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IDCF Evaporative Condensers

A Reliable, Premium Quality Product with Long-Term Low Cost of Ownership





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OVERVIEW

The IDCF Evaporative Condenser utilizes independent axial fans, hot dip galvanized carbon steel condensing coils and PVC fill bundles to deliver maximized thermal performance over a wide range of heat rejection and temperature requirements for various refrigerants. The IDCF series satisfies today's dynamic needs including environmental concerns, reliability and redundancy. These units can be easily maintained. Unique features provide the contractor with ease of installation and the end user with a long service life. IDCF Evaporative Condensers are available with single model capacities ranging from 45 to 2,810 nominal R-717 tons or 63 to 3,962 nominal R-22 tons.

Product Spotlight:

- · Ideal Replacement Unit
- · Independent Drive System
- Top-mounted Fans Direct sound up and away
- Interspersed PVC Fill Blocks For maximum heat transfer
- Factory-supplied Rigging Pins
- Redesigned Interlok[™] System with new rugged baserail.
 Ensures squareness.
- IBC Compliant
- · Factory Installed blank-off panels on multi-cell models

BENEFITS

Low Energy Consumption

Evaporative condensers minimize the energy consumption of the entire system by providing the lowest condensing temperatures. Owners save money while conserving natural resources and reducing environmental impact.

IDCF Evaporative Condensers provide the heat rejection required at the lowest possible energy via:

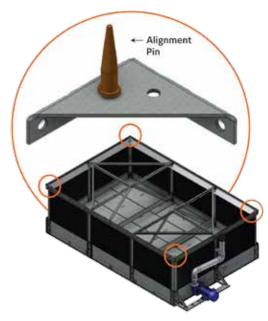
- High efficient, low horsepower axial fans
- Premium efficient/VFD duty motors (standard)
- · Multiple fan models allow for capacity staging

Easy Maintenance

- Easy Access Removable louvers provide easy access to the unit interior to adjust the float valve, clean the strainer or flush the basin.
- BranchLok™ Removal System Water distribution branch removal system that requires minimal tools and effort to service.
- Hygienic Cold Water Basin The cold water basin is sloped to eliminate stagnant water and reduce biological growth. Additionally, the suction strainer is easily removable to simplify maintenance.
- Fan Motors The fan motors for the IDCF are vertically mounted on an adjustable track. The base is easily moved to aid belt tensioning and changing.

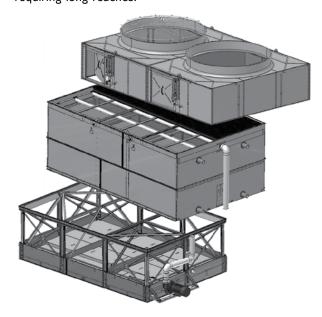
Low Installed Cost

 Improved Coil Casing – The coil casing now incorporates a heavy gauge base rail to ensure casing squareness which reduces rigging time. Factory Supplied Rigging Pins — Rigging pins are supplied by the factory and shipped with each unit. Before rigging, the pins are positioned in designated locations to assist with guiding the coil section into place on top of the basin section.



InterLok™ Installation

- Support All models mount directly on two parallel I-beams and ship complete with motors and drives factoryinstalled and aligned.
- Two-piece Rigging & Assembly Most models ship in two pieces to minimize the size and weight of the heaviest lift so that smaller and less costly cranes can be used. Additionally, these pieces can be assembled at a staging area on the ground and lifted to their final position in a single piece. Models can also ship in three sections for lifts requiring long reaches.



IDCF EVAPORATIVE CONDENSERS SPECIFICATIONS



- Single-Point Wiring (Optional) Single-point wiring decreases installation time by factory routing wires from motors (fan and pump) and options such as Vibration Cutout Switch (VCOS), Electric Water Level Control (EWLC) and basin heaters, in UL-listed conduit to a stainless steel NEMA 3R electrical box
- External Service Platform, Ladder, Safety Cage, and Gate (Optional) -

For external service, options include:

- a) an access door platform,
- b) a fill access door platform, and /or,
- c) top perimeter handrails.

Ladders, safety cages and safety gates are also available. All components meet OSHA requirements.

Every external service platform is pre-assembled at the factory to ensure that every component will fit and function as described. The platform is easily rigged in the field with a minimum number of fasteners.

Long Service Life

- Materials of Construction Various materials are available to meet the corrosion resistance and budgetary requirements of any project.
- IBC Compliance IDCF Evaporative Condensers are designed to meet the seismic and wind requirements of the 2009 International Building Code (IBC). IDCF units were shake table tested at an independent lab in accordance with AC 156. Tests were conducted before and after testing to verify functionality and certify the use of IDCF Evaporative Condensers in critical applications.

Reliable Year Round Operation

- Bearings Minimum L10 bearing life of 100,000 hours delivers years of trouble free service.
- Nozzles IDCF uses patented Frick 360° nozzles. The most technologically advanced nozzle design in the industry, the 360° nozzle ensures the coil is completely wetted, thereby delivering optimum heat transfer.
- **Dry Operation** Operating the unit with the spray water off eliminates winter operating concerns.



CUSTOM FEATURES AND OPTIONS

Construction

- Standard Construction Panels and structural elements are constructed of G-235 mill galvanized steel.
- Optional All Stainless Steel Construction Panels and structural elements are constructed of Type 304 stainless steel.
- Optional Stainless Steel Cold Water Basin All critical components in the cold water basin are provided in Type 304 stainless steel, and the remaining components are constructed of the base material of construction (galvanized steel or a thermosetting hybrid polymer). Seams between the panels and inside the cold water basin are welded. The basin is leak tested at the factory and welded seams are provided with a five year leak-proof warranty.
- · Optional TripleGuard™ 5-Year Warranty Basin -

The TripleGuard™ cold water basin is constructed of a heavy-guage G-235 galvanized steel substrate. It is fully encapsulated by a thermosetting hybrid polymer and further protected by a polyurethane barrier applied to all of the basin's submerged surfaces. The basin is factory leak tested and warranted against leaks and corrosion for five years.

 Rated in accordance with IBC regulations to meet Seismic and Wind Loadings – Standard and optional constructions with structural bracing are designed to meet seismic and wind requirements of International Building Code covering most US seismic applications.

Coil Configurations

 Standard Condensing Coil — The standard condensing coil is constructed of continuous lengths of carbon steel, hot dip galvanized after fabrication. PVC fill bundles are placed within the coil to maximize heat transfer. The coil is designed for low pressure drop for free drainage of fluid. Each coil is pneumatically tested at 375 psig (2,586 kPa) and is welded per ASME B31.5 standards.





- Canadian Registration Number (CRN) A CRN is required for all pressure vessels over 15 psig entering Canada. The CRN identifies that the design of a boiler pressure vessel or fitting has been accepted and registered for use in Canada. A CRN is available for all IDCF coil configurations.
- Optional Stainless Steel Coil Coils are available in Type 304 stainless steel for specialized applications. The coil is designed for low pressure drop with sloping tubes for free drainage of fluid. Each coil is pneumatically tested at 375 psig (2,586 kPa) and is welded per ASME B31.5 standards.
- Optional ASME "U" Stamp Coil This coil is manufactured and tested in accordance with the ASME Boiler and Pressure Vessel Code, Section VIII, Division 1, and bears the ASME "U" stamp. ASME coils are hot-dip galvanized after fabrication (HDGAF). The coil is designed for low pressure drop with sloping tubes for free drainage of fluid. Each coil is pneumatically tested at 335 psig (2,310 kPa).

Two Fan Operation

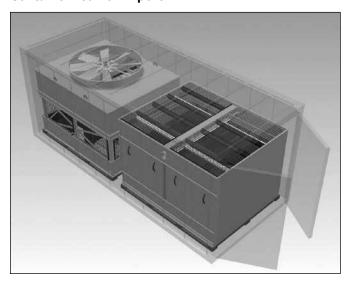
All IDCF models have independent fans. The optional two fan drive unit is available on all 12' x 18' units and the corresponding multi-cell versions.

Extended Lubrication Lines (Standard)

Extended lubrication lines are standard for lubrication of the fan shaft bearings. Grease fittings are located inside the plenum area next to the access door.



Containerized For Export



IDCF 7.4' x 18' and 7.4' x 9' units are available for export.

- · 502 Tons in a single 40' Shipping Container
- Engineered for:
 - Lowest shipping costs
 - The worldwide export market
 - Maximum capacity
 - Easy maintenance
 - Reliability

Units are factory assembled and require only minimal assembly and rigging!



ACCESSORIES

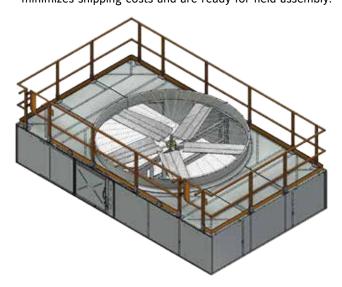
All components are designed to meet OSHA requirements.

Pre-Assembled Platforms, Ladders & Safety Gate

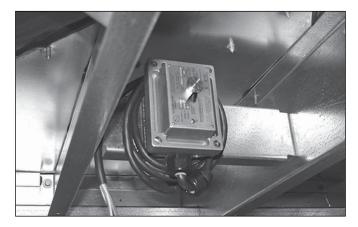
 Modular Platforms – Modular external platforms are preassembled at the factory to ensure that every component will fit and function exactly as described. The platform will attach quickly in the field with minimal fasteners. Safety gates are available for all handrail openings. All components are designed to meet OSHA requirements.



Handrails – All 12' x 12' and 12' x 18' models are available
with top handrails to provide safe access to the top of the
unit. The specially designed handrail packages are secured
for compact shipping within the cold water basin. This
minimizes shipping costs and are ready for field assembly.



Vibration Cutout Switch



A factory mounted vibration cutout switch is available to effectively protect against equipment failure due to excessive vibration of the mechanical equipment system. Frick can provide either a mechanical or solid-state electronic vibration cutout switch in a NEMA 4 enclosure to ensure reliable protection. Additional contacts can be provided on either switch type to activate an alarm.

Basin Heaters

Evaporative condensers exposed to below freezing ambient temperatures require protection to prevent freezing of the water in the cold water basin when the unit is idle. Electric immersion heaters, which maintain 40°F (4.4°C) water temperature, are a simple and inexpensive way of providing such protection.

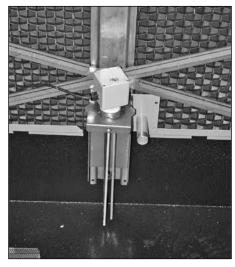
Heater kW Data

Madal Number	-20°F (-28.9°C) A	mbient Heaters
Model Number	# Heaters	kW / Heater
IDCF-0406-X-X	1	3
IDCF-0412-X-X	1	6
IDCF-7409-X-X	1	8
IDCF-7418-X-X	1	15
IDCF-1012-X-X	1	14
IDCF-1024-X-X	2	14
IDCF-1212-X-X	1	16
IDCF-1218-X-X	1	24
IDCF-1220-X-X	1	24
IDCF-1224-X-X	2	16
IDCF-1236-X-X	2	24
IDCF-1240-X-X	2	24
IDCF-2012-X-X	2	24
IDCF-2412-X-X	2	16
IDCF-2418-X-X	2	24
IDCF-2420-X-X	2	24
IDCF-2424-X-X	4	16
IDCF-2436-X-X	4	24
IDCF-2440-X-X	4	24

Note: The table data is based on 460V/3 phase/60HZ power and standard, single-cell configuration



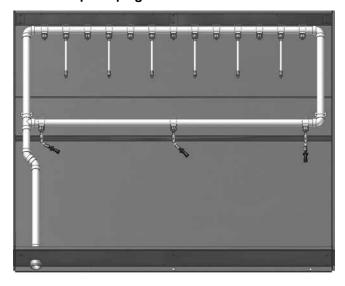
Electronic Water Level Control Package



Electronic Water Level Control

The electronic water level control replaces the standard mechanical makeup valve when more precise water level control is required. This package consists of a conductance-actuated level control mounted in the basin and a solenoid activated valve in the make-up water line. The valve is slow closing to minimize water hammer.

Basin Sweeper Piping



Basin sweeper piping is an effective method of eliminating sediment that may collect in the cold water basin of the unit. A piping system is provided for connection to side stream filtration equipment (by others).

