



METRA CLARK

Refrigeration & Air-Conditioning Wholesale



DYNARACK

PLUS

TYPE:
MULTIPLEX

CONFIGURATION:
INDOOR

CAPACITY RANGE:
45 to 365 kW

COMMENT

The DynaRack is the flagship product of the Dynamic Compressorised Product range. It has been designed utilising first order thermodynamic principles to ensure optimal component sizing and high refrigeration efficiency. The overall design philosophy was set to create a modular design, that maintains simplicity with ease of installation and maintenance. The DynaRack range has the options of incorporating Copeland Semi-Hermetic and Bitzer Semi-Hermetic compressors. The DynaRack is manufactured under strict ISO 9001:2015 quality management and all units are pressure tested before dispatching.

DESIGN

- Three, four, and five semi-hermetic compressor model options with dual suction circuit capability.
- Rigid, high strength, fully welded S355JR steel frame.
- Complete inboard modular mechanical design with component layout aimed to aid serviceability and maintenance.
- Electrical wiring and switchgear layout based on a modular design, and wiring done to SANS regulations.
- Top and bottom lifting lug locations.
- Centre of mass forklift channels, and corner castor wheel channels.
- Dual entry suction header for improved suction pressure distribution and oil return.
- Mild steel discharge header to mitigate possible discharge pipe cracks.
- Helical oil separator for enhanced oil retention within the multiplex system.
- Low pressure oil management system with oil reservoir.
- Optional inboard vertical liquid receiver.

ENERGY EFFICIENCY OPTIONS

- Digital enhancement for energy saving: Digital and mechanical capacity unloading, VFD, and soft starters to reduce starting inrush current.

STANDARD COMPONENTS

- Individual discharge non-return check valve.
- Individual suction shut-off and filter drier with replaceable solid core.
- Compressor discharge and suction line vibration eliminators.
- Helical oil separator with ball and float.
- Main discharge line magnetic non-return check valve.
- Oil return line includes; hand shut-off valve, filter drier, solenoid valve, and sight glass.
- Oil return header with individual isolating valves.
- Mechanical oil level regulator.
- Liquid line replaceable filter drier, sight glass, and ball valves.
- Rack controller options include: Dixell, Danfoss, Carel, Eliwell.
- Liquid receiver manufactured and certified to European specifications, available in 80, 110, 160, 220, and 275 Liters.

OPTIONAL EXTRAS

- Outdoor housing.
- Individual compressor drip pan.
- Condenser fan speed control.
- Electronic oil level management.
- BPHE Hot water recovery.
- Remote suction accumulator (Max. 70L).
- Laser cut customer logo.