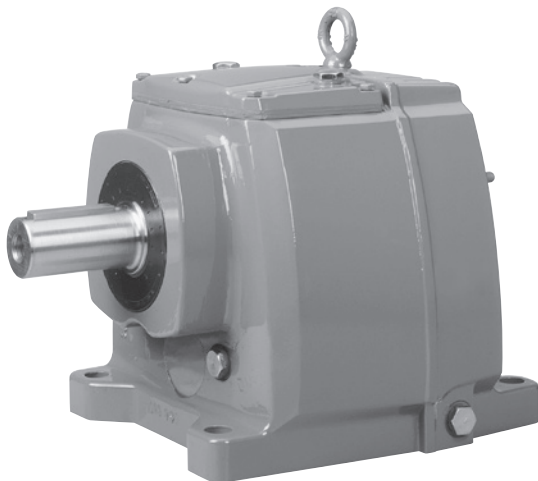



Installation guide

COMPABLOC 3000



 Before any intervention or operation for preventive or corrective maintenance, please, download **NECESSARILY** the update version of Maintenance guide reference 5060: www.leroy-somer.com

Part number: 3520 en - 2019.09 / y

LEROY-SOMERTM

GENERAL WARNING

This document complements the general instructions ref. 2557 (recommendations), ref. 3711, ref. 3804 (Atex specifics recommendations) and the specific instructions ref. 5060 (Compabloc 3000 Maintenance).

NOTE

Nidec Leroy-Somer reserves the right to modify the characteristics of its products at any time in order to incorporate the latest technological developments. The information contained in this document may therefore be changed without notice.

Nidec Leroy-Somer gives no contractual guarantee whatsoever concerning the information published in this document and cannot be held responsible for any errors it may contain, nor for any damage resulting from its use.

CAUTION



Throughout the manual, this symbol warns of consequences which may arise from inappropriate use of the Compabloc 3000 since risks may lead to material or physical damage.

Despite all the care taken in the manufacture and checking of this equipment, Nidec Leroy-Somer cannot guarantee that lubricant will not escape during the product's lifetime. If slight leaks could have serious consequences for the safety of people and property, the installer and user should take all necessary precautions to avoid such consequences.

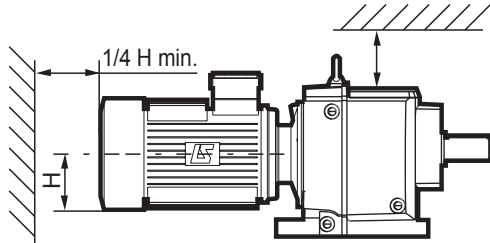
CONTENTS

1 - INSTALLATION RECOMMENDATIONS	9
1.1 - Identification	9
2 - MAINTENANCE	9
3 - LUBRICATION	9
3.1 - Compabloc 1 stage	10
3.1.1 - Plugs positions	10
3.1.2 - Oil quantity in litres	10
3.2 - Compabloc multistage	11
3.2.1 - Plugs positions	11
3.2.2 - Oil quantity in litres	11
3.3 - Combined Compabloc	12
3.3.1 - Oil quantity in litres	12

1 - INSTALLATION RECOMMENDATIONS

Installation must be performed by qualified personnel. Allow sufficient room around the geared motor for plugs (or vessel) accessibility:

- 200 mm: G1/4" plug for Cb 30 to 35
- 500 mm: G3/4" dipstick for Cb 36 to 38



Gearbox:

For the installation of Compabloc 3000 gearbox, follow the "Recommendations" chapter in the general manual. If the gearbox is fitted with a MU universal mounting with a stiff coupling by key, we recommend the application of a lithium paste (molykote TP42 or equal) on the motor shaft.

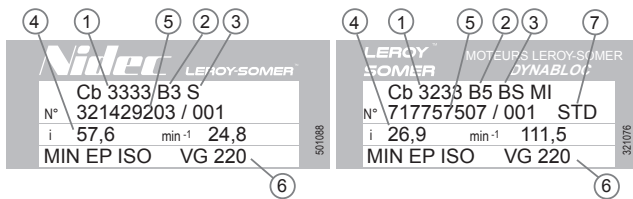
Motor:

For connection of the complete drive system (with brake), follow the instructions of corresponding maintenance delivered with the goods in the parcel.

