



# LV7000-4

AC/AC Pre-engineered cabinet drives

GENERAL DATA		
Mains connection	Input voltage $U_{in}$	208...240 V; 380...500 V; 525...690 V; -10%...+10%
	Input frequency	45...66 Hz
	Connection to mains	Once per minute or less (normal case)
Motor connection	Output voltage	0 - $U_{in}$
	Continuous output current	High overloadability: IH, ambient temperature max. 50 °C ( $\geq$ FR10 + 40 °C) Low overloadability: IL, ambient temperature max. +40 °C
	Overloadability	High: 1.5 x IH (1 min/10 min), Low: 1.1 x IL (1 min/10 min)
	Max. starting current	Is for 2 s every 20 s
	Output frequency	0...320 Hz
Ambient conditions	Ambient operating temperature	-10 °C (no frost)...+50 °C: IH ( $\geq$ FR10 + 40 °C) -10 °C (no frost)...+40 °C: IL
	Storage temperature	-40 °C...+70 °C
	Relative humidity	0 to 95% RH, non-condensing, non-corrosive, no dripping water
	Air quality: chemical vapours/ mechanical particles	IEC 60721-3-3, unit in operation, class 3C2 (tested in accordance with IEC60068-2-60, Method I C CH2 and SO2) IEC 60721-3-3, unit in operation, class 3S2
	Altitude	100% load capacity (no derating) up to 1000 m 1% derating for each 100 m above 1000 m; max. 3000 m (690 V max. 2000 m)
	Vibration EN 50178/EN 60068-2-6	5...150 Hz: Displacement amplitude 1 mm (peak) at 5...15.8 Hz ( $\geq$ FR10: 0.25 mm (peak) at 5...31 Hz) Max acceleration amplitude 1 G at 15.8...150 Hz ( $\geq$ FR10: 1 G at 31...150 Hz)
EMS	Shock EN 50178, EN 60068-2-27	UPS Drop Test (for applicable UPS weights) Storage and shipping: max 15 G, 11 ms (in package)
	Immunity	Fulfils all EMC immunity requirements
Safety	Emissions	EMC level C: EN 61800-3, cat. C1; EMC level H: EN 61800-3, cat. C2; EMC level L: EN 61800-3, cat. C3; EMC level T: Low earth-current solution is suitable for IT networks, (can be modified from L/H-level units)
		EN 50178, EN 60204-1, IEC 61800-5-1, CE, UL, CUL; (see unit nameplate for more details)
Functional safety *	STO	EN/IEC 61800-5-2 safe torque off (STO) SIL2, EN ISO 13849-1 PL"d" cat. 3, EN 62061: SILCL2, IEC 61508: SIL2
	SS1	EN /IEC 61800-5-2 safe stop 1 (SS1) SIL2, EN ISO 13849-1 PL"d" cat. 3, EN /IEC62061: SILCL2, IEC 61508: SIL2, 94/9/EC, CE 0537 Ex 11 (2) GD
	ATEX thermistor input	
Control connections (OPT -A1, -A2 or OPT -A1, -A3)	Advance safety option	STO (+SBC), SS1, SS2, SOS, SLS, SMS, SSM, SSR
	Analogue input voltage	0...+10 V (-10 V...+10 V joystick control), Ri = 200 k $\Omega$ , resolution 0.1%, accuracy $\pm$ 1%
	Analogue input current	0(4)...20 mA, Ri = 250 $\Omega$ differential, resolution 0.1%, accuracy $\pm$ 1%
	Digital inputs	6, positive or negative logic; 18...30 VDC
	Auxiliary voltage	+24 V, $\pm$ 15%, max. 250 mA
	Output reference voltage	+10 V, +3%, max. load 10 mA
	Analogue output	0(4)...20 mA; RL max. 500 $\Omega$ , resolution 10-bit, accuracy $\pm$ 2%
	Digital output	Open collector output, 50 mA/48 V
Supply connections	Relay outputs	2 programmable change-over (NO/NC) relay outputs (OPT-A3: NO/NC+NO) Switching capacity: 24 VDC/8 A, 250 VAC/8 A, 125 VDC/0.4 A. Min. switching load: 5 V/10 mA
	Thermistor input (OPT-A3)	Galvanically isolated, Rtrip = 4.7 k $\Omega$
	Input voltage $U_{in}$ (AC) Front-end modules	380-500 VAC / 525-690 VAC -10%...+10% (according to EN60204-1)
	Input voltage $U_{in}$ (DC) Inverter and brake chopper modules	465...800 VDC / 640...1100 VDC. The voltage ripple of the inverter supply voltage, formed in rectification of the electric network's alternating voltage in basic frequency, must be less than 50 V peak-to-peak
	Output voltage $U_{out}$ (AC) Inverter	3~ 0... $U_{in}$ / 1.4
Control characteristics	Output voltage $U_{out}$ (DC) Active front-end module	1.10 x 1.35 x $U_{in}$ (Factory default)
	Output voltage $U_{out}$ (DC) non-regenerative front-end module	1.35 x $U_{in}$
	Control performance	Open loop vector control (5-150% of base speed): speed control 0.5%, dynamic 0.3%sec, torque lin. <2%, torque rise time ~5 ms Closed loop vector control (entire speed range): speed control 0.01%, dynamic 0.2% sec, torque lin. <2%, torque rise time ~2 ms
	Switching frequency	380-500V: 1...6 kHz; Factory default 3.6 kHz 525-690V: 1...6 kHz; Factory default 1.5 kHz
	Field weakening point	8...320 Hz
	Acceleration time	0...3000 sec
	Deceleration time	0...3000 sec
Protections	Braking	DC brake: 30% of TN (without brake resistor), flux braking
	Overvoltage protection	380-500V: 911 VDC; LV7000-4_6: 1200 VDC
	Undervoltage protection	525-690V: 333 VDC; LV7000-4_6: 460 VDC
	Earth fault protection	Yes
	Motor phase supervision	Trips if any of the output phases is missing
	Overcurrent protection	Yes
	Unit overtemperature protection	Yes
	Motor overload protection	Yes
	Motor stall protection	Yes
Motor underload protection	Yes	
Short-circuit protection of +24 V and +10 V reference voltages	Yes	



