Dr Willis Haviland Carrier developed the first practical centrifugal water-chilling refrigeration machine in 1922. (The man in the photograph is not Dr Carrier)
Photograph from late 1920’s reproduced in an early 1930’s Carrier UK brochure with the compressor mounted above the then distinctive square-shaped evaporator and condenser
Carrier centrifugal installed in the Palace Theatre, Dallas in 1924

Carrier centrifugal at the Aberfoyle Manufacturing Company, Chester, Pennsylvania 1926
Centrifugal Compression as Applied to Refrigeration

W. H. CARRIER
Newark, N. J.

Reprinted from February, 1926, number of Refrigerating Engineering, published by The American Society of Refrigerating Engineers, 35 Warren Street, New York, N. Y.

The Society is not responsible for statements or opinions advanced in papers or discussions

Dr Carrier’s technical paper of 1926
Carrier centrifugal, Missouri Theatre, 1920’s

Carrier centrifugal installed in Capitol House, Washington DC in 1928
Refrigerating Turbo-Compressor catalogue of Brown Boveri, Switzerland, 1932
Brown Boveri refrigerating turbo-compressors

Construction:
The most suitable form of construction of refrigerating turbo-compressors is the

BROWN BOVERI FRIGIBLOC

for 100,000 - 1,000,000 kcal/h

(33–330 standard tons of refrigeration)

Brown Boveri Frigibloc, longitudinal section.

1. Casing of “bloc”.
2. Cover.
3. Partition between evaporator and condenser.
4. Evaporator.
5. Condenser.
6. Tube plate.
7. Supporting plate in evaporator.
8. Supporting plate in condenser.
10. Fan for cooling the motor and circulating the gas in the condenser.
11. Gear.
12. Compressor.
13. Circulating pump.
15. Terminal box.
17. Automatic throttle valve with float.
18. Refrigerant from the condenser to the evaporator.

Brown-Boveri construction detail for their turbo-compressor, 1932
Carrier centrifugal of 150 TR (525 kW) from UK 1930 catalogue

200 TR (700 kW) Carrier centrifugal installed at Joseph Terry & Sons in York, c.1930
Diagram of Carrier water chiller, late 1920’s

Carrier centrifugal about 1956
Advertisement from 1942
Trane Company centrifugal water chiller or “Centravac” from 1950’s

York “Turbopak” centrifugal water chiller 1975
Carrying out maintenance work in the 1970’s on a York centrifugal installed in the Empire State Building, New York in 1950
Trane Centravac chillers at Kai Tak airport, Hong Kong 1975
Trane Centravac chillers, Cable & Wireless Building, Hong Kong 1970’s
Willis Carrier (left) in 1946 inspecting the original 1922 centrifugal which was installed in the Onondaga Pottery Works in New York State serving until 1960 when it was removed for permanent exhibition at the Smithsonian in Washington DC.

Sulzer “Uniturbo” centrifugal water chiller, Switzerland 1981