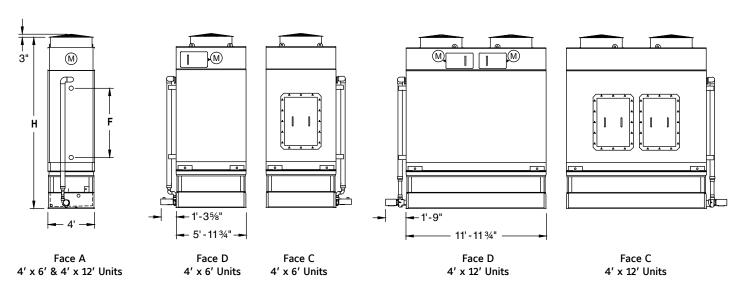
Sound

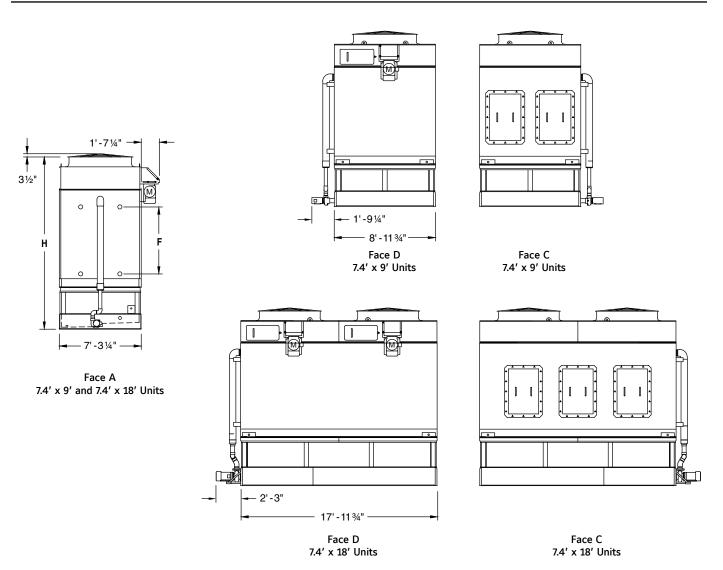
IDCF models generate low sound levels, making them suitable for installation in most environments. To evaluate whether an axial fan unit can be applied on a particular application, follow these steps to minimize the impact of sound on the environment. These suggestions are ordered with regard to the impact they will have on cost.

- Provide a method of capacity control. Capacity control will allow the fan to run at lower speeds when loads are lighter or the wet-bulb is lower. These lower speeds are often sufficient to provide the scheduled capacity at night, when sound requirements are the most stringent.
- For IDCF models, a low sound fan option may be available to significantly reduce the sound levels generated from the unit.
- For IDCF models, water silencers option may be available to reduce the sound levels generated from the unit.
- 4. Barrier walls can be constructed to prevent sound transmission to sensitive areas.



IDCF MODELS - 4'x6' / 4'x12' / 7.4'x9' / 7.4'x18'





Do not use for construction. Refer to factory certified dimensions. This catalog includes data current at the time of publication, which should be reconfirmed at the time of purchase.



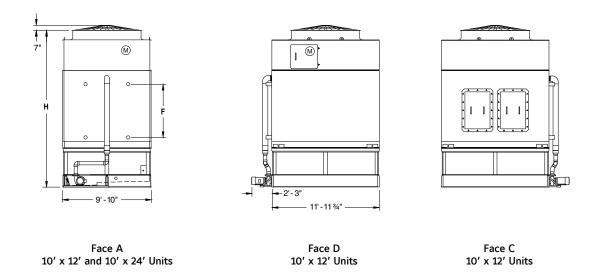
					Spray	Appı	ox. Weigh	t (lb)	R-717	Int		Remote Sum	р		
Nom. Box Size	Model Number	Fan Motor (HP)	Airflow Rate (CFM)	Pump Motor (HP)	Flow Rate (GPM)	Ship Weight	Heaviest Section	Oper. Wt. ⁽¹⁾	Oper. Charge (lb) ⁽²⁾	Unit Vol (ft³)	Max. Drain Size (in)	Water in Suspension (gal) ⁽³⁾	Approx Oper. Wt. (lb)	F	н
	IDCF-0406-041-003	3	13,850			3,090	2,400	4,240	45	5			3,433	49"	153"
	IDCF-0406-041-005	5	16,180			3,110	2,420	4,260	45	5			3,453	49"	153"
	IDCF-0406-046-003	3	12,790			3,400	2,710	4,560	55	6			3,753	56"	160"
	IDCF-0406-061-003	3	13,360			3,370	2,680	4,540	63	7			3,733	49"	153"
	IDCF-0406-061-005	5	15,520			3,390	2,700	4,560	63	7			3,753	49"	153"
4' x 6'	IDCF-0406-063-7.5	8	17,010	(1) 1	97	3,590	2,900	4,770	67	7	4	122	3,963	49"	153"
	IDCF-0406-064-7.5	8	16,410			3,860	3,160	5,030	69	7			4,223	64"	168"
	IDCF-0406-081-003	3	12,420			3,740	3,050	4,930	80	9			4,123	56"	160"
	IDCF-0406-081-005	5	14,710			3,760	3,070	4,950	80	9			4,143	56"	160"
	IDCF-0406-081-7.5	8	16,660			3,890	3,190	5,070	80	9			4,369	56"	160"
	IDCF-0406-121-7.5	8	14,970			4,610	3,910	5,830	115	12			5,129	71"	175"
	IDCF-0412-041-006	6	27,450			5,320	4,210	7,610	81	9			6,164	49"	153"
	IDCF-0412-041-010	10	32,380			5,360	4,250	7,650	81	9			6,204	49"	153"
	IDCF-0412-061-006	6	25,970			5,870	4,760	8,190	116	13			6,744	49"	153"
4' x 12'	IDCF-0412-063-015	15	33,270	(1) 1.5	197	6,320	5,210	8,650	126	14	6	184	7,204	49"	153"
-4	IDCF-0412-061-010	10	30,430	(.,		5,910	4,800	8,230	116	13			6,784	49"	153"
	IDCF-0412-065-010	10	28,730			6,280	5,170	8,620	138	15			7,174	49"	153"
	IDCF-0412-065-015	15	32,620			6,530	5,420	8,870	138	15			7,424	49"	153"
	IDCF-0412-085-010	10	27,120			7,070	5,960	9,460	181	20			8,014	56"	160"
	IDCF-7409-041-005	5	32,560			6,800	5,460	10,160	114	12			8,419	49"	171"
	IDCF-7409-043-7.5	8	35,640			7,020	5,680	10,390	124	13			8,649	49"	171"
	IDCF-7409-045-015	15	42,880			7,350	6,010	10,730	134	14			8,989	49"	171"
	IDCF-7409-061-7.5	8	34,580			7,600	6,260	11,000	162	18			9,259	49"	171"
7.4' x 9'	IDCF-7409-061-010	10	37,730	(1) 2	275	7,650	6,300	11,050	162	18	6	254	9,309	49"	171"
4.7	IDCF-7409-061-015	15	42,880	(-,-		7,770	6,430	11,180	162	18			9,439	49"	171"
	IDCF-7409-083-020	20	42,110			9,060	7,720	12,540	229	25			10,799	56"	179"
	IDCF-7409-101-010	10	34,150			9,480	8,130	12,980	258	28			11,239	64"	186"
	IDCF-7409-101-020	20	42,020			9,670	8,320	13,170	258	28			11,429	64"	186"
	IDCF-7409-103-015	15	36,600			10,000	8,650	13,520	282	30			11,779	64"	186"
	IDCF-7418-041-010	10	65,450			12,160	9,450	18,990	213	23			15,427	49"	180"
	IDCF-7418-043-015	15	71,960			12,580	9,870	19,430	233	25			15,867	49"	180"
	IDCF-7418-045-030	30	86,430			13,260	10,540	20,130	252	27			16,567	49"	180"
=_	IDCF-7418-061-015	15	69,720			13,760	11,050	20,690	311	34			17,127	49"	180"
7.4' x 18'	IDCF-7418-061-020	20	76,230	(1) 5	560	13,860	11,140	20,780	311	34	10	366	17,217	49"	180"
7.4	IDCF-7418-061-030	30	86,530	(.,, 0		14,110	11,390	21,030	311	34			17,467	49"	180"
	IDCF-7418-083-040	40	85,020			16,590	13,870	23,650	447	48			20,087	56"	187"
	IDCF-7418-101-020	20	68,790			17,340	14,620	24,460	507	55			20,897	64"	195"
	IDCF-7418-101-040	40	84,920			17,710	14,990	24,830	507	55			21,267	64"	195"
	IDCF-7418-103-030	30	73,870			18,360	15,640	25,530	554	60			21,967	64"	195"

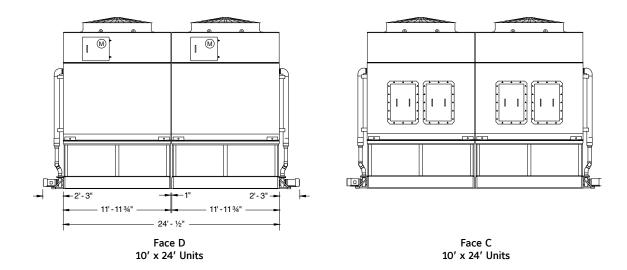
- 1. Operating weight is for the unit with the water level in the cold water basin at the overflow.
- 2. Refrigerant charge listed is R-717 operating charge. To determine operating charge for R-22, multiply charge by 1.94. For R134a, multiply by 1.98.
- 3. Does not include interconnecting water piping.

- * For R-22 and R-134a, the coil connection quantity may double.
- * Standard makeup, drain and overflow connections are MPT.
- * Condensing coil inlet and outlet connections are capped and charged with air to ensure integrity upon arrival at job site. Bevel For Weld connection is performed by the installing contractor.
- ** Product selection software, updated engineering data (if available), and more may be found at www.jci.com/frick.



IDCF MODELS - 10'x 12' / 10'x 24'









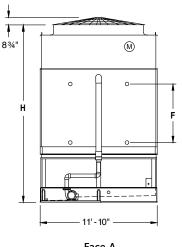
					Spray	Appr	ox. Weigh	t (lb)	R-717	Int	F	Remote Sum	р		
Nom. Box Size	Model Number	Fan Motor (HP)	Airflow Rate (CFM)	Pump Motor (HP)	Flow Rate (GPM)	Ship Weight	Heaviest Section	Oper. Wt. ⁽¹⁾	Oper. Charge (lb) (2)	Unit Vol (ft³)	Max. Drain Size (in)	Water in Suspension (gal) ⁽³⁾	Approx Oper. Wt. (lb)	F	н
	IDCF-1012-043-010	10	60,120			11,260	9,090	17,120	226	24			14,330	49	193
	IDCF-1012-043-015	15	68,630			11,390	9,220	17,240	226	24			14,450	49	193
	IDCF-1012-043-020	20	74,910			11,450	9,280	17,300	226	24			14,510	49	193
	IDCF-1012-045-025	25	78,070			11,790	9,620	17,660	243	26			14,870	49	193
	IDCF-1012-045-030	30	82,720			11,840	9,670	17,710	243	26			14,920	49	193
	IDCF-1012-061-010	10	58,350			12,290	10,120	18,220	294	32			15,430	49	193
	IDCF-1012-061-015	15	66,260			12,420	10,250	18,340	294	32			15,550	49	193
<u>~</u>	IDCF-1012-063-020	20	70,340			13,000	10,830	18,950	326	35			16,160	49	193
10' x 12'	IDCF-1012-063-025	25	75,430	(1) 5	504	13,050	10,880	19,000	326	35	8	397	16,210	49	193
-	IDCF-1012-063-030	30	79,980			13,100	10,930	19,050	326	35			16,260	49	193
	IDCF-1012-081-010	10	55,410			13,890	11,710	19,900	384	41			17,110	56	200
	IDCF-1012-081-015	15	62,910			14,010	11,840	20,020	384	41			17,230	56	200
	IDCF-1012-081-025	25	73,840			14,120	11,950	20,130	384	41			17,340	56	200
	IDCF-1012-081-030	30	78,100			14,170	12,000	20,180	384	41			17,390	56	200
	IDCF-1012-086-010	10	50,240			15,890	13,710	21,980	465	50			19,190	71	215
	IDCF-1012-101-030	30	74,810			15,770	13,600	21,880	473	51			19,090	64	208
	IDCF-1012-103-025	25	68,230			16,560	14,390	22,720	526	57			19,930	64	208
	IDCF-1024-043-020	20	120,230			22,650	9,090	34,360	452	49			31,570	49	205
	IDCF-1024-043-030	30	137,250			22,900	9,220	34,610	452	49			31,820	49	205
	IDCF-1024-043-040	40	149,820			23,020	9,280	34,730	452	49			31,940	49	205
	IDCF-1024-045-050	50	156,130			23,700	9,620	35,450	486	52			32,660	49	205
	IDCF-1024-045-060	60	165,440			23,800	9,670	35,550	486	52			32,760	49	205
	IDCF-1024-061-020	20	116,690			24,710	10,120	36,550	588	63			33,760	49	205
	IDCF-1024-061-030	30	132,520			24,960	10,250	36,800	588	63			34,010	49	205
<u>*</u>	IDCF-1024-063-040	40	140,670			26,120	10,830	38,030	652	70			35,240	49	205
10' x 24'	IDCF-1024-063-050	50	150,850	(2) 5	1,008	26,220	10,880	38,130	652	70	(2) 8	794	35,340	49	205
_	IDCF-1024-063-060	60	159,960			26,320	10,930	38,230	652	70			35,440	49	205
	IDCF-1024-081-020	20	110,820			27,890	11,710	39,920	767	83			37,130	56	212
	IDCF-1024-081-030	30	125,820			28,140	11,840	40,170	767	83			37,380	56	212
	IDCF-1024-081-050	50	147,680			28,360	11,950	40,390	767	83			37,600	56	212
	IDCF-1024-081-060	60	156,190	190		28,460	12,000	40,490	767	83			37,700	56	212
	IDCF-1024-086-020	20	100,480			31,900	13,710	44,090	930	100			41,300	71	227
	IDCF-1024-101-060	60	149,620			31,670	13,600	43,880	946	102			41,090	64	220
	IDCF-1024-103-050	50	136,450			33,250	14,390	45,560	1,052	114			42,770	64	220

- 1. Operating weight is for the unit with the water level in the cold water basin at the overflow.
- 2. Refrigerant charge listed is R-717 operating charge. To determine operating charge for R-22, multiply charge by 1.94. For R134a, multiply by 1.98.
- 3. Does not include interconnecting water piping.

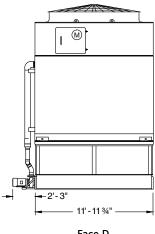
- * For R-22 and R-134a, the coil connection quantity may double.
- * Standard makeup, drain and overflow connections are MPT.
- * Condensing coil inlet and outlet connections are capped and charged with air to ensure integrity upon arrival at job site. Bevel For Weld connection is performed by the installing contractor.
- ** Product selection software, updated engineering data (if available), and more may be found at www.jci.com/frick.



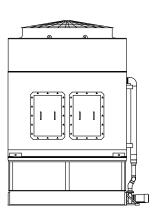
IDCF MODELS - 12'x 12' / 12'x 18'



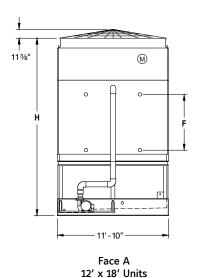
Face A 12' x 12' and 12' x 18' Units

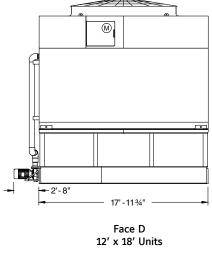


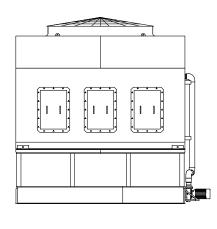
Face D 12' x 12' Units



Face C 12' x 12' Units







Face C 12' x 18' Units

NOTES:

- 1. Operating weight is for the unit with the water level in the cold water basin at the overflow.
- 2. Refrigerant charge listed is R-717 operating charge. To determine operating charge for R-22, multiply charge by 1.94. For R134a, multiply by 1.98.
- 3. Does not include interconnecting water piping.

- * For R-22 and R-134a, the coil connection quantity may double.
- * Standard makeup, drain and overflow connections are MPT.
- * Condensing coil inlet and outlet connections are capped and charged with air to ensure integrity upon arrival at job site. Bevel For Weld connection is performed by the installing contractor.

** Product selection software, updated engineering data (if available), and more may be found at www.jci.com/frick.

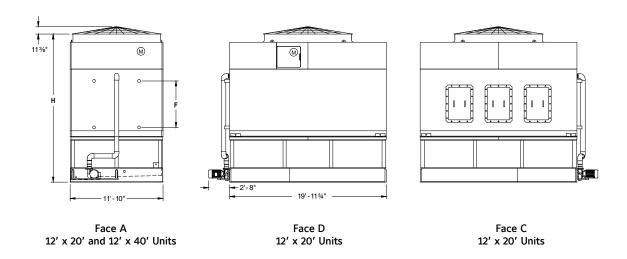
Do not use for construction. Refer to factory certified dimensions. This catalog includes data current at the time of publication, which should be reconfirmed at the time of purchase.

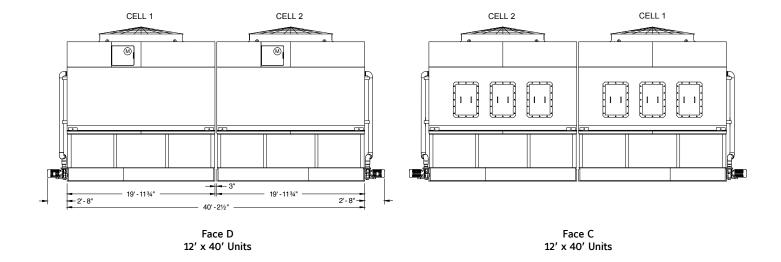


					Spray	Appr	ox. Weigh	t (lb)	R-717	Int		Remote Sum	D		
Nom. Box Size	Model Number	Fan Motor (HP)	Airflow Rate (CFM)	Pump Motor (HP)	Flow Rate (GPM)	Ship Weight	Heaviest Section	Oper. Wt. ⁽¹⁾	Oper. Charge (lb) (2)	Unit Vol (ft³)	Max. Drain Size (in)	Water in Suspension (gal) ⁽³⁾	Approx Oper. Wt. (lb)	F	Н
	IDCF-1212-041-010	10	71,790			13,020	10,170	19,920	251	27			16,843	49	202
	IDCF-1212-045-010	10	67,790			13,820	10,970	20,770	299	32			17,693	49	202
	IDCF-1212-045-015	15	74,440			13,940	11,090	20,890	299	32			17,813	49	202
	IDCF-1212-046-005	5	51,260			14,390	11,540	21,350	305	33			18,273	56	209
	IDCF-1212-046-7.5 IDCF-1212-046-015	8 15	58,250			14,440 14,580	11,590 11,730	21,400	305 305	33 33			18,323	56 56	209
	IDCF-1212-046-015	20	72,390 78,640			14,580	11,730	21,540 21,600	305	33			18,463 18,523	56	209
	IDCF-1212-065-015	15	70,240			16,000	13,150	23,090	432	47			20,013	49	202
	IDCF-1212-065-020	20	76,760			16,060	13,210	23,150	432	47			20,073	49	202
	IDCF-1212-065-025	25	82,110			16,090	13,240	23,180	432	47			20,103	49	202
	IDCF-1212-065-030	30	86,980			16,140	13,290	23,230	432	47			20,153	49	202
	IDCF-1212-065-040	40	95,080			16,330	13,480	23,420	432 432	47 47			20,343	49	202
	IDCF-1212-065-010	10	61,870 48,310			15,880 16,700	13,030 13,840	22,960 23,790	432	47			19,883 20,713	49 64	202
	IDCF-1212-066-7.5	8	54,600			16,750	13,890	23,840	439	47			20,763	64	217
2	IDCF-1212-081-030	30	88,430			16,940	14,090	24,070	472	51			20,993	56	209
12' x 12'	IDCF-1212-081-040	40	96,770	(1) 5	610	17,130	14,280	24,260	472	51	10	370	21,183	56	209
12	IDCF-1212-085-020	20	72,450			18,360	15,510	25,580	566	61			22,503	56	209
	IDCF-1212-085-025	25	77,420			18,390	15,540	25,610	566	61			22,533	56	209
	IDCF-1212-085-030	30 40	81,950 89,500			18,440 18,630	15,590 15,780	25,660 25,850	566 566	61 61			22,583 22,773	56 56	209
	IDCF-1212-083-040	5	49,030			17,480	14,620	24,610	478	52			21,533	71	224
	IDCF-1212-082-7.5	8	55,580			17,530	14,670	24,660	478	52			21,583	71	224
	IDCF-1212-082-010	10	60,830			17,510	14,660	24,640	478	52			21,563	71	224
	IDCF-1212-082-015	15	69,040			17,640	14,780	24,770	478	52			21,693	71	224
	IDCF-1212-121-005	5	46,800			20,490	17,630	27,830	693	75			24,753	71	224
	IDCF-1212-121-7.5 IDCF-1212-121-010	10	53,320 58,030			20,540	17,680 17,700	27,880	693 693	75 75			24,803 24,823	71 71	224 224
	IDCF-1212-121-010	15	65,900			20,550	17,700	27,900 28,020	693	75			24,923	71	224
	IDCF-1212-121-030	30	81,450			20,820	17,960	28,160	693	75			25,083	71	224
	IDCF-1212-121-040	40	87,350			21,010	18,150	28,350	693	75			25,273	71	224
	IDCF-1212-122-020	20	68,680			21,550	18,690	28,900	699	75			25,823	85	238
	IDCF-1212-122-025	25	73,650			21,580	18,720	28,930	699	75			25,853	85	238
	IDCF-1218-041-010 IDCF-1218-045-015	10 15	94,340 101,710			19,100 20,410	14,780 16,090	29,530 30,910	365 435	39 47			24,338 25,718	49 49	211
	IDCF-1218-046-010	10	85,970			21,160	16,840	31,670	442	48			26,478	56	219
	IDCF-1218-046-020	20	107,170			21,290	16,970	31,800	442	48			26,608	56	219
	IDCF-1218-061-020	20	110,990			21,800	17,480	32,400	532	57			27,208	49	211
	IDCF-1218-063-025	25	114,670			22,870	18,560	33,520	580	63			28,328	49	211
	IDCF-1218-063-030	30 15	121,340			22,830 23.490	18,510	33,470	580 637	63 69			28,278	49 49	211
	IDCF-1218-065-015	20	95,170 104,060			23,490	19,170 19,200	34,190 34,220	637	69			28,998 29,028	49	211
	IDCF-1218-081-030	30	118,290			24,910	20,590	35,670	699	75			30,478	56	219
	IDCF-1218-081-040	40	131,400			25,030	20,710	35,790	699	75			30,598	56	219
	IDCF-1218-083-025	25	108,490			25,980	21,670	36,810	762	82			31,618	56	219
	IDCF-1218-083-050	50	134,340			26,160	21,850	36,990	762	82			31,798	56	219
	IDCF-1218-085-020	20	98,270 111,260			26,930	22,610	37,830	839	91			32,638	56	219
× 18	IDCF-1218-085-030 IDCF-1218-085-040	30 40	121,590			27,180 27,300	22,860 22,980	38,080 38,200	839 839	91 91			32,888 33,008	56 56	219 219
12' ×	IDCF-1218-085-050	50	130,070	(1) 7.5	921	27,400	23,090	38,310	839	91	12	548	33,118	56	219
_	IDCF-1218-085-060	60	137,510			27,500	23,190	38,410	839	91			33,218	56	219
	IDCF-1218-086-030	30	108,620			28,370	24,050	39,290	846	91			34,098	71	234
	IDCF-1218-121-015	15	89,560			30,380	26,060	41,480	1,033	112			36,288	71	234
	IDCF-1218-121-020 IDCF-1218-121-040	20 40	97,800 120,890			30,410	26,090 26,460	41,510 41,880	1,033	112 112			36,318 36,688	71 71	234
	IDCF-1218-121-050	50	129,410			30,780	26,570	41,990	1,033	112			36,798	71	234
	IDCF-1218-121-060	60	136,730			30,990	26,670	42,090	1,033	112			36,898	71	234
	IDCF-1218-122-010	10	76,890			31,330	27,000	42,430	1,038	112			37,238	85	248
	IDCF-1218-122-015	15	87,080			31,430	27,100	42,530	1,038	112			37,338	85	248
	IDCF-1218-122-020	20	95,390			31,460	27,130	42,560	1,038	112			37,368	85	248
	IDCF-1218-122-025 IDCF-1218-122-030	25 30	101,940 105,630			31,740 31,710	27,430 27,380	42,840 42,810	1,038	112 112			37,648 37,618	85 85	248 248
	IDCF-1218-122-040	40	117,970			31,710	27,500	42,930	1,038	112			37,738	85	248
	IDCF-1218-122-050	50	126,390			31,930	27,610	43,040	1,038	112			37,848	85	248
	IDCF-1218-122-060	60	133,650			32,030	27,710	43,140	1,038	112			37,948	85	248



IDCF MODELS - 12'x20' / 12'x40'







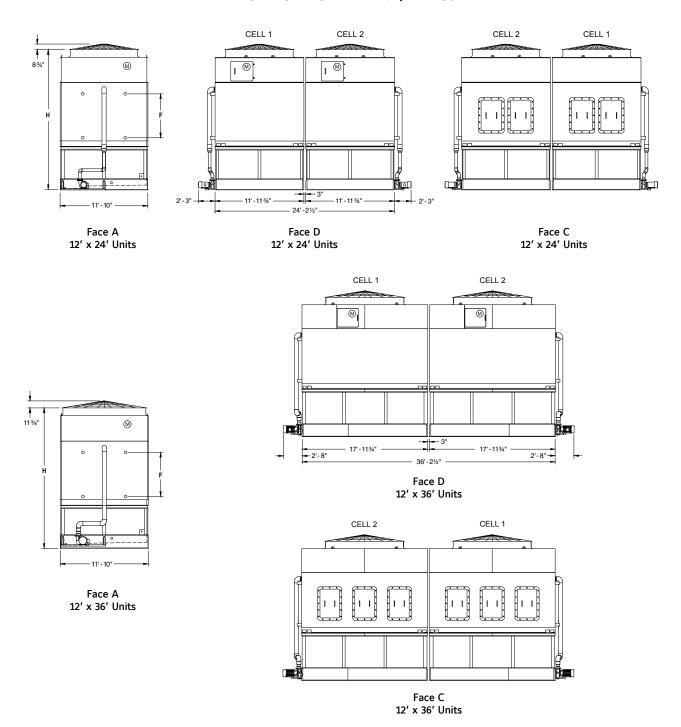
					Spray	Appı	ox. Weigh	t (lb)	R-717	Int		Remote Sum	р		
Nom. Box Size	Model Number	Fan Motor (HP)	Airflow Rate (CFM)	Pump Motor (HP)	Flow Rate (GPM)	Ship Weight	Heaviest Section	Oper. Wt. ⁽¹⁾	Oper. Charge (lb) (2)	Unit Vol (ft³)	Max. Drain Size (in)	Water in Suspension (gal) ⁽³⁾	Approx Oper. Wt. (lb)	F	Н
	IDCF-1220-101-025	25	114,990			28,910	24,340	41,060	960	104			37,291	64	230
	IDCF-1220-061-030	30	134,319			22,650	18,080	34,430	588	63			30,665	49	215
	IDCF-1220-063-030	30	128,915			23,520	18,950	35,350	641	69			31,585	49	215
	IDCF-1220-086-030	30	114,652			29,570	25,000	41,700	936	101			37,929	71	238
	IDCF-1220-123-030	30	110,998			33,830	29,260	46,270	1,251	135			42,499	71	238
	IDCF-1220-122-030	30	113,860			33,260	28,680	45,600	1,151	124			41,825	85	252
	IDCF-1220-063-040	40	140,794			23,740	19,170	35,570	641	69			31,805	49	215
_	IDCF-1220-065-040	40	136,978			24,780	20,210	36,670	705	76			32,905	49	215
× 20'	IDCF-1220-081-040	40	139,280	(1) 7.5	921	26,030	21,460	37,990	774	84	12	567	34,223	56	223
12	IDCF-1220-085-040	40	128,858	(.,,	02.	28,530	23,960	40,650	929	100		007	36,883	56	223
	IDCF-1220-121-040	40	127,764			32,370	27,800	44,710	1,145	124			40,939	71	238
	IDCF-1220-122-040	40	124,785			33,480	28,900	45,820	1,151	124			42,045	85	252
	IDCF-1220-084-050	50	138,238 134,711 136,947 142,619			28,430	23,860	40,470	851	92			36,699	71	238
	IDCF-1220-086-050	50				29,820	25,250	41,940	936	101			38,169	71	238
	IDCF-1220-121-050	50				32,400	27,830	44,730	1,145	124			40,959	71	238
	IDCF-1220-086-060	60				30,070	25,500	42,200	936	101			38,429	71	238
	IDCF-1220-121-060	60	144,925			32,650	28,080	44,990	1,145	124			41,219	71	238
	IDCF-1220-122-060	60	141,476			33,750	29,180	46,090	1,151	124			42,315	85	252
	IDCF-1240-061-060	60	268,638			45,480	18,080	69,030	1,176	127			61,493	49	227
	IDCF-1240-063-060	60	257,830			47,220	18,950	70,880	1,282	138			63,343	49	227
	IDCF-1240-063-080	80	281,589			47,660	19,170	71,320	1,282	138			63,783	49	227
	IDCF-1240-065-080	80	273,955			49,740	20,210	73,530	1,410	152			65,993	49	227
	IDCF-1240-081-080	80	278,560			52,240	21,460	76,170	1,548	167			68,629	56	235
	IDCF-1240-085-080	80	257,717			57,240	23,960	81,480	1,859	201			73,939	56	235
	IDCF-1240-086-060	60	229,304			59,330	25,000	83,580	1,872	202			76,031	71	250
-	IDCF-1240-084-100	100	276,476			57,040	23,860	81,120	1,701	184			73,571	71	250
× 40'	IDCF-1240-086-100	100	269,423	(2) 7.5	1.842	59,820	25,250	84,070	1,872	202	(2) 12	1.134	76,521	71	250
4	IDCF-1240-086-120	120	285,237	` ′	,-	60,320	25,500	84,570	1,872	202	. ,	, -	77,021	71	250
	IDCF-1240-101-050	50	229,981			58,000	24,340	82,300	1,919	207			74,755	64	242
	IDCF-1240-123-060	60	221,997			67,850	29,260	92,730	2,502	270			85,181	71	250
	IDCF-1240-121-080	80	255,527			64,930	27,800	89,600	2,291	247			82,051	71	250
	IDCF-1240-121-100	100	273,893			64,980	27,830	89,650	2,291	247			82,101	71	250
	IDCF-1240-121-120	120	289,850			65,480	28,080	90,150	2,291	247			82,601	71	250
	IDCF-1240-122-060	60	227,720			66,700	28,680	91,380	2,302	249			83,824	85	264
	IDCF-1240-122-080	80	249,571			67,140	28,900	91,820	2,302	249			84,264	85	264
	IDCF-1240-122-120	120	282,952			67,690	29,180	92,370	2,302	249			84,814	85	264

- 1. Operating weight is for the unit with the water level in the cold water basin at the overflow.
- 2. Refrigerant charge listed is R-717 operating charge. To determine operating charge for R-22, multiply charge by 1.94. For R134a, multiply by 1.98.
- 3. Does not include interconnecting water piping.

- * For R-22 and R-134a, the coil connection quantity may double.
- * Standard makeup, drain and overflow connections are MPT.
- * Condensing coil inlet and outlet connections are capped and charged with air to ensure integrity upon arrival at job site. Bevel For Weld connection is performed by the installing contractor.
- ** Product selection software, updated engineering data (if available), and more may be found at www.jci.com/frick.



IDCF MODELS - 12'x 24' / 12'x 36'



NOTES:

- 1. Operating weight is for the unit with the water level in the cold water basin at the overflow.
- 2. Refrigerant charge listed is R-717 operating charge. To determine operating charge for R-22, multiply charge by 1.94. For R134a, multiply by 1.98.
- 3. Does not include interconnecting water piping.

- * For R-22 and R-134a, the coil connection quantity may double.
- * Standard makeup, drain and overflow connections are MPT.
- * Condensing coil inlet and outlet connections are capped and charged with air to ensure integrity upon arrival at job site. Bevel For Weld connection is performed by the installing contractor.

** Product selection software, updated engineering data (if available), and more may be found at www.jci.com/frick.

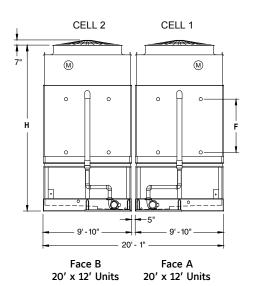
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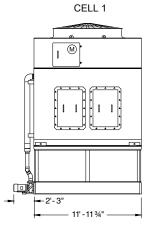


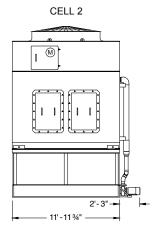
					Spray	Appr	ox. Weigh	t (lb)	R-717	Int		Remote Sum	D		
Nom. Box	Model	Fan Motor	Airflow Rate	Pump Motor	Flow	Ship		Oper.	Oper.	Unit	Max.	Water in	Approx	F	Н
Size	Number	(HP)	(CFM)	(HP)	Rate (GPM)	Weight	Heaviest Section	Wt. ⁽¹⁾	Charge (lb) (2)	Vol (ft³)	Drain Size (in)	Suspension (gal) (3)	Oper. Wt. (lb)	Г	
	IDCF-1224-041-020	20	143,580		(GPIVI)	26,150	10,170	39,970	503	(IL ³)	Size (III)	(gai) (e)	36,893	49	214
	IDCF-1224-045-020	20	135,570			27,750	10,970	41,660	598	65			38,583	49	214
	IDCF-1224-045-030	30	148,870			28,000	11,090	41,910	598	65			38,833	49	214
	IDCF-1224-046-010	10 15	102,510 116,500			28,910 29,010	11,540 11,590	42,830 42,930	611 611	66 66			39,753 39,853	56 56	221 221
	IDCF-1224-046-030	30	144,770			29,290	11,730	43,210	611	66			40,133	56	221
	IDCF-1224-046-040	40	157,270			29,410	11,790	43,330	611	66			40,253	56	221
	IDCF-1224-065-030	30	140,470			32,120	13,150	46,300	864	93			43,223	49	214
	IDCF-1224-065-040	40 50	153,510 164,220			32,240 32,300	13,210 13,240	46,420 46,480	864 864	93 93			43,343 43,403	49 49	214 214
	IDCF-1224-065-060	60	173,950			32,400	13,290	46,580	864	93			43,503	49	214
	IDCF-1224-065-080	80	190,160			32,780	13,480	46,960	864	93			43,883	49	214
	IDCF-1224-065-020	20 10	123,740 96,610			31,870 33,510	13,030 13,840	46,050 47,700	864 878	93 95			42,973 44,623	49 64	214 229
	IDCF-1224-066-015	15	109,200			33,610	13,890	47,800	878	95			44,723	64	229
-42	IDCF-1224-081-060	60	176,860]		34,010	14,090	48,260	945	102			45,183	56	221
12' x 24'	IDCF-1224-081-080	80	193,530	(2) 5	1,220	34,380	14,280	48,640	945	102	(2) 10	740	45,563	56	221
-	IDCF-1224-085-040	40 50	144,900 154,840			36,850 36,910	15,510 15,540	51,290 51,350	1,131 1,131	122 122			48,213 48,273	56 56	221 221
	IDCF-1224-085-060	60	163,890			37,010	15,590	51,450	1,131	122			48,373	56	221
	IDCF-1224-085-080	80	178,990			37,380	15,780	51,830	1,131	122			48,753	56	221
	IDCF-1224-082-010	10 15	98,060 111,150			35,070 35,170	14,620 14,670	49,340 49,440	956 956	103 103			46,263 46,363	71 71	236 236
	IDCF-1224-082-019	20	121,650			35,170	14,660	49,410	956	103			46,333	71	236
	IDCF-1224-082-030	30	138,070			35,390	14,780	49,660	956	103			46,583	71	236
	IDCF-1224-121-010	10	93,590			41,090	17,630	55,790	1,387	150			52,713	71	236
	IDCF-1224-121-015	15 20	106,640 116,060			41,190 41,220	17,680 17,700	55,890 55,920	1,387 1,387	150 150			52,813 52,843	71 71	236 236
	IDCF-1224-121-030	30	131,800			41,470	17,700	56,170	1,387	150			53,093	71	236
	IDCF-1224-121-060	60	162,890			41,750	17,960	56,450	1,387	150			53,373	71	236
	IDCF-1224-121-080	80	174,690			42,130	18,150	56,830	1,387	150			53,753	71	236
	IDCF-1224-122-040 IDCF-1224-122-050	40 50	137,360 147,290			43,220 43,280	18,690 18,720	57,930 57,990	1,398 1,398	151 151			54,853 54,913	85 85	250 250
	IDCF-1236-041-020	20	188,670			38,350	14,780	59,220	729	79			54,028	49	223
	IDCF-1236-045-030	30	203,420			40,970	16,090	61,980	871	94			56,788	49	223
	IDCF-1236-046-020 IDCF-1236-046-040	20 40	171,940 214,340			42,470 42,730	16,840 16,970	63,500 63,760	884 884	95 95			58,308 58,568	56 56	231
	IDCF-1236-061-040	40	221,980			43,750	17,480	64,950	1,063	115			59,758	49	223
	IDCF-1236-063-050	50	229,340			45,900	18,560	67,200	1,159	125			62,008	49	223
	IDCF-1236-063-060 IDCF-1236-065-030	60	242,680			45,810	18,510	67,110	1,159	125			61,918	49 49	223 223
	IDCF-1236-065-040	30 40	190,340 208,120			47,130 47,190	19,170 19,200	68,540 68,600	1,274 1,274	138 138			63,348 63,408	49	223
	IDCF-1236-081-060	60	236,570			49,970	20,590	71,510	1,397	151			66,318	56	231
	IDCF-1236-081-080	80	262,800			50,210	20,710	71,750	1,397	151			66,558	56	231
	IDCF-1236-083-050 IDCF-1236-083-100	50 100	216,970 268,670			52,120 52,480	21,670 21,850	73,790 74,150	1,525 1,525	165 165			68,598 68,958	56 56	231
	IDCF-1236-085-040	40	196,530			54,010	22,610	75,830	1,678	181			70,638	56	231
īc.	IDCF-1236-085-060	60	222,510			54,510	22,860	76,330	1,678	181			71,138	56	231
12' x 36'	IDCF-1236-085-080 IDCF-1236-085-100	80	243,180 260,140	(2) 7.5	1,842	54,750	22,980	76,570	1,678	181	(2) 12	1,096	71,378	56	231 231
12	IDCF-1236-085-100	100 120	275,020			54,960 55,160	23,090 23,190	76,780 76,980	1,678 1,678	181 181			71,588 71,788	56 56	231
	IDCF-1236-086-060	60	217,240			56,900	24,050	78,730	1,691	183			73,538	71	246
	IDCF-1236-121-030	30	179,120			60,920	26,060	83,130	2,066	223			77,938	71	246
	IDCF-1236-121-040 IDCF-1236-121-080	40 80	195,600 241,770			60,980 61,720	26,090 26,460	83,190 83,930	2,066 2,066	223 223			77,998 78,738	71 71	246 246
	IDCF-1236-121-100	100	258,820			61,930	26,570	84,140	2,066	223			78,948	71	246
	IDCF-1236-121-120	120	273,460			62,130	26,670	84,340	2,066	223			79,148	71	246
	IDCF-1236-122-020	20	153,780			62,810	27,000	85,030	2,077	224			79,838	85	260
	IDCF-1236-122-030 IDCF-1236-122-040	30 40	174,160 190,770			63,010 63,070	27,100 27,130	85,230 85,290	2,077 2,077	224 224			80,038 80,098	85 85	260 260
	IDCF-1236-122-050	50	203,870]		63,660	27,430	85,870	2,077	224			80,678	85	260
	IDCF-1236-122-060	60	211,250			63,570	27,380	85,790	2,077	224			80,598	85	260
	IDCF-1236-122-080	80	235,930			63,810	27,500	86,030	2,077	224			80,838	85	260
	IDCF-1236-122-100 IDCF-1236-122-120	100	252,780 267,300			64,020 64,220	27,610 27,710	86,230 86,430	2,077 2,077	224 224			81,038 81,238	85 85	260 260
	1201-1200-122-120	120	201,300			04,220	21,110	00,400	۷,011	224			01,230	00	200



IDCF MODELS - 20'x 12'







Face D (A) 20' x 12' Units

Face D (B) 20' x 12' Units

					Spray	Аррі	rox. Weigh	t (lb)	R-717	Int		Remote Sum	р		
Nom. Box Size	Model Number	Fan Motor (HP)	Airflow Rate (CFM)	Pump Motor (HP)	Flow Rate (GPM)	Ship Weight	Heaviest Section ⁽⁴⁾	Oper. Wt. ⁽¹⁾	Oper. Charge (lb) (2)	Unit Vol (ft³)	Max. Drain Size (in)	Water in Suspension (gal) ⁽³⁾	Approx Oper. Wt. (lb)	F	Н
	IDCF-2012-043-020	20	120,230			22,650	11,325	34,360	452	49			31,570	49	205
	IDCF-2012-043-030	30	137,250			22,900	11,450	34,610	452	49			31,820	49	205
	IDCF-2012-043-040	40	149,820			23,020	11,510	34,730	452	49			31,940	49	205
	IDCF-2012-045-050	50	156,130			23,700	11,850	35,450	486	52			32,660	49	205
	IDCF-2012-045-060	60	165,440			23,800	11,900	35,550	486	52			32,760	49	205
	IDCF-2012-061-020	20	116,690			24,710	12,355	36,550	588	63			33,760	49	205
	IDCF-2012-061-030	30	132,520			24,960	12,480	36,800	588	63			34,010	49	205
Ñ	IDCF-2012-063-040	40	140,670			26,120	13,060	38,030	652	70			35,240	49	205
)' x 12'	IDCF-2012-063-050	50	150,850	(2) 5	1,008	26,220	13,110	38,130	652	70	(2) 8	794	35,340	49	205
20,	IDCF-2012-063-060	60	159,960			26,320	13,160	38,230	652	70			35,440	49	205
	IDCF-2012-081-020	20	110,820			27,890	13,945	39,920	767	83			37,130	56	212
	IDCF-2012-081-030	30	125,820			28,140	14,070	40,170	767	83			37,380	56	212
	IDCF-2012-081-050	50	147,680			28,360	14,180	40,390	767	83			37,600	56	212
	IDCF-2012-081-060	60	156,190			28,460	14,230	40,490	767	83			37,700	56	212
	IDCF-2012-086-020	20	100,480			31,900	15,950	44,090	930	100			41,300	71	227
	IDCF-2012-101-060	60	149,620			31,670	15,835	43,880	946	102			41,090	64	220
	IDCF-2012-103-050	50	136,450			33,250	16,625	45,560	1,052	114			42,770	64	220

NOTES:

- 1. Operating weight is for the unit with the water level in the cold water basin at the overflow.
- 2. Refrigerant charge listed is R-717 operating charge. To determine operating charge for R-22, multiply charge by 1.94. For R134a, multiply by 1.98.
- 3. Does not include interconnecting water piping.
- 4. Heaviest section is a fully assembled unit to ensure the coil section is fully bolted to the basin section.
- * For R-22 and R-134a, the coil connection quantity may double.
- * Standard makeup, drain and overflow connections are MPT.
- * Condensing coil inlet and outlet connections are capped and charged with air to ensure integrity upon arrival at job site.

 Bevel For Weld connection is performed by the installing contractor.

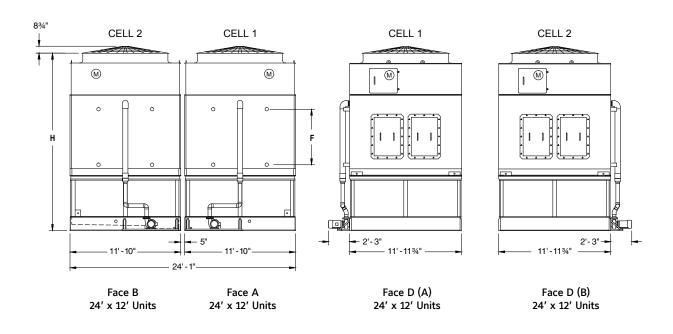
** Product selection software, updated engineering data (if available), and more may be found at www.jci.com/frick.

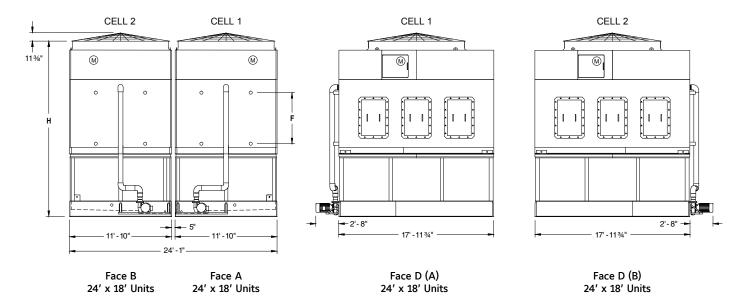
Do not use for construction. Refer to factory certified dimensions. This catalog includes data current at the time of publication, which should be reconfirmed at the time of purchase.





IDCF MODELS - 24'x 12' / 24'x 18'





NOTES:

- 1. Operating weight is for the unit with the water level in the cold water basin at the overflow.
- 2. Refrigerant charge listed is R-717 operating charge. To determine operating charge for R-22, multiply charge by 1.94. For R134a, multiply by 1.98.
- 3. Does not include interconnecting water piping.
- 4. Heaviest section is a fully assembled unit to ensure the coil section is fully bolted to the basin section.
- * For R-22 and R-134a, the coil connection quantity may double.
- * Standard makeup, drain and overflow connections are MPT.
- * Condensing coil inlet and outlet connections are capped and charged with air to ensure integrity upon arrival at job site.

 Bevel For Weld connection is performed by the installing contractor.

** Product selection software, updated engineering data (if available), and more may be found at www.jci.com/frick.

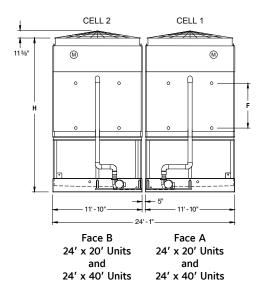
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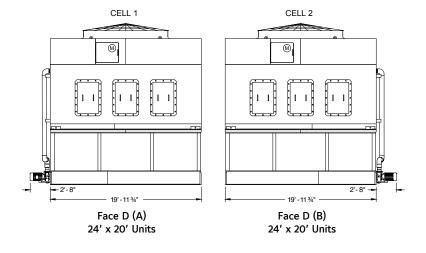


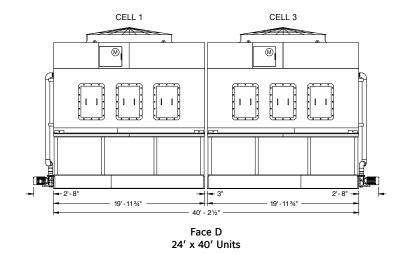
					Cowou	App	rox. Weigh	t (lb)	D 717	las	· ·	Remote Sum	n		
Nom.	Model	Fan	Airflow	Pump	Spray Flow	Ship			R-717 Oper.	Int Unit	Max.	Water in	Approx	F	
Box Size	Number	Motor (HP)	Rate (CFM)	Motor (HP)	Rate		Heaviest Section ⁽⁴⁾	Oper. Wt. ⁽¹⁾	Charge	Vol	Drain	Suspension	Oper. Wt.	F	Н
	IDCF-2412-041-020	20	143,580	` ′	(GPM)	26,150			(lb) (2)	(ft³)	Size (in)	(gal) ⁽³⁾	(lb) 36,893	49	214
	IDCF-2412-041-020	20	135,570			27,750	13,075 13,875	39,970 41,660	503 598	54 65			38,583	49	214
	IDCF-2412-045-030	30	148,870			28,000	14,000	41,910	598	65			38,833	49	214
	IDCF-2412-046-010	10	102,510			28,910	14,455	42,830	611	66			39,753	56	221
	IDCF-2412-046-015 IDCF-2412-046-030	15 30	116,500 144,770			29,010 29,290	14,505 14,645	42,930 43,210	611 611	66 66			39,853 40,133	56 56	221 221
	IDCF-2412-046-040	40	157,270			29,410	14,705	43,330	611	66			40,133	56	221
	IDCF-2412-065-030	30	140,470			32,120	16,060	46,300	864	93			43,223	49	214
	IDCF-2412-065-040	40	153,510			32,240	16,120	46,420	864	93			43,343	49	214
	IDCF-2412-065-050	50 60	164,220 173,950			32,300 32,400	16,150 16,200	46,480 46,580	864 864	93 93			43,403 43,503	49 49	214 214
	IDCF-2412-065-060 IDCF-2412-065-080	80	190,160			32,780	16,200	46,960	864	93			43,883	49	214
	IDCF-2412-065-020	20	123,740			31,870	15,935	46,050	864	93			42,973	49	214
	IDCF-2412-066-010	10	96,610			33,510	16,755	47,700	878	95			44,623	64	229
	IDCF-2412-066-015	15	109,200			33,610	16,805	47,800	878	95			44,723	64	229
x 12'	IDCF-2412-081-060 IDCF-2412-081-080	60 80	176,860 193,530	(2) 5	1,220	34,010 34,380	17,005 17,190	48,260 48,640	945 945	102 102	(2) 10	740	45,183 45,563	56 56	221 221
24	IDCF-2412-085-040	40	144,900	(2) 0	1,220	36,850	18,425	51,290	1,131	122	(2) 10	710	48,213	56	221
	IDCF-2412-085-050	50	154,840			36,910	18,455	51,350	1,131	122			48,273	56	221
	IDCF-2412-085-060	60	163,890			37,010	18,505	51,450	1,131	122			48,373	56	221
	IDCF-2412-085-080 IDCF-2412-082-010	80 10	178,990 98,060			37,380 35,070	18,690 17,535	51,830 49,340	1,131 956	122 103			48,753 46,263	56 71	221 236
	IDCF-2412-082-010	15	111,150			35,070	17,585	49,440	956	103			46,363	71	236
	IDCF-2412-082-020	20	121,650			35,140	17,570	49,410	956	103			46,333	71	236
	IDCF-2412-082-030	30	138,070			35,390	17,695	49,660	956	103			46,583	71	236
	IDCF-2412-121-010	10	93,590			41,090	20,545	55,790	1,387	150			52,713	71	236
	IDCF-2412-121-015 IDCF-2412-121-020	15 20	106,640 116,060			41,190 41,220	20,595 20,610	55,890 55,920	1,387 1,387	150 150			52,813 52,843	71 71	236 236
	IDCF-2412-121-030	30	131,800			41,470	20,735	56,170	1,387	150			53,093	71	236
	IDCF-2412-121-060	60	162,890			41,750	20,875	56,450	1,387	150			53,373	71	236
	IDCF-2412-121-080	80	174,690			42,130	21,065	56,830	1,387	150			53,753	71	236
	IDCF-2412-122-040 IDCF-2412-122-050	40 50	137,360 147,290			43,220 43,280	21,610 21,640	57,930 57,990	1,398 1,398	151 151			54,853 54,913	85 85	250 250
	IDCF-2418-041-020	20	188,670			38,410	19,205	59,270	729	79			54,078	49	229
	IDCF-2418-045-030	30	203,420			41,030	20,515	62,040	871	94			56,848	49	229
	IDCF-2418-046-020	20	171,940			42,530	21,265	63,550	884	95			58,358	56	237
	IDCF-2418-046-040 IDCF-2418-061-040	40	214,340 221,980			42,790 43,810	21,395 21,905	63,810 65,010	884 1,063	95 115			58,618 59,818	56 49	237 229
	IDCF-2418-063-050	50	229,340			45,950	22,975	67,250	1,159	125			62,058	49	229
	IDCF-2418-063-060	60	242,680			45,870	22,935	67,160	1,159	125			61,968	49	229
	IDCF-2418-065-030	30	190,340			47,190	23,595	68,600	1,274	138			63,408	49	229
	IDCF-2418-065-040	40 60	208,120			47,250 50,030	23,625	68,660	1,274	138			63,468	49 56	229
	IDCF-2418-081-060 IDCF-2418-081-080	80	236,570 262,800			50,030	25,015 25,135	71,570 71,810	1,397 1,397	151 151			66,378 66,618	56	237
	IDCF-2418-083-050	50	216,970			52,180	26,090	73,840	1,525	165			68,648	56	237
	IDCF-2418-083-100	100	268,670			52,540	26,270	74,200	1,525	165			69,008	56	237
	IDCF-2418-085-040	40	196,530 222,510			54,070	27,035	75,890	1,678	181			70,698	56	237
<u>∞</u>	IDCF-2418-085-060 IDCF-2418-085-080	60 80	243,180			54,570 54,810	27,285 27,405	76,390 76,630	1,678 1,678	181 181			71,198 71,438	56 56	237
24' x 18'	IDCF-2418-085-100	100	260,140	(2) 7.5	1,842	55,020	27,510	76,830	1,678	181	(2) 12	1,096	71,638	56	237
	IDCF-2418-085-120	120	275,020			55,220	27,610	77,030	1,678	181			71,838	56	237
	IDCF-2418-086-060	60	217,240			56,960	28,480	78,790	1,691	183			73,598	71	252
	IDCF-2418-121-030 IDCF-2418-121-040	30 40	179,120 195,600			60,980 61,040	30,490 30,520	83,180 83,240	2,066 2,066	223 223			77,988 78,048	71 71	252 252
	IDCF-2418-121-080	80	241,770			61,780	30,890	83,980	2,066	223			78,788	71	252
	IDCF-2418-121-100	100	258,820			61,980	30,990	84,190	2,066	223			78,998	71	252
	IDCF-2418-121-120	120	273,460			62,180	31,090	84,390	2,066	223			79,198	71	252
	IDCF-2418-122-020 IDCF-2418-122-030	30	153,780 174,160			62,860 63,060	31,430 31,530	85,080 85,280	2,077 2,077	224 224			79,888 80,088	85 85	266 266
	IDCF-2418-122-040	40	190,770			63,120	31,560	85,340	2,077	224			80,148	85	266
	IDCF-2418-122-050	50	203,870			63,710	31,855	85,930	2,077	224			80,738	85	266
	IDCF-2418-122-060	60	211,250			63,620	31,810	85,840	2,077	224			80,648	85	266
	IDCF-2418-122-080 IDCF-2418-122-100	100	235,930 126,390			63,860 64,070	31,930 32,035	86,080 86,290	2,077 2,077	224 224			80,888 81,098	85 85	266 266
	IDCF-2418-122-100	120	133,650			64,270	32,135	86,490	2,077	224			81,298	85	266
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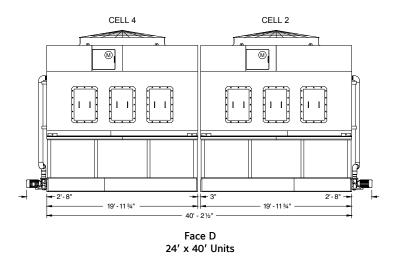


IDCF MODELS - 24'x20' / 24'x40'









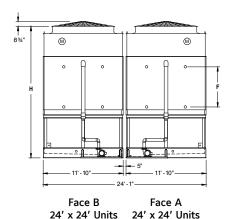


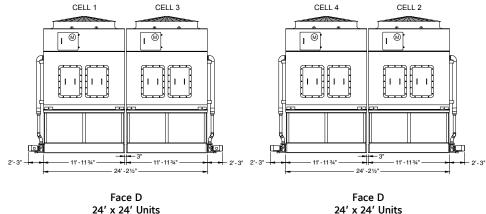
					Spray	App	rox. Weigh	t (lb)	R-717	Int		Remote Sum	р		
Nom. Box Size	Model Number	Fan Motor (HP)	Airflow Rate (CFM)	Pump Motor (HP)	Flow Rate (GPM)	Ship Weight	Heaviest Section ⁽⁴⁾	Oper. Wt. ⁽¹⁾	Oper. Charge (lb) (2)	Unit Vol (ft³)	Max. Drain Size (in)	Water in Suspension (gal) ⁽³⁾	Approx Oper. Wt. (lb)	F	н
	IDCF-2420-061-060	60	268,638			45,520	22,760	69,070	1,176	127			61,530	49	233
	IDCF-2420-063-060	60	257,830			47,260	23,630	70,920	1,282	138			63,380	49	233
	IDCF-2420-063-080	80	281,589			47,700	23,850	71,360	1,282	138			63,820	49	233
	IDCF-2420-065-080	80	273,955			49,780	24,890	73,570	1,410	152			66,030	49	233
	IDCF-2420-081-080	80	278,560			52,280	26,140	76,210	1,548	167			68,666	56	241
	IDCF-2420-085-080	80	257,717			57,280	28,640	81,520	1,859	201			73,976	56	241
	IDCF-2420-086-060	60	229,304			59,370	29,685	83,620	1,872	202			76,068	71	256
_	IDCF-2420-084-100	100	276,476			57,080	28,540	81,160	1,701	184			73,608	71	256
24' x 20'	IDCF-2420-086-100	100	269,423	(2) 7.5	1.842	59,860	29,930	84,110	1,872	202	(2) 12	1.134	76,558	71	256
24.	IDCF-2420-086-120	120	285,237	(2) 7.5	1,042	60,360	30,180	84,610	1,872	202	(2) 12	1,104	77,058	71	256
	IDCF-2420-101-050	50	229,981			58,040	29,020	82,340	1,919	207			74,792	64	248
	IDCF-2420-123-060	60	221,997			67,890	33,945	92,770	2,502	270			85,218	71	256
	IDCF-2420-121-080	80	255,527			64,970	32,485	89,640	2,291	247			82,088	71	256
	IDCF-2420-121-100	100	273,893			65,020	32,510	89,690	2,291	247			82,138	71	256
	IDCF-2420-121-120	120	289,850			65,520	32,760	90,190	2,291	247			82,638	71	256
	IDCF-2420-122-060	60	227,720			66,740	33,370	91,420	2,302	249			83,861	85	270
	IDCF-2420-122-080	80	249,571			67,180	33,590	91,860	2,302	249			84,301	85	270
	IDCF-2420-122-120	120	282,952			67,730	33,865	92,410	2,302	249			84,851	85	270
	IDCF-2440-061-120	120	537,276			91,360	22,840	138,470	2,352	254			123,377	49	245
	IDCF-2440-063-120	120	515,660			94,840	23,710	142,170	2,565	277			127,077	49	245
	IDCF-2440-063-160	160	563,177			95,720	23,930	143,050	2,565	277			127,957	49	245
	IDCF-2440-065-160	160	547,910			99,880	24,970	147,460	2,820	305			132,367	49	245
	IDCF-2440-081-160	160	557,120			104,890	26,223	152,750	3,095	334			137,649	56	253
	IDCF-2440-085-160	160	515,434			114,890	28,723	163,370	3,718	402			148,269	56	253
	IDCF-2440-086-120	120	458,607			119,060	29,765	167,570	3,745	404			152,454	71	268
5	IDCF-2440-084-200	200	552,952			114,480	28,620	162,650	3,403	367			147,534	71	268
× 40'	IDCF-2440-086-200	200	538,845	(4) 7.5	3,684	120,040	30,010	168,550	3,745	404	(4) 12	2.268	153,434	71	268
24.	IDCF-2440-086-240	240	570,475	(1) 7.0	0,001	121,050	30,263	169,550	3,745	404	(1) 12	2,200	154,434	71	268
	IDCF-2440-101-100	100	459,961			116,420	29,105	165,020	3,838	415			149,911	64	260
	IDCF-2440-123-120	120	443,993	,993 ,054 ,786 ,700		136,100	34,025	185,870	5,005	540			170,754	71	268
	IDCF-2440-121-160	160	511,054			130,260	32,565	179,610	4,582	495			164,494	71	268
	IDCF-2440-121-200	200	547,786			130,360	32,590	179,710	4,582	495			164,594	71	268
	IDCF-2440-121-240	240	579,700			131,370	32,843	180,710	4,582	495			165,594	71	268
	IDCF-2440-122-120	120	455,440			133,800	33,450	183,160	4,604	497			168,029	85	282
	IDCF-2440-122-160	160	499,142			134,680	33,670	184,040	4,604	497			168,909	85	282
	IDCF-2440-122-240	240	565,905			135,780	33,945	185,150	4,604	497			170,019	85	282

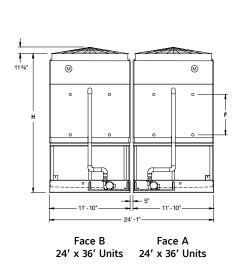
- 1. Operating weight is for the unit with the water level in the cold water basin at the overflow.
- 2. Refrigerant charge listed is R-717 operating charge. To determine operating charge for R-22, multiply charge by 1.94. For R134a, multiply by 1.98.
- 3. Does not include interconnecting water piping.
- 4. Heaviest section is a fully assembled unit to ensure the coil section is fully bolted to the basin section.
- * For R-22 and R-134a, the coil connection quantity may double.
- * Standard makeup, drain and overflow connections are MPT.
- * Condensing coil inlet and outlet connections are capped and charged with air to ensure integrity upon arrival at job site. Bevel For Weld connection is performed by the installing contractor.
- ** Product selection software, updated engineering data (if available), and more may be found at www.jci.com/frick.

