VARMECA variable speed asynchronous motors and FCR brake
LS VARMECA FCR

CATEGORY 3
ZONE 22
Non-conductive dust

General information

LS VARMECA with FCR brake, the result of a long experience in speed variation, has self certification for atmospheres containing explosive dust category 3, zone 22.

Power : 0.25 to 4 kW frame size 71 to 112. VARMECA offers a high flexibilty of operation on account of the options : parameter setting by microconsole or PC ; process management due to the international standard communication systems (Profibus, InterBus S, DeviceNet, ...).

C

Description of VARMECA with LS FCR three-phase brake motor

II 3D T 125 °C

Component	Remarks
Construction	- IP 65 protection, class F - Aluminium housing and polyamide cable glands - Captive cover screws - Control and power cables connected through a flexible blade connector - Electronics encapsulated in the resin to provide a good mechanical rigidity andprotection against humidity
Characteristics	- Single phase power supply : • Mains supply : 208V -10% to 240V +10% 50-60 Hz ±2% • Output voltage : from 0 V to the mains supply voltage • Power range : 0.25 - 0.37 - 0.55 - 0.75 - 0.9 - 1.1 - 1.5 kW • Maximum number of starts/hour : 10 - Three phase power supply : • Mains supply : 208V -10% to 480V +10% 50-60 Hz ±2% • Output voltage : from 0 V to the mains supply voltage • Power range : 0.25 - 0.37 - 0.55 - 0.75 - 0.9 - 1.1 - 1.5 - 1.8 - 2.2 - 3 - 4 kW • Maximum number of starts/hour : 100
FCR brake	- Failsafe electromechanical brake, IP55 : • Incorporated mains supply • Allows a safe and precise reduced stopping time • The brake reacts immediately the run command is activated. • The braking effect take place at the end of the deceleration, after the stop command has been given. - FCR brake management, three phase power supply : • VMA31-32T : SOVMA (fixed brake control) or VMA ESFR (sequential brake control) - Brake motor frequency variation range : • from 10 to 80 Hz constant torque • from 10 to 50 Hz general use - Efficiency : 97.5 % of the brake motor efficiency - Overload : • 150 % of the In during 60 s • 10 times per hour
Environment	- Storage temperature : -40°C to +70°C (IEC 68.2.3). In accordance with the standard IEC 60068-2-1. - Transport temperature : -40°C to +70°C - Operation temperature : -20°C to +50°C (with derating of 1 % of power by °C, beyond 40 °C. - Altitude : < 1000m without derating . The maximum authorised temperature is 4000 m, but beyond 1000 m, the permanent output current must be subject to a derating of 1% for every additional 100 m above 1000 m (ex.: for an altitude of 3000 m, derate of 20%). - Ambient humidity : 95% without condensation - Humidity during storage : 93%, 40 °C, 4 days - Vibrations : • Non packed product : 0.01 g^2/Hz 1hr according to the standard IEC 60068-2-34. • Sinusoidal vibrations : - VMA31-32 : 2-9 Hz 3.5 ms^{-2} – 9-200 Hz 10 ms^{-2} according to the standard IEC 60068-2-6. - Shocks : Packed product : 15 g, 6 ms, 500 times/direction in the 6 directions according to the standard IEC 60068-2-29. - Immunity : According to EN61000-6-2 - Conducted and radiated emissions : • According to EN 61000-6-4 in VMA 31-32 • According to EN 61000-6-3 with internal filter option in VMA 31, VMA 31-32T/TL - UL standards : • According to UL 508 C (E211799) and c UL US
Painting	- system Ia, colour RAL 6000 (green) - resistance to saline mist : 72 h (following NFX 41002)

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LS VARMECA FCR

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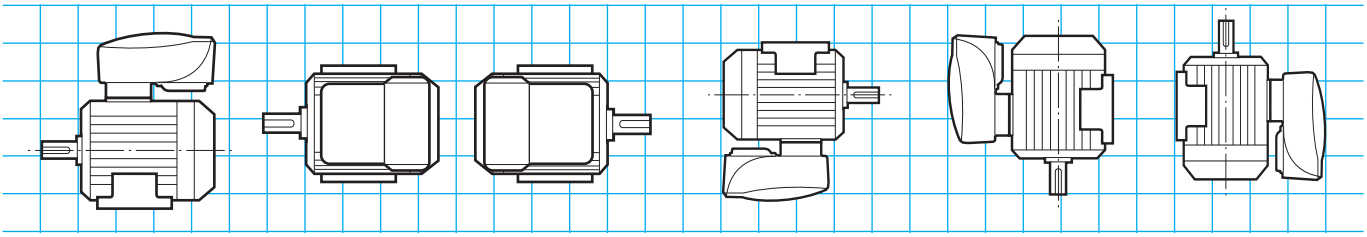
Non-conductive dust

