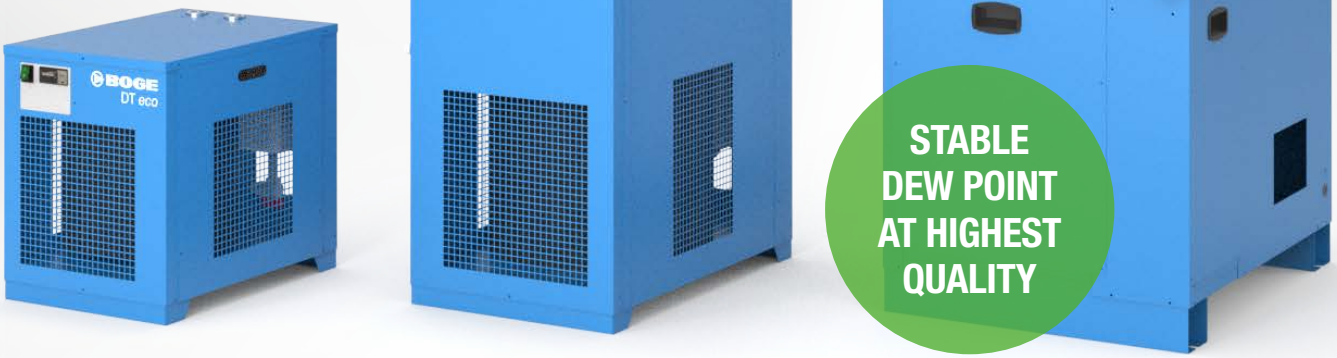
BOGE DT eco refrigerant compressed air dryer Maximum efficiency and reliability

What sets the refrigerant dryers from our new DT eco series apart is their outstanding efficiency: an innovative all-in-one aluminium heat exchanger combines the components air to air heat exchanger, evaporator and condensate drain. The top-down process in the air to air heat exchanger maximises heat transfer. Low flow speed, much lower power consumption and a stable dew point – these models know what matters in practice.



Highest quality standards

The DT eco series sets standards in terms of robustness, reliability and long service life. High quality components such as the all-in- one aluminum heat exchanger, the hot gas bypass valve and the control ensure a stable dew point. The models are designed for high operating temperatures, are environmentally friendly and easy to service and maintain.

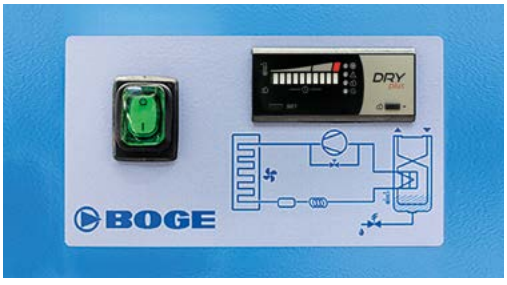
Stable pressure dew point in changeable conditions

What's the point of having the best refrigerant dryer if the dew point isn't stable? It is the hot gas bypass valve in these models that keeps the evaporating temperature and pressure constant – no matter how variable the load conditions are, The result: no more ice in the evaporator (the hot gas feed prevents this), but rather a stable pressure dew point in variable ambient conditions.



Visual control: the new standard

All models from DT 4 eco up to DT 880 eco feature an electronic control with LED status display for quickly checking the pressure dew point. The fan is intelligently controlled by temperature sensor (up to DT 130 eco) or pressure sensor (from DT 180 eco). A time-controlled condensate drain is standard and a potential free contact and an RS 485 serial port (from DT 12 eco upwards) offers external control and monitoring options.



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BOGE model	Flow rate			Maximum operating pressure	Electrical power consumption*		Refrigerant	Dimensions W x D x H	Weight	Compressed air connection
					50 Hz	60 Hz				
	m³/h	m³/ min	scfm	bar	kW	kW	Type	mm	kg	ø
DT 4 eco	24	0.40	14	16	0.08	0.09	R 134a	331 x 423 x 439	16	G 1/2”
DT 9 eco	54	0.90	32	16	0.14	0.15	R 134a	331 x 423 x 439	18	G 1/2”
DT 12 eco	72	1.20	42	16	0.29	0.34	R 134a	351 x 450 x 497	35	G 1"
DT 18 eco	108	1.80	64	16	0.3	0.35	R 134a	351 x 450 x 497	36	G 1"
DT 23 eco	138	2.30	85	16	0.52	0.61	R 134a	351 x 450 x 497	38	G 1"
DT 30 eco	180	3.00	106	16	0.68	0.8	R 134.a	451 x 594 x 559	45	G 1"
DT 40 eco	252	4.20	148	16	0.66	0.75	R 407C	451 x 594 x 559	53	G 1.1/2”
DT 60 eco	360	6.00	212	16	0.7	0.8	R 407C	512 x 784 x 872	73	G 1.1/2”
DT 80 eco	486	8.10	286	16	0.93	0.95	R 407C	512 x 784 x 872	83	G 1.1/2”
DT 100 eco	630	10.50	371	16	1.1	1.1	R 407C	512 x 784 x 872	85	G 1.1/2”
DT 130 eco	780	13.00	459	16	1.2	1.3	R 407C	512 x 784 x 876	106	G 2”
DT 180 eco	1080	18.00	636	16	1.7	1.6	R 407C	688 x 908 x 1077	123	G 2”
DT 210 eco	1260	21	742	16	1.8	-	R 407C	688 x 908 x 1077	189	G 2.1/2”
DT 240 eco	1440	24	848	16	2.1	-	R 407C	688 x 908 x 1077	198	G 2.1/2”
DT 320 eco	1920	32	1130	16	3.5	-	R 407C	740 x 1204 x 1168	279	FLANGE DN80
DT 440 eco	2640	44	1554	16	4.4	-	R 407C	740 x 1204 x 1168	295	FLANGE DN80
DT 640 eco	3840	64	2260	16	7.0	-	R 407C	876 x 1588 x 1726	439	FLANGE DN100
DT 880 eco	5280	88	3108	16	9.2	-	R 407C	876 x 1588 x 1726	487	FLANGE DN100

* All of the above details refer to ISO 7183:2007, at 25°C ambient temperature, 35°C inlet temperature and 7 bar operating pressure.

Conversion factors

The following conversion factors are to be applied if the operating pressures or temperatures vary.

Ambient temperature	°C	**≤ 25**	30	35	40	45								
Factor	f_1	**1.00**	0.95	0.88	0.79	0.68								
Inlet temperature	°C	≤ 30		**35**	40	45	50	55						
Factor	f_2	1.11		**1.00**	0.81	0.67	0.55	0.45						
Intake pressure	bar	4	5	6	**7**	8	9	10	11	12	13	14	15	16
Factor	f_3	0.77	0.86	0.93	**1.00**	1.05	1.10	1.14	1.18	1.21	1.24	1.27	1.30	1.33
Pressure dew point	°C	**3**	5	7	10									
Factor	f_4	**1.00**	1.09	1.19	1.37									

Example: (for dew point 3°C)

Volumetric flow rate (V)	m³/h	100		Factor	$= \frac{V}{f_1 \times f_2 \times f_3 \times f_4} = \frac{100}{0.79 \times 0.55 \times 1.05 \times 1} = 197 =$ **DT 40 eco**
Ambient temperature (f_1)	°C	40	=	0.79	
Inlet temperature (f_2)	°C	50	=	0.55	
Intake pressure (f_3)	bar	8	=	1.05	
Pressure dew point (f_4)	°C	3	=	1	

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