24 YEARS OF SERVICE

Frank AIR COMPRESSOR

Feel the Difference

ENERGY EFFICIENT
SCREW AIR COMPRESSOR

CIN No. : U29120TZ2015PTC021250

MUTE & JUMBO SERIES

ISO 9001 | QM011 | Zed BRONZE | Processed by German Kapp Grinding Machine

www.frankcompressors.com

ENERGY EFFICIENT SCREW AIR COMPRESSOR

- Advanced screw airend
- Intelligent microprocessor based electronic controller
- Three stage air oil separator
- Low specific power consumption
- Less noise level and ease of maintenance
- Very Compact

Compressed air is a type of clean and environmental friendly energy. Frank's goal is to make use of this energy easier by proposing solution and systems that are the result of a careful analysis of the needs of all potential users, distributors and their satisfaction.

Micro Computer Control System

Intelligent micro computer control system. The LCD can show present temperature, working pressure, accumulative working time, malfunction, etc. Maintenance schedule through ON Line.

Advanced Screw Airend

Advanced rotary screw technology, equipped with high efficiency rotary screw airend powered by efficient electric motor.

Loading Head

This newly designed and improved intake controll system ensures economic control and protection of the screw. The control system has been redesigned to be simpler and more reliable. The air intake filter eliminates dust and other harmful particles that may cause premature wearing of the machine. Upon start-up of the machine, the control system will close the intake valve reducing start-up load. Shut down procedure will release pressure from the oil reservoir and prevent lubricant leakage. The new design has resulted in reduced air intake noise.

Spin on Three Stage Separator Air/Oil

Service & maintenance are made extremely simple through spin on three stage separator (upto 20 HP) and convenient location of oil receiver, oil filters and air oil separator - user friendly from servicing point of view. The separator will remove oil particles from the air down to a ratio of 1-2 parts per million.Efficient separation means post-treatment of all will be economical. Cleaner air means low maintenance costs on pneumatic equipment.

Oil Filter

The screw spin on oil filter makes servicing convenient. The filter eliminates oil impurities and other particles produced by wear and tear. High quality oil filtration extends the service life of rotors, bearings and other moving parts.

Quite Operation

High efficiency cooling fan provides sound level low.

Energy Efficient Combination Cooler

Utilising production methods and design the cooling system was designed to provide sustainable and efficient operation in high temperature high humidity environments. The new cross-exchange cooler not only increases exchange capacity by 10% but also is designed to resist chemical damage.

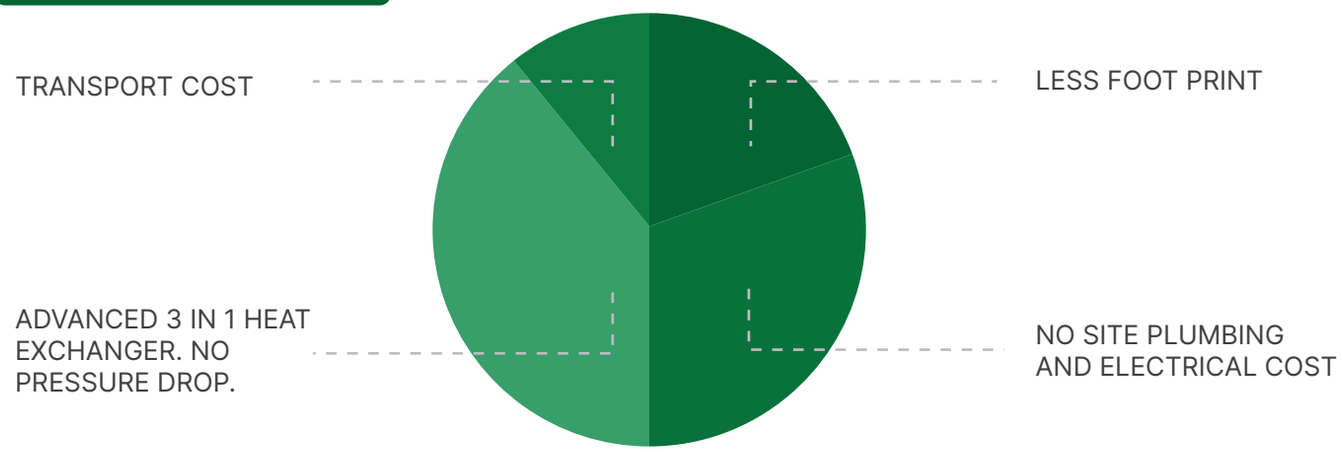
Motor

World-class IE2 electric motor features Grade F insulation and IP55 protection. Bearings are SKF.

