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

"TRANSITION 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 RETIREMENT SAVINGS PLAN FOR PARTICIPATING AFFILIATES IN PUERTO RICO (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

	Page (s)
Report of Independent Registered Public Accounting Firm	<u>2</u>
Financial Statements	
Statements of Net Assets Available for Benefits as of December 31, 2015 and 2014	<u>3</u>
Statements of Changes in Net Assets Available for Benefits for the years ended December 31, 2015 and 2014	<u>4</u>
Notes to Financial Statements	<u>5</u>
Supplemental Schedules	
Schedule H, Part IV, Line 4i – Schedule of Assets (Held at End of Year) as of December 31, 2015	<u>14</u>
Schedule H, Part IV, Line 4a – Schedule of Delinquent Participant Contributions for the year ended December 31, 2015	<u>15</u>
Signatures	<u>16</u>
Exhibit Index	<u>16</u>
01 11 0 1 2500 100 10 61 5	•

Other schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Note: Reporting and Disclosure under the Employee Retirement Income Securities Act of 1974 have been omitted because they are not applicable.

Report of Independent Registered Public Accounting Firm
The Participants and Administrator
Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico
Davidson, North Carolina

We have audited the accompanying statements of net assets available for benefits of the Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico (the "Plan") as of December 31, 2015 and 2014, and the related statements of changes in net assets available for benefits for the years 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 audits.

We conducted our audits 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 audits 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 audits 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 at December 31, 2015 and 2014, and the changes in net assets available for benefits for the years 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 and Schedule of Delinquent Participant Contributions for the year ended 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 schedules, 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 schedules is fairly stated in all material respects in relation to the financial statements as a whole.

Very truly yours,

/s/ Cherry Bekaert Charlotte, North Carolina June 28, 2016

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico 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	\$24.456.503	\$24,106,747
value	\$24,430,303	\$24,100,747
Receivables:		
Employer contributions receivable	21,921	
Employee contributions receivable	22,756	_
Notes receivable from participants	1,374,602	1,216,339
Total Receivables	1,419,279	1,216,339
Net assets available for benefits	\$25,875,782	\$25,323,086
The accompanying notes are an integral part of these financial statements.		

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico Statements of Changes in Net Assets Available for Benefits For the Years Ended December 31, 2015 and 2014

	2015	2014	
Additions to net assets attributed to:			
Interest income on notes receivable from participants	\$48,164	\$40,930	
Plan's interest in investment (loss) income of the Ingersoll-Rand Employee Savings Plan	(248,729	1,149,271	
Master Trust (Note 4)	(240,729	1,149,271	
Contributions:			
Employer	1,213,980	1,077,337	
Participants	1,315,767	1,156,608	
Total additions	2,329,182	3,424,146	
Deductions from net assets attributed to:			
Benefits paid to participants	1,754,793	3,773,766	
Administrative expenses	21,693	8,082	
Total deductions	1,776,486	3,781,848	
Net increase (decrease) in net assets	552,696	(357,702)
Net assets available for benefits			
Beginning of year	25,323,086	25,680,788	
End of year	\$25,875,782	\$25,323,086)
The accompanying notes are an integral part of these financial statements.			

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico Notes to Financial Statements
December 31, 2015 and 2014

1 Description of the Plan

The following brief description of the Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico (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 a defined contribution plan sponsored by Thermo King Puerto Rico Manufactura, Inc., a subsidiary of Ingersoll-Rand plc ("IR-plc") covering all full-time regular employees of Thermo King Puerto Rico Manufactura, Inc. and participating affiliates who work and reside in Puerto Rico. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA"). Thermo King Manufactura, Inc. and its participating affiliates, including Trane Puerto Rico LLC are referred to herein as the "Company".

On June 8, 2012, the IR-plc Board of Directors approved amendments to the retirement plans for certain U.S. and Puerto Rico non-bargained employees, including amendments to the Plan. The amendments provided that the eligible non-bargained employees hired prior to July 1, 2012 were given a choice of remaining in their respective defined benefit plan until the plan freezes on December 31, 2022 or freezing their accrued benefits in their respective defined benefit plan as of December 31, 2012 and receiving an additional 2% non-matching company contribution of eligible compensation into the Plan beginning January 1, 2013. Eligible employees hired or rehired on or after July 1, 2012 will automatically receive the 2% non-matching company contribution of eligible compensation into the Plan in lieu of participating in the defined benefit plan at the date of eligibility. Beginning January 1, 2023, all eligible employees will receive the 2% non-matching contribution into the Plan.

