

Refrigerated Air dryer

Series *IDU/IDF*



In compliance with the Montreal Protocol Regulations, SMC uses refrigerants R134a and R407C in its refrigerated air dryers to prevent any damage to the earth's ozone layer.

Large models IDF190D and 240D newly introduced
R134a used in small models (IDU3D to 8D, IDF1D to 8D)
R407C used in large models (IDF120D, 150D, 190D, 240D)

Refrigerated Air Dryer Series **IDU/IDF**

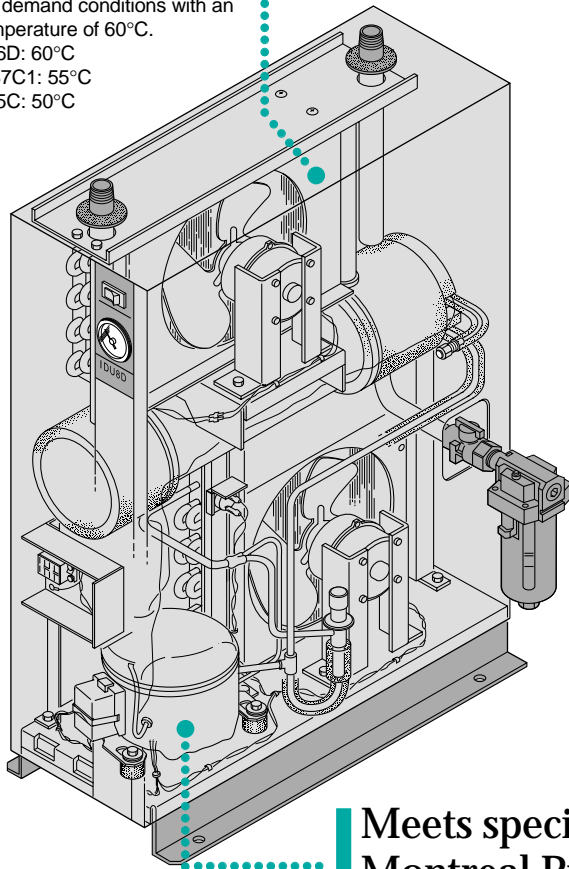
Uses refrigerants (R134a, R407C) that are harmless to the ozone layer

IDU3D, 4D, 6D, 8D/IDF1D, 2D, 3D, 4D, 6D, 8D R134a
IDF120D, 150D, 190D, 240D R407C

In compliance with the Montreal Protocol Regulations, SMC uses refrigerants R134a and R407C to prevent any damage to the earth's ozone layer.
(Medium size series use R22, ODP = 0.055.)

Series IDU
(built-in after-cooler)
Can be operated directly connected to a screw compressor

Provides a stable supply of dry air even under high demand conditions with an inlet air temperature of 60°C.
IDU3D to 6D: 60°C
IDU8D to 37C1: 55°C
IDU55C, 75C: 50°C



Series IDU

IDU3D, 4D, IDF1D to 4D
Rust-free heat exchanger

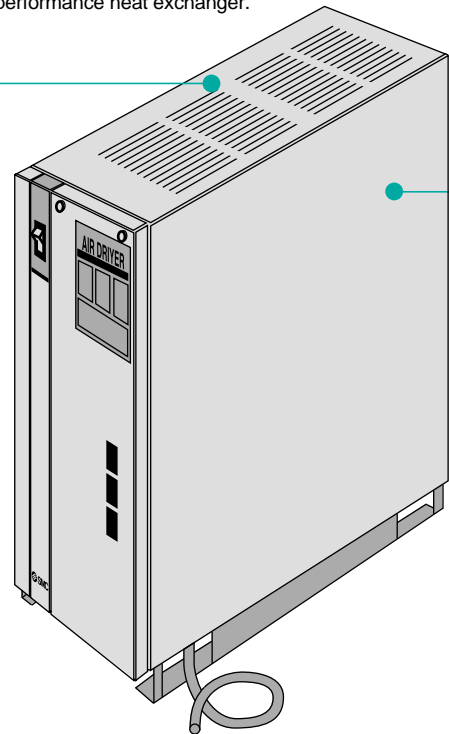
Coaxial copper piping design prevents rust formation.

IDF1D, 2D, 3D
Reduced noise
45dB(A)

Quiet operation allows indoor use in locations such as dental offices, etc.

Series IDF
Can accommodate an inlet air temperature of 40°C

System efficiency is improved by using a high performance heat exchanger.



Series IDF

Meets specified Montreal Protocol Regulations

Small series: R134a
Medium series: R22
Large series: R407C

IDU3D to 15C, IDF3D to 15C
Available in single phase
200VAC without transformer

Series Variations

Series IDU

High inlet air temperature type
Rated temperature
of 50 to 60°C



Air cooled

Series	Air flow capacity (/min(ANR)) ^{Note)}		Screw type air compressor power (kW)	Refrigerant	Rated inlet air temp.	Air connection	Page
	50 Hz	60Hz					
Small	IDU3D	300	350	R134a	60°C	Rc 3/8	1 to 4
	IDU4D	430	500			R 1/2	
	IDU6D	640	750		55°C	R 3/4	
	IDU8D	850	1000				
Medium	IDU11D	1300	—	R134a	55°C	R 3/4	5 to 8
	IDU11C	1300	1500	R22		R 1	
	IDU15C	2050	2400			R 1 1/2	
	IDU22C/22C1	3150	3700		50°C	R 2	
	IDU37C/37C1	5200	6100				
	IDU55C	7650	9000	75			
	IDU75C	10500	12400				

Series IDF

Standard inlet air temperature type
Rated temperature
of 35 to 40°C



Air cooled

Small	IDF1D	100	120	0.75	R134a	35°C	Rc 3/8	9 to 12
	IDF2D	200	235	1.5		40°C		
	IDF3D	300	350	2.2				
	IDF4D	430	500	3.7				
	IDF6D	640	750	5.5				
	IDF8D	850	1000	7.5				
Medium	IDF11D	1300	—	11	R134a	40°C	R 3/4	13 to 15
	IDF11C	1300	1500	R22	R 1			
	IDF15C/15C1	2050	2400		R 1 1/2			
	IDF22C/22C1	3150	3700		R 2			
	IDF37C/37C1	5200	6100					
	IDF55C	7650	9000	55				
	IDF75C	10500	12400	75				
Large	IDF120D	20000	23000	120	R407C	40°C	2 1/2B flange	16 to 18
	IDF150D	25000	30000	150			3B flange	
	IDF190D	32000	38000	190			4B flange	
	IDF240D	43000	50000	240				
Medium	IDF75C	10500	12400	75	R22	40°C	R 2	13 to 15
Large	IDF120D	20000	23000	120	R407C	40°C	2 1/2B flange	16 to 18
	IDF150D	25000	30000	150			3B flange	
	IDF190D	32000	38000	190			4B flange	
	IDF240D	43000	50000	240				
	IDF370B	54000	65000	370			R22	

Water cooled

Options

For medium air pressure
Max. operating pressure 1.5MPa

With terminal block for signal

With terminal block for run & alarm signals and remote operations

For cool compressed air output.
With anti-corrosive treatment of copper tube.
With evaporation thermometer

With motor operated auto drain.
With circuit breaker.
With power cord connection.
Water cooled condenser.

19 to 20

Accessories (Options)

Transformer

This is for power supply other than specified. Available base to integrate transformer.



Dust proof filter set

Avoids decrease of air dryer performance even in dirty environment.



Bypass piping set

Easy bypass piping (just connect this set to air dryer). Substantial reduction of installation labor.



21 to 24

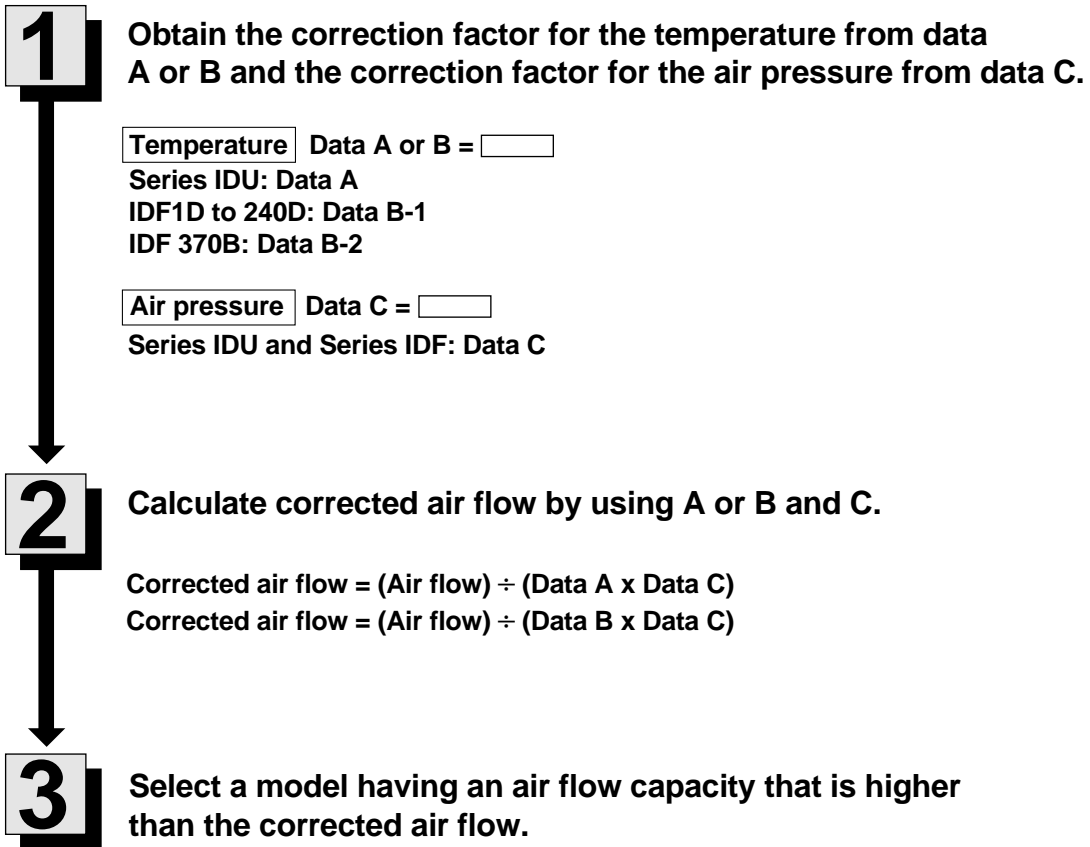
Technical Data

Pressure dew point-Condensed water calculation chart, Pressure dew point temperature-Atmospheric pressure dew point temperature conversion cart

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Note) /min (ANR) is for reference conditions of 20°C, 1 ATM and 65% relative humidity.

Model Selection



IDU selection example

The procedure for selecting the optimum model under the following conditions is shown below.

- Condition
- ① Inlet air temperature 55°C
 - ② Outlet air pressure dew point 10°C
 - ③ Ambient temperature 35°C
 - ④ Inlet air pressure 0.7MPa
 - ⑤ Air flow 350 /min (ANR)
 - ⑥ Power supply frequency 50Hz

- ① A = 0.85 based on conditions ①, ② and ③
- ② C = 1.00 based on condition ④
- ③ Based on condition ⑤, A and B
Corrected air flow = $350 \div (0.85 \times 1.00) = 412$ /min (ANR)
- ④ Based on condition ⑥;
IDU4D is selected as the model to process an air flow larger than 412 /min (ANR) with a 50Hz power supply, according to data D-1.

Note) /min (ANR) is for reference conditions of 20°C, 1 ATM and 65% relative humidity.

IDF selection example

The procedure for selecting the optimum model under the following conditions is shown below.

- Condition
- ① Inlet air temperature 40°C
 - ② Outlet air pressure dew point 10°C
 - ③ Ambient temperature 35°C
 - ④ Inlet air pressure 0.5MPa
 - ⑤ Air flow 1200 /min (ANR)
 - ⑥ Power supply frequency 60Hz

- ① B-1 = 0.95 based on conditions ①, ② and ③
- ② C = 0.90 based on condition ④
- ③ Based on condition ⑤, B-1 and C
Corrected air flow = $1200 \div (0.95 \times 0.90) = 1400$ /min (ANR)
- ④ Based on condition ⑥;
IDF11C is selected as the model to process an air flow larger than 1400 /min (ANR) with a 60Hz power supply, according to data D-2.

Data A Correction factor for temperature/Series IDU

Inlet air temp. (°C)	IDU3D to 6D	50			55			60			70			80		
	IDU8D to 15C	45			50			55			65			75		
Ambient temperature (°C)	IDU22C1, 37C1	45			50			55			65			70		
	IDU55C, 75C	40			45			50			55			60		
Outlet air pressure dew point (°C)		5	10	15	5	10	15	5	10	15	5	10	15	5	10	15
25		0.60	1.35	1.35	0.60	1.35	1.35	0.60	1.35	1.35	0.60	1.35	1.35	0.60	1.35	1.35
30		0.60	1.25	1.35	0.55	1.20	1.35	0.50	1.10	1.35	0.50	1.05	1.35	0.50	1.05	1.35
32		0.60	1.25	1.35	0.55	1.15	1.35	0.50	1.00	1.30	0.45	0.95	1.25	0.45	0.95	1.25
35		0.50	0.95	1.25	0.45	0.85	1.15	0.35	0.75	1.05	0.30	0.70	1.00	0.30	0.70	1.00
40		0.25	0.70	1.00	0.20	0.65	0.90	0.15	0.55	0.80	0.10	0.50	0.80	0.10	0.50	0.80

Data B-1 Correction factor for temperature/Series IDF (IDF1D to 240D)

Inlet air temp. (°C)	IDF 1D	25			30			35			40			50			
	IDF2D to 240D	30			35			40			45			50			
Ambient temp. (°C)	Outlet air press. dew point (°C)		5	10	15	5	10	15	5	10	15	5	10	15	5	10	15
	25		0.60	1.35	1.35	0.60	1.35	1.35	0.50	1.10	1.35	0.35	0.90	1.20	0.20	0.65	1.00
30		0.60	1.35	1.35	0.60	1.30	1.35	0.50	1.05	1.35	0.35	0.80	1.15	0.20	0.60	0.95	
32		0.60	1.35	1.35	0.60	1.25	1.35	0.50	1.00	1.30	0.35	0.80	1.10	0.20	0.60	0.90	
35		0.55	1.35	1.35	0.55	1.20	1.35	0.50	0.95	1.25	0.35	0.75	1.05	0.15	0.60	0.90	
40		0.40	1.35	1.35	0.40	1.15	1.50	0.35	0.90	1.15	0.25	0.70	1.00	0.15	0.55	0.80	

Data B-2 Correction factor for temperature/Series IDF (IDF370B)

Inlet air temp. (°C)	30			35			40			45			50			
	Outlet air pressure dew point (°C)		5	10	15	5	10	15	5	10	15	5	10	15	5	10
25		0.90	1.50	2.10	0.72	1.20	1.68	0.60	1.00	1.39	0.50	0.84	1.18	0.43	0.72	1.01
30		0.80	1.34	1.87	0.64	1.07	1.50	0.53	0.89	1.24	0.45	0.75	1.05	0.39	0.64	0.90
32		0.75	1.25	1.75	0.60	1.00	1.40	0.50	0.83	1.16	0.42	0.70	0.98	0.36	0.60	0.84
35		0.68	1.13	1.58	0.54	0.90	1.26	0.45	0.75	1.05	0.38	0.63	0.88	0.32	0.54	0.76
43		0.45	0.75	1.05	0.36	0.60	0.84	0.30	0.50	0.69	0.25	0.42	0.59	0.21	0.36	0.51

Data C Correction factor for air pressure/Series IDU and IDF

Inlet air pressure (MPa)	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Correction factor	0.65	0.68	0.77	0.84	0.90	0.95	1.00	1.03	1.06	1.08

Data D-1 Air flow capacity/Series IDU

Model	IDU3D	IDU4D	IDU6D	IDU8D	IDU11C	IDU15C	IDU22C1	IDU37C1	IDU55C	IDU75C
Air flow capacity (l/min (ANR))	300	430	640	850	1300	2050	3150	5200	7650	10500
	350	500	750	1000	1500	2400	3700	6100	9000	12400

Data D-2 Air flow capacity/Series IDF

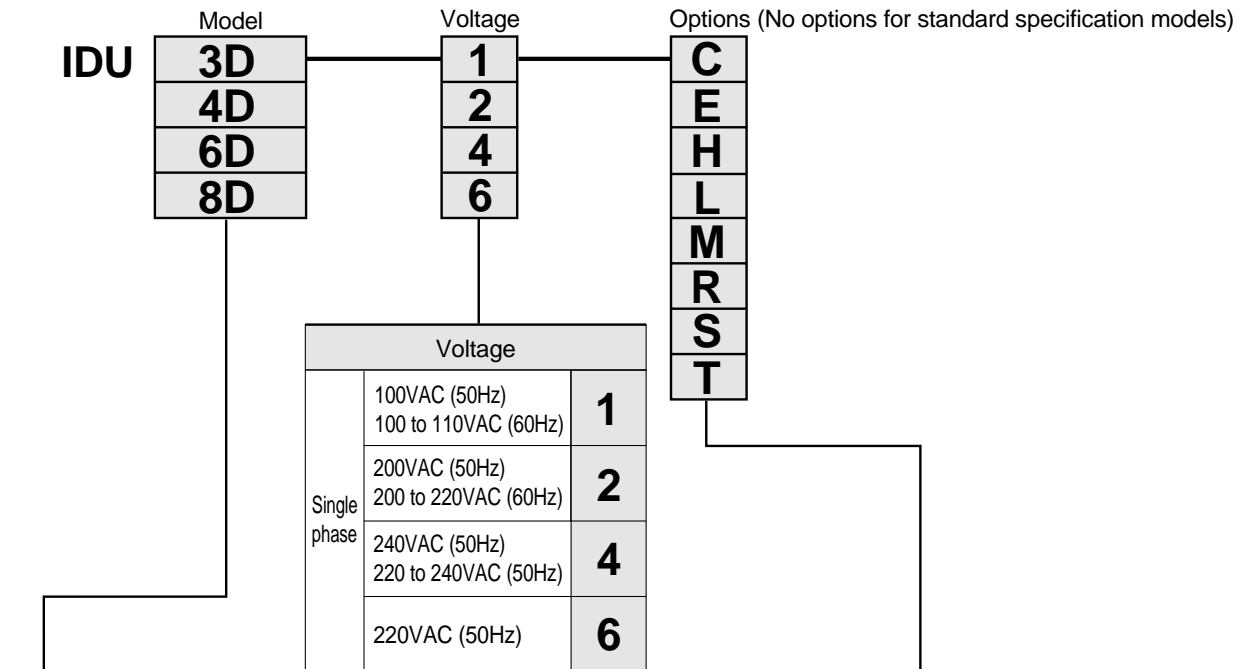
Model	IDF1D	IDF2D	IDF3D	IDF4D	IDF6D	IDF8D	IDF11C	IDF15C	IDF22C1	IDF37C1	IDF55C	IDF75C	IDF120D	IDF150D	IDF190D	IDF240D	IDF370B
Air flow capacity (l/min (ANR))	100	200	300	430	640	850	1300	2050	3150	5200	7650	10500	20000	25000	32000	43000	54000
	120	235	350	500	750	1000	1500	2400	3700	6100	9000	12400	23000	30000	38000	50000	65000

Refrigerant R134a

Series IDU Small

3D, 4D, 6D, 8D

How to Order



Model	Air compressor	Refrigerant
3D	2.2kW	R134a
4D	3.7kW	
6D	5.5kW	
8D	7.5kW	

Model and voltage combinations

Voltage	1		2		4		6	
	100VAC (50Hz) 100 to 110VAC (60Hz)	200VAC (50Hz) 200 to 220VAC (60Hz)	220 to 240VAC (50Hz)	240VAC (50Hz)	220VAC (50Hz)			
Model	●	●		●	●			
3D	●	●		●	●			
4D	●	●		●	●			
6D	●	●		●	●			
8D	●	●	●					

- Note 1) Single phase 200 to 240VAC is "S" specification standard.
- Note 2) Combinations of H and M, R and S, S and T, L and M are not available.
- Note 3) Option "T" is not available for IDU6D, 8D-4 and -6.

