

Chillers

CA Series: 35° – 55° LCT

Models	
CA-10-W	CA-10-R
CA-15-W	CA-15-R
CA-20-W	CA-20-R
CA-30-W	CA-30-R
CA-45-W	CA-45-R
CA-60-W	CA-60-R

CF Series: 35° – 55° LCT

Models	
CF-3-W	CF-3-A
CF-5-W	CF-5-A
CF-7-W	CF-7-A
CF-10-W	CF-10-A
CF-12-W	CF-12-A
CF-15-W	CF-15-A
CF-20-W	CF-20-A
CF-25-W	CF-25-A
CF-30-W	CF-30-A
CF-35-W	CF-35-A
CF-40-W	CF-40-A

CE Series: 35° – 55° LCT

Models	
CE-3-W	CE-3-A
CE-5-W	CE-5-A
CE-7-W	CE-7-A
CE-10-W	CE-10-A
CE-12-W	CE-12-A
CE-15-W	CE-15-A
CE-20-W	CE-20-A
CE-25-W	CE-25-A
CE-30-W	CE-30-A
CE-35-W	CE-35-A
CE-40-W	CE-40-A
CE-50-W	CE-50-A
CE-60-W	CE-60-A
CE-70-W	CE-70-A
CE-80-W	CE-80-A
CE-90-W	CE-90-A
CE-120-W	CE-120-A
CE-150-W	CE-150-A
CE-180-W	CE-180-A
CE-210-W	CE-210-A
CE-225-W	CE-225-A

CLH Series: 15° – -15° LCT

Models	
CLH-6-W	CLH-3-A
CLH-10-W	CLH-5-A
CLH-14-W	CLH-7-A
CLH-20-W	CLH-12-A
CLH-24-W	CLH-17-A
CLH-30-W	CLH-25-A
CLH-40-W	CLH-30-A
CLH-50-W	CLH-37-A
CLH-60-W	CLH-50-A
CLH-70-W	CLH-62-A
CLH-80-W	CLH-75-A
CLH-100-W	CLH-87-A
CLH-120-W	CLH-100-A
CLH-140-W	CLH-125-A
CLH-160-W	CLH-150-A
CLH-180-W	CLH-175-A
CLH-240-W	CLH-200-A
CLH-300-W	CLH-225-A
CLH-360-W	CLH-300-A
CLH-420-W	CLH-375-A
CLH-450-W	CLH-450-A
CLH-560-W	CLH-560-A

CLM Series: -10° – -70° LCT

Models	
CLM-5-W	CLM-5-A
CLM-8-W	CLM-8-A
CLM-12-W	CLM-12-A
CLM-16-W	CLM-16-A
CLM-20-W	CLM-20-A
CLM-25-W	CLM-25-A
CLM-30-W	CLM-30-A
CLM-80-W	CLM-80-A
CLM-100-W	CLM-100-A
CLM-120-W	CLM-120-A
CLM-140-W	CLM-140-A
CLM-160-W	CLM-160-A
CLM-200-W	CLM-200-A
CLM-240-W	CLM-240-A
CLM-280-W	CLM-280-A
CLM-320-W	CLM-320-A
CLM-360-W	CLM-360-A
CLM-480-W	CLM-480-A
CLM-600-W	CLM-600-A
CLM-720-W	CLM-720-A
CLM-840-W	CLM-840-A
CLM-900-W	CLM-900-A

CM Series: 35° – 55° LCT

Models	
CM-10-W	CM-10-R
CM-15-W	CM-15-R
CM-20-W	CM-20-R
CM-30-W	CM-30-R
CM-45-W	CM-45-R
CM-60-W	CM-60-R

CLL Series: -50° – -100° LCT

Models	
CLL-5-W	CLL-5-A
CLL-10-W	CLL-10-A
CLL-15-W	CLL-15-A
CLL-25-W	CLL-25-A
CLL-35-W	CLL-35-A
CLL-50-W	CLL-50-A
CLL-60-W	CLL-60-A
CLL-75-W	CLL-75-A
CLL-100-W	CLL-100-A
CLL-125-W	CLL-125-A
CLL-150-W	CLL-150-A
CLL-175-W	CLL-175-A
CLL-200-W	CLL-200-A
CLL-250-W	CLL-250-A
CLL-300-W	CLL-300-A
CLL-350-W	CLL-350-A
CLL-400-W	CLL-400-A
CLL-450-W	CLL-450-A
CLL-600-W	CLL-600-A
CLL-750-W	CLL-750-A
CLL-900-W	CLL-900-A
CLL-1050-W	CLL-1050-A
CLL-1125-W	CLL-1125-A

DTS Series: 35° – 55° LCT

Models	
DTS-3-W	DTS-3-A
DTS-5-W	DTS-5-A
DTS-7-W	DTS-7-A
DTS-10-W	DTS-10-A
DTS-12-W	DTS-12-A
DTS-15-W	DTS-15-A
DTS-20-W	DTS-20-A
DTS-25-W	DTS-25-A
DTS-30-W	DTS-30-A
DTS-35-W	DTS-35-A
DTS-40-W	DTS-40-A
DTS-50-W	DTS-50-A
DTS-60-W	DTS-60-A
DTS-70-W	DTS-70-A
DTS-80-W	DTS-80-A
DTS-90-W	DTS-90-A
DTS-120-W	DTS-120-A
DTS-150-W	DTS-150-A
DTS-180-W	DTS-180-A
DTS-210-W	DTS-210-A
DTS-225-W	DTS-225-A

Solvent Vapor Recovery

Models

SVR-100-ST	SVR-100-DT	SVR-100-TT
SVR-200-ST	SVR-200-DT	SVR-200-TT
SVR-400-ST	SVR-400-DT	SVR-400-TT
SVR-1000-ST	SVR-1000-DT	SVR-1000-TT
SVR-2000-ST	SVR-2000-DT	SVR-2000-TT
SVR-3000-ST	SVR-3000-DT	SVR-3000-TT

Re-Cogen/Gasoline Vapor Recovery

Model

Model

DE-800	RE-800
DE-1600	RE-1600
DE-3200	RE-3200
DE-7800	RE-7800
DE-9600	RE-9600
DE-19200	RE-19200

TETCO Geothermal

Models

ESII-1.0-DSH	ES-1.0	ESX-1.0	PH-3.0	A-26	C-24-H
ESII-1.5-DSH	ES-1.5	ESX-1.5	PH-3.5	A-38	C-36-H
ESII-2.0-DSH	ES-2.0	ESX-2.0	PH-4.0	A-50	C-60-H
ESII-2.5-DSH	ES-2.5	ESX-2.5	PH-4.5	A-62	
ESII-3.0-DSH	ES-3.0	ESX-3.0	PH-5.0		
ESII-3.5-DSH	ES-3.5	ESX-3.5	PH-5.5	A-26-HW	E24
ESII-4.0-DSH	ES-4.0	ESX-4.0		A-38-HW	E30
ESII-4.5-DSH	ES-4.5	ESX-4.5		A-50-HW	
ESII-5.0-DSH	ES-5.0	ESX-5.0		A-62-HW	
ESII-5.5-DSH	ES-5.5	ESX-5.5			



Design Features

- 10, 15, 30, 45, & 60 HP MODULES
- STAND ALONE OR CONNECTABLE TO 540 HP
- WATER OR REMOTE AIR-COOLED CONDENSERS
- ULTRA-COMPACT DESIGN FOR EASY INSTALLATION
- STAINLESS STEEL AND ALUMINUM CONSTRUCTION
- HIGH EFFICIENCY INDUSTRIAL SCROLL COMPRESSORS
- COIL IN SHELL EVAPORATORS RESIST PLUGGING
- ONBOARD SAFETY AND OPERATING CONTROLS
- SINGLE POINT ELECTRICAL CONNECTION
- PLUG AND PLAY TANKS, PUMPS, AND CONTROLS
- PIPING MANIFOLD KITS TO 8"
- COMPLETE COMPONENT ACCESS FROM FRONT

"The M series is designed to provide a modular and scalable solution to your cooling needs. The M series is configured in 10, 15, 30, 45, and 60 HP modules that may stand alone or be interconnected. Each M series module is designed to easily fit through a standard 36" door and on most elevators. Each module is complete with operating and safety controls."

Standard Features

- Staged operating and safety controls
- Power alarm/indicator lights
- Six-point digital temperature display
- Oil filled refrigerant pressure gauges
- Plug and freeze resistant heat exchangers
- Filter drier, sight glass, & TXV
- Compressors with integral accumulator
- Compressors with isolation valves
- Complete component access from front
- Laser engraved placards and electrical

Available Options

- Piping manifold kit
- Plug and play reservoir tank
- Plug and play pump package
- Electrical distribution panel and enclosure
- MCS operating system, LON/BAC
- PLC operating system
- Color touch screen display
- Heavy duty mounting skid package
- Voltage/ phase protector
- Flow switch (per module or system)
- Flow meter (turbine style)
- Integrated ON/OFF actuators
- Condenser water regulating valve
- Compressor noise attenuation enclosure

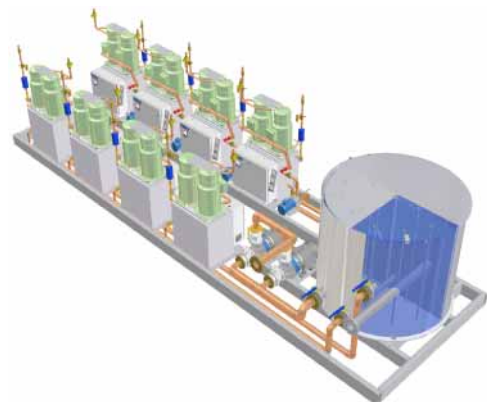
Modular Water Cooled Chiller							
Model	Physical Dimensions	Capacity @ 85°F LCWT (1,000's BTUH)			Water Connection	Shipping Weight	Unit MCA (460V/3/60)
		35°F LCT	44°F LCT	55°F LCT			
CM-10-W	20"L x 24"W x 60"H	97	119	144	1-1/4"	430 lbs.	20
CM-15-W	20"L x 30"W x 65"H	143	177	214	1-1/2"	640 lbs.	30
CM-30-W	35"L x 32"W x 65"H	286	353	427	2"	1300 lbs.	50
CM-45-W	50"L x 32"W x 65"H	430	538	641	2-1/2"	1900 lbs.	80
CM-60-W	68"L x 32"W x 65"H	572	706	854	3"	2500 lbs.	100