Mounting positions

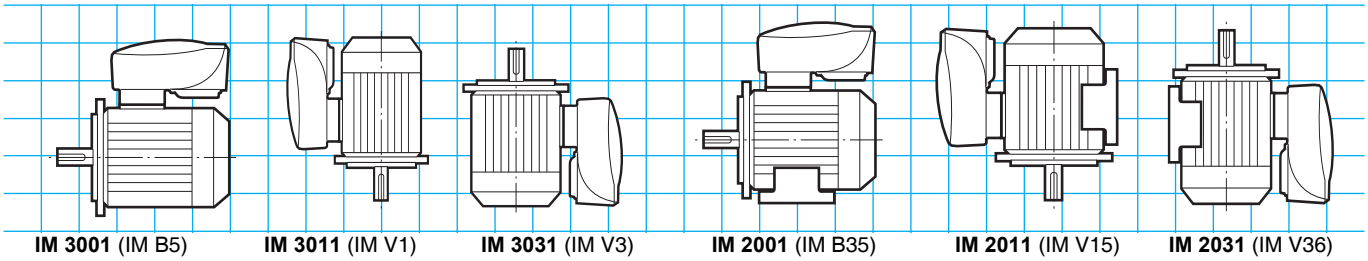
Reference position is viewed from side F (drive end shaft)

Foot mounted VARMECA motor



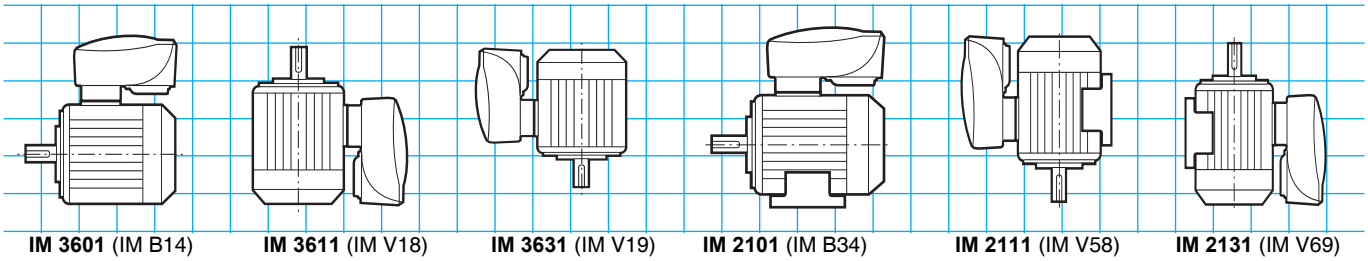
IM 1001 (IM B3) | **IM 1051** (IM B6) | **IM 1061** (IM B7) | **IM 1071** (IM B8) | **IM 1011** (IM V5) | **IM 1031** (IM V6)

(FF) plain hole flange mounted VARMECA motor



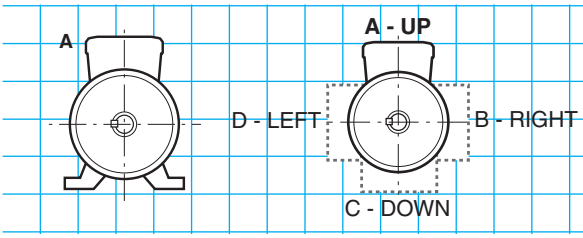
IM 3001 (IM B5) | **IM 3011** (IM V1) | **IM 3031** (IM V3) | **IM 2001** (IM B35) | **IM 2011** (IM V15) | **IM 2031** (IM V36)

(FT) tapped hole flange mounted VARMECA motor



IM 3601 (IM B14) | **IM 3611** (IM V18) | **IM 3631** (IM V19) | **IM 2101** (IM B34) | **IM 2111** (IM V58) | **IM 2131** (IM V69)

