

Ingersoll-Rand plc
Form SC 13D/A
June 20, 2012

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

SCHEDULE 13D
Under the Securities Exchange Act of 1934

(Amendment No. 1)*

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)

June 15, 2012
(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
		21,072,305
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	9	SOLE DISPOSITIVE POWER
		0
	10	SHARED DISPOSITIVE POWER
		21,072,305

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
21,072,305

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
7.05%*

14 TYPE OF REPORTING PERSON
IN

*Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, as reported in the Issuer's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 (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
		0
	8	SHARED VOTING POWER
		21,072,305
NUMBER OF SHARES		
BENEFICIALLY OWNED BY		
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		21,072,305

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
21,072,305

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
7.05%*

14 TYPE OF REPORTING PERSON
IN

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, 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
		21,072,305
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	9	SOLE DISPOSITIVE POWER
		0
	10	SHARED DISPOSITIVE POWER
		21,072,305

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
21,072,305

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
7.05%*

14 TYPE OF REPORTING PERSON
IN

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, 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		21,072,305
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		21,072,305

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 21,072,305

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 7.05%*

14 TYPE OF REPORTING PERSON
 PN

*Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, 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		21,072,305
BENEFICIALLY OWNED BY		
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		21,072,305

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 21,072,305

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 7.05%*

14 TYPE OF REPORTING PERSON
 OO

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, 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		199,908#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		199,908#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 199,908#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 0.07%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, as reported in the Issuer's Form 10-Q.

All 199,908 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		2,298,601#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		2,298,601#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 2,298,601#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 0.77%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, as reported in the Issuer's Form 10-Q.

1,750,352 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		6,670,589#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		6,670,589#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 6,670,589#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 2.23%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, as reported in the Issuer's Form 10-Q.

756,182 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		335,832#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		335,832#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 335,832#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 0.11%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, as reported in the Issuer's Form 10-Q.

All 335,832 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		1,268,711
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		1,268,711

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 1,268,711

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 0.42%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, 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		1,178,550
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		1,178,550

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 1,178,550

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

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

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, 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		2,958,664#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		2,958,664#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 2,958,664#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 0.99%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, 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		1,460,000#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		1,460,000#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 1,460,000#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 0.49%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, as reported in the Issuer's Form 10-Q.

All 1,460,000 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		4,701,450#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		4,701,450#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 4,701,450#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 1.57%*

14 TYPE OF REPORTING PERSON
 PN

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, as reported in the Issuer's Form 10-Q.

All 4,701,450 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		11,023,407#
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER
WITH		0
	10	SHARED DISPOSITIVE POWER
		11,023,407#

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 11,023,407#

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 3.69%*

14 TYPE OF REPORTING PERSON
 OO

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, 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	
		753,348	
NUMBER OF SHARES	8	SHARED VOTING POWER	
BENEFICIALLY OWNED BY		0	
EACH REPORTING PERSON	9	SOLE DISPOSITIVE POWER	
WITH		555,805	
	10	SHARED DISPOSITIVE POWER	
		197,543	

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 753,348

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

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 0.25%*

14 TYPE OF REPORTING PERSON
 EP

* Calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, as reported in the Issuer's Form 10-Q.

This Amendment No. 1 relates to Schedule 13D filed with the Securities and Exchange Commission on May 9, 2012 (the "Original Schedule 13D") relating to the Ordinary Shares, \$1.00 par value per share (the "Shares"), 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 2,3,4,5,6 and 7 of the Original Schedule 13D are hereby amended and supplemented as follows:

Item 2. Identity and Background

Item 2 is amended by deleting Item 2 of the Original Schedule 13D and replacing it with the following:

