PA/+ et PC/- ou les condensateurs du bus DC.
- Avant de réparer le variateur :
  - Déconnectez toute alimentation, y compris l'alimentation contrôle externe, pouvant être présente.
  - Placez une étiquette « NE PAS ALLUMER » sur tous les points de coupure.
  - Assurez-vous que tous les points de coupure restent en position ouverte.
  - ATTENDEZ 15 MINUTES pour permettre aux condensateurs du bus DC de se décharger.
  - Mesurez la tension du bus DC entre les bornes PA/+ et PC/- pour vérifier que la tension est inférieure à 42 Vdc.
  - Si les condensateurs de bus DC ne se déchargent pas complètement, contactez votre représentant local Schneider Electric. Ne réparez pas et ne faites pas fonctionner le variateur.
- Installez et fermez tous les couvercles avant de mettre le variateur sous tension.

Le non-respect de ces instructions entraînera la mort ou des blessures graves.

L'installation, l'utilisation, la réparation et la maintenance des équipements électriques doivent être assurées par du personnel qualifié uniquement. Schneider Electric décline toute responsabilité quant aux conséquences de l'utilisation de ce produit.

Les informations fournies ci-dessous concernent l'utilisation d'un **variateur unique** relié à un **moteur unique par un câble moteur d'une longueur inférieure à 50 mètres.**
Dans tout autre cas, consultez le guide d'installation (BBV46390) et de programmation (BBV46384) de l'ATV312 sur le site Internet www.schneider-electric.com.

❶ Vérification de la livraison

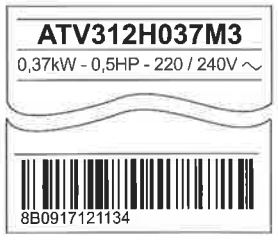
- Ouvrez l'emballage et vérifiez que l'ATV312 n'a pas été endommagé.

⚠ AVERTISSEMENT

VARIATEUR ENDOMMAGÉ

N'installez pas et ne faites pas fonctionner un variateur ou accessoire de variateur s'il semble être endommagé.
Le non-respect de ces instructions peut provoquer la mort, des blessures graves ou des dommages matériels.

- Vérifiez que la référence du variateur imprimée sur l'étiquette est conforme au bordereau de livraison correspondant au bon de commande.



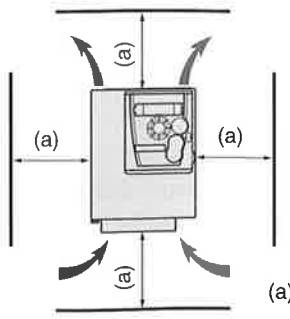
Notez la référence du modèle : _____ et le n° de série du variateur : _____

❷ Vérification de la compatibilité avec l'alimentation

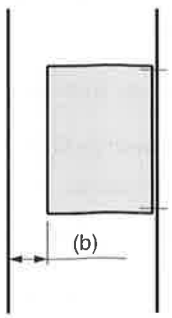
- Vérifiez que la **tension réseau** est compatible avec la plage d'alimentation du variateur.
  Tension réseau _____ V / Plage de tension du variateur _____ V
  Plage du variateur : ATV312•••• M2 = 200/240 V monophasé / ATV312•••• M3=200/240 V triphasé
  ATV312•••• N4 = 380/500 V triphasé / ATV312•••• S6 = 525/600 V triphasé

❸ Montage du variateur en position verticale

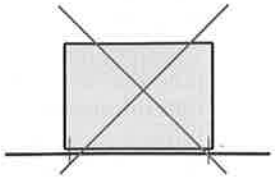
Pour une température de l'air ambiant pouvant atteindre 50 °C (122 °F)

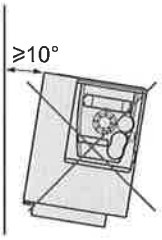


(a) ≥50 mm (2 in.)



(b) ≥ 10 mm (0.4 in.)

