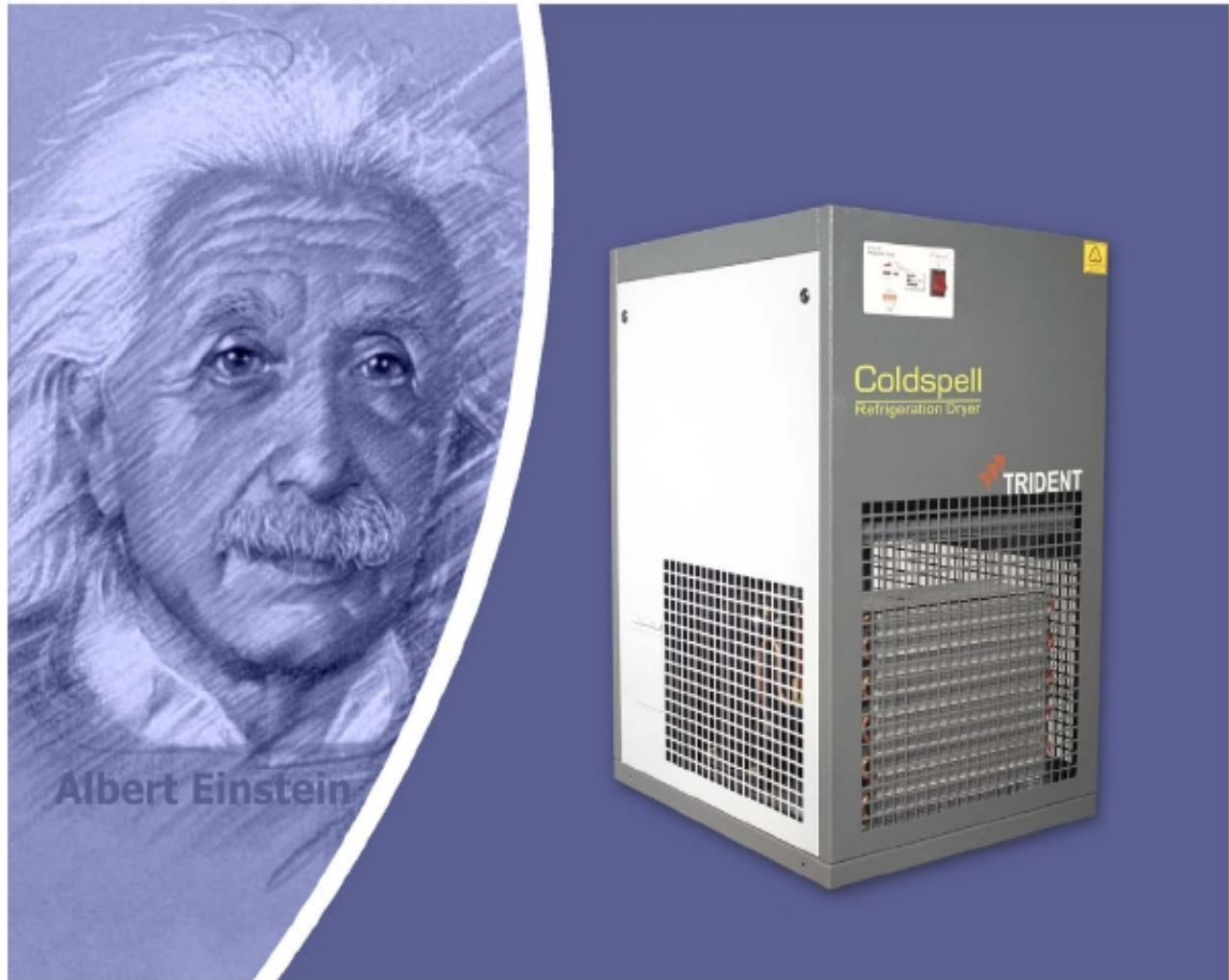


Lasting Values



Albert Einstein

Refrigeration Compressed Air Dryer



Coldspell

- Helium Tested Stainless Steel plate heat exchanger
- Microprocessor Controller
- Maintains Constant Dewpoint
- Large condensor for high ambient temperatures
- 45 Sales & Service outlets across the Nation



Principle of Operation - Coldspell

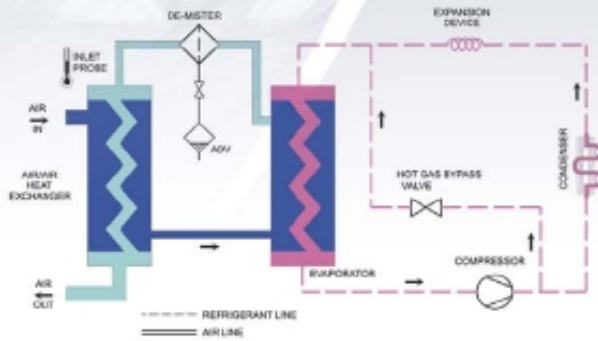
Warm compressed air enters the Air / Air Heat Exchanger where it is pre-cooled by outgoing cold dry air. Pre-cooling makes it possible to use a smaller (More Economical) refrigeration Unit. The pre-cooled air enters the Air to Freon Heat Exchanger where it is cooled down to +3°C. At this temperature, water condenses into liquid droplets, which are removed from the air stream by a very efficient Demister and automatically discharged to drain by a Trident 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. Reheating the outgoing compressed air increases

the volume of the air enabling it to do more work and it also prevents downstream pipe sweating. Trident Heat Exchanger has no extended surfaces or sharp corners that collect dust, dirt or oil residue. Any dust, dirt or out will be washed from the air system along with the condensed moisture at the De-mister.

Salient Features

- Stainless steel brazed plate heat exchangers. These are zero leak helium tested and offer extremely long life. Trident brings this to you this as a standard.
- Easy read bar indicator electronic controller.

Schematic Layout



Superior Design

	Eco Friendly Gas		Micro Processor based controller provides Dryer status
	Hot Gas By-Pass Valve Prevents evaporator freezing.		Optional Level sensing Condensate drain for No Air loss
	Simple and reliable Capillary Expander		SS BPHE for zero freon loss



Specification of Dryer

Model	Flow in CFM	Power Consumption in KW*	Refrigerant	End Connection	Dimensions in mm			Weight in Kg
					H	W	D	
Coldspell 40	40	0.36	R134a	1" BSP	601	450	550	55
Coldspell 50	50	0.36	R134a	1" BSP	602	450	550	55
Coldspell 60	60	0.36	R134a	1" BSP	603	450	550	55
Coldspell 80	80	0.85	R134a	1½" BSP	820	500	600	180
Coldspell 100	100	0.85	R134a	1½" BSP	820	500	600	180
Coldspell 150	150	1.02	R134a	1½" BSP	820	500	600	180
Coldspell 200	200	1.44	R134a / R22	2" NB	900	650	900	220
Coldspell 250	250	1.44	R134a / R22	2" NB	900	650	900	220
Coldspell 300	300	1.85	R134a / R22	2" NB	1175	950	1150	340
Coldspell 400	400	2.40	R134a / R22	2" NB	1175	950	1150	375
Coldspell 500	500	2.40	R134a / R22	2½" NB	1175	950	1150	390
Coldspell 650	650	3.30	R134a / R22	2½" NB	1470	1000	1280	510
Coldspell 800	800	4.00	R134a / R22	3" NB	1570	1080	1450	540
Coldspell 1000	1000	4.80	R134a / R22	3" NB	1570	1080	1450	580
Coldspell 1200	1200	5.50	R134a / R22	4" NB	1820	1080	1450	620
Coldspell 1500	1500	6.20	R134a / R22	4" NB	1820	1080	1450	900
Coldspell 2000	2000	7.80	R134a / R22	6" NB	1820	1080	1800	1020

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

*Power consumption will be low for use of water cooled condenser instead of air cooled.



Recommended Accessories

Dryer model (2)	Pre filter (1)	Sub Micron filter 1 micron (3)	Sub Micron filter .01 micron (4)
Coldspell 40 & 50	TFM 72	T 100 X	T 100 Y
Coldspell 60 & 80	TFM 144	T 150 X	T 150 Y
Coldspell 100 & 150	TFM 384	T 150 X	T 150 Y
Coldspell 200 to 300	TFM 960	T 600 X	T 600 Y
Coldspell 400 to 500	TFM 960	T 860 X	T 860 Y
Coldspell 650	TFM 1920	T 1220 X	T 1220 Y
Coldspell 800 to 1000	TFM 1920	T 1820 X	T 1820 Y

Installation Guide - ISO 8573.1 Class 1.4.1 Dirt, Water and Oil



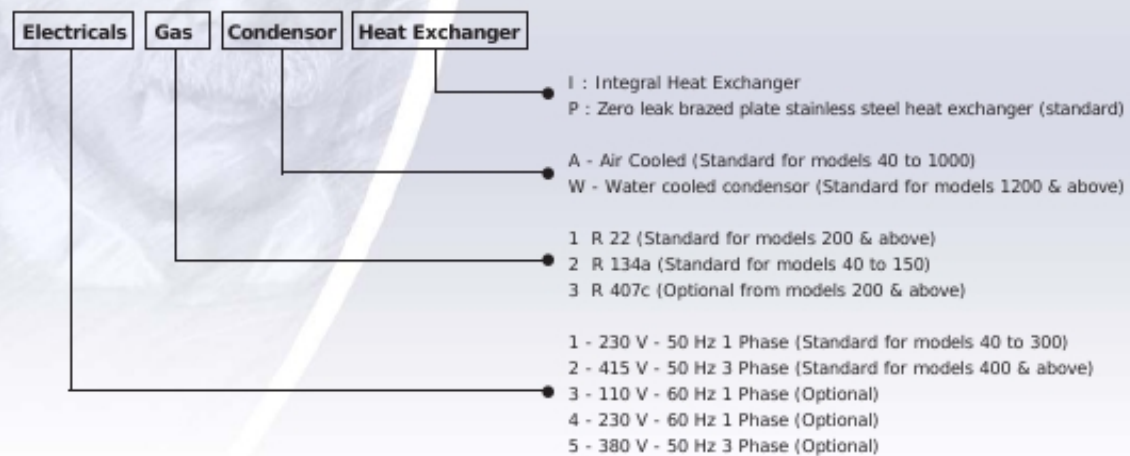
How to Order

Requirement :	Inlet flow	100 cfm
	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 cfm
Choose the nearest higher model :		= Coldspell 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

Ordering Code



Manufacturing Facility



Our Presence



Our other range of products

- Level Sensing Auto Drain Valve
- Desiccant Dryer (Heatless)
- Blower Reactivated Dryer
- Submicron Filter
- Moisture Separator
- Air / Water Cooled After Cooler
- Air Receiver