Modular Air Cooled Chiller							
For use with the ACC Series							
Model	Physical Dimensions	Capacity @ 95°F Ambient (1,000's BTUH)			Water Connection	Shipping Weight	Unit MCA (460V/3/60)
		35°F LCT	44°F LCT	55°F LCT			
CM-10-R	20"L x 24"W x 40"H	90	110	133	1-1/4"	325 lbs.	20
CM-15-R	20"L x 30"W x 46"H	131	162	197	1-1/2"	495 lbs.	30
CM-30-R	35"L x 32"W x 46"H	261	323	393	2"	985 lbs.	60
CM-45-R	50"L x 32"W x 46"H	392	509	590	2-1/2"	1475 lbs.	90
CM-60-R	68"L x 32"W x 46"H	522	646	786	3"	1970 lbs.	110

Remote Air Cooled Condenser						
For use with M-R Series Indoor and Outdoor						
Model	Physical Dimension	Condensing Capacity @ 95°F Ambient (1,000's BTUH)	Liquid/ Discharge Connection	Shipping Weight	Unit MCA (460V/3/60)	
ACC-10	65" L x 39" W 40" H	165	5/8" / 7/8"	300 lbs.	10	
ACC-15	65" L x 80" W 40" H	245	7/8" / 1-1/8"	385 lbs.	10	
ACC-30	84" L x 40" W 40" H	490	1-1/8" / 1-5/8"	675 lbs.	20	
ACC-45	84" L x 40" W 40" H	740	1-3/8" / 2-1/8"	990 lbs.	30	
ACC-60	84" L x 84" W 40" H	985	1-5/8" / 2-1/8"	1275 lbs.	40	

Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the CM series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.





Design Features

- 10, 15, 30, 45, & 60 HP MODULES
- STAND ALONE OR CONNECTABLE TO 540 HP
- CLOSED OR OPEN LOOP SYSTEMS
- ULTRA-COMPACT DESIGN FOR EASY INSTALLATION
- STAINLESS STEEL AND ALUMINUM CONSTRUCTION
- HIGH EFFICIENCY INDUSTRIAL SCROLL COMPRESSORS
- COIL IN SHELL EVAPORATORS RESIST PLUGGING
- ONBOARD SAFETY AND OPERATING CONTROLS
- SINGLE POINT ELECTRICAL CONNECTION
- PLUG AND PLAY TANKS, PUMPS, AND CONTROLS
- PIPING MANIFOLD KITS TO 8"
- COMPLETE COMPONENT ACCESS FROM FRONT

*"The **MW** series is designed to provide a modular and scalable solution to your heating and cooling needs. The **MW** series is configured in 10, 15, 30, 45, and 60 HP modules that may stand alone or be interconnected. Each **MW** series module is designed to easily fit through a standard 36" door and on most elevators. Each module is complete with operating and safety controls."*

Standard Features

- Staged operating and safety controls
- Power alarm/indicator lights
- Six-point digital temperature display
- Oil filled refrigerant pressure gauges
- Plug and freeze resistant heat exchangers
- Filter drier, sight glass, & TXV
- Compressors with integral accumulator
- Compressors with isolation valves
- Complete component access from front
- Laser engraved placards and electrical

Available Options

- Piping manifold kit
- Plug and play reservoir tank
- Plug and play pump package
- Electrical distribution panel and enclosure
- MCS operating system, LON/BAC
- PLC operating system
- Color touch screen display
- Heavy duty mounting skid package
- Voltage/ phase protector
- Flow switch (per module or system)
- Refrigerant Reversing Valve
- Integrated ON/OFF actuators
- Condenser water regulating valve
- Compressor noise attenuation enclosure



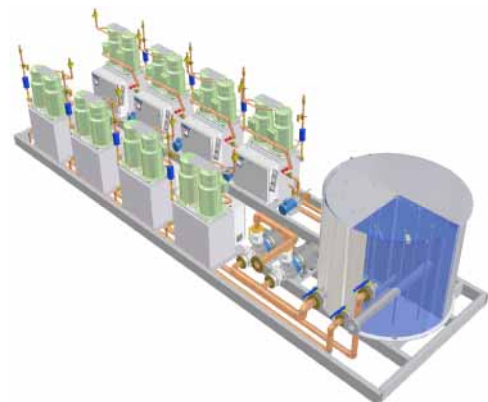
Modular Water Source Heat Pump									
Model	Heating Capacity @ 40°F EWT (1,000's BTUH)			Operating Watts @ 40°F EWT (1,000's Watts)			COP @ 40°F EWT		
	100°F LWT	110°F LWT	120°F LWT	100°F LWT	110°F LWT	120°F LWT	100°F LWT	110°F LWT	120°F LWT
W-10-RGHP	145	142	138	8.492	9.544	10.732	4.9	4.3	3.7
W-15-RGHP	197	194	189	12.773	14.281	15.970	4.5	4.0	3.5
W-30-RGHP	394	388	378	25.550	28.562	31.940	4.5	4.0	3.5
W-45-RGHP	591	582	567	38.323	42.843	47.910	4.4	4.0	3.4
W-60-RGHP	788	776	756	51.096	57.124	63.880	4.4	4.0	3.4

Model	Cooling Capacity @ 50°F EWT (1,000's BTUH)			Operating Watts @ 50°F EWT (1,000's Watts)			EER @ 50°F EWT		
	50°F LCT	45°F LCT	40°F LCT	50°F LCT	45°F LCT	40°F LCT	50°F LCT	45°F LCT	40°F LCT
M-10-W	142	118	95	6.167	6.207	6.248	23.85	22.39	20.29
M-15-W	219	199	180	9.400	9.371	9.342	23.67	21.35	19.29
M-30-W	438	398	360	18.800	18.742	18.684	23.34	21.19	19.05
M-45-W	657	597	540	28.256	28.113	28.026	23.73	21.21	19.28
M-60-W	876	796	720	37.697	37.484	63.880	23.38	21.31	19.09

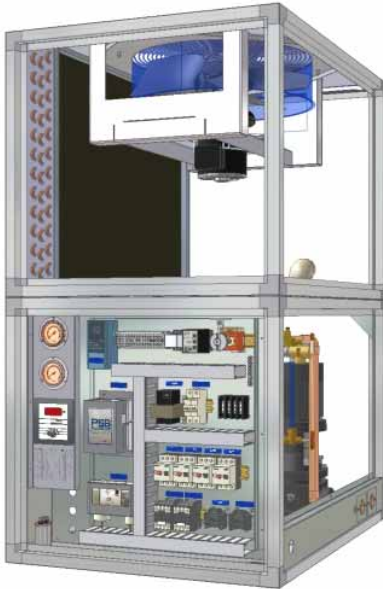
Model	GPM Required @ Capacity			Water Connection	Shipping Weight	Unit MCA (460/3/60)	Unit MCA (230/3/60)	Unit MCA (208/3/60)	Unit MCA (460/3/60)
	Water	80/20	60/40						
W-10-RGHP	20	25	30	1-1/4"	430 lbs.	20	40	45	20
W-15-RGHP	30	36	45	1-1/2"	640 lbs.	30	60	70	30
W-30-RGHP	60	72	90	2"	1300 lbs.	50	100	115	50
W-45-RGHP	90	108	135	2-1/2"	1900 lbs.	80	160	180	80
W-60-RGHP	120	144	180	3"	2500 lbs.	100	200	230	100

Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the M series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.



Design Features



- 1/2 TON TO 40 TON STANDARD MODULAR DESIGNS
- RANGE FROM 20° F TO 70° F COOLANT TEMP
- LARGE PRESSURIZED STAINLESS STEEL RESERVOIR TANK
- SYSTEM PUMP WITH INTEGRATED BYPASS CIRCUIT
- STANDARD OPERATING AND SAFETY CONTROLS
- PACKAGED AIR, WATER, OR REMOTE AIR COOLED
- BREAKERS AND MOTOR PROTECTORS– (NO FUSES)
- REMOVABLE PANELS FOR EASY SERVICE ACCESS
- EXTREME DUTY STAINLESS STEEL FAN SHROUD
- MODULATING CONDENSER FAN AND COMPOSITE PROP
- VENTILATED CONTROL CABINET WITH HINGED ACCESS
- INDOOR/ OUTDOOR OPERATION

The CF series is designed to provide portable process chilled water where you need it. The compact cabinet dimensions allow you to move the unit through standard door openings and set the chiller close to the process. This fully packaged system includes a robust and high efficiency refrigeration circuit which includes industrial style scroll compressors. The integrated tank, pump, and controls make set up and operation of the chiller easy and reliable.