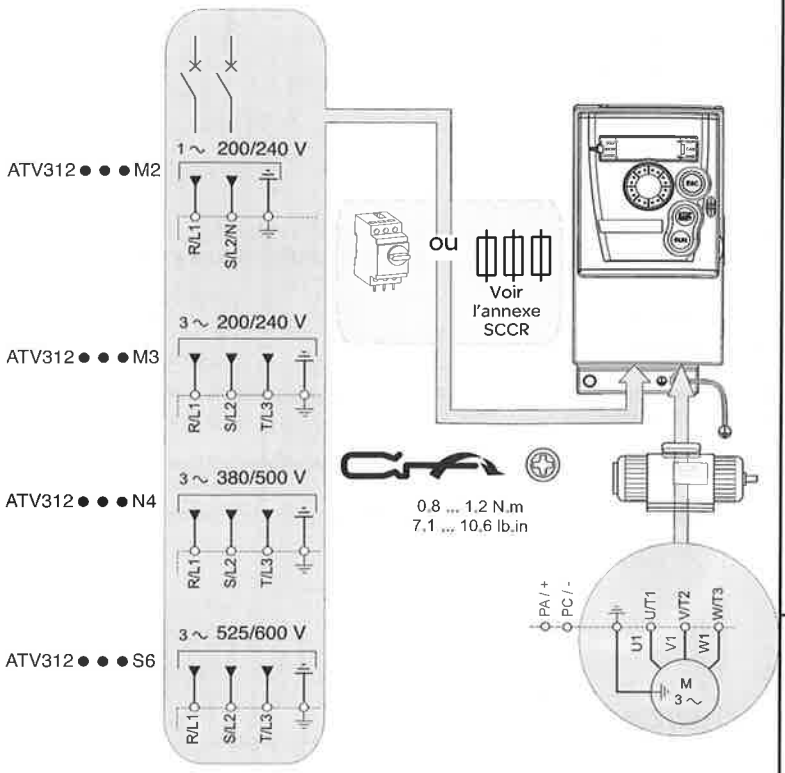




Consultez le Guide d'installation (BBV46390) sur le site Internet www.schneider-electric.com pour connaître les

❹ Câblage de la puissance

- Câblez le variateur à la terre.
- Vérifiez le calibre du disjoncteur ou la valeur nominale des fusibles (voir l'annexe SCCR).
- Vérifiez que la tension du moteur est compatible avec la tension du variateur. Tension du moteur _____V.
- Câblez le variateur au moteur.s
- Câblez le variateur à l'alimentation secteur.



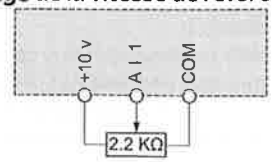
❺ Câblage de la commande et choix de la configuration:

(5.1) ou (5.2)

(5.1) [Configuration à Distance] (Contrôle par référence **externe**)

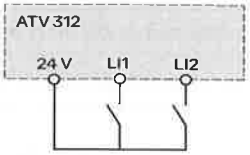
- Vérifier SW1 = « SOURCE »

- **Câblage de la vitesse de référence :**



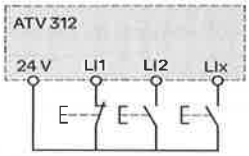
- **Câblage du contrôle :**

En commande deux fils :



OU

En commande trois fils :

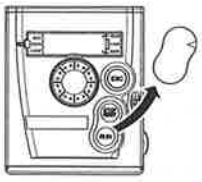


LI1 : avant
LI2 : arrière

LI1 : arrêt
LI2 : avant
LIx : arrière

- Étapes suivantes, faire: ❻+❼+❽+(9.1)

(5.2) [Configuration Locale] (Contrôle par référence **interne**).



Faire: ❻+❼+❽+(9.2)

❻ Mise sous tension du variateur

- Vérifiez que les entrées logiques utilisées ne sont pas actives (voir Li1, Li2, Lix).
- Mettez le variateur sous tension.
- Lors de la première mise en marche, le variateur affiche nSt (Commande 3 fils) ou rdY (Commande deux fils), après avoir appuyé sur **ENT** il affiche bFr.
- Lors des mises en marche suivantes, le variateur affiche nSt ou rdY.

❼ Réglage des paramètres du moteur

- Consultez la plaque signalétique du moteur pour définir les paramètres suivants.

Menu	Code	Description	Réglage usine	Réglage client
drC- [COMMANDE DU MOTEUR]	bFr	[Standard fréq. mot] : Fréquence standard du moteur	50. 0	
	UnS	[Tension nom. mot.] : Tension nominale du moteur sur la plaque signalétique du moteur (V)	valeur nominale du variateur	
	FrS	[Fréq. nom. mot] : Fréquence nominale du moteur sur la plaque signalétique du moteur (Hz)	50. 0	
	nCr	[Courant nom. mot.] : Courant nominal du moteur sur la plaque signalétique du moteur (A)	valeur nominale du variateur	
	nSP	[Vitesse nom. mot] : Vitesse nominale du moteur sur la plaque signalétique du moteur (tr/min)	valeur nominale du variateur	
	COS	[Cosinus Phi mot. 1] : Cosinus φ nominal du moteur sur la plaque signalétique du moteur	valeur nominale du variateur	

❼ Réglage des paramètres du moteur (suite)

- Réglez le paramètre tUn sur DUI.

