



# tecumseh

# TCW413U-GS8E

220V 1~ 50 Hz / 60 Hz

Compressor

L-MBP

R-290

Voltage Code : GS

| Refrigerant | Frequency   | Nominal Cooling Capacity (*) |           | Sound Power<br>ISO3745 / ISO 3743-1 |
|-------------|-------------|------------------------------|-----------|-------------------------------------|
|             |             | Watts                        | BTU/h     |                                     |
| R-290       | 50HZ / 60HZ | 246 / 241                    | 840 / 823 |                                     |

(\*) Operating conditions EN12900 : Dew / T°Cond. 40°C / T°Evap -35°C / T°Return gas temp. 20°C / T°Subcooling 0K



\*Non-contractual picture

## Dimensions

|                  |                  |
|------------------|------------------|
| Weight           | 8 kg (18 lb)     |
| Length           | 248 mm (9.8 in)  |
| Width            | 167 mm (6.6 in)  |
| Height           | 179 mm (7 in)    |
| Ø Suction Tube   | 5/16 in (7.93mm) |
| Ø Discharge Tube | 1/4 in (6.35mm)  |

## Certificates



## General

|                         |                               |
|-------------------------|-------------------------------|
| Compressor Type         | Reciprocating                 |
| Displacement (cc)       | 6.93                          |
| Horse Power             | 1/3                           |
| Compressor Cooling      | Fan                           |
| Evaporating Temp. Range | -35°C to -5°C (-31°F to 23°F) |
| Expansion Device        | Capillary Tube                |
| Oil Type                | P.O.E 10                      |
| Oil Charge (cc)         | 174                           |

## Electrical

|                          |                    |
|--------------------------|--------------------|
| Motor Type               | CSIR               |
| Main Winding (Ohm)       | 8.56               |
| Start Winding (Ohm)      | 13.54              |
| Current RLA 50Hz (A)     | 2.03               |
| Current RLA 60Hz (A)     | 1.94               |
| Current MCC (A)          | 2.67               |
| Current LRA (A)          | 13                 |
| Start Capacitor          | 88-108 µF / 250 V  |
| Overload                 | MRA58195-5587      |
| - Time Check             | 6.5s - 16s / 8.2 A |
| - Open Temp / Close Temp | 120 °C / 52 °C     |
| Current Relay            | MTRPH3631          |
| - Pick Up / Drop Out     | 4.35 A / 3.7 A     |

Note : Tecumseh reserves the right to change information contained in this document without notification.



**tecumseh**

**TCW413U-GS8E**

220V 1~ 50 Hz / 60 Hz

Performances are given at rating conditions EN12900  
Conditions DEW

Return gas temp. : 20 °C  
Subcooling : 0 K

## 50HZ R-290

| Condensing | Evaporating (°C)        | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    |
|------------|-------------------------|------|------|------|------|------|------|------|------|------|
| <b>30</b>  | Refrig. Capacity (Watt) | 268  | 333  | 409  | 496  | 596  | 710  | 839  | 984  | 1145 |
|            | Power Input (W)         | 166  | 180  | 194  | 207  | 219  | 231  | 242  | 251  | 259  |
|            | Amps (A)                | 1.67 | 1.69 | 1.72 | 1.76 | 1.8  | 1.83 | 1.87 | 1.9  | 1.92 |
| <b>40</b>  | Refrig. Capacity (Watt) | 246  | 308  | 378  | 457  | 548  | 651  | 767  | 898  | 1043 |
|            | Power Input (W)         | 172  | 188  | 205  | 222  | 238  | 254  | 270  | 284  | 297  |
|            | Amps (A)                | 1.69 | 1.71 | 1.74 | 1.78 | 1.83 | 1.87 | 1.92 | 1.97 | 2.01 |
| <b>50</b>  | Refrig. Capacity (Watt) | 224  | 282  | 346  | 418  | 500  | 591  | 694  | 810  | 938  |
|            | Power Input (W)         | 178  | 198  | 219  | 240  | 261  | 281  | 302  | 322  | 341  |
|            | Amps (A)                | 1.72 | 1.74 | 1.78 | 1.83 | 1.89 | 1.95 | 2.02 | 2.09 | 2.16 |
| <b>60</b>  | Refrig. Capacity (Watt) |      |      | 314  | 379  | 450  | 531  | 620  | 720  | 831  |
|            | Power Input (W)         |      |      | 228  | 254  | 280  | 306  | 333  | 359  | 385  |
|            | Amps (A)                |      |      | 1.79 | 1.86 | 1.93 | 2.02 | 2.11 | 2.2  | 2.3  |

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## 60HZ R-290

| Condensing | Evaporating (°C)        | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    | 5    |
|------------|-------------------------|------|------|------|------|------|------|------|------|------|
| <b>30</b>  | Refrig. Capacity (Watt) | 260  | 325  | 402  | 496  | 608  | 743  | 903  | 1092 | 1312 |
|            | Power Input (W)         | 256  | 250  | 242  | 235  | 229  | 226  | 228  | 235  | 250  |
|            | Amps (A)                | 1.31 | 1.36 | 1.42 | 1.49 | 1.57 | 1.66 | 1.77 | 1.9  | 2.05 |
| <b>40</b>  | Refrig. Capacity (Watt) | 241  | 308  | 384  | 474  | 580  | 706  | 855  | 1030 | 1234 |
|            | Power Input (W)         | 269  | 265  | 260  | 255  | 252  | 251  | 254  | 263  | 279  |
|            | Amps (A)                | 1.31 | 1.38 | 1.46 | 1.54 | 1.63 | 1.73 | 1.86 | 2    | 2.16 |
| <b>50</b>  | Refrig. Capacity (Watt) | 206  | 269  | 339  | 420  | 516  | 628  | 761  | 917  | 1100 |
|            | Power Input (W)         | 273  | 273  | 272  | 271  | 271  | 273  | 280  | 292  | 310  |
|            | Amps (A)                | 1.32 | 1.41 | 1.5  | 1.6  | 1.71 | 1.83 | 1.97 | 2.12 | 2.3  |
| <b>60</b>  | Refrig. Capacity (Watt) |      |      | 295  | 363  | 442  | 536  | 648  | 781  | 937  |
|            | Power Input (W)         |      |      | 283  | 286  | 291  | 299  | 310  | 326  | 349  |
|            | Amps (A)                |      |      | 1.54 | 1.66 | 1.79 | 1.93 | 2.09 | 2.27 | 2.47 |