

High Capacity Ultra-Low Temperature Chiller

for hydrocarbon extraction process temperature control and solvent recovery



Rated Cooling Capacity (kW)

Temperature	-40°C	-50°C	-60°C	-70°C
ULX 100	33	32	23	17
ULX 50	21	15	13	9

Rated Cooling Capacity (kBtu/hr)

Temperature	-40°F	-50°F	-60°F	-70°F	-80°F	-90°F
ULX 100	111	108	105	87	72	61
ULX 50	73	70	58	48	40	34



CHILLER MODEL ULX 100

CHILLER MODEL ULX 50

Approved low temperature recirculating heat transfer fluids and operating temperature limits:

- 170°F DYNALENE MV
- 150°F SYLTHERM XLT
- 125°F PARATHERM CR
- 100°F DYNALENE HF-LO

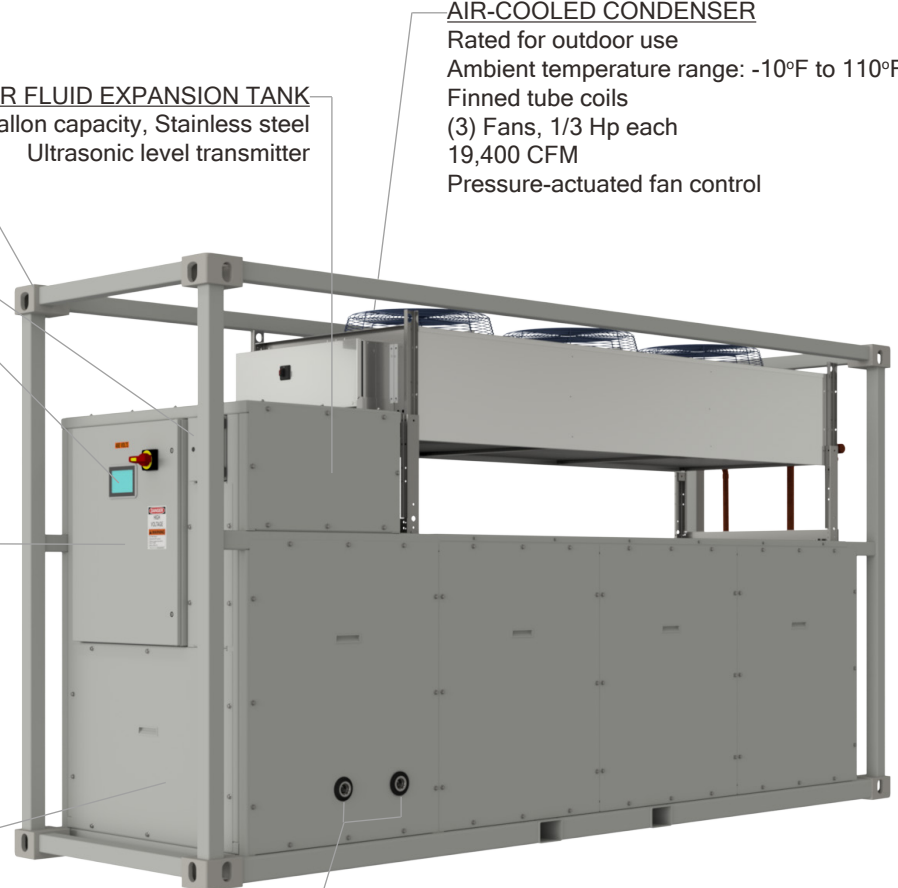


High Capacity Ultra-Low Temperature Chiller

for hydrocarbon extraction process temperature control and solvent recovery



Rated for 23 kW at -60°C



HEAT TRANSFER FLUID EXPANSION TANK
25 Gallon capacity, Stainless steel
Ultrasonic level transmitter

AIR-COOLED CONDENSER
Rated for outdoor use
Ambient temperature range: -10°F to 110°F
Finned tube coils
(3) Fans, 1/3 Hp each
19,400 CFM
Pressure-actuated fan control

HEAVY DUTY WELDED STEEL FRAME
Durable powder coated access panels

Electronic expansion valve controller

HUMAN-MACHINE INTERFACE (HMI)
7" Color touchscreen
Wi-Fi Remote access control option
Allen-Bradley PLC by Rockwell Automation
Data acquisition + Alarms

UL508A INDUSTRIAL CONTROL PANEL
NEMA 4X Enclosure
Power supply: 82 Amps, 460VAC 3-Phase
Single point electrical connection
Fused disconnect switch with safety door lock
Control power transformer
Circuit breakers
Motor starters

CENTRIFUGAL PROCESS PUMP
Stainless steel
Rated flow: 30 GPM at 45 PSI
3 Hp TEFC Magnetic drive motor

STAINLESS STEEL AND COPPER PROCESS PIPE/TUBING/VALVES
1-1/2" FNPT Connections (ANSI Flanges or sanitary tubing clamps optional)
3" Thick closed-cell elastomeric foam pipe insulation
Strainer on process return piping
RTD Temperature sensor and transmitter on supply piping
Pump discharge pressure transmitter
Flow transmitter

2-STAGE CASCADE REFRIGERATION SYSTEM
40 Hp, with 3 stages of compression
(2) Bitzer semi-hermetic reciprocating compressors
Compressor variable frequency drive
Electronic expansion valves
Oil management system with separators and controls
Stainless steel brazed plate heat exchangers
Suction accumulator
Refrigerant filter-driers
Refrigerant sight glass and moisture separator
High pressure switches and transmitters

Dimensions (LxWxH): 180" x 54" x 96"
Approximate weight: 4,750 lbs.