On December 1, 2013 (the "Distribution Date"), Ingersoll-Rand plc completed the spin-off of its commercial and residential security businesses to its shareholders. The businesses were transferred to Allegion plc ("Allegion"), a newly created independent Irish company. On that date, each IR-plc shareholder of record as of the close of business on November 22, 2013 (the "Record Date") received one ordinary share of Allegion for every three IR-plc ordinary shares held as of the Record Date. Allegion is now an independent public company trading under the symbol "ALLE" on the New York Stock Exchange (the "NYSE"). Participants in the Plan received one unit of Allegion stock for every three units of IR-plc stock held in the Ingersoll-Rand Stock Fund at the time of the spin-off. As a result of the spin-off, an Allegion Stock Fund was created in the Plan to hold the Allegion shares received pursuant to the spin-off. The Allegion Stock Fund was closed to new investments and participants were free to diversify out of the Allegion Stock Fund to other investment options. 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 their date of birth.

General

The Plan is a defined contribution plan covering eligible employees of the Company, as defined in the Plan. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). Fidelity Management Trust Company ("Fidelity") is the Plan's recordkeeper and custodian. Banco Popular de Puerto Rico ("BPPR") serves as trustee for the Plan. The Plan's assets are part of the Ingersoll-Rand Employee Savings Plan Master Trust (the "Master Trust") maintained by Fidelity. Effective January 1, 2015, the assets of the Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant merged with and became part of the Master Trust.

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 IR-plc Benefits Design Committee approves recommended design changes to the Plan and the IR-plc Benefits Investment Committee selects and approves the Plan's investment options, which may not include all assets held within the Master Trust. The Plan is operated with the intent to satisfy the requirements of ERISA Section 404(c).

Contributions

Plan participants may elect to contribute on a pre-tax basis from 1% to 50% of their total compensation including certain bonuses subject to the limits imposed by Section 1165(e)(7)(A) of the Puerto Rican Internal Revenue Code. The participants may also elect to contribute on an after-tax basis from 1% to 10% of their total eligible compensation including bonuses as an additional supplementary contribution. The Company contributes a matching amount equal to 100% of the employee's contribution not to exceed 6% of total compensation for a participating employee. Participants who have attained age 50 before the end of the Plan year are eligible to make catch-up contributions. Contributions are subject to various limitations to ensure compliance with the requirements of the Puerto Rican Internal Revenue Code. Participants may change their contribution amounts in accordance with

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico Notes to Financial Statements
December 31, 2015 and 2014

the administrative procedures established by the Committee. Participants who were hired or rehired on or after July 1, 2012 and employees who chose to receive a non-matching contribution in lieu of continuing accruing service in their respective defined benefit plans receive a non-matching company contribution of 2% of eligible compensation in lieu of participating in a defined benefit plan. All company contributions are made in cash and invested in the same manner as the participant contributions; if a participant does not have an investment election on file, Company contributions are invested in the Plan's default investment fund which is the target date retirement fund corresponding to the employee's date of birth.

Participants direct the investment of their contributions into various investment options offered by the Plan. Participant Accounts

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

Vesting

Participants are entitled to the benefits that can be provided from their vested account. Participants are immediately vested in their contributions and Company matching contributions plus actual earnings thereon. Company basic contributions made to Trane union employees under the Plan remain subject to a three year vesting schedule. Company non-matching contributions are vested after 3 years of service or upon attainment of age 65, death or disability while employed.

Notes Receivable from Participants

Participants may borrow from their fund accounts a minimum of \$1,000 up to a maximum equal to the lesser of (a) \$50,000 reduced by their highest outstanding loan balance during the preceding twelve month period or (b) 50% of their total eligible account balance. Loans bear interest at a fixed rate which is equal to the prime rate as quoted by Fidelity on a monthly basis, plus 1%. At December 31, 2015, outstanding loans bore interest rates ranging from 4.00% to 9.5%. Loan terms range from one to five years. Effective January 1, 2010, a loan to acquire a principal residence may be for a term of up to 15 years. The loans are collateralized by the balance in the participant's account. Principal and interest are paid ratably through payroll deductions.

Forfeited Accounts

Forfeited contributions are used to reduce future employer contributions. At December 31, 2015 and 2014, forfeited non-vested balances were \$18,674 and \$12, respectively. In 2015 and 2014, employer contributions were reduced by \$16,467 and \$345, respectively from forfeited non-vested accounts.

Participant Withdrawals and Distributions

Plan distributions may be in the form of a lump sum or in installments in such other manner that the Plan may permit. In the case of an employee's termination because of death, the entire account balance is paid to the designated beneficiary under the Plan or, if none is designated, then to the decedent's estate. In case of termination because of any reasons other than death, the participant is entitled to the vested balance. The participants may, under certain conditions, make withdrawals from the Plan while employed, subject to certain limitations as to purpose and source of the funds.

2 Summary of Significant Accounting Policies

Basis of Accounting

The financial statements of the Plan are prepared using 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 date 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

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 participant accounts are

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico Notes to Financial Statements
December 31, 2015 and 2014

maintained by investment option. These accounts record contributions, withdrawals, transfers, earnings and changes in market value.

Investments in the 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 the investment advisors and custodians. See Notes 3 and 4 for discussion of fair value measurements of the investments. 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 investment management fees and operating expenses are reflected as a reduction of investment returns for such investments in the form of an expense ratio.

The Statements of Changes in Net Assets include unrealized appreciation and 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 or an affiliate and are excluded from these financial statements. Prior to 2015, certain expenses associated with the administration of the Plan and the Master Trust were paid through offsets and/or payments attributable to the annual operating expenses of one or more of the Plan's designated investment options. Certain of these payments were credited to the Plan and are available to pay future Plan administrative expenses. Effective January 1, 2015, the investment options that generated payments used to offset and/or pay administrative expenses of the Plan and Master Trust were replaced by investment options with lower expense ratios that do not provide such offsets and/or payments, and administrative fees are deducted quarterly from Plan accounts (and are included in these financial statements) and/or paid by the Company or an affiliate. 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 are paid by the participant and are included in these financial statements.

Participant Withdrawals and Distributions

Benefits to participants are recorded when paid. There are 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 by the Puerto Rico Treasury Department.

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

_

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico Notes to Financial Statements
December 31, 2015 and 2014

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.

3Fair 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 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 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 assets measured at fair value.

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, available only to participants in the Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant. 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 or 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

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico 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.

4 Investment in Master Trust

The Plan's investments are in the Master Trust which was established for the investment of assets of the Plan and several other retirement plans sponsored by the Company or other affiliated companies of IR-plc. The assets of the Master Trust are held by Fidelity. Each participating retirement plan has an identifiable interest in the Master Trust and investment options for participants may vary by plan. Fidelity maintains separate accounting of all contributions, benefit payments and expenses and allocates income earned and received by the Master Trust on the basis of the adjusted value of each plan at each measurement date. Effective January 1, 2015, the assets of the Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant ("IARP") are considered combined with and part of the Master Trust. The Plan was not affected by the addition of a new plan to the Master Trust as Fidelity maintains separate accounting for each plan within the Master Trust at the measurement date. To reflect the combination of addition of the IARP, the investments disclosed below as of December 31, 2015 include the additional assets of the IARP. The investment income disclosed below for the year ended December 31, 2014 does not include the combined IARP as the combination was completed after January 1, 2015. As of December 31, 2015 and 2014, the Plan had a 0.63% and 0.61% participation, respectively, in the Master Trust.

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico Notes to Financial Statements
December 31, 2015 and 2014

Summarized Master Trust information follows:

	2015	2014
Investments, at fair value		
Mutual funds	\$322,644,868	\$1,220,545,404
Self-directed brokerage accounts	279,854,045	282,203,231
Common collective trusts	2,243,013,900	1,030,464,502
Separate accounts	329,374,802	343,901,290
Ingersoll-Rand Stock Fund	702,688,416	861,914,768
Cameron Stock Fund	1,804,966	_
Allegion Stock Fund	_	240,475,392
Investments, at fair value	\$3,879,380,997	\$3,979,504,587

The following summarizes the net realized and unrealized appreciation (depreciation) of investments and interest and dividend income for the Master Trust for the years ended December 31:

2015	2014
\$(35,214,995)	\$23,452,429
(8,000,533)	12,423,331
38,013,463	59,643,421
1,826,009	(237,508)
(97,693,639)	22,790,032
797,208	
37,810,715	51,866,846
(62,461,772)	169,938,551
30,577,444	88,247,139
\$(31,884,328)	\$258,185,690
	\$(35,214,995) (8,000,533) 38,013,463 1,826,009 (97,693,639) 797,208 37,810,715 (62,461,772) 30,577,444

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico Notes to Financial Statements
December 31, 2015 and 2014

The following summarizes the classification of the underlying investments in the Master Trust by classification and method of valuation as of December 31, 2015:

	Level 1	Level 2	Level 3	Total
Master Trust				
Mutual funds:				
Domestic equity funds	\$3,471,222	\$	\$ -	_\$3,471,222
International equity fund	36,927,066	_	_	36,927,066
Fixed income funds	136,737		_	136,737
Index funds	282,109,843		_	282,109,843
Self-directed brokerage accounts	279,854,045		_	279,854,045
Common collective trusts:				
Index funds (1)	_	982,677,618	_	982,677,618
Target date retirement funds (2)	_	1,260,336,282	_	1,260,336,282
Separate accounts:				
Fixed income bond funds (3)	_	176,903,498	_	176,903,498
Stable value funds (4)		152,471,304	_	152,471,304
Ingersoll-Rand Stock Fund (5)	_	702,688,416	_	702,688,416
Cameron Stock Fund (5)	1,804,966		_	1,804,966
Investments, at fair value	\$604,303,879	\$3,275,077,118	\$ -	_\$3,879,380,997

- (1) Represents investment in common collective trusts that hold equity or fixed income securities. These funds have no unfunded commitments, redemption frequency restrictions, or other redemption restrictions.
- (2) Represents investment in an asset mix that seeks to generate a level of risk and return appropriate for the fund's particular time frame. The asset mix is determined by factors such as the investor's age, projected level of risk aversion and the length of time until the principal will be withdrawn. There are no unfunded commitments, redemption frequency restrictions, or other redemption restrictions.
- (3) Represents investment in a privately managed investment account created for the Master Trust that seeks to maximize price appreciation and current income with volatility similar to its index, the Barclay U.S. Aggregate Bond Index. There are no unfunded commitments, redemption frequency restrictions, or other redemption restrictions.
- (4) Represents investment in a privately managed investment account created for the Master Trust that is primarily comprised of investment contracts issued by financial institutions and other eligible stable value investments. There are no unfunded commitments or redemption frequency restrictions. Transfers to other investment funds could be limited under certain conditions.
- (5) Represents investment in IR-plc ordinary shares, along with a minor amount of short-term investments, to provide liquidity or shares of Cameron International Corporation. There are no unfunded commitments, redemption frequency restrictions, or other redemption restrictions.

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico Notes to Financial Statements
December 31, 2015 and 2014

The following summarizes the classification of the Master Trust investments by classification and method of valuation as of December 31, 2014:

	Level 1	Level 2	Level 3	Total
Master Trust				
Mutual funds:				
Domestic equity funds	\$830,201,607	\$	\$ -	-\$830,201,607
International equity fund	131,238,763	_	_	131,238,763
Fixed income funds	163,158	_	_	163,158
Index funds	258,941,876	_	_	258,941,876
Self-directed brokerage accounts	282,203,231	_	_	282,203,231
Common collective trusts:				
Index funds (1)	_	48,993,924	_	48,993,924
Target date retirement funds (2)		981,470,578	_	981,470,578
Separate accounts:				
Fixed income bond funds (3)	_	200,582,968	_	200,582,968
Stable value funds (4)	_	143,318,322	_	143,318,322
Ingersoll-Rand Stock Fund (5)	_	861,914,768	_	861,914,768
Allegion Stock Fund (5)	_	240,475,392	_	240,475,392
Investments, at fair value	\$1,502,748,635	\$2,476,755,952	\$ -	-\$3,979,504,587

- (1) Represents investment in common collective trusts that hold equity or fixed income securities. These funds have no unfunded commitments, redemption frequency restrictions, or other redemption restrictions.
- (2) Represents investment in an asset mix that seeks to generate a level of risk and return appropriate for the fund's particular time frame. The asset mix is determined by factors such as the investor's age, projected level of risk aversion and the length of time until the principal will be withdrawn. There are no unfunded commitments, redemption frequency restrictions, or other redemption restrictions.
- (3) Represents investment in a privately managed investment account created for the Master Trust that seeks to maximize price appreciation and current income with volatility similar to its index, the Barclay U.S. Aggregate Bond Index. There are no unfunded commitments, redemption frequency restrictions, or other redemption restrictions.
- (4) Represents investment in a privately managed investment account created for the Master Trust that is primarily comprised of investment contracts issued by financial institutions and other eligible stable value investments. There are no unfunded commitments or redemption frequency restrictions. Transfers to other investment funds could be limited under certain conditions.
- (5) Represents investment in IR-plc or Allegion plc ordinary shares, along with a minor amount of short-term investments, to provide liquidity. There are no unfunded commitments, redemption frequency restrictions, or other redemption restrictions.

5 Tax Status

The Puerto Rico Treasury Department has determined and informed the Company by a letter dated March 10, 2014, that the Plan and related trust are designed in accordance with applicable sections of the Puerto Rico Internal Revenue Code. A second letter was received from the Puerto Rico Treasury Department on November 6, 2015 confirming that the amendments made to the Plan in connection with the retirement choice program were also qualified under the Puerto Rico Internal Revenue Code. The Plan has been amended since requesting the determination letter. The Plan administrator and the Plan's counsel believe that the Plan is designed and is currently being operated in material compliance with the applicable requirements of the Puerto Rico Treasury Department and therefore no provision for income tax is required.

The Plan administrator and the Plan's tax counsel believe that the plan is currently designed and being operated in compliance with the applicable requirements of the Puerto Rico Internal Revenue Code. Therefore, no provision for income taxes has been included in the Plan's financial statements.

GAAP requires Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the Internal Revenue Service or the Puerto Rican Department of Treasury. The Plan administrator has analyzed the tax positions taken by the Plan and has concluded that as of December 31, 2015 and 2014, there are no uncertain positions taken or expected to be taken that would require

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico Notes to Financial Statements
December 31, 2015 and 2014

recognition of a liability or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; there is currently a routine Department of Labor record and document audit in progress. The Plan administrator believes it is no longer subject to income tax examinations for years prior to 2012.

6Party-In-Interest

Certain Plan investments held in the Master Trust are shares of common collective trusts and mutual funds managed by Fidelity, the Plan's recordkeeper and custodian. These transactions qualify as permitted party-in-interest transactions.

Certain Master Trust investments are units of the Ingersoll-Rand Stock Fund which primarily invests in ordinary shares of IR-plc. These transactions qualify as permitted party-in-interest transactions.

7 Plan Termination

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of the Plan, ERISA and the Puerto Rico Internal Revenue Code. In the event the Plan terminates, the interest of each participating employee in the Plan shall be fully vested and such termination shall not reduce the interest of any participating employee or their beneficiaries accrued under the Plan up to the date of such termination.

8 Risks and Uncertainties

Through the Master Trust, the Plan provides for investment options in any combination of equity and fixed income investments in the U.S. and abroad through various investment options. Investment asset classes are exposed to various risks, such as market, interest rate, inflation, foreign currency, economic, political and credit risks. Due to the level of risk associated with the Plan's investments, it is reasonably possible that changes in risks in the near term would materially affect participants' account balances and the amounts reported in the Statements of Net Assets Available for Benefits and the Statements of Changes in Net Assets Available for Benefits.

Schedule I

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico Schedule H, Part IV, Line 4i – Schedule of Assets (Held at End of Year)
December 31, 2015

Plan Sponsor: Thermo King Puerto Rico Manufactura, Inc.

Employer Identification: 66-0777053

Plan Number: 077

Description of investment,

Identity of issue, borrower including maturity date, cost Value (b) rate of interest, collateral party or maturity value Cost Value (e)

(c)

Master Trust, ** \$24,456,503

0.63% participation

*** Notes receivable from participants

Due 01/01/15 - 01/29/21
4.00% - 9.5%

** 1,374,602

TOTAL ASSETS (Held at End of Year)

\$25,831,105

^{*}Includes assets which represent permitted party-in-interest transactions to the Plan.

^{**}Cost information is not required for participant directed investments; therefore, this information is omitted.

^{***} The accompanying financial statements classify participant loans as notes receivable from participants.

Schedule II

Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico Schedule H, Part IV, Line 4a – Schedule of Delinquent Participant Contributions For the year ended December 31, 2015

Plan Sponsor: Thermo King Puerto Rico Manufactura, Inc.

Employer Identification: 66-0777053

Plan Number: 077

Total That Constitutes Nonexempt Prohibited

Transactions

Particip contribu transfer to the Plan	Check ant Here if Late itions Participant red late Loan Repayments are Included	Contributions Corrected Outside Contributions Voluntary Not Corrected Fiduciary Correction Program	Contributions Pending Correction in Voluntary Fiduciary Correction Program	Total Fully Corrected Under Voluntary Fiduciary Correction Program and PTE 2002-51
\$4,536	X	\$-\$ 4,536	\$	

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

INGERSOLL-RAND RETIREMENT SAVINGS PLAN FOR PARTICIPATING AFFILIATES IN PUERTO RICO

Date: June 28, 2016 By: /s/ Paul Longstreet

Name: Paul Longstreet

Title: Benefits Administration Committee

EXHIBIT INDEX

Exhibit Description

No.

23.1 Consent of Cherry Bekaert LLP