Desiccant Dryers

pneumatech
Pure air . Pure gas

Pneumatech Pride

Pneumatech has been manufacturing energy-efficient desiccant dryers for nearly 50 years. We are proud to introduce this new design heatless desiccant dryer with low pressure drop, user-friendly controls, compact design and many other features you have come to expect from Pneumatech.

The PH 55-310 HE (high efficiency) is an innovative and energy efficient product at a competitve value. This high efficiency version offers you a wide range of features and options.

PH 55-310 HE

Design standards	PH 55-310 HE
Dew point	**-40°F**
Pressure range	60-210 psig
Voltages	115 V or 230 V
Frequency	60 Hz
Controller	Advanced timer card
Technology	Heatless desiccant
Usage	Continuous
Handling	Easy to maneuver and install
Applications	Food & beverage, electronics, general industry

Important features & benefits
Resume cycle where it stopped, avoiding bed saturation
Purge optimization with varying inlet pressure
Large mufflers with low noise level
Optional dew point dependent tower switching (DPD) with pressure dewpoint control and display
Load/unload contact (if wired, stops unit when compressor unloads)
Large pneumatic line filters as standard
Pressure display on LCD screen & gauges for offline safety
CAN connector for external communication

Options	PH 55-310 HE
Optimized purge nozzle	✓
Wall mounting (up to PH HE 150)	•
DPD kit (hygrometer)	•
PDP -70°C/-94°F	•
IP65	•
NEMA 4X	•

✓ Standard
• Optional
– Not available

Technical data

60Hz

pneumatech
Pure air . Pure gas

Type	Flow			Pressure drop		Inlet/outlet connection	Integrated filter		Dimensions (in)			Dimensions (mm)			Weight	
	cfm	l/min	m³/h	psi	bar	NPT	Pre- filter 0.01 µm 0.01 ppm	After filter 1 µm	L	W	H	L	W	H	lb	kg
PH 55 HE	53	1500	90	0.87	0.06	½	Std	Std	21.7	7.9	48.5	550	201	1233	110	50
PH 65 HE	64	1800	108	1.23	0.09	½	Std	Std	21.7	7.9	48.5	550	201	1233	110	50
PH 75 HE	74	2100	126	1.38	0.10	½	Std	Std	21.7	7.9	58.2	550	201	1478	132	60
PH 105 HE	106	3000	180	4.64	0.32	1	Std	Std	21.7	7.9	72.7	550	201	1846	176	80
PH 130 HE	127	3600	216	1.74	0.12	1	Std	Std	21.7	14.3	48.5	550	364	1233	220	100
PH 150 HE	148	4200	252	2.32	0.16	1	Std	Std	21.7	14.3	58.2	550	364	1479	264	120
PH 170 HE	170	4800	288	4.79	0.33	1 ½	Std	Std	21.7	14.3	72.7	550	364	1846	353	160
PH 210 HE	212	6000	360	5.08	0.35	1 ½	Std	Std	21.7	14.3	72.7	550	364	1846	353	160
PH 310 HE	307	8700	522	6.24	0.43	1 ½	Std	Std	21.7	20.7	72.7	550	526	1846	529	240

Reference conditions: Operating pressure: 7 bar/101.5 psig / Operating temperature: 35°C/95°F / Relative humidity: 100%.
For conditions differing from the reference conditions, use the below correction factor table.

Correction factors

(Kd) Pressure dew point (°C/°F)	-40/-40	-70/-94
PH 55-310 HE	1	0.7

(Kt) Air inlet temperature (°C/°F)	20/68	25/77	30/86	35/95	40/104	45/113	50/122
PH 55-310 HE	1	1	1	1	0.84	0.67	0.55

(Kp) Air inlet pressure (bar/psi)	4/58	5/73	6/87	7/101	8/116	9/131	10/145	11/159	12/174	13/188	14/203	14.5/210
PH 55-310 HE	0.62	0.75	0.87	1	1.12	1.25	1.37	1.5	1.62	1.75	1.87	1.93

Example:
What is the capacity of a PH 150 HE, working at 8 bar(g)/116 psi(g), with an inlet temperature of 40°C/104°F and with a required pressure dew point of -70°C/-100°F?
Find each correction factor:
Kd=0.7
Kt=0.84
Kp=1.12
Actual capacity = Norminal capacity x Kd x Kp x Kt = 148 x 0.7 x 0.84 x 1.12 = 97 cfm

Use of this Motor Challenge logo does not imply DOE endorsement.

Pneumatech
1800 Overview Drive
Rock Hill, SC 29730 USA
1-800-336-2285
www.pneumatech.com