IEC series

EVAPORATIVE CONDENSER

engineering data
and specifications



SGS REFRIGERATION

FULLY HOT-DIPPED GALVANIZED AFTER FABRICATION

1.5-2X the protective zinc layer vs. G235 mil galvanized.

ALL NUT AND BOLT CONSTRUCTION

No unnecessary penetrations in the enclosure or basin.

STAINLESS STEEL OPTIONS

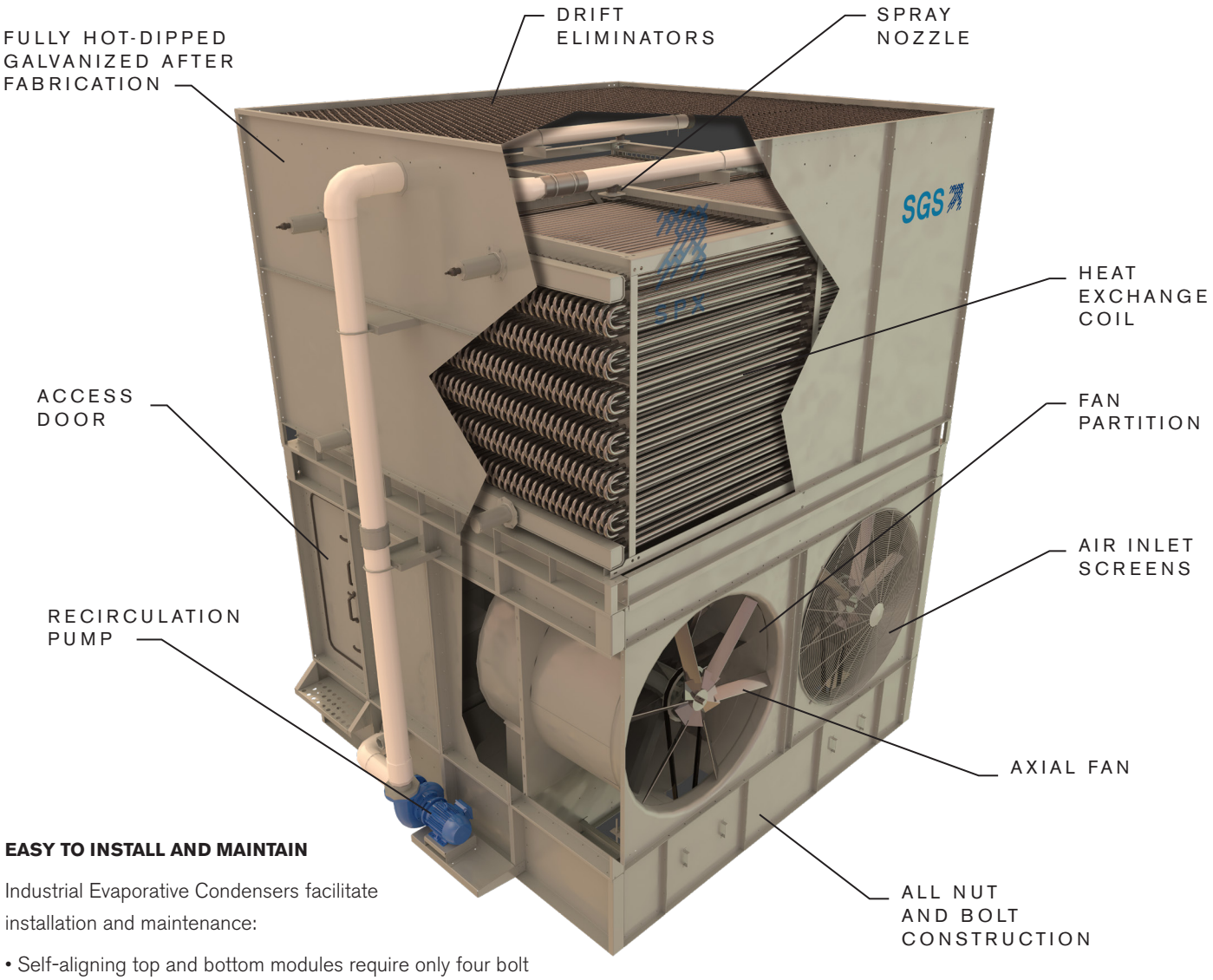
When environmental and design conditions dictate, heavy gauge stainless steel water collection basins and other structural components may be specified.

CLOG-RESISTANT WATER DISTRIBUTION SYSTEM

Self-draining spray headers and large orifice spray nozzles help prevent debris build-up and clogging. Self-draining spray headers limit potential ice buildup when not operational; spray nozzles mount to the bottom of the spray pipes.

LARGE ACCESS DOORS

Located on opposite walls, the rectangular doors provide easy access to the inside of the unit.



EASY TO INSTALL AND MAINTAIN

Industrial Evaporative Condensers facilitate installation and maintenance:

- Self-aligning top and bottom modules require only four bolt connections to speed up field installation.
- Pre-assembled platform options have welded guardrails.
- Coil sections have integrated lift points and fewer connection points to the basin – faster installation.

Access Platforms

Condenser-supported upper access platforms are available in a variety of configurations. Platforms can be configured on one or more faces of the condenser, excluding coil/pipe connection face(s). Corner connectors can be selected to connect platforms on adjacent sides of the condenser, enabling ladder consolidation. Platform surfaces are surrounded by a guardrail, kneerail and toeboard designed according to OSHA guidelines. Partial factory assembled platforms are available to simplify field installation. Available platform accessories include ladder(s), ladder extension(s), safety cage(s) and safety gate(s).

One Motor - Two Fans

The standard IEC drive arrangement incorporates a single NEMA premium efficiency TEFC inverter duty motor driving each fan through a system of belts and pulleys. For replacement applications where extensive electrical service modifications are not practical, the fan drive system can be optionally configured to drive two fans from a single motor.

Vibration Switch

A mechanical vibration switch may be factory mounted for wiring to the shutdown circuit of the fan motor(s) starter or VFD. The switch is designed to interrupt control power voltage to a safety circuit in the event of excessive vibration causing the starter or VFD equipment to de-energize the motor(s).

Stainless Steel Construction

When an enhanced level of corrosion protection is desired, condensers may be configured with varying levels of stainless steel construction. Stainless steel collection basins, welded and factory-water tested to reduce the potential for leaks, are a commonly selected upgrade. Units with stainless steel collection basin and casing are also available.

Electronic Water Level Control

An electronic water level control system consisting of a NEMA 4X control panel, water level probes and probe stilling chamber may be selected to monitor the water level in the collection basin to determine level events used for makeup, high/low alarm(s), and/or pump shutdown.

Water Level Standpipe

An external water level standpipe is available to allow visual determination of the basin water level from the exterior of the unit while in operation.

Pump Heat Trace

When an electric basin heater package is selected, the recirculating pump(s) may be fitted with electric heat trace cable and insulated to protect the water retained in the pump from freezing during periods of shutdown or standby operation.

Basin Sweeper Piping

As an option to augment an external filtration system, the collection basin may be equipped with a factory-installed, corrosion-resistant sweeper piping system designed to force dirt and debris towards a dedicated drain in the depressed section of the collection basin.

Model Nomenclature

IEC-B - 1218 - N A B G 1

- **Product**: Blow Through Condenser (Axial Forced Draft)
- **Blow Through**
- **Box Size**: 1012 - 10' wide x 12' long; 1018 - 10' wide x 18' long; 1212 - 12' wide x 12' long; 1218 - 12' wide x 18' long
- **Total Fan Motor Power**: A - 6 hp; B - 9 hp; N - 10 hp; P - 15 hp; Q - 20 hp; C - 22.5 hp; S - 30 hp; T - 40 hp; D - 45 hp; V - 60 hp
- **Sound**: A - Standard Fan(s); L - Ultra Quiet Fan(s)
- **Coil**: B; C; D; E; J; K
- **Coil Material**: G - Hot Dipped Galvanized (HDG)
- **Number of Cells**

Condenser Recirculating Water

When the ambient air temperature falls below 32°F, the recirculating water within the condenser can freeze. *Marley Technical Report #H-003* "Cooling Towers and Freezing Weather" describes how to prevent freezing during operation. Ask your sales representative for a copy or download a copy at spxcooling.com.

During shutdown, water collects in the basin and may freeze solid. You can prevent freezing by adding heat to the water left in the basin or, you can drain the condenser basin and all exposed pipework at shutdown.

Remote Sump Application

With this type of system, recirculating water used by the condenser for evaporative heat rejection is pumped to the condenser spray system from a remote tank and flows by gravity from the condenser back to the tank. At shutdown, all exposed water drains into the tank, located in a heated space, where it is safe from freezing. The amount of water needed to successfully operate the system depends on condenser size and volume of water contained in the piping system. Select a tank large enough to contain those combined volumes, plus a level sufficient to maintain a flooded suction on the pump. Control makeup water according to the level where the tank stabilizes during operation. For applications with remote sump, the condenser recirculating water pump and piping are removed and an outlet connection is added in the collection basin.

System Cleanliness

The IEC can be a very effective air washer. Atmospheric dust and particulates able to pass through the relatively small louver or screen openings will enter the recirculating water system. Increased concentrations can intensify systems maintenance by clogging screens and strainers—and smaller particulates can coat system heat transfer surfaces. In areas of low flow velocity, such as the collection basin, sedimentary deposits can provide a breeding ground for bacteria.

In areas prone to dust and particulates, consider installing some means for keeping the collection basin clean. Typical devices include basin sweeper piping in conjunction with side stream filters and a variety of filtration media.

Blowdown

Blowdown or bleed-off is the continuous removal of a small portion of the water from the open recirculating system. Blowdown is used to prevent the dissolved solids from concentrating to the point where they will form scale. The amount of blowdown required depends on the heat load and the composition of the makeup water. The IEC is equipped with a blowdown line with metering valve connected directly to the overflow. Specific blowdown adjustment instructions and additional blowdown information can be found in the applicable *IEC User Manual.*

Water Treatment

To control the buildup of dissolved solids resulting from water evaporation, as well as airborne impurities and biological contaminants including Legionella, an effective, consistent water treatment program is required. Simple blowdown may be adequate to control corrosion and scale, but biological contamination can only be controlled with biocides. An acceptable water treatment program must be compatible with the variety of materials incorporated in the condenser. Ideally the pH of the recirculating water should fall between 6.5 and 9.0. Batch feeding of the chemicals directly into the condenser is not recommended since localized damage is possible. Specific startup instructions and additional water quality recommendations can be found in the *IEC User Manual* which accompanies the condenser and also is available from your sales representative.