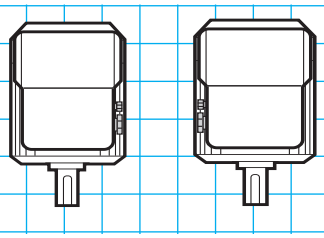
VARMECA positions



Foot mounted motor
A: standard

Flange mounted motor
A - UP: standard

Cable gland positions



1: RIGHT: standard | 3: LEFT

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Non-conductive dust

Adaptation possibilities

Leroy-Somer offers, for use with their VARMECA enclosed three phase variable speed motors, many options which meet the needs of highly diverse applications. They are described below and in the chapter on gearboxes (D).
For other variants or any specific adaptation, consult the technical specialists at Leroy-Somer who will be pleased to advise.

☞ ***VARMECA variable speed FCR three phase brake motors may be integrally mounted (fitted motor), or with universal mounting (IEC standardised motor) with the following gearboxes :***

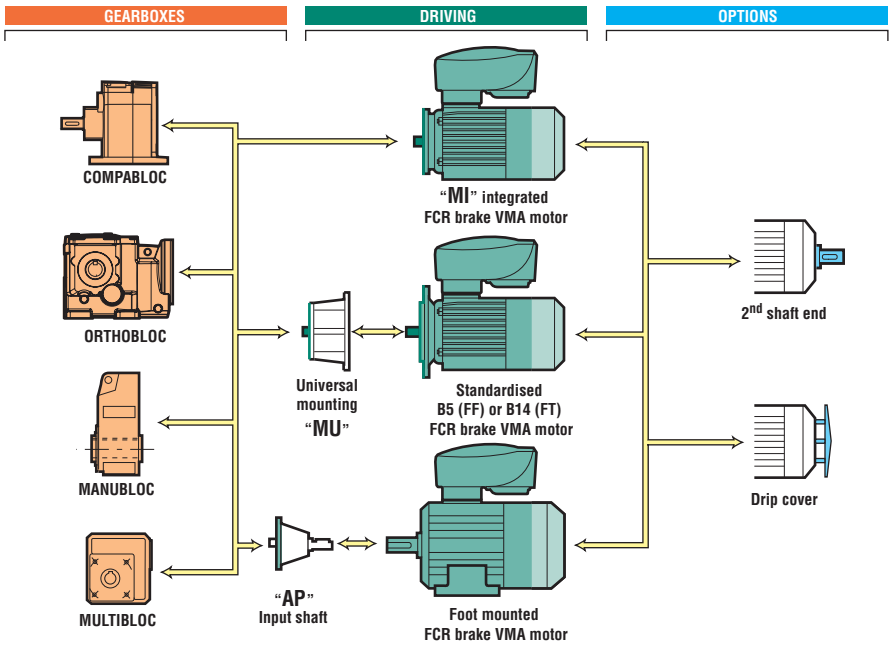
- Compabloc
- Orthobloc
- Manubloc
- Multibloc

☞ ***The options :***

Motor :
- Drip cover
- Stainless steel nameplate
- Second shaft end
- Non standardised flanges

VARMECA :
- Speed setting switch
- Run/Stop order
- Forward run/Reverse run/Stop order
- CVI VMA order (adjustment potentiometers)
- CEM filter
- Integrated speed settings
- Brake management and mains supply
- Local display or remote reading
- Parameter setting software
- External options (potentiometer, speed digital indicator, ...)
- Field bus interface

See the following pages



C

Designation / Codification

ATEX II 3D T 125°C	4P 320-2250 min^{-1} 320-2350 min^{-1}	LS	80	L	0.9 kW	VMA 31T090	SOVMA	400-480 V 50-60 Hz	U.G	FCR J01	6 N.m	A1
Specific application	Polarity, Speed range	Motor series	Motor frame size	Manuf. index (motor)	Power in kW	VARMECA size	Brake mains supply card	Rated frequency and voltage	Use	Inertia and brake type	Brake torque	VMA and PE position

☞ ***Codification example :***

4P LS 80 L 0.9 kW VMA 31T090 FCR J01 6 N.m A1
for a Varmeca motor, 4 poles power 0.9 kW

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

CATEGORY 3
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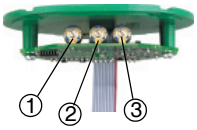
Options designation / codification

Description of the VARMECA options

Component VMA 31-32	Remarks
 B31-32	**Speed setting switch option** The speed setting is made by graduated switch from 15 to 100 %. • 2 indicator lights.
 BMA31-32	**Setting switch option with integrated Stop/Run control** As well as the speed setting, a run key and a stop key allow, once the VARMECA is powered up, to drive it locally if Idesired. In order to react, the run command needs an impulse of a second on the key. • 2 indicator lights.
 BMAVAR31-32	**Setting switch option with Forward run/Reverse run/Stop control** As well as the speed setting, a forward run key, a reverse run key and a stop key, allow once VARMECA is powered up to drive it locally if desired. In order to react, the run command needs an impulse of a second on the key. • 2 indicator lights.
 CVIVMA31-32	**Internal speed setting option** The speed settings are made by potentiometers accessible after cover removal. ① a Minimum speed potentiometer : standardisation of the minimum speed, ② an Integrated speed potentiometer : setting of the speed that substitutes to the switch setting. ③ a Maximum speed potentiometer : setting of the maximum speed, There are also 2 indicator lights.
 Integral : FLT VMA31-32 Integral : FLT VMA31M	**CEM filter option** The VARMECA 31-32 are in accordance with the standard EN 61000-6-4 due to the CEM integral filter mounted in front of the VARMECA box. • FLT VMA 31-32 CEM filter industrial level • FLT VMA 31-33 CEM filter option = internal level - for VMA 31-32 M up to 1.1 kW inside and for 1.5 kW outside - for VMA 31-32 T up to 2.2 kW inside and from 4 kW outside
 Three phase power supply 400V : SO VMA 31-32	**Electromechanical brake management and mains supply** The motor must be fitted with a FCR brake adapted to VARMECA (three phase mains supply 400V to 480V ±10%) The brake mains supply is incorporated. The brake responds immediately the run command is activated. The braking effect takes place ,after a stop command is given, at the end of deceleration or when the mains supply is cut. The rectifier circuit is fixed on the terminal board.
 ESFR VMA 31-32	**Additional inputs/outputs interface and brake sequencial management** The brake mains supply is incorporated. The brake command is controlled from a sequential setting from the VARMECA parameters. An additional digital input allows a preset speed to be obtained or the electrical release of the brake.

Options designation / codification

Description of the VARMECA options

Component VMA 31-32	Remarks
 4 PE flange	**4 PE flange option** A connection terminal block on VARMECA allows the direct installation of a second FCR brake motor.
 KEY PAD LCD + 1 cord L=3 m	**Parameter setting micro-console option** The micro-console option allows access to the internal settings of the variable speed drive (configuration of the terminal block, settings of ramps, of speed, of PI…).
 LEC VMA	**Digital display option for remote reading** Digital speed indicator. Programmable indicator with speed scaling in relation to the speed image output : connection on the control terminal block. Mains supply 10 - 70 V DC
 SOFT VMA + 1 cord L=3 m	**Parameter setting software option** This option allows the access to the internal settings of the variable speed drive from a PC. The software is compatible with WINDOWS 95, 98, NT, 2000, XP and subsequent versions.
 VMA COM PB31-32	**Fieldbus option** The interface card is fixed to the interior of the box. Protocols : Profibus DP. It cannot be mounted on the VMA 32M.
 POT 1T 10K - POT 10T 10K	**Potentiometer option** The speed adjustment may be obtained by : - Potentiometer 1 turn (ref. POT 1T 10K) • Characteristics : 10 kΩ with switch and plate : connection to the control terminal block. - Potentiometer 10 turns (ref. POT 10T 10K) • Characteristics : 10 kΩ with switch and indicator : connection to the control terminal block.

VARMECA variable speed asynchronous motors and FCR brake
LS VARMECA FCR

CATEGORY 3
ZONE 22
Non-conductive dust

Selection

4 poles 1500 min^{-1}

• LS VMA FCR series brake motor - IP 55 - 50/60 Hz ±5 % - U.G. General Use
• Three-phase motors 4 poles 230/400 V connected Δ - Brake management set in factory (VMA ESFR)
Single phase mains supply : from 200 V -10 % to 240 V +10 %