Standard Features

- Industrial scroll compressor with accumulator
- Filter drier, sight glass, TXV, and evaporator
- Insulated pressurized stainless steel storage tank
- Tank sight glass, relief valve, air vent, and fill
- System pump with integrated bypass circuit
- Electro-mechanical simple controls
- Modulating condenser fan / composite prop
- Full refrigerant charge
- Super corrosion resistant design
- Laser engraved placards and diagrams

Available Options

- System pump pressure bypass valve
- Bypass Pump
- Variable speed system pump
- Remote air cooled condenser
- Water cooled condensers with mod. Valve
- Tank level alarm/switch
- Auto-tank fill pressure reducing valve
- Flow switch
- Semi-hermetic reciprocating compressor
- Locking casters
- Voltage/ phase protector
- Door mounted disconnect switch
- Remote operating/monitoring panel
- 6-point digital temperature display
- Oil filled refrigerant pressure gauges
- R-134a, R407c, R-410a, R-507a



Portable Air Cooled Chillers									
Model	Physical Dimensions	Unit MCA (460/3/60)	Capacity @ 95°F Ambient (1,000's BTUH)			Reservoir Capacity (gal)	Pump Flow (gpm)	Inlet / Outlet Size	Shipping Weight
			35°F LCT	45°F LCT	55°F LCT				
CF-3-A	40" L x 30" W x 55" H	20	27	34	43	30	10	1"	550 lbs.
CF-5-A	40" L x 30" W x 55" H	30	41	53	66	30	15	1"	600 lbs.
CF-7-A	48" L x 32" W x 62" H	30	63	78	95	50	20	1-1/4"	800 lbs.
CF-10-A	48" L x 32" W x 62" H	30	90	110	133	50	30	1-1/4"	900 lbs.
CF-12-A	64" L x 39" W x 72" H	40	108	133	163	75	35	1-1/2"	1,300 lbs.
CF-15-A	64" L x 39" W x 72" H	40	131	162	197	75	45	1-1/2"	1,400 lbs.
CF-20-A	84" L x 39" W x 90" H	50	178	219	266	90	60	2"	1,650 lbs.
CF-25-A	84" L x 39" W x 90" H	60	215	267	325	90	70	2"	1,750 lbs.
CF-30-A	128" L x 39" W x 94" H	80	261	323	393	110	90	3"	2,150 lbs.
CF-35-A	128" L x 39" W x 94" H	90	308	381	463	110	100	3"	2,250 lbs.
CF-40-A	128" L x 39" W x 94" H	100	350	433	526	130	110	3"	2,350 lbs.

Portable Water Cooled Chillers									
Model	Physical Dimensions	Unit MCA (460/3/60)	Capacity @ 85°F LCWT (1,000's BTUH)			Reservoir Capacity (gal)	Pump Flow (gpm)	Inlet / Outlet Size	Shipping Weight
			35°F LCT	45°F LCT	55°F LCT				
CF-3-W	40" L x 30" W x 30" H	20	28	38	49	30	10	1"	500 lbs.
CF-5-W	40" L x 30" W x 30" H	30	43	56	70	30	15	1"	550 lbs.
CF-7-W	48" L x 35" W x 36" H	30	69	85	102	50	20	1-1/4"	750 lbs.
CF-10-W	48" L x 35" W x 40" H	30	97	119	144	50	30	1-1/4"	850 lbs.
CF-12-W	64" L x 35" W x 40" H	30	118	145	176	75	35	1-1/2"	1,250 lbs.
CF-15-W	64" L x 35" W x 40" H	40	143	177	214	75	45	1-1/2"	1,350 lbs.
CF-20-W	64" L x 35" W x 40" H	50	194	239	288	90	60	2"	1,600 lbs.
CF-25-W	128" L x 35" W x 50" H	60	235	290	351	90	70	2"	1,700 lbs.
CF-30-W	128" L x 35" W x 50" H	80	286	353	427	110	90	3"	2,100 lbs.
CF-35-W	128" L x 35" W x 50" H	80	337	415	502	110	100	3"	2,200 lbs.
CF-40-W	128" L x 35" W x 50" H	90	383	472	572	130	110	3"	2,300 lbs.

*System pumps designed for rated flow @ 40 PSI, other ranges are available.

*Water Cooled units require 2 GPM per ton condenser water flow.

Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the CF series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.





Design Features

- 2 TONS TO 300 TONS AIR OR WATER COOLED
- 10°F TO 80°F LEAVING COOLANT TEMPERATURES
- LARGE STAINLESS STEEL 15 PSI TANK
- SYSTEM AND BYPASS PUMPS WITH OPTIONAL VARI-SPEED
- SCREW, SCROLL, OR RECIPROCATING COMPRESSORS
- SINGLE POINT WIRING FOR ENTIRE SYSTEM
- SKID MOUNTED AND PACKAGED FOR EASY INSTALLATION
- MODULATING CONDENSER FANS WITH COMPOSITE PROPS
- WEATHERPROOF MECHANICAL AND ELECTRICAL SECTIONS
- MULTIPLE “COIL IN SHELL” EVAPORATORS RESIST FOULING
- “WALK-IN” EQUIPMENT ENCLOSURES FROM 50 TO 300 HP
- MULTIPLE EXPLOSION PROOF CLASSIFICATIONS AVAILABLE

The CE series provides a complete chiller solution to your process cooling requirements. The CE Series fully packages the refrigeration system, tank, pumps, operating and safety controls, and options onto one skid for simple installation, commissioning and operation. The 3D design allows for the CE series to easily integrate options that otherwise would need to be packaged separately.

Standard Features

- Screw, scroll, or reciprocating compressors
- Filter drier, sight glass, TXV, and evaporator
- Modulating condenser fan with composite prop
- Insulated 15 PSI stainless steel storage tank
- Tank sight glass, relief valve, air vent, and fill
- System and bypass pumps
- Electro-mechanical simple controls
- Door mounted disconnect switch
- Oil filled refrigerant pressure gauges
- 6-point digital temperature display
- Laser engraved placards and diagrams
- UL-508 Electrical

Available Options

- Variable speed system pump with controller
- Auto-fill tank with pressure reducing valve
- Tank level alarm/switch
- Flow meter with digital display/ analog output
- Open loop tank/pump option
- Stainless steel panels and hardware
- Variable speed system pump
- Voltage/ phase protector
- Flow switch (per module or system)
- Integrated ON/OFF actuators
- Remote operating/monitoring panel
- 10 to 40 ton with “Walk-in” enclosure



Packaged Air Cooled Chillers									
Model	Physical Dimensions	Unit MCA (460/3/60)	Capacity @ 95°F Ambient (1,000's BTUH)			Reservoir Capacity (gal)	Pump Flow (gpm)	Inlet / Outlet Size	Shipping Weight
			35°F LCT	45°F LCT	55°F LCT				
CE-3-A	40" L x 30" W x 55" H	20	27	34	43	30	10	1"	550 lbs.
CE-5-A	40" L x 30" W x 55" H	30	41	53	66	30	15	1"	600 lbs.
CE-7-A	48" L x 32" W x 62" H	30	63	78	95	50	20	1-1/4"	800 lbs.
CE-10-A	48" L x 32" W x 62" H	30	90	110	133	50	30	1-1/4"	900 lbs.
CE-12-A	64" L x 39" W x 72" H	40	108	133	163	75	35	1-1/2"	1,250 lbs.
CE-15-A	64" L x 39" W x 72" H	40	131	162	197	75	45	1-1/2"	1,350 lbs.
CE-20-A	84" L x 39" W x 90" H	50	178	219	266	90	60	2"	1,650 lbs.
CE-25-A	84" L x 39" W x 90" H	60	215	267	325	90	70	3"	1,750 lbs.
CE-30-A	72" L x 72" W x 80" H	80	261	324	393	110	100	3"	3,800 lbs.
CE-35-A	72" L x 72" W x 80" H	90	308	381	463	110	110	3"	4,000 lbs.
CE-40-A	84" L x 84" W x 93" H	100	350	433	526	130	120	3"	4,400 lbs.
CE-45-A	84" L x 84" W x 93" H	110	392	485	590	130	130	3"	4,700 lbs.

Packaged Air Cooled Chillers Walk-in Enclosure									
Model	Physical Dimensions	Unit MCA (460/3/60)	Capacity @ 95°F Ambient (1,000's BTUH)			Reservoir Capacity (gal)	Pump Flow (gpm)	Inlet / Outlet Size	Shipping Weight
			35°F LCT	45°F LCT	55°F LCT				
CE-50-A	8' L x 8" W x 10' H	120	430	534	650	150	150	3-1/2"	6,500 lbs.
CE-60-A	8' L x 8" W x 10' H	160	522	646	786	150	150	3-1/2"	6,750 lbs.
CE-70-A	12' L x 8" W x 10' H	180	616	760	926	250	200	4"	7,500 lbs.
CE-80-A	12' L x 8" W x 10' H	200	700	866	1052	250	200	4"	8,000 lbs.
CE-90-A	16' L x 8" W x 10' H	240	783	969	1179	350	270	4"	9,000 lbs.
CE-120-A	16' L x 8" W x 10' H	300	1050	1299	1578	350	350	5"	10,500 lbs.
CE-150-A	22' L x 8" W x 10' H	360	1232	1524	1852	500	450	5"	13,000 lbs.
CE-180-A	22' L x 8" W x 10' H	480	1566	1938	2358	500	450	5"	15,000 lbs.
CE-210-A	28' L x 8" W x 10' H	560	1827	2261	2751	700	700	6"	17,000 lbs.
CE-240-A	28' L x 8" W x 10' H	640	2088	2584	3144	700	700	6"	19,000 lbs.
CE-270-A	32' L x 8" W x 10' H	720	2349	2907	3537	900	700	6"	21,000 lbs.
CE-300-A	32' L x 8" W x 10' H	800	2610	3230	3930	900	700	6"	23,000 lbs.

Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the CE series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.





Design Features

- 3 TONS TO 300 TONS AIR OR WATER COOLED
- 10°F TO 80°F LEAVING COOLANT TEMPERATURES
- LARGE STAINLESS STEEL 15 PSI TANK
- SYSTEM AND BYPASS PUMPS WITH OPTIONAL VARI-SPEED
- SCREW, SCROLL, OR RECIPROCATING COMPRESSORS
- SINGLE POINT WIRING FOR ENTIRE SYSTEM
- SKID MOUNTED AND PACKAGED FOR EASY INSTALLATION
- MODULATING CONDENSER FANS WITH COMPOSITE PROPS
- WEATHERPROOF MECHANICAL AND ELECTRICAL SECTIONS
- MULTIPLE “COIL IN SHELL” EVAPORATORS RESIST FOULING
- “WALK-IN” EQUIPMENT ENCLOSURES FROM 50 TO 300 HP
- MULTIPLE EXPLOSION PROOF CLASSIFICATIONS AVAILABLE

The DTS series provides a complete chiller solution to your 100% redundant process cooling requirements. The DTS Series fully packages the refrigeration system, tank, pumps, operating and safety controls, and options onto one skid for simple installation, commissioning and operation. The 3D design allows for the CE series to easily integrate options that otherwise would need to be packaged separately.