Air Circulation

Considering the air path entering and exiting the condenser is critical to ensure the condenser operates as designed. Obstructions near the air inlet(s) and discharge should be located a sufficient distance away so as not to impede airflow. If the condenser is to be located in an enclosure or near tall barriers, the air discharge should be positioned at an elevation higher than the top of the barriers to discourage recirculation of the hot discharge air. The condenser must be located at such distance and direction to avoid the possibility of contaminated discharge air being drawn into building fresh air intake ducts.

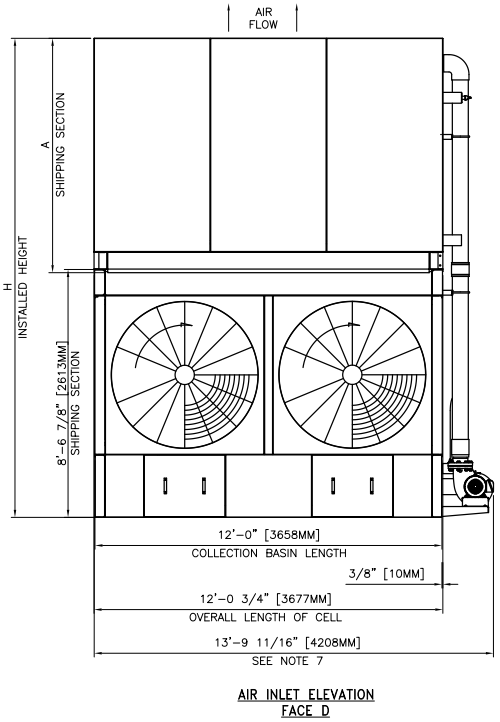
Piping

Always follow accepted engineering practices during design and installation of condenser piping. All piping must be supported independent of the condenser—no loads are to be supported by the condenser coil connections or condenser structure. Precautions must be taken to protect the condenser from excess heat generated during welding.

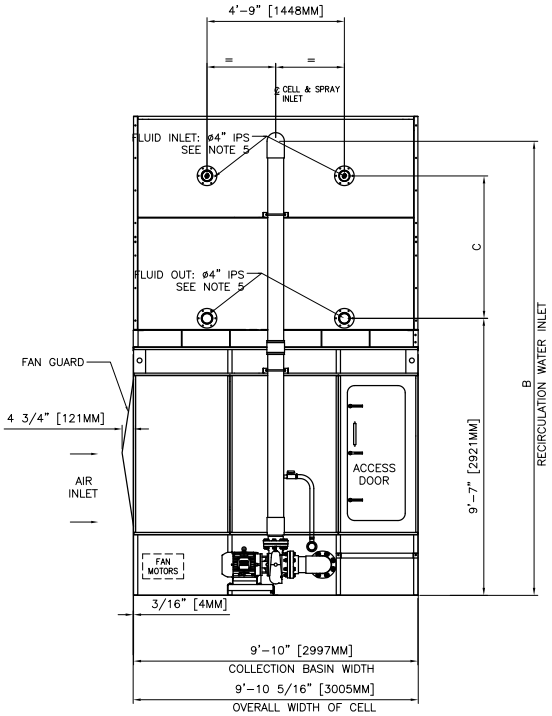
10' x 12' Single Cell 258-496 Tons R717

Model	H	A	B	C
IEC-B1012XXB	171-13/16"	68-15/16"	161-7/16"	32-1/8"
IEC-B1012XXC	180-13/16"	77-15/16"	170-7/16"	41-1/8"
IEC-B1012XXD	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1012XXJ	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1012XXE	198-13/16"	95-15/16"	188-7/16"	59-1/8"
IEC-B1012XXK	198-13/16"	95-15/16"	188-7/16"	59-1/8"

SelectSGS selection software provides IEC model recommendations based on customer's specific design requirements.



AIR INLET ELEVATION
FACE D



SIDE ELEVATION
FACE A

NOTES

1. The equipment must be installed level to insure maximum thermal performance and to avoid racking.
2. Air inlet faces must have an adequate air supply. If obstructions exist, consult your sales representative.
3. For tower support requirements, weights, loads, and multi-cell spacing, refer to the "suggested supporting steel arrangement" drawing.
4. Motor quantities and position vary depending on options selected. Refer to the "conduit location" and "collection basin details" drawings for additional details.
5. Coils are capped and charged with nitrogen at the factory. Upon installation, coil connections require cutting to dimension shown and beveling for welding. Fluid risers by others. Risers to be self supporting and must not add extra weight to the equipment. Precautions must be taken to protect tower from excess heat during welding.
6. All piping shall be supported independent of the tower. Piping, supports, design of piping and supports, and restraint of lateral piping loads shall be supplied by others.
7. Pump dimension is based on a standard scot 59 frame 60 Hz pump. Other pump models, 50 Hz frames, or other options may increase dimension.
8. Routine maintenance does not require workers to use the top of the tower as a work platform. Spray nozzle inspection can be done from a portable ladder, stair, or scaffold. Take adequate safety precautions when using portable ladders.

   For added safety and convenience, SPX Cooling Tech, LLC offers an optional spray platform for improved access for spray nozzle maintenance. Detail drawings for this and other tower options are available from your sales representative.
9. Assembly tolerance is ±1/8" [±3mm]. Consult suppliers of supporting structure for construction tolerance.

10' x 12' Single Cell

Model note1	R717 Capacity tons - note 2	R717 Charge lb - note 3	Internal Coil Volume ft^3	Fan Motor hp	Airflow Rate cfm	Shipping Weight lb		Design Operating Weight lb
						Weight/Cell	Heaviest Section	
IEC-B-1012-AAB1	258	384	37.5	2 x 3	43,874	13,170	8,070	15,125
IEC-B-1012-NAB1	294	384	37.5	2 x 5	51,906	13,170	8,070	15,125
IEC-B-1012-PAB1	325	384	37.5	2 x 7.5	58,820	13,170	8,070	15,125
IEC-B-1012-QAB1	347	384	37.5	2 x 10	63,996	13,170	8,070	15,125
IEC-B-1012-NAC1	333	478	47	2 x 5	51,188	14,670	9,570	16,719
IEC-B-1012-PAC1	368	478	47	2 x 7.5	58,478	14,670	9,570	16,719
IEC-B-1012-QAC1	394	478	47	2 x 10	63,349	146,70	9,570	16,719
IEC-B-1012-PAD1	373	572	56	2 x 7.5	57,692	16,170	11,070	18,313
IEC-B-1012-QAD1	399	572	56	2 x 10	62,909	16,170	11,070	18,313
IEC-B-1012-NAJ1	371	636	62	2 x 5	49,508	17,620	12,220	19,827
IEC-B-1012-PAJ1	394	636	62	2 x 7.5	56,974	17,620	12,220	19,827
IEC-B-1012-QAJ1	421	636	62	2 x 10	62,674	17,620	12,220	19,827
IEC-B-1012-PAE1	402	667	65	2 x 7.5	57,432	17,670	12,570	19,908
IEC-B-1012-QAE1	431	667	65	2 x 10	62,708	17,670	12,570	19,908
IEC-B-1012-NAK1	385	741	72	2 x 5	48,767	19,270	13,870	21,582
IEC-B-1012-PAK1	424	741	72	2 x 7.5	56,333	19,270	13,870	21,582
IEC-B-1012-QAK1	455	741	72	2 x 10	62,115	19,270	13,870	21,582
IEC-B-1012-SLJ1	460	636	62	2 x 15	70,364	17,620	12,220	19,827
IEC-B-1012-SLK1	496	741	72	2 x 15	69,683	19,270	13,870	21,582

Pump Motor hp	Recirculating Flow Rate gpm	Remote Sump Application	
		Bottom Outlet Diameter	Volume gal
5	520	8"	470

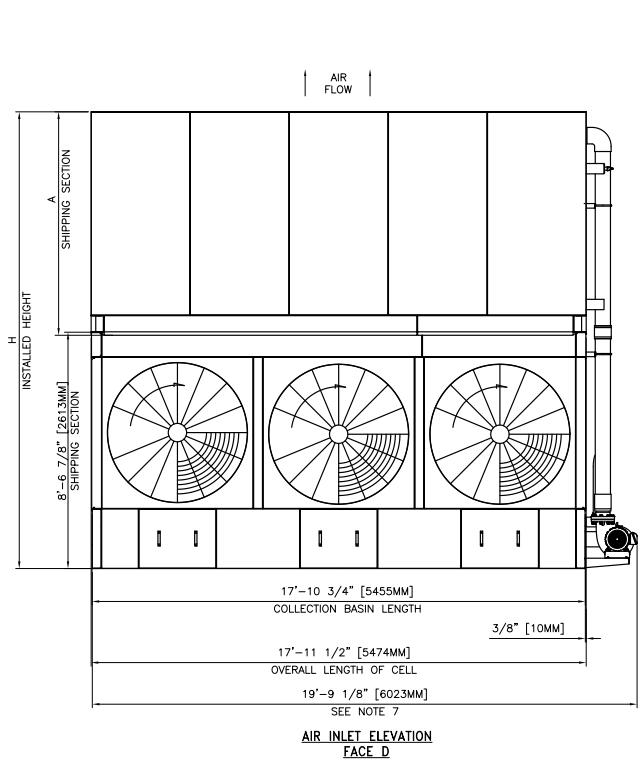
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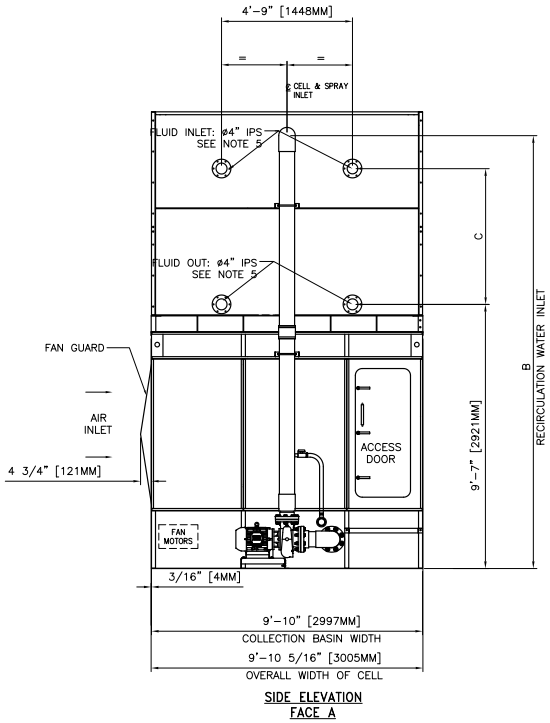
1. The last digit of the model number shown represents the number of cells.
2. R717 tons are at 96.3°F condensing temperature, a 20°F suction temperature and a 78°F entering wet-bulb temperature.
3. For R134a charge, multiply by 1.98. For R22 charge multiply by 1.93. For R404A or R507A charge multiply by 1.65.
4. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

10' x 18' Single Cell 397-760 Tons R717

Model	H	A	B	C
IEC-B1018XXB	171-13/16"	68-15/16"	161-7/16"	32-1/8"
IEC-B1018XXC	180-13/16"	77-15/16"	170-7/16"	41-1/8"
IEC-B1018XXD	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1018XXJ	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1018XXE	198-13/16"	95-15/16"	188-7/16"	59-1/8"
IEC-B1018XXK	198-13/16"	95-15/16"	188-7/16"	59-1/8"

SelectSGS selection software provides IEC model recommendations based on customer's specific design requirements.





NOTES

1. The equipment must be installed level to insure maximum thermal performance and to avoid racking.
2. Air inlet faces must have an adequate air supply. If obstructions exist, consult your sales representative.
3. For tower support requirements, weights, loads, and multi-cell spacing, refer to the "suggested supporting steel arrangement" drawing.
4. Motor quantities and position vary depending on options selected. Refer to the "conduit location" and "collection basin details" drawings for additional details.
5. Coils are capped and charged with nitrogen at the factory. Upon installation, coil connections require cutting to dimension shown and beveling for welding. Fluid risers by others. Risers to be self supporting and must not add extra weight to the equipment. Precautions must be taken to protect tower from excess heat during welding.
6. All piping shall be supported independent of the tower. Piping, supports, design of piping and supports, and restraint of lateral piping loads shall be supplied by others.
7. Pump dimension is based on a standard scot 59 frame 60 Hz pump. Other pump models, 50 Hz frames, or other options may increase dimension.
8. Routine maintenance does not require workers to use the top of the tower as a work platform. Spray nozzle inspection can be done from a portable ladder, stair, or scaffold. Take adequate safety precautions when using portable ladders.

   For added safety and convenience, SPX Cooling Tech, LLC offers an optional spray platform for improved access for spray nozzle maintenance. Detail drawings for this and other tower options are available from your sales representative.
9. Assembly tolerance is ±1/8" [±3mm]. Consult suppliers of supporting structure for construction tolerance.

10' x 18' Single Cell

Model note1	R717 Capacity tons - note 2	R717 Charge lb - note 3	Internal Coil Volume ft^3	Fan Motor hp	Airflow Rate cfm	Shipping Weight lb		Design Operating Weight lb
						Weight/Cell	Heaviest Section	
IEC-B-1018-BAB1	397	573	56	3 x 3	67,641	19,755	11,670	22,721
IEC-B-1018-PAB1	452	573	56	3 x 5	80,047	19,755	11,670	22,721
IEC-B-1018-CAB1	497	573	56	3 x 7.5	90,209	19,755	11,670	22,721
IEC-B-1018-SAB1	533	573	56	3 x 10	97,304	19,755	11,670	22,721
IEC-B-1018-PAC1	500	714	70	3 x 5	78,326	22,055	13,870	25,162
IEC-B-1018-CAC1	550	714	70	3 x 7.5	89,232	22,055	13,870	25,162
IEC-B-1018-SAC1	589	714	70	3 x 10	96,962	22,055	13,870	25,162
IEC-B-1018-CAD1	573	855	83.5	3 x 7.5	88,406	24,255	16,070	27,503
IEC-B-1018-SAD1	608	855	83.5	3 x 10	96,240	24,255	16,070	27,503
IEC-B-1018-PAJ1	562	951	93	3 x 5	75,544	26,430	17,670	29,774
IEC-B-1018-CAJ1	597	951	93	3 x 7.5	87,157	26,430	17,670	29,774
IEC-B-1018-SAJ1	641	951	93	3 x 10	95,837	26,430	17,670	29,774
IEC-B-1018-CAE1	616	996	97	3 x 7.5	87,978	26,505	18,270	29,894
IEC-B-1018-SAE1	658	996	97	3 x 10	95,854	26,505	18,270	29,894
IEC-B-1018-PAK1	572	1108	108	3 x 5	74,025	28,905	20,120	32,406
IEC-B-1018-CAK1	638	1108	108	3 x 7.5	86,119	28,905	20,120	32,406
IEC-B-1018-SAK1	694	1108	108	3 x 10	94,939	28,905	20,120	32,406
IEC-B-1018-DLJ1	707	951	93	3 x 15	107,608	26,430	17,670	29,774
IEC-B-1018-DLK1	760	1108	108	3 x 15	107,220	28,905	20,120	32,406

Pump Motor hp	Recirculating Flow Rate gpm	Remote Sump Application	
		Bottom Outlet Diameter	Volume gal
7.5	790	10"	660

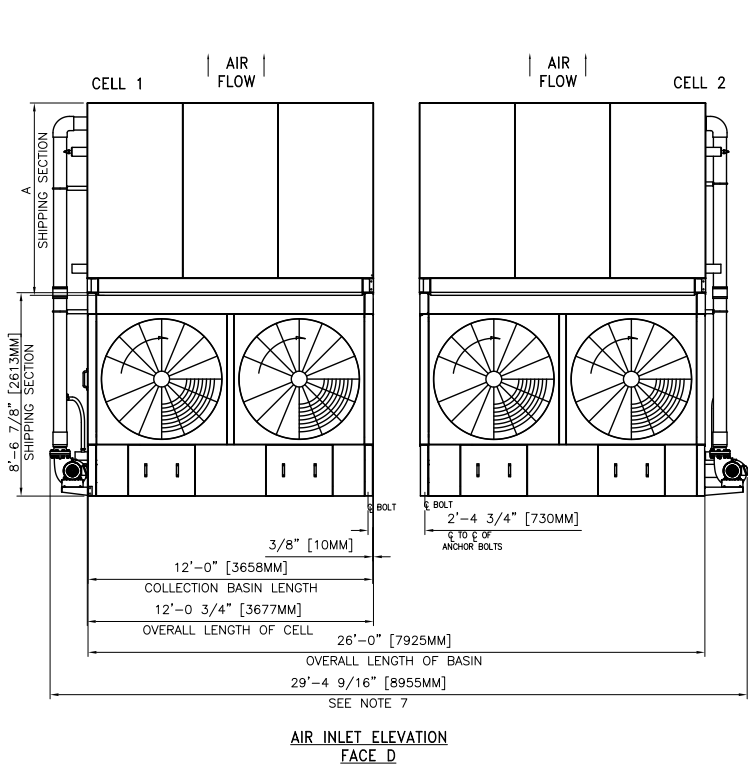
NOTE

1. The last digit of the model number shown represents the number of cells.
2. R717 tons are at 96.3°F condensing temperature, a 20°F suction temperature and a 78°F entering wet-bulb temperature.
3. For R134a charge, multiply by 1.98. For R22 charge multiply by 1.93. For R404A or R507A charge multiply by 1.65.
4. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

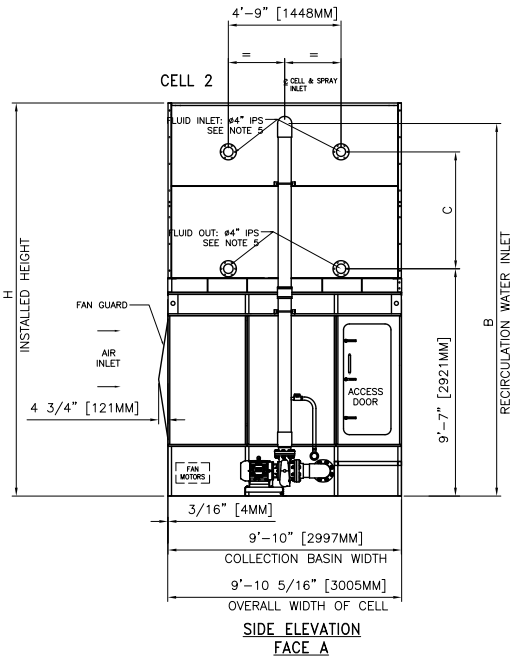
10' x 24' Two Cell 517-992 Tons R717

Model	H	A	B	C
IEC-B1024XXB	171-13/16"	68-15/16"	161-7/16"	32-1/8"
IEC-B1024XXC	180-13/16"	77-15/16"	170-7/16"	41-1/8"
IEC-B1024XXD	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1024XXJ	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1024XXE	198-13/16"	95-15/16"	188-7/16"	59-1/8"
IEC-B1024XXK	198-13/16"	95-15/16"	188-7/16"	59-1/8"

SelectSGS selection software provides IEC model recommendations based on customer's specific design requirements.



AIR INLET ELEVATION
FACE D



SIDE ELEVATION
FACE A

NOTES

1. The equipment must be installed level to insure maximum thermal performance and to avoid racking.
2. Air inlet faces must have an adequate air supply. If obstructions exist, consult your sales representative.
3. For tower support requirements, weights, loads, and multi-cell spacing, refer to the "suggested supporting steel arrangement" drawing.
4. Motor quantities and position vary depending on options selected. Refer to the "conduit location" and "collection basin details" drawings for additional details.
5. Coils are capped and charged with nitrogen at the factory. Upon installation, coil connections require cutting to dimension shown and beveling for welding. Fluid risers by others. Risers to be self supporting and must not add extra weight to the equipment. Precautions must be taken to protect tower from excess heat during welding.
6. All piping shall be supported independent of the tower. Piping, supports, design of piping and supports, and restraint of lateral piping loads shall be supplied by others.
7. Pump dimension is based on a standard scot 59 frame 60 Hz pump. Other pump models, 50 Hz frames, or other options may increase dimension.
8. Routine maintenance does not require workers to use the top of the tower as a work platform. Spray nozzle inspection can be done from a portable ladder, stair, or scaffold. Take adequate safety precautions when using portable ladders.

   For added safety and convenience, SPX Cooling Tech, LLC offers an optional spray platform for improved access for spray nozzle maintenance. Detail drawings for this and other tower options are available from your sales representative.
9. Assembly tolerance is ±1/8" [±3mm]. Consult suppliers of supporting structure for construction tolerance.

10' x 24 Two Cell

Model note1	R717 Capacity tons - note 2	R717 Charge lb - note 3	Internal Coil Volume ft^3	Fan Motor hp	Airflow Rate cfm	Shipping Weight lb		Design Operating Weight lb
						Weight/Cell	Heaviest Section	
IEC-B-1012-AAB2	517	768	75	4 x 3	87,748	26,340	16,140	30,250
IEC-B-1012-NAB2	589	768	75	4 x 5	103,812	26,340	16,140	30,250
IEC-B-1012-PAB2	649	768	75	4 x 7.5	117,640	26,340	16,140	30,250
IEC-B-1012-QAB2	694	768	75	4 x 10	127,992	26,340	16,140	30,250
IEC-B-1012-NAC2	666	956	94	4 x 5	102,376	29,340	19,140	33,438
IEC-B-1012-PAC2	735	956	94	4 x 7.5	116,956	29,340	19,140	33,438
IEC-B-1012-QAC2	788	956	94	4 x 10	126,698	29,340	19,140	33,438
IEC-B-1012-PAD2	746	1144	112	4 x 7.5	115,384	32,340	22,140	36,626
IEC-B-1012-QAD2	799	1144	112	4 x 10	125,818	32,340	22,140	36,626
IEC-B-1012-NAJ2	742	1272	124	4 x 5	99,016	35,240	24,440	39,654
IEC-B-1012-PAJ2	788	1272	124	4 x 7.5	113,948	35,240	24,440	39,654
IEC-B-1012-QAJ2	843	1272	124	4 x 10	125,348	35,240	24,440	39,654
IEC-B-1012-PAE2	804	1334	130	4 x 7.5	114,864	35,340	25,140	39,816
IEC-B-1012-QAE2	862	1334	130	4 x 10	125,416	35,340	25,140	39,816
IEC-B-1012-NAK2	771	1482	144	4 x 5	97,534	38,540	27,740	43,164
IEC-B-1012-PAK2	848	1482	144	4 x 7.5	112,666	38,540	27,740	43,164
IEC-B-1012-QAK2	909	1482	144	4 x 10	124,230	38,540	27,740	43,164
IEC-B-1012-SLJ2	921	1272	124	4 x 15	140,728	35,240	24,440	39,654
IEC-B-1012-SLK2	992	1482	144	4 x 15	139,366	38,540	27,740	43,164

Pump Motor hp	Recirculating Flow Rate gpm	Remote Sump Application	
		Bottom Outlet Diameter	Volume gal
10	1,040	2 x 8"	940

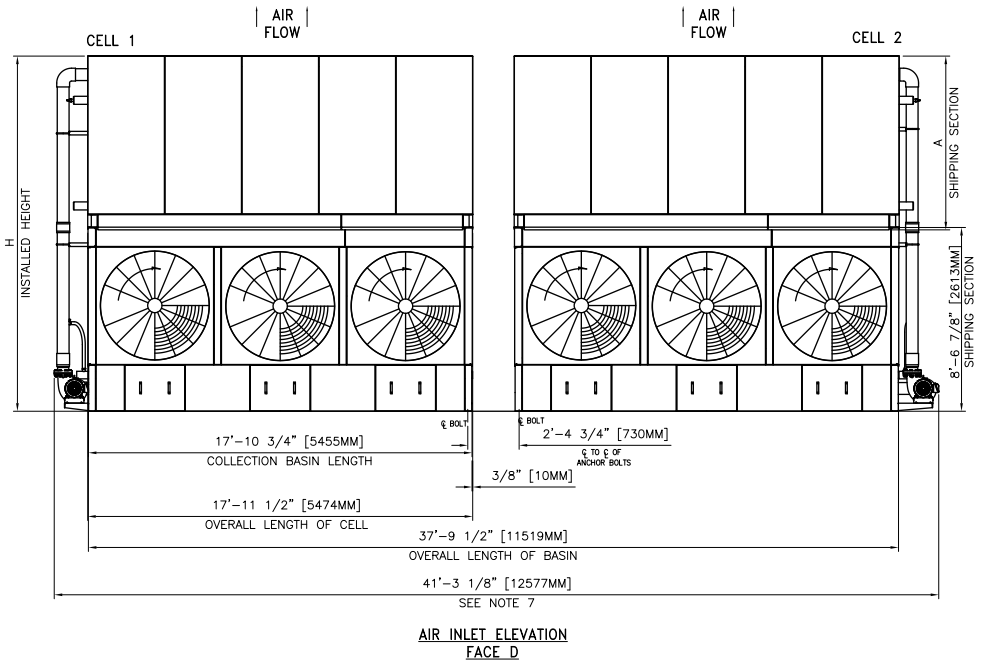
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3. For R134a charge, multiply by 1.98. For R22 charge multiply by 1.93. For R404A or R507A charge multiply by 1.65.
4. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

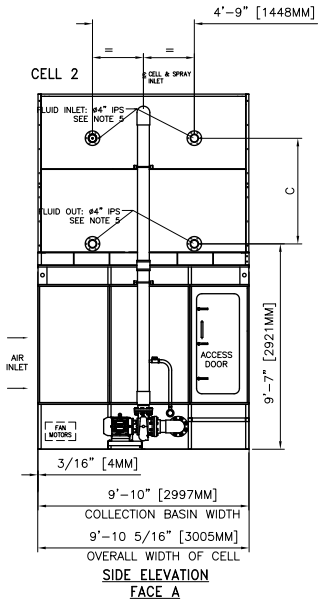
10' x 36' Two Cell 793-1,521 Tons R717

Model	H	A	B	C
IEC-B1036XXB	171-13/16"	68-15/16"	161-7/16"	32-1/8"
IEC-B1036XXC	180-13/16"	77-15/16"	170-7/16"	41-1/8"
IEC-B1036XXD	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1036XXJ	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1036XXE	198-13/16"	95-15/16"	188-7/16"	59-1/8"
IEC-B1036XXK	198-13/16"	95-15/16"	188-7/16"	59-1/8"

SelectSGS selection software provides IEC model recommendations based on customer's specific design requirements.



AIR INLET ELEVATION
FACE D



SIDE ELEVATION
FACE A

NOTES

1. The equipment must be installed level to insure maximum thermal performance and to avoid racking.
2. Air inlet faces must have an adequate air supply. If obstructions exist, consult your sales representative.
3. For tower support requirements, weights, loads, and multi-cell spacing, refer to the "suggested supporting steel arrangement" drawing.
4. Motor quantities and position vary depending on options selected. Refer to the "conduit location" and "collection basin details" drawings for additional details.
5. Coils are capped and charged with nitrogen at the factory. Upon installation, coil connections require cutting to dimension shown and beveling for welding. Fluid risers by others. Risers to be self supporting and must not add extra weight to the equipment. Precautions must be taken to protect tower from excess heat during welding.
6. All piping shall be supported independent of the tower. Piping, supports, design of piping and supports, and restraint of lateral piping loads shall be supplied by others.
7. Pump dimension is based on a standard scot 59 frame 60 Hz pump. Other pump models, 50 Hz frames, or other options may increase dimension.
8. Routine maintenance does not require workers to use the top of the tower as a work platform. Spray nozzle inspection can be done from a portable ladder, stair, or scaffold. Take adequate safety precautions when using portable ladders.

   For added safety and convenience, SPX Cooling Tech, LLC offers an optional spray platform for improved access for spray nozzle maintenance. Detail drawings for this and other tower options are available from your sales representative.
9. Assembly tolerance is ±1/8" [±3mm]. Consult suppliers of supporting structure for construction tolerance.

10' x 36' Two Cell

Model note1	R717 Capacity tons - note 2	R717 Charge lb - note 3	Internal Coil Volume ft^3	Fan Motor hp	Airflow Rate cfm	Shipping Weight lb		Design Operating Weight lb
						Weight/Cell	Heaviest Section	
IEC-B-1018-BAB2	793	1146	112	6 x 3	135,282	39,510	23,340	45,442
IEC-B-1018-PAB2	904	1146	112	6 x 5	160,094	39,510	23,340	45,442
IEC-B-1018-CAB2	995	1146	112	6 x 7.5	180,418	39,510	23,340	45,442
IEC-B-1018-SAB2	1067	1146	112	6 x 10	194,608	39,510	23,340	45,442
IEC-B-1018-PAC2	1000	1428	140	6 x 5	156,652	44,110	27,740	50,324
IEC-B-1018-CAC2	1100	1428	140	6 x 7.5	178,464	44,110	27,740	50,324
IEC-B-1018-SAC2	1177	1428	140	6 x 10	193,924	44,110	27,740	50,324
IEC-B-1018-CAD2	1147	1710	167	6 x 7.5	176,812	48,510	32,140	55,006
IEC-B-1018-SAD2	1216	1710	167	6 x 10	192,480	48,510	32,140	55,006
IEC-B-1018-PAJ2	1125	1902	186	6 x 5	151,088	52,860	35,340	59,548
IEC-B-1018-CAJ2	1194	1902	186	6 x 7.5	174,314	52,860	35,340	59,548
IEC-B-1018-SAJ2	1282	1902	186	6 x 10	191,674	52,860	35,340	59,548
IEC-B-1018-CAE2	1232	1992	194	6 x 7.5	175,956	53,010	36,540	59,788
IEC-B-1018-SAE2	1315	1992	194	6 x 10	191,708	53,010	36,540	59,788
IEC-B-1018-PAK2	1144	2216	216	6 x 5	148,050	57,810	40,240	64,812
IEC-B-1018-CAK2	1277	2216	216	6 x 7.5	172,238	57,810	40,240	64,812
IEC-B-1018-SAK2	1387	2216	216	6 x 10	189,878	57,810	40,240	64,812
IEC-B-1018-DLJ2	1415	1902	186	6 x 15	215,216	52,860	35,340	59,548
IEC-B-1018-DLK2	1521	2216	216	6 x 15	214,440	57,810	40,240	64,812

