



THE HEART OF FRESHNESS

Water cooled (Fresh-water version)

# SHELL AND TUBE CONDENSERS STCA/CRF SERIES CROSS TABLE

CRC-0039-01

### Design Safety

Bitzer ASME condensers are manufactured in accordance with the latest edition of ASME Code are designed for use in Air conditioning and refrigeration applications. CRN is available on majority of models. Consult factory for PED (CE) availability.



### Design Features

- Refrigerants**
  - Suitable for use for (H)CFC / HFC / HFO refrigerants, including but not limited to: R22, R134a, R407C, R450A R404A, R507, R538, R407A, R448, and others. Consult factory regarding application of refrigerants not listed here within.
- Standard Maximum Operating Pressure/ Temperature**
  - Refrigerant side, 435 psi @ -20 to 200°F
  - Water side, 145 psi @ -20 to 200°F
- Tubes**
  - Internally & externally enhanced high-performance copper tube
  - Refer to special options for alternate material
- Tubesheets**
  - Precisely machined from carbon steel
  - Internal grooves for premium sealing
  - Refer to special options for alternate material
- Heads**
  - Precisely machined from carbon steel or cast iron
  - Deep pocket for minimum pressure drop and erosion
  - Optimum flow distribution
  - Detachable to allow mechanical cleaning
- Shells**
  - Steel ASME pipe or rolled shell sand blasted prior to assembly
- Connections**
  - Refrigerant side, steel IDS connections to fit copper tubing
  - Water side, steel G threads or ASME flange depending on the size
  - Safety and auxiliary connections on all models
- Accessories/Options**
  - Sightglass
  - Safety valve can be supplied upon request
- Special Versions & Options**
  - Alternate material for tube (copper nickel), Tubesheet (stainless steel/copper nickel) and head (stainless steel/cast bronze)
  - Higher/Lower pressure and temperature rating
  - Custom design for higher capacity
  - Additional drain and vent

### Explanation of Model Number

S T C A 0 3 0 S X S - X X 2 F

#### Model designation

STCA = Shell and tube condenser

S T C A 0 3 0 S X S - X X 2 F

#### Nominal Capacity

S T C A 0 3 0 S X S - X X 2 F

#### Tube length configuration

S = Short  
M = Middle  
L = Long

S T C A 0 3 0 S X S - X X 2 F

#### Bracket & feet configuration

X = No feet  
N = Bottom feet

S T C A 0 3 0 S X S - X X 2 F

#### Version

S = Fresh water (Copper tube)

