

Refrigerated Air Dryer

Series IDU(A)□E

Air Flow Capacity

Increased up to the

max **40%**

(SMC comparison)

Power Consumption

Decreased up to the

max **40%**

(SMC comparison)

Refrigerant

R134a (HFC)
R407C (HFC)

(Coefficient of destruction
for ozone is zero)

High temperature air inlet type
(Rated inlet air temperature: 55°C)

Improved corrosion resistance with the use
of stainless steel, plate type heat exchanger

Call us for
details:

IDU8E

IDU15E

IDU22E



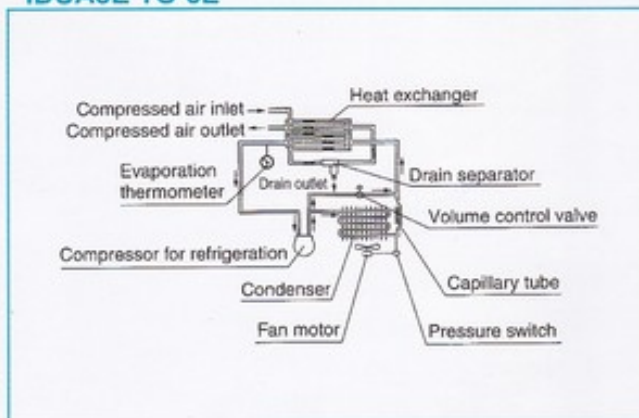
Specification		Model									
		IDUA3E	IDUA4E	IDUA6E	IDU8E	IDU11E	IDU15E	IDU22E	IDU37E	IDU55E	IDU75E
		-23	-23	-23	-23	-23	-23	-23	-23	-23	-23
Rated Condition	Air Flow Capacity ℓ /min	Standard condition (ANR) (50Hz)									
	Inlet air pressure (Mpa)	0.7									
	Inlet Air Temperature (°C)	55									
	Ambient Temperature (°C)	32									
Operating Range	Working Fluid	Compressed Air									
	Inlet Air Temperature (°C)	5 to 80									
	Inlet Air Pressure (MPa)	0.15 to 1.0									
	Ambient Temperature (humidity) (°C)	2 to 40 (Relative Humidity of 85% or less)									
Electric Specification	Power supply voltage frequency	Single -phase 230VAC \pm 10% 50Hz									
	Operating Current (A) 50Hz	1.5	1.6	2.9	1.7	3.0	3.4	4.3	7.5	10.7	
	Power Consumption (W) 50Hz	210	220	400	260	425	550	960	1600	2300	
Circuit Breaker (Note 2) (A)		5					10			20	
Refrigerant		R134a (HFC)					R407C (HFC)				
Auto drain		Float type (normally open)									
Port size		Rc 3/8	Rc 1/2	Rc 3/4			Rc 1	R1	R 1.½	R 2	
Weight (kg)		23	27	28	44	47	71	90	130	160	166
Coating color		Body panel: Urban white 1, Base : Urban gray 2									
Applicable Compressor kW (Standard)		2.2	3.7	5.5	7.5	11	15	22	37	55	75

Note 1: The data for ℓ /min (ANR) is referring to the conditions of 20°C, 1atm. Pressure & relative humidity of 65%.

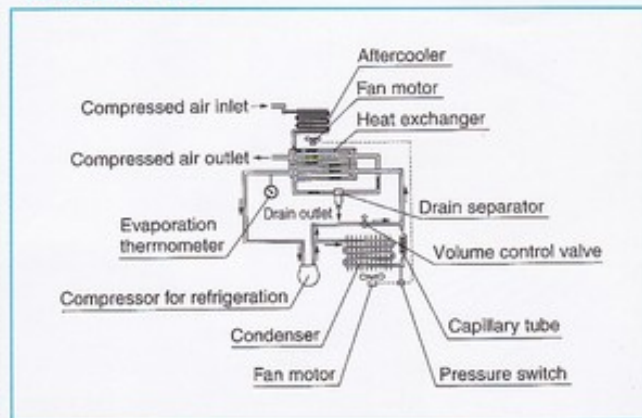
Note 2: Install circuit breaker that comes with sensivity of 30mA.

Construction Principle (Circuit for Air / Refrigerant)

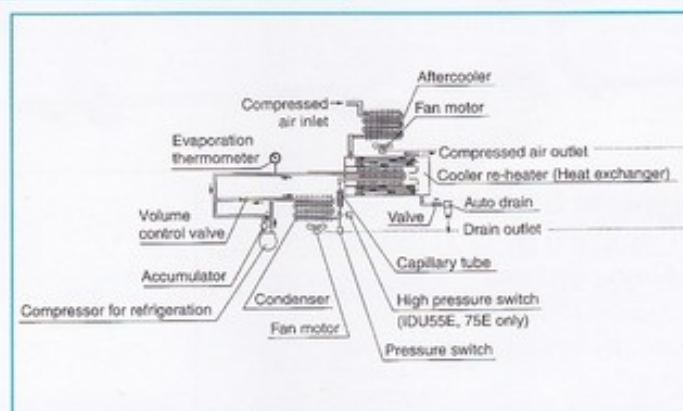
IDUA3E TO 6E



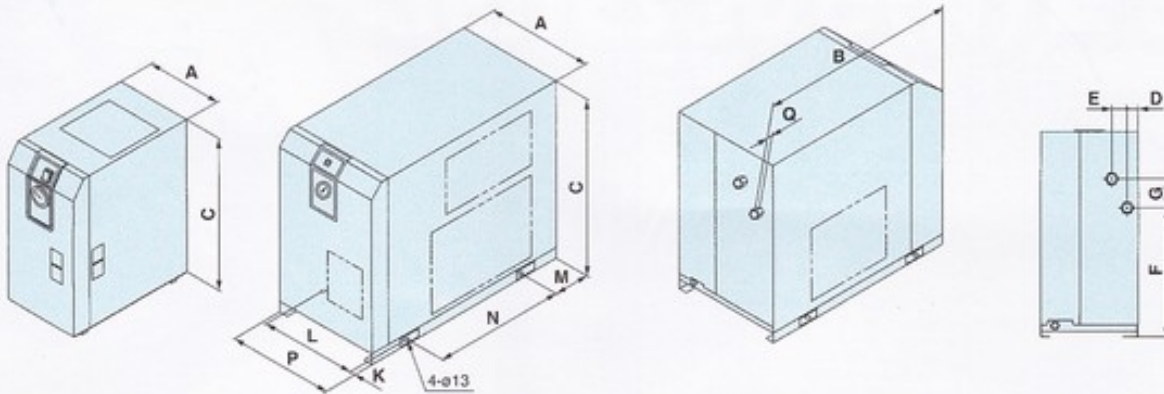
IDU8E to 15E



IDU22E TO 75E



IDUA3E to 6E

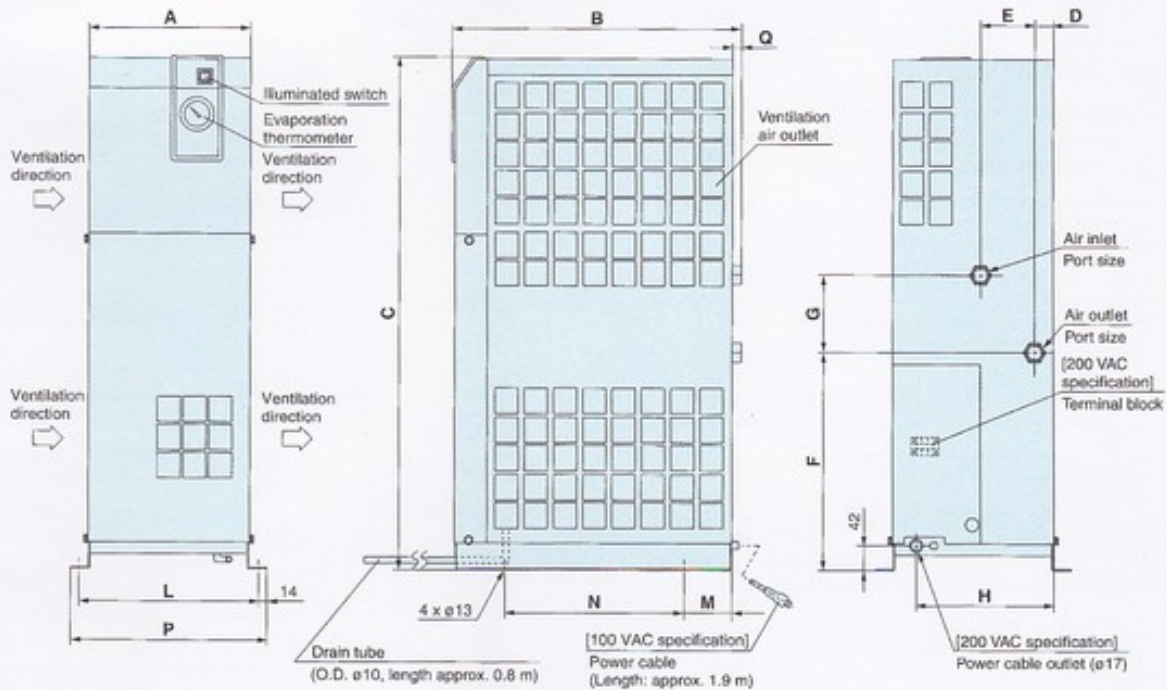


Dimensions

(mm)

Model	Port size	A	B	C	D	E	F	G	K	L	M	N	P	Q
IDUA3E	Rc 3/8	455	498		31	42	283	80	15	240	80	300	-	15
IDUA4E	Rc 1/2	270	485	568										
IDUA6E	Rc 3/4		485											

IDU8E to 15E

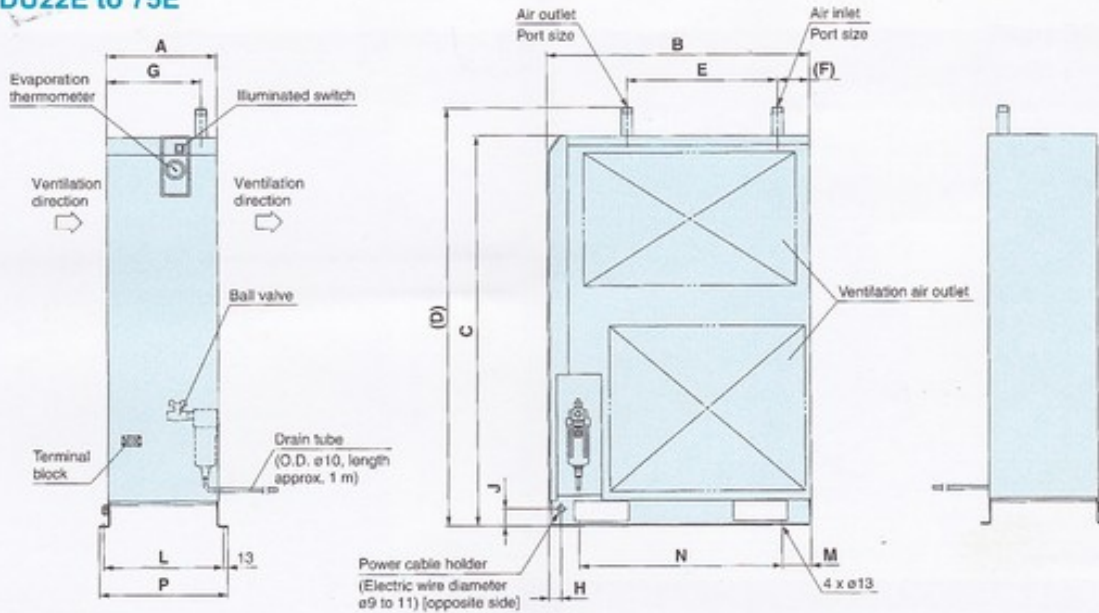


Dimensions

(mm)

Model	Port size	A	B	C	D	E	F	G	H	L	M	N	P	Q
IDU8E	Rc 3/4	270	485	859	31	90	365	130	230	300	80	300	328	15
IDU11E				909										
IDU15E	Rc 1	300	620	960	79	54	425	93	258	330	66	470	358	16

IDU22E to 75E



Dimensions

(mm)

Model	Port size	A	B	C	D	E	F	G	H	J	L	M	N	P
IDU22E	R 1	325	775	1153	1235	445	93	279	46	353	85	600	379	
IDU37E	R1 1/2	360		1258	1350	550	64	290	50	388		680	414	
IDU55E	R 2	470	855	1345	1440	530	53	360	30	500	75	700	526	
IDU75E				1480	1575									70

Model Selection Guide

The corrected air flow capacity, which considers the user's operating conditions, is required for selecting the air dryer. Please select using the following procedures.

- 1 Read the correction factor.**
Obtain the correction factor A to D suitable for your operating condition from the table below.
- 2 Calculate the corrected air flow capacity.**
Obtain the corrected air flow capacity from the following formula.
Corrected air flow capacity = Operating air flow capacity × (Correction factor A × B × C × D).
- 3 Select the model**
Select the model which corrected air flow capacity exceeds the air flow capacity from the specification table. (For the air flow capacity, refer to the data E).

Data A: Inlet Air Temperature

Inlet air temperature (°C)	Correction factor	
	IDUA3E-37E	IDU55E,75E
5 to 45	1.15	1.21
50	1.07	1.10
55	1	1
60	0.95	0.87
65	0.9	0.76
70	0.86	0.74
75	0.82	0.72
80	0.79	0.70

Data B: Ambient Temperature

Ambient temperature (°C)	Correction factor	
	IDUA3E-37E	IDU55E,75E
2 to 25	1.2	1.25
30	1.04	1.11
32	1	1
35	0.93	0.90
40	0.84	0.63

Data C: Outlet Air Pressure

Outlet air pressure dew point (°C)	Correction factor	
	IDUA3E-37E	IDU55E,75E
3	0.55	0.53
5	0.7	0.67
10	1	1
15	1.3	1.30

Data D: Inlet Air Pressure

Inlet air pressure (MPa)	Correction factor	
	IDUA3E-37E	IDU55E,75E
0.2	0.62	0.62
0.3	0.72	0.69
0.4	0.81	0.77
0.5	0.88	0.85
0.6	0.95	0.93
0.7	1	1
0.8	1.06	1.08
0.9	1.11	1.16
1 to 1.6	1.16	1.23

Data E: Air Flow Capacity

Model	IDUA3E	IDUA4E	IDUA6E	IDU8E	IDU11E	IDU15E	IDU22E	IDU37E	IDU55E	IDU75E	
Air flow capacity (l/min) (ANR)	50 Hz	320	520	750	1100	1500	2600	3900	5700	8400	11000