For **more than 30 years** we have provided our customers with quality, innovative, high performance products carefully engineered for better indoor air. Our unique product lines offer heating, cooling, dehumidification, filtration and energy recovery solutions for commercial and industrial applications.

QUALITY

Our products are built to last. The design, components, construction details and finish of each unit are chosen with care to ensure optimum performance over a long service life, as well as good looks. Particular attention is paid to ease of installation, serviceability and low maintenance in every model.

INNOVATION

We apply our many years of engineering expertise together with the latest technologies to design distinctive, energy efficient systems that provide better indoor air. Our skilled technical team also provides custom designed solutions to meet specific project requirements.

KACE/KHPE WATER-COOLED UNITS

HORIZONTAL + VERTICAL SERIES - 18,000 BTU/HR TO 700,000 BTU/HR

KACE/KHPE packaged indoor units feature R410A scroll compressor(s) separated from air stream and are designed for commercial applications (office buildings, schools, hotels, etc...).

Horizontal units up to model 144 feature right or left return and side discharge and are suitable for duct connections, complete with hangar rails and rubber isolation for suspension while models 180 to 360 feature front return and back discharge.

Vertical units up to model 144 feature right or left return and top discharge and are suitable for duct connection or for use with optional free air discharge plenum while models 180 to 720 feature right return and top discharge.

STANDARD FEATURES

- Factory installed water-regulating valve adjusted to provide a pressure regulated water flow thus keeping constant condensing pressure in the system (AC only)
- X13 fan motor with 3 adjustable speeds (models 018 to 072)
- Adjustable motor pulley (models 084+)
- 24V terminal strip for thermostat connection
- Refrigerant high and low pressure cut-out switches
- Access ports on high and low sides
- Thermostatic expansion valve
- Galvanized G90 casing with 1/2" insulation (up to models 018 to 144)
- Prepainted galvanized cabinet with 1/2ï¿‰ insulation (models 180+)
- 2" Merv 8 filter
- Co-axial water condenser

OPERATING RANGE

- Entering air temperature: 70°F thru 80°F DB / 61°F thru 72°F WB
- Entering water temperature: 40°F thru 90°F
- ESP - Direct drive up to 0.5"/ Belt driven up to 2"

OPTIONAL FEATURES

- Back discharge
- Discharge Plenum (Vertical units up to 144)
- Aqua Aero coated coils
- Copper or epoxy fin coils
- Larger motor for higher ESP applications (models 084+)
- Non-fused disconnect
- Compressor sound cover
- 2-stage or digital compressor (models 048+)

ï¿‰ Dual power connection

- Cupro-nickel co-axial condenser

ï¿‰ 2ï¿‰ Merv 13, 14 or 15 filters

- Pre-painted galvanized cabinet (models 018 to 144)
- Heat pump operation (KHPE)
- DDC controls w/BACnet
- 300 psi operating condition on waterside
- 4-year extended compressor warranty
- Coil options (HWC, ECONO, HGRH)

