

# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2  
ZONE 21**

## General information



Compabloc 3000 geared motors with parallel gears are used to adapt the speed of the electric motor to that of the driven machine. Their size is therefore determined by the motor power ( $P$ ) expressed in kilowatts (kW) and the output rotation speed of the gear box ( $n_S$ ) in revolutions per minute ( $\text{min}^{-1}$ ). The main characteristic of the speed reducers is the rated output torque ( $M_{nS}$ ) expressed in Newton-metres (N.m) :

$$M_{nS} = \frac{P \times 9550}{n_S} \times \text{efficiency}$$

A range of six sizes : 30, 31, 32, 33, 34, 35.  
 Rated output torque : from 10 N.m to 3 150 N.m.  
 Power rating : from 0.09 to 30 kW.  
 Reduction ratio : from 1.25 to 204.  
 High efficiency : 95 % to 98 %.  
 Reversible.  
 Silent operation.

Gearboxes within the Compabloc 3000 range benefit from the ATEX **certification** : INERIS n° 03 ATEX 3005 X. For geared motors, this certification becomes : INERIS n° 03 ATEX 0013 X

## Construction

### Description of Compabloc (Cb) gearboxes - Zone 21

II 2D T 125 °C

Component	Materials	Remarks
Housing	Aluminium (30) Cast iron (31 to 35)	<ul style="list-style-type: none"> <li>- use of cast aluminium</li> <li>- use of ENGJL-200 cast iron (flake graphite : tensile strength 200 MPa) single component perlite to ensure the complete sealing of the unit</li> <li>- monobloc with reinforced internal ribbing to absorb vibrations and noise and to increase rigidity</li> <li>- with S baseplate, BT form or with BS, BD flanges. They are compact and meet industrial application-related requirements</li> </ul>
Gears	Steel Ni Cr Mo	- cut by gear hob, they are heat treated by cementation, then undergo a final machining. The quality and the precision of the gear cutting allow maximum torque with minimum noise level
Seals	Nitrile	<ul style="list-style-type: none"> <li>- sealing ring on the motor side</li> <li>- anti-dust lipseal collar according to DIN 3760 AS form</li> <li>- flat seal beneath the inspection door</li> </ul>
Shaft	Steel	<ul style="list-style-type: none"> <li>- grinding of the sealing surfaces</li> <li>- key according to ISO R773</li> <li>- diameter tolerances in accordance with NFE 22-051 and ISO R775</li> <li>- tapped holes in solid shaft end in accordance with DIN 332 version D for mounting connecting equipment.</li> </ul>
Lubrication	Oil	<ul style="list-style-type: none"> <li>- in accordance with ISO 6743 / 6</li> <li>- supplied with the quantity of oil corresponding to the operating position, it is fitted with drain, level and vent plugs (Cb 30-- exclusive)</li> </ul>
Mounting		MI : geared motor with intergral mounting MU : geared motor with IEC motor, with universal mounting
Standard motors		LSPX : - multi-voltage 220/380 V - 230/400 V - 240/415 V - sheet metal fan cover, fitted on request with a drip cover for operation in vertical position (shaft end facing down) - metal terminal box fitted with cable gland - IP 65 standard protection
Brake motors		FCR (see C.15) : failsafe brake asynchronous motor, ranging from 0.18 to 15 kW, IP 65 protection (LSPX 71 to 160)
Other motors		See pages D0.6 to D0.9.
Finish	Paint	Shade : RAL 1007 (yellow), system I (1 polyurethane vinyl layer of 25/30 µm)

# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000

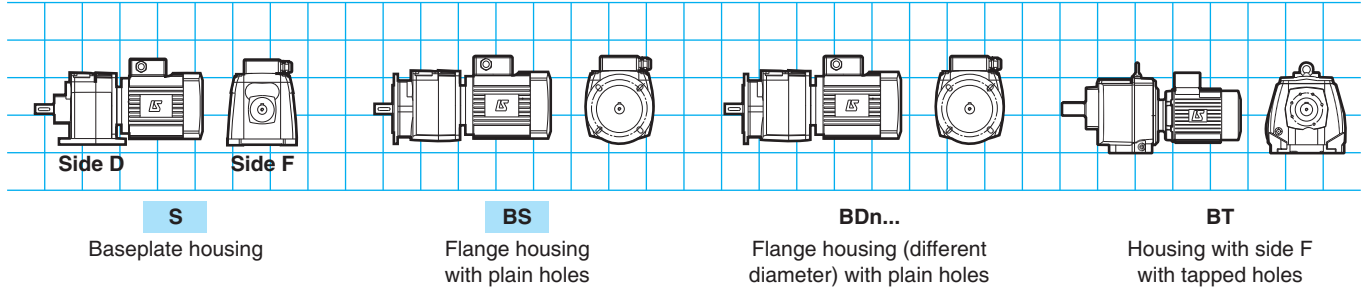


**CATEGORY 2**  
**ZONE 21**

## Mounting - operating positions

**Standard position** : gearbox seen from side F, motor to the rear, side D facing the ground.

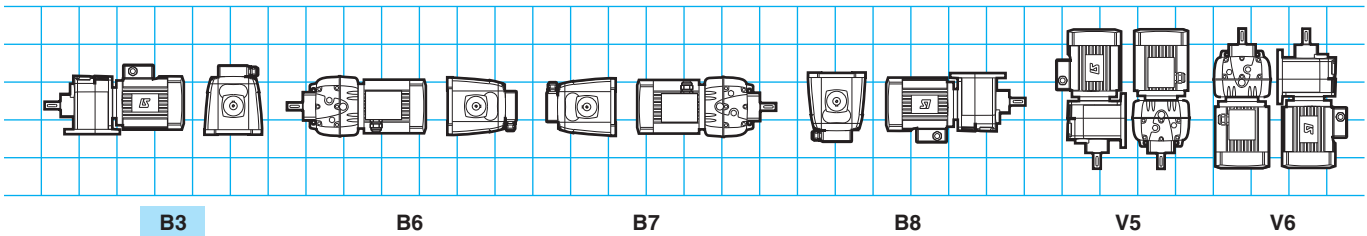
### 1 - Definition of mounting type : S, BS, BDn..., BT



### 2 - Definition of operating position

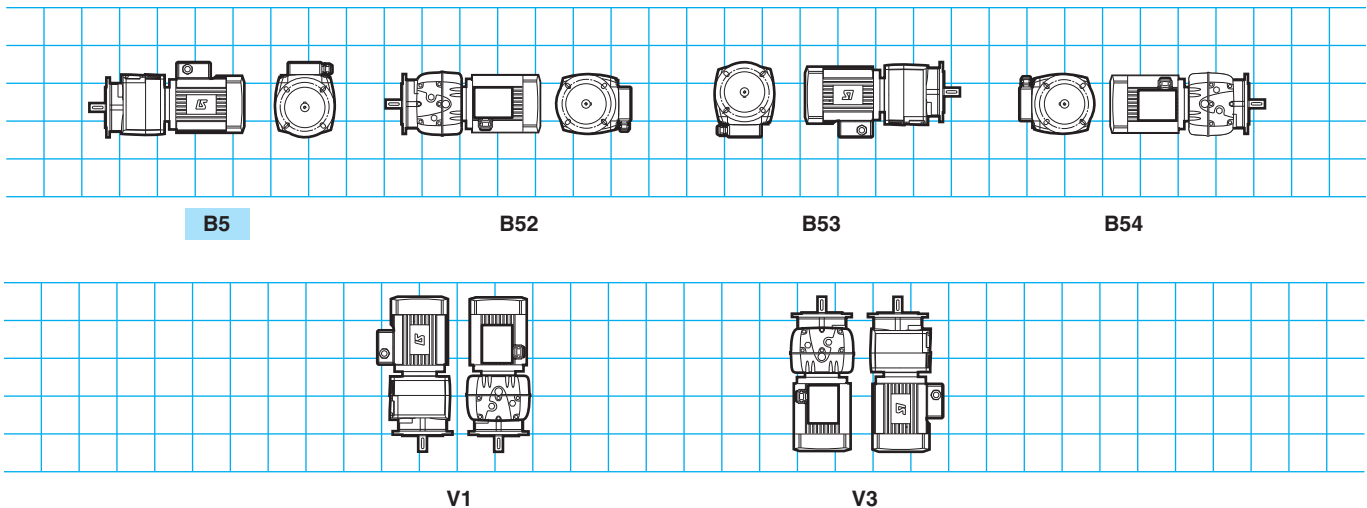
#### 2.1- Mounting with S baseplate

Compabloc 1-train : Cb 3031 M\* and 3131 to 3531, Compabloc multi-train : Cb 3032 and 3033 M\* - Cb 3133 to 3533



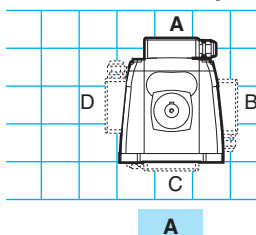
#### 2.2 - Mounting with BS, BDn..., or BT form

Compabloc 1-train : Cb 3031 M\* and 3131 to 3531, Compabloc multi-train : Cb 3032 and 3033 M\* - Cb 3133 to 3533

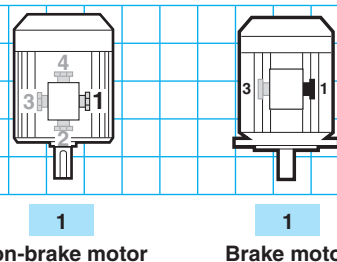


M\* : For these multi-position geared motors (M), the positions should only be specified if the following are necessary : a vent plug on the gearbox and/or condensation water drain plug on the motor. Positions V3 and V6 MUST be specified.

### 3 - Terminal box positions



### 4 - Cable gland positions



# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2  
ZONE 21**

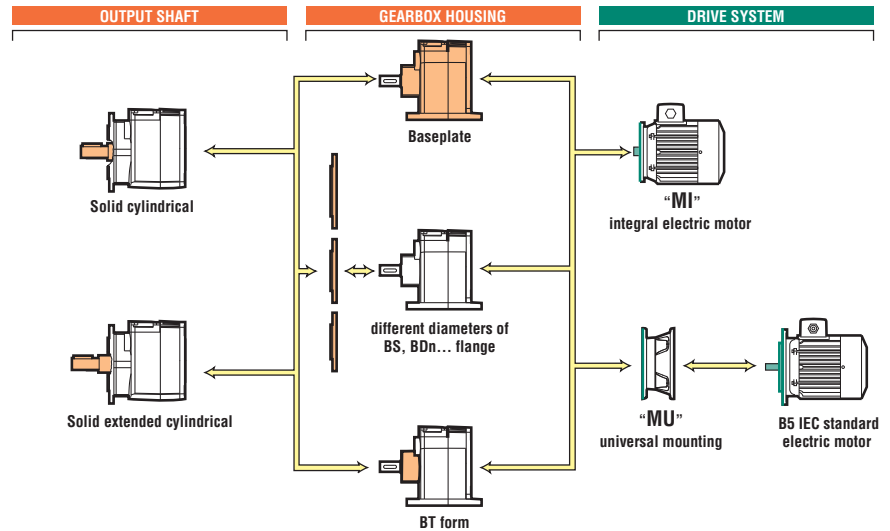
## Adaptation possibilities

Leroy-Somer offers several drives for its gearboxes which meet a diverse range of needs. They are described below and offered in this catalogue.

For other drives, consult Leroy-Somer technical specialists who will be pleased to assist you.

Compabloc gearboxes can be used in conjunction with the following drives :

- **fixed-speed 3-phase asynchronous motors :**
  - LSPX motor from 0.06 to 30 kW,
  - LSPX brake motor from 0.06 to 22 kW.
- **electronic variable speed motors :**
  - LSMV PX motor from 0.25 to 30 kW,
  - LSMV PX...FCR brake motor from 0.25 to 11 kW.
- **decentralised system with built-in drive**
  - VARMECA from 0.25 to 4 kW.



## Designation / Coding

<b>ATEX II 2D T 125°C</b>	<b>Cb</b>	<b>3333</b>	<b>B3</b>	<b>S</b>	<b>57.6</b>	<b>MI</b>	<b>4P</b>	<b>LSPX 80 L</b>	<b>0.9 kW</b>	<b>230/400 V 50 Hz</b>	<b>UG</b>
Specific application	Gearbox type	Manufacturer index and size	Operating position	Mounting type	Exact reduction	Input type	No. of poles	Series, frame size, manufacturer index	Rated power	Voltage and mains frequency	Use

Codification example :

Compabloc 3333 B3 0.9 kW, 25 min<sup>-1</sup>, class III  
ATEX zone 21  
**Designation**  
Cb 3333 B3 S 57,6 MI 4P, LSPX 80,  
0.9 kW 230/400 V - 50 Hz - UG.

All the products in this catalogue have a code.  
The coding table is incorporated in the price list with the list of designations.  
Each electromechanical product is classified first in order of power and then in order of speed.



# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000

**CATEGORY 2**  
**ZONE 21**

## Selection

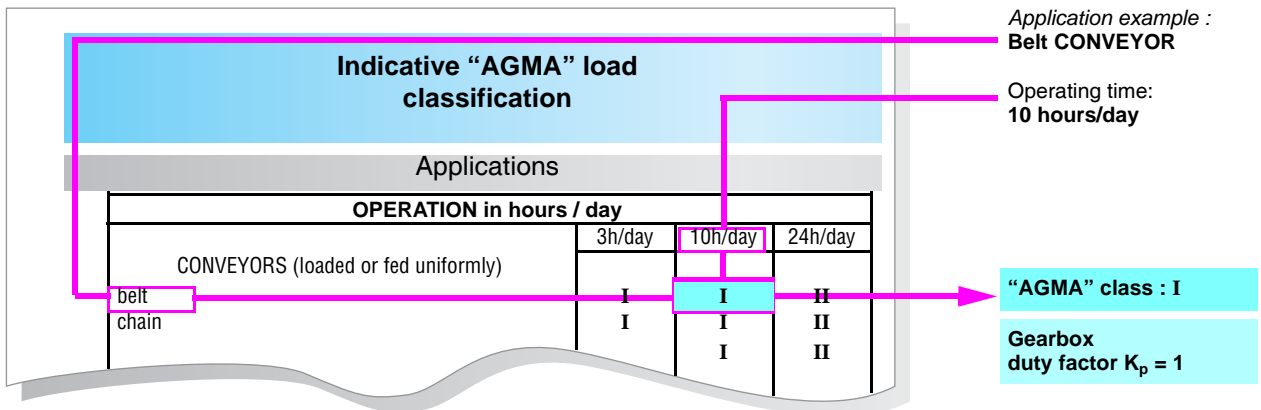
The selection of a gearbox or of a geared motor should take account of the application. Some of these applications are listed in the indicative "AGMA" load classification, page D0.10.

The opposite table summarises the relationship between the "AGMA" class and the gearbox duty factor  $K_p$ .

"AGMA" class	Gearbox duty factor $K_p$
I	1
II	1.4
III	2

## 1<sup>st</sup> case. – Your application is listed

Follow the indicative "AGMA" load classification table, page D0.10 of this catalogue. ▼



## 2<sup>nd</sup> case. – Your application is not listed

The "AGMA" selection class is defined by the daily operating time and by the application operating type, according to the table below. ▼

Type of application	Daily operating time	"AGMA" class
Shock-free, few starts	10 hours / day	I
Damped shocks	10 hours / day	II
Shock-free, few starts	24 hours / day	III
Violent shocks, many starts	10 hours / day	III
Damped shocks	24 hours / day	III

# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

## Conditions

**Cb 3000 : S, BT, BS, BDn**  
**LSPX, LSPX brakes FCR-FAP - IP 65 - Cl.F - 400 V Y - 400 V Δ - 50 Hz - U.G.**  
**II 2D T 125°C - ZONE 21**

Inputs	Maximum quantity by order					
	Cb 3031	Cb 31...3531	Cb 3032/3033	Cb 31/32/3333	Cb 3433	Cb 3533
MI LSPX	0.25-0.55 kW				-	-
	0.75-4 kW	5	5	5	5	5
	5.5-9 kW	-	5	-	5	5
MI LSPX FCR	11-30 kW	-	1	-	-	1
	0.25-9 kW	5	5	5	5	5
	11-15 kW	-	2	-	-	2
MI FLSPX	0.55-30 kW					
MI FLSPX FCR	0.55-9 kW					
MU LSPX	0.25-0.55 kW					
	0.75-9 kW	5	5	5	5	5
	11-15 kW	-	1	-	-	1
MU LSPX FCR	18.5-30 kW	-		-	-	
	0.25-9 kW	5	5	5	5	5
	11-15 kW	-	1	-	-	1
MU FLSPX	0.55-30 kW					
MU FLSPX FCR	0.55-9 kW					

	Mechanical options					
	S	BS	BD1	BD2	BD3	BT
Cb 3031					-	
Cb 31...3531				-	-	
Mounting	Page(s) of dimensions corresponding to mounting					
AP	-	-	-	-	-	-
MI	D2.18	D2.20	D2.21	D2.21	-	D2.19
MU	D2.32-33	D2.32-33	D2.32-33	D2.32-33	-	D2.32-33

	Mechanical options					
	S	BS	BD1	BD2	BD3	BT
Cb 3032/3033/						
Cb 32/33/34/3533					-	
Mounting	Page(s) of dimensions corresponding to mounting					
AP	-	-	-	-	-	-
MI	D2.22-23	D2.26-27	D2.28-29	D2.30	D2.31	D2.24-25
MU	D2.32-33	D2.32-33	D2.32-33	D2.32-33	D2.32-33	D2.32-33

Inputs	4p	Electrical options			Brake options				
		230/400 V	400 V Δ	PTO/CTP	DLRA	Drip cover	TRR	Different Mf	J01
LSPX	0.25-0.55 kW				-	-	-	-	-
	0.75-3 kW				-	-	-	-	-
	4-15 kW				-	-	-	-	-
FLSPX, FLSPX FCR	18.5-30 kW				-	-	-	-	-
	0.55-22 kW								
LSPX FCR	0.25-3 kW								
	4-5.5 kW								
	7.5-9 kW								
	11-15 kW								

# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

AGMA I, II, III

**Cb 3031**  
LSPX, LSPX brake FCR - IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.  
 II 2D T 125°C - ZONE 21

### Cb 3031

LSPX (kW)

0.25	0.37	0.55	0.75	0.9	1.1	1.5	1.8	2.2	3
------	------	------	------	-----	-----	-----	-----	-----	---

LSPX 4 p

min <sup>-1</sup>	i	71		80		90		100	
		176	8.13	1.27					
198	7.22	1.43							
223	6.4	1.61	1.07						
251	5.82	1.78	1.17						
277	5.17	2.00	1.32						
312	4.58	2.25	1.49						
351	4.08	2.53	1.67	1.10					
394	3.63	2.85	1.88	1.23					
441	3.24	3.19	2.11	1.38	1.01				
520	2.75	3.76	2.48	1.62	1.18	1.00			
561	2.55	4.05	2.68	1.75	1.28	1.08			
653	2.19	4.72	3.11	2.04	1.48	1.26			
730	1.96	5.28	3.49	2.28	1.66	1.41			
781	1.83	5.66	3.74	2.45	1.78	1.51			
929	1.54	6.72	4.43	2.9	2.11	1.79			
979	1.46	7.07	4.67	3.06	2.22	1.88			
1083	1.32	7.82	5.16	3.38	2.46	2.08			

