

Ingersoll-Rand plc  
Form SC 13D/A  
November 18, 2013

---

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

SCHEDULE 13D  
Under the Securities Exchange Act of 1934

(Amendment No. 4)\*

INGERSOLL-RAND PLC  
(Name of Issuer)

Ordinary Shares, \$1.00 par value  
(Title of Class of Securities)

G47791101  
(CUSIP Number)

Brian L. Schorr, Esq.  
Triam Fund Management, L.P.  
280 Park Avenue, 41st Floor  
New York, New York 10017  
Tel. No.:(212) 451-3000

Debra Smith  
California State Teachers' Retirement System  
100 Waterfront Place, MS 04  
West Sacramento, CA 95605  
Tel. No.: (916) 414-7551

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

November 15, 2013  
(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 which is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box " .

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

\*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  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
Nelson Peltz

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
AF

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
United States

	7	SOLE VOTING POWER
		0
	8	SHARED VOTING POWER
NUMBER OF SHARES		18,026,126
BENEFICIALLY OWNED BY		
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		18,026,126

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
18,026,126

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
6.26%\*

14 TYPE OF REPORTING PERSON  
IN

\*Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Quarterly Report on Form 10-Q for the quarter ended September 30, 2013 (the "Form 10-Q").

1 NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
Peter W. May

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
AF

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
United States

	7	SOLE VOTING POWER
	8	SHARED VOTING POWER
NUMBER OF SHARES		18,026,126
BENEFICIALLY OWNED BY		
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		18,026,126

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
18,026,126

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
6.26%\*

14 TYPE OF REPORTING PERSON  
IN

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

1 NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
Edward P. Garden

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
AF

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
United States

	7	SOLE VOTING POWER
		0
	8	SHARED VOTING POWER
		18,026,126
NUMBER OF SHARES	9	SOLE DISPOSITIVE POWER
BENEFICIALLY OWNED BY		0
EACH REPORTING PERSON	10	SHARED DISPOSITIVE POWER
WITH		18,026,126

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
18,026,126

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
6.26%\*

14 TYPE OF REPORTING PERSON  
IN

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

1 NAME OF REPORTING PERSON  
 Trian Fund Management, L.P.  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 20-3454182

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
 AF

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT   
 TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Delaware

	7	SOLE VOTING POWER
		0
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		18,026,126
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		18,026,126

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 18,026,126

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN   
 SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 6.26%\*

14 TYPE OF REPORTING PERSON  
 PN

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

1 NAME OF REPORTING PERSON  
 Trian Fund Management GP, LLC  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 20-3454087

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
 AF

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Delaware

	7	SOLE VOTING POWER
		0
	8	SHARED VOTING POWER
NUMBER OF SHARES		18,026,126
BENEFICIALLY OWNED BY		
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		18,026,126

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 18,026,126

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 6.26%\*

14 TYPE OF REPORTING PERSON  
 OO

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

1 NAME OF REPORTING PERSON  
 Trian Partners Master Fund (ERISA), L.P.  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 98-0682467

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
 WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Cayman Islands

	7	SOLE VOTING POWER
		0
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		130,635#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		130,635#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 130,635#

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 0.05%\*

14 TYPE OF REPORTING PERSON  
 PN

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

# All 130,635 shares have been contributed to Trian IR Holdco Ltd., pursuant to a Contribution Agreement dated June 15, 2012, as described in Item 5 herein.



1 NAME OF REPORTING PERSON  
 Trian Partners, L.P.  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 20-3453988

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
 WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Delaware

	7	SOLE VOTING POWER
		0
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		2,035,152#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		2,035,152#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 2,035,152#

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 0.71%\*

14 TYPE OF REPORTING PERSON  
 PN

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

# 1,669,899 of these shares have been contributed to Trian IR Holdco Ltd., pursuant to a Contribution Agreement dated June 15, 2012, as described in Item 5 herein.

1 NAME OF REPORTING PERSON  
 Trian Partners Master Fund, L.P.  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 98-0468601

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY  
 4 SOURCE OF FUNDS  
 WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Cayman Islands

	7	SOLE VOTING POWER
		0
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		4,724,975#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		4,724,975#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 4,724,975#

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 1.64%\*

14 TYPE OF REPORTING PERSON  
 PN

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

# 365,948 of these shares have been contributed to Trian IR Holdco Ltd., pursuant to a Contribution Agreement dated June 15, 2012, as described in Item 5 herein.

