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# AIR COOLED

## Catalog Supplement

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# 70 & 90 Ton Screw Modules

ASR70R1\_A & ASR90R1\_A

-Append to Multistack Catalog [WCRDATA052101](#), "Water Cooled Screw Product Data Catalog"



**MANUFACTURED BY MULTISTACK<sup>®</sup>**

***The Leader in Modular Chillers***

# Performance Table

| Single Module ASR70R1_A  |       |      |      | Saturated Discharge Temperature |      |      |       |      |     |
|--------------------------|-------|------|------|---------------------------------|------|------|-------|------|-----|
| Leaving Chilled Water ΔF | 115ΔF |      |      | 125ΔF                           |      |      | 135ΔF |      |     |
|                          | Tons  | kW   | EER  | Tons                            | kW   | EER  | Tons  | kW   | EER |
| 40                       | 56.7  | 57.7 | 11.8 | 52.9                            | 63.2 | 10.1 | 49.2  | 68.7 | 8.6 |
| 42                       | 59.0  | 58.3 | 12.1 | 55.1                            | 63.8 | 10.4 | 51.2  | 69.3 | 8.8 |
| 44                       | 61.4  | 58.9 | 12.5 | 57.4                            | 64.5 | 10.7 | 53.4  | 70.0 | 9.1 |
| 45                       | 62.6  | 59.3 | 12.7 | 58.6                            | 64.8 | 10.9 | 54.5  | 70.4 | 9.3 |
| 46                       | 63.9  | 59.6 | 12.9 | 59.8                            | 65.2 | 11.0 | 55.6  | 70.7 | 9.4 |
| 48                       | 66.4  | 60.4 | 13.2 | 62.2                            | 66.7 | 11.2 | 57.9  | 72.9 | 9.5 |
| 50                       | 69.0  | 61.3 | 13.5 | 64.7                            | 68.2 | 11.4 | 60.3  | 75.2 | 9.6 |

| Single Module ASR90R1_A  |       |      |      | Saturated Discharge Temperature |      |      |       |      |      |
|--------------------------|-------|------|------|---------------------------------|------|------|-------|------|------|
| Leaving Chilled Water ΔF | 115ΔF |      |      | 125ΔF                           |      |      | 135ΔF |      |      |
|                          | Tons  | kW   | EER  | Tons                            | kW   | EER  | Tons  | kW   | EER  |
| 40                       | 73.8  | 74.3 | 11.9 | 68.9                            | 78.9 | 10.5 | 64.1  | 83.4 | 9.2  |
| 42                       | 76.8  | 75.1 | 12.3 | 71.8                            | 79.7 | 10.8 | 66.7  | 84.2 | 9.5  |
| 44                       | 80.0  | 75.9 | 12.6 | 74.8                            | 80.5 | 11.2 | 69.6  | 85.1 | 9.8  |
| 45                       | 81.6  | 76.3 | 12.8 | 76.3                            | 80.9 | 11.3 | 71.0  | 85.5 | 9.9  |
| 46                       | 83.2  | 76.8 | 13.0 | 77.8                            | 81.4 | 11.5 | 72.5  | 86.0 | 10.1 |
| 48                       | 86.5  | 77.8 | 13.3 | 81.0                            | 83.3 | 11.7 | 75.4  | 88.8 | 10.2 |
| 50                       | 89.9  | 79.0 | 13.7 | 84.4                            | 85.3 | 11.8 | 78.5  | 91.7 | 10.2 |

All performance data is based on a 10°F chilled water temperature drop through the evaporator. For total chiller performance multiply above output (Tons) and input (kW) by the number of modules. For selection procedures, see selection example on page 5 of “Water Cooled Product Data Catalog.”

## Water Pressure Drop

For water pressure drops, use Figure 2 on page 4 of the “Water Cooled Screw Product Data Catalog.”

- 70 ton evaporator pressure drop = Line B
- 90 ton evaporator pressure drop = Line D

# System Wire & Fuse Sizing Specifications

1. Compressor Rated Load Amps (RLA) and Locked Rotor Amps (LRA)

| Model      | Volts/Hz/PH | Compressor |     |
|------------|-------------|------------|-----|
|            |             | RLA        | LRA |
| ASR70R1A_A | 208/60/3    | 199        | 607 |
| ASR70R1L_A | 230/60/3    | 179        | 607 |
| ASR70R1H_A | 460/60/3    | 90         | 290 |
| ASR70R1C_A | 575/60/3    | 72         | 232 |
| ASR90R1A_A | 208/60/3    | 288        | 885 |
| ASR90R1L_A | 230/60/3    | 261        | 885 |
| ASR90R1H_A | 460/60/3    | 130        | 423 |
| ASR90R1C_A | 575/60/3    | 105        | 338 |

Note: For wire sizing and fuse sizing see page 7 of "Air Cooled Product Data Catalog"

## General Data Table

| Model                          | ASR70R1__W   | ASR90R1__W   |
|--------------------------------|--------------|--------------|
| <b>Compressor Type</b>         | Screw        | Screw        |
| Dry Weight (lbs. ea.)          | 1058         | 1091         |
| Normal Capacity (ea.)          | 70           | 90           |
| Quantity                       | 1            | 1            |
| Oil Charge (pints)             | 21.1         | 21.1         |
| <b>Evaporator</b>              | Brazed Plate | Brazed Plate |
| Weight (lbs. ea.)              | 323          | 388          |
| Water Storage (gal. ea.)       | 9.4          | 10.7         |
| Quantity                       | 1            | 1            |
| Header System (gal.)           | 15.1         | 15.1         |
| Refrigerant Type               | R22          | R22          |
| Charge (lbs./circuit)          | 45           | 55           |
| Number of Circuits             | 1            | 1            |
| <b>Operating Weight (lbs.)</b> | 2900         | 3000         |
| <b>Shipping Weight (lbs.)</b>  | 2400         | 2500         |

Note: Other refrigerants are available per request.