II 3D T 125 °C

Motor type	VMA type	Brake type	Rated power P_N kW	Rated current I_N 230 V A	Rated torque 320 to 2350 min^{-1} M_N N.m	Starting torque / Rated torque M_D / M_N	Moment of inertia J 10^{-3}kg.m^2	Brake torque M_f ±20% N.m	Weight[1] IM B5 kg
LS 71 L	**VMA 31 M 025**	**FCR J01**	0.25	1.22	1.1	2.2	1.07	2.5	16
LS 71 L	**VMA 31 M 037**	**FCR J01**	0.37	1.95	1.6	3	1.25	4	17
LS 71 L	**VMA 31 M 055**	**FCR J01**	0.55	2.9	2.35	3	1.5	4	18
LS 80 L	**VMA 31 M 075**	**FCR J01**	0.75	3.5	3.2	3	2.8	6	21
LS 80 L	**VMA 32 M 090**	**FCR J01**	0.9	4	3.8	2.9	3.4	6	22.6
LS 90 L	**VMA 32 M 110**	**FCR J01**	1.1	4.7	4.7	2.7	5	10	27
LS 90 L	**VMA 32 M 150**	**FCR J01**	1.5	6.1	6.4	2.8	5.7	10	29

1. These values are given for information only.

4 poles 1500 min^{-1}

• LS VMA FCR series brake motor - IP 55 - 50/60 Hz ±5 % - U.G. General Use
• Three-phase motors 4 poles 230/400 V connected Δ - Brake management set in factory (VMA ESFR)
Single phase mains supply : from 200 V -10 % to 240 V +10 %

II 3D T 125 °C

Motor type	VMA type	Brake type	Rated power P_N kW	Rated current I_N 230 V A	Rated torque 320 to 2350 min^{-1} M_N N.m	Starting torque / Rated torque M_D / M_N	Moment of inertia J 10^{-3}kg.m^2	Brake torque M_f ±20% N.m	Weight[1] IM B5 kg
LS 71 L	**VMA 31 TL 025**	**FCR J01**	0.25	1.22	1.1	2.2	1.07	2.5	16
LS 71 L	**VMA 31 TL 037**	**FCR J01**	0.37	1.95	1.6	3	1.25	4	17
LS 71 L	**VMA 31 TL 055**	**FCR J01**	0.55	2.9	2.35	3	1.5	4	18
LS 80 L	**VMA 31 TL 075**	**FCR J01**	0.75	3.5	3.2	3	2.8	6	21
LS 80 L	**VMA 32 TL 090**	**FCR J01**	0.9	4	3.8	2.9	3.4	6	22.6
LS 90 L	**VMA 32 TL 110**	**FCR J01**	1.1	4.7	4.7	2.7	5	10	27
LS 90 L	**VMA 32 TL 150**	**FCR J01**	1.5	6.1	6.4	2.8	5.7	10	29
LS 90 L	**VMA 32 TL 180**	**FCR J01**	1.8	7.1	7.7	3	6.7	15	30.7
LS 100 L	**VMA 32 TL 220**	**FCR J01**	2.2	8.85	9.4	2.7	7.4	15	34.5

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VARMECA variable speed asynchronous motors and FCR brake
LS VARMECA FCR

CATEGORY 3
ZONE 22
Non-conductive dust

Selection

4 poles 1500 min^{-1}

- IP 55 - 50/60 Hz ± 5 % - Class F - U.G.
- 4 p - 230/400 V - Δ - FCR (VMA ESFR)

II 3D T 125 °C

Motor type	VMA type	Brake type	Rated power at 50 Hz P_N kW	Braking torque M_f ± 20% N.m	IM 1001 (IM B3) Code	Qty	IM 3001 (IM B5) Code	Qty	IM 3601 (IM B14) Code	Qty
LS 71 L	**VMA 31 M 025**	**FCR J01**	0.25	2.5		-	4569721	3	4571003	3
LS 71 L	**VMA 31 M 037**	**FCR J01**	0.37	4		-	4569736	3	4571005	3
LS 71 L	**VMA 31 M 055**	**FCR J01**	0.55	4		-	4570999	3	4571001	3
LS 80 L	**VMA 31 M 075**	**FCR J01**	0.75	6		-	4572129	3	4572131	3
LS 80 L	**VMA 32 M 090**	**FCR J01**	0.9	6		-	4572136	3	4572139	3
LS 90 L	**VMA 32 M 110**	**FCR J01**	1.1	10		-	4572143	3	4572162	3
LS 90 L	**VMA 32 M 150**	**FCR J01**	1.5	10		-	4572215	3	4572219	3
Options VMA pages C20.4, C20.5						-	-	3	-	3

