

LX

Born to drive lifts

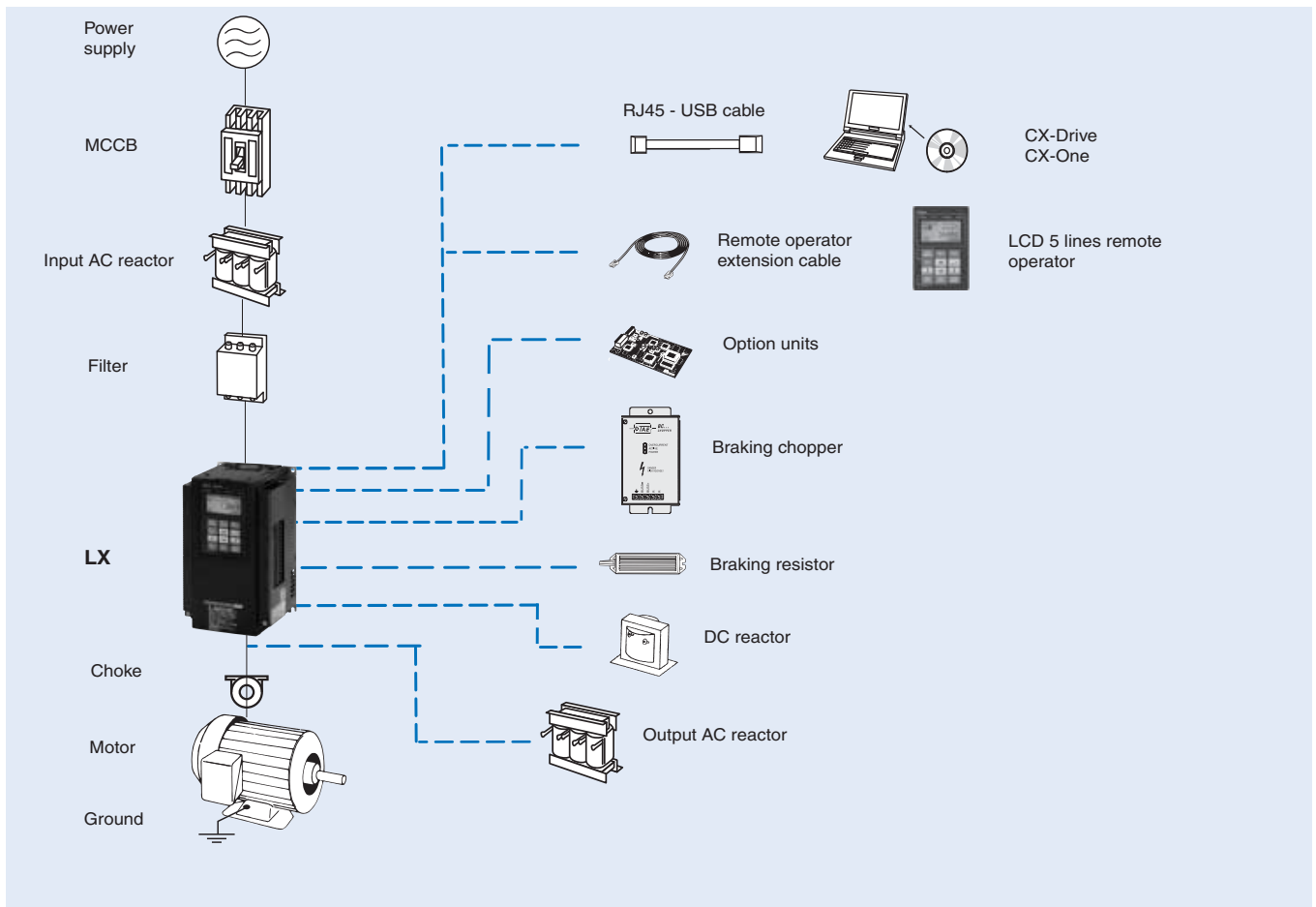
- Current vector control with or without PG
- High strating torque (200%/0.3Hz Sensorless vector, 200%/0Hz close loop vector control)
- IM&PM motor control
- Rescue function with flexible power supply (Control 220VAC, Power from 48VDC or 36VAC)
- Static & Rotary advanced auto tuning
- Safety embedded: IEC 615087 SIL2
- Clock and calendar function
- Silent operation by Fan switch off by temperature
- One parameter Dynamic tuning
- Lift language (Hz, m/s, rpm...)
- Built-in logic programmability
- Universal dual encoder option (Endat,Hiperface,Line driver)
- Positioning functionality with 40 floor memory&autolearning
- Dedicated lift functionality (Brake control, Lift sequence...)
- CE, cULus, RoHS

Ratings

- 200 V Class three-phase 4.0 to 37 kW
- 400 V Class three-phase 3.7 to 37 kW

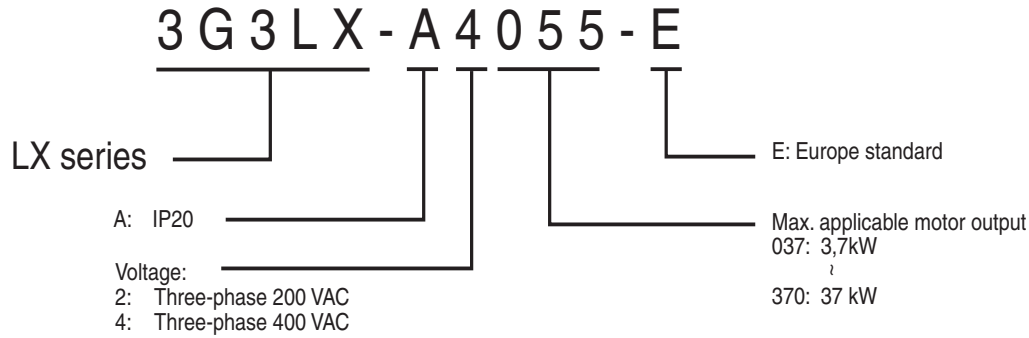


System configuration



Specifications

Type designation



200 V class

Three-phase: 3G3LX-□		A2040	A2055	A2075	A2110	A2150	A2185	A220	A2300	A2370		
Motor kW ¹		4.0	5.5	7.5	11.0	15.0	18.5	22.0	30.0	37.0		
Output characteristics	Inverter capacity kVA	200 V		5.7	8.3	11.0	15.9	22.1	26.3	32.9	41.9	50.2
		240 V		6.8	9.9	13.3	19.1	26.6	31.5	39.4	50.2	60.2
Rated output current (A) (3min, 50%ED)		17.5	25	33	49	64	80	96	130	160		
Max. output voltage		Proportional to input voltage: 0..240 V										
Max. output frequency		400 Hz										
Power supply	Rated input voltage and frequency		Control supply: 1-phase 200..240 V 50/60 Hz								Power supply: 3-phase 200..240 V 50/60 Hz	
			Do not turn the inverter power on and off more often than once every 3 minutes									
	Allowable voltage fluctuation		-15%..+10%									
	Allowable frequency fluctuation		5%									
Braking	Regenerative braking		Internal BRD circuit (external discharge resistor)							External unit		
	Minimum connectable resistance (Ohms)		24	16	10	10	7.5	7.5	5	-		
	Duty at minimum resistance		10%									
	Minimum resistance at continuous running (Ohms)		100	50	50	50	35	35	35			
Protective structure		IP20										
Cooling method		Forced air cooling										

¹ Based on a standard IM 3-Phase standard motor.

400V class

Three-phase: 3G3LX-□		A4037	A4040	A4055	A4075	A4110	A4150	A4185	A4220	A4300	A4370		
Motor kW ¹		3.7	4.0	5.5	7.5	11.0	15.0	18.5	22.0	30.0	37.0		
Output characteristics	Inverter capacity kVA	400 V		5.7	5.9	9.7	13.1	17.3	22.1	26.3	33.2	40.1	51.9
		480 V		6.8	7.1	11.6	15.8	20.7	26.6	31.5	39.9	48.2	62.3
Rated output current (A) (3min, 50%ED)		9	11	14	19	27	34	41	48	65	80		
Max. output voltage		Proportional to input voltage: 0..480 V											
Max. output frequency		400 Hz											
Power supply	Rated input voltage and frequency		Control supply: 1-phase 200..240 V 50/60 Hz								Power supply: 3-phase 380..480 V 50/60 Hz		
			Do not turn the inverter power on and off more often than once every 3 minutes										
	Allowable voltage fluctuation		-15%..+10%										
	Allowable frequency fluctuation		5%										
Braking	Regenerative braking		Internal BRD circuit (external discharge resistor)							External unit			
	Minimum connectable resistance (Ohms)		70	70	70	35	35	24	24	20	-		
	Duty at minimum resistance		10%										
	Minimum resistance at continuous running (Ohms)		200	200	200	150	150	100	100	100			
Protective structure		IP20											
Cooling method		Forced air cooling											

¹ Based on a standard IM 3-Phase standard motor.

Common specifications

Model number LX□		Specifications
Control functions	Control methods	Phase-to-phase sinusoidal pulse with modulation PWM (V/f control for IM, Open loop vector control for IM, Closed loop vector control for IM, Closed loop vector control for PM)
	Output frequency range	0.00 to 400.00 Hz
	Frequency precision	Digital set value: ±0.01% of the max. frequency Analogue set value: ±0.2% of the max. frequency (25 ±10 °C)
	Resolution of frequency set value	Digital set value: 0.01 Hz Analog input: 12 bit
	Resolution of output frequency	0.01Hz
	Starting torque	200% at 0.3Hz (Open loop vector control) 150% at 0Hz (Closed loop vector control)
	Overload capability	150% for 30 sec
	External frequency set value	0 to 10 VDC (10 KΩ), -10 to 10 VDC (10 KΩ), 4 to 20 mA (100 Ω), RS485 Modbus
	Multi input frequency set values	7 multi speeds 10 speeds: Fast, Crawl, Intermediate 1/2/3, Releveling, inspection 1/2, Rescue 1/2
Functionality	Inputs signals	9 terminals (7 multi-function plus GS1 and GS2, NO/NC switchable, sink/source logic switchable) [Terminal function] SET (set 2nd motor data), FRS (Free-run stop), EXT (External trip), SFT (Software lock), RS (Reset), PCLR (Clear the current position), MI1 (General-purpose input 1), MI2 (General-purpose input 2), MI3 (General-purpose input 3), MI4 (General-purpose input 4), MI5 (General-purpose input 5), MI6 (General-purpose input 6), MI7 (General-purpose input 7), MI8 (General-purpose input 8), SPD1 (Multi-speed 1 setting), SPD2 (Multi-speed 2 setting), SPD3 (Multi-speed 3 setting), RESC (Rescue), INSP (Inspection), RL (Releveling), COK (Contactor check signal), BOK (Brake check signal), FP1 (Floor position 1), FP2 (Floor position 2), FP3 (Floor position 3), FP4 (Floor position 4), FP5 (Floor position 5), PAL (Auto learning data latch trigger), TCL (Torque bias latch trigger), LVS (Leveling signal), NFS (Near floor), CMC (control mode change), No allocation (no)
	Output signals	4 Relay output terminals: NO/NC switchable [Terminal function] RUN (Running), FA1 (Constant-speed reached), FA2 (Set frequency overreached), OL (Overload advance signal (1), AL (Alarm signal), FA3 (Set frequency reached), OTQ (Over-torque), IP (Instantaneous power failure), UV (Under voltage), TRQ (Torque limited), RNT (Operation time over), ONT (Plug-in time over), THM (Thermal alarm signal), ZS (0Hz detection signal), DSE (Speed deviation maximum), POK (Positioning completed), FA4 (Set frequency overreached 2), FA5 (Set frequency reached 2), OL2 (Overload advance signal 2), WAC (Capacitor life warning), WAF (Cooling-fan speed drop), FR (starting contact signal), OHF (Heat sink overheat warning), LOC (Low-current indication signal), MO1 (General-purpose output 1), MO2 (General-purpose output 2), MO3 (General-purpose output 3), MO4 (General-purpose output 4), MO5 (General-purpose output 5), MO6 (General-purpose output 6), IRDY (Inverter ready), FWR (Forward rotation), RVR (Reverse rotation), MJA (Major failure), CON (Contactor control signal), BRK (Brake control signal), UPS (Light load search status), UPD (Light load search direction), GMON (Gate suppress monitor), MPS (Magnet pole position search)
	Function for Lift	Dedicated lift sequence built-in (Speed control, Direct position control), Direct control motor brake and contactor, Quick floor function, Torque bias at start (at closed loop vector control), ASR gain adjustment, Lift units (speed, position, Accel/Decel), Motor constant saved on inverter and encoder (Hiperface, EnDat), Emergency operation by UPS or battery (Control supply 1 phase 220V, Power supply 48 to 600 VDC or 1 phase 220V)
	Analogue inputs	Two analogue inputs 0 to 10 V and -10 to 10 V (10 KΩ), one 4 to 20 mA (100 Ω) (12 bits resolution)
	Analogue outputs	Analog voltage output (0 to 10Vdc 10 bits resolution), Analog current output (0 to 20mA 10 bits resolution, Pulse train output (Max frequency 3.6KHz, max current 1.2mA)
	Accel/Decel times	0.01 to 3600.0 s (linear/ S-curve for lift, multi stage Acceleration/Deceleration)
	Display	Status indicator LED's Run, Program, Power, Alarm, Hz, Amps, Volts, % Digital operator: Available to monitors: Output speed, Output current, Output torque, Output voltage, Input power, Electronic thermal overload, LAD speed, Motor temperature, Heat sink temperature, Output torque (signed value), General-purpose output YA(n)
	Protection functions	Motor overload protection
Instantaneous overcurrent		200% of rated current for 3 seconds
Overload		150% for 30 seconds
Overvoltage		800 V for 400 V type and 400 V for 200 V type
Cooling fin overheat		Temperature monitor and error detection
Stall prevention level		Stall prevention during acceleration and constant speed
Ground fault		Detection at power on
Lift specific protection		Speed-reference error, Contactor error, Brake error, Wrong rotation detection, Over acceleration, Over speed, Speed deviation error
Ambient conditions	Degree of protection	IP20
	Ambient humidity	90% RH or less (without condensation)
	Storage temperature	-20°C..+65°C (short-term temperature during transportation)
	Ambient temperature	-10°C to 40°C
	Installation	Indoor (no corrosive gas, dust, etc.)
	Installation height	Max. 1000 m
Vibration	Up to 22KW 5.9 m/s ² (0.6G), 10 to 55 Hz 30KW and above 2.94 m/s ² (0.3G), 10 to 55 Hz	