S T C A 0 3 0 S X S - X X 2 F

#### Connection types

XX= Standard connections  
XG= Addition of 1-1/4" rotalock sight glass

S T C A 0 3 0 S X S - X X 2 F

#### Pass number

2 = 2-pass  
4 = 4-pass

S T C A 0 3 0 S X S - X X 2 F

#### Head configuration

F = Flat head  
Blank = Cast head

2-PASS CAST HEAD MODEL		4-PASS CAST HEAD MODEL	
BITZER US MODEL	ALFA LAVAL MODEL	BITZER US MODEL	ALFA LAVAL MODEL
STCA030SNS-XX2	CRF162-5-2P,STW	STCA030SNS-XX4	CRF162-5-4P,STW
STCA030MNS-XX2	CRF162-6-2P,STW	STCA030MNS-XX4	CRF162-6-4P,STW
STCA030LNS-XX2	CRF162-7-2P,STW	STCA030LNS-XX4	CRF162-7-4P,STW
STCA035SNS-XX2	CRF163-5-2P,STW	STCA035SNS-XX4	CRF163-5-4P,STW
STCA035MNS-XX2	CRF163-6-2P,STW	STCA035MNS-XX4	CRF163-6-4P,STW
STCA035LNS-XX2	CRF163-7-2P,STW	STCA035LNS-XX4	CRF163-7-4P,STW
STCA040SNS-XX2	CRF164-5-2P,STW	STCA040SNS-XX4	CRF164-5-4P,STW
STCA040MNS-XX2	CRF164-6-2P,STW	STCA040MNS-XX4	CRF164-6-4P,STW
STCA040LNS-XX2	CRF164-7-2P,STW	STCA040LNS-XX4	CRF164-7-4P,STW
STCA045SNS-XX2	CRF211-5-2P,STW	STCA045SNS-XX4	CRF211-5-4P,STW
STCA045MNS-XX2	CRF211-6-2P,STW	STCA045MNS-XX4	CRF211-6-4P,STW
STCA045LNS-XX2	CRF211-7-2P,STW	STCA045LNS-XX4	CRF211-7-4P,STW
STCA055SNS-XX2	CRF212-5-2P,STW	STCA055SNS-XX4	CRF212-5-4P,STW
STCA055MNS-XX2	CRF212-6-2P,STW	STCA055MNS-XX4	CRF212-6-4P,STW
STCA055LNS-XX2	CRF212-7-2P,STW	STCA055LNS-XX4	CRF212-7-4P,STW
STCA060SNS-XX2	CRF213-5-2P,STW	STCA060SNS-XX4	CRF213-5-4P,STW
STCA060MNS-XX2	CRF213-6-2P,STW	STCA060MNS-XX4	CRF213-6-4P,STW
STCA060LNS-XX2	CRF213-7-2P,STW	STCA060LNS-XX4	CRF213-7-4P,STW
STCA065SNS-XX2	CRF214-5-2P,STW	STCA065SNS-XX4	CRF214-5-4P,STW
STCA065MNS-XX2	CRF214-6-2P,STW	STCA065MNS-XX4	CRF214-6-4P,STW
STCA065LNS-XX2	CRF214-7-2P,STW	STCA065LNS-XX4	CRF214-7-4P,STW
STCA075SNS-XX2	CRF271-5-2P,STW	STCA075SNS-XX4	CRF271-5-4P,STW
STCA075MNS-XX2	CRF271-6-2P,STW	STCA075MNS-XX4	CRF271-6-4P,STW
STCA075LNS-XX2	CRF271-7-2P,STW	STCA075LNS-XX4	CRF271-7-4P,STW
STCA085SNS-XX2	CRF272-5-2P,STW	STCA085SNS-XX4	CRF272-5-4P,STW
STCA085MNS-XX2	CRF272-6-2P,STW	STCA085MNS-XX4	CRF272-6-4P,STW
STCA085LNS-XX2	CRF272-7-2P,STW	STCA085LNS-XX4	CRF272-7-4P,STW
STCA095SNS-XX2	CRF273-5-2P,STW	STCA095SNS-XX4	CRF273-5-4P,STW
STCA095MNS-XX2	CRF273-6-2P,STW	STCA095MNS-XX4	CRF273-6-4P,STW
STCA095LNS-XX2	CRF273-7-2P,STW	STCA095LNS-XX4	CRF273-7-4P,STW
STCA110SNS-XX2	CRF274-5-2P,STW	STCA110SNS-XX4	CRF274-5-4P,STW
STCA110MNS-XX2	CRF274-6-2P,STW	STCA110MNS-XX4	CRF274-6-4P,STW
STCA110LNS-XX2	CRF274-7-2P,STW	STCA110LNS-XX4	CRF274-7-4P,STW



2-PASS CAST HEAD MODEL (continued)		4-PASS CAST HEAD MODEL (continued)	
BITZER US MODEL	ALFA LAVAL MODEL	BITZER US MODEL	ALFA LAVAL MODEL
STCA130SNS-XX2	CRF322-5-2P,STW	STCA130SNS-XX4	CRF322-5-4P,STW
STCA130MNS-XX2	CRF322-6-2P,STW	STCA130MNS-XX4	CRF322-6-4P,STW
STCA130LNS-XX2	CRF322-7-2P,STW	STCA130LNS-XX4	CRF322-7-4P,STW
STCA145SNS-XX2	CRF323-5-2P,STW	STCA145SNS-XX4	CRF323-5-4P,STW
STCA145MNS-XX2	CRF323-6-2P,STW	STCA145MNS-XX4	CRF323-6-4P,STW
STCA145LNS-XX2	CRF323-7-2P,STW	STCA145LNS-XX4	CRF323-7-4P,STW
STCA160SNS-XX2	CRF324-5-2P,STW	STCA160SNS-XX4	CRF324-5-4P,STW
STCA160MNS-XX2	CRF324-6-2P,STW	STCA160MNS-XX4	CRF324-6-4P,STW
STCA160LNS-XX2	CRF324-7-2P,STW	STCA160LNS-XX4	CRF324-7-4P,STW
STCA185SNS-XX2	CRF401-5-2P,STW	STCA185SNS-XX4	CRF401-5-4P,STW
STCA185MNS-XX2	CRF401-6-2P,STW	STCA185MNS-XX4	CRF401-6-4P,STW
STCA185LNS-XX2	CRF401-7-2P,STW	STCA185LNS-XX4	CRF401-7-4P,STW
STCA200SNS-XX2	CRF402-5-2P,STW	STCA200SNS-XX4	CRF402-5-4P,STW
STCA200MNS-XX2	CRF402-6-2P,STW	STCA200MNS-XX4	CRF402-6-4P,STW
STCA200LNS-XX2	CRF402-7-2P,STW	STCA200LNS-XX4	CRF402-7-4P,STW
STCA225SNS-XX2	CRF403-5-2P,STW	STCA225SNS-XX4	CRF403-5-4P,STW
STCA225MNS-XX2	CRF403-6-2P,STW	STCA225MNS-XX4	CRF403-6-4P,STW
STCA225LNS-XX2	CRF403-7-2P,STW	STCA225LNS-XX4	CRF403-7-4P,STW
STCA255SNS-XX2	CRF404-5-2P,STW	STCA255SNS-XX4	CRF404-5-4P,STW
STCA255MNS-XX2	CRF404-6-2P,STW	STCA255MNS-XX4	CRF404-6-4P,STW
STCA255LNS-XX2	CRF404-7-2P,STW	STCA255LNS-XX4	CRF404-7-4P,STW
STCA275SNS-XX2	CRF452-5-2P,STW	STCA275SNS-XX4	CRF452-5-4P,STW
STCA275MNS-XX2	CRF452-6-2P,STW	STCA275MNS-XX4	CRF452-6-4P,STW
STCA275LNS-XX2	CRF452-7-2P,STW	STCA275LNS-XX4	CRF452-7-4P,STW
STCA295SNS-XX2	CRF453-5-2P,STW	STCA295SNS-XX4	CRF453-5-4P,STW
STCA295MNS-XX2	CRF453-6-2P,STW	STCA295MNS-XX4	CRF453-6-4P,STW
STCA295LNS-XX2	CRF453-7-2P,STW	STCA295LNS-XX4	CRF453-7-4P,STW
STCA315SNS-XX2	CRF454-5-2P,STW	STCA315SNS-XX4	CRF454-5-4P,STW
STCA315MNS-XX2	CRF454-6-2P,STW	STCA315MNS-XX4	CRF454-6-4P,STW
STCA315LNS-XX2	CRF454-7-2P,STW	STCA315LNS-XX4	CRF454-7-4P,STW

