

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. __)*

Tempo Automation Holdings, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

88024M108

(CUSIP Number)

David Schaffer
Point72 Private Investments, LLC
72 Cummings Point Road
Stamford, CT 06902
(203) 890-2000

Adriana Schwartz, Esq.
Schulte Roth & Zabel LLP
919 Third Avenue
New York, NY 10022
(212) 756-2000

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

November 22, 2022

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), Rule 13d-1(f) or Rule 13d-1(g), check the following box.

(Page 1 of 9 Pages)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAME OF REPORTING PERSON Point72 Private Investments, LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS OO	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDING IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 5,351,000
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 5,351,000
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 5,351,000	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 20.3%	
14	TYPE OF REPORTING PERSON OO	

1	NAME OF REPORTING PERSON Steven A. Cohen	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS OO	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDING IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0
	8	SHARED VOTING POWER 5,351,000
	9	SOLE DISPOSITIVE POWER 0
	10	SHARED DISPOSITIVE POWER 5,351,000
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 5,351,000	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 20.3%	
14	TYPE OF REPORTING PERSON IN	

Item 1. SECURITY AND ISSUER

This statement on Schedule 13D (the "Schedule 13D") relates to the shares of Common Stock, par value \$0.0001 per share (the "Shares"), of the Issuer (as defined in Item 4 below). The Issuer's principal executive offices are located at 2460 Alameda Street, San Francisco, CA 94103.

Item 2. IDENTITY AND BACKGROUND

- (a)-(c), (f) This Schedule 13D is being jointly filed by (i) Point72 Private Investments, LLC, a Delaware limited liability company ("Point72 Private Investments") and (ii) Mr. Steven A. Cohen, a United States citizen ("Mr. Cohen"). Point72 Private Investments and Mr. Cohen are sometimes also referred to herein individually as a "Reporting Person" and collectively as the "Reporting Persons".

The securities reported herein are held by Point72 Ventures Investments, LLC, a Delaware limited liability company ("Point72 Ventures Investments"). Point72 Private Investments is the managing member of Point72 Ventures Partners, LLC, a Delaware limited liability company ("Point72 Ventures Partners"), the sole member of Point72 Ventures Investments, and exercises voting and dispositive power over the shares held by Point72 Ventures Investments. Point72 Capital Advisors, Inc., a Delaware corporation ("Point72 Capital Advisors"), is the general partner of Point72, L.P., a Delaware limited partnership ("Point72 L.P."), the sole member of Point72 Private Investments. Mr. Cohen is the sole stockholder and director of Point72 Capital Advisors and may be deemed to share voting and dispositive power over the shares held by Point72 Ventures Investments.

Point72 Capital Advisors and Point72 L.P. are sometimes referred to herein individually as an "Instruction C Person" and collectively as the "Instruction C Persons". To the best of each of the Reporting Person's knowledge, none of the Instruction C Persons owns any Shares, has transacted in the Shares in the past 60 days, or is party to any contract or agreement that would require disclosure in this Schedule 13D.

The filing of this statement should not be construed in and of itself as an admission by the Reporting Persons or Instruction C Persons as to beneficial ownership of the securities reported herein.

The address of the business office of each of the Reporting Persons and Instruction C Persons is 72 Cummings Point Road, Stamford, CT 06902.

- (d)-(e) During the last five (5) years, none of the Reporting Persons or the Instruction C Persons has: (1) been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (2) been party to a civil proceeding of a judicial or administrative body of competent jurisdiction and, as a result of such proceeding, was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION

Point72 Ventures Investments acquired the Shares reported herein in connection with the Business Combination (as defined in Item 4 below), as more fully described in Items 4 and 6 below.

Item 4. PURPOSE OF TRANSACTION

On November 22, 2022, Tempo Automation Holdings, Inc. (formerly known as ACE Convergence Acquisition Corp.) (the "Issuer"), consummated the closing of the transactions contemplated by that certain Amended and Restated Agreement and Plan of Merger, dated as of August 12, 2022, as amended by that certain First Amendment to the Amended and Restated Agreement and Plan of Merger, dated as of September 7, 2022, and that certain Second Amendment to the Amended and Restated Agreement and Plan of Merger, dated as of September 23, 2022 (as amended, the "Merger Agreement"), by and among the Issuer, ACE Convergence Subsidiary Corp. ("Merger Sub") and Tempo Automation, Inc. ("Legacy Tempo"), which provided for, among other things, the merger of Merger Sub with and into Legacy Tempo, with Legacy Tempo surviving as a wholly owned subsidiary of the Issuer (the transactions contemplated by the Merger Agreement, the "Business Combination"). In connection with the consummation of the Business Combination, the Issuer changed its name from "ACE Convergence Acquisition Corp." to "Tempo Automation Holdings, Inc."

