| Sr. No. | | | Description | UOM (Wherever Applicable) | Data (Common For All Models) | KWI130.14 | KWI150.14 | KWI170.14 | KWI195.14 | KWI220.14 | KWI240.14 | KWI265.14 | KWI280.14 | KWI265.24 | KWI295.24 | KWI320.24 | KWI340.24 | KWI365.24 | KWI390.24 | KWI415.24 | KWI445.24 | KWI460.24 | KWI485.24 | KWI505.24 | KWI525.24 | KWI545.24 | KWI560.24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | | | General Points | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Cooling Capacity | $ton_R$ | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Power Consumption | kW | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Specific Power Consumption | $kW/ton_R$ | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Co-Efficient of Performance (COP) | kW/kW | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | No. of Compressors | Nos. | → | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 6 | | No. of Individual Refrigerant Circuits | Nos. | → | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 7 | | Refrigerant | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Name | - | R134a | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Quantity | kg | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Technical Specifications | - | Refer ESP-18-19-003 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 8 | | Sound Pressure Level | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Noise Level | dB | Refer ESP-18-19-001 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Measuring Standard | - | ANSI/AHRI Standard 575-2008 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 9 | | Insulation Details | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Material | - | Closed Cell Nitrile Foam | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Insulation Thickness on Various Parts | - | For Standard Temperature Range (LWT upto -10 0C) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Evaporator Shell | mm | 32 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Evaporator Tubesheet | mm | 19 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Evaporator Dished End | mm | 19 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Evaporator M.W.Box (If Applicable) | mm | 19 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Evaporator Support Plate | mm | 19 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Compressor Motor Body | mm | 19 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Suction Line Assembly | mm | 19 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Liquid Line Assembly | mm | 9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Insulation Thickness on Various Parts | - | For Brine Temperature Range (LWT below -10 0C) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Evaporator Shell | mm | 51 (32+19) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Evaporator Tubesheet | mm | 32 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Evaporator Dished End | mm | 32 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Evaporator M.W.Box (If Applicable) | mm | 32 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Evaporator Support Plate | mm | 32 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Compressor Motor Body | mm | 28 (19+9) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Suction Line Assembly | mm | 28 (19+9) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Liquid Line Assembly | mm | 19 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Density | $kg/m^3$ | 76.6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | v | Thermal Conductivity | W/m.K | 0.035 (at 0 0C Mean Temperature) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vi | Standard | - | IS 14164 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vii | Adhesive | - | Blend of Synthetic Polymers and Synthetic Resin | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | viii | Insulation Specifications | - | Refer ESP-18-19-004 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10 | | Vibration | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Vibration Level | mm/sec | Less than 1.5 mm/sec | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Vibration control | - | Rubber Pads (Standard) / Spring Isolators (At an Additional Cost) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Standard | - | IS 12075 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11 | | Painting Specification | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Paint Type | - | RAL 7035 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Standard | - | Coating as per KCPL Standards | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12 | | Overall Dimensions | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Approx. Length | mm | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Approx. Width | mm | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Approx. Height | mm | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 13 | | Space Clearances Required | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Plain End Side (For Tube Cleaning) | mm | → | 2900 | 2900 | 2900 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 | 3800 |
| | | ii | All Other Sides | mm | → | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 |
| | | iii | Overhead | mm | → | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 |
| | 14 | | Weight | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Approx. Shipping Weight | kg | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Approx. Operating Weight | kg | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 15 | | Cable Sizes | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Aluminum Cable | - | Refer ESP-14-15-01 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Copper Cable | - | Refer ESP-14-15-01 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| B | | | Compressor Details | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Make | - | Kirloskar Chillers Private Limited | | | | | | | | | | | | | | | | | | | | | |
| | 2 | | Type / Description | - | Semi-Hermetic Twin Screw Compressor | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Model | - | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Drive | - | Direct Driven by Rotor Shaft | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | Capacity Control Percentage | % | → | 100-35% | 100-35% | 100-35% | 100-35% | 100-35% | 100-35% | 100-35% | 100-35% | 100-17.5% | 100-17.5% | 100-17.5% | 100-17.5% | 100-17.5% | 100-17.5% | 100-17.5% | 100-17.5% | 100-17.5% | 100-17.5% | 100-17.5% | 100-17.5% | 100-17.5% | 100-17.5% |
| | 6 | | Type of Capacity Control | - | Stepless | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 7 | | Capacity Control Mechanism | - | Variable Speed | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 8 | | Volumetric Ratio | - | Fixed Ratio (2.2) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 9 | | Design and Test Parameters | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Design Pressure | bar | 30 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Test Pressure (Pneumatic) | bar | 33 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Design Temperature | $^0C$ | 120 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Max. Allowable Discharge Temperature | $^0C$ | 120 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11 | | Bearings | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Types of Bearings | - | Roller Bearings - For Radial Load | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | - | Angular Contact Roller Bearing - For Axial Load | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Material of Construction | - | Steel | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Life of Bearing | Hours | 50,000 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Class of Bearing | - | Proprietary Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12 | | Lubrication | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Type | - | Lubrication by Differential Pressure Mechanism | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Lubricating Oil | - | Synthetic Oil | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Grade of Lubricating Oil | - | Proprietary Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Quantity | Liter | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 13 | | Compressor Components MOC | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Screw | - | Alloy Steel | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Casing | - | Cast Iron | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Shaft | - | Alloy Steel | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Rotor | - | Aluminum Alloy | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 14 | | Physical Data of Compressor | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Screw Construction | - | Twin Screw | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| Sr. No. | | | Description | UOM (Wherever Applicable) | Data (Common For All Models) | KWI130.14 | KWI150.14 | KWI170.14 | KWI195.14 | KWI220.14 | KWI240.14 | KWI265.14 | KWI280.14 | KWI265.24 | KWI295.24 | KWI320.24 | KWI340.24 | KWI365.24 | KWI390.24 | KWI415.24 | KWI445.24 | KWI460.24 | KWI485.24 | KWI505.24 | KWI525.24 | KWI545.24 | KWI560.24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ii | No. of Lobes Male Rotor | Nos. | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | No. of Lobes Female Rotor | Nos. | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Male Rotor Diameter (mm) | mm | Proprietary Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | v | Female Rotor Diameter (mm) | mm | Proprietary Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vi | Driving Rotor | - | Male Rotor | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 15 | | Oil Filter | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Micron Rating | Micron | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Material of Construction | - | Resin Impregnated Fibres | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Quantity | Nos. | 1 No. per Compressor | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 16 | | Copressor Isolation Type | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | At Suction | - | Butterfly Valve | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | At Discharge | - | Shut-off Valve | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| C | | | Compressor Motor Details | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Make | - | Kirloskar Approved Vendor | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Motor Type | - | Semi-Hermetic Squirrel Cage Induction Motor | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Type of Duty | - | Continuous | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Motor Rating | kW | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | Motor Speed (Synchronous) | RPM | 3600 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6 | | Ingress Protection (IP) | - | NA, Being Semi-Hermetic Type | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 7 | | $GD^2$ of Rotor | - | Proprietary Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 8 | | Whether SPDP or TEFC? | - | NA, Being Semi-Hermetic Type | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 9 | | Power Supply Details (Standard) | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Supply Voltage | V | 415 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Permissible Voltage Variation | % | ±10% | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Frequency | Hz | 60 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Permissible Frequency Variation | % | ±3% | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | v | Phase | - | 3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10 | | Performance Indicators | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Motor Efficiency Class | - | NA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Motor Power | kW | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Motor Efficiency | - | Consult with Engineering Department on Case to Case Basis | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Power Factor | - | Consult with Engineering Department on Case to Case Basis | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | v | Class of Insulation | - | Class F | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11 | | Motor Cooling | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Motor Cooling Type | - | Refrigerant Cooled | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Cooling Mechanism | - | Suction Gas | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Temperature at full load | $^0C$ | 10 to 15 (At Normal Condtions) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12 | | Current Details | | | | | | | | | | | | | | | | | | | | | | | | |
| | | ii | Rated Load Current | A | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Full Load Current | A | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Inrush/Starting Current | A | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | v | Locked Rotor Current | A | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vi | Starting Torque | N.m | → | 192 | 192 | 226 | 226 | 226 | 226 | 226 | 226 | 192 + 192 | 192 + 192 | 226 + 192 | 226 + 226 | 226 + 226 | 226 + 226 | 226 + 226 | 226 + 226 | 226 + 226 | 226 + 226 | 226 + 226 | 226 + 226 | 226 + 226 | 226 + 226 |
| | | vii | No Load Current | A | → | 44.7 | 44.7 | 74.3 | 74.3 | 74.3 | 74.3 | 74.3 | 74.3 | 44.7 + 44.7 | 44.7 + 44.7 | 74.3 + 44.7 | 74.3 + 74.3 | 74.3 + 74.3 | 74.3 + 74.3 | 74.3 + 74.3 | 74.3 + 74.3 | 74.3 + 74.3 | 74.3 + 74.3 | 74.3 + 74.3 | 74.3 + 74.3 | 74.3 + 74.3 | 74.3 + 74.3 |
| | | viii | Acceleration Time to Reach Rated Speed | Sec | 2 to 3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 13 | | Control Settings | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | No. of Starts per Hour | Nos. | 4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Time Between STOP to START | Sec | 300 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Time Between START to START | Sec | 900 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| D | | | Power Supply (Standard-Chiller Icomer) | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Supply Voltage | V | 415 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Permissible Voltage Variation | % | ±10% | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Frequency | Hz | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Permissible Frequency Variation | % | ±3% | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | Phase | - | 3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6 | | Control Voltage | V | 230 (Standard) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | | 110 (Special-Optional) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 7 | | Supply Wire System | - | 3 Phase - 4 Wire System (Standard) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | | 3 Phase - 3 Wire System (Special-Optional) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 8 | | Fault Level at Busbar | kA | As per KCPL Standard Practice | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| E | | | Oil Separator Details | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Type | - | Horizontal Type | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Internal Structure | - | Baffle - Demister Arrangement | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Method of Oil Separation | - | Separation by "Filtering Effect" Obtained Through Demister | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Material of Construction | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Body and Other Parts | - | Mild Steel (Refer "MOC" Sheet) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Demister | - | SS | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | Physical Details | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Shell Diameter | inch | → | 22 | 22 | 22 | 26 | 26 | 26 | 26 | 26 | 22 | 22 | 22 | 22 | 22 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 |
| | | ii | Approx. Length | mm | → | 1225 | 1225 | 1225 | 1395 | 1395 | 1395 | 1395 | 1395 | 2035 | 2035 | 2035 | 2035 | 2035 | 2365 | 2365 | 2365 | 2365 | 2365 | 2365 | 2365 | 2365 | 2365 |
| | 6 | | Seperation Efficiency | % | 99 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 7 | | Oil Heater Details | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Make | - | Kirloskar Approved Vendor | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Quantity | Nos. | → | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | iii | Power Supply | V | 230 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Rating | W | 250 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| F | | | Oil Cooler | - | Not Applicable | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| G | | | Evaporator Details | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Model | - | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Design Code | - | As per KCPL Standards | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Type | - | Shell and Tube Falling Film Design | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Tube Side (Fluid) | - | Chilled Water | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | Shell Side (Fluid) | - | Refrigerant | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6 | | Design Parameters | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Design Temperature (Refrigerant Side) | $^0C$ | 65 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Max. Operating Pressure (Refrigerant Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Design Pressure (Refrigerant Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Test pressure (Refrigerant Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | v | Testing method (Refrigerant Side) | - | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vi | No. of Passes (Refrigerant Side) | Nos. | Single Pass | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vii | Design Temperature (Water Side) | $^0C$ | 65 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | viii | Max. Operating Pressure (Water Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| Sr. No. | | | Description | UOM (Wherever Applicable) | Data (Common For All Models) | KWI130.14 | KWI150.14 | KWI170.14 | KWI195.14 | KWI220.14 | KWI240.14 | KWI265.14 | KWI280.14 | KWI265.24 | KWI295.24 | KWI320.24 | KWI340.24 | KWI365.24 | KWI390.24 | KWI415.24 | KWI445.24 | KWI460.24 | KWI485.24 | KWI505.24 | KWI525.24 | KWI545.24 | KWI560.24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ix | Design Pressure (Water Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | x | Test pressure (Water Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xi | Testing method (Water Side) | - | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xii | No. of Passes (Water Side) | Nos. | Two Pass | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xiii | Water Velocity | m/s | Less than 3 m/s | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xiv | Inlet Pressure | bar | Depends on Site Piping Layout (Maximum Allowable - 9.4 bar) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xv | Evaporating Temperature | $^0$C | Consult with Engineering Department on Case to Case Basis | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 7 | | Physical Data of Evaporator | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Overall Length of Evaporator | ft | → | 9 | 9 | 9 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| | | ii | Shell Diameter | inch | → | 22 | 22 | 24 | 22 | 24 | 24 | 24 | 24 | 24 | 24 | 26 | 26 | 26 | 30 | 30 | 30 | 36 | 36 | 36 | 36 | 36 |
| | | iii | Shell Thickness | mm | → | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| | | iv | Approx. Shell Length | mm | → | 2662 | 2662 | 2650 | 3548 | 3536 | 3536 | 3536 | 3536 | 3536 | 3536 | 3536 | 3536 | 3536 | 3526 | 3526 | 3526 | 3504 | 3504 | 3504 | 3504 | 3504 |
| | | v | Material of Construction of Shell | - | Mild Steel | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vi | Material Standard of Shell | - | Refer "MOC" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vii | Tube Type/ Nature of Tube Surface | - | Integral Helical Fins on the Outside Surface and Integral Helical Ridges on the Inside Surface | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | viii | Tube Length | mm | Refer "HX Details" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ix | Tube Diameter | mm | Refer "HX Details" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | x | Tube Thickness | mm | Refer "HX Details" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xi | Material of Construction of Tube | - | Cu | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xii | Material Standard of Tube | - | Refer "MOC" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xiii | Water Volume in Evaporator | Liter | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 8 | | Water Box Details | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Type | - | Standard - Dish Ends (M.W.Box - Optional) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Material | - | Mild Steel | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Material Standard | - | Refer "MOC" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Nozzle size | NB | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | v | End connection | - | Standard - Victaulic Conn. (Flanged Conn. - Optional) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vi | MOC of Water Side Gasket | - | NAM AF 120 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vii | MOC of Refrigerant Side Gasket | - | NAM AF 159 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 9 | | Accessories Provided | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Pressure Relief Valve | - | Spring Loaded (For Safety Valve Set Pressure Refer ESP) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Drain/Vent Valves | Inch | Plugged Connection Provided (3/8" NPT) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| H | | | Condenser Details | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Model | - | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Design Code | - | As per KCPL Standards | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Type | - | Shell and Tube Flooded Design | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Tube Side (Fluid) | - | Chilled Water | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | Shell Side (Fluid) | - | Refrigerant | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6 | | Design Parameters | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Design Temperature (Refrigerant Side) | $^0$C | 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Max. Operating Pressure (Refrigerant Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Design Pressure (Refrigerant Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Test pressure (Refrigerant Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | v | Testing method (Refrigerant Side) | - | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vi | No. of Passes (Refrigerant Side) | Nos. | Single Pass | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vii | Design Temperature (Water Side) | $^0$C | 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | viii | Max. Operating Pressure (Water Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ix | Design Pressure (Water Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | x | Test pressure (Water Side) | bar | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xi | Testing method (Water Side) | - | Refer ESP-07-08-107 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xii | No. of Passes (Water Side) | Nos. | Two Pass | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xiii | Water Velocity | m/s | Less than 3 m/s | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xiv | Inlet Pressure | bar | Depends on Site Piping Layout (Maximum Allowable - 9.4 bar) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xv | Condensing Temperature | | Consult with Engineering Department on Case to Case Basis | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 7 | | Physical Data of Condenser | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Overall Length of Condenser | ft | → | 9 | 9 | 9 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| | | ii | Shell Diameter | inch | → | 18 | 18 | 20 | 18 | 20 | 20 | 20 | 20 | 20 | 20 | 22 | 22 | 22 | 26 | 26 | 30 | 30 | 30 | 30 | 30 | 30 |
