Ingersoll-Rand plc Form 11-K June 28, 2016

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

FORM 11-K

ý ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2015 Or

qTRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from to Commission File No. 001-34400

A.Full title of the plan and address of the plan, if different from that of the issuer named below: INGERSOLL-RAND INDIVIDUAL ACCOUNT RETIREMENT PLAN FOR BARGAINING UNIT EMPLOYEES AT THE BUFFALO, NEW YORK PLANT (Full title of the plan)

B. Name of the issuer of the securities held pursuant to the plan and the address of its principal executive office:
INGERSOLL-RAND PLC
170/175 Lakeview Drive
Airside Business Park
Swords, Co. Dublin
Ireland

Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant Index December 31, 2015 and 2014

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<ul> <li>Exhibit Index</li> <li>Other schedules required by Section 2520.103-10 of the Department of Labor's Rules and Reg</li> <li>Note: Reporting and Disclosure under the Employee Retirement Income Securities Act of 1974 have because they are not applicable.</li> </ul>	

Report of Independent Registered Public Accounting Firm

The Participants and Administrator Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant Davidson, North Carolina

We have audited the accompanying statements of net assets available for benefits of the Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant (the "Plan") as of December 31, 2015, and the related statement of changes in net assets available for benefits for the year then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provide a reasonable basis for our opinion.

In our opinion, the financial statements of the Plan, referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2015, and the changes in net assets available for benefits for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The supplemental information in the accompanying schedule of assets (held at end of year) as of December 31, 2015 has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental information is the responsibility of Plan management. Our audit procedures included determining whether the supplemental information reconciles to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In forming our opinion on the supplemental information in the accompanying schedule, we evaluated whether the supplemental information, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information in the accompanying schedule is fairly stated in all material respects in relation to the financial statements as a whole.

Very truly yours,

/s/ Cherry Bekaert LLP Charlotte, North Carolina June 28, 2016 Report of Independent Registered Public Accounting Firm

To Participants and Cameron Benefits Committee of Individual Account Retirement Plan for Bargaining Unit Employees at the Cameron International Corporation Buffalo, New York Plant

We have audited the accompanying statement of net assets available for benefits of the Individual Account Retirement Plan for Bargaining Unit Employees at the Cameron International Corporation Buffalo, New York Plant (the Plan) as of December 31, 2014 and the related statement of changes in net assets available for benefits for the year then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements and assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2014 and the changes in net assets available for benefits for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Houston, Texas June 25, 2015

Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant Statements of Net Assets Available for Benefits December 31, 2015 and 2014

	2015	2014
Assets		
Investments:		
Plan's interest in Ingersoll-Rand Employee Savings Plan Master Trust (Note 4), at fair value	\$41,805,961	\$—
Plan's interest in Cameron International Corporation Master Trust (Note 4), at fair value		42,165,519
Adjustment from fair value to contract value for interest in Cameron International		(185,964)
Corporation Master Trust relating to fully benefit-responsive investment contracts		(105,704 )
Receivables		
Employer contributions receivable	20,235	
Employee contributions receivable	23,041	
Notes receivable from participants	376,025	378,152
Total Receivables	419,301	378,152
Net assets available for benefits	\$42,225,262	\$42,357,707
The accompanying notes are an integral part of these financial statements.		

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Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant Statements of Changes in Net Assets Available for Benefits Years Ended December 31, 2015 and 2014

	2015	2014
Additions to net assets attributable to:		
Plan's interest in investment income of the Ingersoll-Rand Employees Savings Plan Master Trust (Note 4)	\$985,118	\$—
Plan's interest in investment income of the Cameron International Corporation Master Trust (Note 4)	_	2,037,270
Interest income on notes receivable from participants	18,657	17,756
Contributions:		,
Participant	975,007	1,183,980
Employer	835,955	1,006,430
Employee rollover		36,830
Total additions	2,814,737	4,282,266
Deductions from net assets attributable to:		
Participant withdrawals and distributions	2,938,316	3,524,870
Administrative expenses	8,866	76,415
Total deductions	2,947,182	3,601,285
Net (decrease) increase in net assets	(132,445	680,981
Net assets available for benefits		
Beginning of year	42,357,707	41,676,726
End of year	\$42,225,262	\$42,357,707
The accompanying notes are an integral part of these financial statements.		

Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant Notes to Financial Statements December 31, 2015 and 2014

1 Description of the Plan

The following description of the Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant (previously known as Individual Account Retirement Plan for Bargaining Unit Employees at the Cameron International Corporation Buffalo, New York Plant) (the "Plan") provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions. History

The Plan is sponsored by Ingersoll-Rand Company, a U.S. subsidiary of Ingersoll-Rand plc ("IR-plc") (IR-plc, Ingersoll-Rand Company and its participating affiliates are collectively referred to as the "Company"). The Plan was established to facilitate systematic retirement savings by eligible employees and to provide funding through company contributions to facilitate participants' retirement.

Prior to January 1, 2015, the Plan was sponsored by Cameron International Corporation. On January 1, 2015, the Cameron International Corporation completed the sale of its Centrifugal Compression business to the Company. At the time of the sale, the Company assumed the Plan.

General

The Plan is a defined contribution plan covering eligible employees, as defined in the Plan. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA").

Effective January 1, 2015, Fidelity Management Trust Company ("Fidelity") is the trustee and recordkeeper of the Plan. The Plan's assets are part of the Ingersoll-Rand Employee Savings Plan Master Trust ("Master Trust") maintained by Fidelity. Prior to January 1, 2015, the Plan's investments were held in the Cameron International Corporation Master Trust and T. Rowe Price Trust Company served as the trustee.

The Ingersoll-Rand Company Benefits Administration Committee (the "Committee") administers the Plan and is responsible for carrying out the provisions thereof on behalf of the Company. The Ingersoll-Rand plc Benefits Design Committee approves recommended design changes to the Plan. The Ingersoll-Rand plc Benefits Investment Committee selects and approves investment options for the Plan, which may not include all assets held within the Master Trust. Participants direct investments among the approved investment options for the Plan. The Plan is operated with the intent to satisfy the requirements of ERISA Section 404(c). Participation

All union employees of the Company belonging to Local Lodge No. 330, District 65 of the International Association of Machinists and Aerospace Workers, are eligible for participation. Contributions

The Company makes weekly contributions to each participant's account based on hours actively worked and specific contribution rates as defined in the Plan document. Effective August 6, 2014, the employer contribution rate increased from \$1.65 to \$1.80 per contribution hour. Contribution hours consist of hours actively worked, including overtime and hours paid for vacation, personal days or holidays, but exclude sick time for which the employee may be paid. Participants are credited with one year of vesting service for every calendar year in which they complete 1,000 or more hours of service. Company contributions are allocated among the investment fund options that have been selected by each employee.

Participants may rollover to the Plan amounts representing distributions from other eligible retirement plans, as defined by the Plan. The Plan allows for employee pre-tax contributions based on contribution hours and elected contribution rates which can vary between \$.010 to \$7 per contribution hour (increased to \$10 per contribution hour under the collective bargaining agreement completed in September 2015). For purposes of employee contributions only, contribution hours also include time paid for jury duty, bereavement or military service. Electing to contribute is voluntary, and these contributions are immediately 100% vested.

Participants may change their contribution amounts at any time by contacting Fidelity. Participants direct the investment of their contributions into various investment options offered by the Plan.

Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant Notes to Financial Statements December 31, 2015 and 2014

Participant Accounts

Each participant's account is credited with (a) the participant's contribution, (b) allocations of the Company's contributions, and (c) allocations of Plan earnings (losses), net of investment management fees. Each participant's account is charged with withdrawals and applicable administrative expenses. Allocations are based on participant contribution hours, earnings or account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Vesting

Participants are immediately vested in their own contributions plus actual earnings thereon. All active participants in the Plan vest in the employer contributions as outlined below:

Pre January 1, 2009 Contributions: Post December 31, 2008 Contributions:

33.33% after 3 years of service33.33% after 2 years of service66.67% after 4 years of service66.67% after 3 years of service100.00% after 5 years of service100.00% after 4 years of service

In addition, participants shall become fully vested in employer contributions upon death, total and permanent disability (as defined by the Plan) or termination of employment on or after attaining age 65.

# Notes Receivable from Participants

Participants may borrow from their accounts up to a maximum equal to the lesser of \$50,000 (reduced by the excess of the highest outstanding loan balance during the preceding twelve months) or 50% of their vested eligible account balance. Participants are permitted to have one outstanding loan at any given time. Loan transactions are treated as a transfer to (from) the investment fund from (to) the participant loan fund. Loan terms are 60 months. Employer contributions are not available for loans. The loans are secured by the balance in the participant's account and bear a fixed interest rate as determined by the Plan Administrator. At December 31, 2015, outstanding loans bore interest rates of 5.25%. Principal and interest are paid ratably through payroll deductions. Principal and interest are paid ratably through payroll deductions.