KACE/KHPE WATER-COOLED UNITS

KACE/KHPE SERIES (HORIZONTAL)													
Model	Nominal	# of Comp	Total[1]		US GPM[2]	MCA[3](60Hz)				Dimensions[4] (in)			Approx Weight
			Cooling	Heating		208 230/1	208 230/3	460/3	575/3	W	H	D	
KACE KHPE	CFM		Btu/h	Btu/h									Lbs
018H	600	1	19367	22136	4.5	16	-	-	-	43	20	23	200
024H	800	1	25437	28460	6.0	21	14	8	6	43	20	23	203
030H	1000	1	31253	35615	7.5	22	16	8	7	55	22	27	240
036H	1200	1	35968	40935	9.0	22	16	10	7	55	22	27	255
048H	1600	1	47776	53545	12	33	25	12	8	55	22	27	307
060H	2000	1	65791	71064	15	41	28	16	10	61	22	39	335
072H	2200	1	72333	80556	18	46	34	16	12	61	22	39	357
084H	2800	1	83341	97070	21	53	33	18	12	61	22	39	394
096H	3200	2	97215	106792	24	-	39	18	13	76	27	39	713
120H	4000	2	127656	144946	30	-	50	27	18	76	27	39	775
144H	4600	2	143851	163337	35	-	60	28	23	76	27	39	787
180H	6000	2	183881	193671	45	-	62	30	22	86	44	53	1800
240H	8000	2	244301	250941	60	-	76	42	33	86	44	53	2200
300H	10000	2	301330	310564	75	-	129	59	55	112	55	64	2800
360H	12000	2	379364	395338	90	-	137	62	58	112	55	64	2950
KACE/KHPE SERIES (VERTICAL)													
018V	600	1	19367	22136	4.5	16	-	-	-	23	41	23	200
024V	800	1	25437	28460	6.0	21	14	8	6	23	41	23	210
030V	1000	1	31253	35615	7.5	22	16	8	7	27	48	27	245
036V	1200	1	35968	40935	9.0	22	16	10	7	27	48	27	265
048V	1600	1	47776	53545	12	33	25	12	8	27	48	27	305
060V	2000	1	65791	71064	15	41	28	16	10	32	56	27	335
072V	2200	1	72333	80556	18	46	34	16	12	32	56	27	360
084V	2800	1	83341	97070	21	53	33	18	12	32	56	27	395
096V	3200	2	97215	106792	24	-	39	18	13	43	67	33	715
120V	4000	2	127656	144946	30	-	50	27	18	43	67	33	775
144V	4600	2	143851	163337	35	-	60	28	23	43	67	33	790
180V	6000	2	183881	193671	45	-	62	30	22	82	64	33	2000
240V	8000	2	244301	250941	60	-	76	42	33	82	70	33	2200
300V	10000	2	301330	310564	75	-	129	59	55	86	88	39	2800
360V	12000	2	379364	395338	90	-	137	62	58	86	88	39	2950
480V	16000	3	480473	499983	120	-	135	71	52	112	85	41	3800
600V	20000	3	612229	635520	150	-	270	118	97	112	98	49	4000
720V	24000	4	709650	745570	180	-	233	125	110	140	93	55	4250

1: Entering air temperature of 80°F DB/67°F WB (Cooling)/ 70°F DB (Heating)
1: Entering water temperature of 85°F (cooling) and 70°F (Heating)
2: GPM based on 85F entering water
3: External Static Pressure at 0.5" WG
4: Filter holder and supply air connections not included

Data subject to change without prior notice
Please call for larger sizes

KMAE WATER-COOLED MAKE UP AIR UNITS

HORIZONTAL / VERTICAL SERIES - 50,000 BTU/HR TO 740,000 BTU/HR

KMAE packaged indoor units feature R410A scroll compressor(s) separated from air stream and are designed for commercial applications (office buildings, schools, hotels, etc...).

Horizontal units up to model 144 feature right or left return and side discharge and are suitable for duct connections, complete with hangar rails and rubber isolation for suspension while models 180 to 360 feature front return and back discharge.

Vertical units up to model 144 feature right or left return and top discharge while models 180 to 960 feature right return and top discharge. All units are suitable for duct connection.

STANDARD FEATURES

- Factory installed water-regulating valve adjusted to provide a pressure regulated water flow thus keeping constant condensing pressure in the system
- X13 fan motor with 3 adjustable speeds (models 048 to 072)
- Adjustable motor pulley (models 084+)
- Refrigerant High and low pressure cut-out switches
- Access ports on high and low sides
- Digital compressor (1st circuit only)
- Electronic expansion valve
- Galvanized G90 casing with 1/2" insulation
- Prepainted galvanized cabinet with 1/2ï¿‰ insulation (models 180+)
- 2" Merv 8 filter
- Co-axial water condenser
- DDC Controls
- Modulating hot gas reheat coil
- Compressor sound cover
- Suction accumulator
- Crankcase heater
- Check valve

