

Sullivan

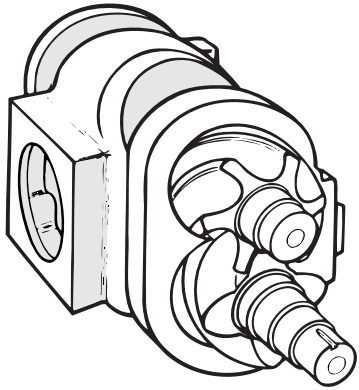
Palatek®

Variable Frequency Drive Rotary Screw Air Compressors



*Proven
performance with
exceptional
design.*

Sullivan Palatek®



*The advantages
of owning a
Sullivan-Palatek
Rotary Screw
Air Compressor.*

Features of the Variable Frequency Drive

*More than a frequency inverter, control
motor/drive system.*

- *Wide power range for 208V, 230V, 460V
and 575V.*
- *Pressure transducer motor speed control.*
- **Factory Settings:**
 - *Programmable digital outputs.*
 - *Digital inputs.*
 - *Programmable outputs: 4 relays, 4 transistors.*
 - *8 programmable parameter sets with S-curves,
power off function, PID process controller,
electronic motor protection, internal timer.*
- *Output frequencies up to 160 Hz with output
voltage stabilization; switching frequencies
up to 16 kHz; output phase monitoring.*
- *DC bus circuit connection, motor thermal sensor
connection, hardware current line.*

Micro Processor

Easily read digital output.



Variable Frequency Controller

Continuous capacity regulation from
20-110% quick ramp-up and down speed.



**TYPICAL DRIVE
OPEN MACHINE**

Electric Motor

Nema T-frame, C-face, ODP
or TEFC, energy efficient
inverter duty rated motor.



Cooling System, Updraft Model

Cooling system with Independent Variable Frequency Drive. Large side by side oil cooler and after cooler for easy cleaning.

Note:

15D-40D Inline Cooling,
40UD-300UD Updraft Cooling.



Optional/Analog Digital read-out:

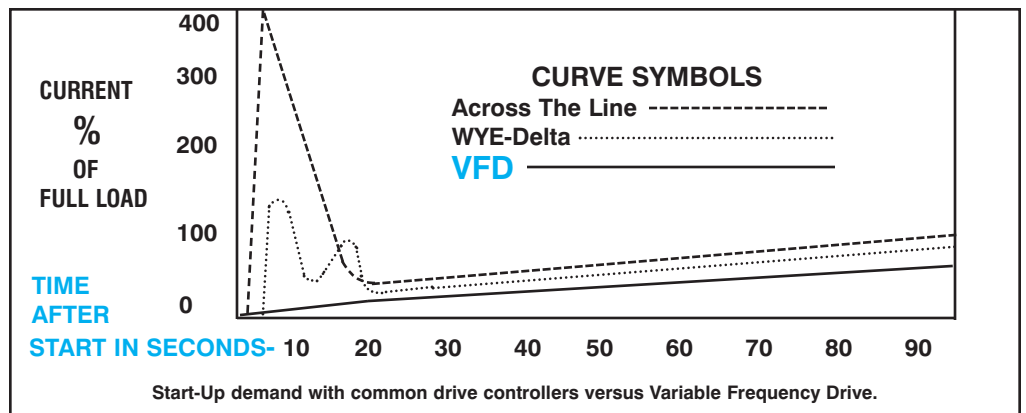
- Line Pressure
- Separator Receiver Pressure
- Temperature
- Delta-P
Fluid Filter
Separator Element
- Air Filter Digital Pop-up



