



WATERCOOLED AFTERCOOLERS

ENGINEERING

Air Solutions Group
Davidson, NC 28036

Ref: 11714.01
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Cancels: 20 April 1992

WATERCOOLED AFTERCOOLERS 20 April 1992 ENGINEERING DATA

| Model Number | Number Tubes | Tube Length | Cooling Area (SF) | Shell OD | Shell Thickness | Design Pressure (1) | Mechanical Design ASME or COMM (2) |
|--------------|--------------|-------------|-------------------|----------|-----------------|---------------------|------------------------------------|
| WCFB1 | 13 | 48" | 3.4 | 1.75" | .065" | 150#/400°F | Comm |
| WCFB1CA | 13 | 60" | 4.3 | 1.75" | .065" | 150#/400°F | Comm |
| WCFB2 | 24 | 48" | 6.3 | 2.25" | .065" | 150#/400°F | Comm |
| WCFB2CA | 24 | 60" | 7.9 | 2.25" | .065" | 150#/400°F | Comm |
| WCFB3 | 38 | 48" | 10.0 | 2.75" | .065" | 150#/400°F | Comm |
| WCFB3CA | 38 | 60" | 12.4 | 2.75" | .065" | 150#/400°F | Comm |
| WCFB4 | 60 | 48" | 15.7 | 3.25" | .065" | 150#/400°F | Comm |
| WCFB4CA | 60 | 60" | 19.6 | 3.25" | .065" | 150#/400°F | Comm |
| WCFB5 | 104 | 48" | 27.2 | 4.25" | .120" | 150#/400°F | Comm |
| WCFB5CA | 104 | 60" | 34.0 | 4.25" | .120" | 150#/400°F | Comm |
| WCFB6 | 180 | 48" | 47.1 | 5.25" | .108" | 150#/400°F | ASME |
| WCFB6CA | 180 | 60" | 58.9 | 5.25" | .108" | 150#/400°F | ASME |
| WCFB7 | 264 | 48" | 69.1 | 6.25" | .120" | 150#/400°F | ASME |
| WCFB7CA | 264 | 60" | 86.4 | 6.25" | .120" | 150#/400°F | ASME |
| WCFB8 | 524 | 48" | 137.2 | 8.625" | .277" | 150#/400°F | ASME |
| WCFB8CA | 524 | 60" | 171.5 | 8.625" | .277" | 150#/400°F | ASME |
| WCFB9 | 847 | 48" | 221.7 | 10.75" | .307" | 150#/400°F | ASME |
| WCFB9CA | 847 | 60" | 277.2 | 10.75" | .307" | 150#/400°F | ASME |
| WCFB10 | 1225 | 48" | 320.7 | 12.75" | .330" | 150#/400°F | ASME |
| WCFB10CA | 1225 | 60" | 400.9 | 12.75" | .330" | 150#/400°F | ASME |
| RBWC1 | 18 | 72" | 10.6 | 3.6" | .216" | 150#/400°F | ASME |
| RBWC2 | 36 | 72" | 21.2 | 4.5" | .237" | 150#/400°F | ASME |
| RBWC3 | 64 | 72" | 37.7 | 5.563" | .258" | 150#/400°F | ASME |
| RBWC4 | 104 | 72" | 61.3 | 6.625" | .280" | 150#/400°F | ASME |
| RBWC5 | 200 | 72" | 117.8 | 8.625" | .277" | 150#/400°F | ASME |
| RBWC6 | 342 | 72" | 201.4 | 10.75" | .307" | 150#/400°F | ASME |
| RBWC7 | 522 | 72" | 307.5 | 12.75" | .330" | 150#/400°F | ASME |
| RBWC8 | 648 | 72" | 381.7 | 14.0" | .375" | 150#/400°F | ASME |
| RBWC9 | 874 | 72" | 514.8 | 16.0" | .375" | 150#/400°F | ASME |
| PLWC1 | 7 | 129" | 12.3 | 3.5" | .216" | 150#/400°F | ASME |
| PLWC2 | 12 | 129" | 21.1 | 4.5" | .237" | 150#/400°F | ASME |
| PLWC3 | 18 | 129" | 31.7 | 5.563" | .258" | 150#/400°F | ASME |
| PLWC4 | 36 | 129" | 63.3 | 6.625" | .280" | 150#/400°F | ASME |
| PLWC5 | 66 | 129" | 116.1 | 8.625" | .277" | 150#/400°F | ASME |
| PLWC6 | 110 | 129" | 193.5 | 10.75" | .307" | 150#/400°F | ASME |
| PLWC7 | 172 | 129" | 302.5 | 12.75" | .330" | 150#/400°F | ASME |
| PLWC8 | 214 | 129" | 376.4 | 14.0" | .375" | 150#/400°F | ASME |
| PLWC9 | 286 | 129" | 503.1 | 16.0" | .375" | 150#/400°F | ASME |

AFTERCOOLER MATERIALS OF CONSTRUCTION

Watercooled Models

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|------------|--|
| Tubing | 1/4" OD Copper for All WCFB Models 3/8" OD Copper to RBWC Models 5/8" OD Admiralty for PLWC Models |
| Tubesheets | Carbon Steel, A-285 Gr. C or A-516 All Models |
| Shell | Carbon Steel, A-278 for Diameters up to 6" A-53 Gr. B for Diameters 6" and Larger |
| Baffles | Steel for All Models |

NOTE: (1) Safety Relief Valve setting not to exceed 150 PSIG.
(2) ASME = Units built to ASME and U stamped, Comm = Units built per commercial standard requirements.