2-PASS FLAT HEAD MODEL		4-PASS FLAT HEAD MODEL	
BITZER US MODEL	ALFA LAVAL MODEL	BITZER US MODEL	ALFA LAVAL MODEL
STCA030SNS-XX2F	CRF162-5-2P,STW,FH	STCA030SNS-XX4F	CRF162-5-4P,STW,FH
STCA030MNS-XX2F	CRF162-6-2P,STW,FH	STCA030MNS-XX4F	CRF162-6-4P,STW,FH
STCA030LNS-XX2F	CRF162-7-2P,STW,FH	STCA030LNS-XX4F	CRF162-7-4P,STW,FH
STCA035SNS-XX2F	CRF163-5-2P,STW,FH	STCA035SNS-XX4F	CRF163-5-4P,STW,FH
STCA035MNS-XX2F	CRF163-6-2P,STW,FH	STCA035MNS-XX4F	CRF163-6-4P,STW,FH
STCA035LNS-XX2F	CRF163-7-2P,STW,FH	STCA035LNS-XX4F	CRF163-7-4P,STW,FH
STCA040SNS-XX2F	CRF164-5-2P,STW,FH	STCA040SNS-XX4F	CRF164-5-4P,STW,FH
STCA040MNS-XX2F	CRF164-6-2P,STW,FH	STCA040MNS-XX4F	CRF164-6-4P,STW,FH
STCA040LNS-XX2F	CRF164-7-2P,STW,FH	STCA040LNS-XX4F	CRF164-7-4P,STW,FH
STCA045SNS-XX2F	CRF211-5-2P,STW,FH	STCA045SNS-XX4F	CRF211-5-4P,STW,FH
STCA045MNS-XX2F	CRF211-6-2P,STW,FH	STCA045MNS-XX4F	CRF211-6-4P,STW,FH
STCA045LNS-XX2F	CRF211-7-2P,STW,FH	STCA045LNS-XX4F	CRF211-7-4P,STW,FH
STCA055SNS-XX2F	CRF212-5-2P,STW,FH	STCA055SNS-XX4F	CRF212-5-4P,STW,FH
STCA055MNS-XX2F	CRF212-6-2P,STW,FH	STCA055MNS-XX4F	CRF212-6-4P,STW,FH
STCA055LNS-XX2F	CRF212-7-2P,STW,FH	STCA055LNS-XX4F	CRF212-7-4P,STW,FH
STCA060SNS-XX2F	CRF213-5-2P,STW,FH	STCA060SNS-XX4F	CRF213-5-4P,STW,FH
STCA060MNS-XX2F	CRF213-6-2P,STW,FH	STCA060MNS-XX4F	CRF213-6-4P,STW,FH
STCA060LNS-XX2F	CRF213-7-2P,STW,FH	STCA060LNS-XX4F	CRF213-7-4P,STW,FH
STCA065SNS-XX2F	CRF214-5-2P,STW,FH	STCA065SNS-XX4F	CRF214-5-4P,STW,FH
STCA065MNS-XX2F	CRF214-6-2P,STW,FH	STCA065MNS-XX4F	CRF214-6-4P,STW,FH
STCA065LNS-XX2F	CRF214-7-2P,STW,FH	STCA065LNS-XX4F	CRF214-7-4P,STW,FH
STCA075SNS-XX2F	CRF271-5-2P,STW,FH	STCA075SNS-XX4F	CRF271-5-4P,STW,FH
STCA075MNS-XX2F	CRF271-6-2P,STW,FH	STCA075MNS-XX4F	CRF271-6-4P,STW,FH
STCA075LNS-XX2F	CRF271-7-2P,STW,FH	STCA075LNS-XX4F	CRF271-7-4P,STW,FH
STCA085SNS-XX2F	CRF272-5-2P,STW,FH	STCA085SNS-XX4F	CRF272-5-4P,STW,FH
STCA085MNS-XX2F	CRF272-6-2P,STW,FH	STCA085MNS-XX4F	CRF272-6-4P,STW,FH
STCA085LNS-XX2F	CRF272-7-2P,STW,FH	STCA085LNS-XX4F	CRF272-7-4P,STW,FH
STCA095SNS-XX2F	CRF273-5-2P,STW,FH	STCA095SNS-XX4F	CRF273-5-4P,STW,FH
STCA095MNS-XX2F	CRF273-6-2P,STW,FH	STCA095MNS-XX4F	CRF273-6-4P,STW,FH
STCA095LNS-XX2F	CRF273-7-2P,STW,FH	STCA095LNS-XX4F	CRF273-7-4P,STW,FH
STCA110SNS-XX2F	CRF274-5-2P,STW,FH	STCA110SNS-XX4F	CRF274-5-4P,STW,FH
STCA110MNS-XX2F	CRF274-6-2P,STW,FH	STCA110MNS-XX4F	CRF274-6-4P,STW,FH
STCA110LNS-XX2F	CRF274-7-2P,STW,FH	STCA110LNS-XX4F	CRF274-7-4P,STW,FH