Standard Features

- Screw, scroll, or reciprocating compressors
- Filter drier, sight glass, TXV, and evaporator
- Modulating condenser fan with composite prop
- Insulated 15 PSI stainless steel storage tank
- Tank sight glass, relief valve, air vent, and fill
- System and bypass pumps
- Electro-mechanical simple controls
- Door mounted disconnect switch
- Oil filled refrigerant pressure gauges
- 6-point digital temperature display
- Laser engraved placards and diagrams
- UL-508 Electrical

Available Options

- Variable speed system pump with controller
- Auto-fill tank with pressure reducing valve
- Tank level alarm/switch
- Flow meter with digital display/ analog output
- Open loop tank/pump option
- Stainless steel panels and hardware
- Variable speed system pump
- Voltage/ phase protector
- Flow switch (per module or system)
- Integrated ON/OFF actuators
- Remote operating/monitoring panel
- 10 to 40 ton with “Walk-in” enclosure



Packaged Air Cooled Chillers									
Model	Physical Dimensions	Unit MCA (460/3/60)	Capacity @ 95°F Ambient (1,000's BTUH)			Reservoir Capacity (gal)	Pump Flow (gpm)	Inlet / Outlet Size	Shipping Weight
			35°F LCT	45°F LCT	55°F LCT				
DTS-3-A	48" L x 32" W x 62" H	20	27	34	43	30	10	1"	1,100 lbs.
DTS-5-A	48" L x 32" W x 62" H	30	41	53	66	30	15	1"	1,150 lbs.
DTS-7-A	64" L x 48" W x 62" H	30	63	78	95	50	20	1-1/4"	1,600 lbs.
DTS-10-A	64" L x 48" W x 62" H	30	90	110	133	50	30	1-1/4"	1,800 lbs.
DTS-12-A	72" L x 72" W x 80" H	40	108	133	163	75	35	1-1/2"	2,500 lbs.
DTS-15-A	72" L x 72" W x 80" H	40	131	162	197	75	45	1-1/2"	2,700 lbs.
DTS-20-A	84" L x 84" W x 93" H	50	178	219	266	90	60	2"	3,200 lbs.
DTS-25-A	84" L x 84" W x 93" H	60	215	267	325	90	70	3"	3,400 lbs.
DTS-30-A	144" L x 72" W x 80" H	80	261	323	393	110	100	3"	7,000 lbs.
DTS-35-A	144" L x 72" W x 80" H	90	308	381	463	110	110	3"	7,500 lbs.
DTS-40-A	168" L x 84" W x 93" H	100	350	433	526	130	120	3"	8,000 lbs.
DTS-45-A	168" L x 84" W x 93" H	110	392	485	590	130	130	3"	8,500 lbs.

Packaged Air Cooled Chillers Walk-in Enclosure									
Model	Physical Dimensions	Unit MCA (460/3/60)	Capacity @ 95°F Ambient (1,000's BTUH)			Reservoir Capacity (gal)	Pump Flow (gpm)	Inlet / Outlet Size	Shipping Weight
			35°F LCT	45°F LCT	55°F LCT				
DTS-50-A	16' L x 8" W x 10' H	120	430	534	650	150	150	2-1/2"	13,000 lbs.
DTS-60-A	16' L x 8" W x 10'H	160	522	646	786	150	150	3"	14,500 lbs.
DTS-70-A	24' L x 8" W x 10'H	180	616	760	926	250	200	3"	16,000 lbs.
DTS-80-A	24' L x 8' W x 10'H	200	700	866	1052	250	200	3"	18,000 lbs.
DTS-90-A	32' L x 8' W x 10'H	240	783	969	1179	350	270	3"	20,000 lbs.
DTS-120-A	32' L x 8' W x 10'H	300	1050	1299	1578	350	350	3"	22,000 lbs.
DTS-150-A	24' L x 16' W x 10'H	360	1232	1524	1852	500	450	3"	25,000 lbs.
DTS-180-A	24' L x 16' W x 10'H	480	1566	1938	2358	500	450	3"	28,000 lbs.
DTS-210-A	24' L x 24' W x 10'H	560	1827	2261	2751	700	700	4"	35,000 lbs.
DTS-240-A	24' L x 24' W x 10'H	640	2088	2584	3144	700	700	4"	40,000 lbs.
DTS-270-A	32' L x 32' W x 10'H	720	2349	2907	3537	900	700	4"	45,000 lbs.
DTS-300-A	32' L x 32' W x 10'H	800	2610	3230	3930	900	700	4"	50,000 lbs.

Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the CE series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.





Design Features

- 1/2 HP TO 300 HP STANDARD PACKAGED DESIGNS
- RANGE FROM +20° F TO -20° F COOLANT TEMP
- LARGE STAINLESS STEEL RESERVOIR TANK
- SYSTEM PUMP & BYPASS PUMP
- STANDARD OPERATING AND SAFETY CONTROLS
- PACKAGED AIR OR WATER COOLED OR REMOTE
- BREAKERS AND MOTOR PROTECTORS- (NO FUSES)
- REMOVABLE PANELS FOR EASY SERVICE ACCESS
- EXTREME DUTY STAINLESS STEEL FAN SHROUD
- MODULATING CONDENSER FAN AND COMPOSITE PROP
- VENTILATED CONTROL CABINET
- INDOOR/ OUTDOOR OPERATION

The CL series is designed to provide a packaged low temperature chiller solution to your process needs. This fully packaged system includes a robust and high efficiency refrigeration circuit which includes industrial style scroll compressors. The integrated tank, pump, and controls make set up and operation of the chiller easy and reliable.

Standard Features

- Industrial scroll compressor with accumulator
- Filter drier, sight glass, TXV, and evaporator
- Modulating condenser fan with composite prop
- Insulated 15 PSI stainless steel storage tank
- Tank sight glass, relief valve, air vent, and fill
- System pump with integrated bypass circuit
- Electro-mechanical simple controls
- Door mounted disconnect switch
- Oil filled refrigerant pressure gauges
- 6-point digital temperature display
- Laser engraved placards and diagrams
- UL-508 Electrical

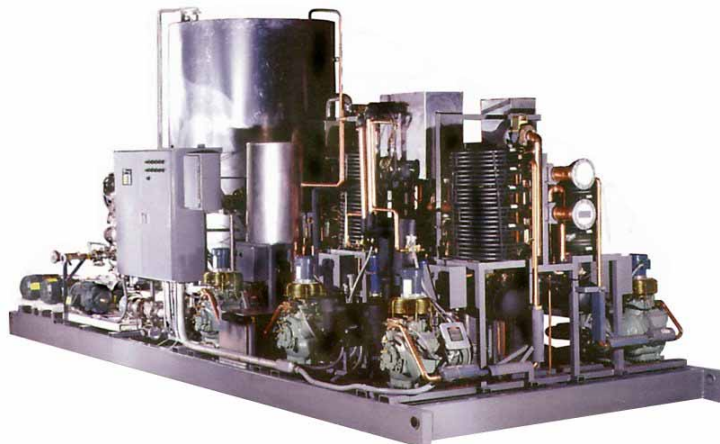
Available Options

- System pump pressure bypass valve
- Mounted Casters
- Vibration isolation floor mounts
- Auto-fill tank
- Tank level alarm/switch
- Stainless steel panels and hardware
- Variable speed system pump
- Voltage/ phase protector
- Flow switch (per module or system)
- Integrated ON/OFF actuators
- Remote operating/monitoring panel
- Hot gas by-pass

Low Temperature Air Cooled Chiller								
Model	Physical Dimensions	Capacity @ 95°F Ambient (1,000's BTUH)			Supply/ Return Pipe Size	Reservoir Capacity (gal)	Shipping Weight	Suggested Fuse Size (460/3/60)
		+15°F LCT	0°F LCT	-15°F LCT				
CLH-2-A	40"L x 30"W x 55"H	10.3	6.6	3.6	1-1/4"	30	3,200 lbs.	10 AMP
CLH-3-A	40"L x 30"W x 55"H	17.8	11.2	3.2	1-1/4"	30	3,200 lbs.	10 AMP
CLH-5-A	40"L x 30"W x 55"H	24.8	15.7	8.7	1-1/4"	30	3,300 lbs.	20 AMP
CLH-7-A	40"L x 30"W x 55"H	37.9	25.1	16.2	1-1/2"	30	3,300 lbs.	20 AMP
CLH-10-A	40"L x 30"W x 55"H	50.0	32.6	20.5	1-1/2"	30	4,000 lbs.	20 AMP
CLH-15-A	56"L x 32" W x 62"H	69.9	46.2	27.9	1-1/2"	50	4,200 lbs.	30 AMP
CLH-20-A	56"L x 32" W x 62"H	86	57	36	2"	50	4,500 lbs.	30 AMP
CLH-25-A	56"L x 32" W x 62"H	99	66	41	2"	50	4,800 lbs.	40 AMP
CLH-30-A	64"L x 39" W x 72"H	115	80	49	2"	75	5,000 lbs.	40 AMP
CLH-40-A	64"L x 39" W x 72"H	154	104	66	2"	75	5,300 lbs.	50 AMP
CLH-50-A	128"L x 39"W x 90"H	204	140	89	2"	100	5,500 lbs.	70 AMP
CLH-60-A	128"L x 39"W x 90"H	239	163	106	2"	100	6,500 lbs.	70 AMP
CLH-70-A	128"L x 39"W x 90"H	278	190	123	3"	100	7,000 lbs.	70 AMP
CLH-80-A	128"L x 39"W x 94"H	318	217	141	3"	100	7,500 lbs.	80 AMP
CLH-90-A	128"L x 39"W x 94"H	359	246	159	3"	100	9,000 lbs.	90 AMP
CLH-120-A	128"L x 39"W x 94"H	462	312	198	3"	100	9,500 lbs.	120 AMP

Layout and Design Assistance

Chiller Solutions 3D design program allows for simple arrangement of the CLH series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.





Design Features



- 1/2 HP TO 300 HP STANDARD PACKAGED DESIGNS
- RANGE FROM +20° F TO -20° F COOLANT TEMP
- LARGE STAINLESS STEEL RESERVOIR TANK
- SYSTEM PUMP & BYPASS PUMP
- STANDARD OPERATING AND SAFETY CONTROLS
- WATER COOLED
- BREAKERS AND MOTOR PROTECTORS- (NO FUSES)
- REMOVABLE PANELS FOR EASY SERVICE ACCESS
- INDOOR/ OUTDOOR OPERATION

The CLH series is designed to provide a packaged low temperature chiller solution to your process needs. This fully packaged system includes a robust and high efficiency refrigeration circuit which includes industrial style scroll compressors. The integrated tank, pump, and controls make set up and operation of the chiller easy and reliable.

Standard Features

- Filter drier, sight glass, TXV, and evaporator
- Modulating condenser fan with composite prop
- Insulated 15 PSI stainless steel storage tank
- Tank sight glass, relief valve, and air vent
- System pump with integrated bypass circuit
- Electro-mechanical simple controls
- Door mounted disconnect switch
- Oil filled refrigerant pressure gauges
- 6-point digital temperature display
- Laser engraved placards and diagrams
- UL-508 Electrical

Available Options

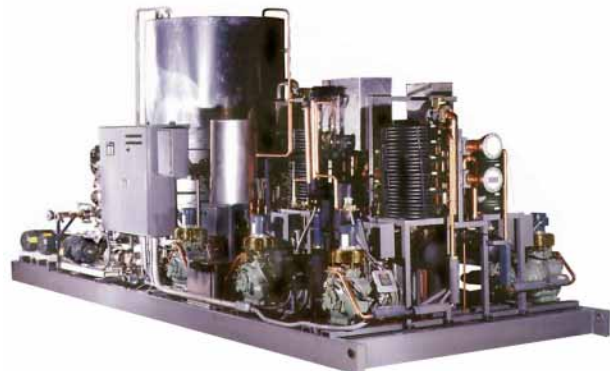
- System pump pressure bypass valve
- Mounted Casters
- Vibration isolation floor mounts
- Auto-fill tank
- Tank level alarm/switch
- Stainless steel panels and hardware
- Variable speed system pump
- Voltage/ phase protector
- Flow switch (per module or system)
- Integrated ON/OFF actuators
- Remote operating/monitoring panel
- Hot gas by-pass

Low Temperature Water Cooled Chiller								
Model	Physical Dimensions	Capacity @ 85°F WT (1,000's BTUH)			Supply/ Return Pipe Size	Condenser Water Pipe Size	Shipping Weight	Suggested Fuse Size (460/3/60)
		+15°F LCT	0°F LCT	-15°F LCT				
CLH-2-W	4'9" L x 4'7" W x 5'3" H	11.9	8.0	4.7	1-1/4"	7/8"	790 lbs.	10 AMP
CLH-3-W	4'9" L x 4'7" W x 6'3" H	20.3	12.8	7.8	1-1/4"	3/4"	850 lbs.	10 AMP
CLH-5-W	4'9" L x 4'7" W x 5'8" H	29.4	18.9	11.7	1-1/4"	1"	900 lbs.	10 AMP
CLH-7-W	4'9" L x 4'7" W x 6'1" H	44.8	30.8	20.3	1-1/2"	1"	1350 lbs.	20 AMP
CLH-10-W	4'9" L x 4'7" W x 6'5" H	58.1	38.1	24.8	1-1/2"	1-1/4"	1700 lbs.	20 AMP
CLH-15-W*	8'0" L x 7'0" W x 7'3" H	81.3	54.7	34.8	1-1/2"	2"	2200 lbs.	20 AMP
CLH-20-W*	8'0" L x 7'0" W x 7'3" H	100	67	44	2"	2"	2600 lbs.	30 AMP
CLH-25-W*	8'0" L x 7'0" W x 7'3" H	116	81	53	2"	2-1/2"	3000 lbs.	30 AMP
CLH-30-W*	8'0" L x 7'0" W x 7'3" H	133	95	63	2"	2-1/2"	4700 lbs.	30 AMP
CLH-40-W*	10'0" L x 8'0" W x 8" H	216	148	95	2"	3"	5000 lbs.	50 AMP
CLH-50-W*	10'0" L x 8'0" W x 8" H	256	174	110	2"	3"	5500 lbs.	70 AMP
CLH-60-W*	10'0" L x 8'0" W x 8" H	326	222	142	2"	3"	6000 lbs.	70 AMP
CLH-70-W*	12'0" L x 8'0" W x 8" H	380	259	165	2"	3"	7500 lbs.	80 AMP
CLH-80-W*	12'0" L x 8'0" W x 8" H	434	296	189	2"	3"	8000 lbs.	110 AMP
CLH-90-W*	16'0" L x 8'0" W x 8" H	512	350	222	3"	3"	10,000 lbs.	110 AMP
CLH-120-W*	16'0" L x 8'0" W x 8" H	648	444	287	3"	3"	11,000 lbs.	150 AMP

*Walk-In Enclosure

Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the CLH series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.





Design Features

- 2 HP TO 30 HP STANDARD PACKAGED DESIGNS
- RANGE FROM -10° F TO -60° F COOLANT TEMP
- LARGE STAINLESS STEEL RESERVOIR TANK
- SYSTEM PUMP & BYPASS PUMP
- STANDARD OPERATING AND SAFETY CONTROLS
- PACKAGED AIR OR WATER COOLED OR REMOTE
- BREAKERS AND MOTOR PROTECTORS– (NO FUSES)
- REMOVABLE PANELS FOR EASY SERVICE ACCESS
- EXTREME DUTY STAINLESS STEEL FAN SHROUD
- MODULATING CONDENSER FAN AND COMPOSITE PROP
- VENTILATED CONTROL CABINET
- INDOOR/ OUTDOOR OPERATION

The CLM series is designed to provide a packaged low temperature chiller solution to your process needs. This fully packaged system includes a robust and high efficiency refrigeration circuit which includes a two stage semi-hermetic reciprocating industrial compressor. The integrated tank, pump, and controls make set up and operation of the chiller easy and reliable.

Standard Features

- Industrial two-stage compound compressor
- Filter drier, sight glass, TXV, and evaporator
- Modulating condenser fan with composite prop
- Insulated 15 PSI stainless steel storage tank
- Tank sight glass, relief valve, air vent, and fill
- System pump with integrated bypass circuit
- Electro-mechanical simple controls
- Door mounted disconnect switch
- Oil filled refrigerant pressure gauges
- 6-point digital temperature display
- Laser engraved placards and diagrams
- UL-508 Electrical

Available Options

- System pump pressure bypass valve
- Mounted Casters
- Vibration isolation floor mounts
- Auto-fill tank
- Tank level alarm/switch
- Stainless steel panels and hardware
- Variable speed system pump
- Voltage/ phase protector
- Flow switch (per module or system)
- Integrated ON/OFF actuators
- Remote operating/monitoring panel
- Hot gas by-pass



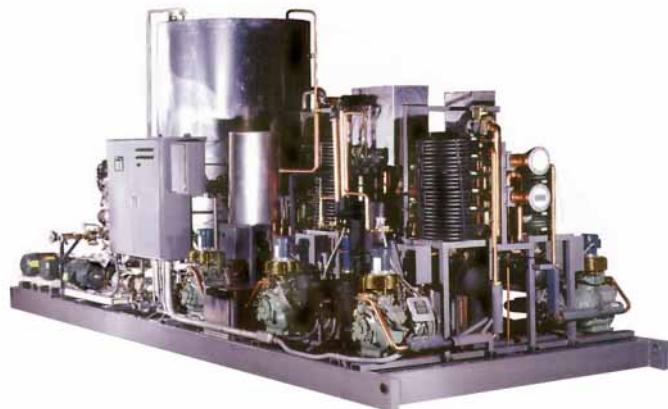
Low Temperature Air Cooled Chiller								
Model	Physical Dimensions	Capacity @ 95°F Ambient (1,000's BTUH)			Supply/ Return Pipe Size	Condenser CFM	Shipping Weight	Suggested Fuse Size (460/3/60)
		-10°F LCT	-25°F LCT	-40°F LCT				
CLM-5-A	56"L x 32" W x 62"H	31	22	16	1-1/2"	5,200	900 lbs.	20
CLM-8-A	56"L x 32" W x 62"H	43	32	22	1-1/2"	8,000	1,000 lbs.	40
CLM-12-A	64"L x 39" W x 72"H	66	50	36	2"	12,000	1,350 lbs.	60
CLM-16-A	64"L x 39" W x 76"H	93	71	52	2"	20,000	1,550 lbs.	60
CLM-20-A	64"L x 39" W x 76"H	107	81	60	3"	28,000	1,650 lbs.	80
CLM-25-A	72"L x 72"W x 80"H	122	93	68	3"	40,000	3,250 lbs.	100
CLM-30-A	8' L x 84" W x 90" H	144	110	81	3"	48,000	3,450 lbs.	110
CLM-40-A	8' L x 84" W x 90" H	214	163	119	3"	56,000	3,550 lbs.	150

Low Temperature Water Cooled Chiller								
Model	Physical Dimensions	Capacity @ 85°F WT (1,000's BTUH)			Supply/ Return Pipe Size	Condenser Water Pipe Size	Shipping Weight	Suggested Fuse Size (460/3/60)
		-10°F LCT	-30°F LCT	-50°F LCT				
CLM-5-A	56"L x 32" W x 62"H	32	23	17	1-1/2"	1"	900 lbs.	20
CLM-8-A	56"L x 32" W x 62"H	46	33	24	1-1/2"	1-1/4"	1,000 lbs.	30
CLM-12-A	64"L x 39" W x 72"H	70	53	38	2"	2"	1,350 lbs.	50
CLM-16-A	64"L x 39" W x 76"H	99	75	55	2"	2-1/2"	1,550 lbs.	60
CLM-20-A	64"L x 39" W x 76"H	114	87	63	3"	2-1/2"	1,650 lbs.	80
CLM-25-A	72"L x 72"W x 80"H	130	99	72	3"	2-1/2"	3,250 lbs.	90
CLM-30-A	8' L x 84" W x 90" H	154	118	86	3"	2-1/2"	3,450 lbs.	110
CLM-40-A	8' L x 84" W x 90" H	228	174	126	3"	2-1/2"	3,550 lbs.	140

Consult Factory for Larger Capacity

Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the CLM series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.





