

MHM · WCS SERIES

MHM Water Cooled Screw Chiller

Semi-hermetic twin-screw chiller, 80–850 TR, R-134a, for plants with cooling towers.

Origin: Shenzhen MHI, China · Category: Electric Chillers



COOLING
CAPACITY

80–850 TR

REFRIGERANT

R-134a

POWER SUPPLY

**415 V / 3 ph /
50 Hz**

COP (FULL LOAD)

5.5–6.1

UNLOADING

**25–100%
stepless**

WARRANTY

18 months

Overview

The WCS series pairs semi-hermetic twin-screw compressors with flooded shell-and-tube evaporators to reach full-load COP above 5.5 with condenser water from a cooling tower. Continuous slide-valve unloading from 25% to 100% suits spinning mills and pharmaceutical plants where load moves with shift patterns.

Units are supplied with electronic expansion valves, oil separators, a colour touch controller and BACnet or Modbus gateway. MHM supplies the matching cooling tower, condenser pumps and plate heat exchanger for free cooling as one package.

Design features

Hermetic scroll or semi-hermetic screw compressors

Low-vibration compressors with capacity staging keep part-load efficiency high across textile and pharma duty cycles.

Microprocessor controller with Modbus RTU

Leaving-water setpoint, alarms and run hours are readable on the panel and shared to a BMS over RS-485.

Electronic expansion valve

Stable superheat control at 25–100% load and during Dhaka summer ambient swings up to 42 °C.

Hydrophilic-coated condenser fins

Corrosion-resistant fins with 40% longer service life in humid, dusty rooftop conditions.

Phase and pressure protection

Phase-loss, reverse-phase, high/low pressure, anti-freeze and flow-switch interlocks as standard.

Factory run-tested

Every unit is charged, run-tested and tagged with a test certificate before dispatch.

Typical applications

- Spinning and weaving mills
- Pharmaceutical clean rooms
- Central plants for hospitals
- Data centre chilled water
- Beverage bottling lines

Technical data — WCS Series

Model	Capacity (TR)	Capacity (kW)	Input power (kW)	Compressors	Condenser flow (m³/h)	L × W × H (mm)	Weight (kg)
MHM-WCS-080	80	281	52.0	1 × screw	60.5	3200 × 1250 × 1850	2650
MHM-WCS-150	150	527	96.8	1 × screw	113.4	3900 × 1450 × 2050	4300
MHM-WCS-250	250	879	160.2	2 × screw	189.1	4400 × 1750 × 2200	6800
MHM-WCS-400	400	1407	254.9	2 × screw	302.6	4900 × 1950 × 2350	9900
MHM-WCS-600	600	2110	380.3	2 × screw	453.9	5600 × 2100 × 2500	13800
MHM-WCS-850	850	2989	536.7	3 × screw	643.0	6400 × 2300 × 2650	19200

Ratings at standard conditions stated in the facts above. Intermediate capacities, alternative voltages and special options on request; MHM selects the model for your load, ambient and water conditions.



Selection, installation and after-sales by MHM Engineering

Send your capacity, ambient / water conditions and site drawings to sales@mhmmachineries.com or call +880 1321-206755. Every MHM unit is commissioned by our own engineers and covered by an annual maintenance contract with genuine spares stocked in Dhaka.