1 NAME OF REPORTING PERSON  
 Trian Partners Parallel Fund I, L.P.  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 20-3694154

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY  
 4 SOURCE OF FUNDS  
 WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Delaware

	7	SOLE VOTING POWER
		0
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		264,017#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		264,017#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 264,017#

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 0.09%\*

14 TYPE OF REPORTING PERSON  
 PN

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

# All 264,017 shares have been contributed to Trian IR Holdco Ltd., pursuant to a Contribution Agreement dated June 15, 2012, as described in Item 5 herein.

1 NAME OF REPORTING PERSON  
 Trian Partners Strategic Investment Fund-A, L.P.  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 27-4180625

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
 WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Delaware

	7	SOLE VOTING POWER
		0
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		1,195,040
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		1,195,040

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 1,195,040

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 0.41%\*

14 TYPE OF REPORTING PERSON  
 PN

---

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

1 NAME OF REPORTING PERSON  
 Trian Partners Strategic Co-Investment Fund-A, L.P.  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 36-4728074

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
 WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Delaware

	7	SOLE VOTING POWER
		0
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		1,110,115
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		1,110,115

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 1,110,115

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 0.39%\*

14 TYPE OF REPORTING PERSON  
 PN

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

1 NAME OF REPORTING PERSON  
 Trian Partners Strategic Investment Fund, L.P.  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 37-1593120

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
 WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Delaware

	7	SOLE VOTING POWER
		0
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		2,762,535#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		2,762,535#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 2,762,535#

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 0.96%\*

14 TYPE OF REPORTING PERSON  
 PN

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

# 1,819,683 of these shares have been contributed to Trian IR Holdco Ltd., pursuant to a Contribution Agreement dated June 15, 2012, as described in Item 5 herein.

1 NAME OF REPORTING PERSON  
 Trian SPV (SUB) VI, L.P.  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 98-0644507

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
 WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Cayman Islands

	7	SOLE VOTING POWER
		0
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		1,375,220#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		1,375,220#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 1,375,220#

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 0.48%\*

14 TYPE OF REPORTING PERSON  
 PN

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

# All 1,375,220 shares have been contributed to Trian IR Holdco Ltd., pursuant to a Contribution Agreement dated June 15, 2012, as described in Item 5 herein.

1 NAME OF REPORTING PERSON  
 Trian SPV (SUB) VI-A, L.P.  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 98-1047700

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
 WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Cayman Islands

	7	SOLE VOTING POWER
		0
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		4,428,437#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		4,428,437#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 4,428,437#

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 1.54%\*

14 TYPE OF REPORTING PERSON  
 PN

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

# All 4,428,437 shares have been contributed to Trian IR Holdco Ltd., pursuant to a Contribution Agreement dated June 15, 2012, as described in Item 5 herein.



1 NAME OF REPORTING PERSON  
 Trian IR Holdco Ltd.  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 98-1057630

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
 OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 Cayman Islands

	7	SOLE VOTING POWER
		0
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		10,053,839#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		10,053,839#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 10,053,839#

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 3.49%\*

14 TYPE OF REPORTING PERSON  
 OO

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

# These shares were received from other Reporting Persons pursuant to a Contribution Agreement dated June 15, 2012, as described in Item 5 herein.

1 NAME OF REPORTING PERSON  
 California State Teachers' Retirement System  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
 94-6291617

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS  
 WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION  
 California Government Pension Plan

	7	SOLE VOTING POWER	
		742,913	
NUMBER OF SHARES	8	SHARED VOTING POWER	
BENEFICIALLY OWNED BY		0	
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER	
WITH		538,904	
	10	SHARED DISPOSITIVE POWER	
		204,009	

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
 742,913

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  
 0.26%\*

14 TYPE OF REPORTING PERSON  
 EP

\* Calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Form 10-Q.

This Amendment No. 4 relates to the Schedule 13D filed with the Securities and Exchange Commission ("SEC") on May 9, 2012, as amended by Amendment No. 1 ("Amendment No. 1") filed on June 20, 2012, Amendment No. 2 ("Amendment No. 2") filed on August 6, 2012 and Amendment No. 3 filed on August 13, 2012 (as so amended, collectively, the "Schedule 13D") relating to the Ordinary Shares, \$1.00 par value per share (the "Shares"), of Ingersoll-Rand PLC, an Irish public limited company (the "Issuer"). The address of the principal executive office of the Issuer is 170/175 Lakeview Dr., Airside Business Park, Swords, Co. Dublin, Ireland.

