## Q-Model <br> Series 450

- Up to 530* lbs. (241 kgs.)


THE RIGHT CLIMATE FOR LEADERSHIP
daily ice production

- Stackable, double daily ice production, 1,060* lbs. ( 482 kgs .)
*Production rating outside the scope of ARI Satndard 820.
- Only 30" ( 76.2 cm ) wide
- Stainless steel exterior with the fit and finish of an appliance
- Rugged, corrosion-free base
- Patented cleaning and sanitizing technology
- New batch water system delivers better ice cube formation
- R-404A CFC-free refrigerant
- Warranty
- 5-year parts and 5-year labor coverage on ice machine evaporator - 5-year parts and 3-year labor coverage on ice machine compressor - 3 year parts-and-labor coverage on all other ice machine, dispenser, and storage bin components


Mantitowor

## Manitowoc Q-Model 450 Series

## A seamless blend of thoughtful design, new technology and rugged construction.

| Model | Cube size | Ice production 24 hours |  | Power $k W h / 100 \mathrm{lbs}$. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | lbs. | kgs. |  |
| QR-0450A | regular | 355 | 161 | 7.7 |
| QR-0451W | regular | 410 | 186 | 5.9 |
| QD-0452A | dice | 380 | 173 | 7.2 |
| QD-0453W | dice | 440 | 200 | 5.5 |
| QY-0454A | half-dice | 380 | 173 | 7.2 |
| QY-0455W | half-dice | 440 | 200 | 5.5 |
| REMOTE AIR-COOLED WITH JC-0495A CONDENSER |  |  |  |  |
| QR-0490N | regular | 390 | 177 | 7.9 |
| QD-0492N | dice | 420 | 191 | 7.3 |
| QY-0494N | half-dice | 420 | 191 | 7.3 |
| Water usage/100 lbs./45.4 kgs. of Ice |  |  |  |  |
| Potable Water: 26.4 gallons, 99.93 liters • Water-cooled Condenser: 177 gallons, 670 liters |  |  |  |  |

Order ice storage bin separately. "A" or " W " following model number indicates "Air" or "Water" condensing unit. Ice storage bin and JC-0495A remote condenser must be ordered separately. Consult remote condenser specification sheet for details.

Certified in Accordance with ARI Automatic Commercial Ice-Cube Machines (Batch-Type) Certification Program, which is based on ARI Standard 810

## Ice Machine Electric

115/60/1 standard. (208-230/60/1 also available. For 230/50/1 see 50 cycle literature.) Remote only available in 115/60/1.
Minimum circuit ampacity: Air-cooled - 12.8 amps . Water-cooled - 11.9 amps . Remote - 13.6 amps .
Maximum fuse size: Air and Water-cooled - 20 amps . HACR-type circuit breakers can be used in place of fuses.

## Specifications

BTU Per Hour:
7,000 (average) 9,600 (peak)
Compressor:
Nominal rating: $3 / 4 \mathrm{HP}$
Cupra-Nickel Condenser: (Water-cooled models) Adds protection from corrosive water elements. Operating Limits:

- Ambient Temperature Range: Air and water: $35^{\circ}-110^{\circ} \mathrm{F}\left(1.7^{\circ}-43.3^{\circ} \mathrm{C}\right)$ Remote: $-20^{\circ}-120^{\circ} \mathrm{F}\left(-29^{\circ}-49^{\circ} \mathrm{C}\right)$
- Water Temperature Range: $33^{\circ}-90^{\circ} \mathrm{F}\left(0.6^{\circ}-32.2^{\circ} \mathrm{C}\right)$
- Water Pressure Ice Maker Water In:
Min. 20 psi ( 137.9 kPA )
Max. 80 psi ( 551.1 kPA)
- Condenser Inlet Water In:
(Water cooled only)
Min. 20 psi ( 137.9 kPA )
Max. $150 \mathrm{psi}(1,034.2 \mathrm{kPA})$
(IISE) (11)

Air Flow Top View


AuCS ${ }^{\circledR}$ Accessory


## 3 Cube Sizes Available

Half Dice
$3 / 8^{\prime \prime} x x^{118^{\prime \prime}} x^{7 / 8^{\prime \prime}}$
(. $95 \times 2.86 \times 2.22 \mathrm{~cm}$ )

## Dice

${ }^{7 / s^{\prime \prime}} x^{7 / s^{\prime \prime}} x^{7 / s^{\prime \prime}}$ ( $2.22 \times 2.22 \times 2.22 \mathrm{~cm}$ )