The persons filing this statement are Trian Partners, L.P., a Delaware limited partnership ("Trian Onshore"), Trian Partners Master Fund, L.P., a Cayman Islands limited partnership ("Trian Offshore"), Trian Partners Parallel Fund I, L.P., a Delaware limited partnership ("Parallel Fund I"), Trian Partners Master Fund (ERISA) L.P., a Cayman Islands limited partnership, ("Trian ERISA"), Trian Partners Strategic Investment Fund, L.P., a Delaware limited partnership ("TPSIF"), Trian Partners Strategic Investment Fund-A, L.P., a Delaware limited partnership ("Strategic Fund-A"), Trian Partners Strategic Co-Investment Fund-A, L.P., a Delaware limited partnership ("Coinvest Fund-A"), Trian SPV (SUB) VI, L.P., a Cayman Islands limited partnership ("SPV VI"), Trian SPV (SUB) VI-A, L.P., a Cayman Islands limited partnership ("SPV VI-A"), Trian IR Holdco Ltd., a Cayman Islands exempted company ("Holdco"), Trian Fund Management, L.P., a Delaware limited partnership ("Trian Management"), and Trian Fund Management GP, LLC, a Delaware limited liability company ("Trian Management GP" and together with the foregoing, the "Trian Entities"), Nelson Peltz, a citizen of the United States of America, Peter W. May, a citizen of the United States of America, and Edward P. Garden, a citizen of the United States of America (the Trian Entities and Messrs. Peltz, May and Garden are sometimes hereinafter referred to collectively as the "Trian Group"). The principal business address and the address of the principal office of each member of the Trian Group is 280 Park Avenue, 41st Floor, New York, New York 10017, except that the principal business address of Trian Offshore, Trian ERISA, SPV VI, SPV VI-A and Holdco is Gardenia Court, Suite 3307, 45 Market Street, Camana Bay, Grand Cayman, Cayman Islands, KY1-1103.

Trian Management GP is the general partner of Trian Management, which serves as the management company for Trian Onshore, Trian Offshore, Parallel Fund I, Trian ERISA, TPSIF, Strategic Fund-A, Coinvest Fund-A, SPV VI, SPV VI-A and Holdco. Trian Management GP is controlled by Nelson Peltz, Peter W. May and Edward P. Garden, who therefore are in a position to determine the investment and voting decisions made by the Trian Entities.

Each of Trian Onshore, Trian Offshore, Parallel Fund I, Trian ERISA, TPSIF, Strategic Fund-A, Coinvest Fund-A, SPV VI, SPV VI-A and Holdco is primarily engaged in the business of investing in securities. Trian Management is primarily engaged in the business of serving as a management company for the Trian Entities. Trian Management GP is primarily engaged in the business of serving as the general partner of Trian Management.

Nelson Peltz's present principal occupation or employment is serving as Chief Executive Officer and a founding partner of Trian Management and, as such, managing the investments of Trian Onshore, Trian Offshore, Parallel Fund I, Trian ERISA, TPSIF, Strategic Fund-A, Coinvest Fund-A, SPV VI, SPV VI-A and Holdco and other funds, accounts and investment vehicles managed by Trian Management. Peter W. May's present principal occupation or employment is serving as President and a founding partner of Trian Management and, as such, managing the investments of Trian Onshore, Trian Offshore, Parallel Fund I, Trian ERISA, TPSIF, Strategic Fund-A, Coinvest Fund-A, SPV VI SPV VI-A and Holdco and other funds, accounts and investment vehicles managed by Trian Management. Edward P. Garden's present principal occupation or employment is serving as Chief Investment Officer and a founding partner of Trian Management and, as such, managing the investments of Trian Onshore, Trian Offshore, Parallel Fund I, Trian ERISA, TPSIF, Strategic Fund-A, Coinvest Fund-A, SPV VI SPV VI-A and Holdco

and other funds, accounts and investment vehicles managed by Trian Management.

This Schedule 13D is also being filed by California State Teachers' Retirement System, a California Government Employee Benefit Plan ("CalSTRS," along with the Trian Group are sometimes hereinafter referred to collectively as the "Reporting Persons"). The principal business of CalSTRS is to provide retirement related benefits and services to teachers in public schools and community colleges in California. The principal business address for CalSTRS is 100 Waterfront Place, MS 04, West Sacramento, CA 95605.

CalSTRS and the Trian Group are filing this statement jointly due to CalSTRS' investment in Coinvest Fund-A and CalSTRS beneficial ownership of the CalSTRS Shares (as defined in Item 5).

None of the Reporting Persons, nor any director, executive officer, general partner or controlling person of any of the Reporting Persons, has, during the past five years, (a) been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors), or (b) been a 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 a finding of any violation with respect to such laws.

Each of the Reporting Persons is responsible for the completeness and accuracy of the information concerning him or it contained herein, but is not 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.