Items 3 and 5 of the Schedule 13D are hereby amended and supplemented as follows:

### Item 3. Source and Amount of Funds or Other Consideration

Item 3 is amended by deleting Item 3 of the Schedule 13D and replacing it with the following:

As of 4:00 p.m., New York City time, on November 15, 2013, the aggregate purchase price of the 13,101,907 Shares (not including those Shares underlying any Options) purchased by the Reporting Persons collectively was \$540,805,454 (including commissions). In addition, as of such time and date, Trian Onshore, Trian Offshore and TPSIF beneficially owned, in the aggregate, an additional 5,667,132 Shares, which were acquired through a series of privately negotiated back-to-back call and put transactions with certain financial institutions (the "Options") and as a result of which Trian Onshore, Trian Offshore and TPSIF are each subject to the same economic gain or loss as if they had purchased the underlying Shares. As of November 15, 2013, these Options have an aggregate strike price of \$227,853,489 (see Schedule A to the Schedule 13D filed by the parties hereto with the SEC on May 9, 2012). As set forth in Item 5, none of the other Reporting Persons directly own any Shares or Options. The source of funding for the purchase of the Shares was, and the source of funding for the purchase of any additional Shares and Options, the exercise of the Options or the purchase and/or exercise of any additional Options or other derivative securities related to the market price of the Shares acquired in the future is currently expected to be, the respective general working capital of the purchasers.

### Item 5. Interest in Securities of the Issuer

Item 5 is amended by deleting Item 5 of the Schedule 13D and replacing it with the following:

(a) As of 4:00 pm, New York City time, on November 15, 2013, the Reporting Persons beneficially owned, in the aggregate, 18,769,039 Shares, representing approximately 6.52% of the Issuer's outstanding Shares (calculated based on 288,086,571 ordinary shares outstanding as of October 11, 2013, as reported in the Issuer's Quarterly Report on Form 10-Q for the quarter ended September 30, 2013 (the "Form 10-Q")). Such Shares include an aggregate of 13,101,907 Shares beneficially owned by the Reporting Persons through direct ownership of the Shares representing approximately 4.55% of the Issuer's outstanding Shares, and an additional 5,667,132 Shares underlying the Options that are held by Trian Onshore, Trian Offshore and TPSIF representing approximately 1.97% of the Issuer's outstanding Shares.

(b) As of 4:00pm, New York City time, on November 15, 2013, pursuant to a Contribution Agreement dated June 15, 2012 (the "Contribution Agreement"), Holdco held 1,669,899; 365,948; 264,017; 130,635; 1,819,683; 1,375,220 and 4,428,437 Shares that were contributed to it by Trian Onshore, Trian Offshore, Parallel Fund I, Trian ERISA, TPSIF, SPV VI and SPV VI-A, respectively, in exchange for their proportionate share of equity securities in Holdco. As such, Holdco may be deemed to have shared voting power and dispositive power with regard to, and therefore may be deemed to beneficially own (as that term is defined in Rule 13d-3), the Shares that Trian Onshore, Trian Offshore,

Parallel Fund I, Trian ERISA, TPSIF, SPV VI and SPV VI-A contributed to it pursuant to the Contribution Agreement. Strategic Fund-A and Coinvest Fund-A continue to beneficially and directly own and have sole voting power and sole dispositive power of 1,195,040 and 1,110,115 Shares, respectively, and each of Trian Onshore, Trian Offshore and TPSIF continue to directly and beneficially own 365,253, 4,359,027 and 942,852 Shares, respectively, underlying the Options held by each such entity. To the extent that other Reporting Persons may be deemed to have shared voting power and shared dispositive power with regard to any of these Shares, such information is set forth below.

Each of Trian Management, Trian Management GP, Nelson Peltz, Peter W. May and Edward P. Garden, by virtue of their relationships to Trian Onshore, Trian Offshore, Parallel Fund I, Trian ERISA, TPSIF, Strategic Fund-A, Coinvest Fund-A, SPV VI, SPV VI-A and Holdco (discussed in Item 2), may be deemed to have shared voting power and shared dispositive power with regard to, and therefore may be deemed to beneficially own (as that term is defined in Rule 13d-3), the Shares (including Shares underlying the Options) that Trian Onshore, Trian Offshore, Parallel Fund I, Trian ERISA, TPSIF, Strategic Fund-A, Coinvest Fund-A, SPV VI, SPV VI-A and Holdco directly and beneficially own. Each of Trian Management, Trian Management GP, Nelson Peltz, Peter W. May and Edward P. Garden disclaims beneficial ownership of such Shares for all other purposes.