Dimensions

Figure 1

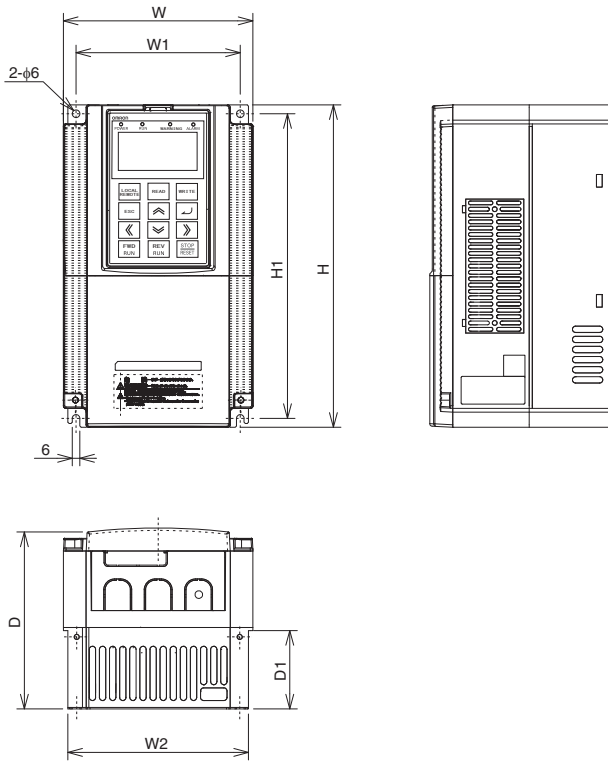


Figure 2

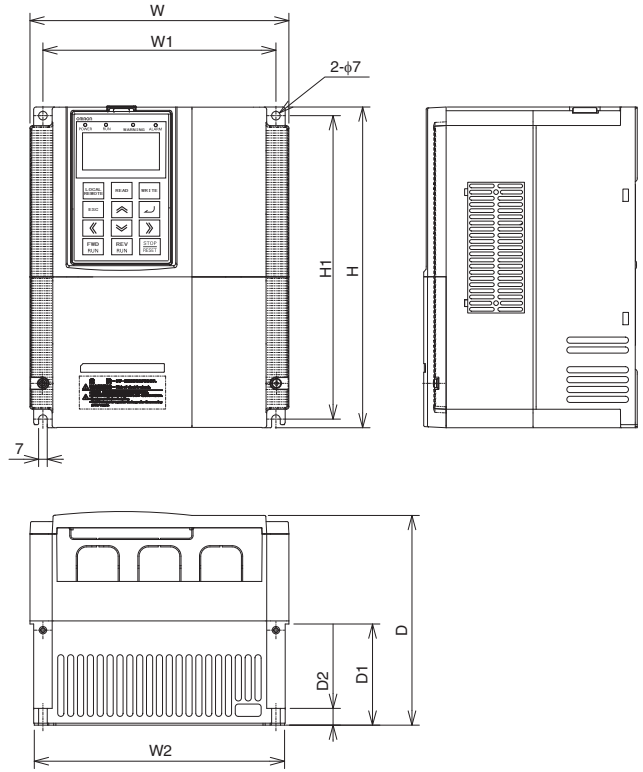


Figure 3

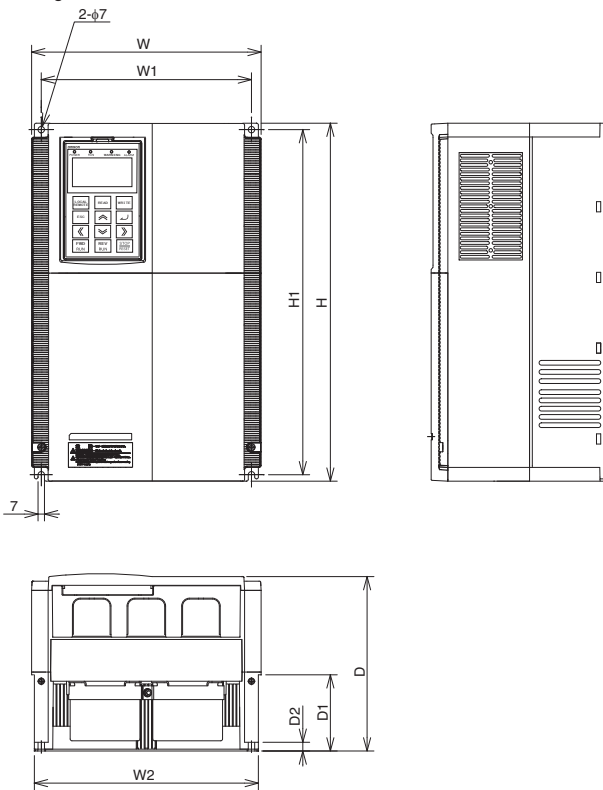
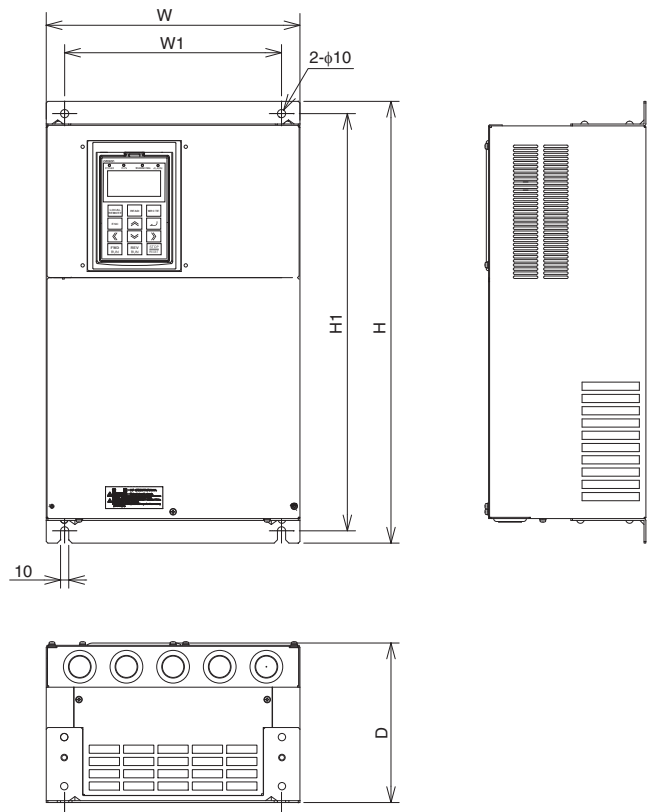


Figure 4

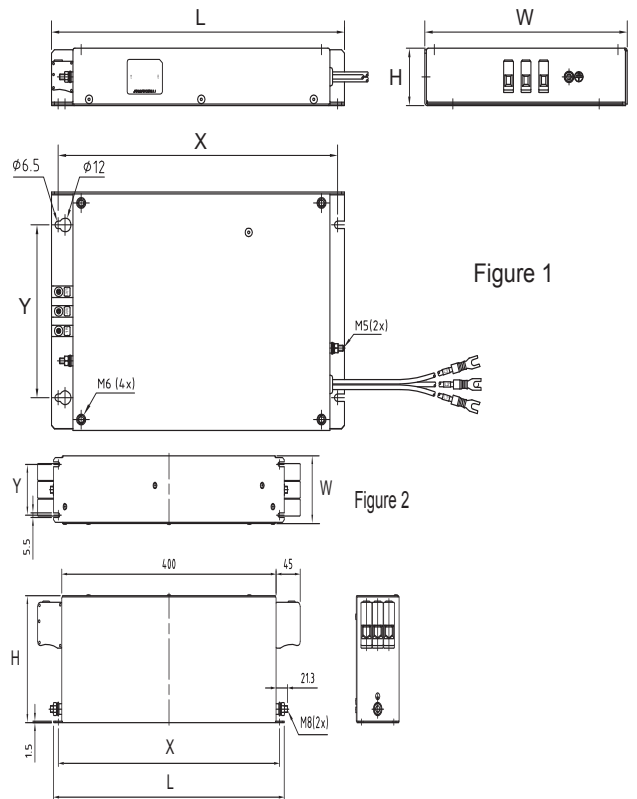


Voltage class	Inverter model LX□	Figure	Dimensions in mm								Weight (KG)
			W	W1	W2	H	H1	D	D1	D2	
Three-phase 200 V	A2040	1	150	130	143	255	241	140	62	-	3.5
	A2055	2	210	189	203	260	246	170	82	13.6	6
	A2075										
	A2110										
	A2150	3	250	229	244	390	376	190	83	9.5	14
	A2185										
	A2220										
A2300	4	310	265	-	540	510	195	-	-	20	
A2370		390	300	-	550	520	250	-	-	30	
Three-phase 400 V	A4037	1	150	130	143	255	241	140	62	-	3.5
	A4040	2	210	189	203	260	246	170	82	13.6	6
	A4055										
	A4075										
	A4110	3	250	229	244	390	376	190	83	9.5	14
	A4150										
	A4185										
	A4220	4	310	265	-	540	510	195	-	-	22
	A4300		390	300	-	550	520	250	-	-	30
A4370											

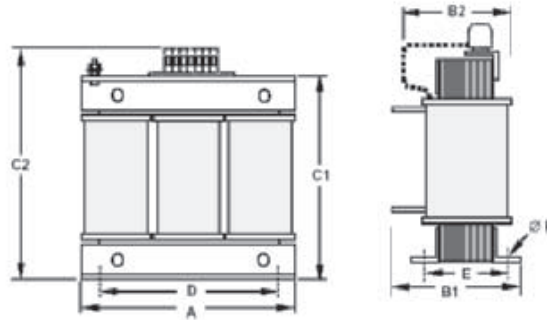
Schaffner filters

V	Inverter 3G3LX	Filter model	Fig	Dimensions (mm)						Weight KG	
				L	W	H	X	Y	A		B
3x200 V	A2040	Under development									
	A2055										
	A2075										
	A2110										
	A2150										
	A2185										
	A2220										
	A2300										
A2370											
3x400 V	A4037	AX-FIL3010-SE	1	300	145	40	286	110	6.5	M5	1.0
	A4040	AX-FIL3015-SE	1	300	207	50	286	150	6.5	M6	1.5
	A4055		1								
	A4075	AX-FIL3030-SE	1	300	207	50	286	150	6.5	M6	2.1
	A4110		1								
	A4150	AX-FIL3053-SE	1	442	250	60	426	180	6.5	M6	4.1
	A4185		1								
	A4220		1								
A4300	AX-FIL3089-SE ^{*1}	2	430	80	150	412.5	60	-	-	4.7	
A4370		2									

*1 Book style installation



Input AC Reactor



Voltage	Reference	Dimensions								Weight Kg
		A	B1	B2	C1	C2	D	E	F	
200 V	AX-RAI00880200-DE	120	-	80	-	120	140	62	6	2.35
	AX-RAI00350335-DE	180		85		190		55		5.5
	AX-RAI00180670-DE			205		85		6.5		
	AX-RAI00091000-DE			205		11.7				
AX-RAI00071550-DE	105	8.5								
400 V	AX-RAI03500100-DE	120	-	80	-	120	140	62	6	2.35
	AX-RAI01300170-DE	180		85		190		55		2.5
	AX-RAI00740335-DE			205		85		6.5		
	AX-RAI00360500-DE			105		8.5				
	AX-RAI00290780-DE			105		8.5				

DC Reactor

Figure 1

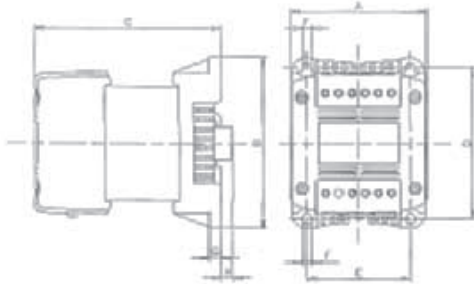
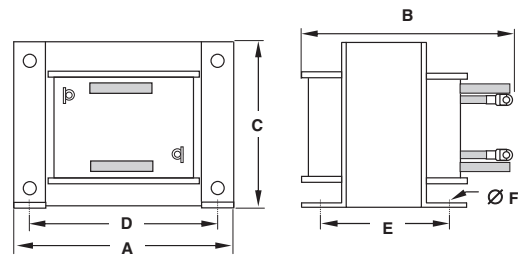
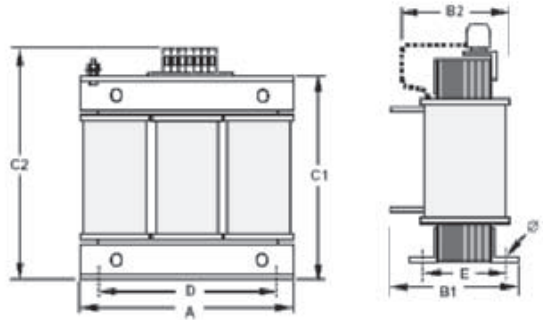


Figure 2



		200 V										400 V									
Reference AX-RC	Fig	Dimensions								kg	Reference AX-RC	Fig	Dimensions								kg
		A	B	C	D	E	F	G	H				A	B	C	D	E	F	G	H	
01600223-DE	1	108	135	124	120	82	6.5	9.5	-	3.20	06400116-DE	1	108	135	133	120	82	6.5	9.5	-	3.70
01110309-DE		120	152	136	135	94	7			5.20	04410167-DE		120	152	136	135	94	7			9.5
00840437-DE		150	177	146	160	115		11.4	03350219-DE	150	177		146	160	160	115	7	2	-	6.00	
00590614-DE				182.6				14.3	01750430-DE				182.6							14.3	
00440859-DE		195	161	162.5	185	88	10	-	17.0	01200644-DE	195		161	162.5	185	88	10	-	-	17.0	
00231662-DE	240	196	200	228	123	12	25.5		00920797-DE	240	196	200	228	109	12	25.5					
00192015-DE		188			34.0		00741042-DE		188		34.0										

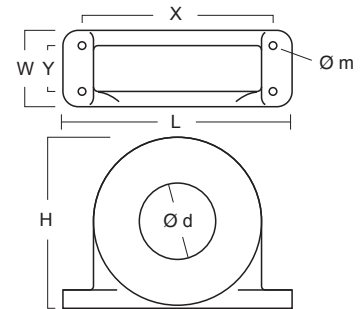
Output AC Reactor



200 V								400 V							
Reference AX-RAO	Dimensions						kg	Reference AX-RAO	Dimensions						kg
	A	B2	C2	D	E	F			A	B2	C2	D	E	F	
01830180-DE	180	85	190	140	55	6	5.5	07300080-DE	120	80	120	80	62	5.5	2.35
01150220-DE	180	85	190	140	55	6	5.5	04600110-DE	180	85	190	140	55	6	5.5
00950320-DE	180	85	205	140	55	6	6.5	03600160-DE	180	85	205	140	55	6	6.5
00630430-DE	180	95	205	140	65	6	9.1	02500220-DE	180	95	205	140	55	6	9.1
00490640-DE	180	95	205	140	65	6	9.1	02000320-DE	180	105	205	140	85	6	11.7
00390800-DE	240	110	275	200	75	6	16.0	01650400-DE	240	110	275	200	75	6	16.0
00330950-DE	240	110	275	200	75	6	16.0	01300480-DE	240	110	275	200	75	6	16.0
00251210-DE	240	110	275	200	75	6	16.0	01030580-DE	240	110	275	200	75	6	16.0
00191450-DE	240	120	275	200	85	6	18.6	00800750-DE	240	120	275	200	85	6	18.6

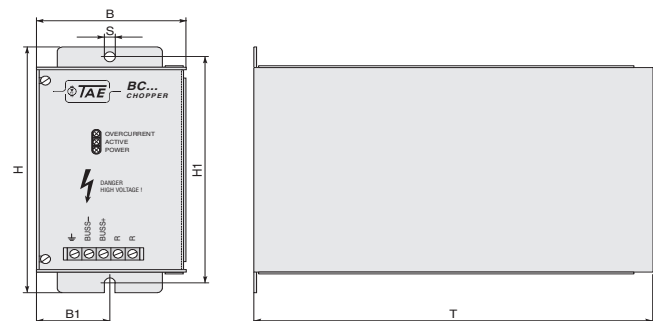
Chokes

Reference	D diameter	Motor KW	Dimensions						Weight kg
			L	W	H	X	Y	m	
AX-FER2515-RE	25	< 15	105	25	62	90	-	5	0.2
AX-FER5045-RE	50	< 37	150	50	110	125	30	5	0.7



Braking unit dimensions

Reference	Dimensions					
	B	B1	H	H1	T	S
AX-BCR2070130-TE	130	64.5	205	193	208	6
AX-BCR4035090-TE						



Resistor dimensions

Fig 1

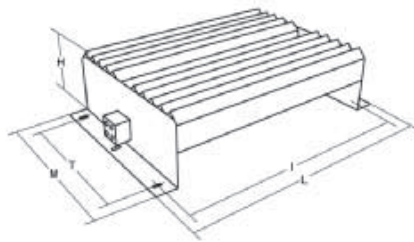
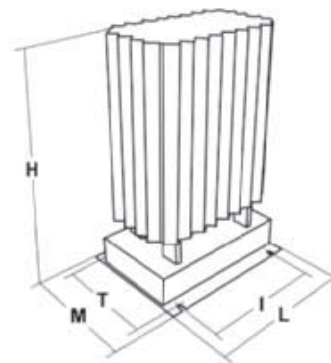
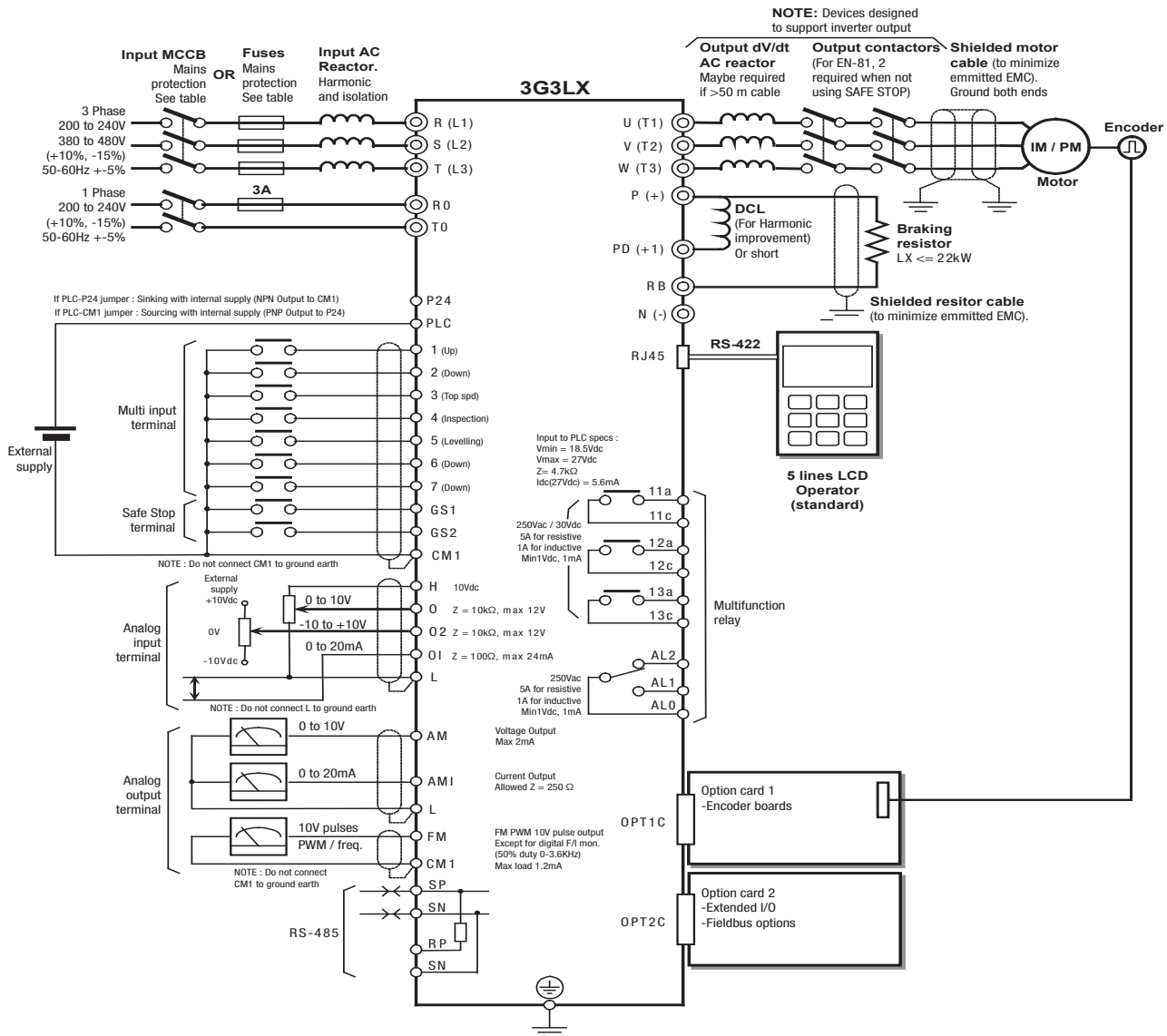


Fig 2



Type	Fig	Dimensions					Weight
		L	H	M	I	T	kg
AX-REM02K1070-IE	1	310	100	240	295	210	7
AX-REM02K1110-IE		365	100	240	350	210	8
AX-REM03K5085-IE							
AX-REM19K0006-IE	2	206	350	140	190	50	8.1
AX-REM19K0020-IE							
AX-REM19K0032-IE							

Standard connections



Frequency inverters

Terminal block specifications

Terminal	Name	Function (signal level)
R/L1, S/L2, T/L3	Main circuit power supply input	Three phase 200-240V / 380-480V (depends on voltage class).
R0, T0	Control circuit power supply	Single phase 200-240V for any voltage class
U/T1, V/T2, W/T3	Inverter output	Three phase motor connection (IM/PM)
PD/+1, P/+	External DC reactor terminal	Normally connected by the short-circuit bar. Remove the short-circuit bar between +1 and P/+ when a DC reactor is connected.
P/+, RB	External brake resistor	For connection of an external braking resistor. (Integrated braking transistor for 22KW or lower size)
P/+, N/-	Regenerative braking unit connection terminal	Connect optional regenerative braking units.
\oplus	Grounding	Earthing terminal. Please ground large ground.

Control circuit

Type	No.	Signal name	Function	Signal level
Frequency reference input	H	Power supply for analog potentiometer	10 VDC 20 mA max	
	O	Analog voltage input Speed Reference / Torque bias (load cell)	0 to 12 VDC (10 kΩ)	
	O2	Analog voltage input Speed Reference / Torque bias (load cell)	0 to +/- 12 VDC (10 kΩ)	
	OI	Analog current input Speed Reference / Torque bias (load cell)	4 to 20 mA (100 Ω)	
	L	analog power supply common	-	
Monitor Output	AM	Multi-function analog voltage output	Factory setting: Output frequency	2 mA max
	AMI	Multi-function analog current output	Factory setting: Output frequency	4 to 20 mA (max imp 250 Ω)
	FM	PWM monitor output	Factory setting: Output frequency	0 to 10 VDC Max 3.6 kHz
Power Supply	P24	Internal 24 VDC	Power supply for contact input signal	100 mA max
	CM1	Input common	Common terminal for P24, TH and analog monitor (AM, AMI, FM) terminals Note: Do not connect to ground earth	
Function Selection	1	Multi-function input When safety inputs GS1 and GS2 are enabled by hardware dip-switch SW1, multifunction settings 78:GS1 and 79:GS2 are compulsory. When safety inputs are disabled, GS1 and GS2 can be used as standard multifunction inputs.	Factory setting: Up (UP)	27 VDC max Input impd 4.7 kΩ Max current 5.6 mA On: 18 VDC or more
	2		Factory setting: Down (DWN)	
	3		Factory setting: Multi-speed 2 setting (SPD2)	
	4		Factory setting: Inspection 1 (INSP1)	
	5		Factory setting: Leveling signal (LVS)	
	6		Factory setting: Reset (RS)	
	7		Factory setting: Inspection 2 (INSP2)	
	GS1		Factory setting: Gate suppress 1 (GS1)	
	GS2		Factory setting: Gate suppress 2 (GS2)	
PLC	Multi-function input common	Sink logic: Short-circuiting P24 and CM1 Source logic: Short-circuiting PSC and CM1 With external supply remove short-circuit bar		
Status/ Factor	11a	Multi-function output	Factory setting: Brake control signal (BRK)	Maximum relay contact capacity: 250Vac 5A (R load) 250Vac 1A (I load) 30Vdc 5A (R load) 30Vdc 1A (I load) Minimum capacity 1Vdc 1mA
	11c			
	12a		Factory setting: Contactor control signal (CON)	
	12c			
	13a		Factory setting: Inverter ready (IRDY)	
	13c			
Relay output	AL1	Relay output (Normally close)	Factory setting: Alarm signal (AL) Under normal operation AL1-AL0 open AL2-AL0 close	R load AL1-AL0 250 VAC 2 A AL2-AL0 250 VAC 1 A I load 250 VAC 0.2 A
	AL2	Relay output (Normally open)		
	AL0	Relay output common		
Sensor	TH	External thermistor input terminal	SC terminal functions as the common terminal 100 mW minimum Impedance at temperature error: 3 kΩ	0 to 8 VDC
Comms	SP	RS485 Modbus terminals	-	Differential input
	SN			
	RP	RS485 terminating resistor terminals	-	-
	SN			

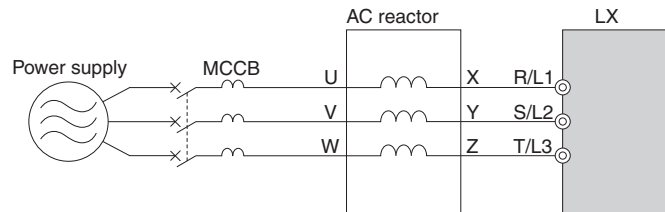
Inverter heat loss
Three-phase 200 V class

Model 3G3LX-		A2040	A2055	A2075	A2110	A2150	A2185	A2220	A2300	A2370
Inverter capacity kVA	200 V	5.7	8.3	11.0	15.9	22.1	26.3	32.9	41.9	50.2
	240 V	6.8	9.9	13.3	19.1	26.6	31.5	39.4	50.2	60.2
Rated current (A)		16.5	24	32	46	64	76	95	121	145
Heat loss W	Losses at 70% load	179	242	312	435	575	698	820	1100	1345
	Losses at 100% load	235	325	425	600	800	975	1150	1550	1900
Efficiency at rated output		94.0	94.4	94.6	94.8	94.9	95.0	95.0	95.0	95.1
Cooling Method		Forced-air-cooling								

Three-phase 400 V class

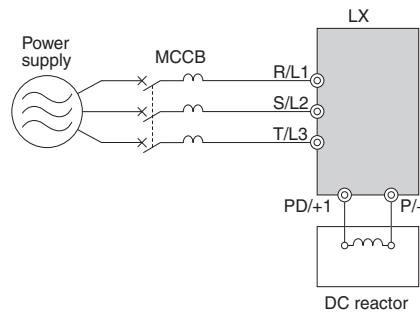
Model 3G3LX-		A4037	A4040	A4055	A4075	A4110	A4150	A4185	A4220	A4300	A4370
Inverter capacity kVA	400 V	5.7	5.9	9.7	13.1	17.3	22.1	26.3	33.2	40.1	51.9
	480 V	6.8	7.1	11.6	15.8	20.7	26.6	31.5	39.9	48.2	62.3
Rated current (A)		9	11	14	19	25	32	38	48	58	75
Heat loss W	Losses at 70% load	179	242	242	312	435	575	698	820	1100	1345
	Losses at 100% load	235	325	325	425	600	800	975	1150	1550	1900
Efficiency at rated output		94.0	94.4	94.4	94.6	94.8	94.9	95.0	95.0	95.0	95.1
Cooling Method		Forced-air-cooling									

Input AC Reactor



3 phase 200 V class				400 V class			
Max. applicable motor output kW	Reference	Current value A	Inductance mH	Max. applicable motor output kW	Reference	Current value A	Inductance mH
4.0	AX-RAI00880200-DE	20.0	0.88	3.7	AX-RAI03500100-DE	10.0	3.5
5.5 to 7.5	AX-RAI00350335-DE	33.5	0.35	4.0, 5.5 to 7.5	AX-RAI01300170-DE	17.0	1.3
11.0 to 15.0	AX-RAI00180670-DE	67.0	0.18	11.0 to 15.0	AX-RAI00740335-DE	33.5	0.74
18.5 to 22.0	AX-RAI00091000-DE	100.0	0.09	18.5 to 22.0	AX-RAI00360500-DE	50.0	0.36
30.0 to 37.0	AX-RAI00071550-DE	155.0	0.07	30.0 to 37.0	AX-RAI00290780-DE	78.0	0.29

DC Reactor



200 V class				400 V class			
Max. applicable motor output kW	Reference	Current value A	Inductance mH	Max. applicable motor output kW	Reference	Current value A	Inductance mH
4.0	AX-RC01600223-DE	22.3	1.60	4.0	AX-RC06400116-DE	11.6	6.40
5.5	AX-RC01110309-DE	30.9	1.11	5.5	AX-RC04410167-DE	16.7	4.41
7.5	AX-RC00840437-DE	43.7	0.84	7.5	AX-RC03350219-DE	21.9	3.35
11.0	AX-RC00590614-DE	61.4	0.59	11.0	AX-RC02330307-DE	30.7	2.33
15.0	AX-RC00440859-DE	85.9	0.44	15.0	AX-RC01750430-DE	43.0	1.75
18.5 to 22	AX-RC00301275-DE	127.5	0.30	18.5 to 22	AX-RC01200644-DE	64.4	1.20
30	AX-RC00231662-DE	166.2	0.23	30	AX-RC00920797-DE	79.7	0.92
37	AX-RC00192015-DE	201.5	0.19	37	AX-RC00741042-DE	104.2	0.74

Output AC Reactor

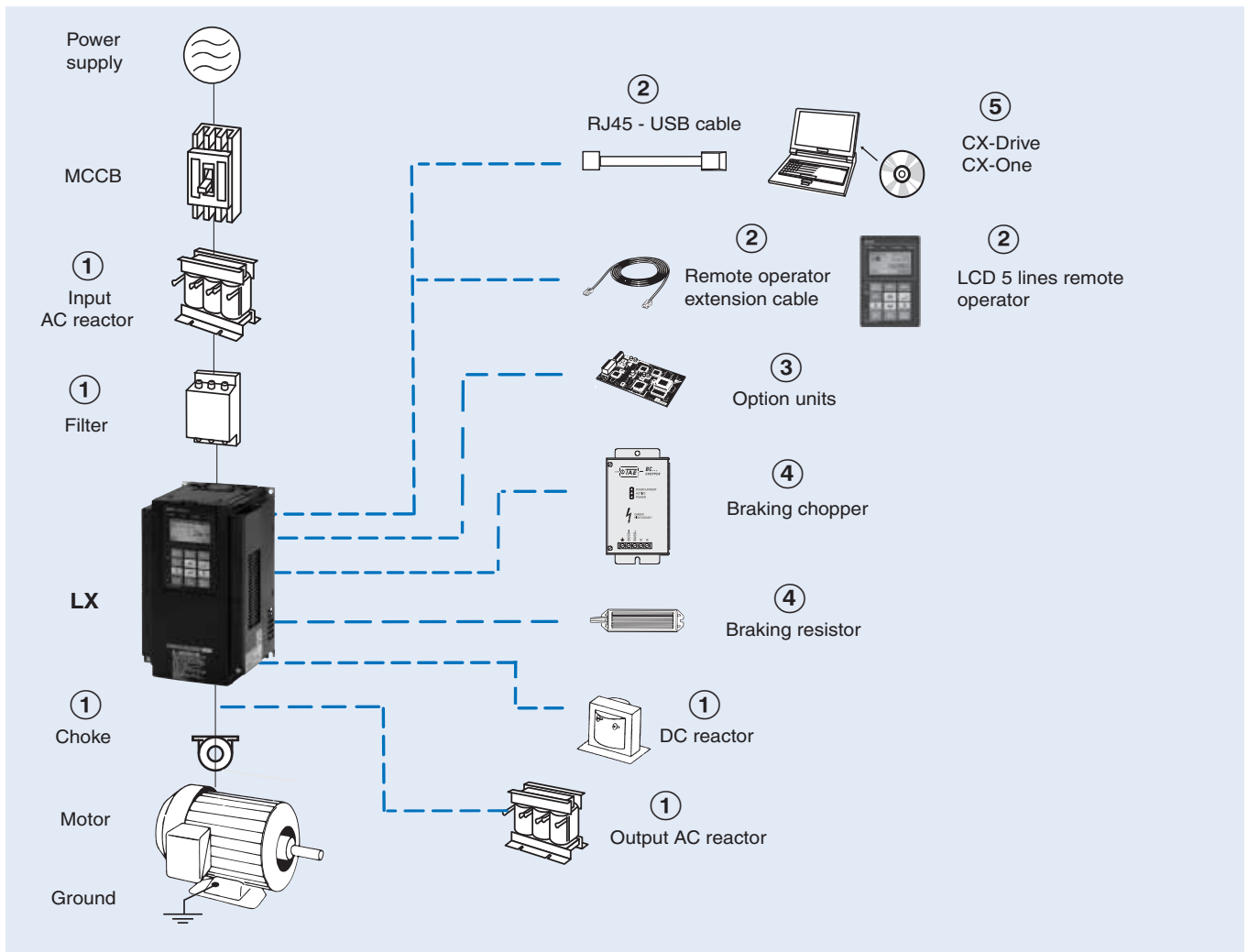
200 V class				400 V class			
Max. applicable motor output kW	Reference	Current value A	Inductance mH	Max. applicable motor output kW	Reference	Current value A	Inductance mH
4.0	AX-RAO01830160-DE	16.0	1.83	4.0	AX-RAO07300080-DE	8.0	7.30
5.5	AX-RAO01150220-DE	22.0	1.15	5.5	AX-RAO04600110-DE	11.0	4.60
7.5	AX-RAO00950320-DE	32.0	0.95	7.5	AX-RAO03600160-DE	16.0	3.60
11	AX-RAO00630430-DE	43.0	0.63	11	AX-RAO02500220-DE	22.0	2.50

200 V class				400 V class			
Max. applicable motor output kW	Reference	Current value A	Inductance mH	Max. applicable motor output kW	Reference	Current value A	Inductance mH
15	AX-RAO00490640-DE	64.0	0.49	15	AX-RAO02000320-DE	32.0	2.00
18.5	AX-RAO00390800-DE	80.0	0.39	18.5	AX-RAO01650400-DE	40.0	1.65
22	AX-RAO00330950-DE	95.0	0.33	22	AX-RAO01300480-DE	48.0	1.30
30	AX-RAO00251210-DE	121.0	0.25	30	AX-RAO01030580-DE	58.0	1.03
37	AX-RAO00191450-DE	145.0	0.19	37	AX-RAO00800750-DE	75.0	0.80

Braking Unit

Voltage	Reference	Specifications				Minimum connectable resistor (Ohms)
		Permanent		Peak (5s max)		
		Current (A)	Brake power (kVA)	Current (A)	Brake power (kVA)	
200 V	AX-BCR2070130-TE	70	25	130	47	2.8
400 V	AX-BCR4035090-TE	35	26	90	67	8.5