Menu	Code	Description	Réglage usine	Réglage client
drC - [COMMANDE MOTEUR]	tUn	[Auto-réglage] : Auto-réglage pour UnS, FrS, nCr, nSP, nPr et COS	nO	

⚠⚠ DANGER

RISQUE D'ÉLECTROCUTION OU D'ARC ÉLECTRIQUE

- Au cours d'un auto-réglage, le moteur fonctionne avec le courant nominal.
- N'intervenez pas sur le moteur pendant un auto-réglage.

Le non-respect de ces instructions entraînera la mort ou des blessures graves.

⚠ DANGER

DÉMARRAGE INTEMPESTIF DE L'APPAREIL

- Les valeurs nominales des paramètres du moteur UnS, FrS, nCr, nSP, nPr et COS doivent être correctement configurées avant de lancer l'auto-réglage.
- Si un ou plusieurs de ces paramètres sont modifiés après l'auto-réglage, tUn est à nouveau réglé sur nO et la procédure doit être répétée.

Le non-respect de ces instructions entraînera la mort ou des blessures graves.

❽ Définition des paramètres de base

Menu	Code	Description	Réglage usine	Réglage client
SEt - [RÉGLAGES]	ACC	[Accélération] : Temps d'accélération (s)	3.0	
	dEC	[Décélération] : Temps de décélération (s)	3.0	
	LSP	[Petite vitesse] : Fréquence du moteur à la référence minimum (Hz)	0.0	
	HSP	[Grande vitesse] : Fréquence du moteur à la référence maximum (Hz)	50.0	
	ItH	[Courant therm. mot] : Courant nominal indiqué sur la plaque signalétique du moteur (A)	valeur nominale du variateur	
I-O - [ENTRÉES/SORTIES]	rrS	[Aff. sens arrière] : Affectation du sens arrière	LI2	
FUn -> PSS - [VITESSES PRESELECT.]	PS2	[2 vitesses présél.] : Vitesses présélectionnées	LI3	
	PS4	[4 vitesses présél.] : Vitesses présélectionnées	LI4	
FUn -> SAI - [ENTREES SOMMATRICE]	SA2	[Réf. sommatrice 2] Entrée analogique	AI2	

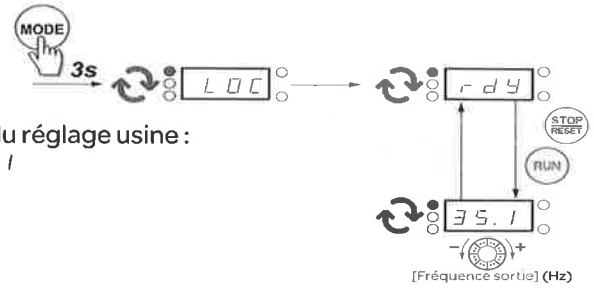
❾ Définition des paramètres de contrôle

Menu	Code	Description	5.1 [Configuration à distance]	5.2 [Configuration Locale]	Réglage client
CtL - [COMMANDE]	Fr1	[Canal réf. 1] : Contrôle de référence	AI1 (Réglage usine), AI2, AI3	AIU1	
I-O - [ENTRÉES/SORTIES]	tCC	[Cde 2/3 fils] : Contrôle de commande	2C : 2 fils (Réglage usine) 3C : 3 fils	LOC	

❾.1 [Configuration à Distance] (Réglage usine)

Paramètres du réglage usine :
Fr1 = AI1
tCC = 2C

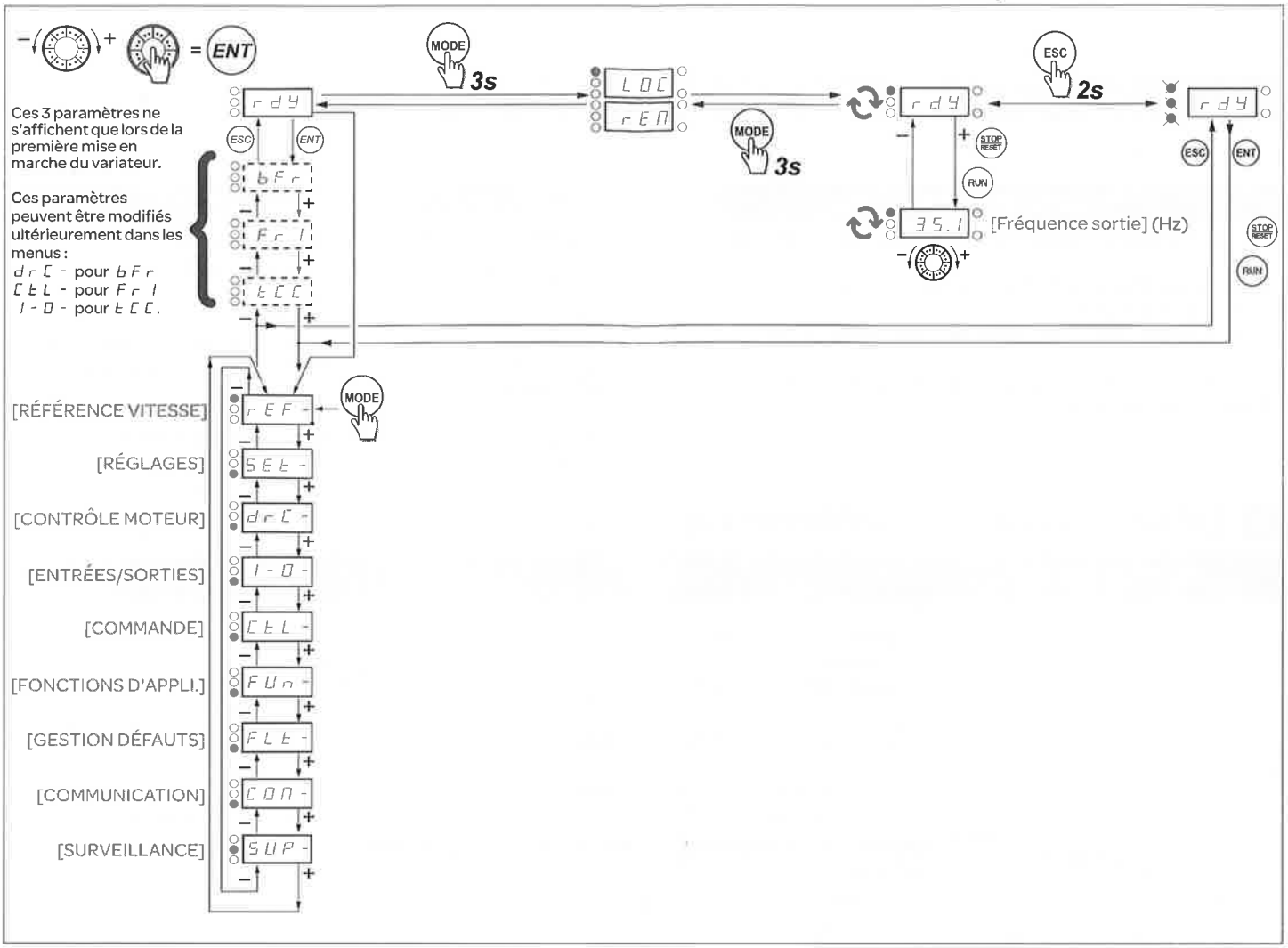
❾.2 [Configuration Locale]



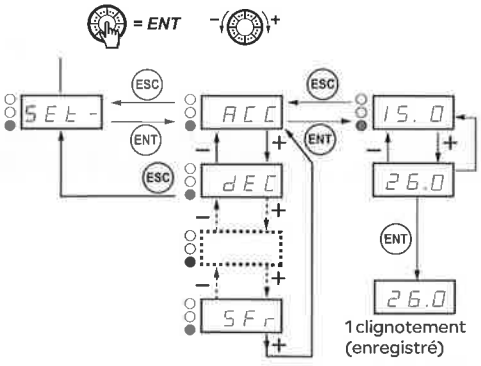
Paramètres du réglage usine :
Fr1 = AIU1
tCC = LOC
rrS = LI2
PS2 = LI3
PS4 = LI4

❿ Démarrez le moteur

Structure des menus



Sélection de paramètres



Reportez-vous au guide de programmation (BBV46384) pour une description exhaustive des menus.

Un tiret s'affiche après les codes de menus pour les distinguer des codes des paramètres.

Exemple :
Menu [RÉGLAGES] (SEt-), paramètre ACC.