Excellence In Integrated Air Dryer

- Foot print required is less as compressor and dryer mounted on the air tank.
- Huge money and time saved by avoiding site plumbing and electrical.
- Compressor and dryer are independent hence dryer maintenance is possible without stopping the compressor. Therefore no production losses.
- Single transport cost.
- Plug and use on arrival of the compressor.

Cost Saving Contributors



TANK MOUNTED SCREW COMPRESSOR WITH DRYER AND FILTERS (MUTE SERIES)

MODEL	MAX WORKING PRESSURE IN KG/CM2	TANK CAPACITY	MOTOR		FLOW CFM	NOISE DB (A)	WEIGHT (KGS)	L W H (MM)
			HP	KW				
Mute-3	10	220	3	2	9.5	61	BM:290TM:340 CDF:430	BM:705*577*950 TM:1550*550*1500 CDF:1645*688*1650
Mute-5	8-10	220	5	3.7	21-18	61	BM:270 TM:360 CDF:314	
Mute-7.5	8-10	220	7.5	5.5	25-22	64	BM:260 TM:370 CDF:400	
Mute-10	8-10-13	270	10	7.5	44-35-28	64	BM:215 TM:255 CDF:385	BM:850*615*1110 TM:1713*615*1110 CDF:1760*670*1650
Mute-15	8-10-13	500	15	11	63-55-45	65	BM:375 TM:525 CDF:570	BM:989*815*1125 TM:1886*815*1750 CDF:2025*1000*1750
Mute-20	8-10-13	500	20	15	83-74-64	72	BM:400 TM:525 CDF:560	

BM - Base Mounted; TM - Tank Mounted; CDF - Tank Mounted with Dryer & Filters

Mute Series

Mute HD Series

BASE MOUNTED SCREW COMPRESSOR (MUTE HD SERIES)

MODEL	MAX WORKING PRESSURE IN KG/CM2	TANK CAPACITY	MOTOR		FLOW CFM	NOISE DB (A)	WEIGHT (KGS)				L W H (MM)
			HP	KW			BM	TM	CDF	VFD	
Mute HD-15	7-10-13	500	15	11	71-60-48	72	375	535	580	-	989×815×1125
Mute HD-20	7-10-13	500	20	15	96-89-78	72	440	620	580	-	
Mute HD-25	7-10-13	500	25	18.5	120-105-85	72	455	615	655	-	1039×920×1245
Mute HD-30	7-10-13	500	30	22	138-116-94	72	496	615	701	-	
Mute HD-40	7-10-13	-	40	30	205-173-140	72	868	-	-	-	
Mute HD-50	7-10-13	-	50	37.5	255-209-180	72	868	-	-	-	1357×1250×1545
Mute HD-60	7-10-13	-	60	45	305-255-210	73	868	-	-	-	
Mute HD-75	7-10-13	-	75	555	368-303-271	73	1620	-	-	1670	
Mute HD-100	7-10-13	-	100	75	478-410-370	73	1620	-	-	1670	1600×1524×1863
Mute HD-125	7-10-13	-	125	90	572-486-440	74	1620	-	-	1670	

BASE MOUNTED SCREW COMPRESSOR (HIGH PRESSURE MUTE SERIES)

Mute HD-15	16	15	11	46	70	375	989×815×1125
Mute HD-20	16	20	15	57	70	440	
Mute HD-25	16	25	18.5	78	70	455	1039×920×1245
Mute HD-30	16	30	22	92	70	495	

Free Air Delivery (FAD) is tested as per 1217:2009 Annexure C edition : 4. Sound level messures as per ISO 2151, Second edition at 1m distance in field conditions, +/- .3dB(A).

VFD USED IN SCREW AIR COMPRESSOR

The FRANK (Variable frequency) Variable Frequency Drive VFD Series is designed as a total concept, rather than by adding a frequency converter to an existing machine, it is tightly integrated and mechanically tested and has low vibration at high performance.

Main benefits are a highly stable air net pressure, low starting currents, a total absence of peaks and a high power factor.

By varying the speed of the drive motor, the FRANK (variable frequency) Variable Frequency Drive VFD Series compressor output closely follows the air demand by covering a wide range, without load-unload switching. The result is a constant pressure, without fluctuations, which greatly benefits to your overall process stability.

Furthermore, a great energy saving between 20% and 35% is achieved during partial load. The reduction in energy cost over a typical life cycle might even surpass the initial investment cost of the screw air compressor. In other words, the savings realized by VSD can pay for the entire machine.

