

# AIRBLOK Inverter

## Compresores de aire de tornillo rotativo súper silenciados con inverter

*Super silent rotary screw air compressors with speed drive control*

HIGH EFFICIENCY  
MOTOR IE3



### Tecnología inverter

Los costos de energía y los costos de mantenimiento pueden, en general, exceder significativamente el costo de la inversión inicial.

La serie AIRBLOK SD, en particular en sistemas con consumo de aire fluctuante, asegura la reducción de los costos de energía ya que es capaz de regular la velocidad de rotación del motor eléctrico, por lo tanto la velocidad de la unidad de tornillo, según el consumo de aire comprimido de la empresa. .

El compresor con inverter permite mantener la proporcionalidad entre el consumo de energía y el consumo de aire, acercando su eficiencia a la ideal.

A partir de los gráficos que se muestran a continuación, queda claro cómo la energía consumida por el compresor con inverter está estrechamente relacionada con la cantidad de aire comprimido requerido, mientras que en el sistema on / off no existe una correlación estrecha entre los dos valores.

### Speed drive control

*The combination of energy and maintenance costs may be considerably higher than the initial investment cost.*

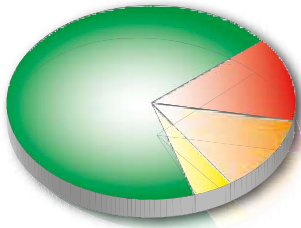
*The AIRBLOK SD series, especially in plants with fluctuating air consumptions, ensures the reduction of energy costs because it can adjust the running speed of the electric motor and therefore the speed of the screw unit, based on the factory's consumption of compressed air.*

*The speed drive controlled compressor maintains the energy consumption and the air consumption proportioned, thus ensuring ideal performance.*

*From the following graphs, it is clear that the energy used by the speed drive control compressor depends on the quantity of compressed air requested, while in the on/off system there is no correlation between the two values.*

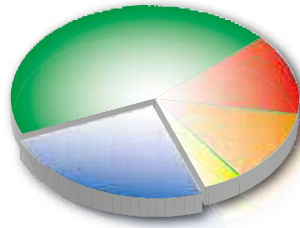
### Sin inverter

Without speed drive control



### Con inverter

With speed drive control



●	Consumo di energia / Energy consumption
●	Manutenzione / Maintenance
●	Investimento / Investment
●	Installazione / Installation
●	Risparmio medio di energia pari al 35% Medium energy saving 35%

Calcule sus ahorros (x)

Varios estudios han demostrado que la utilización típica de los compresores de tornillo está entre el 50% y el 70%. En las tablas se pueden encontrar los valores de energía consumida en porcentaje relativo al uso real de los compresores con arranque estrella / triángulo y con variador de frecuencia.

Con un simple cálculo puede conocer sus ahorros eligiendo un compresor de tornillo AIRBLOK SD.

### Plan your saving (x)

Several studies have shown that typical screw compressor load overtime to be 50-70%. on table above are indicated the value of energy consumption in percentage for real use of compressors star/delta start and speed drive control by inverter.

By a simple calculation, you can know your saving using a compressor AIRBLOK SD.

$$x = T \cdot C \cdot P \cdot \frac{L}{E} + M + K$$

**T** = tempo totale di lavoro (n°ore di lavoro/giorno - n°giorni all'anno - 5 anni)  
total working time (n° working hours per day - n° working day per years - 5 year)

**C** = costo energia kW/ora / energy cost kWh

**P** = potenza in kW del compressore / compressor kw power

**L** = percentuale energia consumata / percentage of energy consumption

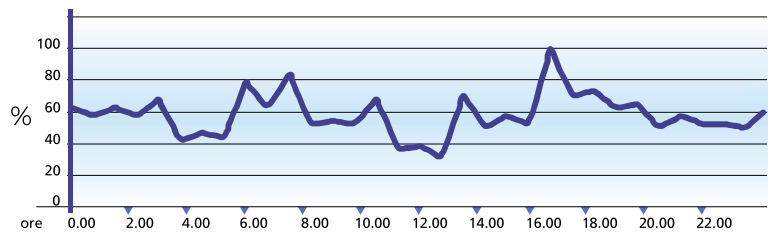
**E** = efficienza del motore / motor efficiency

**M** = costo manutenzione per 5 anni / cost of maintenance per 5 years

**K** = costo dell'investimento / cost of investment



### Solicitud de aire / Air requirement



### Fiac Air Energy Control 3+

Microprocesador de arquitectura industrial seguro y eficiente. Gestión y control total de parámetros funcionales.

### Fiac Air Energy Control 3+

Microprocessor of robust architecture safe and reliable. Management and total control of the compressor operating parameters.