<b>2-PASS FLAT HEAD MODEL (continued)</b>		<b>4-PASS FLAT HEAD MODEL (continued)</b>	
<b>BITZER US MODEL</b>	<b>ALFA LAVAL MODEL</b>	<b>BITZER US MODEL</b>	<b>ALFA LAVAL MODEL</b>
STCA130SNS-XX2F	CRF322-5-2P,STW,FH	STCA130SNS-XX4F	CRF322-5-4P,STW,FH
STCA130MNS-XX2F	CRF322-6-2P,STW,FH	STCA130MNS-XX4F	CRF322-6-4P,STW,FH
STCA130LNS-XX2F	CRF322-7-2P,STW,FH	STCA130LNS-XX4F	CRF322-7-4P,STW,FH
STCA145SNS-XX2F	CRF323-5-2P,STW,FH	STCA145SNS-XX4F	CRF323-5-4P,STW,FH
STCA145MNS-XX2F	CRF323-6-2P,STW,FH	STCA145MNS-XX4F	CRF323-6-4P,STW,FH
STCA145LNS-XX2F	CRF323-7-2P,STW,FH	STCA145LNS-XX4F	CRF323-7-4P,STW,FH
STCA160SNS-XX2F	CRF324-5-2P,STW,FH	STCA160SNS-XX4F	CRF324-5-4P,STW,FH
STCA160MNS-XX2F	CRF324-6-2P,STW,FH	STCA160MNS-XX4F	CRF324-6-4P,STW,FH
STCA160LNS-XX2F	CRF324-7-2P,STW,FH	STCA160LNS-XX4F	CRF324-7-4P,STW,FH
STCA185SNS-XX2F	CRF401-5-2P,STW,FH	STCA185SNS-XX4F	CRF401-5-4P,STW,FH
STCA185MNS-XX2F	CRF401-6-2P,STW,FH	STCA185MNS-XX4F	CRF401-6-4P,STW,FH
STCA185LNS-XX2F	CRF401-7-2P,STW,FH	STCA185LNS-XX4F	CRF401-7-4P,STW,FH
STCA200SNS-XX2F	CRF402-5-2P,STW,FH	STCA200SNS-XX4F	CRF402-5-4P,STW,FH
STCA200MNS-XX2F	CRF402-6-2P,STW,FH	STCA200MNS-XX4F	CRF402-6-4P,STW,FH
STCA200LNS-XX2F	CRF402-7-2P,STW,FH	STCA200LNS-XX4F	CRF402-7-4P,STW,FH
STCA225SNS-XX2F	CRF403-5-2P,STW,FH	STCA225SNS-XX4F	CRF403-5-4P,STW,FH
STCA225MNS-XX2F	CRF403-6-2P,STW,FH	STCA225MNS-XX4F	CRF403-6-4P,STW,FH
STCA225LNS-XX2F	CRF403-7-2P,STW,FH	STCA225LNS-XX4F	CRF403-7-4P,STW,FH
STCA255SNS-XX2F	CRF404-5-2P,STW,FH	STCA255SNS-XX4F	CRF404-5-4P,STW,FH
STCA255MNS-XX2F	CRF404-6-2P,STW,FH	STCA255MNS-XX4F	CRF404-6-4P,STW,FH
STCA255LNS-XX2F	CRF404-7-2P,STW,FH	STCA255LNS-XX4F	CRF404-7-4P,STW,FH
STCA275SNS-XX2F	CRF452-5-2P,STW,FH	STCA275SNS-XX4F	CRF452-5-4P,STW,FH
STCA275MNS-XX2F	CRF452-6-2P,STW,FH	STCA275MNS-XX4F	CRF452-6-4P,STW,FH
STCA275LNS-XX2F	CRF452-7-2P,STW,FH	STCA275LNS-XX4F	CRF452-7-4P,STW,FH
STCA295SNS-XX2F	CRF453-5-2P,STW,FH	STCA295SNS-XX4F	CRF453-5-4P,STW,FH
STCA295MNS-XX2F	CRF453-6-2P,STW,FH	STCA295MNS-XX4F	CRF453-6-4P,STW,FH
STCA295LNS-XX2F	CRF453-7-2P,STW,FH	STCA295LNS-XX4F	CRF453-7-4P,STW,FH
STCA315SNS-XX2F	CRF454-5-2P,STW,FH	STCA315SNS-XX4F	CRF454-5-4P,STW,FH
STCA315MNS-XX2F	CRF454-6-2P,STW,FH	STCA315MNS-XX4F	CRF454-6-4P,STW,FH
STCA315LNS-XX2F	CRF454-7-2P,STW,FH	STCA315LNS-XX4F	CRF454-7-4P,STW,FH



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