Design Features



- 2 HP TO 30 HP STANDARD PACKAGED DESIGNS
- RANGE FROM -60° F TO -100° F COOLANT TEMP
- LARGE STAINLESS STEEL RESERVOIR TANK
- SYSTEM PUMP & BYPASS PUMP
- STANDARD OPERATING AND SAFETY CONTROLS
- PACKAGED AIR OR WATER COOLED OR REMOTE
- BREAKERS AND MOTOR PROTECTORS– (NO FUSES)
- REMOVABLE PANELS FOR EASY SERVICE ACCESS
- EXTREME DUTY STAINLESS STEEL FAN SHROUD
- MODULATING CONDENSER FAN AND COMPOSITE PROP
- VENTILATED CONTROL CABINET
- INDOOR/ OUTDOOR OPERATION

The CLL series is designed to provide a packaged low temperature chiller solution to your process needs. This fully packaged system includes a robust and high efficiency cascade refrigeration circuit. The integrated tank, pump, and controls make set up and operation of the chiller easy and reliable.

Standard Features

- Two-stage cascade refrigeration system
- Filter drier, sight glass, TXV, and evaporator
- Modulating condenser fan with composite prop
- Insulated 15 PSI stainless steel storage tank
- Tank sight glass, relief valve, air vent, and fill
- System pump with integrated bypass circuit
- Electro-mechanical simple controls
- Door mounted disconnect switch
- Oil filled refrigerant pressure gauges
- 6-point digital temperature display
- Laser engraved placards and diagrams
- UL-508 Electrical

Available Options

- System pump pressure bypass valve
- Mounted Casters
- Vibration isolation floor mounts
- Auto-fill tank
- Tank level alarm/switch
- Stainless steel panels and hardware
- Variable speed system pump
- Voltage/ phase protector
- Flow switch (per module or system)
- Integrated ON/OFF actuators
- Remote operating/monitoring panel
- Hot gas by-pass



Low Temperature Air Cooled Chiller								
Model	Physical Dimensions	Capacity @ 95°F Ambient (1,000's BTUH)			Supply/ Return Pipe Size	Condenser CFM	Shipping Weight	Suggested Fuse Size (460/3/60)
		-60°F LCT	-80°F LCT	-100°F LCT				
CLL-15-A	6" L x 4" W x 6" H	18	11	6	1-1/4"	5,200	2,100 lbs.	30 AMP
CLL-30-A	8" L x 4" W x 8" H	30	23	12	1-1/2"	8,000	2,400 lbs.	40 AMP
CLL-50-A	8' L x 8" W x 10' H	64	42	22	2"	12,000	3,900 lbs.	60 AMP
CLL-60-A	8' L x 8" W x 10' H	84	51	29	2"	16,000	4,900 lbs.	60 AMP
CLL-70-A	10' L x 8" W x 10' H	109	61	41	2"	24,000	5,750 lbs.	70 AMP
CLL-110-A	12' L x 8" W x 10' H	150	93	52	2"	32,000	7,200 lbs.	100 AMP
CLL-145-A	12' L x 8" W x 10' H	180	110	61	3"	40,000	8,500 lbs.	130 AMP
CLL-155-A	12' L x 8" W x 10' H	199	129	80	3"	48,000	9,800 lbs.	140 AMP

Low Temperature Water Cooled Chiller								
Model	Physical Dimensions	Capacity @ 85°F WT (1,000's BTUH)			Supply/ Return Pipe Size	Condenser Water Pipe Size	Shipping Weight	Suggested Fuse Size (460/3/60)
		-60°F LCT	-80°F LCT	-100°F LCT				
CLL-15-W	6" L x 4" W x 6" H	20	13	8	1-1/4"	1"	2,400 lbs.	20 AMP
CLL-30-W	8" L x 4" W x 8" H	32	25	14	1-1/2"	1-1/4"	2,700 lbs.	30 AMP
CLL-50-W	10' L x 8" W x 8' H	66	44	24	2"	2"	4,200 lbs.	50 AMP
CLL-60-W	10' L x 8" W x 8' H	87	54	32	2"	2-1/2"	5,200 lbs.	60 AMP
CLL-70-W	10' L x 8" W x 8' H	112	64	44	2"	2-1/2"	6,150 lbs.	70 AMP
CLL-110-W	12' L x 8" W x 8' H	153	96	55	2"	2-1/2"	7,500 lbs.	100 AMP
CLL-145-W	12' L x 8" W x 8' H	186	116	67	3"	2-1/2"	8,800 lbs.	130 AMP
CLL-155-W	12' L x 8" W x 8' H	205	135	86	3"	2-1/2"	9,800 lbs.	130 AMP

Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the CLL series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.



Vapor Recovery Systems

Recover 99% or greater of
Most Solvents or Hydrocarbons with
Edwards Vapor Recovery Units.

- **Simplicity**– Vapors piped directly into the condensing chamber are recovered as liquid condensate without intermediate steps or additional treatments.
- **Cleanliness**– Liquid condensation occurs directly on cold metal surfaces and drips into a collecting chamber with no addition of contaminants.
- **Safety**– The condensation process is continuous, completely safe, and usually occurs at temperatures far below the flash point.
- **Economy**– Low capital and installation costs; low maintenance and operating costs; rapid payback: sell or reuse recovered liquid.



How Edwards Vapor Recovery Units Work

Vapors enter the condenser where moisture is removed in the initial section of heat exchange tubes with widely spaced fins. This spacing design minimized pressure drop and blockage due to frosting.

In the next section of the coil with closely spaced fins, vapors are condensed and collected directly as liquid. The design and use of a refrigerant direct expansion condensing coil heat exchanger permits the raising of refrigeration compressor suction pressure, increasing the capacity of the unit at a constant condensing temperature if needed.

At periodic intervals, defrosting of the finned surfaces may be required; defrosting is accomplished by circulating warm heat transfer fluid, stored in a separate reservoir, and the circulation of warm processed air. The temperature of the fluid and the air is maintained by heat reclamation from the refrigeration equipment. No shut down time is required for defrosting in the vapor recovery unit if the dual condenser option is utilized.

SVR Series

- Chemical Processing
- Pharmaceutical Processing
- General Industrial Applications

Standard factory packaged units recover many common condensable vapors directly to liquid for reuse in processing. Custom design modifications are made readily at the factory upon review of the particular composition of the vapor stream. Units in operation for the past 15 years achieve recovery rates greater than 95%.



Closed Loop Vapor Recovery:

Closed loop vapor recovery is attractive when applied to drying towers, ovens, and spray dryers. Edwards SVR Series Vapor Recovery Units greatly reduce the energy required to heat the inlet product stream by recovering approximately 70% of the sensible cooling load. This approach has the highest recovery efficiency of any recovery system.



DE Series

- Gasoline Bulk Stations
- Truck Loading
- Storage Tanks
- Barges and Tankers

Developed specifically for the gasoline and hydrocarbon field, the DE series achieves 95% to 99% gasoline vapor recovery. Recovered liquid hydrocarbons can be sold or reused. In many cases short-term capital cost recovery is realized due to the value of the recovered liquid.

LN2 Series

- Cool Vapors as low as -300°F
- Achieve recovery rates of 99% or greater
- Meet or exceed the most stringent government vapor recovery requirements

Stand Alone LN2— The LN2 unit can function alone as a condensation-based vapor recovery unit, cooling vapors to -300°F and achieving a recovery rate of 95% to 99% or greater. This option is intended primarily for relatively low volume flow rates or for intermittent or infrequent use.

Retrofit LN2— The LN2 unit can be added as a component to an existing vapor recovery system to achieve higher rates of recovery and to meet stringent code limits.

Cryo-Mechanical— The LN2 unit can be combined with any Edwards mechanical refrigeration vapor recovery unit in a complete factory package. This option is intended for new or replacement installation with high volume flow rates and frequent or continuous process use.





Solvent Vapor Recovery For:

- Chemical Processing
- Pharmaceutical Processing
- General Industrial Applications

SVR systems re used to recover condensable vapors directly to liquid for reuse in processing.

The SVR closed loop vapor recovery system is desirable for drying towers, ovens, and spray dryers. These units greatly reduce the energy required to heat the inlet product stream by recovering approximately 70% of the sensible cooling load. This approach has the highest recovery efficiency of any recovery system.

Standard Features and Available Options

Factory Packaged: All Edwards Vapor Recovery Units are delivered directly to the job-site, factory packaged and skid mounted. Custom modifications can be made at the factory to meet on-site operating needs and performance specifications.

Walk-In Enclosure: The refrigeration machinery is located in a weatherproof metal walk-in enclosure, providing ample room for operation, maintenance and service.

Low Operating Costs/Energy Savings: Edwards electrically operated vapor recovery packages feature LOW energy consumption per volume of liquid recovered. Units also are designed to recover sensible cooling from the effluent stream, and rejected heat from compressors can be used for defrosting.

Low Maintenance/Long Life: Direct condensation of vapors at atmospheric pressure requires no preliminary or intermediate compression or vapor storage. The basic refrigeration system follows conventional circuit design, is easy to maintain, and lasts indefinitely.

Fully Automatic Operation: A single panel controls operation from inside the unit, so full-time attendance is not required. Remote operation also is available.

Direct Meter Record of Liquid Recovery: An optional direct reading indicator provides a cumulative record of the recovered condensate.

Recovered Condensate is Reusable: Simple piping can be used to return the recovered condensate to any convenient location. Condensed water vapor also can be separated from water immiscible solvents and piped to other locations.

Dual Condensing Coils Available: Where continuous production, loading or processing operation is desired, this option eliminates the need to shut down equipment for defrosting.

