

Ingersoll-Rand plc
Form SC 13D/A
March 31, 2014

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

SCHEDULE 13D
Under the Securities Exchange Act of 1934

(Amendment No. 5)*

INGERSOLL-RAND PLC
(Name of Issuer)

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

G47791101
(CUSIP Number)

Brian L. Schorr, Esq.
Trian Fund Management, L.P.
280 Park Avenue, 41st Floor
New York, New York 10017
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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)

March 31, 2014
(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
		17,224,823
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	9	SOLE DISPOSITIVE POWER
		0
	10	SHARED DISPOSITIVE POWER
		17,224,823

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
17,224,823

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
6.20%*

14 TYPE OF REPORTING PERSON
IN

*Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014, as reported in the Issuer's Annual Report on Form 10-K for the fiscal year ended December 31, 2013 (the "Form 10-K").

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
		0
	8	SHARED VOTING POWER
		17,224,823
NUMBER OF SHARES		
BENEFICIALLY OWNED BY		
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		17,224,823

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
17,224,823

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
6.20%*

14 TYPE OF REPORTING PERSON
IN

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

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
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		17,224,823
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		17,224,823

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
17,224,823

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
6.20%*

14 TYPE OF REPORTING PERSON
IN

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

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		17,224,823
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		17,224,823

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 17,224,823

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 6.20%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

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
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY		17,224,823
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		17,224,823

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 17,224,823

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 6.20%*

14 TYPE OF REPORTING PERSON
 OO

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

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 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

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)
 0.73%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

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		4,398,497#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		4,398,497#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 4,398,497#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 1.58%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

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		232,473#	
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER	
WITH		0	
	10	SHARED DISPOSITIVE POWER	
		232,473#	

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 232,473#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 0.08%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

All 232,473 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		1,143,490
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		1,143,490

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 1,143,490

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 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

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		1,062,228
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		1,062,228

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 1,062,228

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 0.38%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

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		2,666,646#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		2,666,646#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 2,666,646#

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 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

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		1,315,899#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		1,315,899#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 1,315,899#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 0.47%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

All 1,315,899 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		4,237,421#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		4,237,421#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 4,237,421#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 1.52%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

All 4,237,421 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		9,771,958#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		9,771,958#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 9,771,958#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 3.51%*

14 TYPE OF REPORTING PERSON
 OO

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

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	
		676,712	
NUMBER OF SHARES	8	SHARED VOTING POWER	
BENEFICIALLY OWNED BY		0	
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER	
WITH		505,354	
	10	SHARED DISPOSITIVE POWER	
		171,358	

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 676,712

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 0.24%*

14 TYPE OF REPORTING PERSON
 EP

* Calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014 as reported in the Issuer's Form 10-K.

This Amendment No. 5 relates to the Schedule 13D filed with the Securities and Exchange Commission 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, Amendment No. 3 filed on August 13, 2012 (“Amendment No. 3”) and Amendment No. 4 filed on November 18, 2013 (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, 4, 5, 6 and 7 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 March 30, 2014, the aggregate purchase price of the 12,656,770 Shares (not including those Shares underlying any Options or the Director Shares, each, as hereinafter defined) purchased by the Reporting Persons collectively was \$416,304,143 (including commissions). In addition, as of such date, Trian Onshore, Trian Offshore and TPSIF beneficially owned, in the aggregate, an additional 5,244,765 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 March 30, 2014, these Options have an aggregate strike price of \$168,074,710. Except 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.

In connection with Mr. Peltz’s service on the Board of Directors of the Issuer, on February 25, 2014, Mr. Peltz received from the Issuer a restricted stock unit award (the “Director Shares”) with respect to 2,382 ordinary shares pursuant to the Ingersoll Rand Incentive Stock Plan of 2013.

Item 4. Purpose of Transaction

Item 4 is hereby amended and supplemented by adding the following:

On March 31, 2014, Mr. Peltz advised the Issuer that due to other board commitments, including his recent appointment to the board of Mondel z International, Inc., he has decided not to stand for re-election as a director of the Issuer at the Issuer’s 2014 Annual General Meeting of Shareholders. A copy of the letter sent to Mr. Michael Lamach, CEO of the Issuer, is attached hereto as Exhibit 3.

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 March 30, 2014, the Reporting Persons beneficially owned, in the aggregate 17,901,535 Shares, representing approximately 6.44% of the Issuer’s outstanding Shares (calculated based on 278,035,707 ordinary shares outstanding as of February 3, 2014, as reported in the Issuer’s Annual Report on Form 10-K for the fiscal year ended December 31,

2013 (the "Form 10-K"). Such Shares include an aggregate of 12,656,770 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 5,244,765 Shares underlying the Options that are held by Trian Onshore, Trian Offshore and TPSIF representing approximately 1.89% of the Issuer's outstanding Shares.

(b) As of March 30, 2014, pursuant to a Contribution Agreement dated June 15, 2012 (the "Contribution Agreement"), Holdco held 1,669,899; 365,948; 232,473; 130,635; 1,819,683; 1,315,899 and 4,237,421 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 1,143,490 and 1,062,228 Shares, respectively, and each of Trian Onshore, Trian Offshore and TPSIF continue to directly and beneficially own 365,253, 4,032,549 and 846,963 Shares, respectively, underlying the Options held by each such entity, in each case except to the extent that other Reporting Persons may be deemed to have shared voting power and dispositive power with regard to such Shares. Mr. Peltz beneficially owns and has sole voting power and sole dispositive power with regard to 2,382 Director Shares, except in each case, to the extent that other members of the Trian Group as described below may be deemed to have shared voting power and shared dispositive power with regard to such Director's Shares. To the extent that other Reporting Persons may be deemed to have shared voting power and shared dispositive power with regard to any of the 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.

Each of Trian Management, Trian Management GP, Peter W. May and Edward P. Garden, by virtue of the agreement between Trian Management and Nelson Peltz (discussed in Item 6), 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 Director Shares that Nelson Peltz directly and beneficially owns. Each of Trian Management, Trian Management GP, 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 676,712 Shares (the "CalSTRS Shares") and the sole power to dispose of or direct the disposition of 505,354 of the CalSTRS Shares. With respect to the other 171,358 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) 98,650 CalSTRS Shares with BlackRock Institutional Trust Company, N.A, (ii) 66,138 CalSTRS Shares with State Street Bank and Trust Company, (iii) 1,300 CalSTRS Shares with OakBrook Investments, LLC and (iv) 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. In January 2014, in conjunction with a settlement of the U.K. Financial Conduct Authority's investigation into our having charged six clients of our U.K. transition management business during 2010 and 2011 amounts in excess of the contractual terms, State Street Bank Europe Ltd. and State Street Global Markets International Ltd. paid a fine of £22.9 million, or approximately \$37.8 million. 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 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 Trian Group does not have the right to vote or dispose of any of the CalSTRS Shares, nor is any member of the Trian Group a party to any contracts, arrangements or understandings with respect to such Shares. As a result, each member of the Trian Group disclaims beneficial ownership of the CalSTRS Shares for all purposes.

(c) On February 25, 2014, Mr. Peltz received the Director Shares. The Trian Group did not engage in any other transactions with respect to the Shares during the past 60 days.

Schedule 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 CalSTRS, inclusive of all transactions effected through March 30, 2014.

(d) No person other than the Trian 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 Trian Group. Except with respect to the 171,358 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.

Item 6. Contracts, Arrangements, Understandings or Relationship with Respect to Securities of the Issuer.

Item 6 is hereby amended and supplemented by adding the following:

Pursuant to an Agreement dated February 24, 2014 between Nelson Peltz and Trian Management (the "Director's Fees Agreement"), Mr. Peltz agreed, among other things, that as long as he is an officer of Trian Management and for a period of six months and one day thereafter, Trian Management shall have dispositive power over any Shares, restricted stock units or other securities (or Shares received in respect of such restricted stock units or other securities) that Mr. Peltz receives from the Issuer as compensation for his service as a director of the Issuer. Trian Management is also entitled to receive the consideration received as a result of any disposition of such Shares, restricted stock units or other securities (or Shares received in respect of such restricted stock units or other securities). The foregoing description of the Director's Fees Agreement is a summary only and is qualified in its entirety by reference to the Director's Fees Agreement, which is filed as Exhibit 4 hereto and incorporated herein by reference.

Item 7. Materials to be Filed as Exhibits

Item 7 is hereby amended and supplemented by adding the following:

3. Letter to Mr. Michael Lamach, Chairman, President and CEO of Ingersoll-Rand plc dated March 31, 2014

4. Agreement dated February 24, 2014 between Nelson Peltz and Trian Management.

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: March 31, 2014

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

Title: Director of Investment
Operations

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 March 30, 2014. Except as otherwise noted below, all such transactions were effected in the open market. The prices set forth in the table do not include commissions.