OPERATING RANGE

- Entering air temperature: 81°F thru 95°F DB / 72°F thru 75°F WB
- Entering water temperature: 55°F thru 90°F
- ESP - Direct drive up to 0.5"/ Belt driven up to 2"

OPTIONAL FEATURES

- Back Discharge
- Aqua Aero coated coils
- Copper or epoxy fin coils
- Larger motor for higher ESP applications (models 084+)
- Non-fused disconnect
- 4-year extended compressor warranty
- Cupro-nickel co-axial condenser

ï¿‰ Double wall construction

ï¿‰ Electric heater (On/Off or Modualting)

ï¿‰ 2ï¿‰ Merv 13, 14 or 15 filters

- Prepainted galvanized cabinet (models 018 to 144)
- Heat pump operation (limited availability)
- 300 psi operating condition on waterside
- Coil options (HWC, ECONO)
- BACnet card

ï¿‰ 1ï¿‰ or 2ï¿‰ insulation foam or acoustical fiber glass

KMAE WATER-COOLED MAKE UP AIR UNITS

KMAE SERIES (HORIZONTAL)														
Model	Nominal CFM		# of Comp	Total[1]		US GPM[2]	MCA[2](60Hz)				Dimensions[4] (in)			Approx Weight
				Cooling	Sensible									
KMAE	MIN.	MAX.		Btu/h	Btu/h		208 230/1	208 230/3	460/3	575/3	W	H	D	Lbs
048H	668	832	1	50120	31100	12	30	23	11	8	54.25	25	32.25	410
060H	835	1040	1	61110	37920	15	37	26	12	10	60.25	25	36.25	450
072H	1002	1248	1	74460	46240	18	-	30	15	12	60.25	25	36.25	475
084H	1169	1456	1	85760	53120	21	-	33	16	12	60.25	25	36.25	510
096H	1336	1664	2	100120	62200	24	-	40	20	14	75.25	27	44.25	875
120H	1670	2080	2	122200	75840	30	-	45	20	15	75.25	27	44.25	945
144H	2004	2496	2	148920	92480	36	-	51	25	19	75.25	27	44.25	960
180H	2505	3120	2	171520	106240	42	-	58	29	21	86	44	52.5	2210
240H	3340	4160	2	248200	153220	60	-	76	42	31	86	44	52.5	2510
300H	4175	5200	2	326600	201660	78	-	122	50	40	112	55	64	3150
360H	5010	6240	2	370600	230480	90	-	130	60	51	112	55	64	3315
KMAE SERIES (VERTICAL)														
048V	668	832	1	50120	31100	12	30	23	11	8	26.25	47.5	31.25	410
060V	835	1040	1	61110	37920	15	37	26	12	10	31.25	55.5	31.25	490
072V	1002	1248	1	74460	46240	18	-	30	15	12	31.25	55.5	31.25	510
084V	1169	1456	1	85760	53120	21	-	33	16	12	31.25	55.5	31.25	545
096V	1336	1664	2	100120	62200	24	-	40	20	14	42.25	66.5	36.25	840
120V	1670	2080	2	122200	75840	30	-	45	20	15	42.25	66.5	36.25	910
144V	2004	2496	2	148920	92480	36	-	51	25	19	42.25	66.5	36.25	925
180V	2505	3120	2	171520	106240	45	-	58	29	21	82	63.25	32	2200
240V	3340	4160	2	248200	153220	60	-	76	42	31	82	69.25	32	2500
300V	4175	5200	2	326600	201660	75	-	122	50	40	86	87.75	38.25	3125
360V	5010	6240	2	370600	230480	90	-	130	60	51	86	87.75	38.25	3300
480V	6680	8320	3	442680	275430	105	-	130	70	52	112	84.25	40	4100
600V	8350	10400	3	555900	345720	135	-	195	90	76	112	97.25	48	4320
720V	10020	12480	4	741200	460960	180	-	244	112	96	140	93	54	4590

1: At air on 95°F DB/75°F WB and minimum CFM (EWT of 85°F)
2: GPM based on 85°F entering water
3: External Static Pressure at 0.5" WG
4: Filter holder and supply air connections not included

Data subject to change without prior notice
Please call for larger sizes

KACSE WATER-COOLED CONDENSING UNIT

SPLIT INDOOR CONDENSING UNIT - 18,000 BTU/HR TO 720,000 BTU/HR

KACSE indoor compact condensing units feature R410A scroll compressor, suitable for connection to duct coils in a ventilation unit or with a DX evaporator-blower unit and are designed for commercial applications (office buildings, schools, hotels, etc...).

STANDARD FEATURES

- Factory installed water-regulating valve adjusted to provide a pressure regulated water flow thus keeping constant condensing pressure in the system
- Refrigerant high and low pressure cut-out switches
- Access ports on high and low sides
- Prepainted galvanized cabinet with 1/2" insulation
- Co-axial water condenser
- Sweat-type refrigerant connections
- Front access electrical service panel
- 24V dry contact terminal to enable/disable compressor(s)

OPERATING RANGE

- 45°F Suction (SST) and 105°F Condensing (SCT)
- Entering water temperature: 40°F thru 90°F

OPTIONAL FEATURES

- Non-fused disconnect
- Compressor sound cover
- 2-stage or digital compressor
- Cupro-nickel co-axial condenser
- Pre-painted galvanized cabinet
- 300 psi operating condition on waterside

KACSE SERIES (CONDENSING UNIT)										
Model	Total[1] Cooling	US GPM	MCA(60Hz)				Dimensions[2] (in)			Approx Weight
KACSE	Btu/h		208 230/1	208 230/3	460/3	575/3	W	H	D	Lbs
018	17832	4.5	12	-	-	-	26	23	26	120
024	22918	6.0	17	10	5	-	26	23	26	125
030	29508	7.5	18	12	7	5	26	23	26	140
036	34003	9.0	18	12	7	5	26	23	26	150
048	43896	10.5	25	17	8	6	26	23	26	210
060	59722	12.0	33	20	10	8	26	23	31	225
072	66965	16.0	38	26	12	10	26	23	31	240
084	83600	21.0	-	29	14	10	26	23	31	260
096	87792	24.0	-	31	14	10	32	26	42	290
120	119444	30.0	-	36	18	13	32	26	42	320
144	133930	35.0	-	47	22	18	32	26	42	345

1:At 45°F Suction(SST) & 105°F Condensing (SCT)

2: Water + refrigerant connections not included

Data subject to change without prior notice
Please call for larger sizes

IRD PACKAGE DEHUMIDIFIER

ICE RINK DEFOGGER - 6.5 LBS/HR TO 21 LBS/HR

IRD indoor packaged R448A dehumidification unit specifically designed for optimal airflow and maximum moisture removal for arenas (skating, hockey, curling)

STANDARD FEATURES

- Refrigerant components out of air stream to ease service accessibility
- Forward curve fan with adjustable pulley
- Continuous fan operation to prevent humidity build-up on off cycle
- Humidistat
- Innovative demand defrost system for quick and efficient defrost
- Heated stainless steel drain pan
- True sub-cooling circuit
- Refrigerant high and low pressure cut-out switches
- External high and low pressure service access valves and sight glass
- Thermostatic expansion valve
- Pre-painted G90 galvanized casing
- 2″ Merv 8 filter

OPERATING RANGE

- Entering air temperature: 30ï¿½F thru 80°F DB
- Relative humidity: 50% thru 100%
- ESP - up to 2.0″

OPTIONAL FEATURES

- Aqua Aero coated coils
- Non-fused disconnect
- Compressor sound cover
- DDC control w/humidistat
- BACnet
- Air supply diffuser
- Plenum fan motor

IRD SERIES (ICE RINK DEFOGGER)

Model	Moisture Removal[1]	Nominal	MCA[2] (60Hz)				Dimensions[3] (in)			Net Weight
IRD	LB/H	CFM	208 230/1	208 230/3	460/3	575/3	L	W	H	Lbs
020	6.5	1200	30	17	8	7	36	24	32 1/2	384
035	11.5	2800	44	30	14	10	60	48	37 1/2	950
050	14.5	3400	38.4	29.4	15.4	11.6	60	48	37 1/2	1000
075	17.5	4000	-	35.9	20.3	20	60	48	37 1/2	1080
100	21.0	5500	-	51.6	24.6	17.3	60	48	54 3/4	1300

1: At air on 60°F and 50% RH
2: External Static Pressure at 0.5″ WG
3: Filter holder and supply air connections not included

Data subject to change without prior notice

CDS AIR COOLED CONDENSER

OUTDOOR REMOTE AIR COOLED CONDENSER - 43,500 BTU/HR TO 440,000 BTU/HR

CDS outdoor remote air cooled condensers are designed for R410A operation and can be used for both residential or commercial applications.

STANDARD FEATURES

- Top discharge dissipates sound away
- Pre-painted galvanized cabinet
- Efficient AC axial fans
- Galvanized G90 steel casing
- Sweat-type refrigerant coil connections
- Front access electrical service panel

OPTIONAL FEATURES

- Non-fused disconnect
- Pre-painted galvanized steel cabinet
- EC axial fan w/pressure controller
- Copper or Epoxy fin coating
- Aqua Aero coated coils
- Dry-type fluid cooler application (FDS)
- Low ambient operation

OPERATING RANGE

- Entering air temperature:
  -40°F thru 100°F DB

CDS SERIES (AIR COOLED CONDENSER)														
MODEL #	MAX # OF CIRCUITS	THR (MBH) @ R410a				FAN ARR.		CONN. SIZE[1]		CONN. SIZE[1], 2 COMP		REF. CHARGE LBS.[2]		WEIGHT
		TEMPERATURE DIFFERENCE				WIDE	LONG	DISCH.	LIQUID	DISCH.	LIQUID	SUMMER	WINTER	LBS
		1	15	20	25									
CDS-044	1	1.8	26.4	35.2	44.0	1	1	5/8	1/2			2.9	9.1	150
CDS-066	1	2.6	39.5	52.6	65.8	1	1	5/8	1/2			4.4	13.7	170
CDS-085	1	3.3	50.0	66.6	84.5	1	1	3/4	1/2			5.8	18.3	185
CDS-098	2	3.9	58.5	78.0	97.5	1	2	7/8	5/8	2 X 5/8	2 X 1/2	5.4	17.0	290
CDS-110	1	4.4	66.0	88.0	110.0	1	1	7/8	5/8			8.2	25.7	220
CDS-131	2	5.2	78.3	104.4	130.5	1	2	7/8	5/8	2 X 5/8	2 X 1/2	8.1	25.4	320
CDS-175	2	6.8	102.0	136.0	170.0	1	2	1-1/8	3/4	2 X 3/4	2 X 1/2	10.8	33.9	350
CDS-196	2	7.8	117.6	156.8	196.0	2	2			2 X 7/8	2 X 5/8	10.8	34.0	550
CDS-220	2	8.8	132.0	176.0	220.0	1	2	1-1/8	3/4	2 X 7/8	2 X 5/8	15.3	48.2	425
CDS-262	2	10.5	157.2	209.6	262.0	2	2			2 X 7/8	2 X 5/8	16.2	50.8	615
CDS-350	2	14.0	210.0	280.0	350.0	2	2			2 X 1/8	2 X 3/4	21.6	67.8	680
CDS-440	2	17.6	264.0	352.0	440.0	2	2			2 X 1/8	2 X 3/4	30.6	96.4	820

1: Maximum 50 FT equivalent distance. Condenser location above or same level of the unit.
Operating range from -20 degree F to 100 Degree F
2: Refrigerant summer charge base on 100 F, 30% liquid and 70% vapour

2: Refrigerant winter charge base on -20 F, 90% liquid and 10% vapour
2: Refrigerant charge is total charge.
For two circuits unit each circuit refrigerant charge will be 50% of table refrigerant charge