



| Nr.       | Kriterium                                                                                                                                                                                                                                                                                                                             | Bemerkung                                                                                                                                                                                                                                                                                                    | i.O.? |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <b>1</b>  | <b>Außeneinheit</b>                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                              |       |
| 1.1       | <b>Verdrahtung</b><br><br>Absicherung Netz Steuerung und Netz Inverter gem. techn. Daten?<br><br>Leitung Netz Steuerung und Netz Inverter $\geq 2,5\text{mm}^2$<br>Leitung Modbus 3 x 0,5mm <sup>2</sup> geschirmt?<br><br>Zuleitung Netz Inverter über IDU:X0 geführt?<br><br>Liegt Spannung an Netz Steuerung und Netz Inverter an? | Feinsicherung (MT4AH / 250VAC, 5 x 20mm)<br><br><br>1) Nennquerschnitt 2,5mm <sup>2</sup> , max. 4mm <sup>2</sup><br>2) Min. 3 x 0,5mm, geschirmt                                                                                                                                                            |       |
| 1.2       | <b>Aufstellung</b><br><br>Schutzbereiche beachten<br><br>(Aufstellung <u>nicht</u> in Gebäudenähe:<br>Schutzbereich 1m umlaufend um die Außeneinheit)                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                              |       |
| 1.3       | <b>Kondensatablauf</b><br><br>Gefälle der Leitungen<br><br>Frostfreie Verlegung                                                                                                                                                                                                                                                       | <br>① Kondensatablaufröhr DN 50 zwischen Boden und Wärmepumpe gedämmt<br>② Kiesschicht zur Aufnahme von bis zu 50 Liter Kondensat pro Tag<br>③ Schmutz-, Regenwasserkanal oder Drainageröhr                                                                                                                  |       |
| 1.4       | <b>Transportsicherung Verdichter</b><br><br>Schraube SW13 entfernen                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                              |       |
| 1.5       | <b>Körperschallübertragung bei Wandkonsole</b><br><br>Gerät schallentkoppelt montiert?<br>Gummipuffer verwendet?                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                              |       |
| <b>2.</b> | <b>Inneneinheit</b>                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                              |       |
| 2.1       | <b>Verdrahtung HCM-4</b><br><br>Absicherung Netz gem. techn. Daten?<br><br>Liegt Spannung am Netzanschluss an?<br><br>AF und SF angeschlossen?                                                                                                                                                                                        | <br>Netz: Netzanschluss 230VAC<br>Z1: Versorgung für Zubehör 230V<br>HKP: Externe Heizkreispumpe<br>3WV: Ext. 3-Wegeventil Heizen/Kühlen<br>A1: parametrierbarer Ausgang<br><br>E1: parametr. Eingang<br>E2/SAF: Sammlerfühl., GLT<br><b>AF: Außenfühler</b><br><b>SF: Speicherfühler</b><br>eBUS: 1(+)/2(-) |       |

| Nr.                                                       | Kriterium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Bemerkung                                                                                                                                                                                                                                                                                                   | i.O.?  |   |                  |      |       |   |                |        |       |  |  |  |  |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---|------------------|------|-------|---|----------------|--------|-------|--|--|--|--|
| 2.2                                                       | <b>Verdrahtung Klemmleiste X0</b><br>Absicherung Netz und Netz Inverter gem. techn. Daten?<br>Leitung Netz & Netz Inverter $\geq 2,5\text{mm}^2$<br>Leitung Modbus 3 x 0,5mm <sup>2</sup> geschirmt?<br>Zuleitung Netz Inverter über IDU:X0 geführt?<br>Liegt Spannung an Netz und Netz Inverter an?<br><br><b>Netz &amp; Inverter:</b><br>ODU: X0:L1 – IDU: X0:L1<br>ODU: X0:L2 – IDU: X0:L2<br>ODU: X0:L3 – IDU: X0:L3<br>ODU: X0:PE – IDU: X0:PE<br><b>Modbus-Schnittstelle:</b><br>ODU: X0:MB GND – IDU: X0:MB GND<br>ODU: X0:MB+ – IDU: X0:MB+<br>ODU: X0:MB- – IDU: X0:MB-<br><br>Bei Kaskadenanlagen mit mehreren Wärmepumpen ist die eindeutige Zuordnung der Modbusleitungen von IDU1 zu ODU1, bzw. IDU2 zu ODU2, usw. zu prüfen.<br>EVU-Sperre: potentialfreier Kontakt an X0-EVU/GND<br>Wird die EVU-Sperre nicht verwendet, ist eine Brücke an X0-EVU/GND einzusetzen |                                                                                                                                                                                                                                                                                                             |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 2.3                                                       | <b>Anlagenkonfiguration</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Fachmannparameter WP001 eingestellt                                                                                                                                                                                                                                                                         |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 2.4                                                       | <b>Heizkurveneinstellung</b><br>BM-2-Fachmannebene:<br>Heizkreis bzw. Mischerkreis-Heizkurven                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Sockeltemperatur : z.B. 30°C<br>Max. Vorlauftemperatur: z.B. 35°C                                                                                                                                                                                                                                           |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| <b>3 Regelung / Regelungszubehör (MM-2, SM1-2, SM2-2)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                             |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 3.1                                                       | <b>E-Bus</b><br>richtig angeschlossen?