Item 3. Source and Amount of Funds or Other Consideration

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

As of 4:00 p.m., New York City time, on June 19, 2012, the aggregate purchase price of the 14,224,016 Shares (not including those Shares underlying any Options) purchased by the Reporting Persons collectively was \$583,692,049.77 (including commissions). In addition, as of such time and date, Trian Onshore, Trian Offshore and TPSIF beneficially owned, in the aggregate, an additional 7,601,637 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 June 19, 2012, these Options have an aggregate strike price of \$307,465,414.86 (See Schedule A hereto for additional detail on the Options). 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 4. Purpose of Transaction

Item 4 of the Original Schedule 13D is hereby amended and supplemented by adding the following:

Since the May 9, 2012 filing of the Schedule 13D, the Trian Group has met with and had conversations with Michael W. Lamach, chairman and chief executive officer of the Issuer, other members of the Issuer's Board of Directors and senior management team and certain of the Issuer's financial and other advisers, about the matters described in the first paragraph of Item 4 of the Original Schedule 13D. During the discussions, the Issuer extended an unsolicited invitation to Trian Management's Chief Executive Officer and founding partner, Nelson Peltz, to join the Issuer's Board of Directors without requiring the Trian Group to be subject to any standstill or other restrictions. The Trian Group believes that it would be beneficial to the Issuer and its shareholders for the Trian Group to suggest additional directors; however, after deliberation the Trian Group advised the Issuer that it agreed to accept its invitation to have

Mr. Peltz join the Board of Directors, at which time the Issuer advised the Trian Group that such invitation was going to be subject to the Trian Group agreeing not to requisition an extraordinary general meeting of shareholders (“EGM”) until after the Issuer's 2013 Annual Meeting (June 2013) and certain other restrictions. The Trian Group advised the Issuer, as it had made clear during earlier conversations, that given the standstill and other restrictions, it would not accept the Issuer’s offer to have Mr. Peltz join the Board of Directors.

The Reporting Persons expect to further communicate and engage in discussions with some or all of the following: management, the Board, other stockholders of the Issuer, industry participants and/or other interested or relevant parties about the Issuer and about various other matters, including the Trian Group having representation on the Board of Directors of the Issuer and the operations, business, management, governance, strategic plans, assets and capital structure of the Issuer, which discussions may include proposing or considering one or more of the actions described in subparagraphs (a)-(j) of Item 4 of Schedule 13D, such as requisitioning an EGM and/or nominating or proposing candidates for election or appointment to the Board of Directors of the Issuer. In addition, the Reporting Persons intend to review their investment in the Issuer on a continuing basis. Depending on various factors including, without limitation, the Issuer’s financial position, results and strategic direction, price levels of the Shares, the Issuer’s response to the matters to be discussed with the Reporting Persons, actions taken by management and the Board of Directors of the Issuer, other investment opportunities available to the Reporting Persons, the adjustment and management of positions in portfolios of the Reporting Persons, conditions in the securities and capital markets, and general economic and industry conditions, the Reporting Persons may, from time to time and at any time, in the future take such actions with respect to their investment in the Issuer as they deem appropriate including, but not limited to: requisitioning an EGM and/or nominating or proposing candidates for election or appointment to the Board of Directors of the Issuer; purchasing additional securities of the Issuer in the open market or otherwise; selling some or all of the Reporting Persons’ respective holdings in the Issuer in the open market or otherwise, at any time and from time to time; entering into financial instruments or other agreements that increase or decrease the Reporting Persons’ economic exposure with respect to their investment in the Issuer; and/or engaging in any hedging or similar transactions with respect to such holdings; and/or otherwise changing their intention with respect to any and all matters referred to in Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer

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

(a) As of 4:00 pm, New York City time, on June 19, 2012, the Reporting Persons beneficially owned, in the aggregate, 21,825,653 Shares, representing approximately 7.31% of the Issuer’s outstanding Shares (calculated based on 298,724,314 ordinary shares outstanding as of April 13, 2012, as reported in the Issuer’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 (the “Form 10-Q”). Such Shares include an aggregate of 14,224,016 Shares beneficially owned by the Reporting Persons through direct ownership of the Shares representing approximately 4.76% of the Issuer’s outstanding Shares, and an additional 7,601,637 Shares underlying the Options that are held by Trian Onshore, Trian Offshore and TPSIF representing approximately 2.54% of the Issuer’s outstanding Shares.

(b) Pursuant to a Contribution Agreement dated June 15, 2012 (the “Contribution Agreement”) attached hereto as Exhibit 2, Trian Onshore, Trian Offshore, Parallel Fund I, Trian ERISA, TPSIF, SPV VI and SPV VI-A contributed 1,750,352; 756,182; 335,832; 199,908; 1,819,683; 1,460,000 and 4,701,450 Shares, respectively, that they beneficially and directly owned to Holdco 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 1,268,711 and 1,178,550 Shares, respectively, and each of Trian Onshore, Trian Offshore and TPSIF continue to directly and beneficially own 548,249, 5,914,407 and 1,138,981 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 753,348 Shares (the "CalSTRS Shares") and the sole power to dispose of or direct the disposition of 555,805 of the CalSTRS Shares. With respect to the other 197,543 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) 104,616 CalSTRS Shares with BlackRock Institutional Trust Company, N.A, and (ii) 92,927 CalSTRS Shares with State Street Bank and Trust Company.