Name	Date	Shares	Price	Type
CALSTRS	01/31/2014	241	58.78	Purchase
CALSTRS	02/04/2014	400	57.28	Purchase
CALSTRS	02/06/2014	500	58.04	Purchase
CALSTRS	02/12/2014	200	58.18	Purchase
CALSTRS	02/24/2014	600	60.26	Purchase
CALSTRS	03/07/2014	200	61.85	Purchase
CALSTRS	03/12/2014	900	58.86	Purchase
CALSTRS	03/13/2014	100	57.47	Purchase
CALSTRS	03/21/2014	1,700	58.86	Purchase
CALSTRS	03/27/2014	50	54.99	Purchase
CALSTRS	02/21/2014	300	59.47	Sale
CALSTRS	02/26/2014	15,160	60.10	Sale
CALSTRS	02/28/2014	2,200	61.14	Sale
CALSTRS	02/28/2014	7,320	61.14	Sale
CALSTRS	02/28/2014	22,740	61.14	Sale
CALSTRS	03/20/2014	1,700	58.66	Sale
CALSTRS	03/24/2014	699	57.89	Sale
CALSTRS	03/25/2014	2,539	58.23	Sale
CALSTRS	03/26/2014	132	57.79	Sale

March 31, 2014

By e-mail and Federal Express
Mr. Michael W. Lamach
Chairman, President and CEO
Ingersoll-Rand plc
800-E Beaty Street
Davidson, NC 28035

Dear Mike:

Due to my other board commitments, including my recent appointment to the board of Mondel z International, Inc., I have decided not to stand for re-election as a director at Ingersoll-Rand's 2014 Annual General Meeting of Shareholders. As you know, investment funds managed by Trian continue to be a large shareholder of Ingersoll-Rand and we are all very pleased with the company's significant progress since 2012, as well as its plans to enhance long-term shareholder value. On a personal note, I have enjoyed my time on the IR Board and the opportunity to work constructively and collegially with you and the rest of the Board.

I wish you and the Board all the best.

Very truly yours,

/s/Nelson Peltz

cc: Mr. Evan Turtz, Corporate Secretary (By e-mail and Federal Express)

February 24, 2014

Mr. Nelson Peltz
280 Park Avenue
New York, New York 10017

Dear Nelson:

In connection with the investment in Ingersoll-Rand PLC (“IR”) by funds managed by Trian Fund Management, L.P. (“Trian”), you were designated by Trian and appointed by the Board of Directors of IR (the “Board”) to serve on the Board.

We understand that, consistent with its practices, IR will be awarding to you, as a director of IR, equity compensation in the form of restricted stock units (“Shares”) that vest on the earlier of: (i) the first anniversary of the grant date or (ii) upon your separation from service with the Board. This is to confirm our prior understanding that you are authorized to accept such Shares in your individual capacity on behalf of Trian upon the terms and conditions of this letter, including your agreement that, as long as you are an officer of Trian and for a period of six months and one day thereafter, you will follow the direction of Trian with respect to (x) the Transfer (as defined below) of any such Shares and (y) the Transfer of any other securities (including, without limitation, common stock and stock options) of IR (or Shares issuable in exchange for, or upon exercise of, such securities) that you may receive as a director of IR (“Other Securities”). You further agree that (i) you will request that IR deliver all Shares directly to an account designated by Trian and (ii) you will not dispose of, transfer, sell, assign, pledge, hypothecate or encumber (collectively, “Transfer”) any Shares or Other Securities, without Trian’s prior written consent, which may be withheld in Trian’s sole discretion. Upon any Transfer of all or a portion of the Shares or Other Securities, Trian shall be entitled to receive the consideration received as a result of such Transfer (the “Equity Consideration”).

Trian agrees to indemnify you against any tax imposed on income to you, net of any corresponding deduction to which you are entitled as a result of the transfer of the Equity Consideration to Trian. Such indemnification shall include all taxes imposed on a tax indemnification payment and shall apply to income reported by either IR or Trian. For purposes of this letter agreement, taxes shall include any penalties, interest or additions to tax imposed upon you with respect to taxes.

This letter agreement shall be governed by, and construed in accordance with, the laws of the State of New York, applicable to agreements made and to be performed entirely within such State.

This letter shall be binding upon the parties hereto and their respective successors, assigns, heirs and estates.

If the above is acceptable to you, please indicate your agreement by signing the enclosed duplicate copy of this letter agreement in the space indicated below.

Very truly yours,

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

Agreed to and Accepted:

/s/Nelson Peltz
NELSON PELTZ