1.1 - Identification

The gearbox nameplate:

- 1 - gearbox model and size
- 2 - operating position
- 3 - fixing type (S with foot, BS, BDN or BT...)
- 4 - exact reduction
 - possible options
- 5 - serial number
- 6 - lubricant
- 7 - backlash: Standard (DYNABLOC).



2 - MAINTENANCE

Control after commissioning (50 hours of operation).

Check tightening of fastening screws and belt tensioning if applicable.

Preventive maintenance visit.

- Check regularly that the recommendations concerning mechanical and electrical installation are still complied with.
- If the gearbox is fitted with a breather plug, make sure that the vent hole of the plug is not obstructed.
- Inspect the seals.
- Clean the ventilation louvres of the motor.
- Lubricate the bearings of the motors fitted with grease nipples.
- Control the air gap of brake motors.

Oil, seals, bearings, AD.

6 months	Adjust oil level. Inspect the seals.
3 years (or 5 000 h)	Drain and refill mineral oil. Change the seals. Change the grease of regreasable bearings.
5 years (or 25 000 h)	Drain and refill synthetic oil. Change the seals. Change the grease of regreasable bearings.

Grease nipple on AP Cb 34, 35.

- Replace the grease ISO VG 100, NLGI 2, after 12 000 h (25°C; 1500 min⁻¹)

Storage period	<1 year	AP can be commissioned without regreasing.
	>1 and <2 years	Regrease before commissioning.
	2 to 5 years	Dismantle AP. Clean it. Replace the grease completely.

3 - LUBRICATION

For operation in ambient temperature between -10°C and +40°C, Compabloc Cb 3000 reducer is shipped, as standard, with mineral Extreme Pressure oil: EP ISO VG 220. From -30°C to +60°C: synthetic oil PAO ISO VG 150. From -30°C to -10°C : synthetic oil PAO ISO VG 32. From -30°C to +60°C and for use in the food industry: synthetic oil PAO H1 ISO VG 150.



You must use an oil of the recommended type.

Polyglycols lubricants cannot be mixed with mineral or synthetic lubricants of a different type.


Oil capacities.

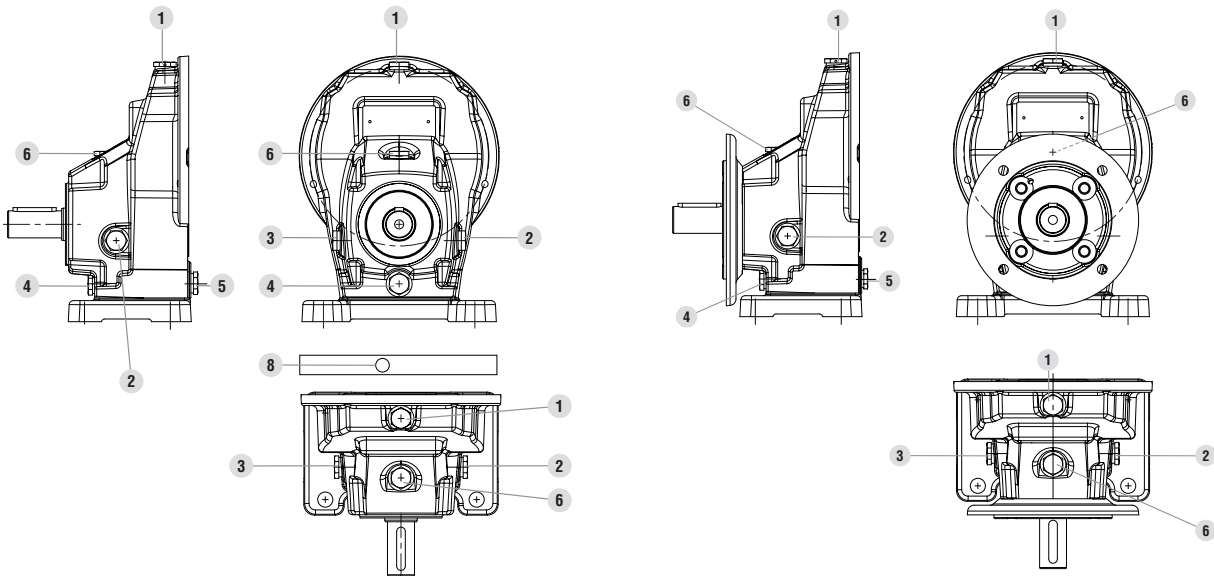
The oil capacities shown in table (see § 3.1, 3.2, 3.3) are approximative: values and should be used only as reference in determining how much oil to provide. The proper oil levels can only be determined by:

- Cb 31 to 35: **plug: filling the reducer to the level of the plug (Cb 30 excepted)**
- Cb 36 to 38: **dipstick: adjust oil level between the 2 marks (up/down).**

3.1 - Compabloc 1 stage


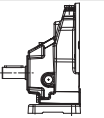
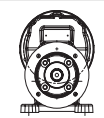
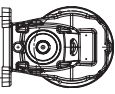
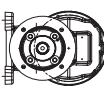
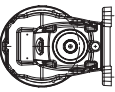

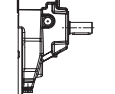

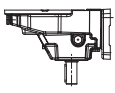
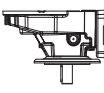
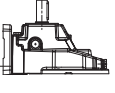
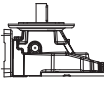
3.1.1 - Plugs positions

 Rep. n° 8 (1/4" except Cb 31, Cb 32: 1/8")
on motor face plate or U-mount housing



 Place the breather plug at the top of the gearbox.

3.1.2 - Oil quantity in litre (considering operating position)

		Cb 3031 ¹	Cb 3131		Cb 3231		Cb 3331		Cb 3431		Cb 3531	
			1/4" G (n°) rep. 8: 1/8"	litre ²	1/4" G (n°) rep. 8: 1/8"	litre ²	1/4" G (n°)	litre ²	1/4" G (n°)	litre ²	1/4" G (n°)	litre ²
B3 	B5 	-	2-3 4 1-8 1-8	0.35	2-3 4 1-6-8 1-6-8	0.25	2-3 4 1-8 1-8	0.9	2-3 4 1-8 1-8	2	2-3 4 1-8 1-8	3.2
B6 	B52 	-	1-4-5 2*-8* 3-8* 3-8*	0.5	1-4-6-5 2*-8* 3-8* 3-8*	0.55	1-4-5 2*-8* 3-8* 3-8*	1.4	1-4 2*-8* 3-8* 3-8*	3	1-4 2*-8* 3-8* 3-8*	5.2
B7 	B54 	-	1-4-5 3*-8* 2-8* 2-8*	0.5	1-4-6-5 3*-8* 2-8* 2-8*	0.55	1-4-5 3*-8* 2-8* 2-8*	1.4	1-4 3*-8* 2-8* 2-8*	3.2	1-4 3*-8* 2-8* 2-8*	5
B8 	B53 	-	2-3 1 4-5 4-5	0.7	2-3 1 4-5 4-5	0.75	2-3 1 4-5 4-5	1.9	2-3 1 4 4	4.2	2-3 1 4 4	7.3
V5 	V1 	-	1 4 5-8 5-8	0.55	1 4 5-8 5-8	0.6	1 4 5-8 5-8	2.1	1 4 8 8	3.8	1 4 8 8	5.8
V6 	V3 	-	2-3 5-8 without 2-3-4	1.0	2-3 5-8 without 2-3-4	0.8	2-3 5-8 4 2-3-4	2.1	2-3 8 4 2-3-4	3	2-3 1-8 4 2-3-4	5.5

1. Cb 3031 (multi-position) is lubricated for life with 0.3 l oil EP ISO VG 220

2. Limits: ± 0.05 litre for oil quantity < 5 litres
± 2 % for oil quantity ≥ 5 litres

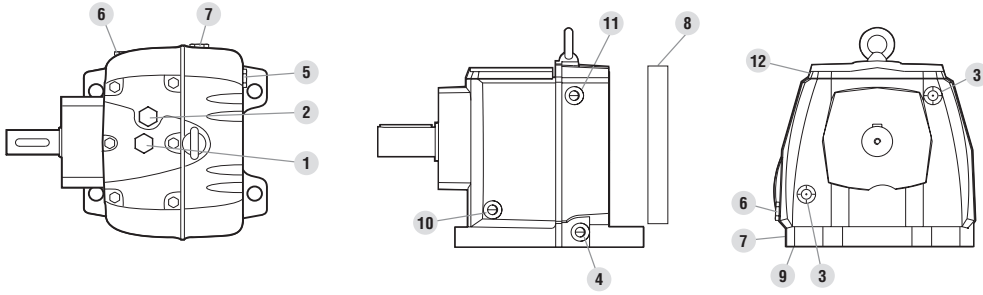
2*: partial draining
3*: partial draining
8*: depending on face-plate position

 :  Level  Draining  Breather  Filling

In case of operating position in inclined plan (option), a study will be done.

3.2 - Compabloc multistage

3.2.1 - Plugs positions in accordance to standard position: B3 - B5



Rep. n°8 (1/4" except Cb 31, Cb 32: 1/8") on motor face plate or U-mount housing. Place the breather plug at the top of the gearbox.

3.2.2 - Oil quantity in litres (considering operation position)

Plugs	n°	Cb 30xx ¹		Cb 31xx	Cb 32xx	Cb 33xx	Cb 34xx	Cb 35xx	Cb 36xx	Cb 37xx	Cb 38xx						
		rep. 8: 1/4" litres ²		rep. 8: 1/8" litres ²	rep. 8: 1/8" litres ²	litres ²	litres ²	litres ²	rep. 8: 1/4" litres ²	rep. 8: 1/4" litres ²	rep. 8: 1/4" litres ²						
		2T	3T	3T	3T	3T	3T	3T	n°	n°	n°						
	3			0.6	0.95	1.6	3.3	5.2	J*2	8	J*2	13	J*2	17			
	4								4		7		4				
	1-2								2		2		2		AD: 8	AD: 13	AD: 17
	1-2								2		2		1				
without	-	0.6	0.7														
	2T: 1-3T: 2			1.23	2.3	4.37	7 (2)	12.5	J*6	15 ³	J*6	27	J*12	43			
	4								10		10		4				
	3-8*								6		6		12		AD: 15 ³	AD: 27	AD: 43
	3								6		6		7				
without	-	0.6	0.7														
	1			0.85	1.55	2.95	4.7	8.5	J*10	18	J*10	32	J*11	51			
	3*								6		6		7				
	4-8*								10		10		11		AD: 18	AD: 32	AD: 51
	4								10		10		4				
without	-	0.6	0.7														
	3			1.1	2.25	4.45	6.7	13.2	J*9	22,5	J*9	38	J*9	58			
	1-2								2		2		2				
	4-8*								9		9		9		AD: 22,5	AD: 38	AD: 58
	4								9		9		9				
without	-	0.6	0.7														
	4			1.15	2.25	4.5	7.5	14.7	J*5	25 ³	J*5	42,5 ³	J*5	65 ³			
	3								3		3		3				
	8								5		5		5		AD: 25 ³	AD: 42,5 ³	AD: 65 ³
	4-8								5		5		5				
without	-	0.6	0.7														
	1-2			1.4	2.7	4.4	7.5	13.7	6J*3	24,5 ³	J*3	41,5	J*3	61 ³			
	4-8								5		5		5				
	3								3		3		3		AD: 24,5 ³	AD: 41,5	AD: 61 ³
	3								3		3		3				
without	-	0.6	0.7														

1. This gearbox is lubricated for life with EP ISO VG 220;
Cb 3032: 0.6 litre - Cb 3033: 0.7 litre

2. Limits: ± 0,05 litre for oil quantity < 5 litres
± 2% for oil quantity ≥ 5 litres

3. Cb 36 B6: kit 2p motor (dipstick, flexible pipe, expansion vessel, plug)

3. Cb 36, 37, 38 V5: kit (dipstick, flexible pipe, expansion vessel, plug)

3. Cb 36 V6: kit 4p motor (dipstick, extension pipe), 2p motor: not allowed

3. Cb 38 V6: 2p motor: not allowed

3*: partial draining

8*: depending on face-plate position

AD: operation with backstop

J*: dipstick






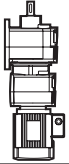
6J*3: Level 6, Dipstick 3

: Level Draining Breather Filling

In case of operating position in inclined plan (option) a study will be done.

3.3 - Cb/Cb combined Compabloc

3.3.1 - Cb/Cb combined oil quantity (considering operation position)

Cb/Cb combined									
Cb Output	i	Cb Input	Operating position						
									
			B3 - B5 litres ¹	B6 - B52 litres ¹	B8 - B53 litres ¹	B7 - B54 litres ¹	V5 - V1 litres ¹	V6 - V3 litres ¹	
3835 (6T)	4580 -> 26500	3433-3T	41 / 3,3	xx / 7	xx / 6,7	xx / 4,7	xx / 7,5	68 / 7,5	
3835 (5T)	1070 -> 3980	3433-3T	41 / 3,3	xx / 7	xx / 6,7	xx / 4,7	xx / 7,5	68 / 7,5	
3835 (4T)	211 -> 983	3433-2T	41 / 3,3	xx / 7	xx / 6,7	xx / 4,7	xx / 7,5	68 / 7,5	
3735 (6T)	5000 -> 40300	3233-3T	26 / 0,95	xx / 2,3	xx / 2,25	xx / 1,55	42,5 / 2,25	xx / 2,7	
3735 (5T)	1260 -> 4600	3233-3T	26 / 0,95	xx / 2,3	xx / 2,25	xx / 1,55	42,5 / 2,25	xx / 2,7	
3735 (4T)	217 -> 1133	3233-2T	26 / 0,95	xx / 1,75	xx / 2,25	xx / 1,55	42,5 / 2,25	xx / 2,7	
3635 (6T)	3950 -> 40500	3233-3T	13,5 / 0,95	xx / 2,3	xx / 2,25	xx / 1,55	25 / 2,25	29 / 2,7	
3635 (5T)	990 -> 3610	3233-3T	13,5 / 0,95	xx / 2,3	xx / 2,25	xx / 1,55	25 / 2,25	29 / 2,7	
3635 (4T)	213 -> 890	3233-2T	13,5 / 0,95	xx / 1,75	xx / 2,25	xx / 1,55	25 / 2,25	29 / 2,7	
3535 (6T)	8970 -> 40300	3133-3T	13,2 / 0,6	12,5 / 1,23	13,2 / 1,1	8,5 / 0,85	14,7 / 1,15	xx / 1,4	
3535 (5T)	1540 -> 7810	3133-2T	13,2 / 0,6	12,5 / 0,95	13,2 / 1,1	8,5 / 0,85	14,7 / 1,15	xx / 1,4	
3535 (4T)	222 -> 1440	3133-2T	13,2 / 0,6	12,5 / 0,95	13,2 / 1,1	8,5 / 0,85	14,7 / 1,15	xx / 1,4	
3435 (6T)	8890 -> 16000	3133-3T	7 / 0,6	7 / 1,23	6,7 / 1,1	4,7 / 0,85	7,5 / 1,15	9,7 / 1,4	
3435 (5T)	1700 -> 7620	3133-2T	7 / 0,6	7 / 0,95	6,7 / 1,1	4,7 / 0,85	7,5 / 1,15	9,7 / 1,4	
3435 (4T)	229 -> 1570	3133-2T	7 / 0,6	7 / 0,95	6,7 / 1,1	4,7 / 0,85	7,5 / 1,15	9,7 / 1,4	
3335 (5T)	1480 -> 8210	3032	4,45 / 0,6	4,37 / 0,6	4,45 / 0,6	2,95 / 0,6	4,5 / 0,6	xx / 0,6	
3335 (4T)	223 -> 1370	3032	4,45 / 0,6	4,37 / 0,6	4,45 / 0,6	2,95 / 0,6	4,5 / 0,6	xx / 0,6	
3235 (6T)	8580 -> 25500	3033	2,3 / 0,7	2,3 / 0,7	2,25 / 0,7	1,55 / 0,6	2,25 / 0,7	xx / 0,6	
3235 (5T)	1500 -> 7910	3032	2,3 / 0,6	2,3 / 0,6	2,25 / 0,6	1,55 / 0,6	2,25 / 0,6	xx / 0,6	
3235 (4T)	224 -> 1370	3032	2,3 / 0,6	2,3 / 0,6	2,25 / 0,6	1,55 / 0,6	2,25 / 0,6	xx / 0,6	
3135 (6T)	6120 -> 25400	3033	1,23 / 0,7	1,23 / 0,7	1,1 / 0,7	0,85 / 0,7	1,15 / 0,7	xx / 0,7	
3135 (5T)	1520 -> 5640	3032	1,23 / 0,6	1,23 / 0,6	1,1 / 0,6	0,85 / 0,6	1,15 / 0,6	xx / 0,6	
3135 (4T)	226 -> 1390	3032	1,23 / 0,6	1,23 / 0,6	1,1 / 0,6	0,85 / 0,6	1,15 / 0,6	xx / 0,6	

1. Limits: ± 10 % for oil quantity ≥ 5 litres

xx: consult us

Nidec
All for dreams

LEROY-SOMERTM



Moteurs Leroy-Somer
Headquarter: Boulevard Marcellin Leroy - CS 10015
16915 ANGOULÈME Cedex 9

Limited company with capital of 65,800,512 €
RCS Angoulême 338 567 258

www.leroy-somer.com