4 poles 1500 min^{-1}

- IP 55 - 50/60 Hz ± 5 % - Class F - U.G.
- 4 p - 230/400 V - Δ - FCR (VMA ESFR)

II 3D T 125 °C

Motor type	VMA type	Brake type	Rated power at 50 Hz P_N kW	Braking torque M_f ± 20% N.m	IM 1001 (IM B3) Code	Qty	IM 3001 (IM B5) Code	Qty	IM 3601 (IM B14) Code	Qty
LS 71 L	**VMA 31 TL 025**	**FCR J01**	0.25	2.5		-	4569379	3	4569562	3
LS 71 L	**VMA 31 TL 037**	**FCR J01**	0.37	4		-	4569382	3	4569564	3
LS 71 L	**VMA 31 TL 055**	**FCR J01**	0.55	4		-	4569385	3	4569566	3
LS 80 L	**VMA 31 TL 075**	**FCR J01**	0.75	6		-	4569387	3	4569568	3
LS 80 L	**VMA 32 TL 090**	**FCR J01**	0.9	6		-	4569408	3	4569570	3
LS 90 L	**VMA 32 TL 110**	**FCR J01**	1.1	10		-	4569411	3	4569572	3
LS 90 L	**VMA 32 TL 150**	**FCR J01**	1.5	10		-	4569519	3	4569575	3
LS 90 L	**VMA 32 TL 180**	**FCR J01**	1.8	15		-	4569522	3	4569669	3
LS 100 L	**VMA 32 TL 220**	**FCR J01**	2.2	15		-	4569531	3	4569673	3
Options VMA pages C20.4. C20.5						-	-	3	-	3

Selection example :

Application :	Atex 22
Required power :	1.1 kW
Mains supply :	Three-phase 230V Δ
Required torque :	10 N.m
Required speed :	600 to 1600 min^{-1}
Mounting and position : flange	IM 3001 (IM B5)

Designation :
4P LS 90 L 1.1 kW VMA 32 TL 110
(VMA ESFR) 200/240V - 50/60 Hz
UG FCR J01 10 N.m A1
Zone 22
Code : 4569411

VARMECA variable speed asynchronous motors and FCR brake
LS VARMECA FCR

CATEGORY 3
ZONE 22
Non-conductive dust

Selection

4 poles 1500 min^{-1}

• LS VMA FCR series brake motors - IP 55 - 50/60 Hz ±5 % - U.G. General Use
• Three-phase motors 4 poles 230/400 V connected Δ - Brake management set in factory (SOVMA)
Three-phase mains supply : from 400 V -10 % to 480 V +10 %

II 3D T 125 °C

Motor type	VMA type	Brake type	Rated power P_N kW	Rated current I_N 400 V A	Rated torque 320 to 2350 min^{-1} M_N N.m	Starting torque / Rated torque M_D / M_N	Moment of inertia J 10^{-3}kg.m^2	Brake torque M_f±20% N.m	Weight[1] IM B5 kg
LS 71 L	**VMA 31 T 025**	**FCR J01**	0.25	0.7	1.1	2.2	1.07	2.5	16
LS 71 L	**VMA 31 T 037**	**FCR J01**	0.37	1.12	1.6	3	1.25	4	17
LS 71 L	**VMA 31 T 055**	**FCR J01**	0.55	1.65	2.35	3	1.5	4	18
LS 80 L	**VMA 31 T 075**	**FCR J01**	0.75	2	3.2	3	2.8	6	21
LS 80 L	**VMA 31 T 090**	**FCR J01**	0.9	2.3	3.8	2.9	3.4	6	22.6
LS 90 L	**VMA 31 T 110**	**FCR J01**	1.1	2.7	4.7	2.7	5	10	27
LS 90 L	**VMA 32 T 150**	**FCR J01**	1.5	3.5	6.4	2.8	5.7	10	29
LS 90 L	**VMA 32 T 180**	**FCR J01**	1.8	4.1	7.7	3	6.7	15	30.7
LS 100 L	**VMA 32 T 220**	**FCR J01**	2.2	5.1	9.4	2.7	7.4	15	34.5
LS 100 L	**VMA 32 T 300**	**FCR J01**	3	7.2	12.8	2.3	8.3	15	37.5
LSMV 112 MG	**VMA 32 T 400**	**FCR J01**	4	8	17	2.3	19.3	22	53.5