# LV7000-4

Cabinet Drive 6-Pulse Supply  
380-500V

## LV7000-4 — 380-500V — IP21/54 — EMC-level L/T — 6-pulse supply — Low Harmonics (AFE)

GEPC TYPE CODE	Load ability				Motor Shaft Power		Frame	Dimensions W x H x D [mm]	Weight [kg]
	Low (+40°C)		High (+40°C)		P <sub>n</sub> [kW]	P <sub>11</sub> [kW]			
	I <sub>L</sub> [A]	I <sub>L</sub> (overload)	I <sub>H</sub> [A]	I <sub>H</sub> (overload)			Size		
LV7000-4 0261 5-A2H0SSF-A1A2000000	261	287	205	308	132	110	FR9	606 x 2275 x 605	308
LV7000-4 0300 5-A2H0SSF-A1A2000000	300	330	245	368	160	132		606 x 2275 x 605	308
LV7000-4 0385 5-A2L0SSF-A1A2000000	385	424	300	450	200	160	FR10	606 x 2275 x 605	371
LV7000-4 0460 5-A2L0SSF-A1A2000000	460	506	385	578	250	200		606 x 2275 x 605	403
LV7000-4 0520 5-A2L0SSF-A1A2000000	520	572	460	690	250	250		606 x 2275 x 605	403
LV7000-4 0590 5-A2L0SSF-A1A2000000	590	649	520	780	315	250	FR11	606 x 2275 x 605	577
LV7000-4 0650 5-A2L0SSF-A1A2000000	650	715	590	885	355	315		606 x 2275 x 605	577
LV7000-4 0730 5-A2L0SSF-A1A2000000	730	803	650	975	400	355	FR12	606 x 2275 x 605	577
LV7000-4 0820 5-A2L0SSF-A1A2000000	820	902	730	1095	450	400		606 x 2275 x 605	810
LV7000-4 0920 5-A2L0SSF-A1A2000000	920	1012	820	1230	500	450	FR13	606 x 2275 x 605	810
LV7000-4 1030 5-A2L0SSF-A1A2000000	1030	1133	920	1380	560	500		606 x 2275 x 605	810
LV7000-4 1150 5-A2L0SSF-A1A2000000	1150	1265	1030	1545	630	560	FR13	606 x 2275 x 605	1050
LV7000-4 1300 5-A2L0SSF-A1A2000000	1300	1430	1150	1725	710	630		806 x 2275 x 605	1250
LV7000-4 1450 5-A2L0SSF-A1A2000000	1450	1595	1300	1950	800	710	FR14	806 x 2405 x 605	1250
LV7000-4 1770 5-A2L0SSF-A1A2000000	1770	1947	1600	2400	1000	900		806 x 2275 x 605	2250
LV7000-4 2150 5-A2L0SSF-A1A2000000	2150	2365	1940	2910	1200	1100	806 x 2405 x 605	2300	

## Variants & Options

S=Standard / O=Optional / +ICB=Circuit Breaker / +IFD=Switch Fuse & Fuses / +IFU=Input Fuses / +ILS=Load Switch / +OCM=Common Mode Choke with Output Terminals / +ODU=du/dt-Filter +OSI=Sine Wave Filter

6-pulse	Enclosure		EMC			Brake Chopper	Cabling		Input devices					Output filters			
	380-500V	IP21	IP54	L	T	H	+MBU	Bottom	Top +CIT/+COT	+IFU	+ILS	+IFD	+HCO	+ICB	+OCM	+ODU	+OSI
FR9	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	O	O	O	O	O	O	O	O
FR10	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	O	O	O	O	O	O	O (W: +400)	O
FR11	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	O	O	O	O	O	O	O (W: +400)	O
FR12	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	O	O	O	O	O	O	O (W: +400)	O
FR13	S	O (H: +170)	S	O	-	O	S	O (W: +400)	-	-	S	-	O	O	O	O	O
FR14	S	O (H: +170)	S	O	-	O	S	O (W: +400)	-	-	-	-	S	O	O	S	O

I<sub>n</sub> = nominal current for 150% overload requirement (at max. 40°C ambient temperature); I<sub>L</sub> = nominal current for 110% overload requirement (at max. 40°C ambient temperature).