CalSTRS has been informed by BlackRock Institutional Trust Company, N.A. ("BlackRock") 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, BlackRock has further informed CalSTRS that on March 8, 2012, BlackRock 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 BlackRock. Without admitting or denying wrongdoing, BlackRock 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 BlackRock violated Section 4c(a)(1) of the Commodity Exchange Act and CFTC Regulation 1.38(a). Blackrock 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 BlackRock or any related affiliate were harmed in any way. Other than the Agreement, during the last five years, BlackRock 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 State Street Bank and Trust Company 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 Bank and Trust Company 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. The order was entered in connection with the resolution of the SEC's investigation into losses incurred by and disclosures made around certain active fixed-income strategies managed by State Street Global Advisors (SSgA) during 2007 and earlier periods. In reaching these settlements, State Street neither admitted nor denied the allegations made by the SEC. Other than the Order, during the last five years, State Street Bank and Trust Company 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) 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 since May 8, 2012, by any of the Reporting Persons, inclusive of the transactions effected through 4:00 pm, New York City time, on June 19, 2012.

(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 197,543 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 of the Original Schedule 13D is hereby amended and supplemented by adding the following:

As more fully described in Item 5(b), certain of the Trian Entities entered into the Contribution Agreement whereby on June 15, 2012, such Trian Entities contributed some or all of the Shares beneficially and directly owned by them to Holdco in exchange for their proportionate share of the equity securities of Holdco. The foregoing description of the Contribution Agreement is a summary only and is qualified in its entirety by reference to the Contribution Agreement, which is filed as Exhibit 2 hereto and incorporated herein by reference.

Item 7. Material to be Filed as Exhibits

Item 7 is of the Original Schedule 13D is hereby amended and supplemented as follows:

1. Joint Filing Agreement of the Reporting Person.
2. Contribution Agreement dated June 15, 2012 by and between Trian IR Holdco Ltd. and certain Trian Entities.

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: June 20, 2012

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: Director

/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/ STEVEN TONG
Name: Steven Tong
Title: Director, Innovation & Risk

The following table sets forth all transactions with respect to the Shares affected since May 8, 2012, by any of the Reporting Persons, inclusive of any transactions effected through 4:00 p.m., New York City time, on June 19, 2012. Except as otherwise noted, all such transactions in the table were effected in the open market, and the table includes commissions paid in per share prices.

Name	Date	Shares	Price	Type
CALSTRS	5/08/2012	2,104	42.289	Sale
CALSTRS	5/17/2012	712	40.680	Purchase
CALSTRS	5/17/2012	17,273	41.197	Sale
CALSTRS	5/21/2012	1,875	40.755	Purchase
CALSTRS	5/21/2012	1,200	41.580	Purchase
CALSTRS	5/21/2012	2,900	41.445	Purchase
CALSTRS	5/22/2012	422	41.792	Purchase
CALSTRS	5/22/2012	400	41.800	Purchase
CALSTRS	5/22/2012	5,900	42.047	Purchase
CALSTRS	5/24/2012	500	42.660	Purchase
CALSTRS	5/29/2012	900	42.910	Purchase
CALSTRS	5/30/2012	4,312	41.758	Sale
CALSTRS	5/30/2012	8,625	41.777	Sale
CALSTRS	5/31/2012	719	41.312	Purchase
CALSTRS	5/31/2012	266	41.312	Purchase
CALSTRS	5/31/2012	900	41.308	Purchase
CALSTRS	5/31/2012	100	41.308	Purchase
CALSTRS	6/04/2012	6,784	39.120	Purchase
CALSTRS	6/04/2012	6,832	39.111	Purchase
CALSTRS	6/13/2012	700	39.670	Purchase
CALSTRS	6/13/2012	4,400	39.650	Sale
CALSTRS	6/13/2012	7,400	39.650	Sale
CALSTRS	6/14/2012	46,749	39.132	Sale

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the persons named below agree to the joint filing on behalf of each of them of a statement on Schedule 13D (including amendments thereto) with respect to the Ordinary Shares of Ingersoll-Rand PLC. and further agree that this Joint Filing Agreement be included as an Exhibit to such joint filings. In evidence thereof, the undersigned, being duly authorized, have executed this Joint Filing Agreement this 20th day of June, 2012.

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: Director

/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/ STEVEN TONG
Name: Steven Tong
Title: Director, Innovation & Risk

THE CONTRIBUTION AGREEMENT