Temperature	-40°C	-50°C	-60°C	-70°C
Cooling Capacity (kW)	32.7	32.1	22.8	17.0

Temperature	-40°F	-50°F	-60°F	-70°F	-80°F	-90°F
Cooling Capacity (Btu/hr)	111,000	108,000	105,000	87,000	72,000	61,000



ULX 50

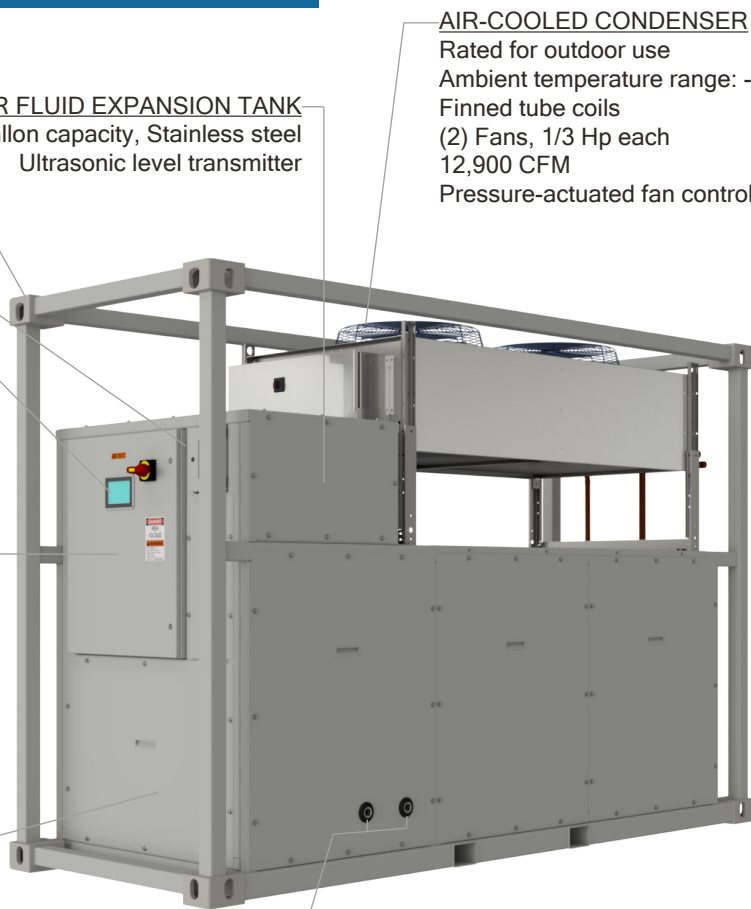
ALPINE CHILLERS

High Capacity Ultra-Low Temperature Chiller

for hydrocarbon extraction process temperature control and solvent recovery



Rated for 13 kW at -60°C



HEAT TRANSFER FLUID EXPANSION TANK
25 Gallon capacity, Stainless steel
Ultrasonic level transmitter

AIR-COOLED CONDENSER
Rated for outdoor use
Ambient temperature range: -10°F to 110°F
Finned tube coils
(2) Fans, 1/3 Hp each
12,900 CFM
Pressure-actuated fan control

HEAVY DUTY WELDED STEEL FRAME
Durable powder coated access panels

Electronic expansion valve controller

HUMAN-MACHINE INTERFACE (HMI)
7" Color touchscreen
Wi-Fi Remote access control option
Allen-Bradley PLC by Rockwell Automation
Data acquisition + Alarms

UL508A INDUSTRIAL CONTROL PANEL
NEMA 4X Enclosure
Power supply: 52 Amps, 460VAC 3-Phase
Single point electrical connection
Fused disconnect switch with safety door lock
Control power transformer
Circuit breakers
Motor starters

EXTERNAL GEAR PROCESS PUMP
Stainless steel
Rated flow: 10 GPM at 45 PSI
1/3 Hp TEFC Magnetic drive motor

STAINLESS STEEL AND COPPER PROCESS PIPE/TUBING/VALVES
1" FNPT Connections (ANSI Flanges or sanitary tubing clamps optional)
3" Thick closed-cell elastomeric foam pipe insulation
Strainer on process return piping
RTD Temperature sensor and transmitter on supply piping
Pump discharge pressure transmitter
Flow transmitter

2-STAGE CASCADE REFRIGERATION SYSTEM
22 Hp, with 3 stages of compression
(2) Bitzer semi-hermetic reciprocating compressors
Compressor variable frequency drive
Electronic expansion valves
Oil management system with separators and controls
Stainless steel brazed plate heat exchangers
Suction accumulator
Refrigerant filter-driers
Refrigerant sight glass and moisture separator
High pressure switches and transmitters

Dimensions (LxWxH): 140" x 54" x 96"
Approximate weight: 4,150 lbs.

Temperature	-40°C	-50°C	-60°C	-70°C
Cooling Capacity (kW)	21.4	15.0	12.5	9.3

Temperature	-40°F	-50°F	-60°F	-70°F	-80°F	-90°F
Cooling Capacity (Btu/hr)	73,000	70,000	58,000	48,000	40,000	34,000