1. These values are given for information only.

4 poles 1500 min^{-1}

• LS VMA FCR series brake motors - IP 55 - 50/60 Hz ±5 % - U.G. General Use
• Three-phase motors 4 poles 230/400 V connected Δ - Brake management set in factory (VMA ESFR)
Three-phase mains supply : from 400 V -10 % à 480 V +10 %

II 3D T 125 °C

Motor type	VMA type	Brake type	Rated power P_N kW	Rated current I_N 400 V A	Rated torque 320 to 2350 min^{-1} M_N N.m	Starting torque / Rated torque M_D / M_N	Moment of inertia J 10^{-3}kg.m^2	Brake torque M_f±20% N.m	Weight[1] IM B5 kg
LS 71 L	**VMA 31 T 025**	**FCR J01**	0.25	0.7	1.1	2.2	1.07	2.5	16
LS 71 L	**VMA 31 T 037**	**FCR J01**	0.37	1.12	1.6	3	1.25	4	17
LS 71 L	**VMA 31 T 055**	**FCR J01**	0.55	1.65	2.35	3	1.5	4	18
LS 80 L	**VMA 31 T 075**	**FCR J01**	0.75	2	3.2	3	2.8	6	21
LS 80 L	**VMA 31 T 090**	**FCR J01**	0.9	2.3	3.8	2.9	3.4	6	22.6
LS 90 L	**VMA 31 T 110**	**FCR J01**	1.1	2.7	4.7	2.7	5	10	27
LS 90 L	**VMA 32 T 150**	**FCR J01**	1.5	3.5	6.4	2.8	5.7	10	29
LS 90 L	**VMA 32 T 180**	**FCR J01**	1.8	4.1	7.7	3	6.7	15	30.7
LS 100 L	**VMA 32 T 220**	**FCR J01**	2.2	5.1	9.4	2.7	7.4	15	34.5
LS 100 L	**VMA 32 T 300**	**FCR J01**	3	7.2	12.8	2.3	8.3	15	37.5
LSMV 112 MG	**VMA 32 T 400**	**FCR J01**	4	8	17	2.3	19.3	22	53.5

1. These values are given for information only.

VARMECA variable speed asynchronous motors and FCR brake
LS VARMECA FCR

CATEGORY 3
ZONE 22
Non-conductive dust

Selection

4 poles 1500 min^{-1}

- IP 55 - 50/60 Hz ± 5 % - Class F - U.G.
- 4 p - 230/400 V - Y - FCR (SOVMA)

II 3D T 125 °C

Motor type	VMA type	Brake type	Rated power at 50 Hz P_N kW	Braking torque M_f ± 20% N.m	IM 1001 (IM B3) Code	Qty	IM 3001 (IM B5) Code	Qty	IM 3601 (IM B14) Code	Qty
LS 71 L	VMA 31 T 025	FCR J01	0.25	2.5		-	4568633	5	4569235	3
LS 71 L	VMA 31 T 037	FCR J01	0.37	4		-	4568637	5	4569238	3
LS 71 L	VMA 31 T 055	FCR J01	0.55	4		-	4568642	5	4569242	3
LS 80 L	VMA 31 T 075	FCR J01	0.75	6		-	4568644	5	4569244	3
LS 80 L	VMA 31 T 090	FCR J01	0.9	6		-	4568652	5	4569349	3
LS 90 L	VMA 31 T 110	FCR J01	1.1	10		-	4568659	5	4569351	3
LS 90 L	VMA 32 T 150	FCR J01	1.5	10		-	4568662	5	4569353	3
LS 90 L	VMA 32 T 180	FCR J01	1.8	15		-	4568691	5	4569356	3
LS 100 L	VMA 32 T 220	FCR J01	2.2	15		-	4568715	5	4569358	3
LS 100 L	VMA 32 T 300	FCR J01	3	15		-	4568721	5	4569360	3
LSMV 112 MG	VMA 32 T 400	FCR J01	4	22		-	4621620	5	4621622	3
Options VMA pages C20.4, C20.5						-		5		3

4 poles 1500 min^{-1}

- IP 55 - 50/60 Hz ± 5 % - Class F - U.G.
- 4 p - 230/400 V - Y - FCR (VMA ESFR)