## Regular

$1^{1 / s^{\prime \prime}} x 1^{1 / s^{\prime \prime}} x^{7 / s^{\prime \prime}}$
( $2.86 \times 2.86 \times 2.22 \mathrm{~cm}$ )

| $\begin{aligned} & 24 \\ & =D \end{aligned}$ |  |  |  | 0 U | P | 0 D | C | $0 \mathrm{~N} \dagger$ |  | lbs./ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | WATER-COOLED U N IT |  |  |  | REMOTE AIR-COOLED UNIT |  |  |  |
| $\begin{array}{\|c\|} \hline \text { air } \\ \text { temp } \end{array}$ |  | water temp |  | $\begin{array}{\|c\|} \hline \text { air } \\ \text { temp } \end{array}$ |  | water temp |  | $\begin{gathered} \text { air } \\ \text { temp } \end{gathered}$ |  | water temp |  |
| ${ }^{\circ}$ | $50^{\circ}$ | $70^{\circ}$ | $90^{\circ}$ | ${ }^{\circ}$ | $50^{\circ}$ | $70^{\circ}$ | $90^{\circ}$ | ${ }^{\circ}$ | $50^{\circ}$ | $70^{\circ}$ | $90^{\circ}$ |
| ${ }^{\circ} \mathrm{C}$ | $10^{\circ}$ | $21^{\circ}$ | $32^{\circ}$ | ${ }^{\circ} \mathrm{C}$ | $10^{\circ}$ | $21^{\circ}$ | $32^{\circ}$ | ${ }^{\circ} \mathrm{C}$ | $10^{\circ}$ | $21^{\circ}$ | $32^{\circ}$ |
| $70^{\circ}$ | 530 | 480 | 440 | $70^{\circ}$ | 520 | 460 | 420 | $-20^{\circ}$ to $70^{\circ}$ | 490 | 440 | 400 |
| $21^{\circ}$ | 241 | 218 | 200 | $21^{\circ}$ | 236 | 209 | 191 | $-29^{\circ}$ to $21^{\circ}$ | 222 | 200 | 182 |
| $80^{\circ}$ | 480 | 430 | 400 | $80^{\circ}$ | 510 | 450 | 410 | $90^{\circ}$ | 470 | 420 | 380 |
| $27^{\circ}$ | 218 | 195 | 182 | $27^{\circ}$ | 232 | 204 | 186 | $32^{\circ}$ | 213 | 191 | 173 |
| $90^{\circ}$ | 430 | 380 | 350 | $90^{\circ}$ | 500 | 440 | 400 | $100^{\circ}$ | 440 | 390 | 350 |
| $32^{\circ}$ | 195 | 173 | 159 | $32^{\circ}$ | 227 | 200 | 182 | $38^{\circ}$ | 200 | 177 | 159 |

tProduction for Dice and Half Dice cubes. Regular cube is $7 \%$ less than chart and $\mathrm{kWh} / 100 \mathrm{lbs}$. increases $7 \%$.

| Space-Saving Designs |  | $\begin{aligned} & Q-450 \\ & S-400 \end{aligned}$ | $\begin{aligned} & Q-450 \\ & S-570 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  | Height | $\begin{gathered} 59.50 " \\ 151.13 \mathrm{~cm} \end{gathered}$ | $\begin{gathered} 71.50 " \\ 181.61 \mathrm{~cm} \end{gathered}$ |
|  | Width | $\begin{gathered} 30.00 " \\ 76.20 \mathrm{~cm} \\ \hline \end{gathered}$ | $\begin{array}{r} 30.00^{\prime \prime} \\ 76.20 \mathrm{~cm} \\ \hline \end{array}$ |
|  | Depth | $\begin{gathered} 34.00 " \\ 86.30 \mathrm{~cm} \\ \hline \end{gathered}$ | $\begin{gathered} 34.00 " \\ 86.30 \mathrm{~cm} \\ \hline \end{gathered}$ |
|  | Bin Storage | $\begin{gathered} 290 \mathrm{lbs} . \\ 131.7 \mathrm{kgs} . \end{gathered}$ | $\begin{gathered} 430 \mathrm{lbs} . \\ 195.2 \mathrm{kgs} . \end{gathered}$ |

Height includes adjustable bin legs 6.00 " to 7.00 ", ( 15.24 to 17.78 cm ) set at 6.00 " $(15.24 \mathrm{~cm})$. For comparison purposes multiply ARI capacity by 1.3 ( $30 \%$ ) to arrive at approximate "Application Rating Capacity."


Installation Note - Minimum Installation Clearance: Top/Sides are 8" ( 20.32 cm ), Back is $5^{\prime \prime}(12.7 \mathrm{~cm})$.