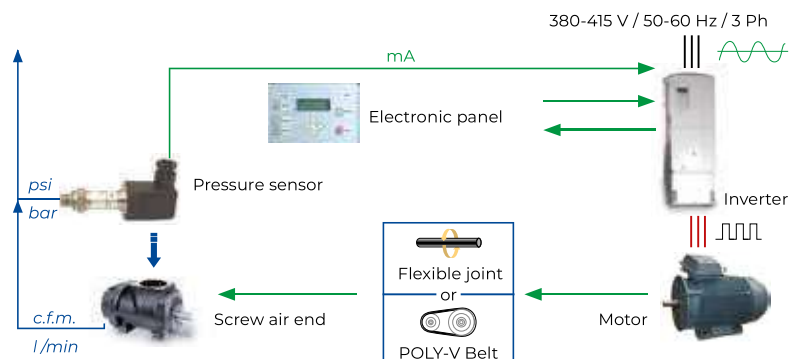
### Potencia consumida Power consumption

compresor standard - eficiencia motore 85-90%for  
D.O.L. compressors - motor efficiency 85-90%

<b>LOAD</b>	100	90	80	70	60	50	40
<b>POWER</b>	100%	97%	94%	91%	88%	85%	82%

Compresor eficiencia motore 94%for speed drive  
compressors - motor efficiency 94%

<b>LOAD</b>	100	90	80	70	60	50	40
<b>POWER</b>	100%	89%	78%	68%	57%	47%	37%



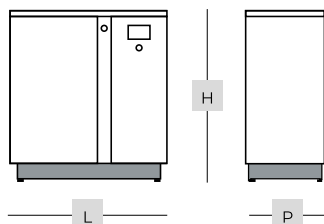
# AIRBLOK BD/SD 103 ÷ 403

## Inverter

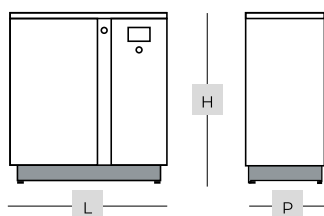


Trasmisión correas.

Compresores de aire de tornillo rotativo súper silenciosos con inverter



**AIRBLOK 103 ÷ 203**



**AIRBLOK 253 ÷ 403**



Type	Code	EAN CODE	🔊 dB (A)	🌀 min			🌀 max			🕒 h	🌀 BSP	🔌 HP	🔌 kW	LxPxH		
				l/min	CFM	m <sup>3</sup> /h	l/min	CFM	m <sup>3</sup> /h					bar	psi	mm in
AIRBLOK 103 BD-SD 5-13	4152026102	on request	125	4.4	7,5	1200	42.4	72,0	7,5	109	3/4"	10	7,5	1065x615x1095	255	
		on request	63	335	11,8	20,1	1040	36.7	62,4	9,5						138
		on request	415	14.7	24,9	825	29.1	49,5	12,5	181						
AIRBLOK 153 BD-SD 5-13	4152026103	on request	380	13.4	22,8	1750	61.8	105,0	7,5	109	3/4"	15	11	1065x615x1095	275	
		on request	65	410	14.5	24,6	1440	50.9	86,4	9,5						138
		on request	450	15.9	27,0	1200	42.4	72,0	12,5	181						
AIRBLOK 203 BD-SD 5-10	4152026268	on request	620	21.9	37,2	2310	81.6	138,6	7,5	109	3/4"	20	15	1065x615x1095	280	
		on request	670	23.7	40,2	1990	70.3	119,4	9,5	138						
AIRBLOK 203 BD-SD 5-13	4152026269	on request	485	17.1	29,1	1865	65.9	111,9	9,5	138	3/4"	20	15	1065x615x1095	280	
		on request	610	21.5	36,6	1725	60.9	103,5	12,5	181						
AIRBLOK 253 BD-SD 5-10	4152026270	on request	575	20.3	34,5	2935	103.6	176,1	7,5	109	1"	25	18,5	1130x780x1220	370	
		on request	770	27.2	46,2	2615	92.3	156,9	9,5	138						
AIRBLOK 253 BD-SD 5-13	4152026271	on request	490	17.3	29,4	2465	87.1	147,9	9,5	138	1"	25	18,5	1130x780x1220	370	
		on request	610	21.5	36,6	2155	76.1	129,3	12,5	181						
AIRBLOK 303 BD-SD 5-10	4152026272	on request	625	22.1	37,5	3390	119.7	203,4	7,5	109	1"	30	22	1130x780x1220	400	
		on request	865	30.5	51,9	3080	108.8	184,8	9,5	138						
AIRBLOK 303 BD-SD 5-13	4152026273	on request	530	18.7	31,8	3050	107.7	183,0	9,5	138	1"	30	22	1130x780x1220	400	
		on request	755	26.7	45,3	2510	88.6	150,6	12,5	181						
AIRBLOK 403 BD-SD 5-10	4152026406	on request	1456	51.4	87,4	4400	155.4	264,0	7,5	109	1"	40	30	1130x780x1220	447	
		on request	1804	63.7	108,2	3997	141.2	239,8	9,5	138						
AIRBLOK 403 BD-SD 5-13	4152026407	on request	1600	56.5	96,0	3792	133.9	227,5	9,5	138	1"	40	30	1130x780x1220	447	
		on request	1347	47.6	80,8	3245	114.6	194,7	12,5	181						

Alimentazione standard 400V/50Hz/3 - 230V/50Hz/3 - 230V/60Hz/3 - 208-230-460/60Hz/3 - 575/60Hz/3 - 380-440/60Hz/3  
Standard input 400V/50Hz/3 - 230V/50Hz/3 - 230V/60Hz/3 - 208-230-460/60Hz/3 - 575/60Hz/3 - 380-440/60Hz/3

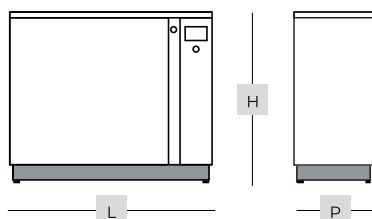
# AIRBLOK BD/SD DRY 103 ÷ 403

## Inverter

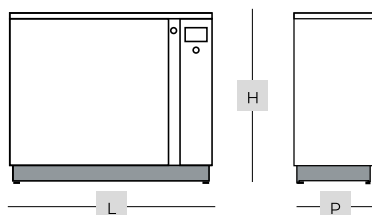
Trasmisión correas.

Compresores de aire de tornillo rotativo súper silenciosos con inverter

HIGH EFFICIENCY  
MOTOR IE3



///  
**AIRBLOK 103 ÷ 203**



///  
**AIRBLOK 253 ÷ 403**



Type	Code	EAN CODE	dB (A)	min			max			bar	psi	BSP	HP	kW	LxPxH	
				l/min	CFM	m <sup>3</sup> /h	l/min	CFM	m <sup>3</sup> /h						mm	kg
AIRBLOK 103 BD-SD DRY 5-13	4152026104	on request	125	4.4	7.5	1200	42.4	72.0	7.5	109						
		on request	63	335	11.8	20.1	1040	36.7	62.4	9.5	138	3/4"	10	7.5	1065x615x1095	285
		on request	415	14.7	24.9	825	29.1	49.5	12.5	181					41.9x24.2x43.1	628
AIRBLOK 153 BD-SD DRY 5-13	4152026105	on request	380	13.4	22.8	1750	61.8	105.0	7.5	109						
		on request	65	410	14.5	24.6	1440	50.9	86.4	9.5	138	3/4"	15	11	1065x615x1095	305
		on request	450	15.9	27.0	1200	42.4	72.0	12.5	181					41.9x24.2x43.1	672
AIRBLOK 203 BD-SD DRY 5-10	4152026274	on request	620	21.9	37.2	2310	81.6	138.6	7.5	109						
		on request	67	670	23.7	40.2	1990	70.3	119.4	9.5	138	3/4"	20	15	1065x615x1095	307
AIRBLOK 203 BD-SD DRY 5-13	4152026275	on request	485	17.1	29.1	1865	65.9	111.9	9.5	138						
		on request	67	610	21.5	36.6	1725	60.9	103.5	12.5	181	3/4"	20	15	1065x615x1095	307
AIRBLOK 253 BD-SD DRY 5-10	4152026276	on request	575	20.3	34.5	2935	103.6	176.1	7.5	109						
		on request	69	770	27.2	46.2	2615	92.3	156.9	9.5	138	1"	25	18.5	1585x780x1220	445
AIRBLOK 253 BD-SD DRY 5-13	4152026277	on request	490	17.3	29.4	2465	87.1	147.9	9.5	138						
		on request	69	610	21.5	36.6	2155	76.1	129.3	12.5	181	1"	25	18.5	1585x780x1220	445
AIRBLOK 303 BD-SD DRY 5-10	4152026278	on request	625	22.1	37.5	3390	119.7	203.4	7.5	109						
		on request	70	865	30.5	51.9	3080	108.8	184.8	9.5	138	1"	30	22	1585x780x1220	490
AIRBLOK 303 BD-SD DRY 5-13	4152026279	on request	530	18.7	31.8	3050	107.7	183.0	9.5	138						
		on request	70	755	26.7	45.3	2510	88.6	150.6	12.5	181	1"	30	22	1585x780x1220	490
AIRBLOK 403 BD-SD DRY 5-10	4152026408	on request	1456	51.4	87.4	4400	155.4	264.0	7.5	109						
		on request	71	1804	63.7	108.2	3997	141.2	239.8	9.5	138	1"	40	30	1585x780x1220	520
AIRBLOK 403 BD-SD DRY 5-13	4152026409	on request	1600	56.5	96.0	3792	133.9	227.5	9.5	138						
		on request	71	1347	47.6	80.8	3245	114.6	194.7	12.5	181	1"	40	30	1585x780x1220	520

Alimentazione standard 400V/50Hz/3 / Standard input 400V/50Hz/3  
Disponibili versioni / Version available: 230V/50Hz/3 - 230V/60Hz/3 - 208-230-460/60Hz/3 - 575/60Hz/3 - 380-440/60Hz/3