Point72 Ventures Investments received an aggregate of 5,351,000 Shares in the Business Combination in exchange for (i) shares of Series B and Series C preferred stock of Legacy Tempo and (ii) as a result of the exercise of certain warrants to purchase shares of Legacy Tempo common stock and preferred stock, and the conversion of the Legacy Tempo convertible promissory notes it received in the Bridge Financing (as defined in the Prospectus filed by the Issuer pursuant to Rule 424(b)(3) with the Securities and Exchange Commission (the "SEC") on November 1, 2022 (the "Prospectus")).

The Reporting Persons intend to review the Reporting Persons' investment in the Issuer on a continuing basis. The Reporting Persons may seek to sell or otherwise dispose of some or all of the Issuer's securities from time to time, and/or may seek to acquire additional securities of the Issuer (which may include rights or securities exercisable or convertible into securities of the Issuer) from time to time, in each case, in open market or private transactions, block sales or otherwise. Any transaction that the Reporting Persons may pursue may be made at any time and from time to time without prior notice and will depend on a variety of factors, including, without limitation, the price and availability of the Issuer's securities, subsequent developments affecting the Issuer, the Issuer's business and the Issuer's prospects, other investment and business opportunities available to the Reporting Persons, general industry and economic conditions, the securities markets in general, tax considerations and other factors deemed relevant by the Reporting Persons.

Other than as described in this Item 4, the Reporting Persons do not have any current plans or proposals that relate to or that would result in any of the transactions or other matters specified in clauses (a) through (j) of Item 4 of Schedule 13D.

Item 5. INTEREST IN SECURITIES OF THE ISSUER

- (a) See rows (11) and (13) of the cover pages to this Schedule 13D for the aggregate number of Shares and percentages of the Shares beneficially owned by each Reporting Person. The percentages used in this Schedule 13D are calculated based upon 26,392,289 Shares outstanding after the closing of the Business Combination based on information provided by the Issuer.
- (b) See rows (7) through (10) of the cover pages to this Schedule 13D for the number of Shares as to which each Reporting Person has the sole or shared power to vote or direct the vote and sole or shared power to dispose or to direct the disposition.
- (c) Other than as disclosed in Item 4, no transactions in the Shares have been effected by the Reporting Persons during the past sixty (60) days.
- (d) No person other than the Reporting Persons, the Instruction C Persons, Point72 Ventures Partners and Point72 Ventures Investments is known to have the right to receive, or the power to direct the receipt of dividends from, or proceeds from the sale of, the Shares held by Point72 Ventures Investments.
- (e) Not applicable.

Item 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER

On November 22, 2022, Point72 Ventures Investments entered into an Amended and Restated Registration Rights Agreement with the Issuer and the other parties thereto (the "Registration Rights Agreement"), the form of which is attached as Exhibit B hereto and is incorporated herein by reference. The Registration Rights Agreement provides for customary registration rights with respect to the Shares reported herein.

On November 22, 2022, Point72 Ventures Investments entered into a Lock-Up Agreement with the Issuer (the "Lock-Up Agreement"), the form of which is attached as Exhibit C hereto and is incorporated herein by reference. The Lock-Up Agreement applies to 3,843,921 of the Shares reported herein and has a term of 365 days following the closing of the Business Combination, subject to the early release provisions set forth therein.

The foregoing descriptions of the Registration Rights Agreement and Lock-Up Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of the Registration Rights Agreement and Lock-Up Agreement, which are attached as Exhibit B and C, respectively.

Except as otherwise described in this Schedule 13D, there are no contracts, arrangements, understandings or similar relationships with respect to the securities of the Issuer between any of the Reporting Persons or Instruction C Persons and any other person or entity.

Item 7. MATERIAL TO BE FILED AS EXHIBITS

Exhibit A: Joint Filing Agreement, dated December 5, 2022.

Exhibit B: Registration Rights Agreement (incorporated herein by reference to the Amended and Restated Registration Rights Agreement, which is included as Annex D of the Prospectus).

Exhibit C: Lock-Up Agreement (incorporated herein by reference to the form of Lock-Up Agreement, which is included as Annex F of the Prospectus).

SIGNATURES

After reasonable inquiry and to the best of his or its knowledge and belief, the undersigned certifies that the information set forth in this statement is true, complete and correct.

Date: December 5, 2022

POINT72 PRIVATE INVESTMENTS, LLC

By: /s/ David Schaffer

Name: David Schaffer

Title: Authorized Person

/s/ Steven A. Cohen

STEVEN A. COHEN

**JOINT FILING AGREEMENT
PURSUANT TO RULE 13(d)-1(k)**

The undersigned acknowledge and agree that the foregoing statement on Schedule 13D is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13D shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing agreements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him or it contained herein and therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

Date: December 5, 2022

POINT72 PRIVATE INVESTMENTS, LLC

By: /s/ David Schaffer

Name: David Schaffer

Title: Authorized Person

/s/ Steven A. Cohen

STEVEN A. COHEN