CalSTRS has the sole power to vote or direct the vote of 742,913 Shares (the "CalSTRS Shares") and the sole power to dispose of or direct the disposition of 538,904 of the CalSTRS Shares. With respect to the other 204,009 CalSTRS Shares, the power to dispose or to direct the disposition of such Shares is shared with certain of its external managers, as follows: (i) 123,401 CalSTRS Shares with BlackRock Institutional Trust Company, N.A, (ii) 70,538 CalSTRS Shares with State Street Bank and Trust Company, (iii) 1,300 CalSTRS Shares with OakBrook Investments, LLC, (iv) 3,500 CalSTRS Shares with TWIN Capital Management, Inc. and (v) 5,270 CalSTRS Shares with Light Green Advisors.

CalSTRS has been informed by BlackRock Institutional Trust Company, N.A. ("BTC") that its principal business is to provide diversified investment management and securities lending services to institutional clients, intermediary and individual investors through various investment vehicles and that its business address is 400 Howard Street, San Francisco, CA 94105. In addition, BTC has further informed CalSTRS that on January 20, 2012, BTC entered into an Offer of Settlement (the "Agreement") with the CFTC and consented to the entry of an Order, which makes findings and imposes remedial sanctions against BTC. Without admitting or denying wrongdoing, BTC agreed to the imposition of a \$250,000 penalty and the entry of the Order to resolve allegations by the CFTC that two trades by BTC violated Section 4c(a)(1) of the Commodity Exchange Act and CFTC Regulation 1.38(a). BTC also agreed to refrain from any further violations of the above-mentioned statutory provisions. The CFTC did not allege, nor find, that any clients of BTC or any related affiliate were harmed in any way. In the previous five years BTC has not been (i) convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors) nor (ii) a party to any other civil proceeding of a judicial or administrative body of competent jurisdiction, and as a result of such proceeding, was or is the subject to a judgment, decree or final order (with the exception of the Agreement) 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.

CalSTRS has been informed by State Street Bank and Trust Company (State Street) that its principal business is to provide a broad range of financial products and services to institutional investors worldwide, including its transition management services. Its principal business address is 1 Lincoln Street, Boston, MA 02111. CalSTRS has been further informed by State Street that on February 4, 2010, the U.S. Securities and Exchange Commission issued an administrative order in which it ordered State Street to cease and desist from committing or causing any violations, and any future violations of Section 17(a)(2) and Section 17(a)(3) of the Securities Act of 1933. In connection with the same matter, the Massachusetts Secretary of State issued a consent order in which it ordered State Street to cease and desist from violations of the Massachusetts Uniform Securities Act. The orders were entered in connection with the resolution of an investigation into losses incurred by and disclosures made around certain active fixed-income strategies managed by State Street Global Advisors (SSgA), a division of State Street, during 2007 and earlier

periods. In addition, in conjunction with a February 2012 settlement of an investigation of SSgA's role as collateral manager for Carina CDO, Ltd., the Massachusetts Secretary of State issued a consent order finding that SSgA had failed to disclose certain material information to investors in the CDO in violation of MGL c. 110A, Sec. 101(2) and 101(3). SSgA neither admitted nor denied the findings. In connection with the settlement SSgA paid a civil fine. SSgA was ordered to cease and desist from violations of the Massachusetts Uniform Securities Act. Other than the foregoing, during the last five years, State Street has not been (i) convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors) or (ii) a party to any other civil proceeding of a judicial or administrative body of competent jurisdiction, and as a result of such proceeding, was or is the 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.

CalSTRS has been informed by OakBrook Investments, LLC ("OakBrook") that its principal business is Institutional Investment Management and that its business address is 2300 Cabot Dr., Suite 300, Lisle, IL 60532. During the last five years, OakBrook has not been (i) convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors) or (ii) a party to any other civil proceeding of a judicial or administrative body of competent jurisdiction, and as a result of such proceeding, was or is the 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.