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1(+) / 2(-)                                                                                                                                                                                                                                                                                                 |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 3.2                                                       | <b>Adresseinstellung</b><br>bei den Heizgeräten und Modulen (MM-2, BM-2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Siehe auch Inbetriebnahmeanleitung WRS (in der Verpackung der Erweiterungsmodule)<br>                                                                                                                                                                                                                       |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 3.3                                                       | <b>Anlagenkonfigurationseinstellung</b><br>bei den Modulen (MM-2, SM1-2, SM2-2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <table border="1"> <tr> <td>MM-2</td> <td>=</td> <td>Mischerparameter</td> <td>MI05</td> </tr> <tr> <td>SM1-2</td> <td>=</td> <td>Solarparameter</td> <td>SOL 12</td> </tr> <tr> <td>SM2-2</td> <td></td> <td></td> <td></td> </tr> </table>                                                                | MM-2   | = | Mischerparameter | MI05 | SM1-2 | = | Solarparameter | SOL 12 | SM2-2 |  |  |  |  |
| MM-2                                                      | =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Mischerparameter                                                                                                                                                                                                                                                                                            | MI05   |   |                  |      |       |   |                |        |       |  |  |  |  |
| SM1-2                                                     | =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Solarparameter                                                                                                                                                                                                                                                                                              | SOL 12 |   |                  |      |       |   |                |        |       |  |  |  |  |
| SM2-2                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                             |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| <b>4 Hydraulik</b>                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                             |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 4.1                                                       | <b>Anlagendruck = 1,5 bar?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Max. Anlagendruck 2,5 bar                                                                                                                                                                                                                                                                                   |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 4.2                                                       | <b>Schlamm- / Magnetitabscheider im Rücklauf zur Außeneinheit?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                             |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 4.3                                                       | <b>Schmutzfänger im Rücklauf zur Außeneinheit?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                             |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 4.4                                                       | <b>Anlage gespült?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | keine Verschmutzung die zu Verstopfung führen kann                                                                                                                                                                                                                                                          |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 4.5                                                       | <b>Absperrventile VL und RL geöffnet?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                             |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 4.6                                                       | <b>Heizkörperthermostate geöffnet?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                             |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 4.7                                                       | <b>Gerät / Anlage befüllt und entlüftet?</b><br>1. Verschlusskappe an der Entlüftung in IDU eine Umdrehung öffnen<br>2. Alle Heizkreise öffnen<br>3. Gesamtes Heizsystem im kalten Zustand langsam über KFE-Hahn am Rücklauf auf ca. 2 bar auffüllen<br>4. 3-Wege-Ventil manuell von Heiz- in WW-Betrieb und zurück betätigen<br>5. Anlage auf wasserseitige Dichtheit prüfen<br>6. Druckausdehnungsgefäß langsam öffnen<br>7. Wärmepumpe einschalten<br>8. Heizkreise restlos entlüften: in Fachmannebene „Relaistest“ die entsprechende Pumpe auswählen und 5 mal hintereinander die Pumpe für 5s ein und 5s ausschalten<br>9. Bei Absinken des Anlagendrucks Wasser nachfüllen                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                             |        |   |                  |      |       |   |                |        |       |  |  |  |  |
| 4.8                                                       | <b>Einstellung Überströmventil bei Reihenspeicher</b><br><br>Aktueller Durchfluss > minimaler Durchfluss                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1. Alle Heizkreise verschließen<br>2. Im Anzeigemodul AM oder Bedienmodul BM-2 in der Fachmannebene den „Relaistest“ einstellen<br>3. Pumpe (ZHP) einschalten und den Durchfluss am Display ablesen<br>4. Überströmventil einstellen auf > 27 l/min<br>5. Heizkreise wieder öffnen<br>6. Relaistest beenden |        |   |                  |      |       |   |                |        |       |  |  |  |  |

| No.                   | Criterion                                                                                                                                                                                                                                                                                                                                             | Comments                                                                                                                                                                                                                                                                                                                                                                                                                        | OK? |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <b>1 Outdoor Unit</b> |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |
| 1.1                   | <b>Wiring</b><br><br>Electrical fuse protection for Grid Control and Grid Inverter according to technical data?<br><br>Wiring Grid Control and Grid Inverter $\geq 2,5 \text{ mm}^2$<br>Wiring Modbus $3 \times 0,5 \text{ mm}^2$ shielded?<br><br>Lead wiring Grid Inverter via IDU:X0?<br><br>Is voltage applied at Grid Control and Grid Inverter? | <p>Microfuse (MT4AH / 250VAC, 5 x 20mm)</p> <p>Terminal Box</p> <p>1) Nominal wire size <math>2,5 \text{ mm}^2</math>, max. <math>4 \text{ mm}^2</math><br/>           2) Min. <math>3 \times 0,5 \text{ mm}</math>, shielded</p>                                                                                                                                                                                               |     |
| 1.2                   | <b>Installation</b><br><br>Note protection area<br><br>(Installation <u>not</u> close to the building:<br>Protection area 1 m circulating around the ODU)                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |
| 1.3                   | <b>Condensate drain</b><br><br>Incline of pipes<br><br>Frost free installation                                                                                                                                                                                                                                                                        | <p>① Condensate drain pipe DN 50 between soil and heat pump insulated<br/>           ② Silicia for absorption of 50 l condensate per day<br/>           ③ Canal for wastewater, rainwater or drainage pipe</p>                                                                                                                                                                                                                  |     |
| 1.4                   | <b>Transport safety kit of compressor</b><br><br>Remove screw                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |
| 1.5                   | <b>Borne noise at wall bracket</b>                                                                                                                                                                                                                                                                                                                    | Device sound-decoupled mounted?<br>Rubber buffer used?                                                                                                                                                                                                                                                                                                                                                                          |     |
| <b>2. Indoor Unit</b> |                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |
| 2.1                   | <b>Wiring of HCM-4</b><br><br>Electrical fuse protection Grid according to technical data?<br><br>Is voltage applied at Grid?<br><br>AF and SF connected?                                                                                                                                                                                             | <p>230VAC</p> <p>Netz: 230V power supply<br/>           Z1: supply for 230V accessories<br/>           HKP: external heating circuit pump<br/>           3WV: ext. 3-way valve heating / cooling<br/>           A1: parameterizable output</p> <p>E1: paramet. input<br/>           E2/SAF: SAF-sensor / GLT<br/>           AF: outdoor temp. sensor<br/>           SF: storage temp. sensor<br/>           eBUS: 1(+)/2(-)</p> |     |

| No.                                                              | Criterion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Comments                                                                                                                                                                                                                                                                                         | OK?    |   |                 |      |       |   |                 |        |       |  |  |  |  |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---|-----------------|------|-------|---|-----------------|--------|-------|--|--|--|--|
| 2.2                                                              | <b>Wiring terminal X0</b><br>Electrical fuse protection Grid and Grid Inverter according to technical data?<br>Wiring Grid & Grid Inverter $\geq 2,5 \text{ mm}^2$<br>Wiring Modbus 3 x 0,5mm <sup>2</sup> shielded?<br>Lead wiring Grid Inverter via IDU:X0?<br>Is voltage applied at Grid and Grid Inverter?<br><br><i>Grid &amp; Inverter:</i><br>ODU: X0:L1 – IDU: X0:L1<br>ODU: X0:L2 – IDU: X0:L2<br>ODU: X0:L3 – IDU: X0:L3<br>ODU: X0:PE – IDU: X0:PE<br><br><i>Modbus-Interface:</i><br>ODU: X0:MB GND – IDU: X0:MB GND<br>ODU: X0:MB+ – IDU: X0:MB+<br>ODU: X0:MB- – IDU: X0:MB-<br><br>In the case of cascade systems with several heat pumps, it must be verified that the Modbus lines from IDU1 to ODU1, or IDU2 to ODU2, etc. have been unambiguously assigned.<br>EVU-Lock: potential-free contact at X0-EVU/GND<br>If EVU-Lock is not used, an electrical bridge must be applied at X0-EVU/GND |                                                                                                                                                                                                                                                                                                  |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 2.3                                                              | <b>System configuration</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Set expert parameter WP001                                                                                                                                                                                                                                                                       |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 2.4                                                              | <b>Setting of heating curves</b><br>BM-2-expert level:<br>Heating curves of heating circuit or mixer circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Socket temperature: e.g. 30°C<br>Max. leaving water temperature e.g. 35°C                                                                                                                                                                                                                        |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| <b>3 Control unit / accessories modules (MM-2, SM1-2, SM2-2)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                  |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 3.1                                                              | <b>E-Bus</b><br>connected correctly?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1(+) / 2(-)                                                                                                                                                                                                                                                                                      |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 3.2                                                              | <b>Address settings</b><br>for device and accessories modules (MM-2, BM-2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | See manual WRS<br>(in the packaging of accessories modules MM-2, SM1-2, SM2-2)                                                                                                                                                                                                                   |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 3.3                                                              | <b>System configuration settings</b><br>for accessories modules (MM-2, SM1-2, SM2-2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <table border="1"> <tr> <td>MM-2</td> <td>=</td> <td>Mixer parameter</td> <td>MI05</td> </tr> <tr> <td>SM1-2</td> <td>=</td> <td>Solar parameter</td> <td>SOL 12</td> </tr> <tr> <td>SM2-2</td> <td></td> <td></td> <td></td> </tr> </table>                                                     | MM-2   | = | Mixer parameter | MI05 | SM1-2 | = | Solar parameter | SOL 12 | SM2-2 |  |  |  |  |
| MM-2                                                             | =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Mixer parameter                                                                                                                                                                                                                                                                                  | MI05   |   |                 |      |       |   |                 |        |       |  |  |  |  |
| SM1-2                                                            | =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Solar parameter                                                                                                                                                                                                                                                                                  | SOL 12 |   |                 |      |       |   |                 |        |       |  |  |  |  |
| SM2-2                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                  |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| <b>4 Hydraulic</b>                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                  |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 4.1                                                              | <b>System pressure = 1,5 bar?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Max. operating pressure 2,5 bar                                                                                                                                                                                                                                                                  |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 4.2                                                              | <b>Sludge / magnetite separator mounted in return pipe to the outdoorunit?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                  |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 4.3                                                              | <b>Strainer mounted in retronpipe to the outdoorunit?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                  |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 4.4                                                              | <b>System flushed?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | no contamination that can lead to constipation                                                                                                                                                                                                                                                   |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 4.5                                                              | <b>Shut-off valves for entering and leaving water temperature opened?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                  |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 4.6                                                              | <b>Radiator thermostats opened?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                  |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 4.7                                                              | <b>Device / system filled and vented?</b><br>1. Open the cap on the vent in IDU for one turn<br>2. Open all heating circuits<br>3. Slowly fill the entire heating system in cold state via KFE tap on return to approx. 2 bar<br>4. Manually actuate the 3-way valve from heating to DHW and backwards<br>5. Check system for watertightness<br>6. Slowly open the pressure expansion vessel<br>7. Switch on the heat pump<br>8. Vent all heating circuits: Select appropriate pump in Expert Level „Relay test“ and switch on/off pump 5 times in succession for respectively 5s.<br>9. If the system pressure drops, top up with water again                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                  |        |   |                 |      |       |   |                 |        |       |  |  |  |  |
| 4.8                                                              | <b>Setting of overflow valve with serial buffer</b><br><br>Current water flow > minimum water flow                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1. Close all heating circuits<br>2. Set „Relay test“ in the expert level of the display module AM or the operating module BM-2<br>3. Switch on pump (ZHP) and see water flow in the display<br>4. Set the overflow valve to > 27 l/min<br>5. Open heating circuits again<br>6. Quit „Relay test“ |        |   |                 |      |       |   |                 |        |       |  |  |  |  |