Participant Withdrawals and Distributions

On termination of service, plan distributions may be in the form of an annuity or a lump sum distribution. In the case of an employee's termination because of death, the entire account balance is paid to the valid designated beneficiary under the Plan or, if none is designated, then to the employee's spouse, if then living; if not living, then to the beneficiary named under a group term life insurance program sponsored by the company or if, none , then to the beneficiary named under any other program sponsored by the company which provides for a death benefit; otherwise to the employee's children; if there are no children, then to the employee's estate. In case of termination because of any reasons other than death, the participant is entitled to the vested balance.

Forfeited Accounts

At December 31, 2015 and 2014, forfeited non-vested accounts were \$94,973 and \$25,747. Forfeited non-vested amounts may be used to reduce future employer contributions. In 2015, employer contributions were reduced by \$1,217 from forfeited non-vested accounts. In 2014, no employer contributions were reduced from forfeited non-vested accounts.

#### 2 Summary of Accounting Policies

Basis of Accounting

The financial statements of the Plan are prepared on the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America ("GAAP").

Use of Estimates

The preparation of financial statements in conformity with GAAP requires the Committee to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent

assets and liabilities at the dates of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Valuation of Investments

As of January 1, 2015, Plan investments are included in the Master Trust, which provides unified investment management. Fidelity invests plan assets in various trust investment options at the direction of plan participants and as required by the Plan. Separate

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Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant Notes to Financial Statements December 31, 2015 and 2014

participant accounts are maintained by investment option. These accounts record contributions, withdrawals, transfers, earnings and changes in market value. Prior to January 1, 2015, Plan assets were included in the Cameron International Corporation Master Trust, which provided unified investment management. T. Rowe Price invested plan assets in various trust investment options at the direction of plan participants and as required by the Plan. Separate participant accounts were maintained by investment option. These accounts recorded contributions, withdrawals, transfers, earnings and changes in market value.

Investments in the Master Trust and the Cameron International Corporation Master Trust are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Benefits Investment Committee determines the Plan's valuation policies utilizing information provided by investment advisors and custodians. See Notes 3 and 4 for discussion of fair value measurements.

Realized gains or losses on security transactions are recorded on the trade date. Realized gains or losses are the difference between the proceeds received and the security's unit cost. Dividend income is recorded on the record date and interest income is recorded when earned.

Certain investment management fees and expenses charged to the Plan for the investment in the Master Trust are deducted from income earned on a daily basis and are not separately reflected. Consequently, certain management fees and operating expenses are reflected as a reduction of investment returns for such investments.

The Statements of Changes in Net Assets Available for Benefits include unrealized appreciation or depreciation in accordance with the policy of stating investments at fair value. Net appreciation or depreciation of investments reflects both realized gains and losses and the change in unrealized appreciation and depreciation of investments. Valuation of Notes Receivable from Participants

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Related fees are recorded as administrative expenses and are expensed when incurred. No allowance for credit losses has been recorded as of December 31, 2015 and 2014. Delinquent participant loans are reclassified as distributions based upon the terms of the Plan document.

#### Expenses of the Plan

Certain expenses associated with the administration of the Plan and the Master Trust are paid for by the Company and are excluded from these financial statements. Administrative fees are deducted quarterly from Plan accounts (and are included in these financial statements) and/or paid by the Company. Expenses of the funds related to the investment and reinvestment of assets are included in the cost of the related investments. Participant directed transaction expenses such as loan fees and withdrawal fees may be paid for by the participant and are included in these financial statements.

Participant Withdrawals and Distributions

Benefits to participants are recorded in the Plan's financial statements when paid. There were no approved and unpaid amounts as of December 31, 2015 and 2014.

Transfer of Assets from Other Plans

Employees may transfer their savings from other plans qualified under the IRC.

New Accounting Pronouncements

In May 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2015-07, Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent), which exempts investments measured using the net asset value ("NAV") practical expedient in Accounting Standards Codification 820, Fair Value Measurement, from categorization within the fair value hierarchy. This guidance requires retrospective application and is effective for annual reporting periods beginning on or after December 15, 2015. Early adoption is permitted. The Company does not expect the adoption of this accounting guidance to have a significant impact on the Plan's financial statements.

In July 2015, the FASB issued ASU 2015-12, Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), and Health and Welfare Benefit Plans (Topic 965): Part (I) Fully Benefit-Responsive Investment Contracts, Part (II) Plan Investment Disclosures, Part (III) Measurement Date Practical Expedient. This three-part standard simplifies employee benefit plan reporting with respect to fully benefit-responsive investment contracts and plan investment disclosures, and provides for a measurement-date practical expedient. Part I and Part II are effective for fiscal years beginning after December 15, 2015, and should be applied retrospectively, with early application permitted. Part III is effective for fiscal years beginning after December 15, 2015, and should be applied prospectively, with early application permitted. The Company does not expect the adoption of this accounting guidance to have a significant impact on the Plan's financial statements.

Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant Notes to Financial Statements December 31, 2015 and 2014

#### 3 Fair Value Measurements

Fair value is defined as the exchange price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Fair value measurements are based on a framework that utilizes the inputs market participants use to determine the fair value of an asset or liability and establishes a fair value hierarchy to prioritize those inputs. The fair value hierarchy is comprised of three levels that are described below:

Level Inputs to the valuation methodology are based on quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2 Observable inputs other than Level 1. Inputs to the valuation methodology include:

•Quoted prices for similar assets or liabilities in active markets;

•Quoted prices for identical or similar assets or liabilities in markets that are not active;

Other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability

Level Inputs to the valuation methodology are unobservable inputs based on little or no market activity and that are 3 significant to the fair value of the assets and liabilities.

The fair value hierarchy requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Observable inputs are obtained from independent sources and can be validated by a third party, whereas unobservable inputs reflect assumptions regarding what a third party would use in pricing an asset or liability based on the best information available under the circumstances. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Not all assets held in the Master Trust and Cameron International Corporation Master Trust are available for investment by participants of the Plan. There have been no changes in the methodologies used as of December 31, 2015 and 2014. There have been no significant transfers between Level 1 and Level 2 categories. Following is a description of the valuation methodologies used for the assets measured at fair value.

Common Stocks: The shares are valued at the closing price reported on the active market on which the individual securities are traded. Such assets are classified as Level 1.

Ingersoll-Rand Stock Fund: The shares of the fund are valued at the daily net asset value ("NAV") of shares held by the Master Trust at year end. NAV per share or the equivalent is used for fair value purposes as a practical expedient. NAVs are calculated by the investment manager or sponsor of the fund. The fund primarily invests in ordinary shares of IR-plc, which is traded on the NYSE and is valued at its quoted market price at the daily close of the NYSE. A small portion of the fund is invested in short-term money market instruments. Such assets are classified as Level 2. Cameron Stock Fund: The Cameron Stock Fund is a closed investment option. The fund invests in shares of Cameron International Corporation, which is traded on the NYSE and is valued at its quoted market price at the daily close of the NYSE. Such assets are classified as Level 1.

Allegion Stock Fund: The shares of the fund were valued at the daily NAV of shares held by the Master Trust at year end. NAV per share or the equivalent was used for fair value purposes as a practical expedient. NAVs were calculated by the investment manager or sponsor of the fund. The fund primarily invested in ordinary shares of Allegion, which is traded on the NYSE and was valued at its quoted market price at the daily close of the NYSE. A small portion of the fund is invested in short-term money market instruments. The Allegion Stock Fund was eliminated effective November 30, 2015 with all remaining participant balances in the fund liquidated and reinvested in the Plan's target date retirement fund corresponding to the participant's date of birth. Such assets are classified as Level 2.

Mutual funds: The shares of registered investment companies are valued at quoted market prices in an exchange and active market, which represent the daily NAV of shares held by the Master Trust at year end and are classified as Level 1. Investments in registered investment companies generally may be redeemed daily.

Common collective trusts: These assets are not available in an exchange or active market; however, the fair value is determined based on the daily NAV of the underlying assets as traded in an exchange or active market. NAV per share or the equivalent is

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Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant Notes to Financial Statements December 31, 2015 and 2014

used for fair value purposes as a practical expedient. NAVs are calculated by the investment manager or sponsor of the fund. The Plan's investment in common collective trusts are classified as Level 2.

Separate accounts - fixed income bond funds: Investments are privately managed investments created for a single group of plans in a single master trust maintained by the employer. The fair value is determined based on the daily NAV of the underlying assets as traded in an exchange or active market. NAV per share or the equivalent is used for fair value purposes as a practical expedient. NAVs are calculated by the investment manager or sponsor of the fund. Such assets are classified as Level 2.

Separate accounts - stable value funds: Investments are privately managed investments created for a single group of plans in a single master trust maintained by the employer. As the account primarily consists of investment contracts, the assets are valued at fair value by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the credit-worthiness of the issuer. Such assets are classified as Level 2. Self-directed brokerage accounts: Investments in the self-directed brokerage accounts are at current value based on published market quotations from individual investments composing the brokerage accounts. Such assets are classified as Level 1.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.