II 3D T 125 °C

Motor type	VMA type	Brake type	Rated power at 50 Hz P_N kW	Braking torque M_f ± 20% N.m	IM 1001 (IM B3) Code	Qty	IM 3001 (IM B5) Code	Qty	IM 3601 (IM B14) Code	Qty
LS 71 L	VMA 31 T 025	FCR J01	0.25	2.5		-	4591145	5	4591147	3
LS 71 L	VMA 31 T 037	FCR J01	0.37	4		-	4591151	5	4591154	3
LS 71 L	VMA 31 T 055	FCR J01	0.55	4		-	4591158	5	4591160	3
LS 80 L	VMA 31 T 075	FCR J01	0.75	6		-	4591162	5	4591166	3
LS 80 L	VMA 31 T 090	FCR J01	0.9	6		-	4591176	5	4591178	3
LS 90 L	VMA 31 T 110	FCR J01	1.1	10		-	4591182	5	4591185	3
LS 90 L	VMA 32 T 150	FCR J01	1.5	10		-	4591189	5	4591192	3
LS 90 L	VMA 32 T 180	FCR J01	1.8	15		-	4591195	5	4591197	3
LS 100 L	VMA 32 T 220	FCR J01	2.2	15		-	4591202	5	4591204	3
LS 100 L	VMA 32 T 300	FCR J01	3	15		-	4591208	5	4591214	3
LSMV 112 MG	VMA 32 T 400	FCR J01	4	22		-	4591228	5	4591258	3
Options VMA pages C20.4, C20.5						-		5		3

Selection example :

Application :	Atex 22
Required power :	1.1 kW
Mains supply :	Three-phase 400V Y
Required torque :	10 N.m
Required speed :	600 to 1600 min^{-1}
Mounting and position : flange	IM 3001 (IM B5)

Designation :
4P LS 90 L 1.1 kW VMA 31 T 110
(VMA ESFR) 400/480V - 50/60 Hz
UG FCR J01 10 N.m A1
Zone 22
Code : 4591182

VARMECA variable speed asynchronous motors and FCR brake
LS VARMECA FCR

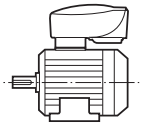
CATEGORY 3
ZONE 22
Non-conductive dust

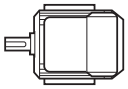
Dimensions

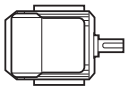
Dimensions of the LS VARMECA FCR asynchronous brake motors

According to operating position and mechanical forms of the brake motor

Foot mounted VARMECA motor — S


IM 1001 (IM B3)


IM 1051 (IM B6)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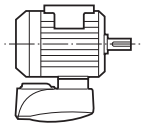
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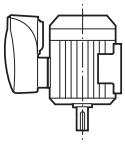
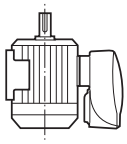

IM 1011 (IM V5)


IM 1031 (IM V6)

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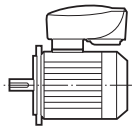
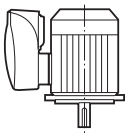
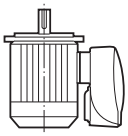
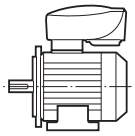
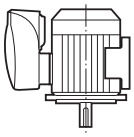
(FF) plain hole flange mounted VARMECA motor — BS

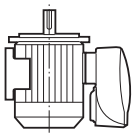

IM 3001 (IM B5)


IM 3011 (IM V1)


IM 3031 (IM V3)


IM 2001 (IM B35)


IM 2011 (IM V15)


IM 2031 (IM V36)

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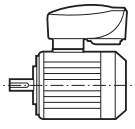
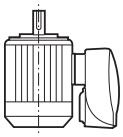
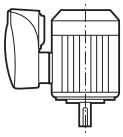
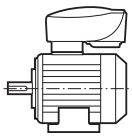
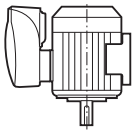
(FT) tapped hole flange mounted VARMECA motor — BT

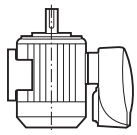

IM 3061 (IM B14)


IM 3611 (IM V18)


IM 3631 (IM V19)


IM 2101 (IM B34)


IM 2111 (IM V58)


IM 2131 (IM V69)

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