Ingersoll-Rand plc Form S-8 POS December 12, 2012 As filed with the Securities and Exchange Commission on December 12, 2012

Registration No. 333-35229-98

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

POST-EFFECTIVE AMENDMENT NO. 3 FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

INGERSOLL-RAND PUBLIC LIMITED COMPANY (Exact name of registrant as specified in its charter)

Ireland (State or other jurisdiction of incorporation or organization) 170/175 Lakeview Dr. Airside Business Park Swords, Co. Dublin Ireland (Address of Principal Executive Offices, Zip Code)

98-0626632 (I.R.S. Employer Identification No.)

Incentive Stock Plan of 1990 of Ingersoll-Rand Company Limited (Full title of the plan)

Robert L. Katz Senior Vice President and General Counsel c/o Ingersoll-Rand Company 800 Beaty-E Street Davidson, North Carolina 28036 (Name and address of agent for service)

(704) 655-4000 (Telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting

company" in Rule 12b-2 of the Exchange Act. Large accelerated filer ý Accelerated filer Non-accelerated filer o (Do not check if a smaller reporting company)

0 Smaller reporting company 0

EXPLANATORY NOTE

This Post-Effective Amendment No. 3 relates to the Registration Statement of Ingersoll-Rand plc (the "Company"), successor to Ingersoll-Rand Company Limited and Ingersoll-Rand Company, on Form S-8 (File No. 033-35229) filed on June 11, 1990, Post-Effective Amendment No-1 (File No. 333-35229-99) filed on January 2, 2002, and Post-Effective Amendment No-2 (File No. 333-35229-98) filed on July 1, 2009 (collectively, the "Registration Statement"), which registered 18,000,000 shares of Company stock (adjusted for stock splits), to be offered pursuant to the Incentive Stock Plan of 1990 of Ingersoll-Rand Company Limited (the "Plan").

The Company hereby terminates the effectiveness of the Registration Statement and, in accordance with an undertaking made by the Company in Part II of the Registration Statement to remove from registration, by means of a post-effective amendment, any securities that had been registered for issuance but remain unsold at the termination of the offering, removes from registration any and all shares of Company stock registered but unsold under the Registration Statement as of the date hereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment No. 3 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Davidson, State of North Carolina, on the 12th day of December, 2012.

Ingersoll-Rand Public Limited Company

By: /s/ Michael W. Lamach (Michael W. Lamach) Chairman and Chief Executive Officer Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 3 to the Registration Statement has been signed below by the following persons in the capacities listed on the 12th day of December, 2012.

Signature	Title
/s/ Michael W. Lamach (Michael W. Lamach)	Chairman, Chief Executive Officer and Director (Principal Executive Officer)
/s/ Steven R. Shawley (Steven R. Shawley)	Senior Vice President and Chief Financial Officer (Principal Financial Officer)
* (Richard J. Weller)	Vice President and Controller (Principal Accounting Officer)
* (Ann C. Berzin)	Director
(John Bruton)	Director
* (Jared L. Cohon)	Director
* (Gary D. Forsee)	Director
* (Peter C. Godsoe)	Director
* (Edward E. Hagenlocker)	Director
* (Constance Horner)	Director
* (Theodore E. Martin)	Director
(Nelson Peltz)	Director
* (Richard J. Swift)	Director
* (Tony L. White)	Director
/s/ Steven R. Shawley (Steven R. Shawley) Attorney-in-Fact	

By: