

| Sr. No. |      | Description                            | UOM<br>(Wherever<br>Applicable) | Data (Common For All Models)   | KWE100.14 | KWE115.14 | KWE135.14 | KWE155.14 | KWE175.14 | KWE190.14 | KWE210.14 | KWE225.14 | KWE200.24 | KWE230.24 | KWE250.24 | KWE270.24 | KWE290.24 | KWE310.24 | KWE330.24 | KWE350.24 | KWE365.24 | KWE380.24 | KWE405.24 | KWE420.24 | KWE435.24 | KWE450.24 |  |  |  |
|---------|------|--|---------------------------------|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|--|
| A       |      | General Points                         |                                 |  |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |  |  |  |
|         | 1    | Cooling Capacity                       | ton <sub>h</sub>                | Refer KCPL Chiller Selection System Software   | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | 2    | Power Consumption                      | kW                              | Refer KCPL Chiller Selection System Software   | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | 3    | Specific Power Consumption             | kW/ton <sub>h</sub>             | 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         | 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         | 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 OC)                                     | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         |      | 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 OC)                                       | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         |      | 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 <sup>3</sup>               | 76.6   | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | v    | Thermal Conductivity                   | W/m.K                           | 0.035 (at 0 OC 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      | 2900      | 2900      | 2900      | 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      | 1000      | 1000      | 1000      | 1000      | 1000      | 1000      | 1000      | 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            | -                               |  | 100-25%   | 100-25%   | 100-25%   | 100-25%   | 100-25%   | 100-25%   | 100-25%   | 100-25%   | 100-12.5% | 100-12.5% | 100-12.5% | 100-12.5% | 100-12.5% | 100-12.5% | 100-12.5% | 100-12.5% | 100-12.5% | 100-12.5% | 100-12.5% | 100-12.5% | 100-12.5% | 100-12.5% |  |  |  |
|         | 6    | Type of Capacity Control               | -                               | Stepless   | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | 7    | Capacity Control Mechanism             | -                               | Slide Valve Mechanism  | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | 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                     | °C                              | 120  | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | iv   | Max. Allowable Discharge Temperature   | °C                              | 120  | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | 10   | Bearings                               |                                 |  |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |  |  |  |
|         | i    | Types of Bearings                      | -                               | Roller Bearings - For Radial Load<br>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   | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | 11   | 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   | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | 12   | Compressor Components MOC              |                                 |  |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |  |  |  |
|         | i    | Screw                                  | -                               | Alloy Steel  | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | ii   | Casing                                 | -                               | Cast Iron  | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | iii  | Shaft                                  | -                               | Alloy Steel  | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | iv   | Rotor                                  | -                               | Aluminum Alloy   | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |
|         | 13   | Physical Data of Compressor            |                                 |  |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |  |  |  |
|         | i    | Screw Construction                     | -                               | Twin Screw   | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |  |



| Sr. No. | Description                 |                                       | UOM<br>(Wherever<br>Applicable)              | Data (Common For All Models)   | KWE100.14 | KWE115.14 | KWE135.14 | KWE155.14 | KWE175.14 | KWE190.14 | KWE210.14 | KWE225.14 | KWE200.24 | KWE230.24 | KWE250.24 | KWE270.24 | KWE290.24 | KWE310.24 | KWE330.24 | KWE350.24 | KWE365.24 | KWE380.24 | KWE405.24 | KWE420.24 | KWE435.24 | KWE450.24 |  |  |
|---------|-----------------------------|---------------------------------------|--|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
|         | 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 (Water Side)           | bar  | Depends on Site Piping Layout (Maximum Allowable - 9.4 bar)                                    | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |
|         | xv                          | Evaporating Temperature               | °C   | Consult with Engineering Department on Case to Case Basis                                      | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |  |  |
| 7       | Physical Data of Evaporator |                                       |  |  |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |  |  |
|         | i                           | Overall Length of Evaporator          | ft   |  | 9         | 9         | 9         | 9         | 9         | 9         | 12        | 12        | 12        | 12        | 12        | 12        | 12        | 12        | 12        | 12        | 12        | 12        | 12        | 12        | 12        | 12        |  |  |
|         | ii                          | Shell Diameter                        | inch   |  | 20        | 20        | 20        | 22        | 22        | 24        | 22        | 22        | 22        | 22        | 22        | 22        | 24        | 24        | 24        | 24        | 26        | 26        | 26        | 26        | 30        | 30        |  |  |
|         | iii                         | Shell Thickness                       | mm   |  | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 10        | 10        |  |  |
|         | iv                          | Approx. Shell Length                  | mm   |  | 2662      | 2662      | 2662      | 2662      | 2662      | 2650      | 3548      | 3548      | 3548      | 3548      | 3536      | 3536      | 3536      | 3536      | 3536      | 3536      | 3536      | 3536      | 3536      | 3536      | 3526      | 3526      |  |  |
|         | 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) | °C   | 100  | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         |           |           |           |  |  |