I<sub>L</sub>(overload) = maximum 1 min/10 min overload current (high overload); No marine certificate included. For specific marine certificate adders, please consult the GE Power Conversion team.

**A1A2000000 on product type code means:** Standard options boards are included in the price. Option board must be added separately according to the OPT boards listed in the I/O card options section.



# LV7000-4

Cabinet Drive 6-Pulse Supply  
525-690V

## LV7000-4 — 525-690V — IP21/54 — EMC-level L/T — 6-pulse supply — Low Harmonics (AFE)

GEPC TYPE CODE	Load ability				Motor Shaft Power		Frame	Dimensions W x H x D [mm]	Weight [kg]
	Low (+40°C)		High (+40°C)		P <sub>n</sub> [kW]	P <sub>11</sub> [kW]			
	I <sub>n</sub> [A]	I <sub>n</sub> (overload)	I <sub>n</sub> [A]	I <sub>n</sub> (overload)			Size		
LV7000-4 0125 6-A2LOSSF-A1A2000000	125	138	100	150	110	90	FR9	606 x 2275 x 605	308
LV7000-4 0144 6-A2LOSSF-A1A2000000	144	158	125	188	132	110		606 x 2275 x 605	308
LV7000-4 0170 6-A2LOSSF-A1A2000000	170	187	144	216	160	132		606 x 2275 x 605	308
LV7000-4 0208 6-A2LOSSF-A1A2000000	208	229	170	255	200	160		606 x 2275 x 605	308
LV7000-4 0261 6-A2LOSSF-A1A2000000	261	287	208	312	250	200	FR10	606 x 2275 x 605	341
LV7000-4 0325 6-A2LOSSF-A1A2000000	325	358	261	392	315	250		606 x 2275 x 605	371
LV7000-4 0385 6-A2LOSSF-A1A2000000	385	424	325	488	355	315		606 x 2275 x 605	371
LV7000-4 0416 6-A2LOSSF-A1A2000000 *1	416	458	325	488	400	315		606 x 2275 x 605	371
LV7000-4 0460 6-A2LOSSF-A1A2000000	460	506	385	578	450	355	FR11	806 x 2275 x 605	577
LV7000-4 0502 6-A2LOSSF-A1A2000000	502	552	460	690	500	450		806 x 2275 x 605	524
LV7000-4 0590 6-A2LOSSF-A1A2000000 *1	590	649	502	753	560	500		806 x 2275 x 605	577
LV7000-4 0650 6-A2LOSSF-A1A2000000	650	715	590	885	630	560	FR12	1206 x 2275 x 605	745
LV7000-4 0750 6-A2LOSSF-A1A2000000	750	825	650	975	710	630		1206 x 2275 x 605	745
LV7000-4 0820 6-A2LOSSF-A1A2000000 *1	820	902	750	975	800	710		1206 x 2405 x 605	745
LV7000-4 0920 6-A2LOSSF-A1A2000000	920	1012	820	1230	900	800	FR13	1406 x 2275 x 605	1050
LV7000-4 1030 6-A2LOSSF-A1A2000000	1030	1133	920	1380	1000	900		1406 x 2405 x 605	1050
LV7000-4 1180 6-A2LOSSF-A1A2000000 *1	1180	1298	1030	1463	1150	1000		1406 x 2275 x 605	1050
LV7000-4 1500 6-A2LOSSF-A1A2000000	1500	1650	1300	1950	1500	1300	FR14	2806 x 2405 x 605	1950
LV7000-4 1900 6-A2LOSSF-A1A2000000	1900	2090	1500	2250	1800	1500		2806 x 2275 x 605	2250
LV7000-4 2250 6-A2LOSSF-A1A2000000 *1	2250	2475	1900	2782	2000	1800		2806 x 2405 x 605	2300

## Variants & Options

S=Standard / O=Optional / +ICB=Circuit Breaker / +IFD=Switch Fuse & Fuses / +IFU=Input Fuses / +ILS=Load Switch / +OCM=Common Mode Choke with Output Terminals / +ODU=du/dt-Filter +OSI=Sine Wave Filter

6-pulse	Enclosure		EMC			Brake Chopper	Cabling		Input devices					Output filters		
	IP21	IP54	L	T	H	+MBU	Bottom	Top +CIT/+COT	+IFU	+ILS	+IFD	+ICO	+ICB	+OCM	+ODU	+OSI
525-690V	IP21	IP54	L	T	H	+MBU	Bottom	Top +CIT/+COT	+IFU	+ILS	+IFD	+ICO	+ICB	+OCM	+ODU	+OSI
FR9	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	O	O	O	O	O	O	O
FR10	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	O	O	O	O	O	O (W: +400)	O
FR11	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	O	O	O	O	O	O (W: +400)	O
FR12	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	O	O	O	O	O	O (W: +400)	O
FR13	S	O (H: +170)	S	O	-	O	S	O (W: +400)	-	-	S	-	O	O	O	O
FR14	S	O (H: +170)	S	O	-	O	S	O (W: +400)	-	-	-	-	S	O	S	O

\*1 max. 35 C ambient temperature

I<sub>n</sub> = nominal current for 150% overload requirement (at max. 40°C ambient temperature); I<sub>n</sub> = nominal current for 110% overload requirement (at max. 40°C ambient temperature).

