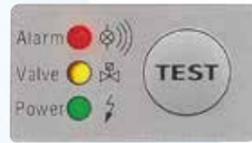


Energy saving & highly reliable

Two sensors prevent wasteful air consumption.

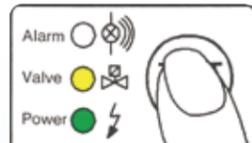
Control unit

Electronic circuit with self-diagnosis function



The electronic circuit with self-diagnosis function constantly monitors the discharge status displaying it with LEDs. (excluding DB3003D)

Arbitrary discharge of drainage



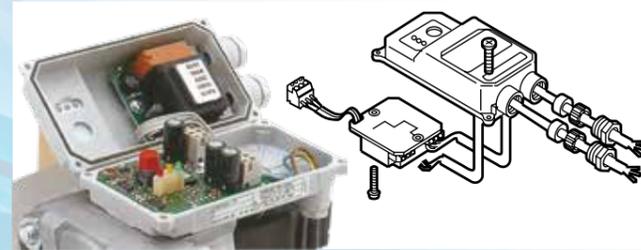
Drain can be discharged as desired by pressing the TEST button during operation check, etc. External test terminal added. (excluding DB3003D)

Self-avoidance operation simultaneous with alarm mode output



If drain discharge does not work normally, an alarm signal is output and self-recovery operation is repeated until the problem of the valve is removed. (excluding DB3003D)

Easy wiring



The power supply and control sections are compactly stored. The power supply section can be detached allowing you to connect the pipes easily. (excluding DB3003D)



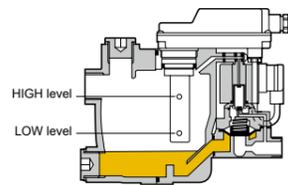
Level sensor

Highly reliable level sensor



The sensor is protected by the resin cover. Stable performance is not affected by the drain quality.

No wasteful consumption of compressed air



HIGH and LOW level sensors discharge drainage only, preventing wasteful air consumption. (DB1090D, 3090D, 3700)

Tank

Easy to clean inside the tank



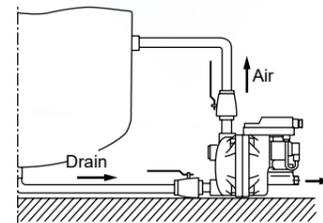
You can access inside the tank easily by simply removing four bolts without disconnecting the inlet pipe. (DB102, 4/3024, 1090D, 3090D)

Oil-free



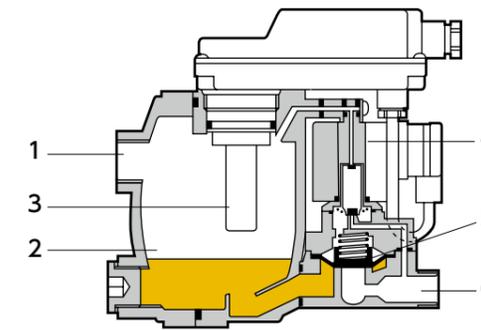
Rust proof treatment on the inner and outer surfaces of the housing. (DB3000 Series)

Port options that can be selected according to the installation condition



If the inlet pipe is connected to the bottom part and the amount of drain is large, the pipe at the top can be used as an air vent. (DB1024, 3024, 1090D, 3090D, 3700)

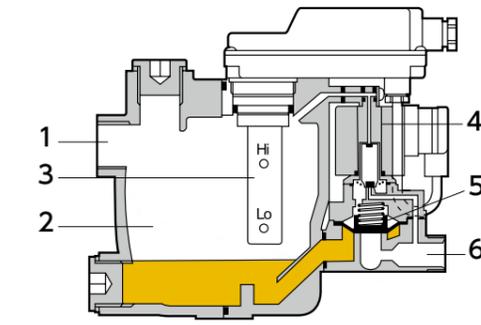
Operational explanation



(DB1024)

DB Series single sensor

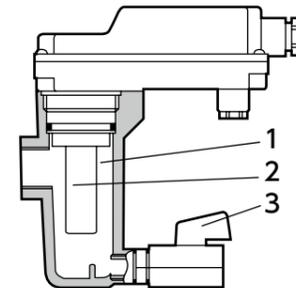
- When drain accumulates in the tank (1), the level sensor (3) detects it.
- The pilot valve (4) starts, and drainage is discharged.
- The valve start time is set by the timer to minimize air leakage.
- The alarm mode is activated if an event occurs that prevents drainage from being discharged.



(DB1090D)

DB Series double sensor

- When drain accumulates in the tank, the high level of the level sensor is detected.
- The pilot valve (4) starts, and drainage is discharged.
- The valve open time is determined by calculating it from the rate at which the drain level drops.
- The valve is closed to prevent leakage before the compressed air starts leaking.
- The alarm mode is activated if an event occurs that prevents drainage from being discharged.



DBS1006

- When drain accumulates in the tank, the level sensor detects it.
- Outputs a buzzer, red LED blinks and an alarm signal.
- When an alarm signal is output, accumulated drain can be manually discharged from the drain cock.
- After discharge, the alarm signal disappears and the system returns to the original state. (Drain is not discharged automatically since this product is not a drain discharger.)

Automatic drain series map

		Automatic drain DB Series									Drain sensor DBS1006					
		11	15	22	37	55	75	120	150	300		450	900			
		1		5		10		50		100		500		1000		
Compatible compressor	No-lubrication	DB3003D		DB3006E	DB3024					DB3090D		DB3700				
	Lubrication			DB1006E	DB1024					DB1090D						



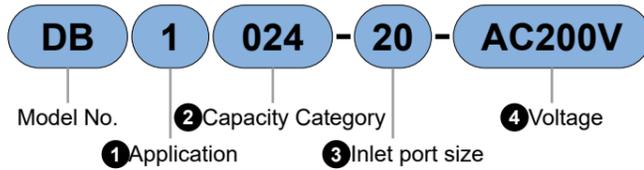
Super Drain DB1000, DB3000 Series

Drain discharger with highly reliable level sensor
 ●Port size: G1/2" to G1"
 (Compatible with air compressor discharge flow rates from 2.5 to 1000 m³/min (ANR))



DB1000, DB3000 Series Dimensions

Model No. Notation



1 Application

Code	Description
1	For lubrication compressor
3	For no-lubrication compressor

2 Capacity Category

Code	Description
003D	22 kW or less
006E	55 kW or less
024	240 kW or less
090D	900 kW or less
700	7000 kW or less

Note: Capacity code is the capacity of air compressor for the corresponding air dryer.

3 Inlet port size

Code	Description
15	G1/2"
20	G3/4"

4 Voltage

Code	Description
Blank	- ②Leave blank for capacity category "003D".
AC200V	200 VAC For capacity classification other than the above, select the 200 VAC.

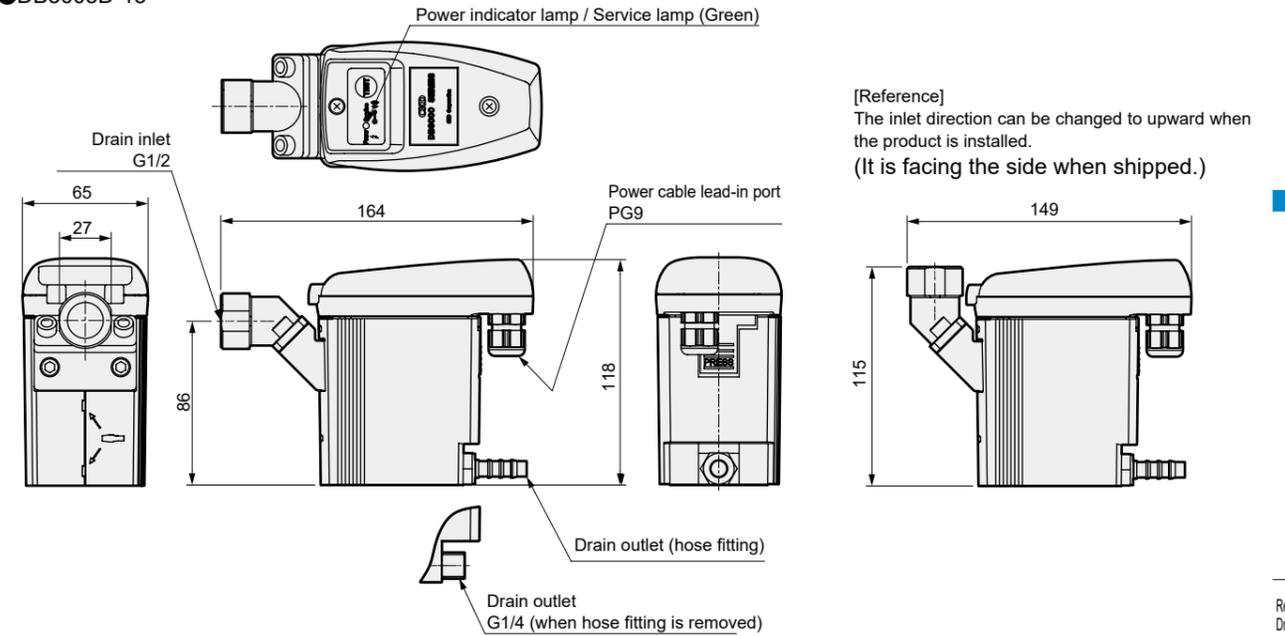
Specifications

Item	DB3003D-15	DB1006E-15 -AC200V	DB3006E-15 -AC200V	DB1024-15 -AC200V	DB3024-15 -AC200V	DB1090D-20 -AC200V	DB3090D-20 -AC200V	DB3700-20 -AC200V
Port size	Drain inlet	G1/2"	G1/2"	G1/2"	G1/2"	G3/4"	G3/4"	G3/4", G1"
	Drain outlet	8 mm hose fitting or G1/4"	10 mm hose fitting or G3/8"	13 mm hose fitting or G1/2"	G1/2"			
Processing air flow rate of applicable air compressor m ³ /min (ANR)	2.5	4.5	20	90	1000			
Processing air flow rate of applicable air dryer m ³ /min (ANR)	5	9	40	180	2000			
[Reference] Capacity of compressor for the corresponding air dryer (kW)	22	55	240	900	7000			
Working Conditions	Working fluid	Drain contained in compressed air						
	Ambient temperature °C	1 to 60						
	Working pressure MPa	0.08 to 1.6						
Electrical Specifications	Power Supply	Single-phase 95 VAC to 240 VAC 50/60Hz	Single phase 200 VAC 50/60 Hz					
	Max. power consumption	3 VA	8.0 VA					
Alarm contact capacity	—	max.250 VAC / 1A, max.30 VDC / 1A, min.5 VDC / 10 mA						
Degree of Protection	IP67	IP65						
Weight kg	0.8	0.8	2.0	2.9	5.9			
Applicable air compressor type	No-lubrication	Lubrication	No-lubrication	Lubrication	No-lubrication	Lubrication	No-lubrication	No-lubrication