100% Overload Capacity: In a refrigeration based unit, the suction pressure of the compressors automatically rises with the load; raising the suction pressure results in increased refrigeration capacity of the unit.

SVR Models						
Model	Physical Dimensions	Electrical Characteristics				
		Total Name Plate Connected HP	Average Electrical Consumption @ 60°F Ambient			
			Ampere Draw		KW Draw	
SVR-800	40'8" L x 8'0" W x 10'0" H	44.0	47.6	85.7	54.8	65.2
SVR-1200	40'8" L x 8'0" W x 10'0" H	66.5	66.5	116	71.9	88.2
SVR-1600	43'0" L x 8'0" W x 10'0" H	76.5	73.7	128	79.1	97.4
SVR-2400	43'0" L x 8'0" W x 10'0" H	116.5	106.2	178	107.8	135.4
SVR-3200	45'0" L x 9'0" W x 10'0" H	139	124.6	212.5	127.36	161.6
SVR-4800	48'0" L x 10'0" W x 10'0" H	225	193.1	314.9	186.3	239.5
SVR-6400	45'0" L x 12'0" W x 10'0" H	279	251.5	403.1	199.7	306.6
SVR-9600	60'0" L x 12'0" W x 10'0" H	454	381.2	617.1	303.3	469.4

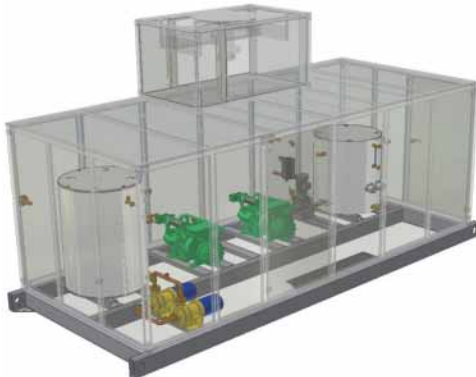
How The Edwards Hydrocarbon Vapor Recovery Unit Works

A conventional Edwards refrigeration chiller cools glycol and water to 34°F for precooling the vapors to remove as much water vapor as possible without the formation of hydrates. The effluent vapors leave the pre cooler at a standardized water vapor dew-point condition of approximately 34°F and 34°F dry bulb.

The vapors, after leaving the pre cooler, enter the top section of the condensing column where moisture and hydrates are removed. In the next section, heavier molecular weight ends are condensed in the column. The design and use of a direct expansion refrigeration condenser coil heat exchanger permits raising the refrigeration compressor suction pressure and so increasing the capacity of the unit.

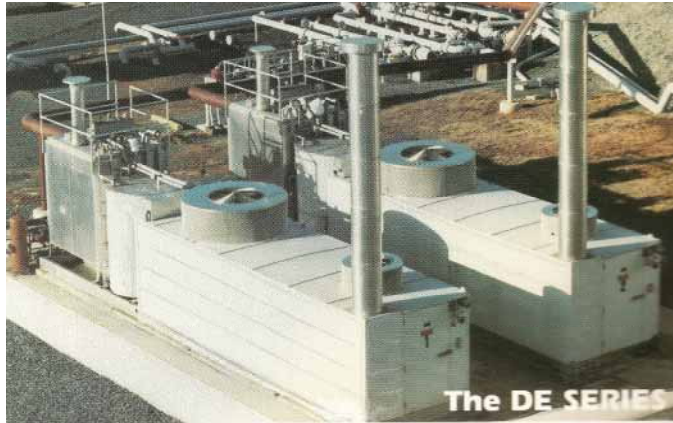
At periodic intervals, defrosting of the finned surfaces is accomplished by circulation of warm brine stored in a separate reservoir. The temperature of the warm defrost brine is maintained by heat reclamation from the refrigeration equipment.

Minimal shut-down time is required to accomplish de-frosting in the standard DE— unit, since the unit is equipped with a pre-cooler as previously described. The pre cooler acts to remove most of the water vapor in the entering hydrocarbon vapor-air mixture, thereby reducing the time required for defrost. Defrosting is completed in 30 to 60 minutes, depending upon the amount of frost collected on the finned coil. Dual condenser units with no time lost for defrost are available.



Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the SVR series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.



DE Series for use in:

- Gasoline Bulk Stations
- Truck Loading
- Storage Tanks
- Barges and Tankers

Developed specifically for the gasoline and hydrocarbon field, the DE series achieves 95% to 99% gasoline vapor recovery. Recovered liquid hydrocarbons can be sold or reused. In many cases short term capital cost recovery is realized due to the value of the recovered liquid.

Standard Features and Available Options

Simple Fully Automatic Operation

Operation of the complete unit is fully controlled from the single panel within the enclosure. All functions are automatic. The Edwards Vapor Recovery Units are furnished with automatic controls which provide operation without full time attendance. Remote operation with safety controls is available as an option.

Low Maintenance Cost

Recovery of condensable vapors is accomplished by passing vapor-air mixtures over cold heat transfer surfaces, resulting in the direct condensation of hydrocarbon vapors at atmospheric pressure. No preliminary or intermediate compression of vapors is required, thus simplifying the equipment required and reducing maintenance. The maintenance costs are reasonable.

Fully Factory Packaged to Your Specifications

Factory packaged units are available with various custom modifications to meet on-site specifications. The standard enclosure is designed to be mounted on a concrete pad. All operating components are mounted on a heavy duty steel base frame- ready to place on site. Most of the refrigeration machinery, is located within a weather-proof, fire-resistant enclosure. Pick-up lugs are provided for rigging purposes.

Recovered Liquid Hydrocarbon Can Be Pumped to Any Location

Piping can be used to automatically return the condensed liquid hydrocarbons from the insulated condenser package directly to any convenient location. Condensed water vapor is separated from the condensed hydrocarbons and can be piped to the terminal waste water disposal facilities.

All Components Weather-proof or Enclosed

All working components and electrical controls are either of weather-proof construction or are housed in a weather-proof enclosure constructed of galvanized steel panels. This enclosure provides full room for attending personnel to enter for routine maintenance and service.

Wiring Meets Explosion-proof Codes

The Edwards Hydrocarbon Recovery Unit is constructed as ordered by the customer to meet any local code requirements. All wiring is complete and may include, if ordered and requested by the customer, a main disconnect switch mounted within the enclosure.

Long Equipment Life

The cascade refrigeration system follows conventional circuit design with an almost indefinite life.

DE Models						
Model	Physical Dimensions	Electrical Characteristics				
		Total Name Plate Connected HP	Average Electrical Consumption @ 60°F Ambient			
			Ampere Draw		KW Draw	
DE-800	40'8" L x 8'0" W x 10'0" H	44.0	47.6	85.7	54.8	65.2
DE-1200	40'8" L x 8'0" W x 10'0" H	66.5	66.5	116	71.9	88.2
DE-1600	43'0" L x 8'0" W x 10'0" H	76.5	73.7	128	79.1	97.4
DE-2400	43'0" L x 8'0" W x 10'0" H	116.5	106.2	178	107.8	135.4
DE-3200	45'0" L x 9'0" W x 10'0" H	139	124.6	212.5	127.36	161.6
DE-4800	48'0" L x 10'0" W x 10'0" H	225	193.1	314.9	186.3	239.5
DE-6400	45'0" L x 12'0" W x 10'0" H	279	251.5	403.1	199.7	306.6
DE-9600	60'0" L x 12'0" W x 10'0" H	454	381.2	617.1	303.3	469.4

How The Edwards Hydrocarbon Vapor Recovery Unit Works

A conventional Edwards refrigeration chiller cools glycol and water to 34°F for precooling the vapors to remove as much water vapor as possible without the formation of hydrates. The effluent vapors leave the precooler at a standardized water vapor dew-point condition of approximately 34°F and 34°F dry bulb.

The vapors, after leaving the precooler, enter the top section of the condensing column where moisture and hydrates are removed. In the next section, heavier molecular weight ends are condensed in the column. The design and use of a direct expansion refrigeration condenser coil heat exchanger permits raising the refrigeration compressor suction pressure and so increasing the capacity of the unit.

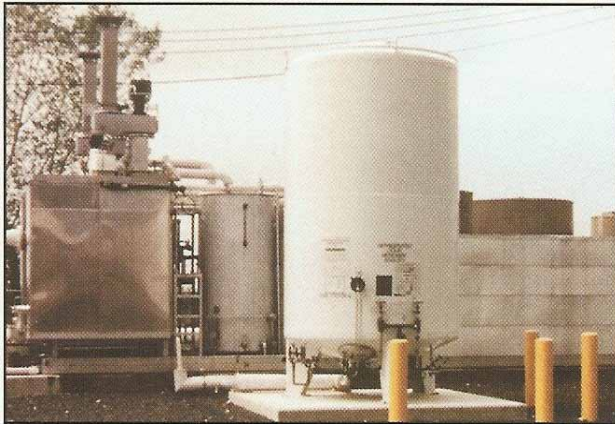
At periodic intervals, defrosting of the finned surfaces is accomplished by circulation of warm brine stored in a separate reservoir. The temperature of the warm defrost brine is maintained by heat reclamation from the refrigeration equipment.

Minimal shut-down time is required to accomplish de-frosting in the standard DE-unit, since the unit is equipped with a precooler as previously described. The precooler acts to remove most of the water vapor in the entering hydrocarbon vapor-air mixture, thereby reducing the time required for defrost. Defrosting is completed in 30 to 60 minutes, depending upon the amount of frost collected on the finned coil. Dual condenser units with no time lost for defrost are available.



Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the DE series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.



LN2 Series for use in:

- Pharmaceutical Applications
- Petroleum
- Chemical Processing

Edwards Engineering in Cooperation with Praxair, Inc. now offers an additional line of simple, safe, and economical vapor recovery packages now using liquid nitrogen. By cooling vapors to as low as -300°F with liquid nitrogen, these enhanced vapor recovery packages make it possible to achieve greater recovery rates than mechanical refrigeration alone.