CalSTRS has been informed by TWIN Capital Management, Inc. that its principal business is investment management and that its business address is 3244 Washington Road, Suite 202, McMurray, PA 15317. During the last five years, TWIN Capital Management, Inc. has not been (i) convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors) or (ii) a party to any other civil proceeding of a judicial or administrative body of competent jurisdiction, and as a result of such proceeding, was or is the 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.

CalSTRS has been informed by Light Green Advisors (LGA) that its principal business is asset management and that its business address is 405 Lexington Avenue, 26th floor, New York, NY 10174. During the last five years, Light Green Advisors has not been (i) convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors) or (ii) a party to any other civil proceeding of a judicial or administrative body of competent jurisdiction, and as a result of such proceeding, was or is the 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.

The Triam Group does not have the right to vote or dispose of any of the CalSTRS Shares, nor is any member of the Triam Group a party to any contracts, arrangements or understandings with respect to such Shares. As a result, each member of the Triam Group disclaims beneficial ownership of the CalSTRS Shares for all purposes.

(c) Exhibit A hereto (which is incorporated by reference in this Item 5 as if restated in full herein) sets forth all transactions with respect to the Shares effected during the past 60 days by any of the Reporting Persons, inclusive of all transactions effected through 4:00 p.m., New York City time, November 15, 2013.

(d) No person other than the Triam Group is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Shares beneficially owned by the Triam Group. Except with respect to the 204,009 CalSTRS Shares it beneficially owned in accounts managed by external managers as disclosed in (b) above, no other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Shares covered by this statement beneficially owned by CalSTRS.



SIGNATURE

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

Dated: November 15, 2013

TRIAN FUND MANAGEMENT, L.P.  
By: Trian Fund Management GP, LLC, its  
general partner

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

TRIAN FUND MANAGEMENT GP, LLC

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

TRIAN PARTNERS, L.P.  
By: Trian Partners GP, L.P., its general  
partner  
By: Trian Partners General Partner, LLC,  
its general partner

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

TRIAN PARTNERS MASTER FUND,  
L.P.  
By: Trian Partners GP, L.P., its general  
partner  
By: Trian Partners General Partner, LLC,  
its general partner

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

TRIAN PARTNERS MASTER FUND  
(ERISA) L.P.

By: Trian Partners (ERISA) GP, L.P., its  
general partner  
By: Trian Partners (ERISA) General  
Partner,  
LLC, its general partner

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

TRIAN PARTNERS PARALLEL FUND I,  
L.P.  
By: Trian Partners Parallel Fund I  
General Partner, LLC, its general partner

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

TRIAN SPV (SUB) VI, L.P.  
By: Trian Partners SPV VI GP, L.P., its  
general  
partner  
By: Trian Partners SPV VI General Partner,  
LLC, its general partner

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

TRIAN SPV (SUB) VI-A, L.P.  
By: Trian Partners SPV VI-A GP, L.P., its  
general partner  
By: Trian Partners SPV VI-A General  
Partner,  
LLC, its general partner

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

TRIAN PARTNERS STRATEGIC  
INVESTMENT FUND-A, L.P.  
By: Trian Partners Strategic Investment  
Fund-A  
GP, L.P., its general partner



By: Trian Partners Strategic Investment  
Fund-A  
General Partner LLC., its general partner

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

TRIAN PARTNERS STRATEGIC CO-  
INVESTMENT FUND-A, L.P.

By: Trian Partners Strategic Co-Investment  
Fund-A GP, L.P. its general partner

By: Trian Partners Strategic Co-Investment  
Fund-A General Partner, LLC., its general  
partner

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

TRIAN PARTNERS STRATEGIC  
INVESTMENT FUND, L.P.

By: Trian Partners Strategic Investment  
Fund GP, L.P., its general partner

By: Trian Partners Strategic Investment  
Fund General Partner, LLC,  
its general partner

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

TRIAN IR HOLDCO LTD.

By: /s/ EDWARD P.GARDEN  
Name: Edward P. Garden  
Title: Member

/s/ NELSON PELTZ  
NELSON PELTZ

/s/ PETER W. MAY  
PETER W. MAY

/s/ EDWARD P. GARDEN

EDWARD P. GARDEN

---

CALIFORNIA STATE TEACHERS'  
RETIREMENT SYSTEM

By: /s/DEBRA SMITH  
Name: Debra Smith

---

## Schedule A

The following table sets forth all transactions with respect to the Shares affected during the past 60 days by any of the Reporting Persons, inclusive of all transactions effected through 4:00 p.m., New York City time, on November 15, 2013. All such transactions in the table were effected in the open market. The prices set forth in the table do not include commissions.

Name	Date	Shares	Price	Type
Trian Partners Master Fund, L.P.	11/13/2013	386,486	67.69	Sale*
Trian Partners Master Fund, L.P.	11/14/2013	112,081	67.89	Sale*
Trian Partners Master Fund, L.P.	11/15/2013	169,204	68.29	Sale*
Trian Partners Parallel Fund I, L.P.	11/13/2013	14,065	67.52	Sale
Trian Partners Parallel Fund I, L.P.	11/14/2013	12,002	67.85	Sale
Trian Partners Parallel Fund I, L.P.	11/15/2013	19,034	68.26	Sale
Trian Partners Strategic Investment Fund, L.P.	11/13/2013	113,514	67.69	Sale*
Trian Partners Strategic Investment Fund, L.P.	11/14/2013	32,919	67.89	Sale*
Trian Partners Strategic Investment Fund, L.P.	11/15/2013	49,696	68.29	Sale*
Trian Partners Strategic Investment Fund-A, L.P.	11/13/2013	22,980	67.52	Sale
Trian Partners Strategic Investment Fund-A, L.P.	11/14/2013	19,600	67.85	Sale
Trian Partners Strategic Investment Fund-A, L.P.	11/15/2013	31,091	68.26	Sale
Trian Partners Strategic Co-Investment Fund-A, L.P.	11/13/2013	21,347	67.52	Sale
Trian Partners Strategic Co-Investment Fund-A, L.P.	11/14/2013	18,207	67.85	Sale
	11/15/2013	28,881	68.26	Sale

Trian Partners Strategic  
Co-Investment Fund-A,  
L.P.

Trian SPV (SUB) VI, L.P.	11/13/2013	26,445	67.52	Sale
Trian SPV (SUB) VI, L.P.	11/14/2013	22,556	67.85	Sale
Trian SPV (SUB) VI, L.P.	11/15/2013	35,779	68.26	Sale
Trian SPV (SUB) VI-A, L.P.	11/13/2013	85,163	67.52	Sale
Trian SPV (SUB) VI-A, L.P.	11/14/2013	72,635	67.85	Sale
Trian SPV (SUB) VI-A, L.P.	11/15/2013	115,215	68.26	Sale
CALSTRS	9/13/2013	214	63.56	Purchase
CALSTRS	9/24/2013	200	65.81	Purchase
CALSTRS	9/30/2013	200	64.94	Purchase
CALSTRS	10/01/2013	400	65.17	Purchase
CALSTRS	10/21/2013	4,048	67.66	Purchase
CALSTRS	10/22/2013	2,099	68.42	Purchase
CALSTRS	10/23/2013	560	67.54	Purchase
CALSTRS	10/24/2013	1,754	67.60	Purchase
CALSTRS	10/28/2013	472	67.39	Purchase
CALSTRS	10/29/2013	1,444	67.71	Purchase
CALSTRS	10/30/2013	600	67.38	Purchase
CALSTRS	10/30/2013	1,352	67.28	Purchase
CALSTRS	10/31/2013	346	67.53	Purchase
CALSTRS	10/31/2013	1,044	67.88	Purchase
CALSTRS	11/01/2013	771	67.41	Purchase
CALSTRS	11/06/2013	1,070	67.72	Purchase
CALSTRS	11/06/2013	300	67.72	Purchase
CALSTRS	11/08/2013	400	67.7	Purchase
CALSTRS	9/16/2013	2,218	64.44	Sale
CALSTRS	9/17/2013	4,817	64.48	Sale
CALSTRS	9/24/2013	6,231	66.15	Sale
CALSTRS	10/3/2013	100	64.86	Sale
CALSTRS	10/31/2013	100	67.54	Sale
CALSTRS	11/08/2013	3,307	67.60	Sale
CALSTRS	11/08/2013	4,062	67.7	Sale
CALSTRS	11/12/2013	530	67.26	Sale

---

\* Cash settlement of privately negotiated call options in privately negotiated transactions. The related back-to back put options terminated automatically upon settlement of the call options. For information related to the back-to-back call and put transactions see Schedule A to the Schedule 13D filed by the parties hereto with the Securities and Exchange Commission on May 9, 2012.

---