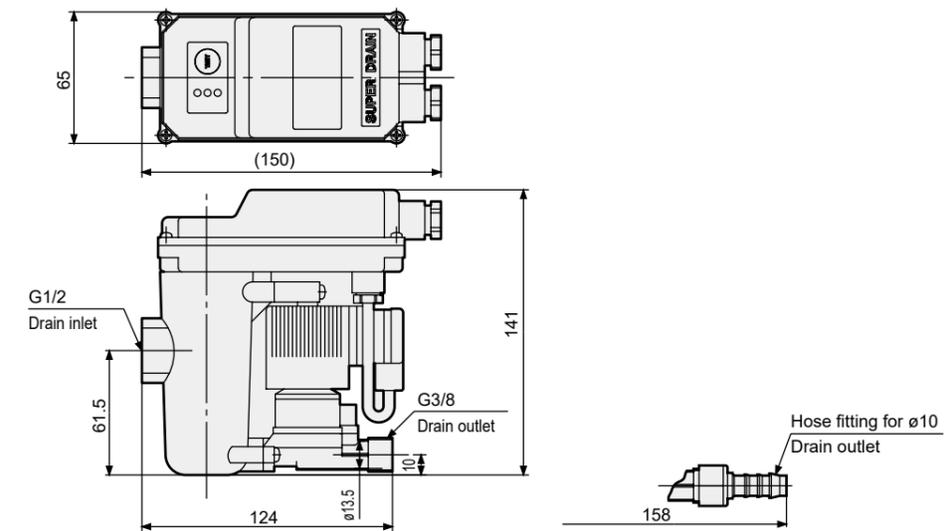
*1: G is a parallel female thread. can be connected with R thread.
 *2: Use a hose fitting or G1/4" for the drain outlet of DB3003D. G1/4" is a parallel male thread.
 *3: Use a hose fitting or G3/8" for the drain outlet of DB1006E/3006E. G3/8" is a parallel male thread.
 *4: Use a hose fitting or G1/2" for the drain outlet of DB1024/3024 and DB1090D/3090D. G1/2" is a parallel male thread.
 *5: Use G3/4" or G1" for the drain inlet of DB3700.
 *6: DB3000 Series can be used for lubrication compressor.

Dimensions

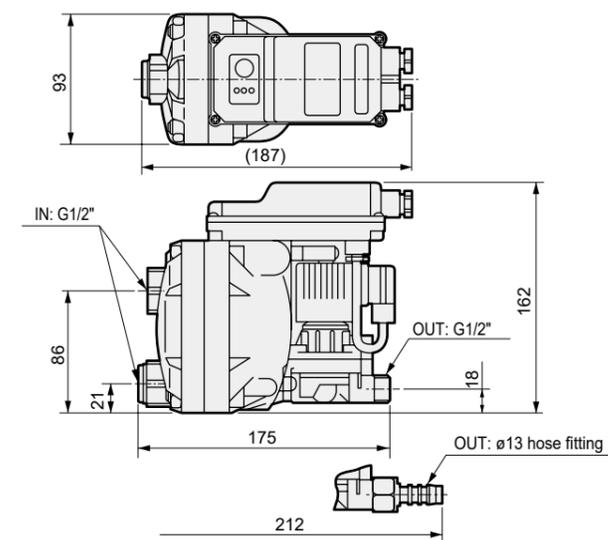
●DB3003D-15



●DB1006E-15, DB3006E-15



●DB1024-15, DB3024-15



Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

Drain discharger, etc.

Main Line Components

Refrigeration Dryers

Desiccant Dryers

High Polymer Membrane Dryers

Main Line Filters

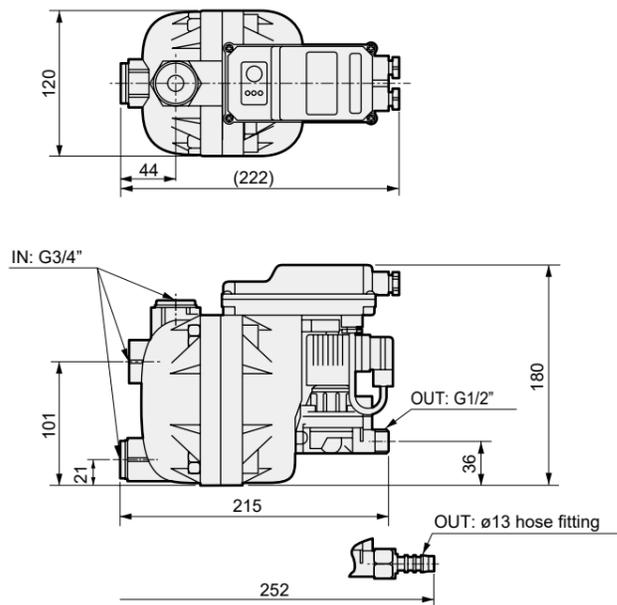
Drain discharger, etc.

Ending

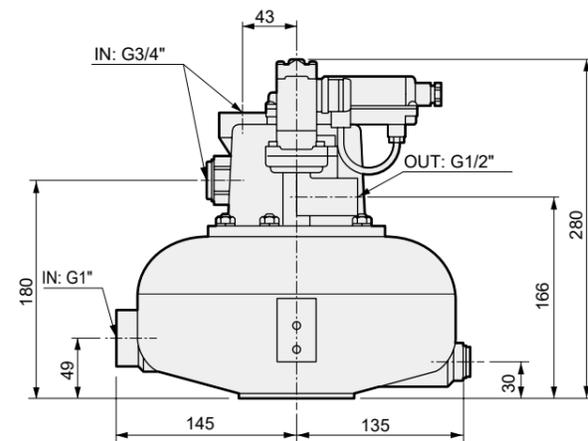
Ending

Dimensions

●DB1090D-20, DB3090D-20



●DB3700-20



Pneumatic Components (Drain Discharger)

Safety Precautions

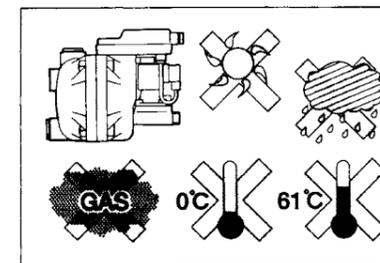
Be sure to read this section before use.
Refer to Intro 15 for General Precautions.

Product-specific cautions: Automatic Drain DB Series

Design / Selection

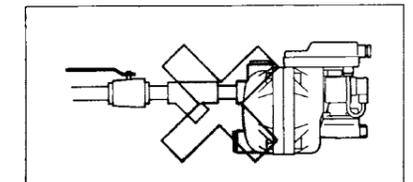
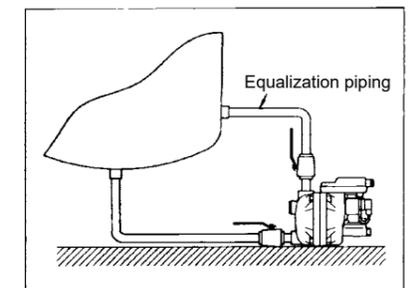
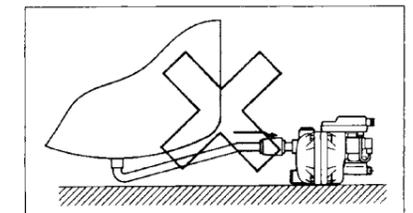
CAUTION

- Avoid direct sunlight and rain water. Resin parts may deteriorate and break.
- Do not use in locations with corrosive gases.
- Use this product within the range of the working temperature.
- Do not use the product where it could freeze. Accumulated drain may freeze and damage the product.
- Do not use in hazardous locations (possibly explosive atmospheres, etc.).
- Do not use this product in an ozone generating environment.
- Do not use the product in a components where the working air is forced-cooled to below the ambient temperature, such as a refrigeration air dryer or water cooling after-cooler.



- The drain inlet pipe should be 1/2" and over and continuously slope downward. Note that riser piping must be avoided. Otherwise drainage will not enter to be discharged.

- To pass drain from the bottom inlet, provide an equalization piping on the top of the product. Otherwise drainage will not enter to be discharged.
- Do not install a strainer to the drain inlet pipe. Doing so may cause a clogged strainer preventing drain from entering.
- Use a ball valve or gate valve as a stop valve. Do not use any other valves. The ball valve should be a full bore type. Using any other valves than those specified may block the drain path, preventing drainage from entering.



For precautions during mounting, installation, adjustment, use and maintenance, refer to the CKD Components Product Site (<https://www.ckd.co.jp/kiki/en/>) → "Model No. → Instruction Manual

Contact CKD Sales for maintenance parts.