Elitech®
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Heated Diode Leak Detector
Model:HD Mate

Operation introduction

1. Press the "ON/OFF" button, the leak detector will turn on and starts to warm-up;
2. During the warm-up process of the leak detector, no buttonoperation is allowed. The warm-up time is about 30 seconds;
3. After the machine is warmed up, enter the user interface; The normal frequency of sound is about 1 time per second;
4. The environment is zeroed automatically by default. AUTO is displayed at the lower right corner of the screen;
5. Move the probe to detect where leaks may occur, and the flexible probe can be bent into the desired shape;
6. If a leak is detected, the screen will appear a columnar alarm display, and the sound will become more rapid; The larger the leakage concentration, the higher the columnar display and the faster the sound; You can click the "Mode" key to detect the curve mode;
7. After multiple consecutive leaks are detected, it is recommended to remove the detection area for 10 seconds before detecting the leak source.
8. After the leak detector is used, press and hold the "ON/OFF" key to turn off the leak detector.

Note: Applicable to all halogen refrigerants, including but not limited to:

CFCs: Such as R12, R11, R500, R503

HCFCs: Such as R22, R123, R124, R502

HFCs: Such as R134a, R404a, R410a, R407C, R32

HCs: Such as R600a, R290

HFOs: Such as R1234YF

Automatic/Manual Reset

In order to prevent false alarms caused by refrigerant mixed in the air, the leak detector has the function of ignoring the surrounding refrigerant concentration.

Automatic reset: The default environment zeroed function is when thesystem starts. The leak detector automatically ignores the

refrigerant concentration around the probe, and an alarm will occur only when the refrigerant concentration level around the probe is detected to be higher.
Manual reset: press and hold MUTE to switch manually or automatically. The MANUAL/AUTO logo will appear in the lower right corner of the screen; In MANUAL mode, press and hold RESETSENS to manually reset. If REST is displayed in the lower right corner of the screen, the reset is successful.

Precautions

1. During detecting, the refrigeration system pressure shall be ≥ 50psi, and the detected area should be nearly air-static. If there is a wind, the leaked refrigerant gas will be quickly diluted or blown away from the leakage source point, thus affecting the detection accuracy. In addition, before detecting, please use a fan to blow off the refrigerant gas emitted by a known source in the refrigeration system to avoid its influence on accuracy.
2. The "Automatic Reset" function is a default option, so when the detector is started and detects some refrigerant, it will automatically zero the value of the current ambient refrigerant concentration. If the "Automatic Zeroing" function is turned off, you have to short-press the "RESETSENS" button to zero the value of current ambient refrigerant concentration.
3. Leakage sources usually occur in oil-polluted or dusty places, joint valve or pipeline connection. These places shall be detected with priority.
4. The probe of the leak detector should be 3 mm-5 mm (1/8 in-1/4 in) away from the suspected leak point during detection, so as to prevent it from being polluted by oil and other pollution and affecting the detection accuracy. The probe should move at a speed of about 25-50mm/s(1-2in/second)
5. when detecting.
   It is strictly forbidden to place the sensor directly in the refrigerant environment with a concentration exceeding 30000ppm, which may cause permanent damage to the sensor.

Maintenance

Proper maintenance of the leak detector can prolong the service life of the sensor and improve its performance.

1. Sensor service life: it can be used normally for ≥1 year. If the sensor frequently works in an environment with high-concentration refrigerant, the service life will be reduced quickly. When the service life is over, the sensor needs to be replaced.
2. The product has not been used for a long time, and needs to be preheated for a longer time when it is used again, generally more than 5 minutes.
3. Replacing the sensor: As shown in the figure below, unscrew the probe shell and then replace the sensor. Attention: the sensor and the socket shall be in a good contact.

Note:

1.Please turn off the detector before cleaning the probe shell.

2.Clean the sensor with a cotton cloth or dry gas to ensure that there are no water drops, oil, grease, dust or other pollutants on the sensor surface.

3.Put the leak detector and sensor in a dry and clean place. If it will not be used for a long time, please remove the battery.

List

Leak detector	*1	User manual	*1	USB cable	*1
Blow box	*1	Certificate	*1		

Scan the code for user manual
Scansiona il codice per il manuale utente
Digitalize o código para o manual do usuário
Scanner le code pour le manuel de l'utilisateur
Scanne den code und suche nach bedienungsanleitung