Screw Air Compressor with inbuilt VFD

VFD Used in Screw Air Compressor

Energy Saving 1:1 Direct Drive Transmission - *Jumbo Series*

Jumbo & Jumbo HD series are built for continuous duty in very hard conditions of use. The design of the machine have been focused not only on power consumption, but also on maintenance and operational costs and installation ease.

The drive between the airend and electric motor is carried out by means of gearless direct coupling connection. One to one direct drive by maintenance free coupling reduces number of components needed in gear drive, increasing reliability and service life through elimination of wear & transmission loses. Low speed 2950 RPM larger airends are more efficient than high speed airends. A dedicated airend for any machine at any pressure in order to grant maximum performance in the complete range.

BASE MOUNTED SCREW COMPRESSOR (JUMBO SERIES)

MODEL	MAX WORKING PRESSURE IN KG/CM2	MOTOR		FLOW CFM	NOISE DB (A)	WEIGHT (KGS)	L W H (MM)
		HP	KW				
JUMBO HD SERIES							
Jumbo HD-25	7	25	18.5	118	72	490	1350×900×1250
Jumbo HD-40	7	40	30	205	72	900	1592×1233×1616
Jumbo HD-100	7	100	75	523	73	1595	2170×1311×1771
JUMBO SERIES							
Jumbo-15	9	15	11	63	65	370	1100×770×1200
Jumbo-20	13	20	15	62	68	374	
Jumbo-30	8-9	30	22	123	72	510	1350×900×1250
Jumbo-40	8-9	40	30	178	72	900	1592×1233×1616
Jumbo-50	8-9	50	37.5	225	72	900	
Jumbo-60	8-9	60	45	268	72	900	
Jumbo-75	8-9	75	55	339	73	1900	2170×1311×1771
Jumbo-100	8-9	100	75	465	73	2200	
Jumbo-125	8-10-12	125	90	525-483-431	75	1650	
Jumbo-150	8-10-12	150	110	694-610-518	75	2200	2480×1500×1840
Jumbo-175	8-10-12	175	132	813-718-610	75	2500	
Jumbo-220	8-10-12	220	160	956-885-794	76	3050	2550×1590×1920
Jumbo-250	8-10-12	250	185	1062-956-797	78	3500	
Jumbo-300	8-10-12	300	220	1206-1058-970	82	4000	3060×1880×2080
Jumbo-350	8-10-12	350	250	1420-1338-1208	82	4500	

Jumbo 100

Lower speed means increased efficiency and durability with reduced compressed air cost, less wear & less maintenance cost.

Principle of Operation - *Nippydry*

Warm compressed air enters the Air / Air Heat Exchanger where it is precooled by outgoing cold dry air. The precooled air enters the Air to Freon Heat Exchanger where it is cooled down to +30C. 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.

SPECIFICATION OF DRYER

MODEL	FLOW IN SCFM	POWER CONSUMPTION IN KW		END CONNECTION	DIMENSIONS IN MM			WEIGHT IN KG	MAX. WORKING PRESSURE
		R 134a	R 407c		H	W	D		
Nippydry 20	20	0.32	—	1⁄2" BSP	505	202	502	25	16
Nippydry 20 HP	20	0.32	—	1⁄2" BSP	610	450	500	35	30
Nippydry 30	35	0.32	—	1⁄2" BSP	505	202	502	25	30
Nippydry 40 HP	40	0.34	—	1⁄2" BSP	400	400	590	68	40
Nippydry 45	45	0.34	—	1⁄2" BSP	525	450	475	48	16
Nippydry 50	50	0.36	—	1⁄2" BSP	525	450	475	48	16
Nippydry 60	60	0.36	—	1⁄2" BSP	525	450	475	48	16
Nippydry 60 HP	60	0.36	—	1" BSP	400	400	590	48	40
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	500	500	690	85	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	—	1 1⁄2" BSP	860	670	700	123	16
Nippydry 150 HP	150	0.85	—	1" BSP	675	485	525	65	40
Nippydry 200	200	2.08	2.34	1 1⁄2" BSP	860	670	700	129	16
Nippydry 250	250	2.08	2.34	1 1⁄2" BSP	860	670	700	129	16
Nippydry 250 HP	250	2.08	2.34	1 1⁄2" BSP	860	670	700	129	40
Nippydry 300	300	2.40	2.40	2" NB	1275	850	800	240	16
Nippydry 400	400	2.50	2.30	2" NB	1275	850	800	260	16
Nippydry 500	500	2.50	2.30	2" NB	1275	850	800	290	16
Nippydry 650	650	—	3.50	2" NB	1700	1100	1425	350	16
Nippydry 800	800	—	4.00	3" NB	1700	1100	1425	490	16
Nippydry 1000	1000	—	5.10	3" NB	1700	1100	1425	580	16
Nippydry 1250	1250	—	7.90	4" NB	1700	1100	1425	620	16
Nippydry 1500	1500	—	7.90	4" NB	1700	1100	1425	900	16
Nippydry 2000	2000	—	10.20	6" NB	1700	1100	1450	1020	16

