Title (en)

CONDENSER TUMBLE DRYER HAVING A HEAT PUMP AND A RECIRCULATED-AIR PORTION, AND METHOD FOR OPERATING THE CONDENSER TUMBLE DRYER

Title (de)

KONDENSATIONSTROCKNER MIT WÄRMEPUMPE UND UMLUFTANTEIL SOWIE VERFAHREN ZU SEINEM BETRIEB

Title (fr)

SÈCHE-LINGE À CONDENSEUR AYANT UNE POMPE À CHALEUR ET UNE PARTIE D'AIR RECYCLÉ, ET PROCÉDÉ POUR FAIRE FONCTIONNER LE SÈCHE-LINGE À CONDENSEUR

Publication

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Application

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Abstract (en)

[origin: WO2022189115A1] The invention relates to a condenser tumble dryer (1), comprising: - a drum (2) for laundry items to be dried; - a supply-air channel (3); - an exhaust-air channel (4), from which a recirculated-air channel (5) branches off, the recirculated-air channel leading into the supply-air channel (3) upstream of a drum inlet (6); - a fan (7); - a heat pump (8, 9, 10, 11), which has a condenser (8) disposed in the supply-air channel (3), an evaporator (9) disposed in the exhaust-air channel (4), a throttle (10), and a compressor (11); - a control device; and - a heating device. The condenser tumble dryer (1) is designed such that, in a drying program carried out therein, moist warm process air from the drum (2) flows, in an exhaust-air channel part (12) delimited by the evaporator (9), substantially in the same direction as supply air in an inlet part (13) of the supply-air channel (3), said inlet part containing the condenser (8), and the process air exiting the drum (2) has a relative humidity Frel for which the following applies: Frelmin ≤ Frel ≤ Frelmax, wherein Frelmin is a specified minimum value and Frelmax is a maximum value of the relative humidity attainable in the drying program. The invention also relates to a preferred method for operating said condenser tumble dryer.

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