Option	C	E	H	L	M	R	S	T
Optional specification	With anti-corrosive treatment	With evaporation thermometer	For medium air pressure	With heavy duty auto drain	With motor operated auto drain	With circuit breaker	With power cord connection	With terminal block for run & alarm signal and remote operation
Model	●	●					●	
3D	●	●					●	
4D	●	●	●				●	
6D	●	Standard	●	●	●	●	●	● Note 3)
8D	●		●	●	●	●	●	● Note 3)

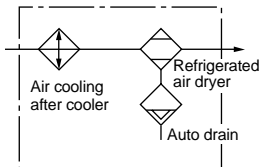


* Refer to pages 19 and 20 for further information on options.

Standard Specifications/Models



JIS Symbol

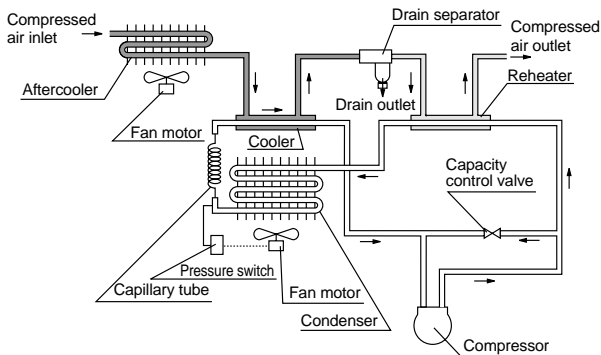


Specification		Model	IDU3D	IDU4D	IDU6D	IDU8D	
Rated Conditions	Air flow rate ^{Note 2)} /min (ANR)	50Hz	300	430	640	850	
		60Hz	350	500	750	1000	
	Operating pressure (MPa)		0.7				
	Inlet air temperature (°C)		60			55	
	Ambient temperature (°C)		32				
	Pressure dew point (°C)		10				
Operating Ranges	Working fluid		Compressed air				
	Inlet air temperature (°C)		5 to 80			5 to 75	
	Inlet air pressure (MPa)		0.15 to 1.0				
	Ambient temperature (°C)		2 to 40 (Relative humidity of 85% or less)				
Electrical Specifications	Power source		Single phase, 100/100 to 110VAC (50/60Hz) Single phase, 200/200 to 220VAC (50/60Hz) Single phase, 220, 240/200 to 240VAC (50Hz)				
	Power consumption (W)	100 VAC	50Hz	225	250	305	340
			60Hz	275	350	380	415
		200 VAC	50Hz	205	220	300	325
			60Hz	240	280	350	375
		220 to 240VAC	50Hz	—	—	—	332
		240VAC	50Hz	182	265	280	—
		50Hz	189	275	295	—	
	Circuit breaker (A) ^{Note 3)}		10 (for 100VAC), 5 (for 200VAC)				
	Condenser		Air cooled				
Refrigerant		R134a					
Air connection		Rc 3/8		Rc 1/2	Rc 3/4		
Drain connection		Drain tube ø10 attached			Rc 1/4		
Auto drain		AD43			INA-20-41-04 ^{Note 5)}		
Weight (kg)	100 to 200VAC	23	31	43	47		
	220 to 240VAC	24	31	46	53		
Coating color		Munsell 10Y8/0.5 (White)					
Applicable compressor (screw type) kW		2.2	3.7	5.5	7.5		

- Note 1) Select an air dryer according to the selection method and not the rated conditions.
- Note 2) The data for /min (ANR) refers to the conditions of 20°C, 1atm. pressure and relative humidity of 65%.
- Note 3) Install a circuit breaker with sensitivity of ≤ 30mA.
- Note 4) IDU3D to 8D-4/6 are only for frequency of 50Hz.
- Note 5) Spare part for auto drain INA-20-41-04 is AD44-x445.

Operation Principles

IDU3D

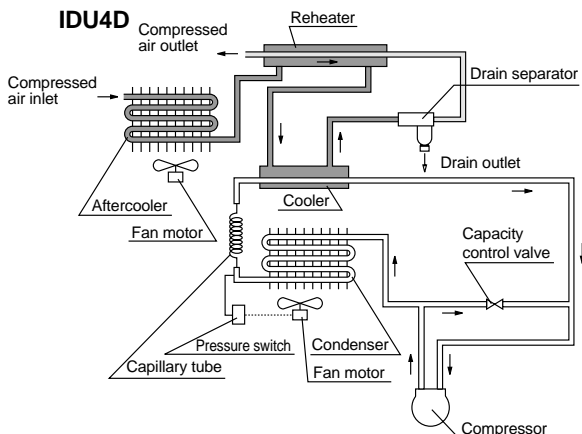


Humid hot air entering the air dryer is cooled in the aftercooler (air-cooling style) and then further cooled by the cooler.

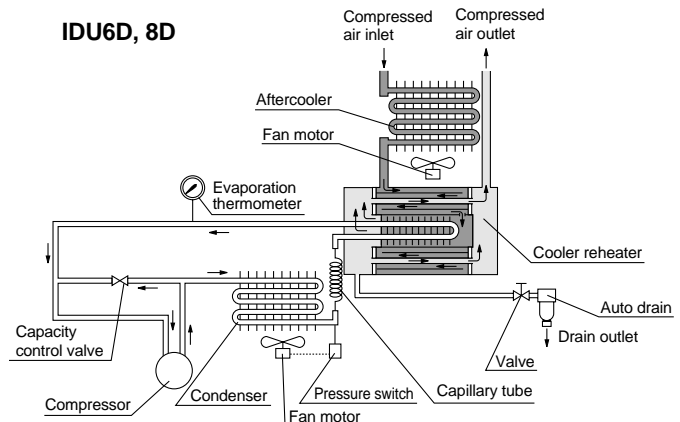
At this time, the condensed moisture is separated from the air by the drain separator and automatically discharged. (IDU3D uses hot refrigerant vapor for reheating.)

The dried clean air is heated by the hot air that has entered the dryer. It is then discharged from air dryer outlet.

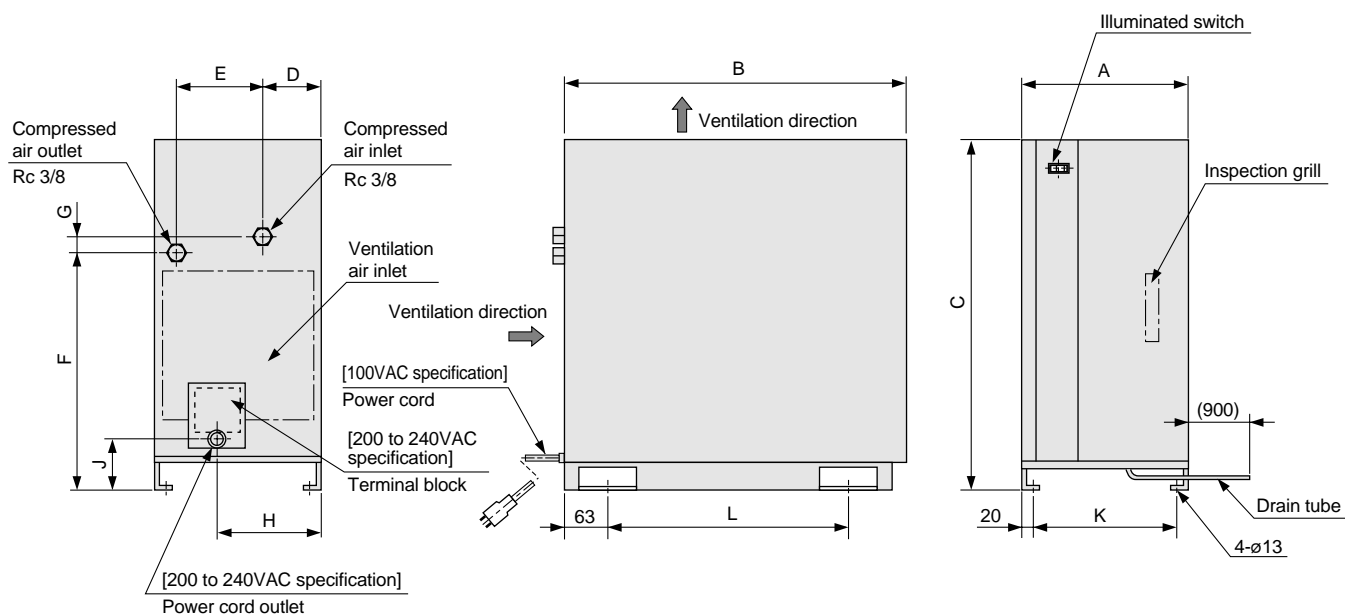
IDU4D



IDU6D, 8D



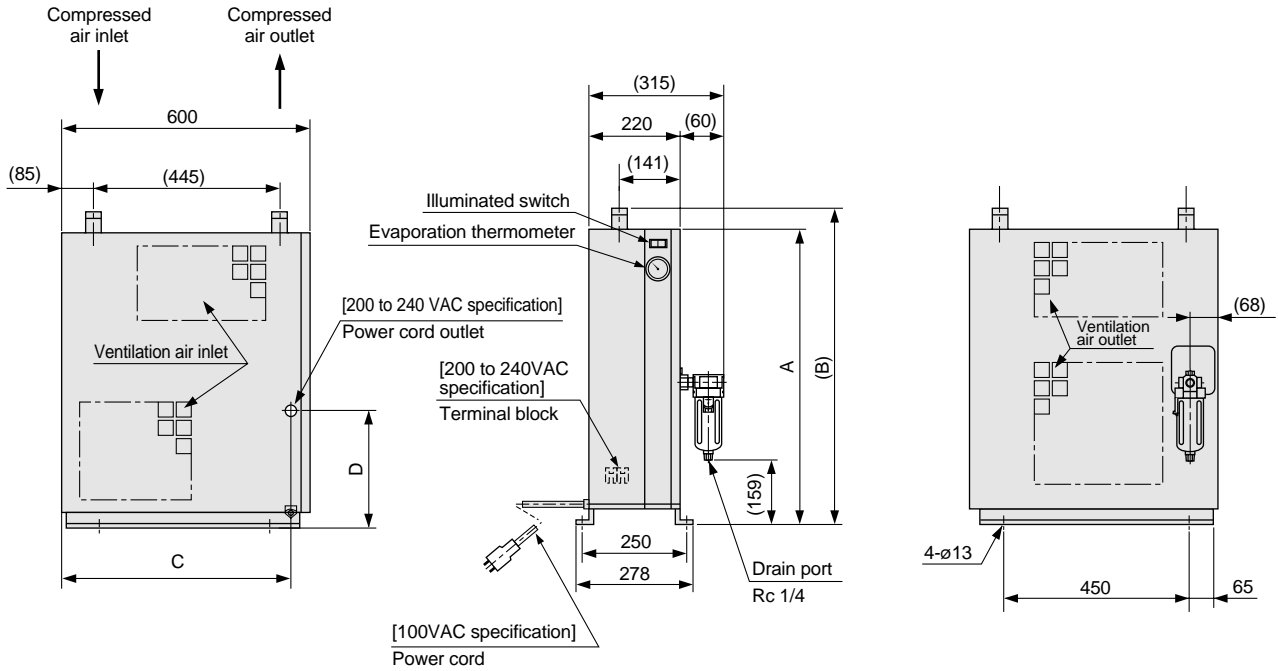
IDU3D, 4D



Model	Port size	A	B	C	D	E	F	G	H	J	K	L
IDU3D	Rc 3/8	246	496	509	87	125	344	23	175	44	206	356
IDU4D		242	591	606	31	170	469	13	171	44	202	446

□ : Power source 200 to 240VAC

IDU6D, 8D



* Auto drain is packed together with air dryer. (Some assembly is required.)

Model	Port size	A	B	C	D
IDU6D	R 1/2	710	760	560 [551]	240 [75]
IDU8D	R 3/4	810	860		

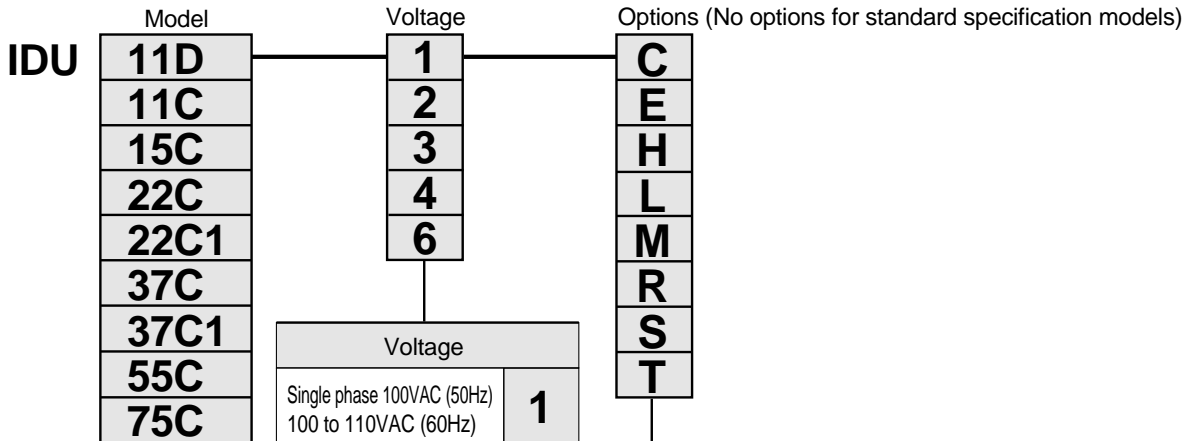
[]: Power source 220 to 240VAC

Refrigerant R22, R134a

Series **IDU Medium**

11D, 11C, 15C, 15C1, 22C, 22C1, 37C, 37C1, 55C, 75C

How to Order



Voltage	
Single phase 100VAC (50Hz) 100 to 110VAC (60Hz)	1
Single phase 200VAC (50Hz) 200 to 220VAC (60Hz)	2
Three phase 200VAC (50Hz) 200 to 220VAC (60Hz)	3
Single phase 240VAC (50Hz) 220 to 240VAC (50Hz)	4
Single phase 220VAC (50Hz)	6



Note 1) Options for "-4" and "-6" are not currently available. Please contact our subsidiaries if necessary.

Note 2) A combination of two options is standard. A combination of three or more optional items is handled as a special order product.

Note 3) 200 to 240VAC is "S" specification standard.

Note 4) Combinations of M and H, H and M, R and S, S and T, L and M are not available.

Note 5) Option "T" is not available for IDU55C and 75C-4/6.

Model	Air compressor	Refrigerant
11D	11kW	R134a
11C		
15C	15kW	R22
22C/22C1	22kW	
37C/37C1	37kW	
55C	55kW	
75C	75kW	

Option	C	E	H	L	M	R	S	T
Optional specification	With anti-corrosive treatment	With evaporation thermometer	For high air pressure	With heavy duty auto drain	With motor operated auto drain	With circuit breaker	With power cord connection	With terminal block for run & alarm signal
Model		Standard					Standard	
11C/11D	●		●	●	●	●		●
15C	●		●	●	●	●		●
22C1/22C	●		●	●	●	●		●
37C1/37C	●		●	●	●	●		●
55C	●		●	●	●	●		●
75C	●		●	●	●	●		●



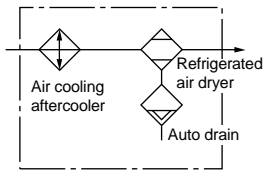
* Refer to pages 19 and 20 for further information on options.

Model and voltage combinations

Voltage	1	2	3	4		6
	Single phase		Three phase	Single phase		
Model	100VAC (50Hz) 100 to 110VAC (60Hz)	200VAC (50Hz) 200 to 220VAC (60Hz)	200VAC (50Hz) 200 to 220VAC (60Hz)	220 to 240VAC (50Hz)	240VAC (50Hz)	220VAC (50Hz)
11D				●		
11C	●	●				
15C	●	●			●	●
22C					●	●
22C1			●			
37C					●	●
37C1			●			
55C			●		●	●
75C			●		●	●



JIS Symbol



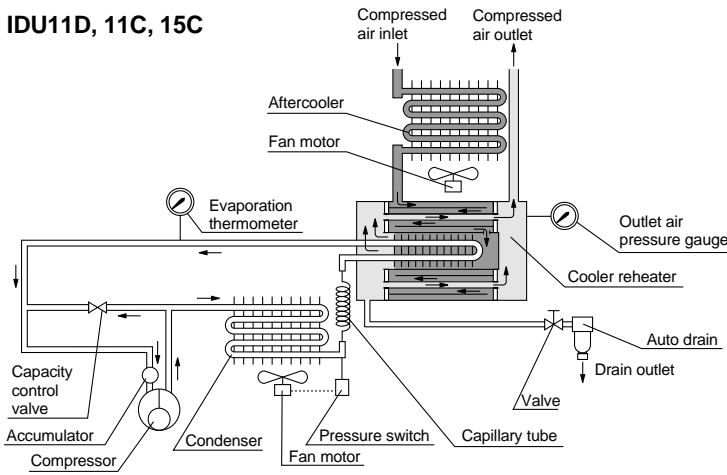
Standard Specifications/Models

Specification		Model	IDU11D	IDU11C	IDU15C	IDU22C	IDU22C1	IDU37C	IDU37C1	IDU55C	IDU75C	
Air flow rate ^{Note 2)} /min (ANR)	50Hz		1300	1300	2050	3150		5200	7650	10500		
	60Hz		—	1500	2400	—	3700	—	6100	9000	12400	
Operating pressure (MPa)			0.7									
Inlet air temperature (°C)			55						50			
Ambient temperature (°C)			32									
Pressure dew point (°C)			10									
Working fluid			Compressed air									
Inlet air temperature (°C)			5 to 75			5 to 70			5 to 60			
Inlet air pressure (MPa)			0.15 to 1.0									
Ambient temperature (°C)			2 to 40 (Relative humidity of 85% or less)									
Power source			Single phase, 100/100 to 110VAC (50/60Hz) 220, 240VAC (50Hz) 220 to 240VAC (50Hz)				Three phase, 200/200 to 220VAC (50/60Hz) Single phase, 220, 240VAC (50Hz)					
Power consumption (W)	100 VAC	50Hz	—	360	583	—	—	—	—	—	—	
		60Hz	—	385	700	—	—	—	—	—	—	
	200 VAC	50Hz	—	348	597	—	750	—	870	1520	2290	
		60Hz	—	384	690	—	880	—	1040	1910	2770	
	220 to 240VAC	50Hz	377	—	—	—	—	—	—	—	—	
240VAC	50Hz	—	—	600	790	—	870	—	1650	2340		
Circuit breaker (A) ^{Note 3)}			10 (for 100VAC), 5 (for 200VAC)			10			15			
Condenser			Air cooled									
Refrigerant			R134a			R22						
Air connection			Rc 3/4			Rc 1		Rc 1 1/2		Rc 2		
Drain connection			Rc 1/4									
Auto drain			INA-20-41-04 ^{Note 5)}									
Weight (kg)	100 to 200VAC		—	59	66	—	83	—	114	160	185	
	220 to 240VAC		62	—	70	85	—	115	—	170	194	
Coating color			Munsell 10Y8/0.5 (White)									
Applicable compressor (screw type) kW			11		15		22		37		55	75

- Note 1) Select an air dryer according to the selection method and not the rated conditions.
- Note 2) The data for /min (ANR) refers to the conditions of 20°C, 1 atm. pressure and relative humidity of 65%.
- Note 3) Install a circuit breaker with sensitivity of ≤ 30 mA.
- Note 4) IDU11D to 75C-4/6 are only for frequency of 50Hz.
- Note 5) Spare part for auto drain INA-20-41-04 is AD44-x445.

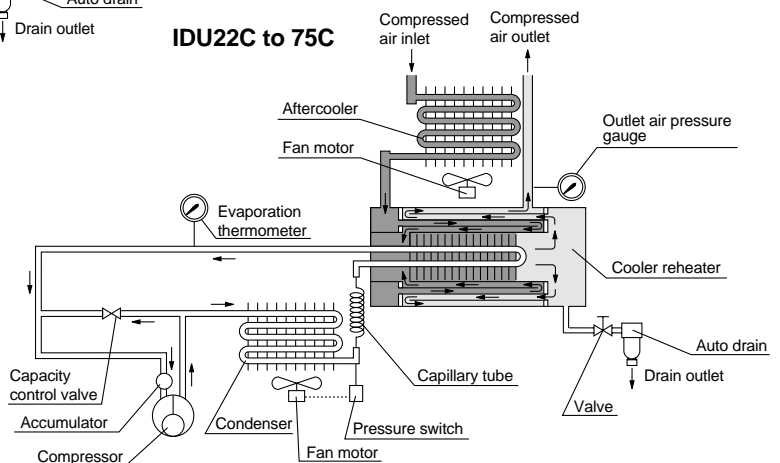
Operation Principles

IDU11D, 11C, 15C

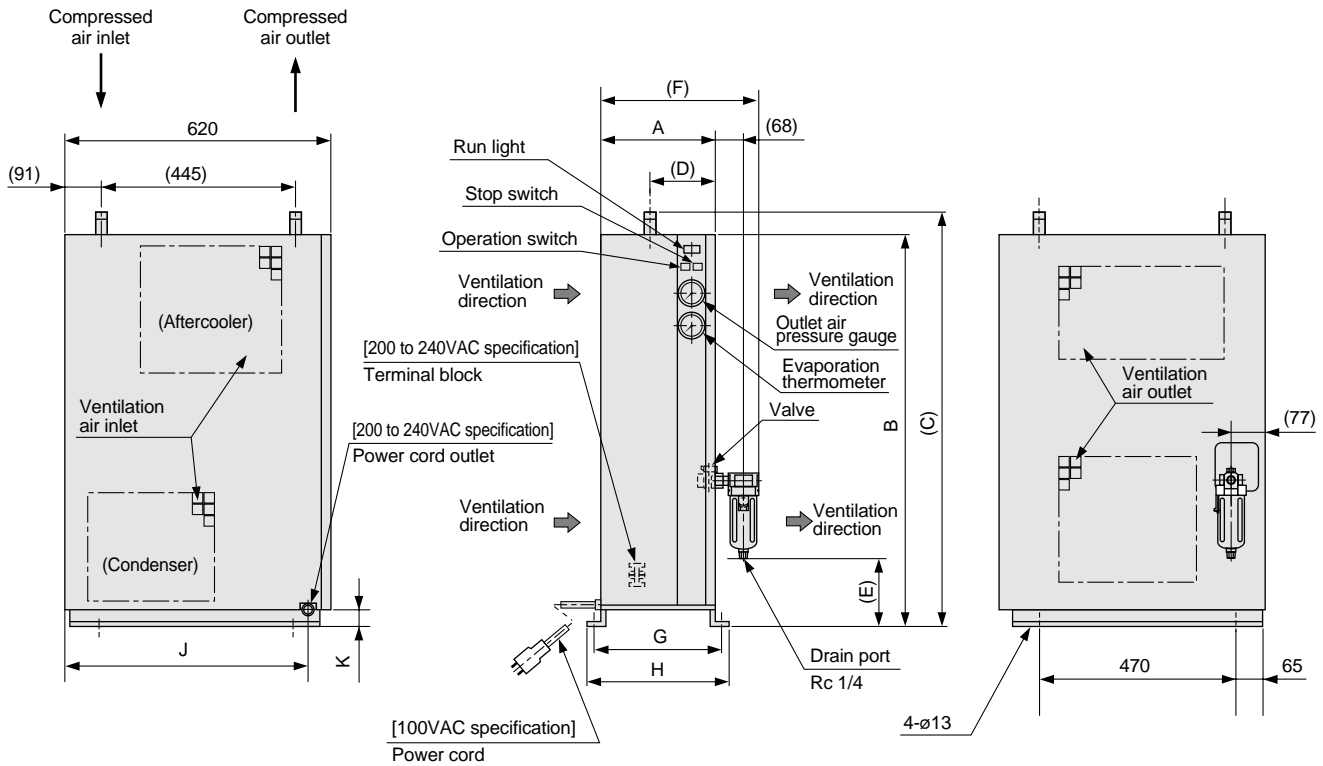


Humid hot air entering the air dryer is cooled in the after-cooler. It then enters the reheater to create an initial condensation with cooled and dehumidified air. The hot air is cooled further and dehumidified inside the cooler as heat is transferred to the refrigerant. The water vapor condensed by the cooling process is cooled and discharged automatically through the auto drain. Cool air is then heated again inside the reheater (heat is transferred from incoming hot air), before leaving the air dryer.

IDU22C to 75C



IDU11D, 11C, 15C

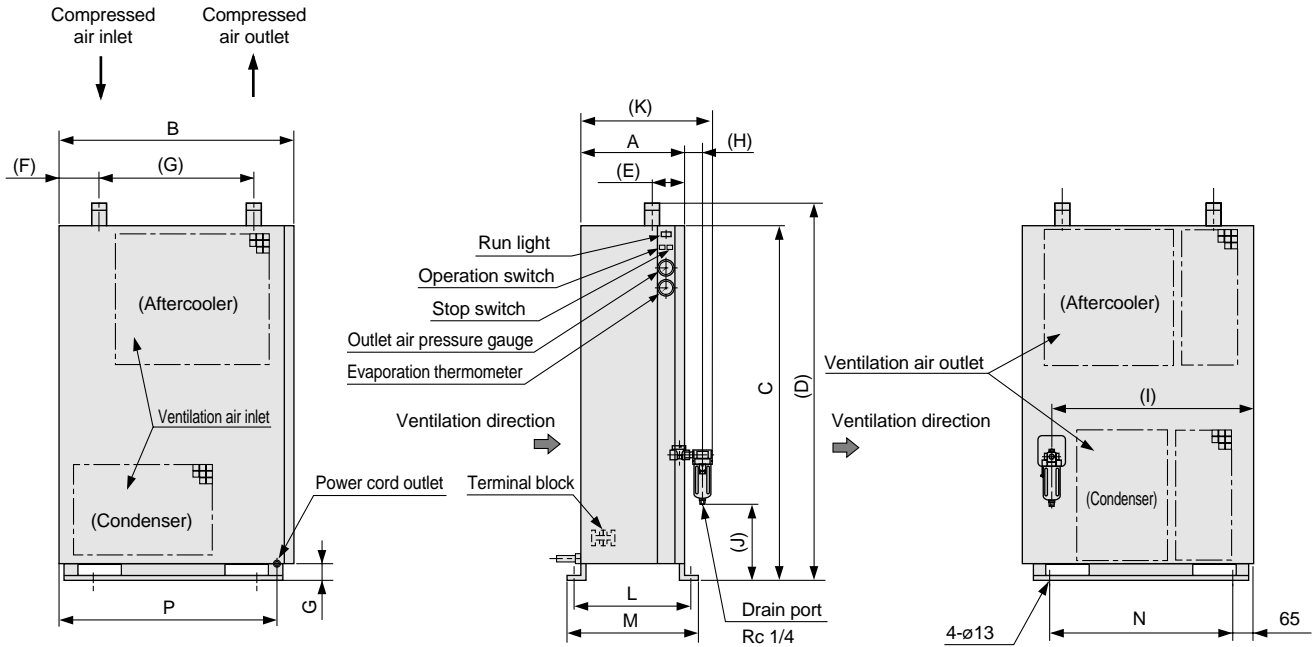


* Auto drain is packed together with air dryer. (Some assembly is required.)

Model	Port size	A	B	C	D	E	F	G	H	J	K
IDU11C/11D	R 3/4	260	910	959	152	157	363	289	317	571 [580]	30 [70]
IDU15C	R 1	280	960	1009	175	207	383	309	337	571 [580]	30 [70]

□ : Power source 220 to 240VAC

IDU22C, 22C1, 37C, 37C1, 55C, 75C



* Auto drain is packed together with air dryer. (Some assembly is required.)

Model	Port size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q
IDU22C1/22C	R 1	300	750	1155	1235	71	70	445	63	642	219	398	328	356	600	700 [700]	50 [90]
IDU37C1/37C	R 1 1/2	360	830	1260	1350	112	136	550	68	722	269	463	388	416	680	780 [776]	50 [90]
IDU55C	R 2	405	850	1340	1440	87	155	530	68	722	267	508	433	461	700	800 [800]	50 [95]
IDU75C	R 2	425	850	1475	1575	87	220	530	68	722	317	528	453	481	700	800 [800]	50 [95]

[] : Power source 220 to 240VAC

Refrigerant R134a

Series **IDF Small**

1D, 2D, 3D, 4D, 6D, 8D

How to Order

IDF

Model: 1D, 2D, 3D, 4D, 6D, 8D

Voltage: 1, 2, 4, 6

Options (No options for standard specification models): A, C, E, H, L, M, R, S, T

Voltage		
Single phase	100VAC (50Hz) 100 to 110VAC (60Hz)	1
	200VAC (50Hz) 200 to 220VAC (60Hz)	2
	240VAC (50Hz) 220 to 240VAC (50Hz)	4
	220VAC (50Hz)	6

Model	Air compressor	Refrigerant
1D	0.75kW	R134a
2D	1.5kW	
3D	2.2kW	
4D	3.7kW	
6D	5.5kW	
8D	7.5kW	

Note 1) A combination of three or more optional items is handled as a special order product.
 Note 2) Single phase 220 to 240VAC is "S" specification standard.
 Note 3) Combinations of H and M, R and S, S and T, A and H, L and M are not available.
 Note 4) Option "T" is not available for IDF6D, 8D-4 and -6.

Option	A	C	E	H	L	M	R	S	T
Optional specification	With cool compressed air output	With anti-corrosive treatment	With evaporation thermometer	For medium air pressure	With heavy duty auto drain	With motor operated auto drain	With circuit breaker	With power cord connection	With terminal block for run & alarm signal and remote operation
Model									
1D	●	●						●	
2D	●	●						●	
3D	●	●	●					●	
4D	●	●	●	●				●	
6D	●	●	Standard	●	●	●	●	●	● Note 4)
8D	●	●	Standard	●	●	●	●	●	● Note 4)

* Refer to pages 19 and 20 for further information on options.

Model and voltage combinations

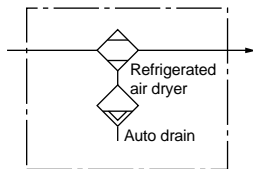
Voltage	1	2	4	6
Model	100VAC (50Hz) 100 to 110VAC (60Hz)	200VAC (50Hz) 200 to 220VAC (60Hz)	220 to 240VAC (50Hz)	240VAC (50Hz) 220VAC (50Hz)
1D	●			
2D	●			
3D	●	●		●
4D	●	●		●
6D	●	●	●	
8D	●	●	●	



Standard Specifications/Models

Specification		Model	IDF1D	IDF2D	IDD3D	IDF4D	IDF6D	IDF8D
Air flow rate ^{Note 2)} /min (ANR)	50Hz	100	200	300	430	640	850	
	60Hz	120	235	350	500	750	1000	
Operating pressure (MPa)		0.7						
Inlet air temperature (°C)		35	40					
Ambient temperature (°C)		32						
Pressure dew point (°C)		10						
Working fluid		Compressed air						
Inlet air temperature (°C)		5 to 50						
Inlet air pressure (MPa)		0.15 to 1.0						
Ambient temperature (°C)		2 to 40 (Relative humidity of 85% or less)						
Power source		Single phase, 100/100 to 110VAC (50/60Hz)			Single phase, 100/100 to 110VAC (50/60Hz) Single phase, 200/200 to 220VAC (50/60Hz) Single phase, 220, 240/220 to 240VAC (50Hz)			
Power consumption (W)	100 VAC	50Hz	184	187	210	207	283	283
		60Hz	213	210	260	250	330	330
	200 VAC	50Hz	—	—	195	202	280	280
		60Hz	—	—	240	245	328	328
		220 to 240VAC	50Hz	—	—	—	259	292
220VAC	50Hz	—	—	172	247	—	—	
240VAC	50Hz	—	—	179	257	—	—	
Circuit breaker (A) ^{Note 3)}		10 (for 100VAC), 5 (for 200VAC)						
Condenser		Air cooled						
Refrigerant		R134a						
Air connection		Rc 3/8				Rc 1/2	Rc 3/4	
Drain connection		Drain tube ø10 attached				Rc 1/4		
Auto drain		AD53	AD43			INA-20-41-04 ^{Note 5)}		
Weight (kg)	100 to 200VAC	15	16	18	26	32	32	
	220 to 240VAC	—		19	26	35	38	
Coating color		Munsell 10Y8/0.5 (White)						
Applicable compressor (screw type) kW		0.75	1.5	2.2	3.7	5.5	7.5	

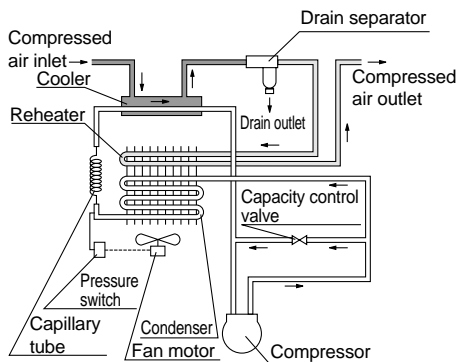
JIS Symbol



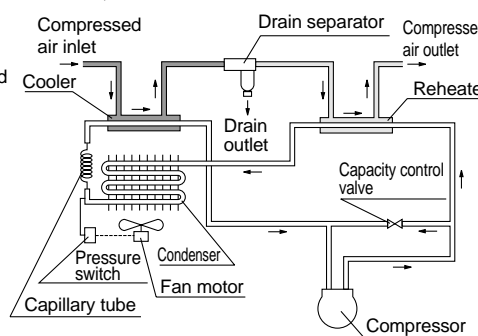
- Note 1) Select an air dryer according to the selection method and not the rated conditions.
- Note 2) The data for /min (ANR) refers to the conditions of 20°C, 1 atm. pressure and relative humidity of 65%.
- Note 3) Install a circuit breaker with sensitivity of ≤30 mA.
- Note 4) IDF3D to 8D-4/6 are only for frequency of 50Hz.
- Note 5) Spare part for auto drain INA-20-41-04 is AD44- x445.

Operation Principles

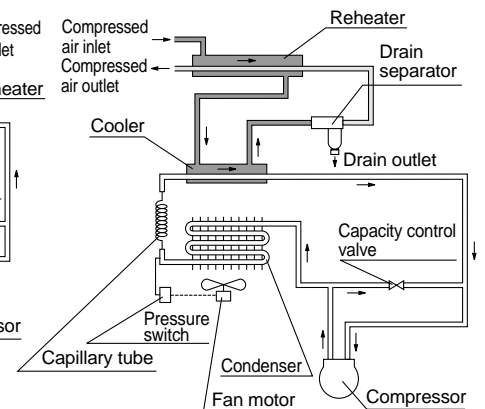
IDF1D



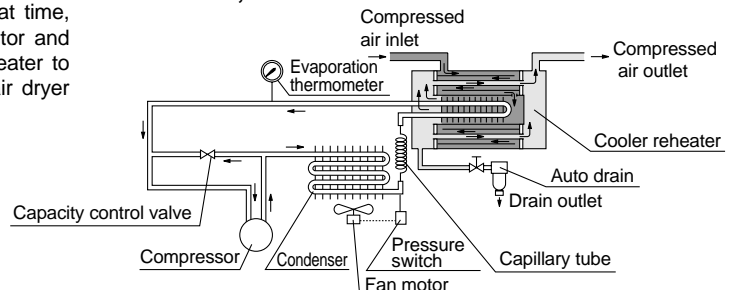
IDF2D, 3D



IDF4D

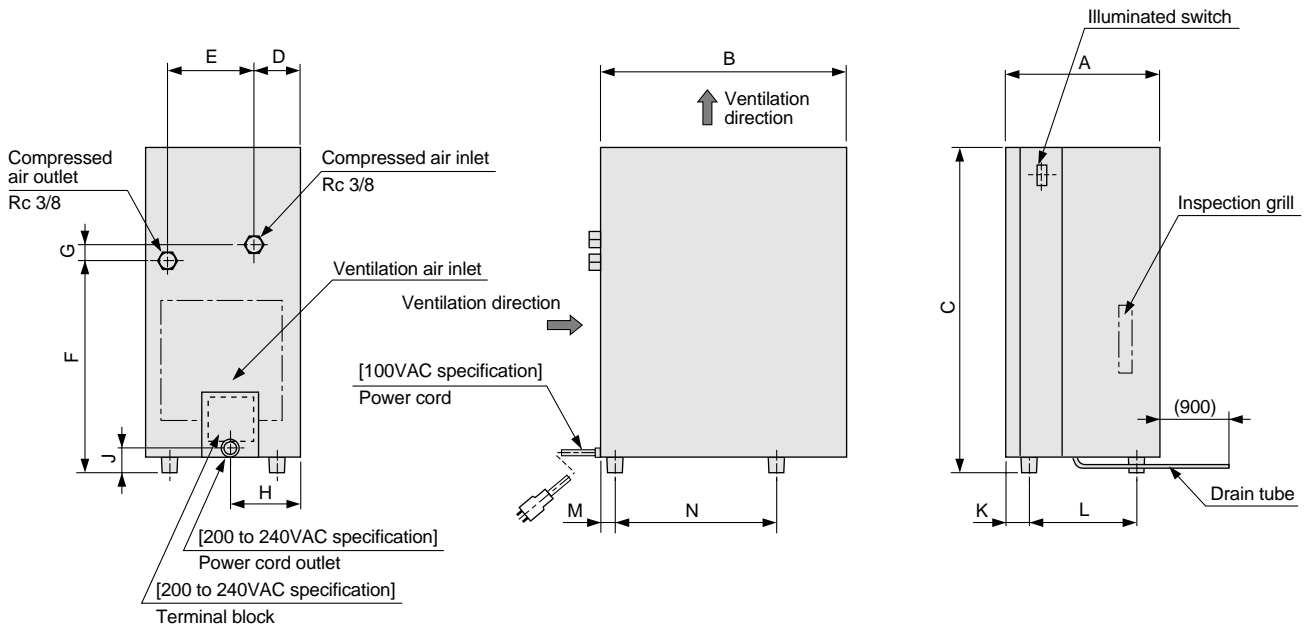


IDF6D, 8D



Hot humid air entering the air dryer is cooled by the cooler. At that time, condensed moisture is separated from the air by the drain separator and automatically discharged. The dried clean air is heated by the reheater to about the ambient temperature, and is then discharged from the air dryer outlet.

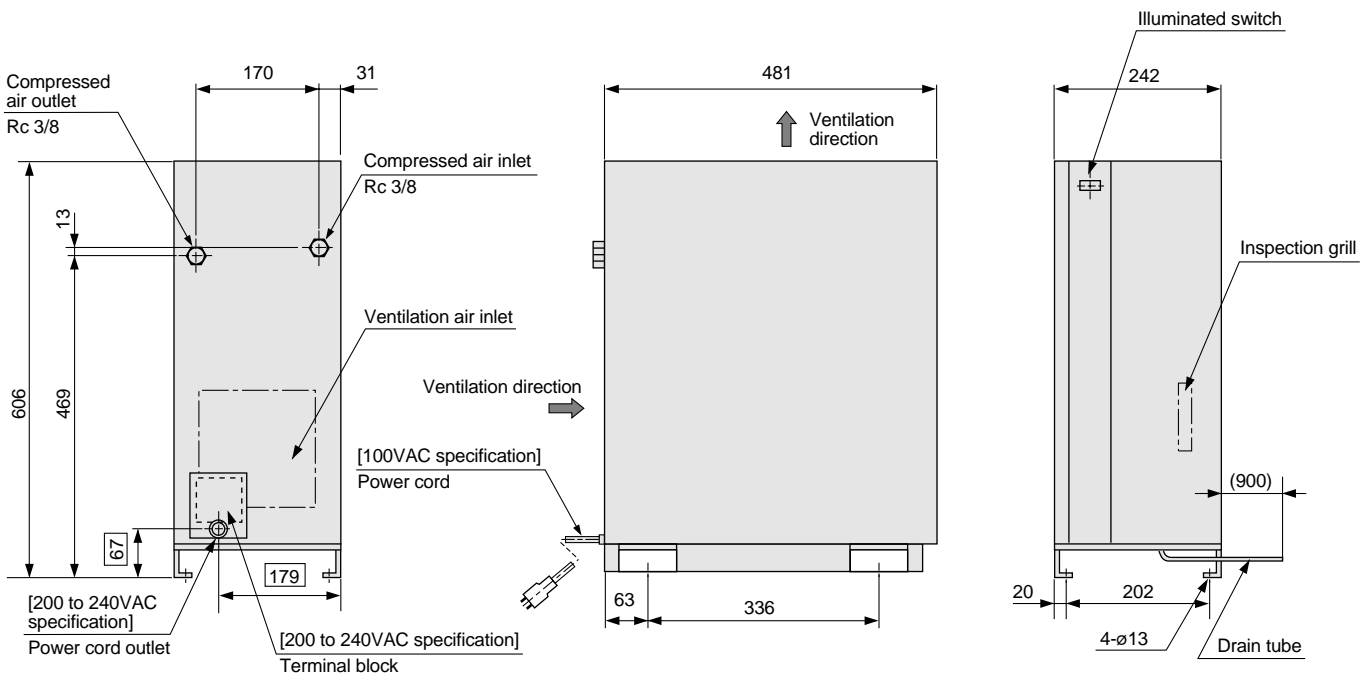
IDF1D, 2D, 3D



Model	Port size	A	B	C	D	E	F	G	H	J	K	L	M	N
IDF1D	Rc 3/8	200	328	395	59	74	247	36	—	—	34	132	38	198
IDF2D		226	328	410	51	125	232	138	—	—	38	150	24	217
IDF3D		226	358	470	67	125	304	33	103	28	36	154	21	236

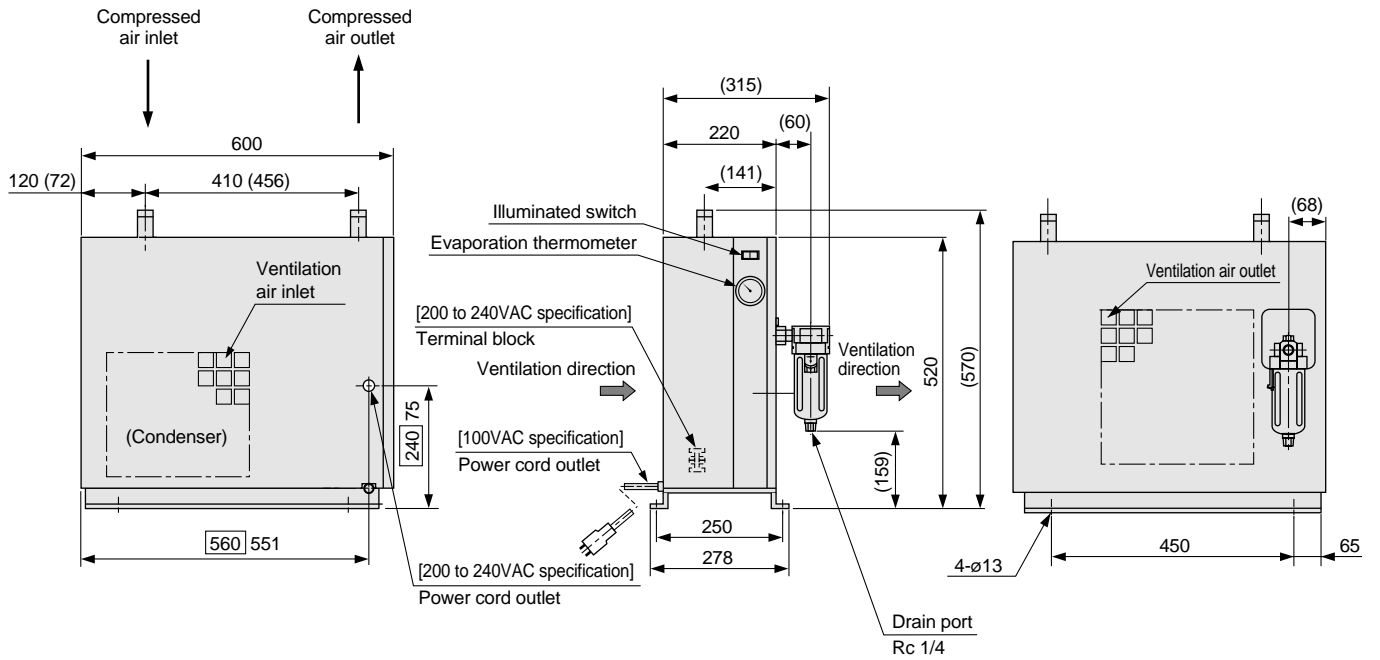
☐ : Power source 200 to 240VAC

IDF4D



☐ : Power source 200 to 240VAC

IDF6D, 8D



□: In case of 200VAC. Dimension shown on the right is for 220 to 240VAC.
 (): Dimension within bracket is for air dryer with option A, with cool compressed air output.
 Air inlet and outlet are reversed for air dryer with option A, with cool compressed air output.

* Auto drain is packed together with the air dryer. (Some assembly is required.)

Model	Port size
IDF6D	R 1/2
IDF8D	R 3/4

Refrigerant R22

Series **IDF** *Medium*

11D, 11C, 15C, 15C1, 22C, 22C1, 37C, 37C1, 55C, 75C

How to Order

IDF

Model	Voltage	Options (No options for standard specification models)
11D	1	A
11C	2	C
15C	3	E
15C1	4	H
22C	6	L
22C1		M
37C		R
37C1		S
55C		T
75C		W

Model	Air compressor	Refrigerant
11D	11kW	R134a
11C		
15C/15C1	15kW	R22
22C/22C1	22kW	
37C/37C1	37kW	
55C	55kW	
75C	75kW	

Voltage	Code
Single phase 100VAC (50Hz) 100 to 110VAC (60Hz)	1
Single phase 200VAC (50Hz) 200 to 220VAC (60Hz)	2
Three phase 200VAC (50Hz) 200 to 220VAC (60Hz)	3
Single phase 240VAC (50Hz) 220 to 240VAC (50Hz)	4
Single phase 220VAC (50Hz)	6

Note 1) A combination of two is standard. A combination of three or more optional items is handled as a special order product.

Note 2) 200 to 240VAC is "S" specification standard.

Note 3) Combinations of A and H, H and M, R and S, S and T are not available.

Note 4) Options "T" and "W" are not available for IDF37C, 55C and 75C-4/6.

Option	A	C	E	H	L	M	R	S	T	W	
Optional specification	With cool compressed air output	With anti-corrosive treatment	With evaporation thermometer	For medium air pressure	With heavy duty auto drain	With motor operated auto drain	With circuit breaker	With power cord connection	With terminal block for run & alarm signal	Water cooled condenser	
Model											
11C/11D	●	●	Standard	●	●	●	●	●	●		
15C/15C1	●	●		●	●	●	●	●	●		
22C/22C1	●	●		●	●	●	●	Standard	●		
37C/37C1	●	●		●	●	●	●		●	●	Note 4)
55C	●	●		●	●	●	●		●	●	Note 4)
75C	●	●	●	●	●	●	●	●	●	Note 4)	



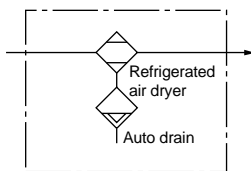
* Refer to pages 19 and 20 for further information on options.

Model and voltage combinations

Voltage	1		2		3		4		6	
	Single phase		Three phase		Single phase		Single phase		Single phase	
	100VAC (50Hz) 100 to 110VAC (60Hz)	200VAC (50Hz) 200 to 220VAC (60Hz)	200VAC (50Hz) 200 to 220VAC (60Hz)	200VAC (50Hz) 200 to 220VAC (60Hz)	220 to 240VAC (50Hz)	240VAC (50Hz)	220VAC (50Hz)	240VAC (50Hz)	220VAC (50Hz)	220VAC (50Hz)
Model										
11D								●		
11C	●									
15C	●									
15C1		●							●	
22C								●		●
22C1				●						
37C								●		●
37C1								●		●
55C								●		●
75C								●		●



JIS Symbol



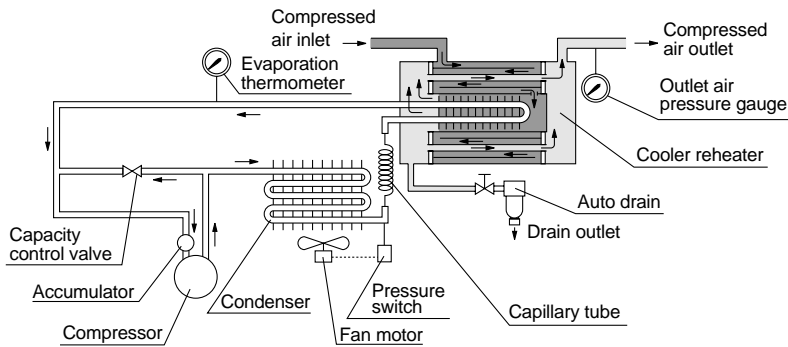
Standard Specifications/Models

Specification	Model	IDF11D	IDF11C	IDF15C	IDF15C1	IDF22C	IDF22C1	IDF37C	IDR37C1	IDF55C	IDF75C	
Air flow rate ^{Note 2)} /min (ANR)	50Hz	1300	2050	3150	5200	7650	10500					
	60Hz	—	1500	2400	—	—	3700	—	6100	9000	12400	
Operating pressure (MPa)		0.7										
Inlet air temperature (°C)		40										
Ambient temperature (°C)		32										
Pressure dew point (°C)		10										
Working fluid		Compressed air										
Inlet air temperature (°C)		5 to 50										
Inlet air pressure (MPa)		0.15 to 1.0										
Ambient temperature (°C)		2 to 40 (Relative humidity of 85% or less)										
Power source		Single phase, 100/100 to 110VAC (50/60Hz) 220, 240VAC (50Hz) 220 to 240VAC (50Hz)					Three phase, 200/200 to 220VAC (50/60Hz) Single phase, 220, 240VAC (50Hz)					
Power consumption (W)	100 VAC	50Hz	—	320	543	—	—	—	—	—	—	—
		60Hz	—	347	662	—	—	—	—	—	—	—
	200 VAC	50Hz	—	308	561	—	—	670	—	750	1400	2100
		60Hz	—	346	652	—	—	800	—	880	1750	2150
	220 to 240VAC	50Hz	337	—	—	—	—	—	—	—	—	—
240VAC	50Hz	—	—	—	548	747	—	830	—	1530	2150	
240VAC	50Hz	—	—	—	570	777	—	860	—	1580	2200	
Circuit breaker (A) ^{Note 3)}		10 (for 100VAC), 5 (for 200VAC)					10			15		
Condenser		Air cooled										
Refrigerant		R134a		R22								
Air connection		Rc 3/4		Rc 1			Rc 1 1/2		Rc 2			
Drain connection		Rc 1/4										
Auto drain		INA-20-41-04 ^{Note 5)}										
Weight (kg)	100 to 200VAC	—	47	50	—	—	60	—	72	114	126	
	220 to 240VAC	50	—	—	53	60	—	72	—	125	135	
Coating color		Munsell 10Y8/0.5 (White)										
Applicable compressor (screw type) kW		11		15		22		37		55		75

- 🔍 Note 1) Select an air dryer according to the selection method and not the rated conditions.
- Note 2) The data for /min (ANR) refers to the conditions of 20°C, 1 atm. pressure and relative humidity of 65%.
- Note 3) Install a circuit breaker with sensitivity of ≤30 mA.
- Note 4) IDU11D to 75C-4/6 are only for frequency of 50Hz.
- Note 5) Spare part for auto drain INA-20-41-04 is AD44- x445.

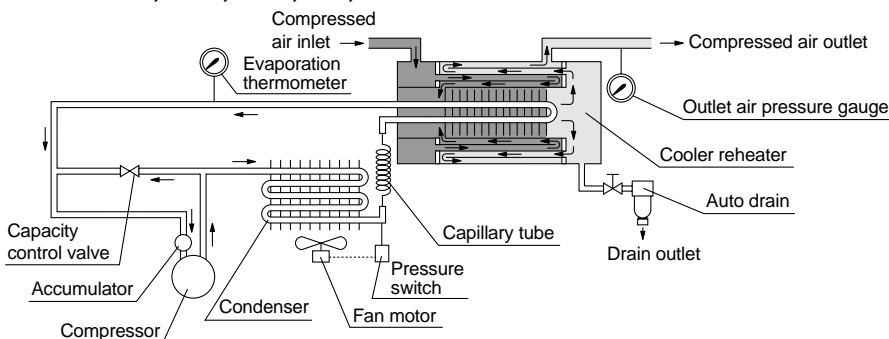
Operation Principles

IDF11D, 11C, 15C, 15C1

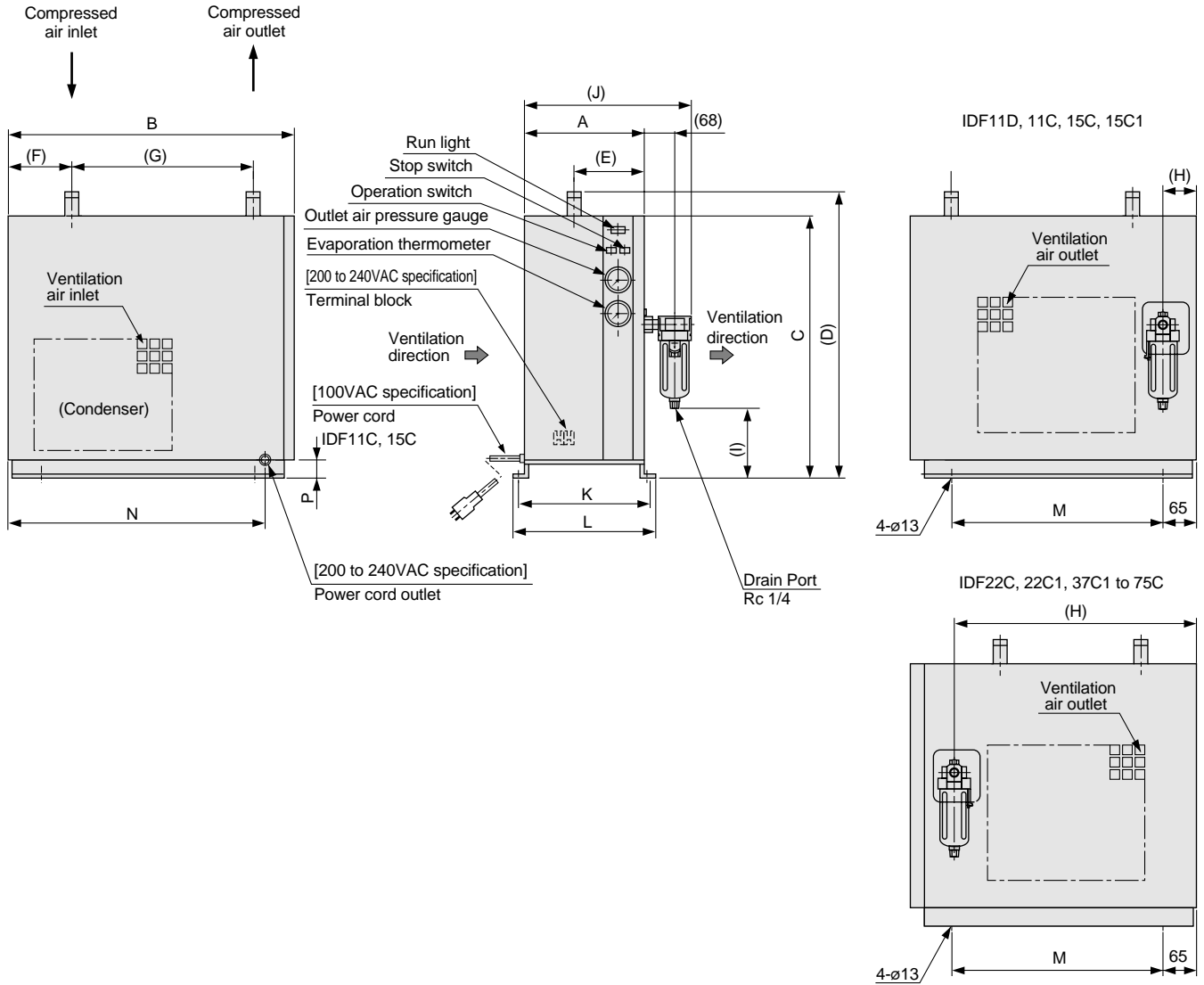


Hot humid air entering the reheater is precooled by dehumidified cool air. (The hot air is cooled further and dehumidified inside the cooler as heat is transferred to the refrigerant. The water condensed by the cooling process is collected and discharged automatically by the auto drain.) Finally, the cool dehumidified air is heated in the reheater by hot inlet air and discharged in a dry state.

IDF22C, 22C1, 37C1, 55C, 75C



IDF11D, 11C, 15C, 15C1, 22C, 22C1, 37C1, 55C, 75C



* Auto drain is packed together with the air dryer. (Some assembly is required.)

Model	Port size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	
IDF11C/11D	R 3/4	260	620	570	630	152	131 (85)	405 (450)	77	157	363	289	317	470	580	70	65
IDF15C/15C	R 1	280	620	620	680	175	131 (85)	405 (450)	77	207	383	309	337	470	580	70	65
IDF22C/22C1	R 1	295	750	680	760	183	98	405 (530)	642	199	398	323	351	600	700	70	30
IDF37C/37C1	R 1 1/2	320	830	730	810	208	98	405 (610)	722	249	423	348	376	680	776	70	30
IDF55C	R 2	405	850	850	930	85	98	405 (610)	722	247	508	433	461	700	800	75	30
IDF75C	R 2	425	850	900	980	85	98	405 (610)	722	297	528	453	481	700	802	75	30

□ : Power source 200VAC. Dimension shown on the right is for 220 to 240VAC.
 (): Dimension within bracket is for air dryer with option A, with cool compressed air output.
 Air inlet and outlet are reversed for air dryer with option A, with cool compressed air output.

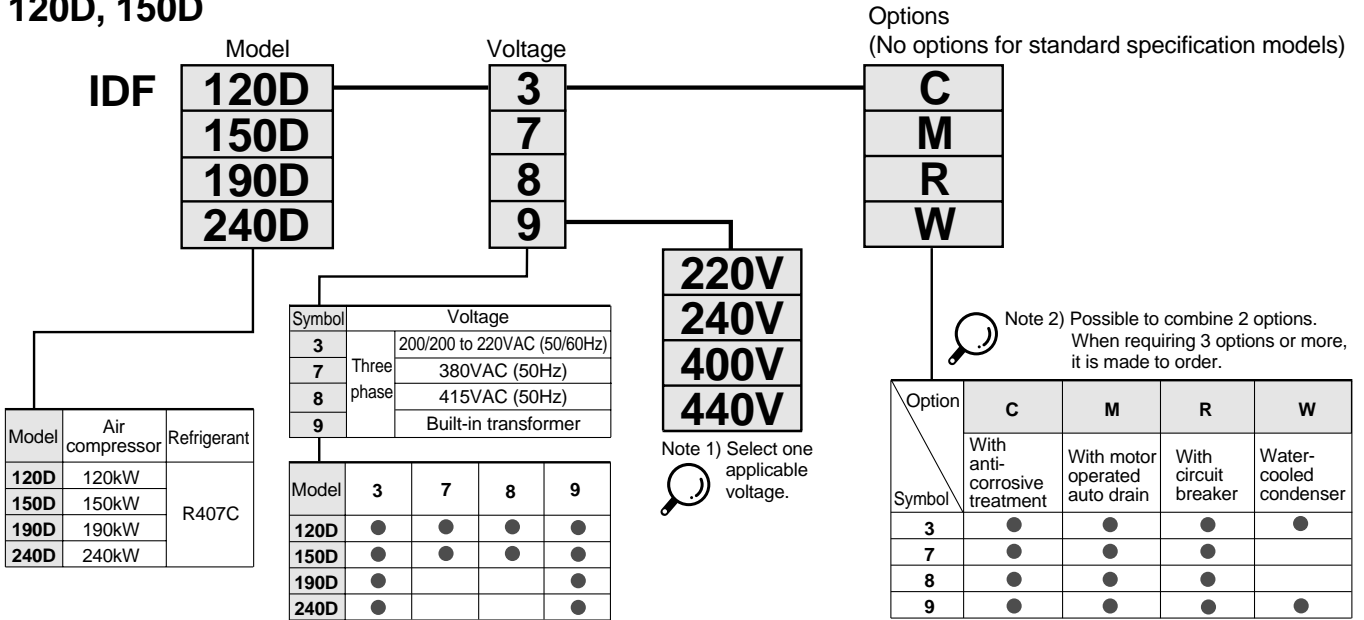
Refrigerant R407C, R22

Series *IDF Large*

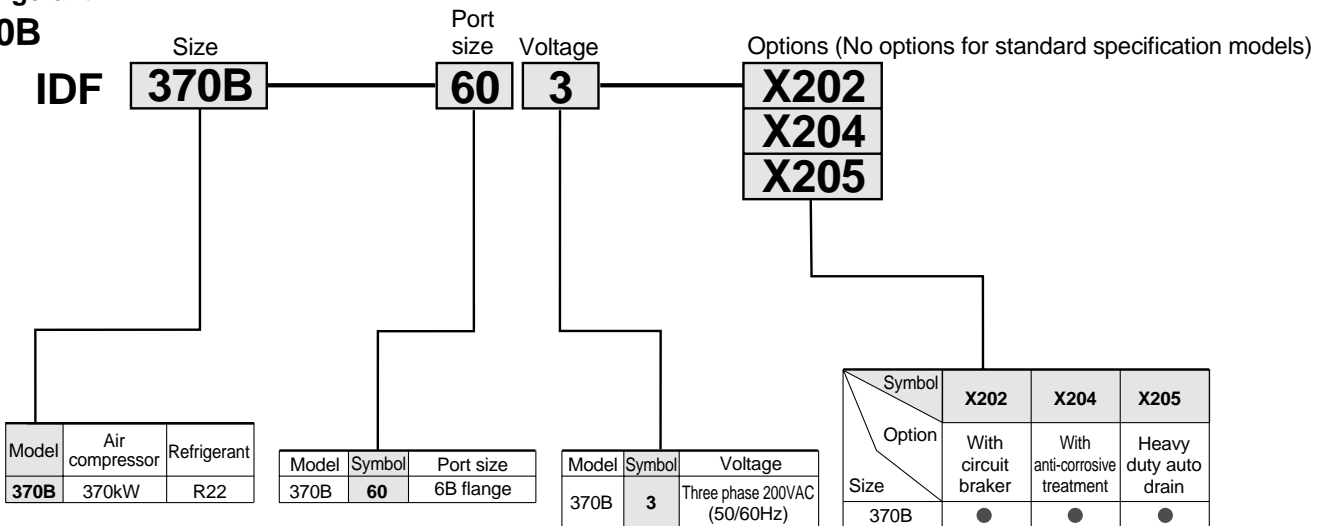
120D, 150D, 190D, 240D, 370B

How to Order

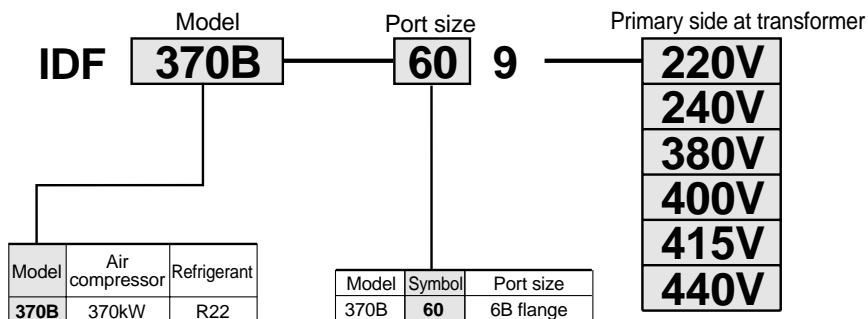
Refrigerant R407C 120D, 150D



Refrigerant R22 370B



Integrated with Transformer (Option)



Standard Specifications/Models

Specification		Model	IDF120D	IDF150D	IDF190D	IDF240D	IDF370B ^{Note 2)}	
Rated conditions	Air flow rate ^{Note 1)} (m ³ /min (ANR))	50Hz	20	25	32	43	54	
		60Hz	23	30	38	50	65	
	Inlet air pressure (MPa)	0.7						
	Inlet air temperature (°C)	40						
	Ambient temperature (°C)	32						
Operating ranges	Working fluid	Compressed air						
	Inlet air temperature (°C)	5 to 50						
	Inlet air pressure (MPa)	0.15 to 0.1						
	Ambient temperature (Humidity) (°C)	2 to 40 (Relative humidity of 85% or less)						
Electrical specifications	Power source		Three phase 200/220VAC (50/60Hz) Three phase 380VAC (50Hz) Three phase 415VAC (50Hz)	Three phase 200/220VAC (50/60Hz) Three phase 380VAC (50Hz) Three phase 415VAC (50Hz)	Three phase 200/220VAC (50/60Hz) Three phase 380VAC (50Hz) Three phase 415VAC (50Hz)	Three phase 200/220VAC (50/60Hz)		
	Power consumption (kw)	200AVC	50Hz	2.5	4.0	4.9	6.3	8.1
			60Hz	3.1	5.0	5.9	7.6	9.5
		380AVC 415AVC	50Hz	2.1	3.3	-	-	-
	Circuit breaker (A)	200AVC	30	50	50	60	80	
		380AVC	15	20	-	-	-	
		451AVC						
	Condenser	Air cooled						Water cooled
	Refrigerant	R407C						R22
	Air connection	2 1/2B flange	3B flange	4B flange	6B flange			
Drain connection (Rc)	Rc 1/2						Rc 3/8	
Auto drain	ADH4000-04						ADM200-042-8	
Weight (kg)	330	350	450	660	1100			
Coating color	Body panel: Munsell 10Y8/0.5 (White) Base: Black						Front panel: Munsell 2.5PB6/8.5 (Blue) Other panels (Except base): Munsell N-8 (White)	
Applicable compressor (kw)	120	150	190	240	370			

Water cooled condenser specifications (IDF370B)

Condenser	Shell and tube system
Cooling water flow ^{Note 1)}	100 /min
Cooling tower capacity ^{Note 2)}	10RT
Water flow regulator	Pressure style automatic water supply valve
Connection bore on water side	1 1/4B union

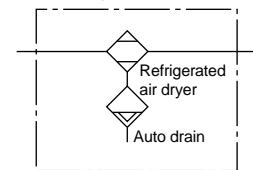
Note 1) Value for inlet water temperature of 32°C and rated load.

Note 2) Value calculated for 1RT = 3, 300kcal/h.

Auto drain

Model	Operation cycle	Operation time
IDF370B	4 cycles/min.	8 sec./min.
Power supply	200VAC 50/60Hz.	
Power consumption	4W	

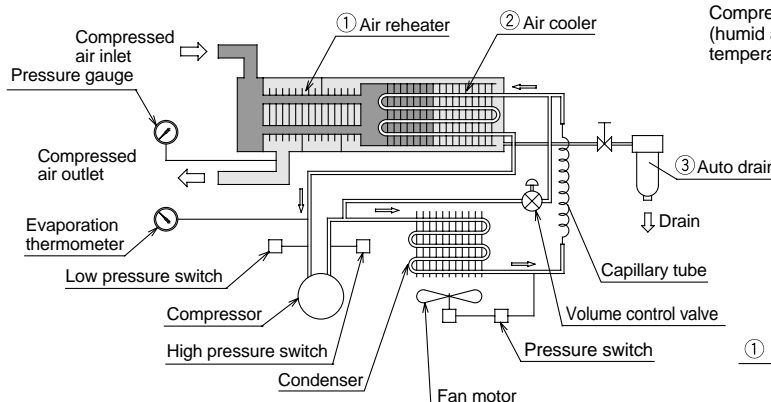
JIS Symbol



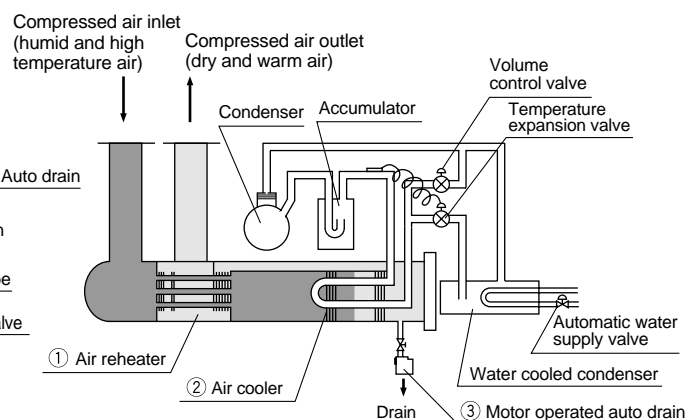
Note 1) The data for /min (ANR) refers to the conditions of 20°C, 1atm. pressure and relative humidity of 65%.
Note 2) This is made to order.

Operation Principles

IDF120D to 240D

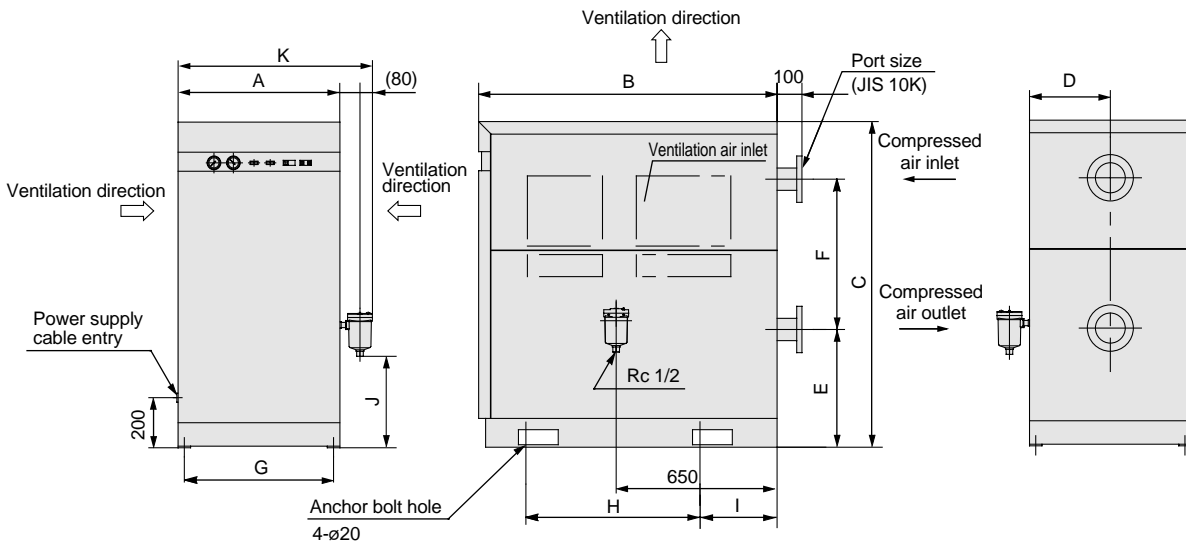


IDF370B



High temperature humid air is cooled in the reheater ①. Then it is further cooled to a specified temperature using the evaporation heat in the air cooler ②. The oil mist and moisture occurring due to condensation is exhausted through the auto drain ③. Cooled and dehumidified air is returned to the air reheater ① and heat is transferred from the incoming high temperature air. It is then exhausted out of the air dryer as dry air.

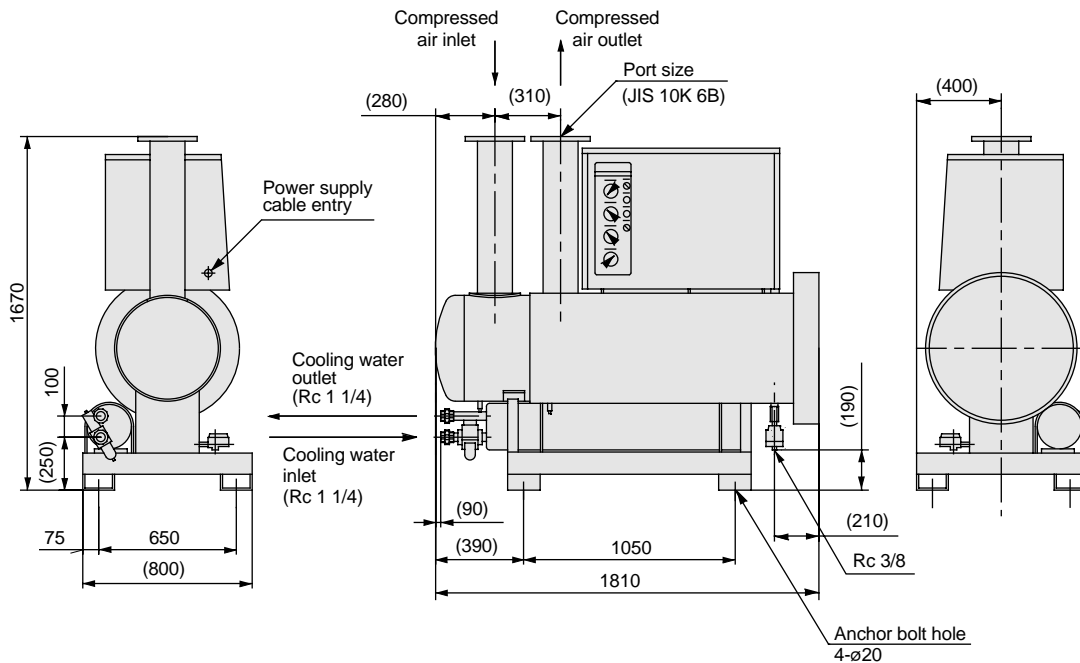
IDF120D, 150D, 190D, 240D



Model	Port size	A	B	C	D	E	F	G	H	I	J	K
IDF120D	JIS 10K 2B 1/2 Flange	650	1200	1300	325	470	600	600	660	330	365	780
IDF150D	JIS 10K 3B Flange											
IDF190D	JIS 10K 3B Flange	750	1510	1320	375	480	600	700	800	355	427	880
IDF240D	JIS 10K 4B Flange	770	1550	1640	385	703	730	700	800	355	592	900

* Auto drain is packed together with air dryer. (Some assembly is required.)

IDF370B



Series IDU/IDF Option Specification

Refer to pages 1, 5, 9, 13 and 16 for "How to order" of options.

A Option symbol Cool compressed air output at 10°C

The air flow with this option is lower than that of the standard dryer.
 * On models IDF6D to 15C, the air inlet and outlet are reversed.
 ** Except for IDF1D to 4D, piping dimensions of the air inlet and outlet are different from standard. (Refer to pages 12, 15 and 18.)