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

COMPRESSED AIR FILTERS MODEL

MODEL	ELEMENT GRADE	FLOW CFM	PRESSURE KG/CM2	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

SPECIFICATION Element Grade

DESCRIPTION	P	O/X	M/Y
Filter Element	Borosilicate	Borosilicate	Borosilicate
Particle Removal Max	5 (Micron)	1 (Micron)	0.01 (Micron)
Oil carryover Max	5 (mg/m3)	0.5 (mg/m3)	0.01 (mg/m3)
Working Temp	80oC	80oC	80oC

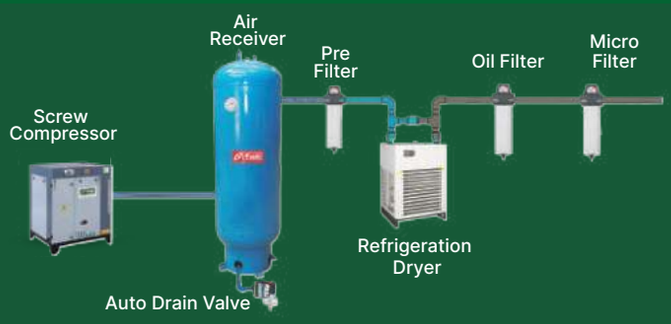
Ordering Code : Example : Model FPF 65 Element Grade - P; T600Y Element Grade - Y

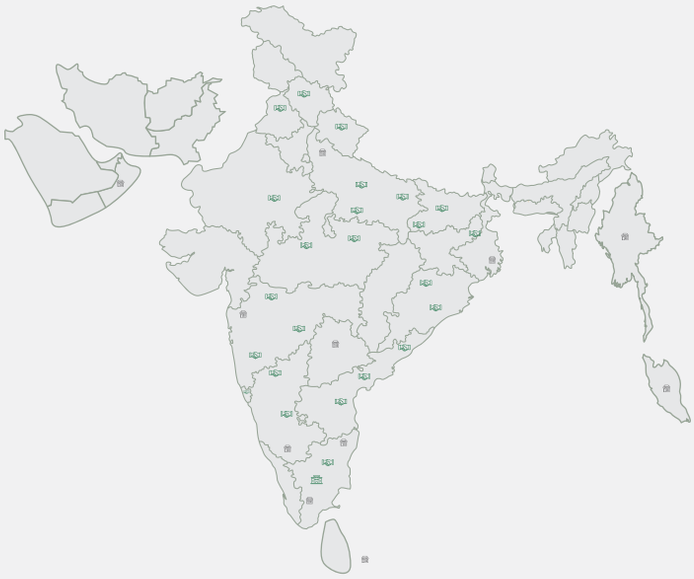
- Dewpoint +3ºC to +7ºC
- Designed for high ambient temperatures
- Time delay for compressor safety

Nippydry

Compressed Air Filters

Installation Guide
ISO 8573.1





SALES & SERVICE NETWORK

Head Office
- Coimbatore

Branches
- New Delhi
- Kolkatta
- Hyderabad
- Bengaluru
- Chennai
- Madurai
- Mumbai
- Visakhapatnam

Our Global Presence
- Dubai
- Colombo
- Malaysia
- Myanmar

Dealers
- Amritsar
- Ludhiana
- Kurukeshtra
- Kanpur
- Lucknow
- Gorakpur
- Patna
- Varanasi
- Burdwan
- Kantabanj
- Visakhapatnam
- Palasa
- Pondycherry
- Kolaphur
- Pune
- Aurangabad
- Indore
- Nasik
- Goa
- Jaipur
- Ahmedabad
- Indore
- Satna
- Bhubaneswar
- Hubli
- Durgapur
- Raipur
- Vijayawada
- Nagpur

OTHER RANGE OF PRODUCTS

Belt Driven Compressor 1 to 30 HP

Direct Driven Compressor 2 HP

Oilfree Air Compressor 0.75 to 20 HP

Vacuum Pump 1 to 10 HP

Refrigeration Chillers 0.5 to 50 TR

Oilfree Scroll Compressor 3 to 30 H

Dessicant Dryer 5 to 375 cfm

Auto Drain Valve - Timer

Medical Dryer 10 to 200 cfm

Level Sensing Drain Valve

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