



Installation Guide ISO 8573.1

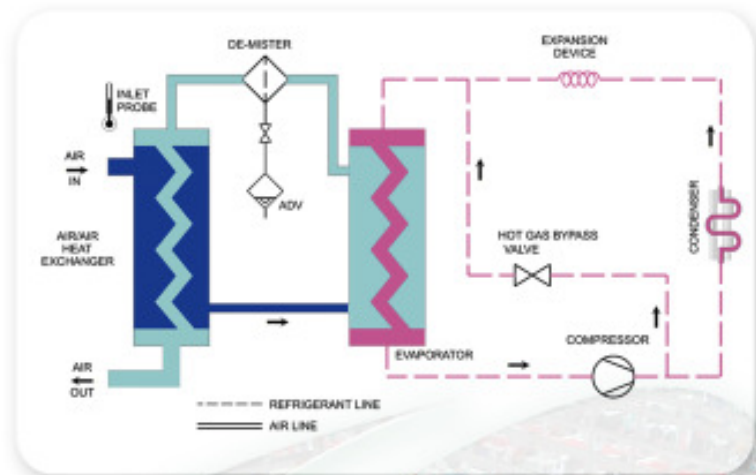


The air produced by a compressor is **HOT, WET** and **DIRTY**.

The first step in **GOOD AIR** preparation is to **FILTER** out these **CONTAMINANTS**.

Principle of Operation - Nippydry

Warm compressed air enters the Air / Air Heat Exchanger where it is pre-cooled by outgoing cold dry air. The pre-cooled air enters the Air to Freon Heat Exchanger where it is cooled down to +3°C. At this temperature, water condenses into liquid droplets, which are removed from the air stream by a very efficient Demister and automatically discharged by a Automatic Drain Valve. The Cold dry compressed air passes back through the secondary side of the Air to Air Heat Exchanger where it is reheated by the incoming warm air.



- Dewpoint +3°C
- Designed for high ambient temperatures
- Time delay for compressor safety

Model	Flow in scfm	Power Consumption in KW		End Connection	Dimensions in mm			Weight in Kg	Max. Working Pressure Kg/cm ²
		R 134a	R 407c		H	W	D		
Nippydry 20	20	0.32	—	1" BSP	420	400	430	38	16
Nippydry 35	35	0.32	—	1" BSP	420	400	430	38	16
Nippydry 40 HP	40	0.34	—	1" BSP	525	450	475	48	40
Nippydry 45	45	0.34	—	1" BSP	420	400	430	38	16
Nippydry 50	50	0.36	—	1" BSP	525	450	475	48	16
Nippydry 60	60	0.36	—	1" BSP	525	450	475	48	16
Nippydry 75	75	0.36	—	1" BSP	525	450	475	48	16
Nippydry 80	80	0.85	—	1" BSP	675	485	525	65	16
Nippydry 80 HP	80	0.36	—	1" BSP	525	450	475	65	40
Nippydry 100	100	0.85	—	1" BSP	675	485	525	65	16
Nippydry 130	130	0.85	—	1" BSP	675	485	525	65	16
Nippydry 150	150	1.02	—	1½" BSP	860	670	700	123	16
Nippydry 150 HP	150	0.85	—	1" BSP	675	485	525	123	40
Nippydry 200	200	2.08	2.34	1½" BSP	860	670	700	129	16
Nippydry 250	250	2.08	2.34	1½" BSP	860	670	700	129	16
Nippydry 300	300	2.40	2.40	2" NB	1275	850	800	240	14
Nippydry 400	400	2.50	2.30	2" NB	1275	850	800	260	14
Nippydry 500	500	2.50	2.30	2" NB	1275	850	800	290	14
Nippydry 650	650	3.12	3.32	2" NB	1700	1100	1425	350	14
Nippydry 800	800	5.30	4.80	3" NB	1700	1100	1425	490	14
Nippydry 1000	1000	4.72	4.80	3" NB	1700	1100	1425	580	14

For any other capacity contact factory. Specifications are subject to change without notification.

How to Order

Requirement :	Inlet flow	100 scfm
	working pressure	5 Kg / cm ²
	Inlet temperature	45° C
	Ambient temperature	38° C
Referring tables :	Factor Pi	= 0.84
	Factor Ti	= 1
	Factor Ta	= 1
Dryer capacity required :	Flow	= 100
	$\frac{\text{Flow}}{\text{Pi} \times \text{Ti} \times \text{Ta}}$	$\frac{100}{0.84 \times 1 \times 1}$
		= 119 scfm
Choose the nearest higher model :		= Nippydry 150

Correction Factor

Inlet Air Temperature °C	30	38	45	50
Correction Factor (Ti)	1.14	1.08	1	0.75
Inlet Pressure Kg/cm ²	5	7	9	12
Factor (Pi)	0.84	1	1.11	1.21
Ambient Temperature °C	25	30	38	43
Factor (Ta)	1.36	1.18	1.0	0.86

Desiccant Compressed Air Dryers - **DRYSPELL / DRYSPELL PLUS**



Specifications

Maximum Working Pressure	16 kg / cm ²
Air Inlet Condition	Maximum Fluid Temp 45°C
Recommended Pre-filter	0.01 Microns (Coalescer)
After filter	In built 25 micron (within the diffuser screen or compactor plate)
Cycle Time	4 Minutes
Regeneration Volume	12% Dryspell / 14% Dryspell Plus
Air Outlet Conditions	Dry air at -40°C Dew Point ADP for Dryspell, PDP for Dryspell Plus
Operating Voltage	100 - 240 V Ac 50/60 hz 1 Ph

Model	Flow scfm	End Connection BSP	Dimensions (mm)			Weight KGs
			H	W	D	
Dryspell 10	10	1/2"	600	280	200	11
Dryspell Plus 10	10	1/2"	1038	330	150	21
Dryspell Plus 20	20	1/2"	963	371	213	29
Dryspell Plus 30	30	1/2"	1227	371	213	39
Dryspell Plus 45	45	1/2"	999	497	313	49
Dryspell Plus 60 A	60	3/4"	1192	523	313	61
Dryspell Plus 100	100	1"	1603	439	372	106
Dryspell Plus 125	125	1"	1913	439	372	119
Dryspell Plus 200	200	1 1/2"	1615	449	582	214
Dryspell Plus 250	250	1 1/2"	1925	449	582	238
Dryspell Plus 300	300	2"	1615	457	764	256
Dryspell Plus 375	375	2"	1925	457	764	286

Compressed Air Filters



Technical Data

Model	Element Grade	Flow cfm	Pressure Kg/cm ²	Pipe Size BSP	Height (mm)	Width (mm)
F_F65	P / O / M	65	13	3/4"	260	100
F_F150	P / O / M	150	13	1"	350	150
F_F250	P / O / M	250	13	1 1/2"	750	220
T 600_	P / X / Y	350	16	1 1/2"	474	114
T 851_	P / X / Y	500	16	2"	666	148
T 1210_	P / X / Y	710	16	2"	736	148

Ordering Code : Example : Model FPF 65 Element Grade - P; T600Y Element Grade - Y

Specification

Description	Element Grade		
	P	O/X	M/Y
Filter Element	Borosilicate	Borosilicate	Borosilicate
Particle Removal	5 (Micron)	1 (Micron)	0.01 (Micron)
Max. Oil carryover	5 (mg/m ³)	0.5 (mg/m ³)	0.01 (mg/m ³)
Max. Working Temp.	80°C	80°C	80°C

Ordering Code : Example : Model FPF 65 Element Grade - P; T600Y Element Grade - Y



Automatic Drain Valves Timer Type - **CTD**

Specifications :

Voltage	230 V AC / 50 Hz / 1 Ph
Inlet & Outlet	1/2" BSP (F)
Pressure	2 - 16 bar (g)
Valve Orifice	4 mm
Timing	Cycle : 1 min to 60 min Adjustable Drain : 1 sec to 20 Sec
Compressor Capacity	Upto 500 cfm



Automatic Drain Valves - **LDV**

Specifications

Maximum Working Pressure	16 Kg/cm ²
Minimum Working Pressure	4 Kg/cm ²
Capacity	upto 1000 cfm
End connection Inlet & Outlet	1/2" (M) (F) BSP
Voltage	85 to 265 V AC 50/60 Hz, 1Ph

LDV-2000

Automatic Drain Valves - **Series EDV-X**

Specifications	EDV X1-1	EDV X1-3	EDV X-HD-1-1
Maximum working Pressure (kg/cm ²)	15	70	15
Valve Orifice (mm)	1.3	1.3	12.5
Timing Cycle :	1 min to 120 min Adjustable		
Drain :	1 sec to 25 sec		
Valve Connection Size	1/2" BSP (F)		
Environmental Protection	IP 55		
Voltage (V)	230		



Sales & Service Network



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