Pump Motor hp	Recirculating Flow Rate gpm	Remote Sump Application	
		Bottom Outlet Diameter	Volume gal
15	1,580	2 x 10"	1,320

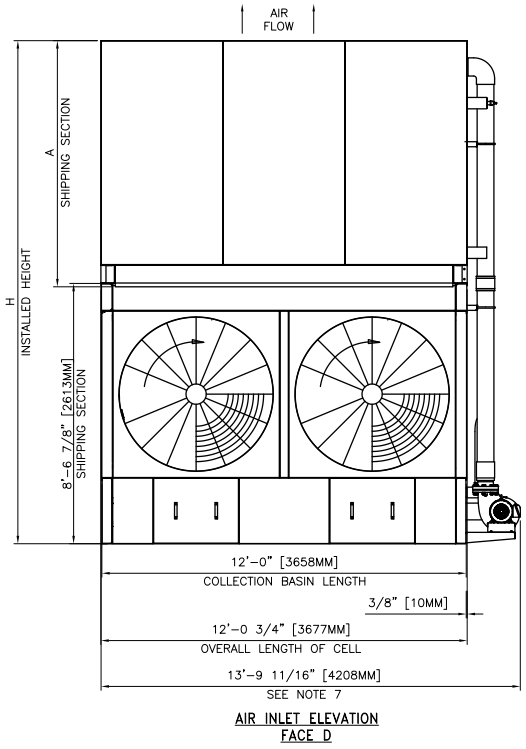
NOTE

1. The last digit of the model number shown represents the number of cells.
2. R717 tons are at 96.3°F condensing temperature, a 20°F suction temperature and a 78°F entering wet-bulb temperature.
3. For R134a charge, multiply by 1.98. For R22 charge multiply by 1.93. For R404A or R507A charge multiply by 1.65.
4. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

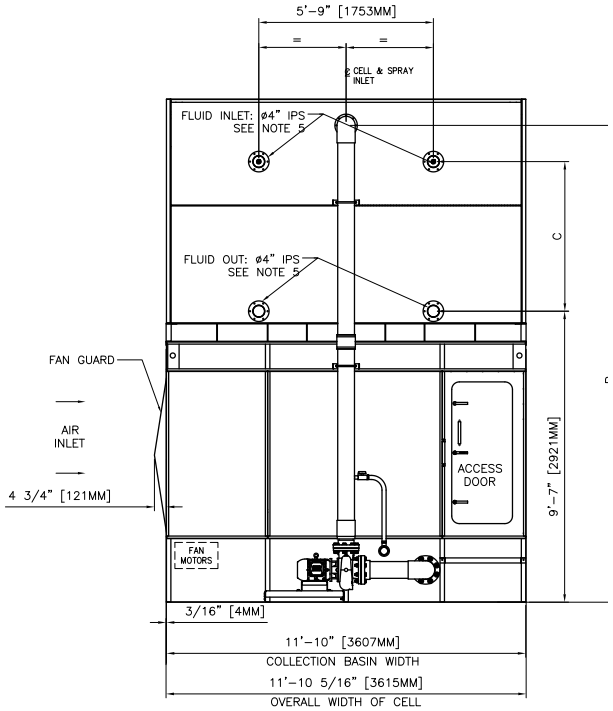
12' x 12' Single Cell 296-603 Tons R717

Model	H	A	B	C
IEC-B1212XXB	171-13/16"	68-15/16"	161-7/16"	32-1/8"
IEC-B1212XXC	180-13/16"	77-15/16"	170-7/16"	41-1/8"
IEC-B1212XXD	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1212XXJ	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1212XXE	198-13/16"	95-15/16"	188-7/16"	59-1/8"
IEC-B1212XXK	198-13/16"	95-15/16"	188-7/16"	59-1/8"

SelectSGS selection software provides IEC model recommendations based on customer's specific design requirements.



AIR INLET ELEVATION
FACE D



SIDE ELEVATION
FACE A

NOTES

1. The equipment must be installed level to insure maximum thermal performance and to avoid racking.
2. Air inlet faces must have an adequate air supply. If obstructions exist, consult your sales representative.
3. For tower support requirements, weights, loads, and multi-cell spacing, refer to the "suggested supporting steel arrangement" drawing.
4. Motor quantities and position vary depending on options selected. Refer to the "conduit location" and "collection basin details" drawings for additional details.
5. Coils are capped and charged with nitrogen at the factory. Upon installation, coil connections require cutting to dimension shown and beveling for welding. Fluid risers by others. Risers to be self supporting and must not add extra weight to the equipment. Precautions must be taken to protect tower from excess heat during welding.
6. All piping shall be supported independent of the tower. Piping, supports, design of piping and supports, and restraint of lateral piping loads shall be supplied by others.
7. Pump dimension is based on a standard scot 59 frame 60 Hz pump. Other pump models, 50 Hz frames, or other options may increase dimension.
8. Routine maintenance does not require workers to use the top of the tower as a work platform. Spray nozzle inspection can be done from a portable ladder, stair, or scaffold. Take adequate safety precautions when using portable ladders.

   For added safety and convenience, SPX Cooling Tech, LLC offers an optional spray platform for improved access for spray nozzle maintenance. Detail drawings for this and other tower options are available from your sales representative.
9. Assembly tolerance is ±1/8" [±3mm]. Consult suppliers of supporting structure for construction tolerance.

12' x 12' Single Cell

Model note1	R717 Capacity tons - note 2	R717 Charge lb - note 3	Internal Coil Volume ft^3	Fan Motor hp	Airflow Rate cfm	Shipping Weight lb		Design Operating Weight lb
						Weight/Cell	Heaviest Section	
IEC-B-1212-AAB1	296	472	46	2 x 3	48,327	15,310	9,860	17,463
IEC-B-1212-NAB1	335	472	46	2 x 5	57,468	15,310	9,860	17,463
IEC-B-1212-PAB1	369	472	46	2 x 7.5	65,788	15,310	9,860	17,463
IEC-B-1212-QAB1	396	472	46	2 x 10	71,823	15,310	9,860	17,463
IEC-B-1212-NAC1	373	587	57	2 x 5	56,989	16,990	11,540	19,258
IEC-B-1212-PAC1	412	587	57	2 x 7.5	65,261	16,990	11,540	19,258
IEC-B-1212-QAC1	442	587	57	2 x 10	71,412	16,990	11,540	19,258
IEC-B-1212-PAD1	430	703	69	2 x 7.5	64,811	18,670	13,220	21,054
IEC-B-1212-QAD1	462	703	69	2 x 10	71,118	18,670	13,220	21,054
IEC-B-1212-QAJ1	481	779	76	2 x 10	70,550	20,270	14,520	22,730
IEC-B-1212-PAE1	464	818	80	2 x 7.5	64,434	20,650	14,900	23,149
IEC-B-1212-QAE1	498	818	80	2 x 10	70,716	20,650	14,900	23,149
IEC-B-1212-QAK1	526	907	89	2 x 10	70,231	22,150	16,400	24,738
IEC-B-1212-SLD1	501	703	69	2 x 15	80,473	18,670	13,220	21,054
IEC-B-1212-SLJ1	526	779	76	2 x 15	79,807	20,270	14,520	22,730
IEC-B-1212-TLJ1	561	779	76	2 x 20	86,853	20,270	14,520	22,730
IEC-B-1212-SLE1	539	818	80	2 x 15	79,797	20,650	14,900	23,149
IEC-B-1212-SLK1	565	907	89	2 x 15	79,005	22,150	16,400	24,738
IEC-B-1212-TLK1	603	907	89	2 x 20	86,199	22,150	16,400	24,738

Pump Motor hp	Recirculating Flow Rate gpm	Remote Sump Application	
		Bottom Outlet Diameter	Volume gal
5	620	10"	540

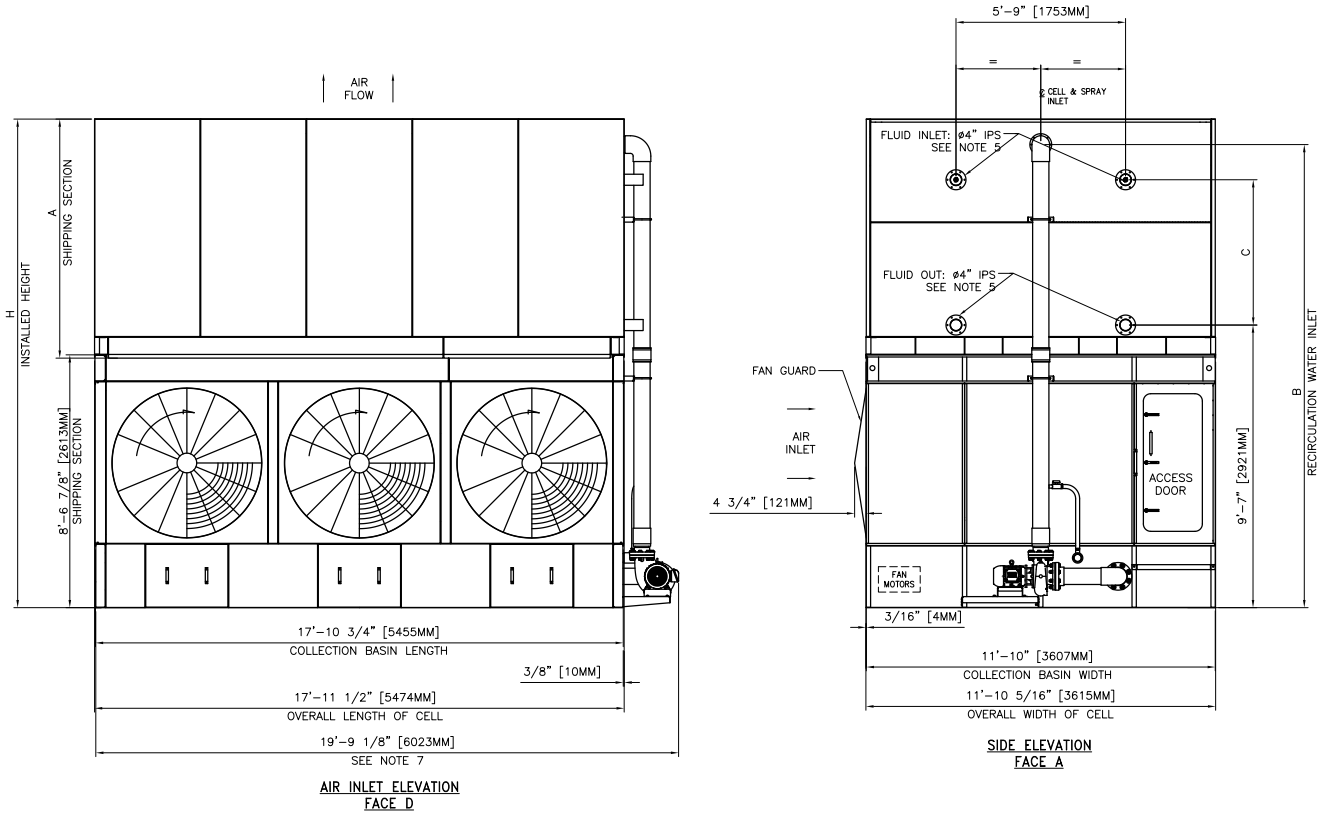
NOTE

1. The last digit of the model number shown represents the number of cells.
2. R717 tons are at 96.3°F condensing temperature, a 20°F suction temperature and a 78°F entering wet-bulb temperature.
3. For R134a charge, multiply by 1.98. For R22 charge multiply by 1.93. For R404A or R507A charge multiply by 1.65.
4. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

12' x 18' Single Cell 482-932 Tons R717

Model	H	A	B	C
IEC-B1218XXB	171-13/16"	68-15/16"	161-7/16"	32-1/8"
IEC-B1218XXC	180-13/16"	77-15/16"	170-7/16"	41-1/8"
IEC-B1218XXD	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1218XXJ	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1218XXE	198-13/16"	95-15/16"	188-7/16"	59-1/8"
IEC-B1218XXK	198-13/16"	95-15/16"	188-7/16"	59-1/8"

SelectSGS selection software provides IEC model recommendations based on customer's specific design requirements.



NOTES

1. The equipment must be installed level to insure maximum thermal performance and to avoid racking.
2. Air inlet faces must have an adequate air supply. If obstructions exist, consult your sales representative.
3. For tower support requirements, weights, loads, and multi-cell spacing, refer to the "suggested supporting steel arrangement" drawing.
4. Motor quantities and position vary depending on options selected. Refer to the "conduit location" and "collection basin details" drawings for additional details.
5. Coils are capped and charged with nitrogen at the factory. Upon installation, coil connections require cutting to dimension shown and beveling for welding. Fluid risers by others. Risers to be self supporting and must not add extra weight to the equipment. Precautions must be taken to protect tower from excess heat during welding.
6. All piping shall be supported independent of the tower. Piping, supports, design of piping and supports, and restraint of lateral piping loads shall be supplied by others.
7. Pump dimension is based on a standard scot 59 frame 60 Hz pump. Other pump models, 50 Hz frames, or other options may increase dimension.
8. Routine maintenance does not require workers to use the top of the tower as a work platform. Spray nozzle inspection can be done from a portable ladder, stair, or scaffold. Take adequate safety precautions when using portable ladders.

   For added safety and convenience, SPX Cooling Tech, LLC offers an optional spray platform for improved access for spray nozzle maintenance. Detail drawings for this and other tower options are available from your sales representative.
9. Assembly tolerance is ±1/8" [±3mm]. Consult suppliers of supporting structure for construction tolerance.

12' x18' Single Cell

Model note1	R717 Capacity tons - note 2	R717 Charge lb - note 3	Internal Coil Volume ft^3	Fan Motor hp	Airflow Rate cfm	Shipping Weight lb		Design Operating Weight lb
						Weight/Cell	Heaviest Section	
IEC-B-1218-BAB1	482	703	69	3 x 3	73,404	22,965	14,259	26,261
IEC-B-1218-PAB1	515	703	69	3 x 5	87,035	22,965	14,259	26,261
IEC-B-1218-CAB1	569	703	69	3 x 7.5	99,677	22,965	14,259	26,261
IEC-B-1218-SAB1	611	703	69	3 x 10	109,087	22,965	14,259	26,261
IEC-B-1218-PAC1	570	883	86	3 x 5	86,204	25,485	16,725	28,961
IEC-B-1218-CAC1	629	883	86	3 x 7.5	98,802	25,485	16,725	28,961
IEC-B-1218-SAC1	674	883	86	3 x 10	108,361	25,485	16,725	28,961
IEC-B-1218-CAD1	651	1049	102.5	3 x 7.5	98,041	28,455	19,191	32,097
IEC-B-1218-SAD1	697	1049	102.5	3 x 10	107,735	28,455	19,191	32,097
IEC-B-1218-SAJ1	735	1165	114	3 x 10	106,756	30,405	20,996	34,163
IEC-B-1218-CAE1	702	1223	119	3 x 7.5	97,488	30,975	21,657	34,791
IEC-B-1218-SAE1	753	1223	119	3 x 10	107,361	30,975	21,657	34,791
IEC-B-1218-SAK1	796	1357	132.5	3 x 10	105,967	33,225	23,790	37,175
IEC-B-1218-DLD1	777	1049	102.5	3 x 15	123,513	28,455	19,191	32,097
IEC-B-1218-DLJ1	814	1165	114	3 x 15	122,425	30,405	20,996	34,163
IEC-B-1218-VLJ1	867	1165	114	3 x 20	133,009	30,405	20,996	34,163
IEC-B-1218-DLE1	834	1223	119	3 x 15	122,460	30,975	21,657	34,791
IEC-B-1218-DLK1	876	1357	132.5	3 x 15	121,069	33,225	23,790	37,175
IEC-B-1218-VLK1	932	1357	132.5	3 x 20	131,877	33,225	23,790	37,175

Pump Motor hp	Recirculating Flow Rate gpm	Remote Sump Application	
		Bottom Outlet Diameter	Volume gal
8	900	10"	760

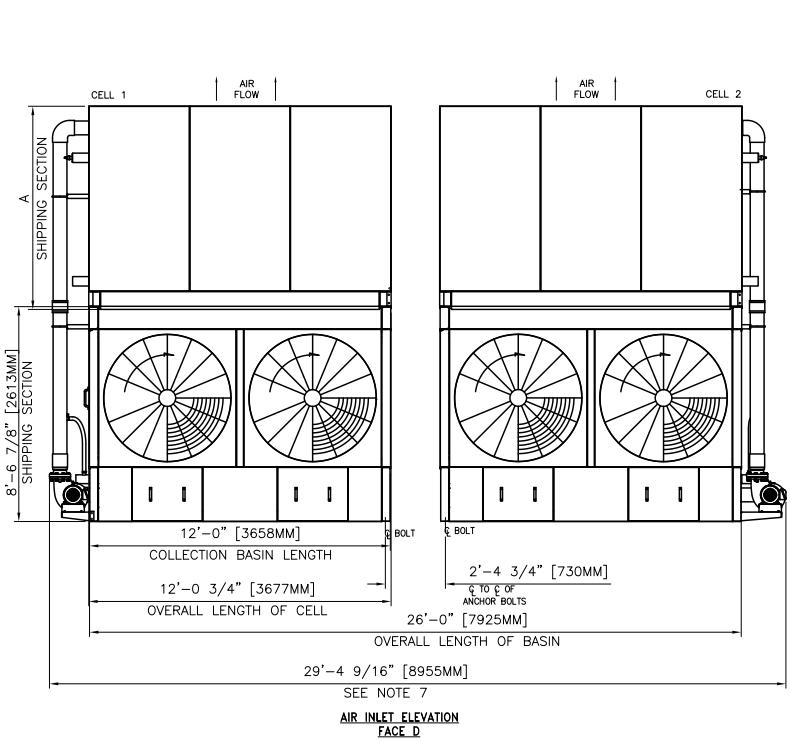
NOTE

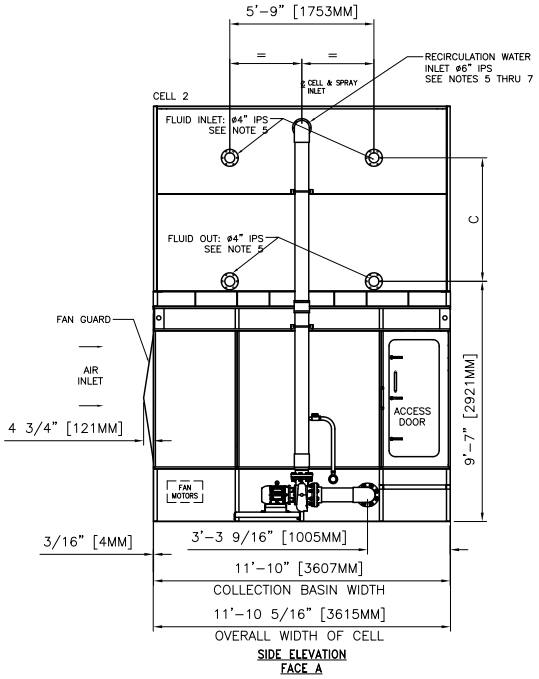
1. The last digit of the model number shown represents the number of cells.
2. R717 tons are at 96.3°F condensing temperature, a 20°F suction temperature and a 78°F entering wet-bulb temperature.
3. For R134a charge, multiply by 1.98. For R22 charge multiply by 1.93. For R404A or R507A charge multiply by 1.65.
4. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

12' x 24' Two Cell 592-1,206 Tons R717

Model	H	A	B	C
IEC-B1224XXB	171-13/16"	68-15/16"	161-7/16"	32-1/8"
IEC-B1224XXC	180-13/16"	77-15/16"	170-7/16"	41-1/8"
IEC-B1224XXD	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1224XXJ	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1224XXE	198-13/16"	95-15/16"	188-7/16"	59-1/8"
IEC-B1224XXK	198-13/16"	95-15/16"	188-7/16"	59-1/8"

SelectSGS selection software provides IEC model recommendations based on customer's specific design requirements.





NOTES

1. The equipment must be installed level to insure maximum thermal performance and to avoid racking.
2. Air inlet faces must have an adequate air supply. If obstructions exist, consult your sales representative.
3. For tower support requirements, weights, loads, and multi-cell spacing, refer to the "suggested supporting steel arrangement" drawing.
4. Motor quantities and position vary depending on options selected. Refer to the "conduit location" and "collection basin details" drawings for additional details.
5. Coils are capped and charged with nitrogen at the factory. Upon installation, coil connections require cutting to dimension shown and beveling for welding. Fluid risers by others. Risers to be self supporting and must not add extra weight to the equipment. Precautions must be taken to protect tower from excess heat during welding.
6. All piping shall be supported independent of the tower. Piping, supports, design of piping and supports, and restraint of lateral piping loads shall be supplied by others.
7. Pump dimension is based on a standard scot 59 frame 60 Hz pump. Other pump models, 50 Hz frames, or other options may increase dimension.
8. Routine maintenance does not require workers to use the top of the tower as a work platform. Spray nozzle inspection can be done from a portable ladder, stair, or scaffold. Take adequate safety precautions when using portable ladders.

   For added safety and convenience, SPX Cooling Tech, LLC offers an optional spray platform for improved access for spray nozzle maintenance. Detail drawings for this and other tower options are available from your sales representative.
9. Assembly tolerance is ±1/8" [±3mm]. Consult suppliers of supporting structure for construction tolerance.

12' x 24' Two Cell

Model note1	R717 Capacity tons - note 2	R717 Charge lb - note 3	Internal Coil Volume ft^3	Fan Motor hp	Airflow Rate cfm	Shipping Weight lb		Design Operating Weight lb
						Weight/Cell	Heaviest Section	
IEC-B-1212-AAB2	592	944	92	4 x 3	96,654	30,620	19,720	34,926
IEC-B-1212-NAB2	670	944	92	4 x 5	114,936	30,620	19,720	34,926
IEC-B-1212-PAB2	739	944	92	4 x 7.5	131,576	30,620	19,720	34,926
IEC-B-1212-QAB2	792	944	92	4 x 10	143,646	30,620	19,720	34,926
IEC-B-1212-NAC2	747	1174	114	4 x 5	113,978	33,980	23,080	38,516
IEC-B-1212-PAC2	823	1174	114	4 x 7.5	130,522	33,980	23,080	38,516
IEC-B-1212-QAC2	884	1174	114	4 x 10	142,824	33,980	23,080	38,516
IEC-B-1212-PAD2	859	1406	138	4 x 7.5	129,622	37,340	26,440	42,108
IEC-B-1212-QAD2	923	1406	138	4 x 10	142,236	37,340	26,440	42,108
IEC-B-1212-QAJ2	962	1558	152	4 x 10	141,100	40,540	29,040	45,460
IEC-B-1212-PAE2	928	1636	160	4 x 7.5	128,868	41,300	29,800	46,298
IEC-B-1212-QAE2	997	1636	160	4 x 10	141,432	41,300	29,800	46,298
IEC-B-1212-QAK2	1053	1814	178	4 x 10	140,462	44,300	32,800	49,476
IEC-B-1212-SLD2	1003	1406	138	4 x 15	160,946	37,340	26,440	42,108
IEC-B-1212-SLJ2	1053	1558	152	4 x 15	159,614	40,540	29,040	45,460
IEC-B-1212-TLJ2	1121	1558	152	4 x 20	173,706	40,540	29,040	45,460
IEC-B-1212-SLE2	1078	1636	160	4 x 15	159,594	41,300	29,800	46,298
IEC-B-1212-SLK2	1129	1814	178	4 x 15	158,010	44,300	32,800	49,476
IEC-B-1212-TLK2	1206	1814	178	4 x 20	172,398	44,300	32,800	49,476

Pump Motor hp	Recirculating Flow Rate gpm	Remote Sump Application	
		Bottom Outlet Diameter	Volume gal
10	1,240	2 x 10"	1,080

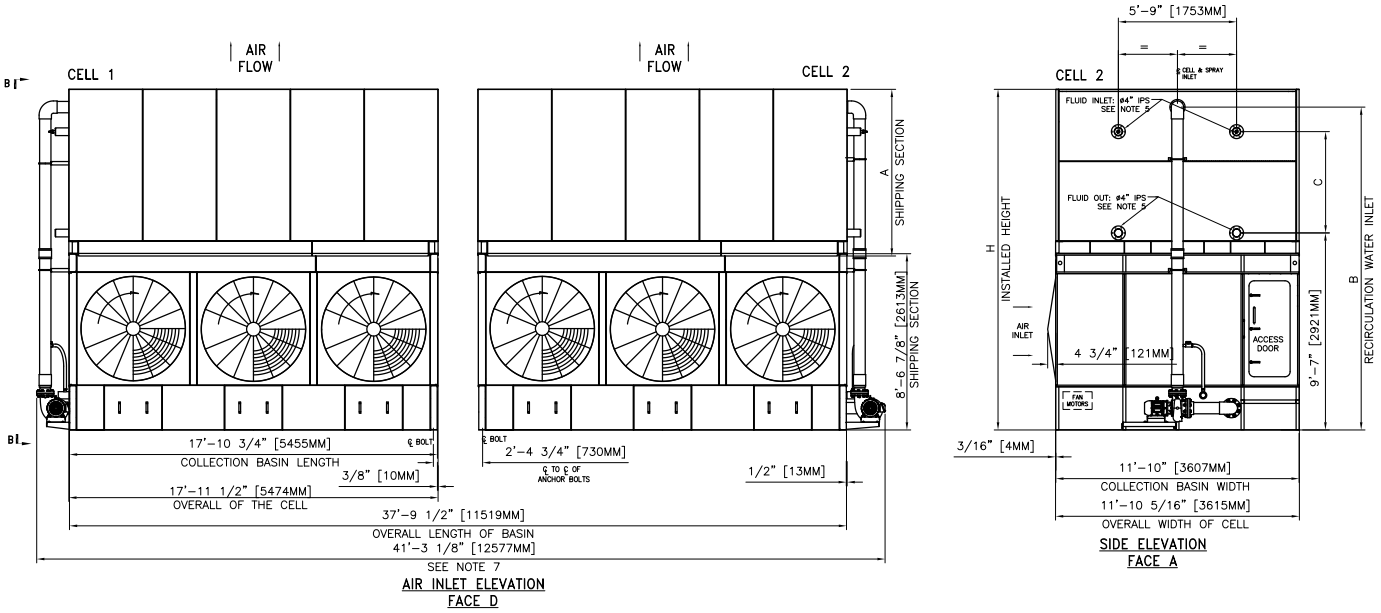
NOTE

1. The last digit of the model number shown represents the number of cells.
2. R717 tons are at 96.3°F condensing temperature, a 20°F suction temperature and a 78°F entering wet-bulb temperature.
3. For R134a charge, multiply by 1.98. For R22 charge multiply by 1.93. For R404A or R507A charge multiply by 1.65.
4. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

12' x 36' Two Cell 964-1,864 Tons R717

Model	H	A	B	C
IEC-B1236XXB	171-13/16"	68-15/16"	161-7/16"	32-1/8"
IEC-B1236XXC	180-13/16"	77-15/16"	170-7/16"	41-1/8"
IEC-B1236XXD	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1236XXJ	189-13/16"	86-15/16"	179-7/16"	50-1/8"
IEC-B1236XXE	198-13/16"	95-115/16"	188-7/16"	59-1/8"
IEC-B1236XXK	198-13/16"	95-15/16"	188-7/16"	59-1/8"

SelectSGS selection software provides IEC model recommendations based on customer's specific design requirements.



NOTES

1. The equipment must be installed level to insure maximum thermal performance and to avoid racking.
2. Air inlet faces must have an adequate air supply. If obstructions exist, consult your sales representative.
3. For tower support requirements, weights, loads, and multi-cell spacing, refer to the "suggested supporting steel arrangement" drawing.
4. Motor quantities and position vary depending on options selected. Refer to the "conduit location" and "collection basin details" drawings for additional details.
5. Coils are capped and charged with nitrogen at the factory. Upon installation, coil connections require cutting to dimension shown and beveling for welding. Fluid risers by others. Risers to be self supporting and must not add extra weight to the equipment. Precautions must be taken to protect tower from excess heat during welding.
6. All piping shall be supported independent of the tower. Piping, supports, design of piping and supports, and restraint of lateral piping loads shall be supplied by others.
7. Pump dimension is based on a standard scot 59 frame 60 Hz pump. Other pump models, 50 Hz frames, or other options may increase dimension.
8. Routine maintenance does not require workers to use the top of the tower as a work platform. Spray nozzle inspection can be done from a portable ladder, stair, or scaffold. Take adequate safety precautions when using portable ladders.

   For added safety and convenience, SPX Cooling Tech, LLC offers an optional spray platform for improved access for spray nozzle maintenance. Detail drawings for this and other tower options are available from your sales representative.
9. Assembly tolerance is ±1/8" [±3mm]. Consult suppliers of supporting structure for construction tolerance.

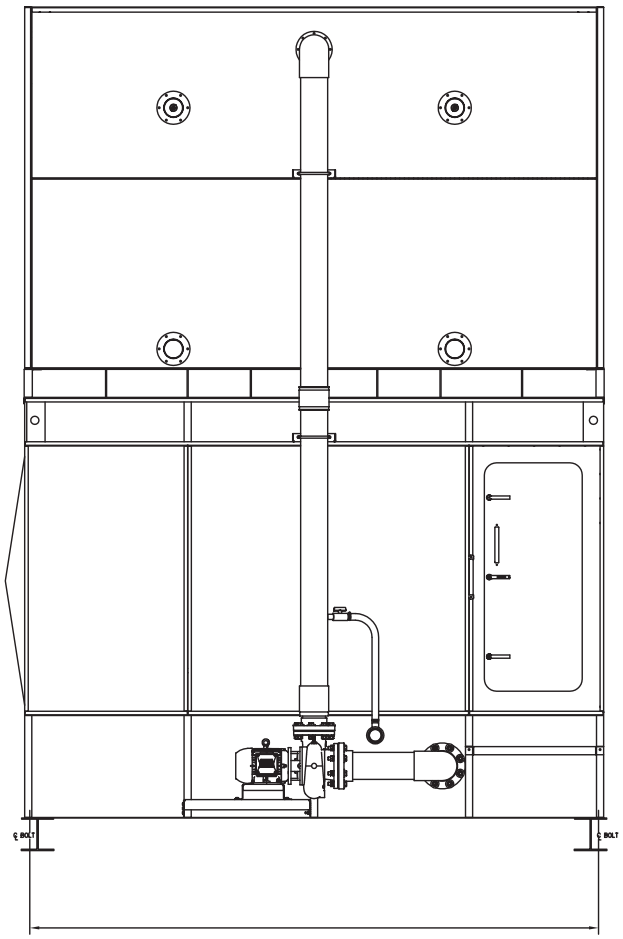
12' x 36' Two Cell

Model note1	R717 Capacity tons - note 2	R717 Charge lb - note 3	Internal Coil Volume ft^3	Fan Motor hp	Airflow Rate cfm	Shipping Weight lb		Design Operating Weight lb
						Weight/Cell	Heaviest Section	
IEC-B-1218-BAB2	964	1406	138	6 x 3	146,808	45,930	28,518	52,522
IEC-B-1218-PAB2	1031	1406	138	6 x 5	174,070	45,930	28,518	52,522
IEC-B-1218-CAB2	1139	1406	138	6 x 7.5	199,354	45,930	28,518	52,522
IEC-B-1218-SAB2	1221	1406	138	6 x 10	218,174	45,930	28,518	52,522
IEC-B-1218-PAC2	1141	1766	172	6 x 5	172,408	50,970	33,450	57,922
IEC-B-1218-CAC2	1258	1766	172	6 x 7.5	197,604	50,970	33,450	57,922
IEC-B-1218-SAC2	1349	1766	172	6 x 10	216,722	50,970	33,450	57,922
IEC-B-1218-CAD2	1301	2098	205	6 x 7.5	196,082	56,910	38,382	64,194
IEC-B-1218-SAD2	1394	2098	205	6 x 10	215,470	56,910	38,382	64,194
IEC-B-1218-SAJ2	1470	2330	228	6 x 10	213,512	60,810	41,992	68,326
IEC-B-1218-CAE2	1404	2446	238	6 x 7.5	194,976	61,950	43,314	69,582
IEC-B-1218-SAE2	1506	2446	238	6 x 10	214,722	61,950	43,314	69,582
IEC-B-1218-SAK2	1592	2714	265	6 x 10	211,934	66,450	47,580	74,350
IEC-B-1218-DLD2	1554	2098	205	6 x 15	247,026	56,910	38,382	64,194
IEC-B-1218-DLJ2	1628	2330	228	6 x 15	244,850	60,810	41,992	68,326
IEC-B-1218-VLJ2	1735	2330	228	6 x 20	266,018	60,810	41,992	68,326
IEC-B-1218-DLE2	1669	2446	238	6 x 15	244,920	61,950	43,314	69,582
IEC-B-1218-DLK2	1751	2714	265	6 x 15	242,138	66,450	47,580	74,350
IEC-B-1218-VLK2	1864	2714	265	6 x 20	263,754	66,450	47,580	74,350

Pump Motor hp	Recirculating Flow Rate gpm	Remote Sump Application	
		Bottom Outlet Diameter	Volume gal
15	1,800	2 x 10"	1,520

NOTE

1. The last digit of the model number shown represents the number of cells.
2. R717 tons are at 96.3°F condensing temperature, a 20°F suction temperature and a 78°F entering wet-bulb temperature.
3. For R134a charge, multiply by 1.98. For R22 charge multiply by 1.93. For R404A or R507A charge multiply by 1.65.
4. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.



Model	D	Maximum Deflection
IEC-B-1012	9'-7½"	⅜"
IEC-B-1018	9'-7½"	⅜"
IEC-B-1212	11'-7½"	½"
IEC-B-1218	11'-7½"	½"

NOTE

1. The recommended supporting steel arrangement for the IEC consists of parallel I-beams running the full length of the unit.
2. Supporting steel is to be designed, constructed and furnished by others.
3. The top surface of the supporting steel must be framed flush and level.
4. If vibration isolators are used, they must be placed underneath the supporting steel beams.
5. Consider provisions for access to the condenser if the supporting steel is elevated above grade.
6. **Use this bulletin for preliminary layouts only.** Obtain current drawings from your sales representative.

The purpose of a basin heater is to prevent recirculating water from freezing in the collection basin during periods of shutdown or standby operation. Heater systems are sized according to tower model and ambient temperature to give maximum protection against freezing in the collection basin. They are not intended to protect the coil and other components from icing.

An automatic basin water heater system consists of the following components:

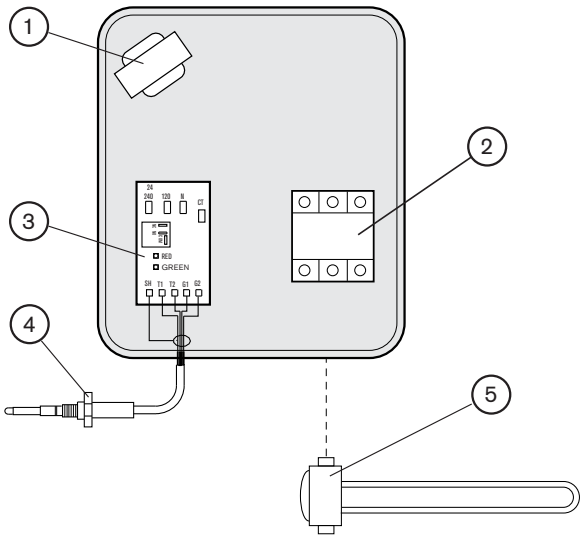
- Stainless steel electric immersion heater(s). Threaded couplings are provided in the side of the collection basin.
- NEMA 4 enclosure containing:
  Transformer to convert power supply to 24 volts for control circuit.
  Magnetic contactor to energize heater.
  Solid state circuit board for temperature and low-water cutoff.
  The enclosure may be mounted on the side of the condenser.
- Control probe in the collection basin to monitor water temperature and level.

Heater components are typically shipped separately for installation by others.

Heat trace and insulation of the pump may be optionally selected.



Heater Size kW			
Model	0°F Ambient	-20°F Ambient	-40°F Ambient
IEC-B-1012	6.0	9.0	12.0
IEC-B-1018	12.0	2 x 7.5	2 x 12
IEC-B-1212	9.0	2 x 7.5	2 x 9
IEC-B-1218	2 x 7.5	2 x 9	2 x 12



1. Transformer
2. Contactor
3. Solid State Relay Card
4. Sensor Probe
5 Heater Element(s)

Furnish and install a forced draft, counterflow, evaporative condenser with a condensing capacity of _____ MBH heat rejection while operating with ____ refrigerant at ___°F condensing temperature and ___°F entering wet-bulb temperature.

Unit shall consist of ___ cell(s), as shown on plans. The limiting overall dimensions of the condenser shall be ___ft wide, ___ft long, and ___ft high. Total operating power of all fans shall not exceed ___ hp, consisting of___@ ___ hp motor(s). Tower shall be similar and equal in all aspects to IEC Model _____.

Collection Basin and Casing: The collection basin and casing shall be hot dip galvanized steel. To reduce potential for leaks, bolts shall be used in all submerged areas; self-tapping screws are not permitted. A factory-installed, float operated, mechanical make-up valve shall be included. An overflow and drain connection shall be provided in each cell. The basin floor shall slope towards the drain to allow complete flushing of debris. The collection basin shall be tested for leaks at the factory.

Fan Motor: Fan motor(s) shall be NEMA Premium Efficiency, TEFC, 1.15 service factor, variable torque, inverter ready and insulated for cooling tower duty, with each motor serving a single fan drive assembly. Motors shall be nameplated for 3 phase, 60 Hz, ___ volt operation.

Fan: Fan(s) shall be dual stage propeller-type, incorporating aluminum alloy blades. Fan(s) shall be driven through an industrial grade system of V-belts, pulleys, and tapered roller bearings designed for 150% of nameplate power. Bearings shall be rated at an L_{10} life of 100,000 hours or greater, with extended lubrication lines for easy maintenance. Fan sections shall be separated by a partition wall extending to the back of the unit.

Pump: Recirculation pump(s) shall be centrifugal with mechanical seal, mounted to the collection basin in conjunction with a suction assembly, and close-coupled with a ___hp TEFC pump motor nameplated for 3 phase, 60 Hz, ___volt operation. Recirculation piping shall be schedule 40 PVC. A blowdown line with metering valve shall be connected directly to the evaporative condenser overflow.

Heat Transfer Coil: Condenser coil(s) shall be constructed of continuous serpentine circuits assembled into fully welded headers and hot dip galvanized after fabrication. Each coil shall be tested at 375 psig air pressure under water. Coil tubes shall be sloped for free drainage of fluid. An optional coil design to comply with Canadian Standard B51-14 - Boiler, pressure vessel, and pressure piping code is available.

Water Distribution: A pressurized spray system shall distribute water evenly over the coil surface with large-orifice, clog resistant spray nozzles that are threaded for easy removal. The distribution header shall be self-draining, with removable corrosion-resistant PVC branch arms.

Drift Eliminators: Drift eliminators shall be 17 mil thick PVC with a minimum of three changes in air direction, and shall limit drift losses to 0.001% or less of the design recirculating water flow rate Eliminators shall be easily removable for inspection.

Access: Large rectangular access doors with minimum 24" wide and 48" tall opening shall be located on exterior ends of the unit.

IEC series

ENGINEERING DATA AND SPECIFICATIONS

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In the interest of technological progress, all products are subject to design and/or material change without notice.

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