I<sub>n</sub>(overload) = maximum 1 min/10 min overload current (high overload); No marine certificate included. For specific marine certificate adders, please consult the GE Power Conversion team.

**A1A2000000 on product type code means:** Standard options boards are included in the price. Option board must be added separately according the OPT boards listed in the I/O card options section.



# LV7000-4

Cabinet Drive 12-Pulse Supply  
380-500V

## LV7000-4 — 380-500V — IP21/54— EMC-level L/T — 12-pulse supply

GEPC TYPE CODE	Load ability				Motor Shaft Power		Frame	Dimensions W x H x D [mm]	Weight [kg]
	Low (+40°C)		High (+40°C)		P <sub>n</sub> [kW]	P <sub>11</sub> [kW]			
	I <sub>L</sub> [A]	I <sub>L</sub> (overload)	I <sub>H</sub> [A]	I <sub>H</sub> (overload)			Size		
LV7000-4 0385 5-A2L0TSF-A1A2000000	385	424	300	450	200	160	FR10	606 x 2275 x 605	371
LV7000-4 0460 5-A2L0TSF-A1A2000000	460	506	385	578	250	200		606 x 2275 x 605	403
LV7000-4 0520 5-A2L0TSF-A1A2000000	520	572	460	690	250	250		606 x 2275 x 605	403
LV7000-4 0590 5-A2L0TSF-A1A2000000	590	649	520	780	315	250	FR11	806 x 2275 x 605	577
LV7000-4 0650 5-A2L0TSF-A1A2000000	650	715	590	885	355	315		806 x 2275 x 605	577
LV7000-4 0730 5-A2L0TSF-A1A2000000	730	803	650	975	400	355		806 x 2275 x 605	577
LV7000-4 0820 5-A2L0TSF-A1A2000000	820	902	730	1095	450	400	FR12	1206 x 2275 x 605	810
LV7000-4 0920 5-A2L0TSF-A1A2000000	920	1012	820	1230	500	450		1206 x 2275 x 605	810
LV7000-4 1030 5-A2L0TSF-A1A2000000	1030	1133	920	1380	560	500		1206 x 2275 x 605	810
LV7000-4 1150 5-A2L0TSF-A1A2000000	1150	1265	1030	1545	630	560	FR13	1406 x 2275 x 605	1050
LV7000-4 1300 5-A2L0TSF-A1A2000000	1300	1430	1150	1725	710	630		2006 x 2275 x 605	1700
LV7000-4 1450 5-A2L0TSF-A1A2000000	1450	1595	1300	1950	800	710		2006 x 2275 x 605	1700
LV7000-4 1770 5-A2L0TSF-A1A2000000	1770	1947	1600	2400	1000	900	FR14	2806 x 2275 x 605	2250
LV7000-4 2150 5-A2L0TSF-A1A2000000	2150	2365	1940	2910	1200	1100		2806 x 2405 x 605	2300

## Variants & Options

S=Standard / O=Optional / +ICB=Circuit Breaker / +IFD=Switch Fuse & Fuses / +IFU=Input Fuses / +ILS=Load Switch / +OCM=Common Mode Choke with Output Terminals / +ODU=du/dt-Filter +OSI=Sine Wave Filter

12-pulse	Enclosure		EMC			Brake Chopper	Cabling		Input devices					Output filters		
	IP21	IP54	L	T	H	+MBU	Bottom	Top +CIT/+COT	+IFU	+ILS	+IFD	+ICO	+ICB	+OCM	+ODU	+OSI
380-500V																
FR10	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	-	-	-	O	O	O (W: +400)	O
FR11	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	O	O	O	O	O	O (W: +400)	O
FR12	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	O	O	O	O	O	O (W: +400)	O
FR13	S	O (H: +170)	S	O	-	1	S	O (W: +400)	-	-	-	-	S	O	O	O
FR14	S	O (H: +170)	S	O	-	1	S	O (W: +400)	-	-	-	-	S	O	O	O
FR14	S	O (H: +170)	S	O	-	O	S	O (W: +400)	-	-	-	-	S	O	S	O

\*1 max. 35 C ambient temperature

I<sub>n</sub> = nominal current for 150% overload requirement (at max. 40°C ambient temperature); I<sub>L</sub> = nominal current for 110% overload requirement (at max. 40°C ambient temperature).

I<sub>L</sub>(overload) = maximum 1 min/10 min overload current (high overload); No marine certificate included. For specific marine certificate adders, please consult the GE Power Conversion team.

**A1A2000000 on product type code means:** Standard options boards are included in the price. Option board must be added separately according the OPT boards listed in the I/O card options section.