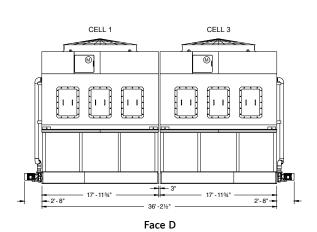


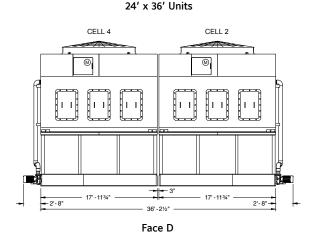
IDCF MODELS - 24'x24' / 24'x36'











24' x 36' Units

NOTES:

- 1. Operating weight is for the unit with the water level in the cold water basin at the overflow.
- 2. Refrigerant charge listed is R-717 operating charge. To determine operating charge for R-22, multiply charge by 1.94. For R134a, multiply by 1.98.
- 3. Does not include interconnecting water piping.
- 4. Heaviest section is a fully assembled unit to ensure the coil section is fully bolted to the basin section.
- * For R-22 and R-134a, the coil connection quantity may double.
- * Standard makeup, drain and overflow connections are MPT.
- * Condensing coil inlet and outlet connections are capped and charged with air to ensure integrity upon arrival at job site. Bevel For Weld connection is performed by the installing contractor.
- ** Product selection software, updated engineering data (if available), and more may be found at www.jci.com/frick.

Do not use for construction. Refer to factory certified dimensions. This catalog includes data current at the time of publication, which should be reconfirmed at the time of purchase.



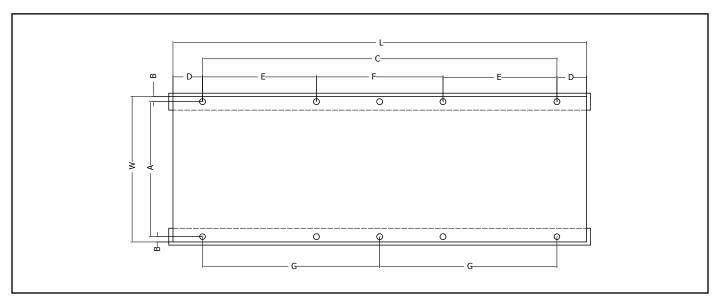
					Spray	App	rox. Weigh	t (lb)	R-717	Int		Remote Sum	D		
Nom.	Model	Fan	Airflow	Pump	Flow	Ship			Oper.	Unit	Max.	Water in	Approx	F	
Box Size	Number	Motor (HP)	Rate (CFM)	Motor (HP)	Rate		Heaviest Section ⁽⁴⁾	Oper. Wt. ⁽¹⁾	Charge (lb) (2)	Vol	Drain	Suspension		Г	Н
	IDCF-2424-041-040	40	287,160	<u> </u>	(GPM)	52,790	13,198	80,430	1,006	(ft³)	Size (in)	(gal) ⁽³⁾	(lb) 77,353	49	238
	IDCF-2424-041-040	40	271,130			55,990	13,198	83,820	1,195	129			80,743	49	238
	IDCF-2424-045-060	60	297,740			56,490	14,123	84,320	1,195	129			81,243	49	238
	IDCF-2424-046-020	20	205,020			58,300	14,575	86,160	1,222	132			83,083	56	245
	IDCF-2424-046-030 IDCF-2424-046-060	30 60	233,000 289,540			58,500 59,060	14,625 14,765	86,360 86,920	1,222 1,222	132 132			83,283 83,843	56 56	245 245
	IDCF-2424-046-080	80	314,540			59,300	14,825	87,160	1,222	132			84,083	56	245
	IDCF-2424-065-060	60	280,930			64,730	16,183	93,090	1,729	187			90,013	49	238
	IDCF-2424-065-080 IDCF-2424-065-100	100	307,020 328,430			64,970 65,090	16,243 16,273	93,330 93,450	1,729 1,729	187 187			90,253 90,373	49 49	238
	IDCF-2424-065-100	120	347,890			65,290	16,323	93,650	1,729	187			90,573	49	238
	IDCF-2424-065-160	160	380,310			66,050	16,513	94,410	1,729	187			91,333	49	238
	IDCF-2424-065-040	40	247,480			64,230	16,058	92,590	1,729	187			89,513	49	238
	IDCF-2424-066-020 IDCF-2424-066-030	20 30	193,210 218,390			67,310 67,430	16,828 16,858	95,700 95,810	1,756 1,756	190 190			92,623 92,733	64	253 253
4	IDCF-2424-081-120	120	353,720			68,500	17,125	97,020	1,890	204			93,943	56	245
' x 24'	IDCF-2424-081-160	160	387,060	(4) 5	2,440	69,260	17,315	97,780	1,890	204	(4) 10	1,480	94,703	56	245
24	IDCF-2424-085-080	80	289,800			74,180	18,545	103,080	2,262	244			100,003	56	245
	IDCF-2424-085-100 IDCF-2424-085-120	100 120	309,670 327,780			74,300 74,500	18,575 18,625	103,200	2,262 2,262	244 244			100,123 100,323	56 56	245 245
	IDCF-2424-085-160	160	357,970			75,260	18,815	104,150	2,262	244			101,073	56	245
	IDCF-2424-082-020	20	196,110			70,520	17,630	99,060	1,912	206			95,983	71	260
	IDCF-2424-082-030	30	222,300			70,720	17,680	99,260	1,912	206			96,183	71	260
	IDCF-2424-082-040 IDCF-2424-082-060	40 60	243,290 276,130			70,780 71,280	17,695 17,820	99,320 99,820	1,912 1,912	206 206			96,243 96,743	71 71	260 260
	IDCF-2424-121-020	20	187,170			82,680	20,670	112,080	2,773	300			109,003	71	260
	IDCF-2424-121-030	30	213,280			82,880	20,720	112,280	2,773	300			109,203	71	260
	IDCF-2424-121-040	40	232,120			82,940	20,735 20,860	112,340	2,773	300 300			109,263	71 71	260
	IDCF-2424-121-060 IDCF-2424-121-120	60 120	263,590 325,770			83,440 84,000	21,000	112,840 113,400	2,773 2,773	300			109,763 110,323	71	260 260
	IDCF-2424-121-160	160	349,370			84,750	21,188	114,160	2,773	300			111,083	71	260
	IDCF-2424-122-080	80	274,710			86,930	21,733	116,360	2,796	302			113,283	85	274
	IDCF-2424-122-100 IDCF-2436-041-040	100 40	294,570 377,330			87,050 77,090	21,763 19,273	116,480 118,840	2,796 1,458	302 157			113,403 113,648	85 49	274 241
	IDCF-2436-045-060	60	406,840			82,330	20,583	124,360	1,742	188			119,168	49	241
	IDCF-2436-046-040	40	343,880			85,340	21,335	127,400	1,769	191			122,208	56	249
	IDCF-2436-046-080	80	428,680 443,960			85,860 87,890	21,465	127,920	1,769	191 230			122,728 125,118	56 49	249 241
	IDCF-2436-061-080	100	458,670			92,190	21,973 23,048	130,310 134,790	2,127 2,318	250			129,598	49	241
	IDCF-2436-063-120	120	485,360			92,010	23,003	134,620	2,318	250			129,428	49	241
	IDCF-2436-065-060	60	380,670			94,650	23,663	137,490	2,549	275			132,298	49	241
	IDCF-2436-065-080 IDCF-2436-081-120	80 120	416,240 473,130			94,770 100,340	23,693 25,085	137,610 143,420	2,549 2,795	275 302			132,418 138,228	49 56	241 249
	IDCF-2436-081-160	160	525,600			100,340	25,205	143,900	2,795	302			138,708	56	249
	IDCF-2436-083-100	100	433,940			104,640	26,160	147,970	3,050	329			142,778	56	249
	IDCF-2436-083-200	200	537,340			105,360	26,340	148,690	3,050	329			143,498	56	249
	IDCF-2436-085-080 IDCF-2436-085-120	80 120	393,050 445,020			108,420 109,420	27,105 27,355	152,060 153,060	3,355 3,355	362 362			146,868 147,868	56 56	249 249
24' x 36'	IDCF-2436-085-160	160	486,360	(4) 7.5	3,684	109,900	27,475	153,540	3,355	362	(4) 12	2,192	148,348	56	249
24',	IDCF-2436-085-200	200	520,280	(4) 7.5	5,004	110,320	27,580	153,960	3,355	362	(4) 12	2,192	148,768	56	249
	IDCF-2436-085-240 IDCF-2436-086-120	240 120	550,040 434,480			110,720 114,200	27,680 28,550	154,360 157,870	3,355 3,382	362 365			149,168 152,678	56 71	249 264
	IDCF-2436-121-060	60	358,230			122,240	30,560	166,650	4,131	446			161,458	71	264
	IDCF-2436-121-080	80	391,200			122,360	30,590	166,770	4,131	446			161,578	71	264
	IDCF-2436-121-160	160	483,540			123,840	30,960	168,250	4,131	446			163,058	71	264
	IDCF-2436-121-200 IDCF-2436-121-240	200	517,630 546,910			124,250 124,650	31,063 31,163	168,670 169,070	4,131 4,131	446 446			163,478 163,878	71 71	264 264
	IDCF-2436-122-040	40	307,550			126,010	31,503	170,450	4,154	449			165,258	85	278
	IDCF-2436-122-060	60	348,310			126,410	31,603	170,850	4,154	449			165,658	85	278
	IDCF-2436-122-080	80	381,530			126,530	31,633	170,970	4,154	449			165,778	85	278
	IDCF-2436-122-100 IDCF-2436-122-120	100 120	407,740 422,500	40		127,710 127,530	31,928 31,883	172,150 171,970	4,154 4,154	449 449			166,958 166,778	85 85	278 278
	IDCF-2436-122-160	160	471,850			128,010	32,003	172,450	4,154	449			167,258	85	278
	IDCF-2436-122-200	200	505,560			128,430	32,108	172,870	4,154	449			167,678	85	278
	IDCF-2436-122-240	240	534,590			128,830	32,208	173,270	4,154	449			168,078	85	278



STRUCTURAL SUPPORT

The recommended support arrangement for the IDCF Evaporative Condenser consists of parallel I-beams positioned as shown on the drawing. Besides providing adequate support, the steel also serves to raise the unit above any solid foundation to assure access to the bottom of the unit. The IDCF Evaporative Condenser may also be supported on columns at the anchor bolt locations shown below.

A minimum bearing surface of 12 in² (77,742 mm²) must be provided under each of the concentrated load points (See Note 6). To support a IDCF Evaporative Condenser on columns with an alternate steel support arrangement, or the optional structurally upgraded unit, consult your local Frick Representative.



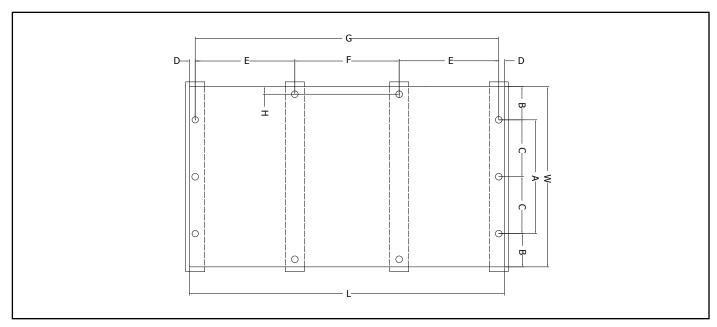
Single Cell Standard Unit Only

Model Number	L	W	Α	В	С	D	E	F	G	Max Deflection
IDCF-0406-X-X	5'-11¾"	4'	3'-9¾"	11/8"	2'-5¼"	9¼"	N/A	N/A	N/A	N/A
IDCF-0412-X-X	11'-11¾"	4'	3'-9¾"	11/⁄8"	10'-5¼"	9¼"	N/A	N/A	N/A	N/A
IDCF-7409-X-X	8'-11¾"	7'-3¼"	7' 1"	11/⁄8"	8'-3¾"	4"	N/A	N/A	4'-11/8"	5/16"
IDCF-7418-X-X	17'-11¾"	7'-3¼"	7' 1"	11/8"	17'-3¾"	4"	5'-83/32"	5'-11½"	N/A	1/2"
IDCF-1012-X-X	11'-11¾"	9'-10"	7'-3¼"	11/8"	11'-3¾"	4"	N/A	N/A	5'-71/8"	1/2"
IDCF-1212-X-X	11'-11¾"	11'-10"	11'-7¾"	11/8"	11'-3¾"	4"	N/A	N/A	5'-71/8"	1/2"
IDCF-1218-X-X	17'-11¾"	11'-10"	11'-7¾"	11/⁄8"	17'-3¾"	4"	5'-83/32"	5'-11½"	N/A	3/8"
IDCF-1220-X-X	19'-11¾"	11'-10"	11'-7¾"	11/8"	19'-2¾"	6½"	6'-7%"	5'-11½"	N/A	_

- 1. Contact your local Frick Representative for multi-cell or structurally upgraded unit steel support and for structurally upgraded unit arrangements.
- 2. Support beams and anchor bolts to be selected and installed by others.
- 3. All support steel must be level at the top.
- 4. Beam size should be calculated in accordance with accepted structural practice. Maximum deflection of beam under unit to be 1/360 of span, not to exceed 1/2". Use 65% of operating weight as a uniform load on each beam. The length of the beam must be at least equal to the length of the basin. Refer to engineering data for basin dimensions. Support data and maximum allowed deflection is tabulated
- 5. If vibration isolators are used, a rail or channel must be provided between the unit and the isolators to provide continuous support. Refer to vibration isolators drawings for the length of the rails and mounting hole. Locations, which may differ from the length and the hole location of the unit itself.

STRUCTURAL SUPPORT ALTERNATIVE

For replacement installations, the IDCF Evaporative Condenser has been designed to match the supporting steel of many existing evaporative condensers without modifications. Shown below are the most common steel support arrangements which can be accommodated by the IDCF. IBC wind and seismic load ratings are not available on alternate steel support arrangements. If individual point support is required, or if the steel arrangement is not shown as below, consult your local Frick Representative for assistance.



Single Cell Standard Unit - Alternative Steel Support

Model Number	L	w	Α	В	С	D	E	F	G	Н
IDCF-0406-X-X	5'-11¾"	4'	3'-4"	4"	3'-9½"	11/8"	N/A	N/A	N/A	N/A
IDCF-0412-X-X	11'-11¾"	4'	3'-4"	4"	11'-9½"	11/8"	N/A	N/A	N/A	N/A
IDCF-7409-X-X	8'-11¾"	7'-3¼"	6'-7¼"	4"	N/A	11/8"	N/A	N/A	N/A	N/A
IDCF-7418-X-X	17'-11¾"	7'-3¼"	6'-7¼"	4"	N/A	11/8"	5'-11"	5'-11½"	17'-9½"	11/8"
IDCF-1012-X-X	11'-11¾"	9'	9'-2"	4"	4'-7"	11/8"	N/A	N/A	11'-9½"	N/A
IDCF-1212-X-X	11'-11¾"	11'-10"	11'-2"	4"	5'-7"	11/8"	N/A	N/A	N/A	N/A
IDCF-1218-X-X	17'-11¾"	11'-10"	11'-2"	4"	5'-7"	11/8"	5'-11"	5'-11½"	17'-9½"	11/8"
IDCF-1220-X-X	19'-11¾"	11'-10"	11'-2"	4"	5'-7"	11/8"	6'-11"	5'-11½"	19'-9½"	11/8"

- 1. Contact your local Frick Representative for multi-cell or structurally upgraded unit steel support and for structurally upgraded unit arrangements.
- 2. Support beams and anchor bolts to be selected and installed by others.
- 3. All support steel must be level at the top.
- 4. Beam size should be calculated in accordance with accepted structural practice. Maximum deflection of beam under unit to be 1/360 of span, not to exceed 1/2". Use 65% of operating weight as a uniform load on each beam. The length of the beam must be at least equal to the length of the basin. Refer to engineering data for basin dimensions. Support data and maximum allowed deflection is tabulated
- 5. If vibration isolators are used, a rail or channel must be provided between the unit and the isolators to provide continuous support. Refer to vibration isolators drawings for the length of the rails and mounting hole. Locations, which may differ from the length and the hole location of the unit itself.



IDCF LAYOUT GUIDELINES

OVERVIEW

Included are the layout guidelines for IDCF Evaporative Condensers in several situations typically encountered by designers. These guidelines represent minimum spacing requirements. If available, greater spacing should be utilized whenever possible.

Operational efficiency of evaporative cooling equipment depends upon an adequate supply of fresh, ambient air to provide design capacity. Other important considerations, such as the proximity to building air intakes or discharges, also must be taken into account when selecting and designing the equipment site.

As the size of an installation increases, the total amount of heat being rejected into the atmosphere and the volume of discharge air increase — to the point where the units can virtually create their own environment. As a result, it becomes increasingly difficult to apply a set of general guidelines to each case. In such installations, particularly those in wells or enclosures, some air will recirculate. The recirculation should be minimized or design wet bulb temperature must be adjusted to allow for the recirculation. Consequently, any job that involves four or more cells should be referred to your local Frick Representative for review.

EQUIPMENT LAYOUT

IDCF is an induced draft, counter flow, evaporative cooled product line utilizing a four-sided air entry configuration. Properly evaluating equipment location leads to a successful installation and subsequent proper operation. This manual provides recommendations for various layout scenarios including placing equipment in close proximity to an obstruction (e.g. wall). In addition, both "dual" and "quad" unit configurations are offered in which the air inlet openings are increased appropriately (in comparison to a single unit) to enable the absolute minimum clearance between units (see applicable schematic / chart).

The minimum clearance(s) listed between an obstruction and the air inlet side (or end) is a guideline only. There are always circumstances (i.e. prevailing winds, etc.) coupled with field experience which lead to alternate layouts and thus would increase a minimum clearance presented in this manual to achieve proper operation.

It is recommended to place the equipment in a free-field environment (when possible) to ensure the required ambient air flow and prevent recirculation of the saturated discharge air. Condensers located on open roof tops or at ground level with no obstructions such as walls or adjacent buildings will be the optimum location. However, in many instances this cannot be realized.

Positioning in wells, next to high walls, adjacent buildings, occupied areas or specific enclosures all pose a risk of recirculating the saturated discharge air. This will increase the wet bulb temperature of the intake air and definitely compromise the performance of the condenser, typically resulting in higher condensing temperatures. Discharge hoods or duct extensions should be used in such instances. Units that are located in a well, an enclosure or close to adjacent walls or buildings must be positioned such that the discharge of the condenser (top) is either level or higher than these adjacent obstacles.

If the unit/s is to be located in occupied areas or close to adjacent buildings, it is good engineering practice that the discharge air is not in the direction of, or in close proximity to, any air intake location for the building's ventilation system.

SINGLE/MULTIPLE UNIT LAYOUTS

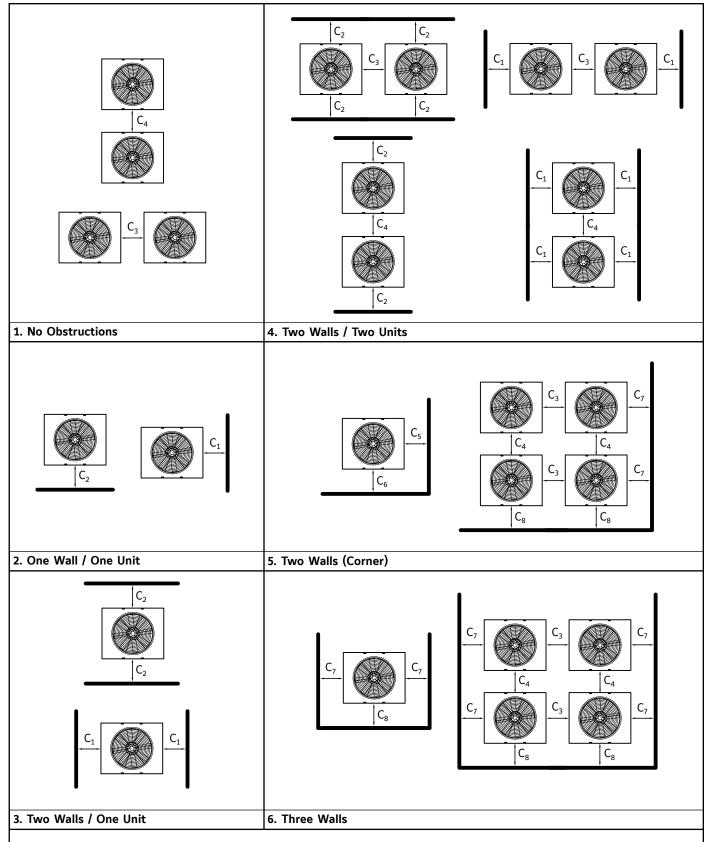
All minimum clearance values indicated (feet), C1, C2, C3, C4, etc. are for IDCF induced draft units only. In addition, overall nominal unit lengths (feet) are indicated as well. A "Unit" is a specific model number which consists of a single nominal box size (i.e. $4' \times 6'$, $10' \times 12'$, $12' \times 12'$, etc.) or multiple, single boxes arranged in very close proximity. There are three different unit configurations available, single, dual and quad. For example; a "dual" unit can be quantity two (2), $12' \times 12'$ single boxes positioned end-to-end which is designated as one model number and is considered one unit. See the following Figure and Table for clearances and potential layouts for properly locating the units on-site.

Вох	Distance (Ft)									
Size	C ₁	C ₂	C ₃ ⁽¹⁾	C ₄	C ₅	C ₆	C ₇	C ₈		
4' x 6'	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5		
4' x 12'	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5		
7.4' x 9'	3.0	3.0	4.0	3.5	4.0	4.0	4.5	4.5		
7.4' x 18'	3.0	3.0	4.0	4.5	4.0	4.0	4.5	4.5		
10' x 12'	3.0	3.0	3.0	4.0	3.0	3.0	4.5	4.5		
10' x 24'	3.5	4.0	4.5	5.5	4.5	5.0	5.0	5.5		
12' x 12'	3.0	3.0	4.0	4.0	4.0	4.0	4.5	4.5		
12' x 18'	3.0	3.0	4.0	4.0	4.0	4.0	4.5	4.5		
12' x 20'	3.0	3.0	4.0	4.0	4.0	4.0	4.5	4.5		
12' x 24'	3.5	3.5	4.5	5.0	4.5	4.5	5.0	5.0		
12' x 36'	4.0	5.0	5.0	6.5	5.0	6.0	5.5	6.5		
12' x 40'	4.0	5.0	5.0	6.5	5.0	6.0	5.5	6.5		
20' x 12'	3.5	4.0	4.5	5.0	4.5	5.0	5.0	5.5		
24' x 12'	3.5	3.5	4.5	4.5	4.5	4.5	5.0	5.0		
24' x 18'	4.0	5.0	5.0	6.0	5.0	6.0	5.5	6.5		
24' x 20'	4.0	5.0	5.0	6.0	5.0	6.0	5.5	6.5		
24' x 24'	6.5	6.5	7.5	7.5	7.5	7.5	8.0	8.0		
24' x 36'	7.5	9.5	8.5	10.5	8.5	10.5	9.0	11.0		
24' x 40'	7.5	9.5	8.5	10.5	8.5	10.5	9.0	11.0		

1. For Condensers with pumps, the distance C₃ is measured from the edge of the pump rather than the edge of the basin.



Single/Multiple Unit Configurations (1)



1. If these guidelines do not cover a particular situation or if the layout criteria cannot be met, please contact your local Frick Representative for review. Please indicate prevailing wind direction, geographic orientation of the unit(s), and other factors such as large buildings and other obstructions that may influence layout decisions.

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IDCF EVAPORATIVE CONDENSERS ENGINEERING DATA - DIMENSIONS