| | | iii | Shell Thickness | mm | → | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 10 | 10 |
| | | iv | Shell Length | mm | → | 2668 | 2668 | 2662 | 3554 | 3548 | 3548 | 3548 | 3548 | 3548 | 3548 | 3540 | 3540 | 3540 | 3528 | 3528 | 3516 | 3516 | 3516 | 3516 | 3516 | 3516 |
| | | v | Material of Construction of Shell | - | Mild Steel | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vi | Material Standard of Shell | - | Refer "MOC" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vii | Tube Type/ Nature of Tube Surface | - | Integral Helical Fins on the Outside Surface and Integral Helical Ridges on the Inside Surface | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | viii | Tube Length | mm | Refer "HX Details" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ix | Tube Diameter | mm | Refer "HX Details" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | x | Tube Thickness | mm | Refer "HX Details" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xi | Material of Construction of Tube | - | Cu | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xii | Material Standard of Tube | - | Refer "MOC" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | xiii | Water Volume in Condenser | Liter | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 8 | | Water Box Details | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Type | - | Standard - Dish Ends (M.W.Box - Optional) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Material | - | Mild Steel | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Material Standard | - | Refer "MOC" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Nozzle size | NB | Refer KCPL Chiller Selection System Software | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | v | End connection | - | Standard - Victaulic Conn. (Flanged Conn. - Optional) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vi | MOC of Water Side Gasket | - | NAM AF 120 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vii | MOC of Refrigerant Side Gasket | - | NAM AF 159 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 9 | | Accessories Provided | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Pressure Relief Valve | - | Spring Loaded (For Safety Valve Set Pressure Refer ESP) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Drain/Vent Valves | Inch | Plugged Connection Provided (3/8" NPT) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| I | | | Suction Line | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Design Code | - | ASME B31.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Isolation Valve | - | Butterfly Valve | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Material of Construction | - | Carbon Steel | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Material Standard | - | Refer "MOC" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | Angle Valve | - | Provided on Suction Line For Oil Recovery Line | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| J | | | Discharge Line | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Design Code | - | ASME B31.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Isolation Valve | - | Shut-off Valve | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Material of Construction | - | Carbon Steel | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Material Standard | - | Refer "MOC" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| Sr. No. | | | Description | UOM (Wherever Applicable) | Data (Common For All Models) | KWI130.14 | KWI150.14 | KWI170.14 | KWI195.14 | KWI220.14 | KWI240.14 | KWI265.14 | KWI280.14 | KWI265.24 | KWI295.24 | KWI320.24 | KWI340.24 | KWI365.24 | KWI390.24 | KWI415.24 | KWI445.24 | KWI460.24 | KWI485.24 | KWI505.24 | KWI525.24 | KWI545.24 | KWI560.24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | | Skin Type Thermowell | - | Provided on Discharge Line For Discharge Temp. Sensor | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| K | | | Liquid Line | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Design Code | - | ASME B31.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Expansion Valve | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Type | - | Electronic Expansion Valve | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Make | - | Kirloskar Approved Vendor | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Quantity | Nos. | → | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | iv | Sight Glass | - | Inbuilt | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | v | Moisture Indicator | - | NA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Filter Drier | - | NA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Material of Construction | - | Copper | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | Material Standard | - | Refer "MOC" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| L | | | Desuperheater | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Type | - | Plate Type | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Quantity | Nos. | One per Compressor | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Operating Conditions | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Heat Duty | kW | Depends on Working Conditions | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Hot Water Inlet Temperaure | $^0$C | Depends on Site Conditions (Max. Possible - 40) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Hot Water Outlet Temperaure | $^0$C | Max. Possible - 45 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Hot Water Flow Rate | L/s | Depends on Working Conditions | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Material of Construction | - | Brazzed PHE, Plate Material - SS | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | Water Side End connection Details | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | Water Inlet Connection | NB | Consult with Engineering Department on Case to Case Basis | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | Water Outlet Connection | NB | Consult with Engineering Department on Case to Case Basis | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6 | | Pressure Drop | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Water Side | bar | less than 0.5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Refrigerant Side | bar | Proprietary Data | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| M | | | Economizer | - | Not Applicable | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| N | | | Starter and Control Panel | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Panel Enclosure | - | Single Circuit - Starter and Control Panel Integrated in Single Fabricated Box<br>Dual Circuit - VFDs are Mounted on Both Sides (Outside) of Control Panel | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Make | - | Kirloskar Approved Vendor | | | | | | | | | | | | | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Material of Enclosure | - | Rittal Enclosure - Sheet Steel<br>Fabricated Enclosure - CRCA Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Thickness of Enclosure | mm | For Single Circuit Chillers (Starter and Control Panel)<br>Fabricated Enclosure - (For Dual Circuit Chillers)<br>Load Bearing Member - 2 mm<br>Non-Load Bearing Member - 1.6 mm<br><br>For Dual Circuit Chillers<br>Control Panel<br>Rittal Enclosure<br>Enclosure - 1.5 mm<br>Door - 2 mm<br><br>Starter Panel<br>Fabricated Enclosure<br>Load Bearing Member - 2 mm<br>Non-Load Bearing Member - 1.6 mm | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | Ingress Protection (IP) | - | IP54 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6 | | Painting Specification | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Paint Type | - | RAL 7035 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Standard | - | Coating as per KCPL Standards | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 7 | | Mounting Arrangement | - | Mounted on Chiller | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 8 | | Type of Starter | - | VFD Starter | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 9 | | Type of Isolation | - | SDU as Incomer for Individual Circuit | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10 | | Type of Protection | - | Motor Protection - Built in VFD<br>Motor Winding Protection - WPU (Winding Protection Unit) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11 | | Switchgear Make | - | Refer "Make List" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12 | | Electrical and Control Cables | - | Power - PVC Insulated Single Core (Vtg. Grade 1.1 kV)<br>Control- PVC Insulated Single Core, Multicore Cable (Vtg. Grade 1.1 kV)<br>Signal- Shielded Cable | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 13 | | Optional Features | | | | | | | | | | | | | | | | | | | | | | | | |
| | | i | Phase Indicating Lamps | - | Special-Optional | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | ii | Hooter | - | Special-Optional | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iii | Energymeter | - | Special-Optional | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | iv | Door Handle | - | Special-Optional | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | v | LOTO Arrangement | - | Special-Optional | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vi | Active Harmonic Filter | - | Special-Optional | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | vii | AC Input Choke | - | Special-Optional | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | viii | Purge Panel | - | Special-Optional | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| O | | | Controller | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | Make | - | Refer "Make List" Sheet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | | Transmitters | - | NA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | | Oil Level Switch | - | Yes, Provided | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | | Oil Level Failure Trip | - | Yes, Provided | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 5 | | LP Switch and Gauge | - | No, Controller Program will Take Care of Low Pressure | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6 | | HP Switch and Gauge | - | No, Controller Program will Take Care of High Pressure | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 7 | | Chilled Water Flow Failure | - | Yes | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 8 | | Cooling Water Flow Failure | - | Yes | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 9 | | Reverse Rotor Protection | - | No | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10 | | High/Low Voltage Trip | - | Yes | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11 | | Low Current Trip (Current Based-Analog) | - | Yes | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12 | | High Current Trip (Current Based-Analog) | - | Yes | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 13 | | Phase Failure/Reverse Phasing Trip | - | Yes | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 14 | | Earth Fault Trip | - | No | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 15 | | Communication Through RS232/RS485 | - | RS485 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 16 | | Display of Microprocessor | - | Yes | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 17 | | Type of Display | - | 7" Touch Screen Display | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| Sr. No. | Description | UOM (Wherever Applicable) | Data (Common For All Models) | KWI130.14 | KWI150.14 | KWI170.14 | KWI195.14 | KWI220.14 | KWI240.14 | KWI265.14 | KWI280.14 | KWI265.24 | KWI295.24 | KWI320.24 | KWI340.24 | KWI365.24 | KWI390.24 | KWI415.24 | KWI445.24 | KWI460.24 | KWI485.24 | KWI505.24 | KWI525.24 | KWI545.24 | KWI560.24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Remote Monitoring Facility | - | Yes | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 19 | Output to DCS | - | Applicable (Only if RS485 is Available) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |