

# Condensing Unit

## Technical Data Sheet

**Model** CML80FB\_N  
**Voltage** 220-240V 50Hz ~1  
**Refrigerant** R404A

### APPLICATION

|                    |                      |
|--------------------|----------------------|
| Application        | Low Back Pressure    |
| Refrigerant        | R404A                |
| Evaporating Temp.  | -40,0 °C to -10,0 °C |
| Expansion          | Capillar/Valve       |
| Comp. Cooling      | Fan cooled           |
| Max. ambient temp. | 43,0 °C              |

### COMPRESSOR

|              |                      |
|--------------|----------------------|
| Displacement | 8,10 cm <sup>3</sup> |
| Diameter     | 24,29 mm             |
| Stroke       | 17,47 mm             |
| Oil type     | ISO VG 32 ESTER      |
| Oil charge   | 295 cm <sup>3</sup>  |

### MOTOR

|                          |               |
|--------------------------|---------------|
| Nominal Power            | 1/4 hp        |
| Voltage/Frequency        | 220-240V 50Hz |
| Voltage range            | 187-255 V     |
| Type                     | CSIR          |
| Phase number             | 1 PH          |
| Locked Rotor Amps (LRA)  | 13,00 A       |
| Max. Cont. Current (MCC) | 2,80 A        |
| Main W. resist. at 25°C  | 8,60 Ω        |
| Start W. resist. at 25°C | 27,80 Ω       |

### NOMINAL PERFORMANCE

### ASHRAE

|                  |              |
|------------------|--------------|
| Cooling Capacity | 357 W        |
| COP              | 1,53 W/W     |
| EER              | 1,31 kCal/Wh |
| Input Power      | 234 W        |
| Current          | 1,99 A       |

### TEST CYCLE CONDITIONS

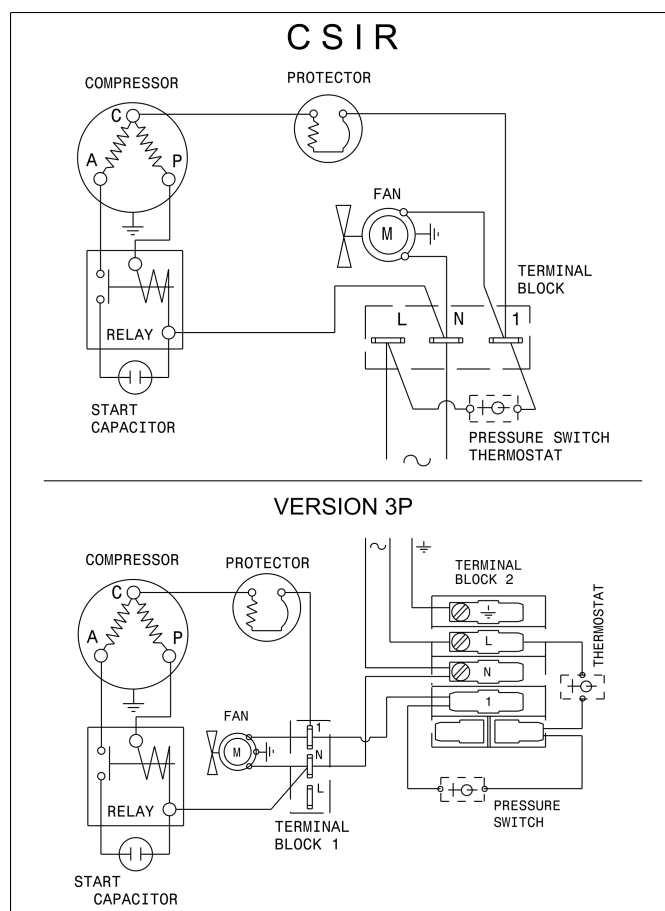
#### LBP

|                                       |             |
|---------------------------------------|-------------|
| Evaporating temp. (T <sub>e</sub> )   | -23,3 °C    |
| Condensing temp. (T <sub>c</sub> )    | 55,0 °C     |
| Liquid temp. (T <sub>liq.</sub> )     | 32,0 °C     |
| Ambient temp. (T <sub>amb.</sub> )    | 32,0 °C     |
| Suction temp. (T <sub>suction</sub> ) | 32,0 °C     |
| Voltage/Frequency                     | 220 V 50 Hz |

### CONDENSER AND FAN DATA

|                      |                 |
|----------------------|-----------------|
| Condenser type       | CU-AL           |
| Condenser model      | 7T 2R           |
| Fan blade (Ø mm / °) | 172 / 28        |
| Fan motor            | 5W 230V 50/60Hz |

### WIRING DIAGRAM



### REFRIGERATION CAPACITY (W)

Evaporating Temperature (°C)

| Model     | Motor | -40 | -35 | -30 | -25 | -23.3 |      |      | -10 |
|-----------|-------|-----|-----|-----|-----|-------|------|------|-----|
|           |       |     |     |     |     | W     | Winp | A    |     |
| CML80FB_N | CSIR  | 169 | 223 | 274 | 343 | 357   | 234  | 1.99 | 548 |

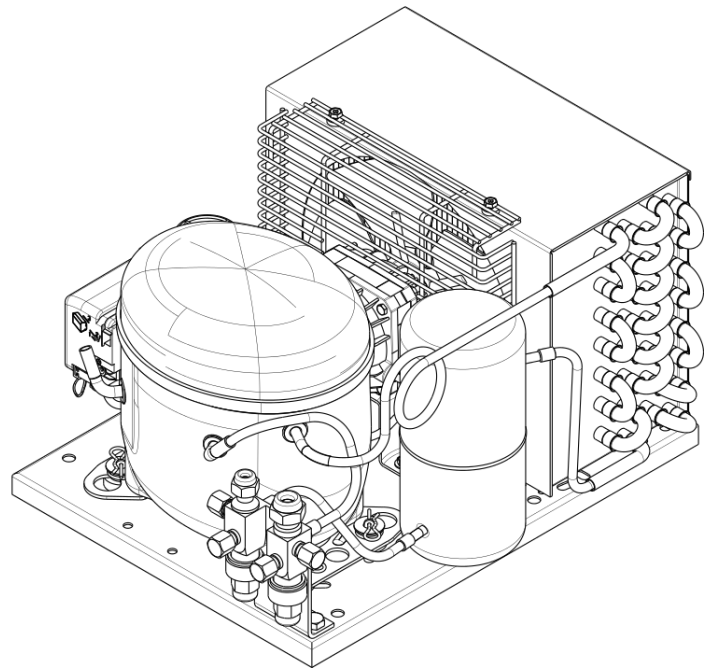
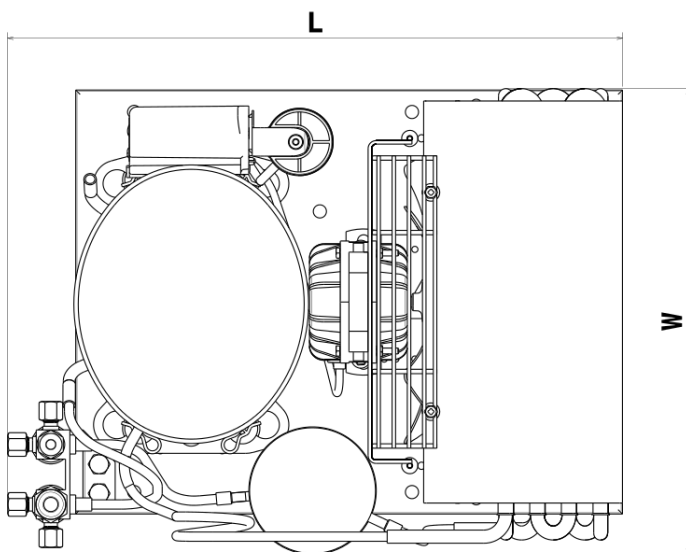
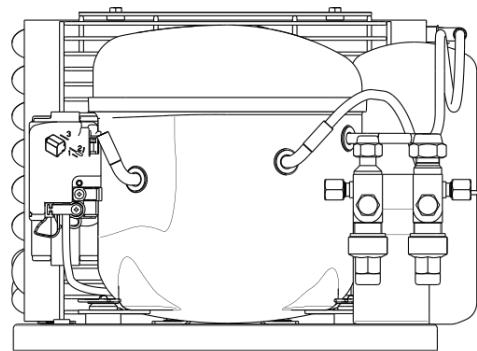
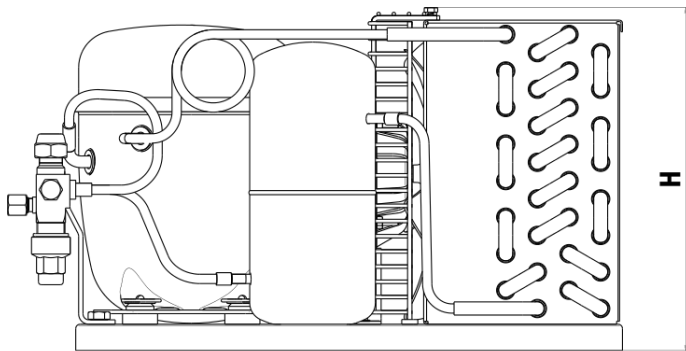
ASHRAE LBP: Condensing temperature: 55°C, Liquid temperature: 32°C, Suction temperature: 32°C, Ambient temperature: 32°C

# Condensing Unit Technical Data Sheet

## VERSIONS

| VERSION 1                                                                                           | VERSION 2                                                           | VERSION 3                                                                                   | VERSION 3P                                                                                  | VERSION 4                                                                                           |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Tube</b>                                                                                         | <b>Service valve</b>                                                | <b>Service valve and receiver</b>                                                           | <b>Service valve, receiver, pressure switch</b>                                             | <b>Schrader valve on the service port</b>                                                           |
| Suction tube internal diam.: 6,5 mm<br>Discharge tube internal diam.: 4,9 mm<br>Net Weight: 16,4 Kg | Suction valve: 3/8"<br>Discharge valve: 1/4"<br>Net Weight: 16,9 Kg | Receiver vol.: 0,9 l<br>Suction valve: 3/8"<br>Discharge valve: 1/4"<br>Net Weight: 17,2 Kg | Receiver vol.: 0,9 l<br>Suction valve: 3/8"<br>Discharge valve: 1/4"<br>Net Weight: 18,3 Kg | Suction tube internal diam.: 6,5 mm<br>Discharge tube internal diam.: 4,9 mm<br>Net Weight: 16,4 Kg |

## DIMENSIONS (Version 3 drawing)



| VERSION 1-4<br>(WxLxH) (mm) | VERSION 2<br>(WxLxH) (mm) | VERSION 3<br>(WxLxH) (mm) | VERSION 3P<br>(WxLxH) (mm) |
|-----------------------------|---------------------------|---------------------------|----------------------------|
| 305x385x215                 | 315x425x215               | 330x425x215               | 330x435x245                |