4p LSPX brake

FCR	71	80
-----	----	----

# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

AGMA I, II, III

**Cb 3032-3033**  
LSPX, LSPX brake FCR - IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.  
 II 2D T 125°C - ZONE 21

### Cb 3032 - 3033

		LSPX (kW)										
		0.25	0.37	0.55	0.75	0.9	1.1	1.5	1.8	2.2	3	
		LSPX 4 p										
min <sup>-1</sup>	i	71			80			90			100	
10.8	130											
12.2	115											
13.7	102											
15.4	91.1											
17.3	81.3											
20.3	69.1											
21.9	64.1											
25.5	55	1.08										
28.5	49.2	1.21										
30.6	45.9	1.30										
36.3	38.7	1.54	1.01									
38.2	36.7	1.62	1.07									
<b>Cb 3033</b>												
31	45.4	1.31										
34.8	40.3	1.47										
39.3	35.7	1.66	1.10									
43.3	32.5	1.82	1.20									
48.7	28.8	2.05	1.35									
54.9	25.6	2.30	1.52	1.00								
61.7	22.8	2.58	1.71	1.12								
69.4	20.2	2.90	1.91	1.25								
77.8	18.1	3.24	2.14	1.40	1.02							
91.5	15.4	3.79	2.51	1.64	1.19	1.01						
98.7	14.2	4.08	2.70	1.77	1.29	1.09						
115	12.2	4.73	3.13	2.05	1.49	1.26						
129	10.9	5.28	3.49	2.28	1.66	1.41						
138	10.2	5.65	3.73	2.44	1.78	1.50						
164	8.59	6.67	4.40	2.88	2.10	1.78						
172	8.16	7.01	4.63	3.03	2.21	1.87						
190	7.38	7.70	5.09	3.33	2.43	2.05						
<b>Cb 3032</b>												
<b>4p LSPX brake</b>												
<b>FCR</b>		71			80							



# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

AGMA I, II, III

**Cb 3131**  
LSPX, LSPX brake FCR - IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.  
 II 2D T 125°C - ZONE 21

### Cb 3131

		LSPX (kW)													
		0.25	0.37	0.55	0.75	0.9	1.1	1.5	1.8	2.2	3	4	5.5	7.5	
		LSPX 4 p													
min <sup>-1</sup>	i	71			80			90			100		112	132	
181	7.91	6.54	2.70												
200	7.17	5.93	2.97												
229	6.25	5.17	3.41	2.23	1.63	1.38									
251	5.69	5.67	3.75	2.45	1.79	1.51									
290	4.92	6.57	4.34	2.84	2.07	1.75	1.43	1.04							
326	4.38	7.36	4.86	3.18	2.32	1.96	1.60	1.17							
364	3.93	8.22	5.43	3.55	2.59	2.19	1.79	1.31	1.10						
416	3.44	9.39	6.20	4.06	2.97	2.50	2.05	1.49	1.25	1.02					
440	3.25	9.93	6.56	4.29	3.13	2.64	2.16	1.58	1.32	1.08					
522	2.74	11.80	7.79	5.10	3.71	3.14	2.57	1.88	1.57	1.28					
554	2.58	12.52	8.27	5.41	3.94	3.33	2.73	1.99	1.67	1.36	1.00				
624	2.29	14.12	9.33	6.10	4.45	3.76	3.08	2.25	1.88	1.54	1.13				
715	2	15.59	10.30	6.76	4.92	4.15	3.39	2.48	2.08	1.69	1.24				
813	1.76	16.50	11.91	7.18	5.23	4.39	3.59	2.62	2.19	1.79	1.31				
917	1.56						3.74	2.73	2.28	1.86	1.37				
1036	1.38						3.87	2.83	2.36	1.93	1.41				
1172	1.22	19.06	12.60	8.29	6.04	5.07	4.15	3.03	2.53	2.07	1.51				
1232	1.16	19.66	13.00	8.56	6.23	5.23	4.28	3.13	2.61	2.13	1.56				
<b>4p LSPX brake</b>															
<b>FCR</b>		71			80			90			100				

# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

AGMA I, II, III

**Cb 3133**  
LSPX, LSPX brake FCR - IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.  
 II 2D T 125°C - ZONE 21

### Cb 3133

		LSPX (kW)												
		0.25	0.37	0.55	0.75	0.9	1.1	1.5	1.8	2.2	3	4	5.5	7.5
		LSPX 4 p												
min <sup>-1</sup>	i	71			80		90		100		112		132	
7.12	200													
7.85	181													
9	158													
9.89	144													
11.4	124	1.08												
12.8	111	1.20												
14.3	99.4	1.30												
16.4	87	1.43												
17.3	82.2	1.49												
20.6	69.2	1.67	1.11											
21.8	65.3	1.74	1.15											
24.6	57.8	1.89	1.25											
28.1	50.6	2.06	1.36											
29	49.1	2.73	1.81											
32	44.5	3.06	2.01											
36.7	38.8	3.45	2.28	1.49	1.09									
40.3	35.4	3.78	2.50	1.63	1.19	1.01								
46.6	30.6	4.36	2.88	1.89	1.37	1.16								
52.3	27.2	4.88	3.22	2.11	1.54	1.30	1.06							
58.3	24.4	5.43	3.59	2.35	1.71	1.45	1.18							
66.7	21.4	6.19	4.09	2.68	1.95	1.65	1.35							
70.5	20.2	6.54	4.32	2.83	2.06	1.74	1.42	1.04						
83.7	17	7.73	5.10	3.34	2.43	2.06	1.68	1.23	1.03					
88.8	16	8.19	5.41	3.54	2.58	2.18	1.78	1.30	1.09					
100	14.2	9.21	6.08	3.98	2.90	2.45	2.01	1.46	1.23	1.00				
115	12.4	10.26	6.78	4.44	3.24	2.73	2.23	1.63	1.37	1.11				
130	10.9	11.26	7.44	4.89	3.56	3.00	2.45	1.79	1.50	1.22				
136	10.4	8.94	5.90	3.86	2.81	2.38								
147	9.67						2.67	1.95	1.63	1.33				
162	8.79	10.61	7.01	4.59	3.34	2.82								
166	8.57						2.89	2.11	1.76	1.44				
172	8.28	11.26	7.44											
188	7.57	14.37	9.50	6.25	4.55	3.83	3.13	2.28	1.91	1.56	1.14			
194	7.34	12.70	8.39	5.49	4.00	3.38	2.77	2.02	1.69	1.38	1.01			
222	6.42	14.52	9.59	6.28	4.57	3.87	3.16	2.31	1.93	1.58	1.16			
252	5.65	16.24	10.73	7.03	5.12	4.32	3.54	2.58	2.16	1.76	1.29			
285	4.99						3.73	2.73	2.28	1.86	1.36			
322	4.43						3.84	2.81	2.35	1.92	1.40			
364	3.91	19.69	13.02	8.57	6.24	5.24	4.28	3.13	2.62	2.13	1.56			
385	3.71	20.24	13.39	8.91	6.41	5.39	4.40	3.22	2.69	2.19	1.61			
<b>4p LSPX brake</b>														
<b>FCR</b>		71			80		90		100					



# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

AGMA I, II, III

**Cb 3231**  
LSPX, LSPX brake FCR - IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.  
 II 2D T 125°C - ZONE 21

### Cb 3231

		LSPX (kW)												
		0.25	0.37	0.55	0.75	0.9	1.1	1.5	1.8	2.2	3	4	5.5	7.5
		LSPX 4 p												
min <sup>-1</sup>	i	71			80			90			100	112	132 <sup>1</sup>	
177	8.08	6.40	4.22	2.76	2.01	1.70								
207	6.92	7.47	4.93	3.23	2.35	1.99	1.63	1.19	1.00					
227	6.31	8.19	5.41	3.54	2.58	2.18	1.78	1.30	1.09					
250	5.71	9.04	5.97	3.91	2.85	2.41	1.97	1.44	1.20					
293	4.88	10.60	7.00	4.58	3.34	2.82	2.31	1.69	1.41	1.15				
330	4.33	11.92	7.87	5.15	3.75	3.19	2.60	1.90	1.59	1.30				
368	3.89	13.26	8.76	5.73	4.17	3.53	2.89	2.11	1.77	1.44	1.06			
417	3.43	15.07	9.95	6.51	4.74	4.01	3.28	2.40	2.01	1.64	1.20			
463	3.09	16.73	11.05	7.23	5.27	4.45	3.64	2.66	2.22	1.82	1.34	1.00		
526	2.72	18.99	12.54	8.21	5.98	5.06	4.14	3.02	2.53	2.06	1.51	1.13		
561	2.55	20.29	13.40	8.77	6.39	5.40	4.42	3.23	2.70	2.21	1.62	1.21		
647	2.21	23.39	15.45	10.11	7.36	6.23	5.09	3.72	3.12	2.54	1.86	1.40	1.02	
737	1.94	26.66	17.61	11.52	8.39	7.10	5.81	4.24	3.55	2.90	2.13	1.59	1.16	
817	1.75									3.16	2.31	1.73	1.27	
923	1.55									3.43	2.51	1.88	1.37	
986	1.45									3.35	2.45	1.84	1.34	
1163	1.23									3.63	2.66	1.99	1.45	
<b>4p LSPX brake</b>														
<b>FCR</b>		71			80			90			100	112	132	

1. Integral mounting obligatory

# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

AGMA I, II, III

**Cb 3233**  
LSPX, LSPX brake FCR - IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.  
 II 2D T 125°C - ZONE 21

### Cb 3233

		LSPX (kW)												
		0.25	0.37	0.55	0.75	0.9	1.1	1.5	1.8	2.2	3	4	5.5	7.5
		LSPX 4 p												
min <sup>-1</sup>	i	71			80		90			100		112	132 <sup>1</sup>	
7	204	1.48												
8.18	174	1.72	1.14											
8.97	159	1.89	1.25											
9.9	144	2.09	1.38											
11.6	123	2.45	1.62	1.06										
13.1	109	2.75	1.82	1.19										
14.5	98.2	3.03	2.02	1.32										
16.5	86.5	3.48	2.30	1.50	1.09									
18.3	77.9	3.86	2.55	1.67	1.22	1.03								
20.8	68.6	4.38	2.90	1.89	1.38	1.17								
22.2	64.2	4.68	3.09	2.02	1.47	1.25	1.02							
25.6	55.7	5.40	3.57	2.33	1.70	1.44	1.18							
28.4	50.2	5.99	3.96	2.59	1.89	1.60								
29.2	48.9						1.34							
33.2	43	6.98	4.61	3.02	2.20	1.86	1.52	1.11						
36.4	39.2	7.64	5.05	3.30	2.41	2.03	1.66	1.22	1.02					
40.2	35.5	8.42	5.56	3.64	2.65	2.24	1.83	1.34	1.12					
47.1	30.3	9.83	6.49	4.25	3.10	2.62	2.14	1.56	1.31	1.07				
53	26.9	11.03	7.29	4.77	3.47	2.94	2.40	1.75	1.47	1.20				
59	24.2	12.24	8.08	5.29	3.86	3.26	2.67	1.95	1.63	1.33				
67	21.3	13.86	9.15	5.99	4.36	3.69	3.02	2.20	1.85	1.51	1.10			
74.4	19.2	15.29	10.10	6.61	4.82	4.07	3.33	2.43	2.04	1.66	1.22			
84.4	16.9	16.78	11.09	7.28	5.30	4.47	3.65	2.67	2.23	1.82	1.33	1.00		
90.2	15.8	17.61	11.64	7.64	5.57	4.69	3.83	2.80	2.34	1.91	1.40	1.05		
104	13.7	19.47	8.87	8.46	6.16	5.18	4.24	3.09	2.59	2.11	1.55	1.16		
116	12.3	13.40	8.85											
119	12	21.20	14.02	9.22	6.71	5.64	4.61	3.37	2.82	2.30	1.68	1.26		
131	10.9									2.46	1.80	1.35		
132	10.8	15.23	10.05	6.58	4.79	4.05	3.32	2.42	2.03	1.66				
147	9.72	16.91	11.17	7.31	5.32	4.50	3.68	2.69	2.25	1.84				
148	9.62									2.66	1.95	1.46	1.07	
158	9.02									2.78	2.04	1.53	1.12	
167	8.57	19.19	12.67	8.30	6.04	5.11	4.18	3.05	2.56	2.09				
178	8.02	20.51	13.54	8.86	6.46	5.46	4.47	3.26	2.73	2.23				
187	7.63									3.09	2.27	1.70	1.24	
205	6.96	23.64	15.61	10.22	7.44	6.29	5.15	3.76	3.15	2.57	1.88	1.41	1.03	
234	6.1	26.94	17.79	11.65	8.48	7.17	5.87	4.29	3.59	2.93	2.15	1.61	1.18	
259	5.51									3.24	2.38	1.78	1.30	
293	4.88									3.67	2.69	2.01	1.47	
312	4.57									3.91	2.86	2.15	1.57	
369	3.87									4.62	3.38	2.54	1.85	
<b>4p LSPX brake</b>														
<b>FCR</b>		71			80		90			100		112	132	

1. Integral mounting obligatory

# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

## AGMA I, II, III

**Cb 3331**  
LSPX, LSPX brake FCR - IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.  
 II 2D T 125°C - ZONE 21

### Cb 3331

		LSPX (kW)													
		0.25	0.37	0.55	0.75	0.9	1.1	1.5	1.8	2.2	3	4	5.5	7.5	9
		LSPX 4 p													
min <sup>-1</sup>	i	71			80			90			100		112	132	
183	7.83	12.36	8.16	5.34	3.89	3.29	2.69	1.97	1.65	1.34					
202	7.08	13.69	9.04	5.92	4.31	3.64	2.99	2.18	1.82	1.49					
226	6.33	15.29	10.10	6.61	4.81	4.07	3.33	2.43	2.04	1.66	1.22				
260	5.5	17.61	11.63	7.61	5.54	4.69	3.84	2.80	2.35	1.91	1.40	1.05			
294	4.87	19.90	13.14	8.60	6.26	5.30	4.33	3.17	2.65	2.16	1.59	1.19			
320	4.47	21.65	14.30	9.36	6.81	5.76	4.72	3.44	2.89	2.35	1.72	1.29			
362	3.95	24.51	16.18	10.59	7.71	6.52	5.34	3.90	3.27	2.66	1.95	1.46	1.07		
406	3.52	26.93	17.79	11.66	8.49	7.17	5.86	4.28	3.59	2.93	2.14	1.61	1.17		
453	3.16	28.22	18.66	12.28	8.94	7.51	6.14	4.48	3.75	3.06	2.24	1.68	1.22		
491	2.91	> 30	21.74	14.24	10.37	8.76	7.17	5.24	4.39	3.58	2.62	1.96	1.44	1.06	
554	2.58	> 30	24.76	16.20	11.80	9.98	8.17	5.69	5.00	4.08	2.99	2.24	1.64	1.20	1.00
636	2.25	> 30	25.18	16.57	12.07	10.14	8.28	6.05	5.06	4.13	3.02	2.27	1.65	1.21	1.01
701	2.04									4.34	3.18	2.38	1.74	1.28	1.06
808	1.77									4.09	3.00	2.25	1.64	1.20	1.00
888	1.61											2.25	1.64	1.21	1.01
979	1.46									4.16	3.04	2.28	1.66	1.22	1.02
1135	1.26											2.40	1.75	1.28	1.07
<b>4p LSPX brake</b>															
<b>FCR</b>		71			80			90			100		112	132	

# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

AGMA I, II, III

**Cb 3333**  
LSPX, LSPX brake FCR - IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.  
 II 2D T 125°C - ZONE 21

### Cb 3333

		LSPX (kW)													
		0.25	0.37	0.55	0.75	0.9	1.1	1.5	1.8	2.2	3	4	5.5	7.5	9
		LSPX 4 p													
min <sup>-1</sup>	i	71			80		90			100		112	132		
7.14	200	2.75	1.81	1.19											
7.9	181	3.04	2.01	1.31											
8.83	162	3.40	2.24	1.47	1.07										
10.2	141	3.91	2.58	1.69	1.23	1.04									
11.5	125	4.42	2.92	1.91	1.39	1.18									
12.5	114	4.81	3.17	2.08	1.51	1.28	1.05								
14.1	101	5.44	3.59	2.35	1.71	1.45	1.19								
15.9	90.1	6.11	4.03	2.64	1.92	1.63	1.33								
17.7	80.9	6.81	4.49	2.94	2.14	1.81	1.48	1.08							
19.2	74.4	7.39	4.88	3.20	2.33	1.97	1.61	1.18							
21.6	66.1	8.33	5.50	3.60	2.62	2.22	1.81	1.32	1.11						
24.8	57.6	9.56	6.31	4.13	3.01	2.54	2.08	1.52	1.27	1.04					
29.4	48.7	10.91	7.21	4.72	3.43	2.91	2.38	1.74	1.45	1.19					
32.5	44	12.08	7.98	5.22	3.80	3.22	2.63	1.92	1.61	1.31					
36.4	39.4	13.50	8.91	5.83	4.25	3.59	2.94	2.15	1.80	1.47	1.08				
41.9	34.2	15.54	10.26	6.72	4.89	4.14	3.39	2.47	2.07	1.69	1.24				
47.3	30.2	17.57	11.60	7.59	5.53	4.68	3.83	2.79	2.34	1.91	1.40	1.05			
51.5	27.8	19.11	12.62	8.26	6.01	5.09	4.16	3.04	2.55	2.08	1.52	1.14			
58.2	24.6	21.63	14.28	9.35	6.81	5.76	4.71	3.44	2.88	2.35	1.72	1.29			
65.4	21.9	24.27	16.03	10.49	7.64	6.46	5.29	3.86	3.23	2.64	1.93	1.45	1.06		
72.9	19.6	27.05	17.86	11.69	8.52	7.20	5.89	4.30	3.61	2.94	2.15	1.62	1.18		
79.1	18.1	29.39	19.40	12.70	9.25	7.82	6.40	4.67	3.92	3.19	2.34	1.75	1.28		
89.1	16.1	> 30	21.85	14.30	10.42	8.81	7.21	5.26	4.41	3.60	2.64	1.98	1.44	1.06	
102	14	> 30	25.08	16.41	11.95	10.11	8.27	6.04	5.06	4.13	3.02	2.27	1.66	1.22	1.02
113	12.7									4.55	3.33	2.50	1.83	1.34	1.12
115	12.5	21.63	14.28	9.35	6.81	5.76	4.71	3.44	2.88	2.35					
129	11.1	24.27	16.03	10.49	7.64	6.46	5.29	3.86	3.23	2.64					
130	11									4.96	3.64	2.72	1.99	1.46	1.22
143	9.98										2.98	2.18	1.60	1.33	
144	9.95	27.05	17.86	11.69	8.52	7.20	5.89	4.30	3.61	2.94	2.15	1.62			
156	9.16	29.39	19.40	12.70	9.25	7.82	6.40	4.67	3.92	3.19					
158	9.06									5.82	4.26	3.20	2.33	1.71	1.43
176	8.14	> 30	21.85	14.30	10.42	8.81	7.21	5.26	4.41	3.60	2.64	1.98			
182	7.85										3.50	2.56	1.88	1.57	
202	7.09	> 30	25.09	16.42	11.96	10.11	8.28	6.04	5.06	4.13	3.03	2.27	1.66	1.22	1.02
223	6.41									4.57	3.34	2.50	1.83	1.35	1.13
256	5.59									5.24	3.84	2.88	2.10	1.55	1.29
283	5.06										3.18	2.32	1.71	1.43	
312	4.59									6.38	4.67	3.50	2.56	1.88	1.57
360	3.98										4.04	2.95	2.17	1.81	
<b>4p LSPX brake</b>															
<b>FCR</b>		71			80		90			100		112	132		



# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

**AGMA I, II, III**

**Cb 3431**  
**LSPX, LSPX brake FCR IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.**  
**Ex II 2D T 125°C - ZONE 21**

### Cb 3431

LSPX (kW)

0.75	0.9	1.1	1.5	1.8	2.2	3	4	5.5	7.5	9	11	15	18.5	22
------	-----	-----	-----	-----	-----	---	---	-----	-----	---	----	----	------	----

3-phase LSPX 4 p

min <sup>-1</sup>	i	3-phase LSPX 4 p														
		80		90		100		112		132		160		180		
177	8.1	7.81	6.59	5.39	3.93	3.29	2.69	1.97	1.47							
209	6.83	9.77	8.25	6.75	4.92	4.12	3.36	2.46	1.84							
233	6.15	10.89	9.20	7.52	5.49	4.60	3.75	2.74	2.06	1.50	1.10					
257	5.57	12.03	10.16	8.31	6.06	5.08	4.14	3.03	2.27	1.66	1.22	1.02				
279	5.13	13.05	11.03	9.02	6.58	5.51	4.49	3.29	2.47	1.80	1.32	1.11				
324	4.41	15.19	12.83	10.49	7.65	6.41	5.23	3.83	2.87	2.10	1.54	1.29	1.05			
348	4.11			11.26	8.21	6.88	5.61	4.11	3.08	2.25	1.65	1.38	1.13			
397	3.6			12.86	9.38	7.86	6.41	4.69	3.52	2.57	1.89	1.58	1.29			
450	3.18			14.55	10.61	8.89	7.25	5.31	3.98	2.91	2.14	1.78	1.46	1.07		
505	2.83			16.19	11.81	9.89	8.06	5.90	4.42	3.23	2.38	1.98	1.62	1.19		
563	2.54			17.52	12.78	10.70	8.73	6.39	4.79	3.50	2.57	2.15	1.75	1.28	1.04	
659	2.17			19.48	14.21	11.90	9.70	7.10	5.32	3.89	2.86	2.39	1.95	1.43	1.16	
726	1.97									4.15	3.05	2.55	2.08	1.52	1.24	1.04
822	1.74									4.05	2.98	2.49	2.03	1.49	1.21	1.02
917	1.56									4.78	3.51	2.93	2.39	1.75	1.42	1.20
1036	1.38									4.72	3.47	2.89	2.37	1.73	1.41	1.18
1153	1.24									4.40	3.23	2.70	2.20	1.62	1.31	1.10

4 p LSPX brake

FCR	80	90	100	112	132	160
-----	----	----	-----	-----	-----	-----

# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

AGMA I, II, III

**Cb 3433**  
LSPX, LSPX brake FCR IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.  
II 2D T 125°C - ZONE 21

### Cb 3433

		LSPX (kW)														
		0.75	0.9	1.1	1.5	1.8	2.2	3	4	5.5	7.5	9	11	15	18.5	22
		3-phase LSPX 4 p														
min <sup>-1</sup>	i	80		90		100		112	132			160		180		
7.0	204	1.66	1.40	1.15												
8.3	172	1.97	1.66	1.36												
9.2	155	2.18	1.85	1.51	1.10											
10.2	140	2.41	2.04	1.66	1.21	1.02										
11.1	129	2.61	2.21	1.80	1.32	1.10										
12.9	111	3.03	2.56	2.09	1.53	1.28	1.04									
13.8	104			2.24	1.64	1.37	1.12									
15.8	90.7			2.56	1.87	1.56	1.27									
17.9	80.1			2.89	2.11	1.76	1.44	1.05								
20.0	71.4			3.24	2.36	1.98	1.61	1.18								
22.4	63.9			3.60	2.63	2.20	1.80	1.31								
26.1	54.7			4.20	3.06	2.56	2.09	1.53	1.15							
28.4	50.3	6.59	5.57	4.55	3.32	2.78	2.27	1.66	1.24							
28.8	49.6															
32.7	43.7								1.04							
33.6	42.5	7.79	6.58	5.38	3.92	3.28	2.68	1.96	1.47							
37.4	38.2	8.62	7.28	5.95	4.34	3.64	2.97	2.17	1.63	1.19						
41.3	34.6	9.50	8.02	6.56	4.79	4.01	3.27	2.39	1.79	1.31						
44.8	31.9	10.29	8.69	7.10	5.18	4.34	3.54	2.59	1.94	1.42	1.04					
52.2	27.4	11.92	10.07	8.23	6.00	5.03	4.10	3.00	2.25	1.64	1.21	1.01				
56.1	25.5			8.81	6.43	5.38	4.39	3.21	2.41	1.76	1.29	1.08				
63.8	22.4			10.02	7.31	6.12	4.99	3.66	2.74	2.00	1.47	1.23	1.00			
72.2	19.8			11.29	8.24	6.90	5.63	4.12	3.09	2.26	1.66	1.38	1.13			
81.3	17.6			12.63	9.21	7.71	6.29	4.61	3.45	2.52	1.85	1.55	1.27			
90.5	15.8			14.04	10.24	8.57	6.99	5.12	3.84	2.80	2.06	1.72	1.41	1.03		
106	13.5			16.30	11.89	9.96	8.12	5.95	4.46	3.26	2.39	2.00	1.63	1.20		
117	12.2									3.58	2.63	2.20	1.80	1.32	1.07	
132	10.8									3.95	2.90	2.42	1.98	1.45	1.18	
147	9.67									4.26	3.13	2.61	2.13	1.56	1.27	1.07
166	8.60									4.59	3.37	2.81	2.30	1.68	1.37	1.15
186	7.69									4.44	3.27	2.73	2.23	1.63	1.33	1.11
208	6.86			19.68	14.36	12.02	9.81	7.18	5.38	3.93	2.89	2.41	1.97	1.44	1.17	0.99
230	6.21									4.19	3.08	2.57	2.10	1.54	1.25	1.05
261	5.48									4.10	3.01	2.51	2.05	1.50	1.22	1.03
291	4.91									4.83	3.55	2.96	2.42	1.77	1.44	1.21
327	4.37									4.77	3.50	2.93	2.39	1.75	1.42	1.20
366	3.91									4.44	3.27	2.73	2.23	1.63	1.33	1.11
<b>4 p LSPX brake</b>																
<b>FCR</b>		80	90		100		112	132			160					



# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2**  
**ZONE 21**

AGMA I, II, III

**Cb 3531**  
LSPX, LSPX brake FCR IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.  
 II 2D T 125°C - ZONE 21

### Cb 3531

		LSPX (kW)														
		1.1	1.5	1.8	2.2	3	4	5.5	7.5	9	11	15	18.5	22	30	
		3-phase LSPX 4 p														
min <sup>-1</sup>	i	90			100		112	132			160		180		200	
179	8	9.82	7.16	5.99	4.89	3.58	2.68	1.96	1.44	1.20						
208	6.87	11.12	8.11	6.78	5.53	4.05	3.03	2.22	1.63	1.36						
227	6.31	12.55	9.15	7.66	6.25	4.57	3.43	2.50	1.84	1.54						
260	5.5	14.41	10.50	8.79	7.17	5.25	3.93	2.87	2.11	1.76	1.44	1.06				
295	4.85	16.25	11.85	9.92	8.08	5.92	4.43	3.24	2.38	1.99	1.62	1.19				
329	4.35	18.21	13.27	11.11	9.06	6.63	4.97	3.63	2.67	2.23	1.82	1.33	1.08			
369	3.88	19.71	14.37	12.02	9.80	7.18	5.38	3.93	2.88	2.41	1.97	1.44	1.17			
403	3.55					7.87	5.90	4.31	3.16	2.64	2.16	1.58	1.28	1.08		
466	3.07					7.94	5.94	4.34	3.19	2.66	2.18	1.59	1.29	1.09		
516	2.77					8.87	6.64	4.85	3.56	2.97	2.43	1.78	1.44	1.21		
586	2.44							5.15	3.78	3.15	2.58	1.89	1.53	1.29		
636	2.25							5.33	3.91	3.26	2.67	1.95	1.58	1.33		
715	2							5.58	4.09	3.41	2.79	2.05	1.66	1.40	1.02	
799	1.79							5.81	4.27	3.56	2.91	2.13	1.73	1.45	1.07	
894	1.60										3.02	2.21	1.80	1.51	1.11	
979	1.46										3.11	2.28	1.85	1.56	1.14	
1117	1.28										3.24	2.37	1.93	1.62	1.19	
<b>4 p LSPX brake</b>																
<b>FCR</b>		90			100		112	132			160					

D

# Electromechanical products

## Atmospheres containing explosive dust

### Compabloc 3000



**CATEGORY 2  
ZONE 21**

## AGMA I, II, III

**Cb 3533**  
**LSPX, LSPX brake FCR IP 65 - Cl.F - 400 Y - 400 Δ - 50 Hz - U.G.**  
**II 2D T 125°C - ZONE 21**

### Cb 3533

		LSPX (kW)													
		1.1	1.5	1.8	2.2	3	4	5.5	7.5	9	11	15	18.5	22	30
		LSPX 4 p													
min <sup>-1</sup>	i	90			100		112	132			160		180		200
7.1	201	2.22	1.62	1.35	1.10										
8.3	173	2.58	1.88	1.57	1.28										
9.0	159	2.80	2.04	1.71	1.39	1.02									
10.4	138	3.21	2.34	1.96	1.60	1.17									
11.7	122	3.63	2.65	2.22	1.81	1.32									
13.0	110	4.04	2.94	2.46	2.01	1.47	1.10								
14.7	97.5	4.53	3.30	2.76	2.25	1.65	1.24								
16.0	89.3					1.80	1.35								
18.5	77.2					2.07	1.55	1.13							
20.5	69.8					2.22	1.66	1.21							
23.3	61.4							1.32							
25.3	56.6							1.38	1.01						
28.8	49.7	8.75	6.38	5.34	4.36	3.19	2.39	1.74	1.28	1.07					
31.8	44.9														
33.5	42.7	10.16	7.41	6.20	5.05	3.70	2.77	2.02	1.49	1.24					
35.5	40.3														
36.5	39.2	11.02	8.04	6.73	5.49	4.01	3.01	2.20	1.61	1.35					
41.8	34.2	12.60	9.19	7.69	6.27	4.59	3.44	2.51	1.85	1.54	1.26				
47.5	30.1	14.24	10.38	8.69	7.08	5.18	3.88	2.84	2.08	1.74	1.42	1.04			
52.8	27.1	15.80	11.52	9.64	7.86	5.76	4.31	3.15	2.31	1.93	1.58	1.16			
59.3	24.1	17.69	12.90	10.79	8.80	6.44	4.83	3.53	2.59	2.16	1.77	1.29	1.05		
64.7	22.1					7.01	5.25	3.84	2.82	2.35	1.92	1.41	1.14		
74.9	19.1					7.64	5.72	4.18	3.07	2.56	2.10	1.53	1.25	1.05	
83.1	17.2					8.87	6.64	4.85	3.56	2.98	2.43	1.78	1.45	1.22	
94.1	15.2							5.31	3.90	3.26	2.66	1.95	1.58	1.33	
102	14							5.59	4.11	3.43	2.80	2.05	1.67	1.40	1.03
115	12.4							6.18	4.54	3.79	3.10	2.27	1.84	1.55	1.14
129	11.1							6.60	4.85	4.05	3.31	2.42	1.97	1.66	1.22
144	9.94										3.65	2.68	2.17	1.83	1.34
158	9.07										3.88	2.84	2.31	1.94	1.43
181	7.92										4.24	3.11	2.52	2.12	1.56
199	7.18							5.60	4.11	3.43	2.80	2.05	1.67	1.40	1.03
224	6.38							6.18	4.54	3.79	3.10	2.27	1.84	1.55	1.14
251	5.7							6.60	4.85	4.05	3.31	2.42	1.97	1.65	1.22
280	5.1										4.34	3.18	2.58	2.17	1.60
307	4.66										4.56	3.34	2.72	2.28	1.68
351	4.07										4.89	3.58	2.91	2.44	1.80
<b>4p LSPX brake</b>															
<b>FCR</b>		90			100		112	132			160				



