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(54) Title : WINDING SWITCHING CIRCUIT AND THERMAL PROTECTION FOR DUAL VOLTAGE HERMETIC INDUCTION MOTOR OF HERMETIC COOLING COMPRESSOR

(54) Título : WINDING SWITCHING CIRCUIT AND THERMAL PROTECTION FOR DUAL VOLTAGE HERMETIC INDUCTION MOTOR OF HERMETIC COOLING COMPRESOR

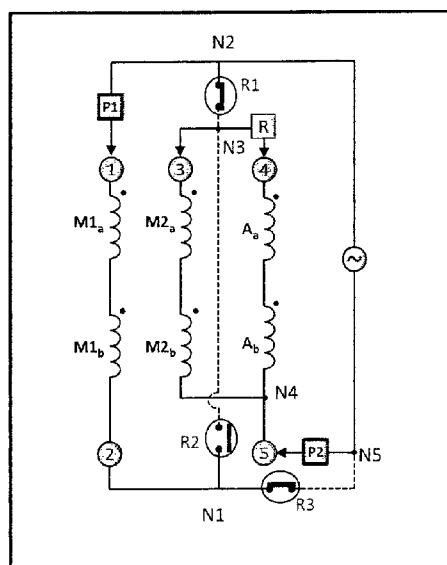


FIG. 3a

(57) Abstract : The present invention refers to a winding switching circuit and thermal protection for dual voltage hermetic induction motors used in hermetic cooling compressors, the circuit comprising two coils of the main winding (M1 and M2), an auxiliary winding (A), three switches (R1, R2 and R3) that are connected and disconnected based on the desired connections for each of the power arrangements (115V or 220V), a start-up relay (R) and thermal protection means that protect the two main windings (M1, M2) from overheating, and the circuit is operative in a first and in a second arrangements, where in the first arrangement, the first switch (R1) and the third switch (R3) are connected, the second switch (R2) is disconnected, and the first main winding (M1), and second main winding (M2) and the auxiliary winding (A) are connected in parallel; and in the second arrangement, the first switch (R1) and the third switch (R3) are disconnected, the second switch (R2) is connected, and the first main winding (M1) and the second main winding (M2) are connected in series and the auxiliary winding (A) is connected in parallel only to the second main winding (M2).

(57) Resumo : The present invention

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refers to a winding switching circuit and thermal protection for dual voltage hermetic induction motors used in hermetic cooling compressors, the circuit comprising two coils of the main winding (M1 and M2), an auxiliary winding (A), three switches (R1, R2 and R3) that are connected and disconnected based on the desired connections for each of the power arrangements (115V or 220V), a start-up relay (R) and thermal protection means that protect the two main windings (M1, M2) from overheating, and the circuit is operative in a first and in a second arrangements, where in the first arrangement, the first switch (R1) and the third switch (R3) are connected, the second switch (R2) is disconnected, and the first main winding (M1), and second main winding (M2) and the auxiliary winding (A) are connected in parallel; and in the second arrangement, the first switch (R1) and the third switch (R3) are disconnected, the second switch (R2) is connected, and the first main winding (M1) and the second main winding (M2) are connected in series and the auxiliary winding (A) is connected in parallel only to the second main winding (M2).