


DECLARATION OF CONFORMITY

This document is the conformity declaration concerning safety switches and relays, conform to the Machine Directive 2006/42/CE and the EMC Directive 2004/108/CE.

ELECTROMECHANICAL SAFETY MODULES

Range	Standards	Approvals	Category
SPEEDTRONIC - N -	ISO 13849-1 EN 60947-5-1	CE	<div style="border: 1px solid black; padding: 5px;"> Performance Level (PL) = e Safety category = 4 or SIL3 MTTFd = 100 years DC = 99 % CCF = 65 % TM= 20 years Cheking period = 6 months </div>
			

This product range is intended to monitor an emergency stop, a safety sensor
 The safety modules is designed and manufactured following UL508 regulation.
 Safety modules must be used following diagram and directives described in our data sheet.

FOR COMITRONIC-BTI 2014/12/04 NOISY LE GRAND
 MANAGER
 CHRISTOPHE PAYS

Datasheet of SpeedTronic

You have just purchased a product BTI, we appreciate your trust.

To ensure high reliability, the product of new technology was developed and manufactured with great care.

1. Scope

The SpeedTronic detector is a zero-speed engine that allows unlocking movable. This module has three safety lines and a line NO auxiliary NC, each with a power cut 8A/250Vac. This product is compatible with variable frequency. It has two settings on the front (level and timer) to make it compatible with all engines on the market.

2. Compliance with standards

SpeedTronic : ISO13849-1.
Class 2 (not earth connected).

3. Instructions

Housing Snap 45mm DIN symmetrical 35mm DIN 50,022. The torque of the terminal is 0.5Nm. The maximum diameter of the son of wiring is 2.5mm². The opening of the case results in the loss of security.

4. Operation: Supply A1/A2=24v

L1/L2/L3 terminals are connected to the motor windings in accordance with the scheme. The system detects the absence of the engine or at least one of its coils. This is indicated by the exit OK sending a 0 V. In a passage star / delta for example, a coil can be cut up for 2s before being reconnected. When stopped, lines 13/14, 23/24, 33/34 are closed so that the unlocking order. The rotation of the engine results in the opening lines of 13/14, 23/24, 33/34 which allows the device to lock interlock. When the engine is powered, it decelerates to provide a voltage below the preset threshold (level). A hysteresis is conducted to maintain a good noise immunity. When the stop is detected, NO lines close after a delay (delay). To ensure security, prevent unlocking system in case of desynchronization (> 500ms) between the tracks L1/L2 and L3/L2. When the problem is resolved, the application of the 24Vdc pillar RS (reset), resets the system. Whatever the situation, the application of 24V on the base line RS opens NO (about locking). Permission to unlock is effective after the term (delay). However, the real time can be a little longer if the engine is stopped through a frequency because it injects a tension winding after stopping physical and during a time that depends on the model of drive .

5. Connected to PLC : Supply +V/0v=24Vdc only

ERROR output: 24Vdc if default works (PNP)
OK output: 24Vdc if works well (PNP)
RS input: Active to +24Vdc (PNP) for reset the module

6. Electrical safety and installation

This product is Class 2 and does not require earthing. Entrances and exits are galvanically isolated. Entries measuring L1/ L2/L3 are directly connected to the network and should choose the cable insulation appropriate to the type of network.

DO NOT REMOVE THE COVER CASE FOR PREVENT TO ELECTRIC SHOCK.

In accordance with the requirements of DIN enclosures in the area of security machine, the product must be placed in a box IP54 ventilated area.

7. Les voyants

Red LED "ON": indicates power
Green LED "V1" lit: indicates no voltage on L1
Green LED "V2" lit: indicates no voltage on L3
Engine stopped and plugged: LED V1 and V2 are lit
Engine is running and connected correctly: LED V1 and V2 are off

If V1 or V2 LED is off: Check the motor connection to terminals L1, L2, L3.

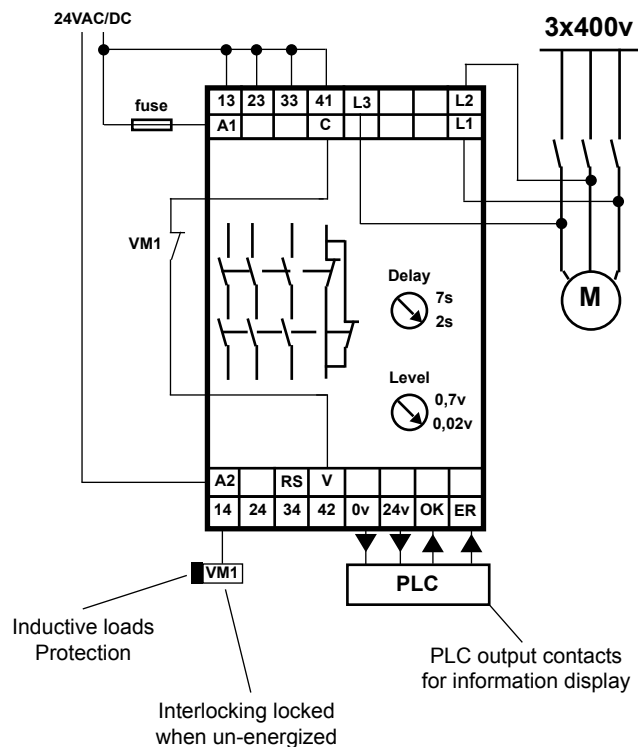
White LED "RESET" says RS input is active.

NO contacts are closed when the V1 and V2 LED are lit.

8. Caractéristiques techniques

		SpeedTronic
Supply A1/A2		24Vac 50Hz/60Hz or 24Vdc -15%/+10%
Consumption		150mA (DC)
Electrical protection		Isolation galvanique et parasurtenseur
Safety lines		8A / 250Vac résistif
Min switched power		>50 mW
PLC information	ERROR	Output PNP 24Vdc/150mA
	OK	Output PNP 24Vdc/150mA
	RESET	Input PNP 24Vdc
	+V/0v	24Vdc
3 phases motor		3 x 690Vac max
Voltage level to inductor		20mV to 700mV adjust to front side
Response time		2s to 7s +/- 22 % adjust to front side
Temperature		-20 °C à +60 °C
Case protection		IP20
Dimensions L x H x P		45 x 100 x 111mm
Weight		300g

9. Example Wiring



Any installation of security must be checked periodically.
For this product, the frequency of verification is quarterly.