Meets the Most Stringent State & EPA Vapor Recovery Requirements

The Clean Air Act

The 1990 Clean Air Act established federal guidelines for VOC (volatile organic compounds) emissions and requires industrial sources that exceed those guidelines to reduce emissions by installing a maximum achievable control technology (MACT). Mechanical refrigeration for vapor recovery has proven to be a safe, economical way to deal with VOC and hydrocarbon emissions and to comply with the Clean Air Act guidelines.

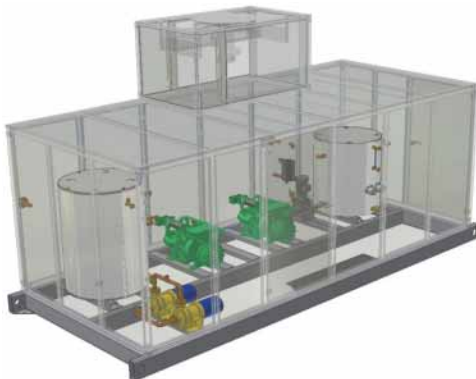
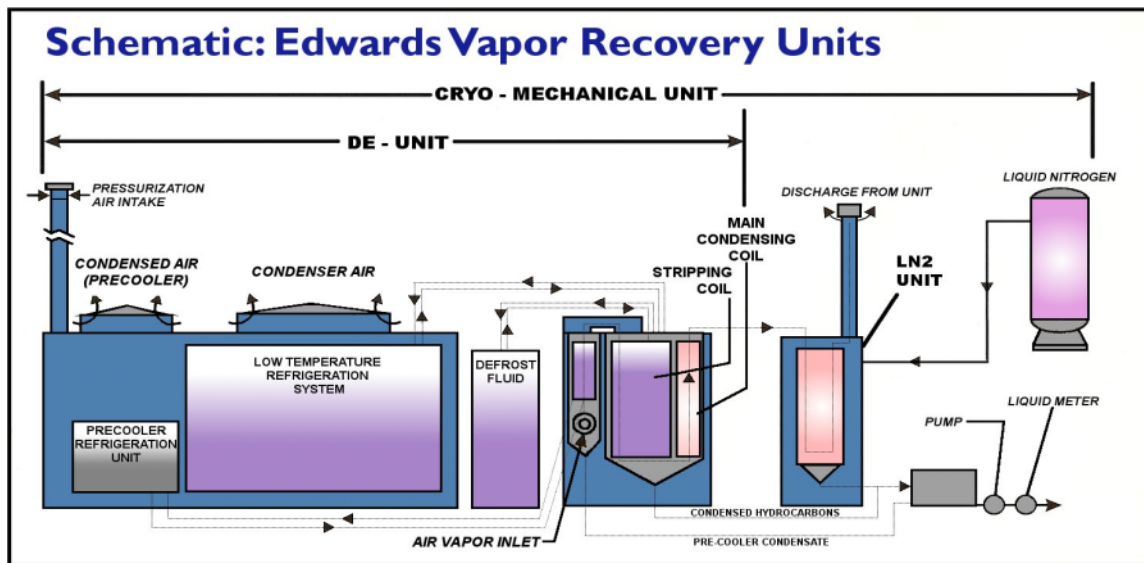
Regulations Are Getting Tougher

A typical mechanical refrigeration vapor recovery system cools vapors to -100°F, where up to 95-98% of most vapors are condensed and recovered directly as liquid. However, new regulations are now mandating a vapor recovery rate of at least 99% in many areas. The Edwards LN2 Series makes it possible to meet or exceed these new standards by adding a liquid nitrogen component to super-cool vapors to a maximum of -300°F, thereby achieving a recovery rate of 99% or higher in most instances.

Options for Nearly Any Vapor Recovery Requirement

- LN2 Retrofit-The Edwards Liquid Nitrogen Unit can be added to any existing vapor recovery system to improve recovery efficiency.
- Stand-alone LN2 Unit-The liquid nitrogen unit can function by itself as a condensation-based vapor recovery unit, cooling vapors to -300F and achieving a recovery rate of 95-99% or greater.
- Edwards Cryo-Mechanical Vapor Recovery Units-Each Edwards mechanical refrigeration vapor recovery unit now can be combined with an LN2 unit in a complete factory package that achieves a 99%+ vapor recovery rate.

LN2 Models					
Model	Physical Dimensions	Electrical Characteristics			
		Total Name Plate Connected HP	Liquid Nitrogen Consumption		
			-180	-220	KW Draw
LN-800	20'8" L x 8'0" W x 10'0" H	2			
LN-1200	20'8" L x 8'0" W x 10'0" H	3			
LN-1600	24'0" L x 8'0" W x 12'0" H	4			
LN-2400	24'0" L x 8'0" W x 12'0" H	6			
LN-3200	28'0" L x 9'0" W x 14'0" H	8			
LN-4800	28'0" L x 10'0" W x 14'0" H	12			
LN-6400	32'0" L x 10'0" W x 14'0" H	16			
LN-9600	36'0" L x 10'0" W x 16'0" H	24			



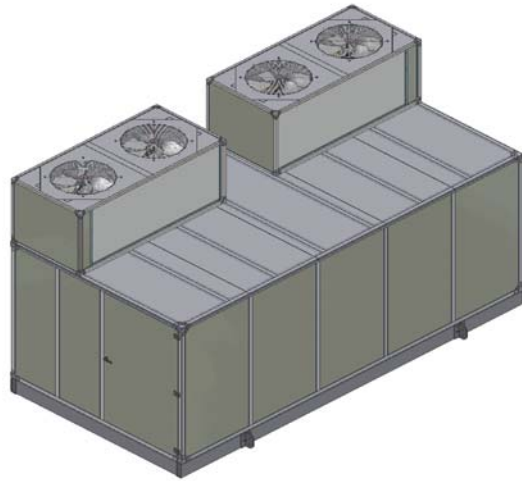
Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the DE series chillers and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.

Boiler Chiller Plants

Custom Engineered Pre Assembled
Factory Tested
Single Point Connections

- **Simplicity**– Edwards Boiler chiller plants are assembled with the latest technology, materials, and components.
- **Reliability**– Completely factory assembled in a controlled environment, and tested to assure that the components and controls are matched and working to specifications.
- **Safety**– The compact platform keeps all your heating and cooling machinery in on place. The all steel and aluminum enclosure adds to durability and fire rating.
- **Economy**– Low capital, installation, maintenance, and commissioning costs. The bulk of the labor is in the factory not in the field for faster trouble free installa-



How Edwards Boiler Chiller Plants Work

Edwards boiler chiller plants are a value engineered product based on your pre-engineered conditions. Any large office, residential, or industrial facility can be designed to accept these highly efficient cost effective products. Installation times and costs are highly reduced because of the simplicity of single point connections. Imagine the cost savings of instead of wiring 10 or more power points, 30 or more control points, 20 or more plumbing components, and then connecting these all to the building systems. You have 1 power point, 1 control connection, and 6 plumbing points. Imagine the time savings in commissioning the system when instead of 3 or 4 contractors being involved, the system has already been test run in the factory. Imagine the difference when and if there is a component failure, instead of a who's who figure pointing escapade, there is a clear knowledgeable individual to call, with all the pertinent information archived, and readily accessible, regardless of the quality of your in house record keeping. Now stop imagining because that is an Edwards Boiler Chiller Plant. We can single or multiple skid Boiler Chiller Plants to fit almost any application. Now just imagine how you will spend all the time and money your going to save.



Condensing Boiler/Chiller Plants							
Model	Physical Dimensions	Capacity @ 95°F Ambient (1,000's BTUH)			Water Connection	Shipping Weight	Unit MCA (460/3/60)
		35°F LCT	44°F LCT	180°F LCT			
CBC2040	8' L x 8' W x 10'H	240	280	400	2"	7,750 lbs.	180
CBC4080	12' L x 8' W x 10'H	480	560	800	2-1/2"	8,000 lbs.	220
CBC60120	12' L x 8' W x 10'H	720	840	1200	3"	9,000 lbs.	240
CBC80160	16' L x 8' W x 10'H	960	1120	1600	3"	10,000 lbs.	270
CBC100200	16' L x 8' W x 10'H	1200	1400	2000	4"	11,000 lbs.	360

Heat Pump Boiler/Chiller Plants							
Model	Physical Dimensions	Capacity @ 95°/55°F Ambient (1,000's BTUH)			Water Connection	Shipping Weight	Unit MCA (460V/3/60)
		35°F LCT	44°F LCT	130°F LHT			
HBC2040	8' L x 8' W x 10'H	240	280	340	2"	7,750 lbs.	180
HBC4080	12' L x 8' W x 10'H	480	560	680	2-1/2"	8,000 lbs.	220
HBC60120	12' L x 8' W x 10'H	720	840	1020	3"	9,000 lbs.	240
HBC80160	16' L x 8' W x 10'H	960	1120	1360	3"	10,000 lbs.	270
HBC100200	16' L x 8' W x 10'H	1200	1400	1700	4"	11,000 lbs.	360

Geo-Thermal Boiler/Chiller Plants						
Model	Physical Dimensions	Capacity @ 45°F Ground Source (1,000's BTUH)	Water Connection	Shipping Weight	Unit MCA (460/3/60)	
CBC2040	8' L x 8' W x 10'H	Cooling 240 / Heating 280	2"	7,750 lbs.	180	
CBC4080	12' L x 8' W x 10'H	Cooling 480 / Heating 560	2-1/2"	8,000 lbs.	220	
CBC60120	12' L x 8' W x 10'H	Cooling 720 / Heating 840	3"	9,000 lbs.	240	
CBC80160	16' L x 8' W x 10'H	Cooling 960 / Heating 1120	3"	10,000 lbs.	270	
CBC100200	16' L x 8' W x 10'H	Cooling 1200 / Heating 1400	4"	11,000 lbs.	360	

Layout and Design Assistance:

Chiller Solutions 3D design program allows for simple arrangement of the Edwards Boiler Chiller Plants and integrated options with minimal time and effort. This assistance allows the installation to be ideally fit into each application. Chiller Solutions provides a complete bill of materials, quotation, and CAD drawings for the application in a short amount of time.