# LV7000-4

Cabinet Drive 12-Pulse Supply  
525-690V

## LV7000-4 — 525-690V — IP21/54— EMC-level L/T — 12-pulse supply

GEPC TYPE CODE	Load ability				Motor Shaft Power		Frame	Dimensions W x H x D [mm]	Weight [kg]
	Low (+40°C)		High (+40°C)		P <sub>n</sub> [kW]	P <sub>11</sub> [kW]			
	I <sub>L</sub> [A]	I <sub>L</sub> (overload)	I <sub>H</sub> [A]	I <sub>H</sub> (overload)			Size		
LV7000-4 0261 6-A2L0TSF-A1A2000000	261	287	208	312	250	200	FR10	606 x 2275 x 605	341
LV7000-4 0325 6-A2L0TSF-A1A2000000	325	358	261	392	315	250		606 x 2275 x 605	371
LV7000-4 0385 6-A2L0TSF-A1A2000000	385	424	325	488	355	315		606 x 2275 x 605	371
LV7000-4 0416 6-A2L0TSF-A1A2000000 *1	416	458	325	488	400	315		606 x 2275 x 605	371
LV7000-4 0460 6-A2L0TSF-A1A2000000	460	506	385	578	450	355	FR11	806 x 2275 x 605	524
LV7000-4 0502 6-A2L0TSF-A1A2000000	502	552	460	690	500	450		806 x 2275 x 605	524
LV7000-4 0590 6-A2L0TSF-A1A2000000 *1	590	649	502	753	560	500	FR12	806 x 2275 x 605	577
LV7000-4 0650 6-A2L0TSF-A1A2000000	650	715	590	885	630	560		1206 x 2275 x 605	745
LV7000-4 0750 6-A2L0TSF-A1A2000000	750	825	650	975	710	630	FR13	1206 x 2275 x 605	745
LV7000-4 0820 6-A2L0TSF-A1A2000000 *1	820	902	750	975	800	710		1206 x 2275 x 605	745
LV7000-4 0920 6-A2L0TSF-A1A2000000 *	920	1012	820	1230	900	800	FR13	1406 x 2275 x 605	1050
LV7000-4 1030 6-A2L0TSF-A1A2000000 *	1030	1133	920	1380	1000	900		1406 x 2275 x 605	1050
LV7000-4 1180 6-A2L0TSF-A1A2000000 **1	1180	1298	1030	1463	1150	1000		1406 x 2275 x 605	1050
LV7000-4 1500 6-A2L0TSF-A1A2000000 *	1500	1650	1300	1950	1500	1300	FR14	2806 x 2405 x 605	2250
LV7000-4 1900 6-A2L0TSF-A1A2000000 *	1900	2090	1500	2250	1800	1500		2806 x 2275 x 605	2250
LV7000-4 2250 6-A2L0TSF-A1A2000000 **1	2250	2475	1900	2782	2000	1800		2806 x 2405 x 605	2300

## Variants & Options

S=Standard / O=Optional / +ICB=Circuit Breaker / +IFD=Switch Fuse & Fuses / +IFU=Input Fuses / +ILS=Load Switch / +OCM=Common Mode Choke with Output Terminals / +ODU=du/dt-Filter +OSI=Sine Wave Filter

6-pulse	Enclosure		EMC			Brake Chopper	Cabling		Input devices					Output filters		
	IP21	IP54	L	T	H	+MBU	Bottom	Top +CIT/+COT	+IFU	+ILS	+IFD	+ICO	+ICB	+OCM	+ODU	+OSI
FR10	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	-	-	-	O	O	O (W: +400)	O
FR11	S	O (H: +130)	S	O	-	O	S	O (W: +400)	O	O	O	O	O	O	O (W: +400)	O
FR12	S	O (H: +130)	S	O	-	O	S	O (W: +400)	O	O	O	O	O	O	O (W: +400)	O
FR13	S	O (H: +170)	S	O	-	1	S	O (W: +400)	-	-	O	-	S	O	O	O
FR14	S	O (H: +170)	S	O	-	1	S	O (W: +400)	-	-	-	-	S	O	O	O

\*1 max. 35 C ambient temperature

I<sub>n</sub> = nominal current for 150% overload requirement (at max. 40°C ambient temperature); I<sub>L</sub> = nominal current for 110% overload requirement (at max. 40°C ambient temperature).

I<sub>L</sub>(overload) = maximum 1 min/10 min overload current (high overload); No marine certificate included. For specific marine certificate adders, please consult the GE Power Conversion team.

**A1A2000000 on product type code means:** Standard options boards are included in the price. Option board must be added separately according to the OPT boards listed in the I/O card options section.