Ordering information



Frequency inverters

LX

Specifications			Model	Specifications			Model
Voltage class	Max motor kW	Rated current A	3G3LX-	Voltage class	Max motor kW	Rated current A	3G3LX-
Three-phase 200 V	-	-	-	Three-phase 400V	3.7	9	A4037-E
	4.0	17.5	A2037-E		4.0	11	A4040-E
	5.5	25	A2055-E		5.5	14	A4055-E
	7.5	33	A2075-E		7.5	19	A4075-E
	11	49	A2110-E		11	27	A4110-E
	15	64	A2150-E		15	34	A4150-E
	18.5	80	A2185-E		18.5	41	A4185-E
	22	96	A2220-E		22	48	A4220-E
	30	130	A2300-E	30	65	A4300-E	
	37	160	A2370-E	37	80	A4370-E	

① Line filters

Line filter									
200V					400V				
Model 3G3LX-□	Reference	Rated current (A)	Leakage Nom / Max	Kg	Model 3G3LX-□	Reference	Rated current (A)	Leakage Nom / Max	Kg
A2040	Under development				A4037	AX-FIL3010-SE	10	3.3/53 mA	1.0
A2055 / A2075 / A2110					A4040	AX-FIL3015-SE	15	3.3/53 mA	1.5
A2150/ A2185/ A2220					A4055 / A4075 / A4110	AX-FIL3030-SE	30	3.4/58 mA	2.1
A2300					A4150/ A4185/ A4220	AX-FIL3053-SE	53	3.4/58 mA	4.1
A2370					A4300 / A4370	AX-FIL3089-SE	89	3.4/58 mA	4.7

① Input AC Reactors

Voltage			
3-Phase 200 VAC		3-Phase 400 VAC	
Inverter Model 3G3LX-□	AC Reactor Reference	Inverter Model 3G3LX-□	AC Reactor Reference
A2040	AX-RAI00880200-DE	A4037 / A4040	AX-RAI03500100-DE
A2055 / A2075	AX-RAI00350335-DE	A4055 / A4075	AX-RAI01300170-DE
A2110 / A2150	AX-RAI00180670-DE	A4110 / A4150	AX-RAI00740335-DE
A2185 / A2220	AX-RAI00091000-DE	A4185 / A4220	AX-RAI00360500-DE
A2300 / A2370	AX-RAI00071550-DE	A4300 / A4370	AX-RAI00290780-DE

① DC Reactors

Voltage			
3-Phase 200 VAC		3-Phase 400 VAC	
Inverter Model 3G3LX-□	AC Reactor Reference	Inverter Model 3G3LX-□	AC Reactor Reference
A2040	AX-RC01600223-DE	A4037	AX-RC06400116-DE
A2055	AX-RC01110309-DE	A4040 / A4055	AX-RC04410167-DE
A2075	AX-RC00840437-DE	A4075	AX-RC03350219-DE
A2110	AX-RC00590614-DE	A4110	AX-RC02330307-DE
A2150	AX-RC00440859-DE	A4150	AX-RC01750430-DE
A2185 / A2220	AX-RC00301275-DE	A4185 / A4220	AX-RC01200644-DE
A2300	AX-RC00231662-DE	A4300	AX-RC00920797-DE
A2370	AX-RC00192015-DE	A4370	AX-RC00741042-DE

① Chokes

Model	Diameter	Description
AX-FER2515-RE	25	For 15 kW motors or below
AX-FER5045-RE	50	For 37 kW motors or below

① Output AC Reactor

Voltage			
200V		400V	
Model 3G3LX-□	Reference	Model 3G3LX-□	Reference
A2037	AX-RAO01830160-DE	A4040	AX-RAO07300080-DE
A2055	AX-RAO01150220-DE	A4055	AX-RAO04600110-DE
A2075	AX-RAO00950320-DE	A4075	AX-RAO03600160-DE
A2110	AX-RAO00630430-DE	A4110	AX-RAO02500220-DE
A2150	AX-RAO00490640-DE	A4150	AX-RAO02000320-DE
A2185	AX-RAO00390800-DE	A4185	AX-RAO01650400-DE
A2220	AX-RAO00330950-DE	A4220	AX-RAO01300480-DE
A2300	AX-RAO00251210-DE	A4300	AX-RAO01030580-DE
A2370	AX-RAO00191450-DE	A4370	AX-RAO00800750-DE

② Accessories

Types	Model	Description	Functions
Digital operator	AX-OP05-E	LCD remote operator	5 Line LCD remote operator with copy function, cable length max. 3m. ^{*1}
	3G3AX-CAJOP300-EE	Remote operator cable	3 meters cable for connecting remote operator
	3G3AX-OP01	LED remote operator	LED remote operator, cable length max. 3m
	4X-KITMINI	Mounting kit for LED operator	Mounting kit for LED operator on panel
Accessories	3G3AX-PCACN2	USB converter / USB cable	RJ45 to USB connection cable
	USB-convertercable		

*1 please note, models with firmware 4287 and 4288, the operator will only display 2 lines of text.

③ Option boards

Types	Model	Description	Functions
Encoder Feedback	3G3AX-PG	PG speed controller option card	Phase A,B and Z pulse (differential pulse) inputs (RS-422) Pulse train position command input (RS-422) Pulse monitor output (RS-422) PG frequency range: 100 kHz max
	3G3AX-ABS		Two encoder input board supporting Phase A,B and Z pulse (differential pulse) inputs (RS-422) EnDat 2.1 and 2.2 Hiperface
	3G3AX-ABSGL		3G3AX-ABS --> PG frequency range: 100 kHz max 3G3AX-ABSGL --> PG frequency range: 30 KHz max to improve noise immunity
Option	SJ-EIO	Expansion I/O board	5 digital inputs, 2 relay output and 1 open collector output

④ Braking unit, braking resistor unit

Voltage	Max. motor kW	Inverter				Braking resistor unit		
		Inverter 3G3LX□ 3-phase	Braking Unit AX-BCR□	Connectable min. resistance Ω	Connectable resistance at continuous running Ω	External resistor 10%ED 10 sec max for built-in 5 sec max for Braking Unit		Braking torque %
					Type AX-	Resist Ω		
200 V (Three-phase)	4.0	2037	Built-in	24	100	REM02K1070-IE	70	50
	5.5	2055		16	50	REM02K1070-IE	70	40
	7.5	2075		10	50	REM03K5035-IE	35	45
	11.0	2110		10	50	REM03K5035-IE	35	30
	15.0	2150		7.5	35	REM19K0020-IE	20	65
	18.5	2185		7.5	35	REM19K0020-IE	20	55
	22.0	2220		5	35	REM19K0020-IE	20	45
	30.0	2300	2070130-TE	2.8	5.6	2x REM19K0006-IE	3	50
37.0	2370	40						
400 V (Three-phase)	3.7	4037	Built-in	70	200	REM02K1110-IE	110	55
	4.0	4040		70	200	REM02K1110-IE	110	50
	5.5	4055		70	200	REM02K1110-IE	110	40
	7.5	4075		35	150	REM03K5085-IE	85	45
	11.0	4110		35	150	REM03K5085-IE	85	30
	15.0	4150		24	100	REM19K0032-IE	32	65
	18.5	4185		24	100	REM19K0032-IE	32	55
	22.0	4220	20	100	REM19K0032-IE	32	45	
	30.0	4300	4035090-TE	8.5	22	2x REM19K0020-IE	10	50
	37.0	4370						40

Recommended values with a 2:1 roping ratio, 1m/s lift speed and medium lift usage

⑤ Computer software

Types	Model	Description	Installation
Software	CX-drive	Computer software	Configuration and monitoring software tool
	CX-One	Computer software	Configuration and monitoring software tool

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.