

CARTER MARTIN J  
 Form 3  
 March 10, 2010

**FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

OMB APPROVAL

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**INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,  
 Section 17(a) of the Public Utility Holding Company Act of 1935 or Section  
 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person * ^ CARTER MARTIN J (Last) (First) (Middle)  C/O SENSATA TECHNOLOGIES, INC., ^ 529 PLEASANT STREET (Street)  ATTLEBORO, ^ MA ^ 02703 (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 03/10/2010	3. Issuer Name and Ticker or Trading Symbol Sensata Technologies Holding N.V. [ST]	4. Relationship of Reporting Person(s) to Issuer  (Check all applicable)  <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer <input type="checkbox"/> Other (give title below) (specify below) Senior Vice President, Controls	5. If Amendment, Date Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person
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**Table I - Non-Derivative Securities Beneficially Owned**

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
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Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

**Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.**

**Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)  Date Exercisable    Expiration Date	3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)  Title    Amount or Number of	4. Conversion or Exercise Price of Derivative Security	5. Ownership Form of Derivative Security: Direct (D)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
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				Shares		or Indirect (I) (Instr. 5)	
Stock Options to Buy	Â (1)	12/09/2019	Ordinary shares	350,000 (1)	\$ 17.48	D	Â

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
CARTER MARTIN J C/O SENSATA TECHNOLOGIES, INC. 529 PLEASANT STREET ATTLEBORO, MA 02703	Â	Â	Â Senior Vice President, Controls	Â

## Signatures

/s/ Martin J. Carter  
03/10/2010

Signature of Reporting Person Date

## Explanation of Responses:

- \* If the form is filed by more than one reporting person, see Instruction 5(b)(v).
  - \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Consists of 116,667 Tranche I options and 233,333 Tranche II options granted to the reporting person on December 9, 2009. The Tranche I options vest as follows: 40% upon the second anniversary of the date of grant and 20% upon each of the third, fourth and fifth anniversaries of the date of grant. Vesting of Tranche II options is conditioned upon the achievement of a performance target at which time they become subject to time vesting in the same manner as the Tranche I options. No Tranche I or Tranche II options have vested.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, See Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.