Model		IDF1D	IDF2D	IDF3D	IDF4D
Air flow capacity (/min (ANR)) 50/60Hz	50Hz	85	120	180	215
	60Hz	100	140	210	250
Model		IDF6D	IDF8D	IDF11C	IDF15C
Air flow capacity (/min (ANR)) 50/60Hz	50Hz	320	425	650	1025
	60Hz	375	500	750	1200
Model		IDF22C1	IDF37C1	IDF55C	IDF75C
Air flow capacity (/min (ANR)) 50/60Hz	50Hz	1575	2600	3825	5250
	60Hz	1850	3050	4500	6200

[Condition IDF1D] Pressure: 0.7MPa, Saturation: 35°C
 Ambient temperature: 32°C, Outlet air temperature: 10°C
 [IDF2D to 75C] Pressure: 0.7MPa, Saturation: 40°C,
 Ambient temperature: 32°C, Outlet air temperature: 10°C

C Option symbol Anti-corrosive treatment

This minimizes the corrosion of the copper and copper alloy parts when the air dryer is used in an atmosphere containing hydrogen sulfide or sulfurous acid gas. This option extends the service life.
 Special epoxy coating of copper tube and copper alloy parts.
 The coating is not applied on the heat exchanger or around electrical parts, where operation may be affected by coating.

Note) For IDF370B, option C is assigned as X204.

E Option symbol With evaporation thermometer

A thermometer (pressure gauge) indicating the evaporating temperature of the refrigerant is attached to the operation panel, facilitating maintenance and daily checks. IDU6D to 75C, IDF6D to 370B standard.

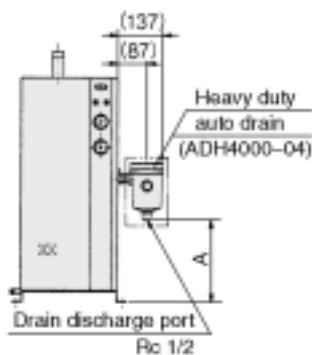
H Option symbol For medium air pressure

This option provides a heat exchanger, auto drain, air pressure gauge and ball valve, etc., with a medium pressure capability. This is different from the standard specifications. Maximum operating pressure is 1.5MPa.

L Option symbol With heavy duty auto drain

A dryer with heavy duty auto drain (ADH4000-04) is installed instead of the float type auto drain (INA20-41-04), which is used for standard models to discharge drainage. IDF120D, 150D, 190D, 240D standard.

Note) For IDF370B, option L is assigned as X205.



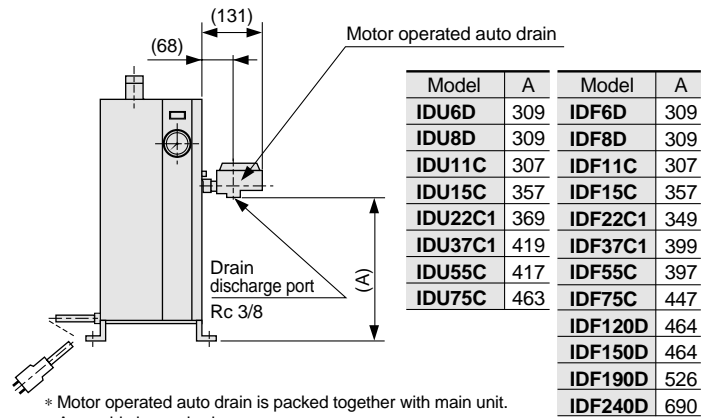
Model	A	Model	A
IDU6D	210	IDF6D	210
IDU8D	210	IDF8D	210
IDU11C	208	IDF11C	208
IDU15C	258	IDF15C	258
IDU22C1	270	IDF22C1	250
IDU37C1	320	IDF37C1	300
IDU55C	318	IDF55C	298
IDU75C	368	IDF75C	348
		IDF120D	365
		IDF150D	365
		IDF190D	427
		IDF240D	592

M Option symbol With motor operated auto drain

This option changes the float style auto drain (INA-20-41-04) used by standard air dryers to a motor operated auto drain (ADM200-04) where by drainage is discharged more precisely.

Operating air pressure	Air discharge if no drainage
0.3MPa	6 / (ANR) each time
0.5MPa	10 / (ANR) each time
0.7MPa	14 / (ANR) each time

* Operation cycle: 1 cycle/min. Operation time: 2 sec./min.
 IDF220B to 370B standard.

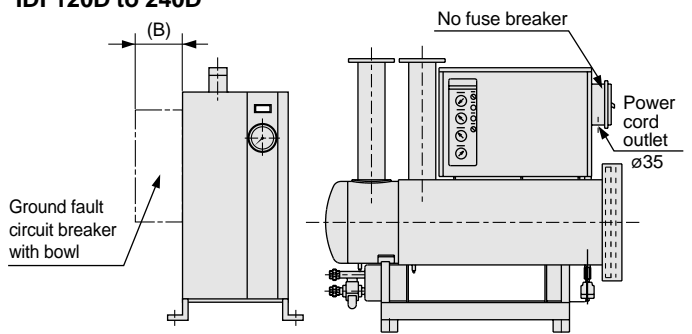


* Motor operated auto drain is packed together with main unit.
 Assembly is required.

R Option symbol With circuit breaker X202 (IDF220B, 370B)

A circuit breaker with bowl is attached to the side of the air dryer. This saves additional electrical wiring at the time of installation. (IDF120D to 370B do not have an electric leakage detection function.)

IDU6D to 75C
 IDF6D to 75C
 IDF120D to 240D



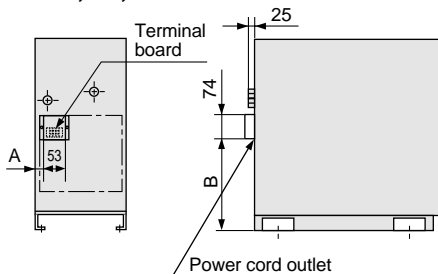
Model	B	Breaker capacity	Sensitivity current
IDU6D, IDF6D IDU8D, IDF8D IDU11C, IDF11C IDU15C, IDF15C	95	10A (100VAC) 5A (200VAC)	15 to 30mA
IDU22C1, IDF22C1 IDU37C1, IDF37C1		10A	
IDU55C, IDF55C IDU75C, IDF75C		15A	
IDF120D	69	30A	
IDF150D	94	45A	
IDF190D	95	50A	
IDF240D		60A	
IDF370B		80A	

S Option symbol

With power cord connection

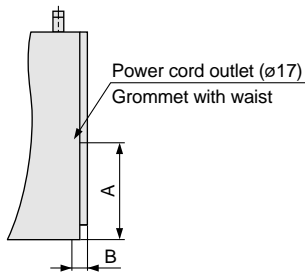
This option allows connection of the power supply to a terminal board (3P).

IDU3D, 4D, IDF1D to 4D



Model	A	B
IDU3D	24	247
IDU4D	20	298
IDF1D	47	123
IDF2D	55	123
IDF3D	37	173
IDF4D	45	197

IDU6D to 15C, IDF6D to 15C



Model	A	B
IDU6D	240	40
IDU8D	240	40
IDU11C	30	49
IDU15C	30	49
IDF6D	240	40
IDF8D	240	40
IDF11C	65	40
IDF15C	65	40

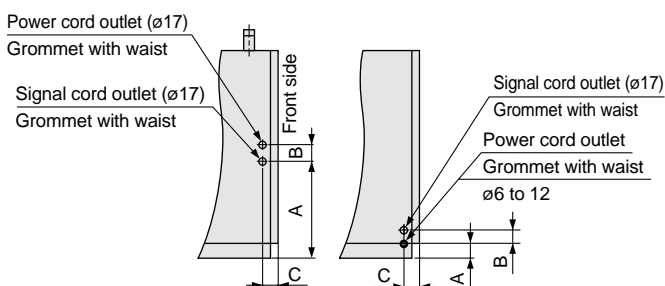
T Option symbol

With terminal block for run & alarm signal and remote operation

With the optional terminal, in addition to connection of the power supply, the air dryer can be started and stopped by remote control and an operation failure signal can be obtained. (If no voltage contact is made, an operation failure signal will register.) IDF120D to 370B standard.

**IDU6D, 8D
IDF6D, 8D**

**IDU11C to 75C
IDF11C to 75C**



Model	A	B	C	Model	A	B	C
IDU6D	240	38	70	IDF6D	240	38	70
IDU8D	240	38	70	IDF8D	240	38	70
IDU11C	30	50	49	IDF11C	65	32	40
IDU15C	30	50	49	IDF15C	65	32	40
IDU22C1	50	45	50	IDF22C1	30	45	50
IDU37C1	50	45	50	IDF37C1	30	45	50
IDU55C	50	45	50	IDF55C	30	45	50
IDU75C	50	45	50	IDF75C	30	45	50

W Option symbol

Water cooled condenser (IDF37C1 to 240D)

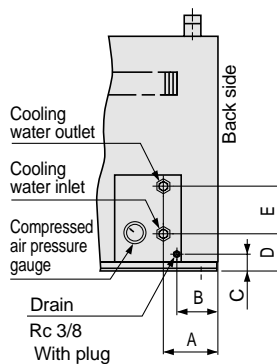
This option can be used where the ambient temperature is high (Max. 43°C), and does not reduce air flow capacity. It is also possible to use this option in an enclosed environment to prevent increasing of the surrounding temperature. IDF370B standard.

W: Water cooled condenser (IDF37C1 to 240D)

Model	IDF37C1	IDF55C	IDF75C	IDF120D	IDF150D	IDF190D	IDF240D
Condenser type	Shell & coil system						
Cooling water flow /min (Note 1)	6	8	20	50	65	80	90
Cooling tower capacity RT (Note 2)	2	2	3	5	7.5	7.5	7.5
Water flow regulator	Pressure auto feed valve						
Connection bore on water side (union)	1/2B	1/2B	3/4B	1B	1B	1B	1B

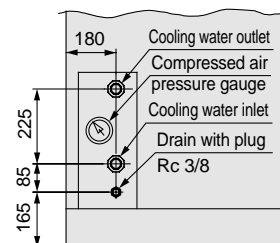
Note 1) Value for inlet water temperature of 32°C and rated load.
Note 2) Value calculated for 1RT = 3, 300kcal/h.

IDF75C



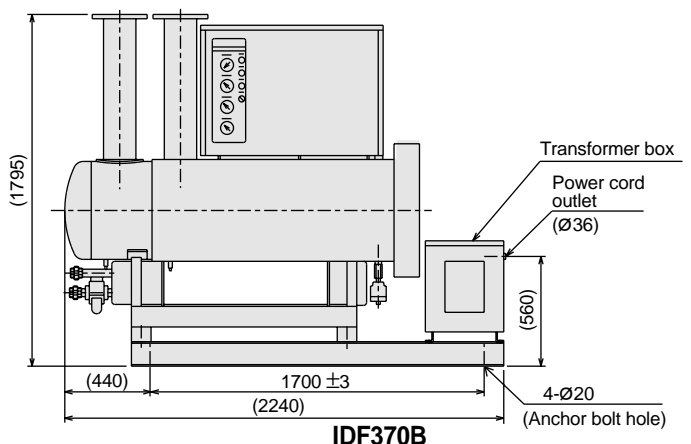
Model	A	B	C	D	E
IDF37C1	425	375	75	153	225
IDF55C	190	140	75	153	225
IDF75C	208	158	66	144	181

IDF120D to 240D







Transformer integrated

The power supply transformer can be integrated with an air dryer. It is used when a refrigerated air dryer is using a non-standard voltage specification. The power supply transformer for IDF120D to 240D is installed inside of the air dryer. Therefore, external dimensions are the same as the standard product.



Accessories (Options)

Description	Features	Specifications	Applicable dryer	Dimensions
Transformer separately installed 	This is for power supply and voltage other than standard.	Max. ambient temperature 40°C (Relative humidity 85% or less)	All models	Page 22
Base integrated with transformer 	This is the base for integrating the transformer and air dryer.	—	IDU3D to 15C IDF4D to 75C	Page 23
Dust proof filter set 	Avoids decreasing of air dryer performance even in dusty atmosphere.	Max. ambient temperature 40°C	IDU3D to 75C IDF1D to 75C	Page 23
Bypass piping set 	Easy bypass piping (connect this set to the air dryer), realizing substantial reduction of man-hours at the site.	Max. operating pressure 1.0MPa Max. operating temperature 60°C	IDU3D to 75C IDF1D to 75C	Page 24

How to Order

Transformer separately installed

IDF — TR 1500 — 5

Volume

Symbol	Volume	Applicable dryer
500	500 VA	IDU3D-1 to 11C-1, IDF1D-1 to 11C-1
1000	1 kVA	IDU15C-1, IDF15C-1
1500	1.5 kVA	IDU22C1-3, 37C1-3, IDF22C1-3, 37C1-3
4000	4 kVA	IDU55C-3, 75C-3, IDF55C-3, 75C-3
7000	7 kVA	IDF120D
9000	9 kVA	IDF150D
11000	11 kVA	IDF190D
13000	13 kVA	IDF240D
18000	18 kVA	IDF370B

Supply voltage

Symbol	Primary voltage	Secondary voltage	Model
1	110 VAC (50Hz), 110 to 120VAC (60Hz)	100VAC (50Hz) 100 to 110VAC (60Hz)	Single phase Single turn
2	200, 220, 230, 240VAC (50Hz), 200 to 260VAC (60Hz)		
3	380, 400, 415VAC (50Hz), 380 to 420VAC (60Hz)		
4	420, 440, 480VAC (50Hz), 420 to 520VAC (60Hz)		
5	220VAC (50Hz), 220 to 240VAC (60Hz)	200VAC (50Hz) 200 to 220VAC (60Hz)	Three phase Single turn
6	380, 400, 415VAC (50Hz), 380 to 440VAC (60Hz)		
7	440, 460VAC (50Hz), 440 to 500VAC (60Hz)		
8	220, 240, 380, 400, 415, 440VAC (50/60Hz)	200VAC (50/60Hz)	Three phase Compound

Base integrated with transformer

IDF — TB 2

Size order

Symbol	Applicable dryer
1	IDU3D, IDF4D
2	IDU4D to 15C, IDF6D to 15C
3	IDF22C1
4	IDF37C1 to 75C

Not available for IDF1D to 3D, IDU22C to 75C.

Dust proof filter set

IDU — FL 22 C

Applicable dryer

Symbol	Dryer	Symbol	Dryer	Symbol	Dryer
3	IDU3D	6	IDU6D	22	IDU22C1
4	IDU4D	8	IDU8D	37	IDU37C1
		11	IDU11C	55	IDU55C
		15	IDU15C	75	IDU75C

IDF — FL 22 C

Applicable dryer

Symbol	Dryer	Symbol	Dryer	Symbol	Dryer
1	IDF1D	6	IDF6D	22	IDF22C1
2	IDF2D	8	IDF8D	37	IDF37C1
3	IDF3D	11	IDF11C	55	IDF55C
4	IDF4D	15	IDF15C	75	IDF75C

Bypass piping set

IDU — BP 22 C

Applicable dryer

Symbol	Dryer	Symbol	Dryer	Symbol	Dryer
3	IDU3D	6	IDU6D	22	IDU22C1
4	IDU4D	8	IDU8D	37	IDU37C1
		11	IDU11C	55	IDU55C
		15	IDU15C	75	IDU75C

IDF — BP 22 C

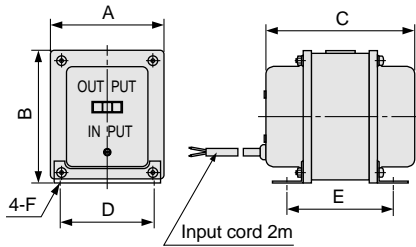
Applicable dryer

Symbol	Dryer	Symbol	Dryer	Symbol	Dryer
1	IDF1D	6	IDF6D	22	IDF22C1
2	IDF2D	8	IDF8D	37	IDF37C1
3	IDF3D	11	IDF11C	55	IDF55C
4	IDF4D	15	IDF15C	75	IDF75C

Cannot be mounted on models with option "A" (IDF6D to 75C).

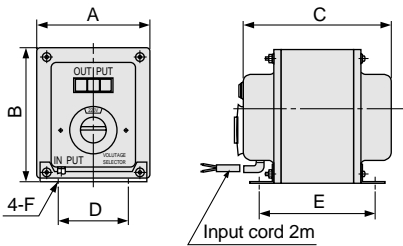
Transformers

IDF-TR-1



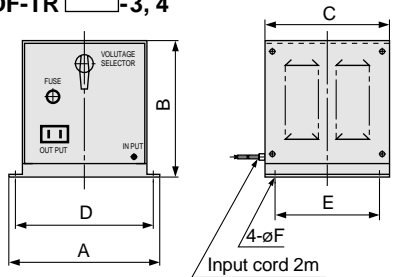
Part No.	Dryer	Capacity	Model	Primary voltage	Secondary voltage	A	B	C	D	E	F	Weight (kg)
IDF-TR500-1	IDF1D-1 to 11C-1	500VA	Single phase	110VAC (50Hz)	100VAC (50Hz)	78	94	100	64	75	4.2 x 7 (Long hole)	1.5
	IDU3D-1 to 11C-1											
IDF-TR1000-1	IDF15C-1	1kVA	Single turn	110 to 120VAC (60Hz)	100 to 110VAC (60Hz)	104	122	134	75	114	4.2 x 9 (Long hole)	4
	IDU15C-1											

IDF-TR-2



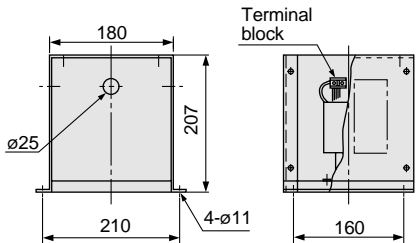
Part No.	Dryer	Capacity	Model	Primary voltage	Secondary voltage	A	B	C	D	E	F	Weight (kg)
IDF-TR500-2	IDF1D-1 to 11C-1	500VA	Single phase	200, 220, 230, 240VAC (50Hz)	100VAC (50Hz)	118	140	163	70	112	5.5 x 10 (Long hole)	6
	IDU3D-1 to 11C-1											
IDF-TR1000-2	IDF15C-1	1kVA	Single turn	200 to 260VAC (60Hz)	100 to 110VAC (60Hz)	118	140	208	70	157	5.5 x 10 (Long hole)	10
	IDU15C-1											

IDF-TR-3, 4



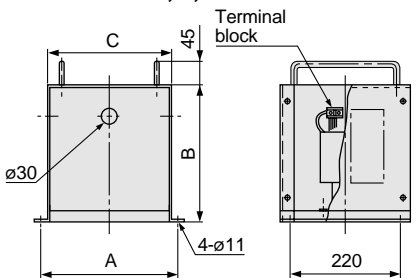
Part No.	Dryer	Capacity	Model	Primary voltage	Secondary voltage	A	B	C	D	E	F	Weight (kg)									
IDF-TR500-3	IDF1D-1 to 11C-1	500VA	Single phase	380, 400, 415VAC (50Hz)	100VAC (50Hz)	230	207	190	210	160	9	15									
IDF-TR1000-3	IDF15C-1	1kVA										380 to 420VAC (60Hz)	110VAC (60Hz)	22							
IDF-TR500-4	IDF1D-1 to 11C-1	500VA										Single turn	420, 440, 480VAC (50Hz)	110VAC (60Hz)	230	207	190	210	160	9	15
IDF-TR1000-4	IDF15C-1	1kVA																			420 to 520VAC (60Hz)

IDF-TR1500-5



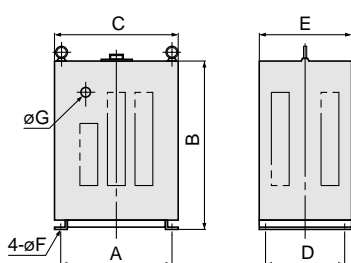
Part No.	Dryer	Capacity	Model	Primary voltage	Secondary voltage	Weight (kg)
IDF-TR1500-5	IDF22C1-3	1.5kVA	Three phase	220V (50Hz)	200V (50Hz)	9
	IDF37C1-3					
	IDU22C1-3					
	IDU37C1-3					

IDF-TR-5, 6, 7



Part No.	Dryer	Capacity	Model	Primary voltage	Secondary voltage	A	B	C	Weight (kg)
IDF-TR1500-6	IDF22C1-3, 37C1-3	1.5kVA	Three phase	380, 400, 415V (50Hz)	200V (50Hz)	275	259	240	18
IDF-TR1500-7	IDU22C1-3, 37C1-3								
IDF-TR4000-5	IDF55C-3, 75C-3	4kVA	Single turn	220V (50Hz)	200V (50Hz)	275	259	240	14
IDF-TR4000-6	IDU55C-3, 75C-3								
IDF-TR4000-6	IDF55C-3, 75C-3	4kVA	Three phase	380, 400, 415V (50Hz)	200V (50Hz)	355	299	320	35
IDF-TR4000-7	IDF55C-3, 75C-3	4kVA	Single turn	440, 460V (50Hz)	200V (50Hz)	355	299	320	42

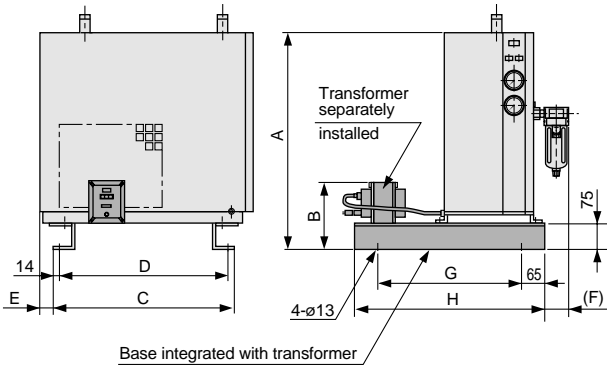
IDF-TR-8



Part No.	Dryer	Capacity	Model	Primary voltage	Secondary voltage	A	B	C	D	E	F	G	Weight (kg)
IDF-TR7000-8	IDF120D	7kVA	Three phase compound	220, 240, 380, 400, 415, 440V (50/60Hz)	200V (50/60Hz)	360	540	400	260	300	11	30	94
IDF-TR9000-8	IDF150D	9kVA				400	650	450	300	350	13	40	109
IDF-TR11000-8	IDF190D	11kVA				550	450	600	350	400	13	60	131
IDF-TR13000-8	IDF240D	13kVA				400	600	450	300	350	13	60	138
IDF-TR18000-8	IDF370B	18kVA				400	650	450	300	350	13	40	179

Accessories (Options)

Base Integrated with Transformer



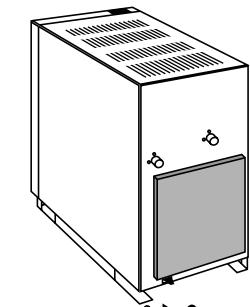
Part No.	Dryer	Transformer	A	B	C	D	E	F	G	H	Weight (kg)	
IDF-TB3	IDF22C1	IDF-TR1500-5	755	327	628	600					83	
		IDF-TR1500-6		379							92	
		IDF-TR1500-7										
IDF-TB4	IDF37C1	IDF-TR1500-5	805	327	708	680					95	
		IDF-TR1500-6		379							104	
		IDF-TR1500-7										
	IDF55C	IDF-TR4000-5	925	379	728	700	51	69	675	805		142
		IDF-TR4000-6		419								163
		IDF-TR4000-7										170
	IDF75C	IDF-TR4000-5	975	379	728	700						154
		IDF-TR4000-6		419								175
		IDF-TR4000-7										182

Part No.	Dryer	Transformer	A	B	C	D	E	F	G	H	Weight (kg)	
IDF-TB1	IDF4D-1	IDF-TR500-1	681	171	356	328					33	
		IDF-TR500-2		217							37	
		IDF-TR500-3.4		284							46	
	IDU3D-1	IDF-TR500-1	584	171	376	348		53				30
		IDF-TR500-2		217								34
		IDF-TR500-3.4		284								43
IDF-TB2	IDF6D-1	IDF-TR500-1	595	171	470	442					39	
		IDF-TR500-2		217							44	
		IDF-TR500-3.4		284							53	
	IDF8D-1	IDF-TR500-1	595	171	470	442			55	69		39
		IDF-TR500-2		217								44
		IDF-TR500-3.4		284								53
	IDF11C-1	IDF-TR500-1	645	171	490	462						54
		IDF-TR500-2		217								59
		IDF-TR500-3.4		284								68
	IDF15C-1	IDF-TR1000-1	695	199	490	462						60
		IDF-TR1000-2		217								66
		IDF-TR1000-3.4		284								78
	IDU4D-1	IDF-TR500-1	681	171	466	438		53				38
		IDF-TR500-2		217								43
		IDF-TR500-3.4		284								52
	IDU6D-1	IDF-TR500-1	785	171	470	442						50
		IDF-TR500-2		217								55
		IDF-TR500-3.4		284								64
IDU8D-1	IDF-TR500-1	885	171	470	442			55	69		54	
	IDF-TR500-2		217								59	
	IDF-TR500-3.4		284								68	
IDU11C-1	IDF-TR500-1	985	171	490	462						66	
	IDF-TR500-2		217								71	
	IDF-TR500-3.4		284								80	
IDU15C-1	IDF-TR1000-1	1035	199	490	462						76	
	IDF-TR1000-2		217								82	
	IDF-TR1000-3.4		284								94	

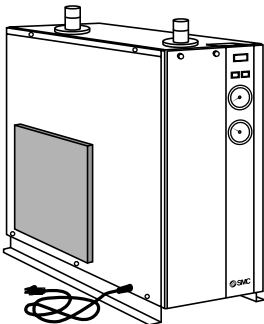


Note) Weight includes air dryer and transformer.
Not available for IDF1D to 3D, IDU22C to 75C.

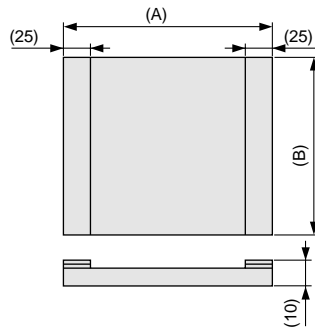
Dust proof filter set



(IDF-FL1C, 2C, 3C, 4C,
IDU-FL3C, 4C)



(IDF-FL6C, 8C, 11C, 15C)

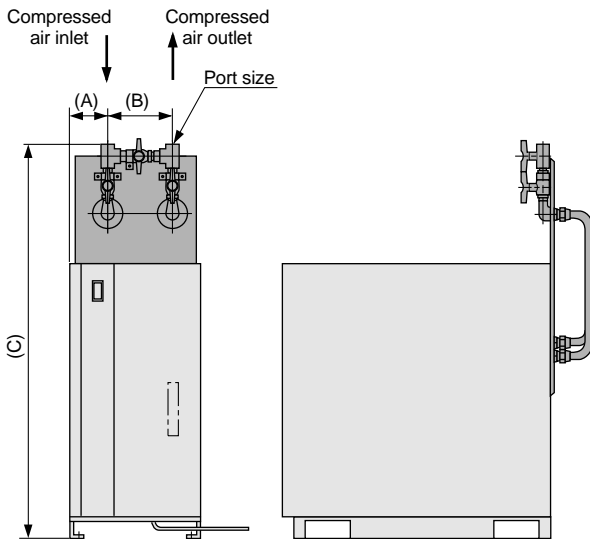


Part No.	Dryer	A	B
IDF-FL1C	IDF1D	180	145
IDF-FL2C	IDF2D	180	145
IDF-FL3C	IDF3D	225	180
IDF-FL4C	IDF4D	225	180
IDF-FL6C	IDF6D	345	270
IDF-FL8C	IDF8D	345	270
IDF-FL11C	IDF11C	365	270
IDF-FL15C	IDF15C	385	310
IDF-FL22C	IDF22C1	430	310
IDF-FL37C	IDF37C1	555	380
IDF-FL55C	IDF55C	600	410
IDF-FL75C	IDF75C	640	510
IDF-FL120D	IDF120D	360	420
		440	420
IDF-FL150D	IDF150D	360	420
		440	420
		440	420
IDF-FL190D	IDF190D	250	480
		750	480
		440	670
IDF-FL240D	IDF240D	600	670

Part No.	Dryer	A	B
IDU-FL3C	IDU3D	245	265
IDU-FL4C	IDU4D	240	300
IDU-FL6C	IDU6D	400	170
		345	270
IDU-FL8C	IDU8D	405	270
		345	
IDU-FL11C	IDU11C	395	310
		365	270
IDU-FL15C	IDU15C	395	310
		385	
IDU-FL22C	IDU22C1	480	430
		430	310
IDU-FL37C	IDU37C1	605	475
		555	345
IDU-FL55C	IDU55C	605	475
		600	410
		625	550
IDU-FL75C	IDU75C	640	510

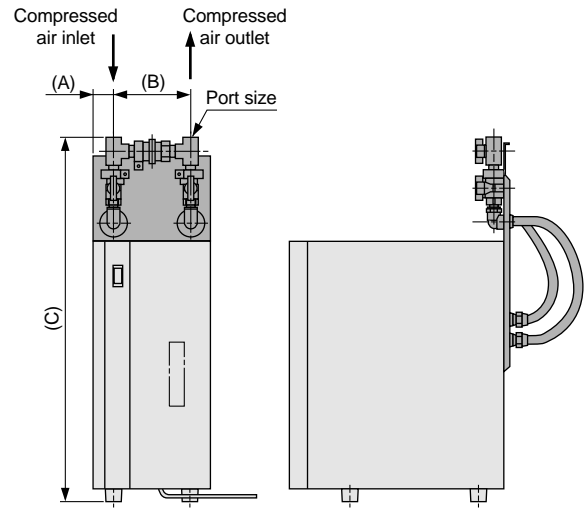
Bypass Piping Set

IDU3D, 4D



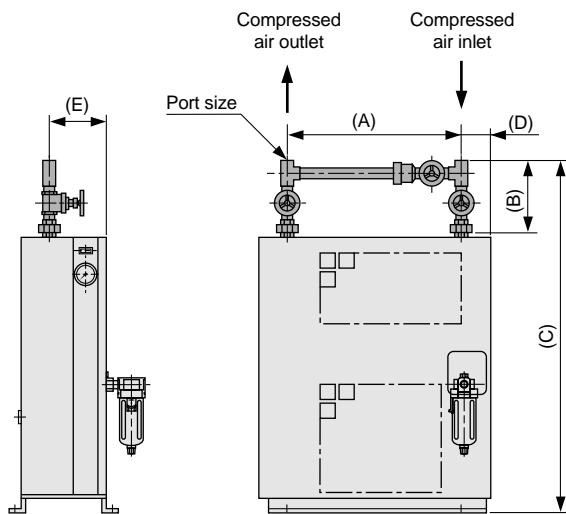
Part No.	Applicable dryer	Port size Rc	A	B	C
IDU-BP3C	IDU3D	3/8	77	112	706
IDU-BP4C	IDU4D		66	112	791

IDF1D, 2D, 3D, 4D



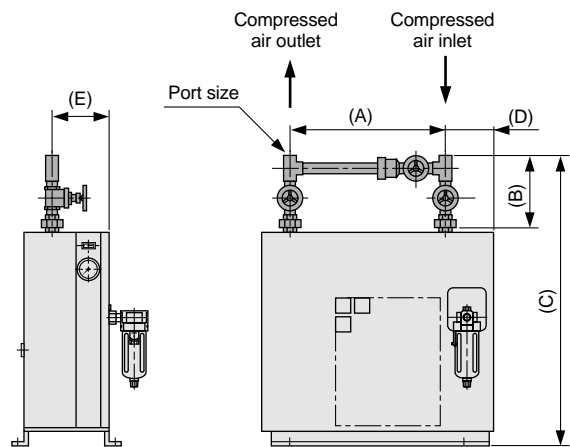
Part No.	Applicable dryer	Port size Rc	A	B	C
IDF-BP1C	IDF1D	3/8	34	112	563
IDF-BP2C	IDF2D		62	112	571
IDF-BP3C	IDF3D		57	112	632
IDF-BP4C	IDF4D		66	112	792

IDU6D, 8D, 11C, 15C, 22C1, 37C1, 55C, 75C



Part No.	Applicable dryer	Port size Rc	A	B	C	D	E
IDU-BP6C	IDU6D	1/2	445	165	915	85	141
IDU-BP8C	IDU8D	3/4	445	196	1045	85	141
IDU-BP11C	IDU11C	3/4	445	196	1155	91	152
IDU-BP15C	IDU15C	1	445	222	1230	91	175
IDU-BP22C	IDU22C1	1	445	222	1445	70	71
IDU-BP37C	IDU37C1	1 1/2	550	280	1615	136	112
IDU-BP55C	IDU55C	2	530	325	1750	155	87
IDU-BP75C	IDU75C	2	530	325	1885	220	87

IDF6D, 8D, 11C, 15C, 22C1, 37C1, 55C, 75C

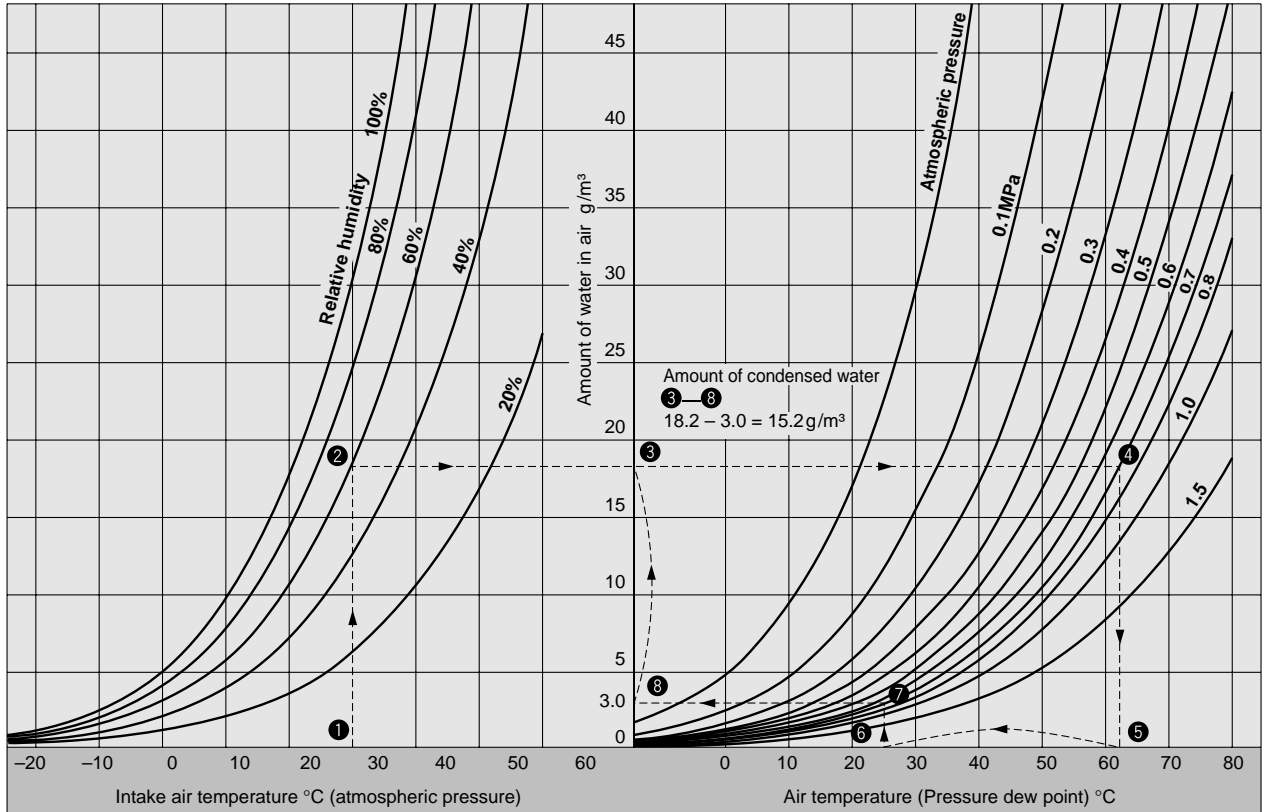


Part No.	Applicable dryer	Port size Rc	A	B	C	D	E
IDF-BP6C	IDF6D	1/2	410	165	725	120	141
IDF-BP8C	IDF8D	3/4	410	196	755	120	141
IDF-BP11C	IDF11C	3/4	405	196	815	131	152
IDF-BP15C	IDF15C	1	405	222	890	131	175
IDF-BP22C	IDF22C1	1	405	222	970	91	183
IDF-BP37C	IDF37C1	1 1/2	405	280	1075	98	208
IDF-BP55C	IDF55C	2	405	325	1240	98	85
IDF-BP75C	IDF75C	2	405	325	1290	98	85

Cannot be mounted on models with option "A".

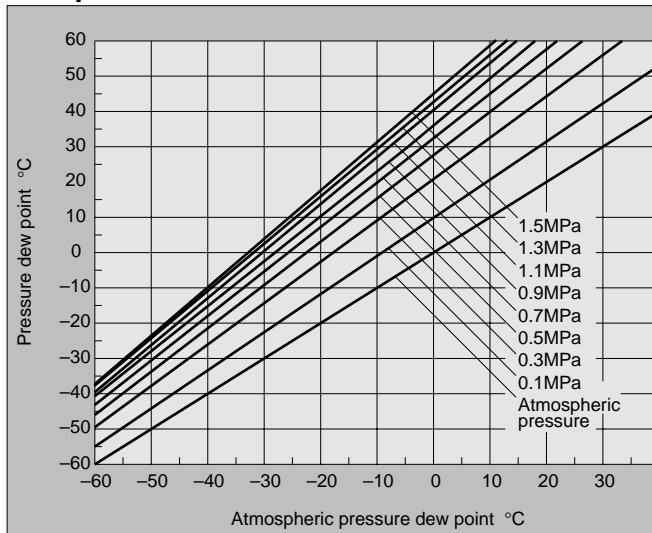
Technical Data

Pressure dew point — Condensed water calculation



[Example] If air at 30°C and 60% humidity is pressurized to 0.7MPa, the dew point of the air will be 62°C. (1→2→3→4→5) If this is cooled to 25°C, the amount of condensed water generated will be 15.2g/m³. (6→7→8→3) Therefore, with an air flow rate of 3m³/min (22kW equivalent compressor), the amount of condensed water per unit of time is $15.2 \times 3 \times 60 = 2736\text{g/h}$.

Dew point conversion chart





Series **IDU/IDF**

Safety Instructions

These safety instructions are intended to prevent a hazardous situation and/or equipment damage. These instructions indicate the level of potential hazard by a label of "**Caution**", "**Warning**" or "**Danger**". To ensure safety, be sure to observe ISO 4414 Note 1), JIS B 8370 Note 2) and other safety practices.

⚠ Caution : Operator error could result in injury or equipment damage.

⚠ Warning : Operator error could result in serious injury or loss of life.

⚠ Danger : In extreme conditions, there is a possible result of serious injury or loss of life.

Note 1) ISO 4414: Pneumatic fluid power – Recommendations for the application of equipment to transmission and control systems

Note 2) JIS B 8370: General Rules for Pneumatic Equipment

⚠ Warning

1. The compatibility of pneumatic equipment is the responsibility of the person who designs the pneumatic system or decides its specifications.

Since the products specified here are used in various operating conditions, their compatibility for the specific pneumatic system must be based on specifications or after analysis and/or tests to meet your specific requirements.

2. Only trained personnel should operate pneumatically operated machinery and equipment.

Compressed air can be dangerous if handled incorrectly. Assembly, handling or repair of pneumatic systems should be performed by trained and experienced operators.

3. Do not service machinery/equipment or attempt to remove components until safety is confirmed.

1. Inspection and maintenance of machinery/equipment should only be performed after confirmation of safe locked-out control positions.
2. When equipment is to be removed, first confirm the safety process as mentioned above.
3. Before machinery/equipment is restarted, first confirm that safety measures are implemented, and proceed with caution.

4. Contact SMC if the product is to be used in any of the following conditions:

1. Conditions and environments beyond the given specifications, or if product is used outdoors.
2. Installation on equipment in conjunction with atomic energy, railway, air navigation, vehicles, medical equipment, food and beverages, recreation equipment, emergency stop circuits, press applications, or safety equipment.
3. An application which has the possibility of having negative effects on people, property, or animals, requiring special safety analysis.



Series IDU/IDF

Air Preparation Equipment Precautions 1

Be sure to read before handling.

Precautions on Design

Employ a safe design so that the following type of unexpected conditions will not occur.

⚠ Warning

1. Design so that high temperature compressed air does not flow to pneumatic equipment.

In case of cooling equipment failure (stoppage of cooling water in water cooled type after cooler, stoppage of fan motor in air cooled type after cooler, etc.) on the air supply side, high temperature compressed air can flow downstream and cause damage or malfunction of downstream equipment.

2. Use a design that allows for stoppage of the compressed air supply.

Compressed air flow may be stopped by freezing of a refrigerated air dryer or malfunction of the switching valve (heatless dryer).

⚠ Caution

1. Use a design that prevents reverse pressure and back flow.

Reverse pressure and back flow can cause equipment damage or malfunction, etc.

Give attention to safety measures, including handling procedures.

Selection

⚠ Warning

1. When selecting equipment, first adequately confirm the purpose for which it will be used, the required specifications and the operating conditions (pressure, flow rate, temperature, environment), etc. Then select equipment from the latest catalogs without exceeding the specification ranges. Contact SMC in advance regarding any questions.

2. Do not use for caisson shields, breathing, medical treatment or for blowing of medicine or food products which will enter the human body.

This cleaning equipment is exclusively for use with industrial compressed air, and should not be used for other applications. If other application is unavoidable, give attention to safety measures and contact SMC in advance.

3. This product cannot be used on board vehicles or vessels.

This product cannot be used on board vehicles, vessels or other transportation devices, because vibration will cause damage. If this type of use is unavoidable, contact SMC in advance.

Selection

⚠ Caution

1. Do not allow flow greater than the rated flow rate.

If the flow exceeds the rated flow rate even momentarily, this can cause drainage and oil to be sprayed downstream or cause damage, etc.

2. The product cannot be used with low pressure air (blowers).

Operating below the minimum operating pressure can cause reduced performance and malfunction. If this type of use is unavoidable, contact SMC in advance.

Mounting

⚠ Caution

1. Confirm the mounting orientation.

Since the mounting orientation is different for each piece of equipment, this should be confirmed either in this catalog or in the instruction manual. Mounting in a tilted orientation can cause faulty drainage discharge, auto drain malfunction and damage in some types of equipment.

2. Ensure sufficient maintenance space.

When installing and mounting, be sure to allow the space required for maintenance and inspections. Confirm the necessary maintenance space in the instruction manual for each piece of equipment.

Piping

⚠ Caution

1. Preparation before piping

Before piping is connected, it should be thoroughly blown out with air (flushing) or washed to remove chips, cutting oil and other debris from inside the pipe.

2. Wrapping of pipe tape

When screwing together pipes and fittings, etc., be certain that chips from the pipe threads and sealing material do not get inside the piping.

Furthermore, when pipe tape is used, leave 1.5 to 2 thread ridges exposed at the end of the threads.

3. Implement measures to prevent drainage from collecting inside piping.

Drains should be installed in the lower sections of piping that rises, or piping should be designed with a slight taper provided along the direction of flow so that drainage will not accumulate.

4. Confirm IN and Out ports.

When piping is being installed, take care to prevent incorrect connection of the water and air sides, or the IN and OUT ports.



Series IDU/IDF

Air Preparation Equipment Precautions 2

Be sure to read before handling.

Air Supply

Warning

1. Do not use with fluids other than compressed air.

Cleaning equipment is designed exclusively for use with compressed air. Contact SMC in advance if a fluid other than compressed air is to be used.

2. Do not use compressed air which contains chemicals, organic solvents or corrosive gases.

Do not use compressed air containing chemicals, organic solvents, salt or corrosive gases, as this can cause damage and/or malfunction, etc.

3. Use within the operating pressure range.

The operating pressure range is determined by the equipment being used. Operation beyond this range can cause damage, failure or malfunction.

Operating Environment

Warning

1. Do not use in the following environments, as this can cause failure.

1. Locations with an atmosphere of corrosive gases, organic solvents or chemical solutions, or where there may be contact with these.
2. Locations where there is contact with sea spray, water or steam.
3. Locations which receive direct sunlight. (Sunlight should be blocked to prevent deterioration of resin from ultra violet rays, and over heating, etc.)
4. Locations near heat sources with poor ventilation. (Heat sources should be blocked off, because radiated heat may cause damage due to softening of materials.)
5. Locations with impacts or vibration. (Check the specifications for each series.)
6. Locations with high moisture and dust. (Contact SMC in advance.)

2. Adhere to the fluid and ambient temperature ranges.

The fluid and ambient temperatures are determined by the equipment being used. Operation outside of the prescribed range can cause damage, failure or malfunction, etc.

Maintenance

Warning

1. If an abnormality occurs, stop the compressed air.

If abnormalities such as smoke, unusual odor or unusual noise occur, stop the inflow of compressed air, as this may indicate a fire.

2. When performing inspections, set the compressed air pressure at zero.

When the compressed air side is to be disassembled for auto drain inspection, separator element replacement or film module replacement, etc., confirm that the pressure is at zero before proceeding.

Caution

1. Do not place heavy objects on the unit or use it as a step.

The equipment may be deformed or damaged, and if balance is lost, falling may cause injury.

2. Discharge drainage regularly.

Accumulation of drainage in equipment, piping or other areas can cause malfunction of the equipment or unexpected trouble due to splash over into the downstream side, etc. Therefore, the amount of drainage and the operation of auto drains should be checked every day.



Series IDU/IDF Specific Product Precautions 1 Air Preparation Equipment Precautions

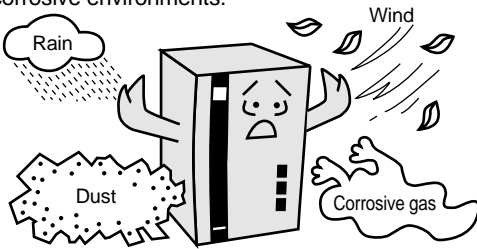
Refer to pages 26 through 28 for safety instructions and cleaning equipment precautions.

Installation Location

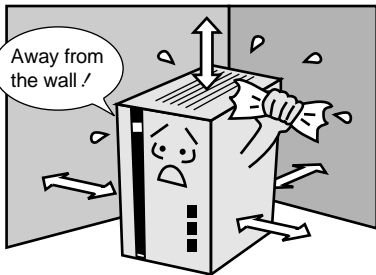
⚠ Caution

- Avoid locations where the air dryer will be in direct contact with wind and rain. (Places where relative humidity is more than 85%)
- Avoid exposure to direct sunlight.
- Avoid dusty or corrosive environments.

If it is used in the above environments, select option C (with anti-corrosive treatment).

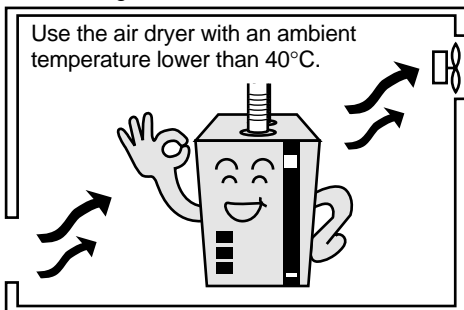


- Avoid places with poor ventilation and high temperature.



- Allow ample space around the air dryer.

- Avoid locations subjected to vibrations.
- Avoid locations where drainage can freeze.

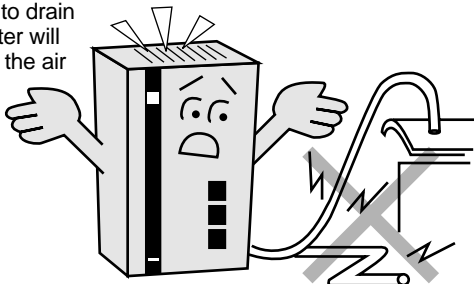


- Avoid installation on moving objects like trucks, ships, and so forth.

Drain Tube

⚠ Caution

- A polyurethane tube of 10mm outer diameter is attached as the drain tube for IDF1D to 4D and IDU3D, 4D. Use this tube to discharge drainage.
- Do not use the drain tube in an upward direction. Do not bend or crush the drain tube. (Operation of auto drain will stop and water will flow out through the air outlet.)

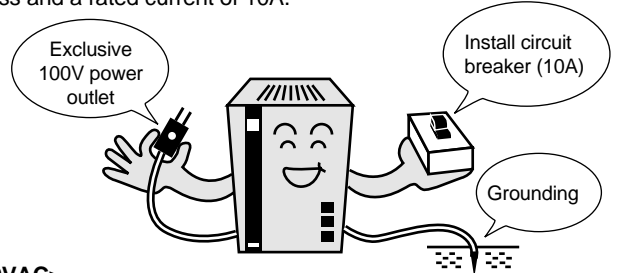


Power Supply

⚠ Caution

<100VAC>

- Insert the power supply plug into an exclusive 100VAC power outlet.
 - Install a circuit breaker (10A)* at the power supply.
 - Be sure to ground the power supply prior to use.
 - Multiple-branch wiring is dangerous as it causes over-heating.
 - Do not extend the power supply cord length using an extension cord.
- A voltage drop may cause the air dryer to stop operating.
* Use a circuit breaker having a sensitivity current of 30mA or less and a rated current of 10A.



<200VAC>

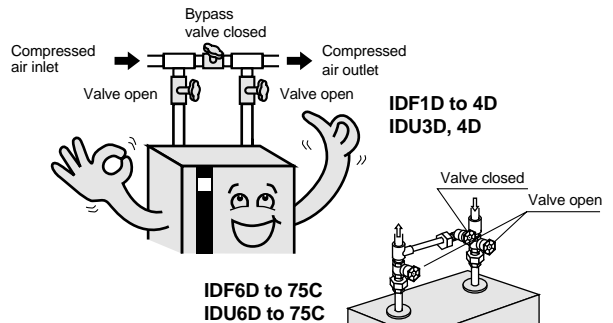
- Connect the power supply to the terminal block.
- Install a suitable circuit breaker applicable to each model.

When the voltage used is other than specified in the standard product specifications, use a transformer (page 21).

Air Piping

⚠ Caution

- Be careful to avoid errors in connecting the air piping to the compressed air inlet (IN) and outlet (OUT).
- Install bypass piping which it is needed for maintenance.



- When tightening piping at the air inlet/outlet tube, the nozzle should be held firmly with a pipe wrench. (IDF6D to 75C, IDU6D to 75C)
- Variation of operating conditions may cause condensate to form on the surface of the outlet piping. In the case of models larger than IDF6D and IDU6D, roll thermal insulation around piping to prevent condensate from forming.
- Vibration caused by the compressor should not be transmitted through air piping to the air dryer.
- Do not allow the weight of piping to be applied directly to the air dryer.



Series IDU/IDF Specific Product Precautions 2 Air Preparation Equipment Precautions

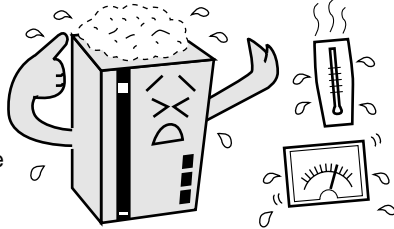
Refer to pages 26 through 28 for safety instructions and cleaning equipment precautions.

Protection Circuit

⚠ Caution

When the air dryer is operated under the following conditions, the protection circuit is activated, the light goes off and operation stops.

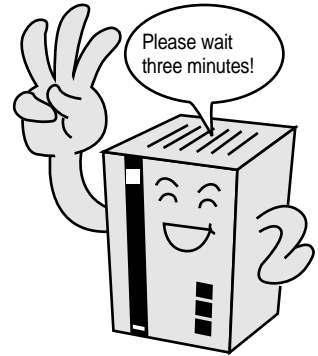
- When compressed air temperature is too high
- When compressed air flow rate is too high
- When ambient temperature is too high (40°C or higher)
- When power supply is beyond rated voltage by $\pm 10\%$
- When ventilation port is obstructed by a wall or clogged with dust



Time Delay for Restarting

⚠ Caution

Allow at least three minutes before restarting the dryer. If the air dryer is restarted within three minutes after being stopped, the protection circuit will be activated, the operating light goes off and the dryer will not be activated.



Compressor Air Delivery

⚠ Caution

Use an air compressor of 100 l/min or greater air delivery with IDF2D to 4D/IDU3D, 4D, and 300 l/min or greater air delivery with IDF6D to 75C/IDU6D to 75C.

Since the auto drain of IDF2D to 75C/IDU3D to 75C is designed in such a way that the valve remains open unless the air pressure rises to 0.15MPa or higher, air will blow out from the drain discharge port when the air compressor starts up until the pressure increases. Therefore, if an air compressor has a low air delivery, the pressure may not be sufficient.

Crank Case Heater

⚠ Caution

A crank case heater is installed on IDF370B. Energize the crank case heater 12 hours prior to operation of the dryer to prevent trouble occurring in the refrigerant compressor.

Auto Drain

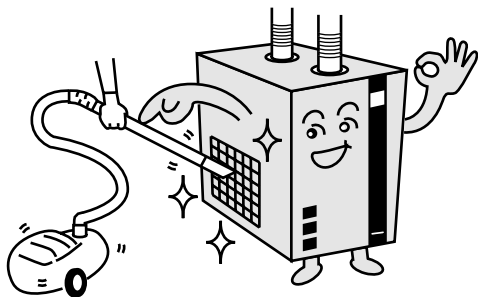
⚠ Caution

The auto drain may not function properly, depending on the quality of compressed air. Check its operation once a day.

Cleaning of Ventilation Area

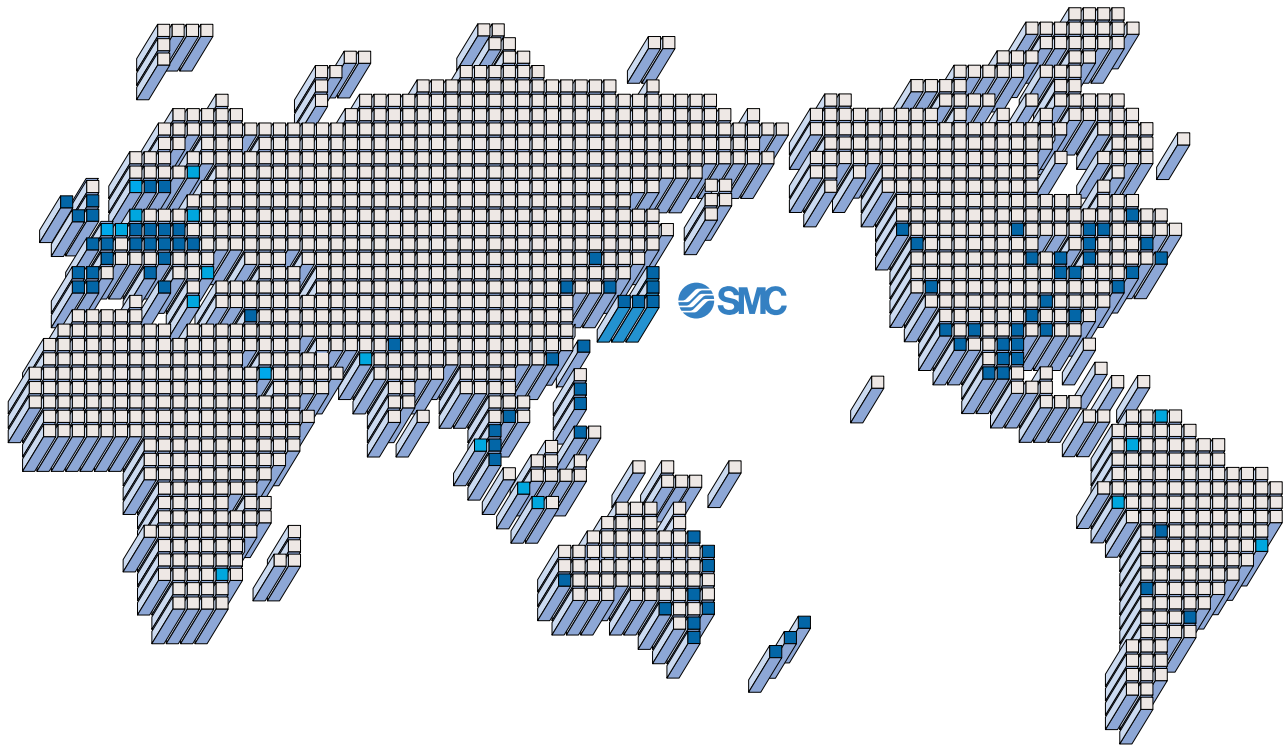
⚠ Caution

Remove dust from the ventilation area once a month using a vacuum cleaner or an air blow nozzle.





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