# Refrigerant R134a (HFC) Standard Inlet Air Series IDFB E 3E, 4E, 6E, 8E, 11E, 15E (Inlet air temperature: 100°F [37.8°C])

How to Order IDFB 11 E- 11 N Nil Α Κ Size R Size т 3 ν 4 6 8 11 15 Voltage Voltage Symbol Single-phase 11 115 VAC (60 Hz) Thread type Symbol Thread type Drain tube size Ν NPT (female) 3/8 Nil Rc (female) Note) 00.4 in [ø10 mm] Note) An adapter for converting NPT to Rc is included if the thread symbol is "Nil".

### Table of Options and Available Combinations (Size/Option)

Symbol Note 1)	Nil	Α	К	R	т	v
Optional specifications Size	None	Cool compressed air output	For medium air pressure ( Auto drain bowl: ( Metal case with level gauge)	With circuit breaker	With terminal block for run & alarm signal	Timer type solenoid valve with auto drain (Suitable for medium air pressure)
3	$\bullet$	•	—	—	—	—
4	•	•	_	•	•	•
6	•	•	•	•	•	•
8	•	•	•	•	•	•
11	•	•	•		•	•
15	•	_	•	•	•	●

Note 1) Enter alphabetically when multiple options are combined.

However, the following combination cannot be achieved. • Combination of K and V (Only one or the other may be attached.)

Note 2) Refer to pages 10 and 11 for further information on options.

## **Standard Specifications**

Model		Standard inlet air						
		IDFB3E	IDFB4E	IDFB6E	IDFB8E	IDFB11E	IDFB15E	
· · · · · · · · · · · · · · · · · · ·		Compressed air						
Inlet air temperature °F (°C)		41 to 122 (5 to 50)						
Fluid Inlet air temperature °F (°C) Inlet air pressure psi (MPa)		22 (0.15) to 150 (1.0)						
Ambient temperat	ure °F (°C)	36 to 104 (2 to 40) Relative humidity of 85% or less						
	dew point 37°F (2.8°C)	10 (17)	15 (25)	25 (43)	41 (70)	59 (100)	71 (120)	
Capacity SCFM Note 1, 2) Outlet air pressure	dew point 45°F (7.2°C)	11 (19)	16 (27)	26 (45)	43 (74)	62 (106)	80 (136)	
(m <sup>3</sup> /h (ANR)) Outlet air pressure	dew point 50°F (10°C)	12 (20)	17 (28)	28 (47)	45 (77)	65 (110)	86 (147)	
Operating pressure         psi (MPa)           Inlet air temperature         °F (°C)           Ambient temperature         °F (°C)		100 (0.7)						
Inlet air temperatu	re °F (°C)	100 (37.8)						
Ambient temperat	ure °F (°C)	100 (37.8)						
Power supply voltage Operating current (A) Power consumption (W)		Single-phase 115 VAC [voltage fluctuation $\pm 10\%$ ] 60 Hz						
Operating current	(A)	2.7	3.0	3.0	3.5	6.5	7.5	
Power consumption (W)		240	260	260	310	550	750	
Applicable circuit breaker capacity Note 3) (A)		15						
Condenser		Forced air-cooled						
Refrigerant		R134a (HFC)						
Thread symbol and size Symbol Nil		NPT 3/8 (female)	NPT 1/2 (female)		NPT 3/4 (female) NPT		NPT 1 (female)	
		Rc 3/8 (female) With Rc conversion adapter	Rc 1/2 (female) With Rc conversion adapter	With	Rc 3/4 (female) Rc 1 With Rc conversion adapter Conversion			
Drain tube O.D. Symbol N Symbol Nil		3/8 inch						
		10 mm						
Coating color		White 1						
Mass	lbs (kg)	40 (18)	55 (25)	57 (26)	64 (29)	73 (33)	110 (50)	
Compliant standards		UL, CSA						

Note 1) ANR is under the conditions of 68°F (20°C) at atmospheric pressure and relative humidity of 65%.

Note 2) Air flow capacity for each outlet air pressure dew point is indicated.

Note 3) Install a circuit breaker with a sensitivity of 30 mA.

Note 4) If this equipment suffers a short-term power outage (even if it is only momentary), it may require some time before normal operation resumes, and protective mechanisms may prevent normal operation even after the power supply has been restored.

#### **Replacement Parts**

Model		IDFB3E	IDFB4E	IDFB6E	IDFB8E	IDFB11E	IDFB15E	
Auto drain replace-	Thread symbol N	AD38N-Z		AD48N-Z				
ment part no. Note 5)	Thread symbol Nil	AD38		AD48				

Note 5) The part number for the auto drain components without including the body part. Body part replacement is impossible.



## Construction Principle (Circuit for Air/Refrigerant)

Humid, hot air coming into the air dryer will be cooled down by a cooler (heat exchanger). Water condensed at this time will be removed from the air by a drain separator (auto drain) and drained out automatically. Air separated from the water will be heated by a re-heater (heat exchanger) to obtain the dried air, which goes through to the outlet side.