50 H.P. Model Shown

Variable Frequency Drive

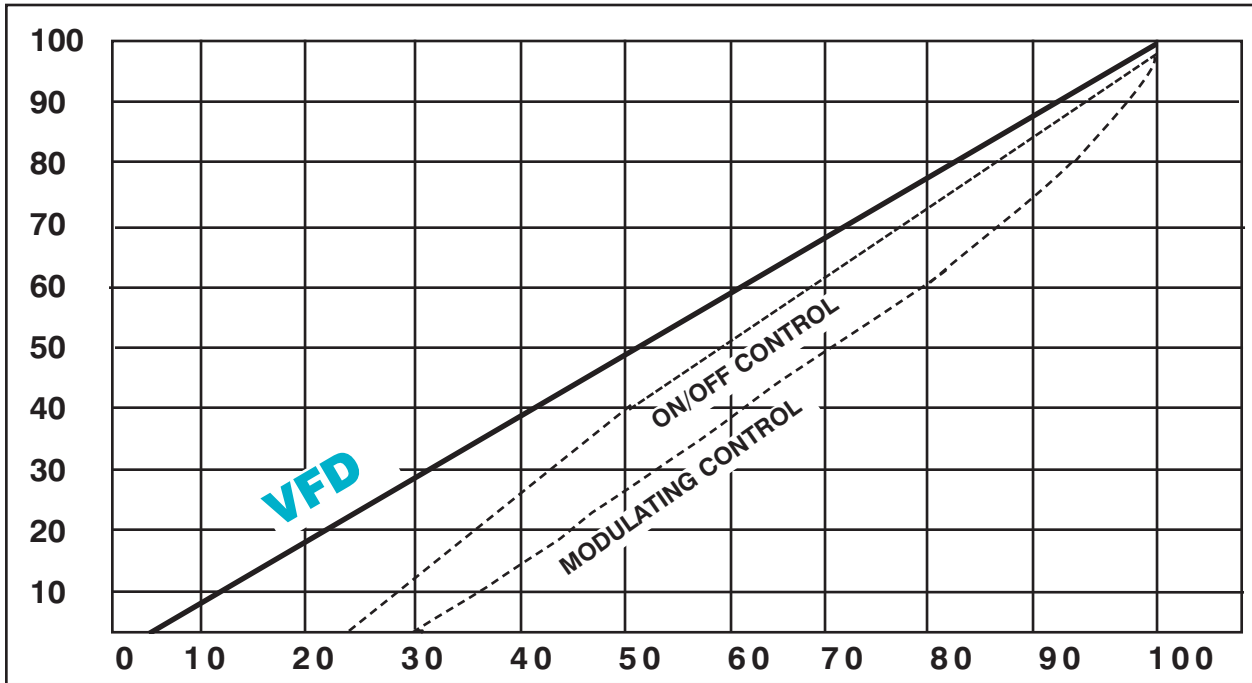
Start-Up Current (i.e. Power Demand)



Efficiency

Compressor output matches load requirement, saving power as compared to conventional controls.

**CAPACITY
PERCENT**



POWER PERCENT

Efficiency vs Delivered Air

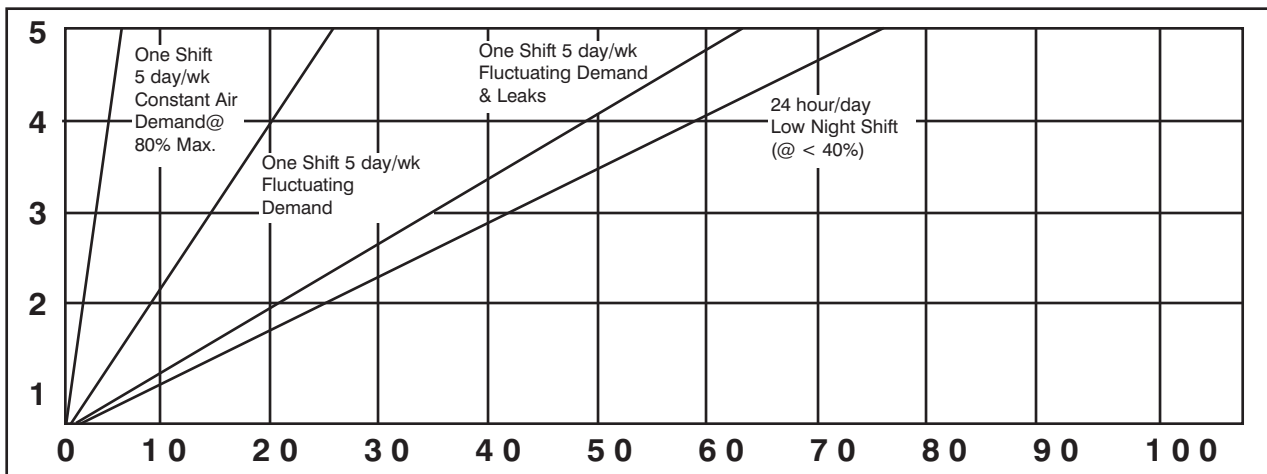
This Efficiency Curve Chart shows how the *Variable Frequency Drive* operates more efficiently than other controls in providing air delivery.