# LV7000-4

Cabinet Drive, Low Harmonics (AFE), 380-500V

## LV7000-4 — 380-500V — IP21/54— EMC-level L/T

GEPC TYPE CODE	Load ability				Motor Shaft Power		Frame	Dimensions W x H x D [mm]	Weight [kg]
	Low (+40°C)		High (+40°C)		P <sub>n</sub> [kW]	P <sub>11</sub> [kW]			
	I <sub>L</sub> [A]	I <sub>L</sub> (overload)	I <sub>H</sub> [A]	I <sub>H</sub> (overload)			Size		
LV7000-4 02615-A2L0RSF-A1A2000000	261	287	205	308	132	110	AF9	1006 x 2275 x 605	680
LV7000-4 03005-A2L0RSF-A1A2000000	300	330	245	368	160	132		1006 x 2275 x 605	680
LV7000-4 03855-A2L0RSF-A1A2000000	385	424	300	450	200	160	AF10	1006 x 2275 x 605	700
LV7000-4 04605-A2L0RSF-A1A2000000	460	506	385	578	250	200		1006 x 2275 x 605	700
LV7000-4 05205-A2L0RSF-A1A2000000	520	572	460	690	250	250		1006 x 2275 x 605	700
LV7000-4 06505-A2L0RSF-A1A2000000	650	715	590	885	355	315	AF12	2006 x 2275 x 605	1400
LV7000-4 07305-A2L0RSF-A1A2000000	730	803	650	975	400	355		2006 x 2275 x 605	1400
LV7000-4 08205-A2L0RSF-A1A2000000	820	902	730	1095	450	400		2006 x 2275 x 605	1400
LV7000-4 09205-A2L0RSF-A1A2000000	920	1012	820	1230	500	450		2006 x 2275 x 605	1400
LV7000-4 10305-A2L0RSF-A1A2000000	1030	1133	920	1380	560	500	FR13	2006 x 2275 x 605	1400
LV7000-4 11505-A2L0RSF-A1A2000000	1150	1265	1030	1545	630	560		2206 x 2275 x 605	1950
LV7000-4 13005-A2L0RSF-A1A2000000	1300	1430	1150	1725	710	630		2206 x 2275 x 605	1950
LV7000-4 14505-A2L0RSF-A1A2000000	1450	1595	1300	1950	800	710	FR14	2206 x 2275 x 605	1950
LV7000-4 17705-A2L0RSF-A1A2000000 + ODU	1770	1947	1600	2400	1000	900		4406 x 2275 x 605	3900
LV7000-4 21505-A2L0RSF-A1A2000000 + ODU	2150	2365	1940	2910	1200	1100		4406 x 2275 x 605	3900
LV7000-4 27005-A2L0RSF-A1A2000000 + ODU	2700	2970	2300	3278	1500	1200		4406 x 2275 x 605	3900

## Variants & Options

S=Standard / O=Optional / +ICB=Circuit Breaker / +IFD=Switch Fuse & Fuses / +IFU=Input Fuses / +ILS=Load Switch / +OCM=Common Mode Choke with Output Terminals / +ODU=du/dt-Filter +OSI=Sine Wave Filter

AFE	Enclosure		EMC			Brake Chopper	Cabling		Input devices					Output filters		
	IP21	IP54	L	T	H	+MBU	Bottom	Top +CIT/+COT	+IFU	+ILS	+IFD	+HCO	+ICB	+OCM	+ODU	+OSI
AF9	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	S	-	O	S	O	O (W: +400)	O
AF10	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	S	-	O	S	O	O (W: +400)	O
AF11	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	S	O	O	S	O	O (W: +400)	O
AF12	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	S	O	O	S	O	O (W: +400)	O
AF13	S	O (H: +170)	S	O	-	-	S	O (W: +400)	-	S	-	-	S	O	O	O
AF14	S	O (H: +170)	S	O	-	-	S	O (W: +400)	-	S	-	-	S	O	S	O

AFE9-AFE13 incl. +AT2, +ADC, +TUP, +AMO, +DCO, +DRO, +ILS & +ICB as standard; AFE14 incl. +AT3, +ADC, +TUP, +AMO, +DCO, +DRO, +ILS, +ICB & +ODU as standard (+ODU can be changed to +OSI)

I<sub>n</sub> = nominal current for 150% overload requirement (at max. 40°C ambient temperature); I<sub>L</sub> = nominal current for 110% overload requirement (at max. 40°C ambient temperature).

I<sub>L</sub>(overload) = maximum 1 min/10 min overload current (high overload); No marine certificate included. For specific marine certificate adders, please consult the GE Power Conversion team.

**A1A2000000 on product type code means:** Standard options boards are included in the price. Option board must be added separately according to the OPT boards listed in the I/O card options section.



# LV7000-4

Cabinet Drive, Low Harmonics (AFE), 525-690V

## LV7000-4 — 525-690V — IP21/54— EMC-level L/T

GEPC TYPE CODE	Load ability				Motor Shaft Power		Frame	Dimensions W x H x D [mm]	Weight [kg]
	Low (+40°C)		High (+40°C)		P <sub>l</sub> [kW]	P <sub>ll</sub> [kW]			
	I <sub>l</sub> [A]	I <sub>l</sub> (overload)	I <sub>ll</sub> [A]	I <sub>ll</sub> (overload)			Size		
LV7000-4 01256-A2LORSF-A1A2000000	125	138	100	200	110	90	AF9	1006 x 2275 x 605	680
LV7000-4 01446-A2LORSF-A1A2000000	144	158	125	213	132	110		1006 x 2275 x 605	680
LV7000-4 01706-A2LORSF-A1A2000000	170	187	144	245	160	132		1006 x 2275 x 605	680
LV7000-4 02086-A2LORSF-A1A2000000	208	229	170	289	200	160		1006 x 2275 x 605	680
LV7000-4 02616-A2LORSF-A1A2000000	261	287	208	375	250	200	AF10	1006 x 2275 x 605	700
LV7000-4 03256-A2LORSF-A1A2000000	325	358	261	470	315	250		1006 x 2275 x 605	700
LV7000-4 03856-A2LORSF-A1A2000000	385	424	325	585	355	315		1006 x 2275 x 605	700
LV7000-4 04166-A2LORSF-A1A2000000	416	416	325	585	400	315		1006 x 2275 x 605	700
LV7000-4 04606-A2LORSF-A1A2000000	460	506	385	693	450	355	AF12	2006 x 2275 x 605	1400
LV7000-4 05026-A2LORSF-A1A2000000	502	552	460	828	500	450		2006 x 2275 x 605	1400
LV7000-4 05906-A2LORSF-A1A2000000	590	649	502	904	560	500		2006 x 2275 x 605	1400
LV7000-4 06506-A2LORSF-A1A2000000	650	715	590	1062	630	560		2006 x 2275 x 605	1400
LV7000-4 07506-A2LORSF-A1A2000000	750	825	650	1170	710	630		2006 x 2275 x 605	1400
LV7000-4 08206-A2LORSF-A1A2000000	820	902	650	1170	750	650		2006 x 2405 x 605	1400
LV7000-4 09206-A2LORSF-A1A2000000	920	1012	820	1476	900	800	AF13	2206 x 2275 x 605	1400
LV7000-4 10306-A2LORSF-A1A2000000	1030	1133	920	1656	1000	900		2206 x 2405 x 605	1950
LV7000-4 11806-A2LORSF-A1A2000000	1180	1298	1030	1755	1150	1000		2206 x 2275 x 605	1950
LV7000-4 15006-A2LORSF-A1A2000000 + ODU	1500	1650	1300	2340	1500	1300	AF14	4406 x 2405 x 605	3900
LV7000-4 19006-A2LORSF-A1A2000000 + ODU	1900	2090	1500	2700	1800	1500		4406 x 2275 x 605	3900
LV7000-4 22506-A2LORSF-A1A2000000 + ODU	2250	1475	1900	3335	2000	1800		4406 x 2405 x 605	3900

## Variants & Options

S=Standard / O=Optional / +ICB=Circuit Breaker / +IFD=Switch Fuse & Fuses / +IFU=Input Fuses / +ILS=Load Switch / +OCM=Common Mode Choke with Output Terminals / +ODU=du/dt-Filter +OSI=Sine Wave Filter

AFE	Enclosure		EMC			Brake Chopper	Cabling		Input devices					Output filters			
	IP21	IP54	L	T	H		+MBU	Bottom	Top +CIT/+COT	+IFU	+ILS	+IFD	+ICO	+ICB	+OCM	+ODU	+OSI
525-690V																	
AF9	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	S	-	O	S	O	O (W: +400)	O	
AF10	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	S	-	O	S	O	O (W: +400)	O	
AF11	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	S	O	O	S	O	O (W: +400)	O	
AF12	S	O (H: +130)	S	O	-	-	S	O (W: +400)	O	S	O	O	S	O	O (W: +400)	O	
AF13	S	O (H: +170)	S	O	-	-	S	O (W: +400)	-	S	-	-	S	O	O	O	
AF14	S	O (H: +170)	S	O	-	-	S	O (W: +400)	-	S	-	-	S	O	S	O	

AFE9-AFE13 incl. +AT2, +ADC, +TUP, +AMO, +DCO, +DRO, +ILS & +ICB as standard; AFE14 incl. +AT3, +ADC, +TUP, +AMO, +DCO, +DRO, +ILS, +ICB & +ODU as standard (+ODU can be changed to +OSI)

\*1 max. 35 C ambient temperature

I<sub>ll</sub> = nominal current for 150% overload requirement (at max. 40°C ambient temperature); I<sub>l</sub> = nominal current for 110% overload requirement (at max. 40°C ambient temperature).

I<sub>l</sub>(overload) = maximum 1 min/10 min overload current (high overload); No marine certificate included. For specific marine certificate adders, please consult the GE Power Conversion team.

**A1A2000000 on product type code means:** Standard options boards are included in the price. Option board must be added separately according to the OPT boards listed in the I/O card options section.



# LV7000-4

Common Options /  
I/O Card Options

## Auxiliary Equipment (A-Group)

GEPC TYPE CODE	OPTION
+AAA	Aux. contact (for +ATx supervision)
+AAC	Aux. contact (for +Ixx options)
+AAI	Analog signal isolator
+ACH	Cabinet Heater
+ACL	Cabinet Light
+ACR	Control relay
+ACS	230 VAC customer socket
+ADC	Power supply 24 VDC, 2,5 A
+AMB	Mech. brake control
+AMF	Motor fan control
+AMH	Motor heater feeder
+AMO	ICB Motor Operator
+AT1	Aux. Transformer (200VA)
+AT2	Aux. Transformer (750VA)
+AT3	Aux. Transformer (2500VA)
+AT4	Aux. Transformer (4000VA)

## Seaworthy Packing (S-Group)

GEPC TYPE CODE	OPTION
+SWP	Seaworthy Packing

## Door Mounted (D-Group)

GEPC TYPE CODE	OPTION
+DAM	Analog Meter (AO1)
+DAR	Potentiometer for Reference
+DCM	Analogue Meter & Current Transformer
+DCO	Main Contactor Operation Switch
+DEP	Emergency Stop Push-Button
+DLD	Pilot Light (DO1)
+DLF	Pilot Light (FLT)
+DLR	Pilot Light (RUN)
+DLV	Pilot Light (Control Voltage ON)
+DRO	Local / Remote Operation Switch
+DRP	Reset Push-Button
+DVM	Analog Voltage Meter with Selection Switch

## Terminals (T-Group)

GEPC TYPE CODE	OPTION
+TIO	External Terminals (35)
+TID	External Terminals (70)
+TUP	Terminals for 230 VAC Control Voltage

## General (G-Group)

GEPC TYPE CODE	OPTION
+G40	400 mm Empty Cabinet
+G60	600 mm Empty Cabinet
+G80	800 mm Empty Cabinet
+GPL	100mm Cabinet Base
+GPH	200mm Cabinet Base G40/G60/G80

## General (M-Group)

GEPC TYPE CODE	OPTION
+MDC	Terminals in Cabinet for DC / Brake Chopper

## Protection Devices (P-Group)

GEPC TYPE CODE	OPTION
+PES	Emergency Stop (cat 0)
+PED	Emergency Stop (cat 1)
+PTR	External Thermistor Relay
+PAP	Arc Protection
+PIF	Insulation Fault Sensor

## Basic I/O cards (A)

A1	6DI, 1DO, 2AI(mA/V), 1AO(mA/V), +10Vref, +24V/EXT+24V
A2	2RO (NO/NC)
A3	1RO (NO/NC), 1RO(NC), 1 Thermistor
A4	3DI (Encoder RS422), Out +5V/+15V
A5	3DI (Encoder 10...24V), Out +15V/+24V
A7	Double encoder (Wide Range), 6D1, 2xDO
A8	As NXOPTA1, but analog I/O and +10Vref galv. de-coupled as a group
A9	As NXOPTA1, but 2,5mm <sup>2</sup> terminals
AE	Encoder board (Wide Range), 3DI (Encoder 10...24V), Out +15V/+24V, 2DO (encoder divider and direction)
AF	Protection against unexpected restart + ATEX approved thermistor
AK	SIN/COS encoder interface
AL	6DI (42...240VAC), 2AI, 2AO, 1DO, Out 15 V / 24 V
AN	6DI galv. de-coupled as a group, 2AI and 2AO (Programmable 0 ... 20mA, 4 ... 20mA, 0 ... 10V, 2 ... 10V, -10 ... +10V)

## I/O expander cards (B)

B1	6DI/DO (programmable, DI or DO)
B2	1RO(NO/NC), 1RO(NO), Thermistor
B4	1AI (mA, isolated), 2AO (mA, isolated), +24V/EXT+24V
B5	3RO(NO)
B8	3Pt100, +24V/EXT+24V
B9	1RO(NO), 5 pcs of 41...240VAC input
BB	ENDAT encoder card, 2xDO (RS422)
BC	RESOLVER, 3x DO (Wide Range)
BE	SSI and Endat Encoders
BH	3 x Temp sensor inputs (PT100, PT1000, KTY84-130, KTY84-150, KTY84-131, NI1000)

## Fieldbus cards (C Legacy)

C2	Modbus RTU / N2
C3	Profibus DP
C4	LonWorks
C5	Profibus DP (D9 type connector)
C6	CANopen (slave)
C7	DeviceNet
C8	Modbus RTU / N2 (D9 type connector)
C1	Modbus TCP/IP
CJ	BACnet MS/TP
CP	ProfNet I/O
CQ	Ethernet/IP

## Communication cards (D)

D1	System Bus adapter (2xfiber optic cable)
D2	System Bus (1xfiber optic cable) & CAN-bus (galv. decoupled)
D3	RS232 adapter card (not galvanically decoupled)
D6	CAN-Bus (galv. decoupled)
D7	Line voltage measurement board

## Fieldbus cards (E)

E2	Modbus RTU / N2
E3	Profibus DPV1
E5	Profibus DPV1 (D9)
E6	CANopen
E7	DeviceNet
E8	Modbus RTU / N2 (D9 type connector)
E9	2-Port Ethernet option (Modbus TCP/UDP, PROFINET, EtherNet/IP, RSTP, MRP)
EA	Advanced dual-port Ethernet option
EC	EtherCAT field bus

DI = digital Input  
DO = digital Output  
AI = analog Input  
AO = analog Output  
RO = Relay Output  
NO/NC = Normally open contact / Normally closed contact  
Pt100 = Temperature sensor