Mbsm.pro, Type of Compressor, csr, psc, pscr, cscr, rsir

Category: compressor

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Here is a table summarizing the types of compressors mentioned in the question:

Type of Compressor

CSR (Capacitor Start, Relay)

PSC (Permanent Split Capacitor)

PSCR (Permanent Split Capacitor with Relay)

CSCR (Capacitor Start, Capacitor Run)

RSIR (Refrigerant-cooled, Semi-Hermetic, Internal Motor, Reciprocating)

Description

Uses a start capacitor and a relay to provide initial torque for starting the compressor motor

Uses a single capacitor to provide both start and run torque for the compressor motor

Similar to a PSC compressor, but also uses a relay to provide additional starting torque when needed

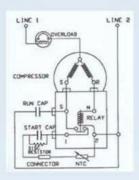
Uses two capacitors, one for starting and one for running the compressor motor

A semi-hermetic design with a motor and compressor enclosed in the same housing, commonly used in commercial refrigeration systems

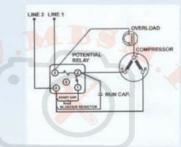
CSR: Capacitor Start Capacitor Run

This motor arrangement uses a start capacitor added to a PSC circuit. The high starting torque is suitable for unequalized systems with capillary tube or expansion valve, maintaining the same efficiency of a PSC motor.





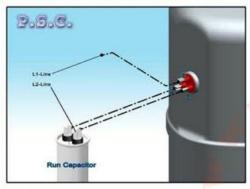


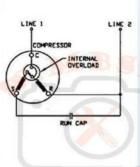


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PSC: Permanent Split Capacitor

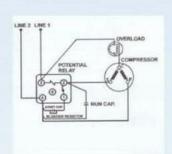
A run capacitor in series with the start winding produces a higher efficiency (EER) in comparison to a RSIR motor. They have a normal starting torque and are designed for capillary tube control devices, with equalized pressures.



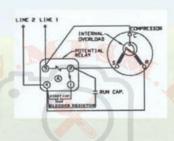


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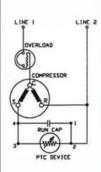


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RSCR: Resistance Start Capacitor Run

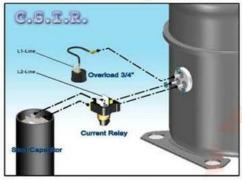
The motors have a PTC starting torque and a run capacitor. Their functioning is similar to the PSC motor. These compressors have a normal starting torque.

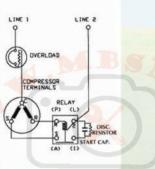




CSIR: Capacitor Start Induction Run

The motors have a high starting torque, using an electrolytic starting capacitor. Recommended for applications with capillary tube or expansion valve systems.





RSIR: Resistance Start Induction Run

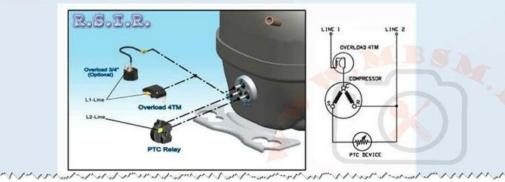
RSIR motor with current relay:

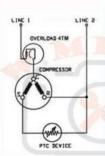
The motors have a normal starting torque and are designed for completely self-equalizing capillary tube.



RSIR motor with PTC relay:

Motor functioning is similar to the RSIR with current relay, except that the current relay is replaced by a PTC relay.



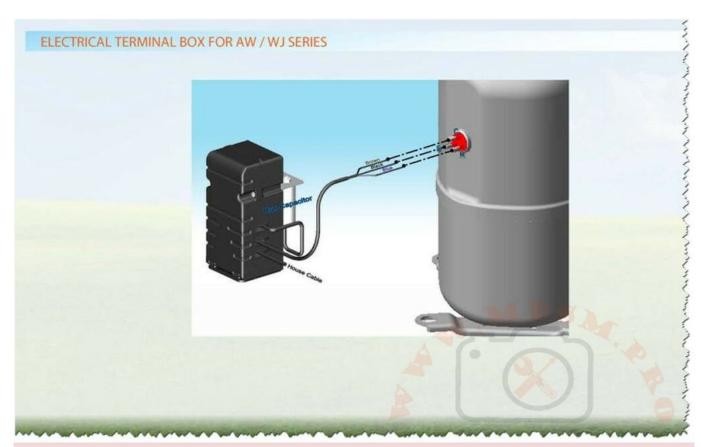


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