The VFD helps reduce energy bills. Operating at 70% capacity, the VFD consumes 10% less power than a standard compressor operating with on-off control and 20% less than a compressor with modulating control.

The Variable Frequency Drive has a soft start feature that maintains a low starting current. This reduces stress on the site power supply and also reduces motor wear. The VFD system complies with the Electro-Magnetic Compatibility standard and is UL/CUL listed. The VFD

**YEARS
IN
SERVICE**

Cost Savings With Time In Use



PERCENT RELATIVE COST SAVINGS

Chart shows 24 hour operation for 64% of installations. Low night shift, high day shift and weekend air usage. 30% of installations have a wide variation air demand.

15-300 H.P. Variable Frequency Drive Packages

Inline *15-40 H.P.*

Model No.	H.P.	Capacity (CFM @ 100 PSI Control)			Dimensions L x W x H (in.) Enclosed	Compressed Air Outlet Connection	Weight (lbs.)
		100%	50%	25%			
15 VFD	15	63	31.5	15.7	78 X 41 X 43	NPT 1"	1400
20 VFD	20	93	43.5	21.7	78 X 41 X 43	NPT 1"	1500
25 VFD	25	120	60	30	78 X 41 X 43	NPT 1"	1600
30 VFD	30	128	64	32	78 X 41 X 43	NPT 1"	1650
40 VFD	40	175	87	43.5	78 X 41 X 43	NPT 1-1/4"	1700

Updraft *50-300 H.P.*

50 VFD	50	220	110	55	79 X 34 X 49	NPT 1-1/4"	2000
60 VFD	60	305	152	76	79 X 34 X 49	NPT 1-1/4"	2100
75 VFD	75	350	175	87.5	80 X 45 X 65	NPT 1-1/2"	3200
100 VFD	100	440	220	110	80 X 45 X 65	NPT 2"	3550
125 VFD	125	615	307.5	153.8	96 X 58 X 67	NPT 2"	5000
150 VFD	150	730	365	182.5	96 X 58 X 67	NPT 2"	5100
200 VFD	200	935	467.5	233.8	96 X 58 X 67	NPT 2"	5200
250 VFD	250	1025	512	256	96 X 58 X 67	NPT 2"	5350
300 VFD	300	1525	762.5	381	120 X 66 X 79	NPT 3"	7950

COMPLETE LINE OF COMPRESSED
AIR DRYERS/FILTERS



15 to 40 H.P.



Compressor/Dryer/Filter
Package

■ Refrigeration Dryers

- Cycling
- Non-cycling
- High-temperature

■ Regenerative Dryers

- Heat less
- Externally Heated
- Internally Heated
- Blower Purge

■ Deliquescent Dryers

- Single Tower

■ Filters

- Particulate
- Coalescer
- Activated Carbon
- Mist Eliminator



40, 50 & 60 H.P.



75 & 100 H.P.



125 to 300 H.P.

Sold and Serviced By: