1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 06ATEX9112X** Issue: **7**

4 Equipment: **Range of Type SGA 71 to 315 Motors and HGA range frame 80-315**

5 Applicant's: **CMG Pty Ltd**

6 Address: 19 Corporate Avenue, Rowville, Victoria 3178, Australia

CMG Electric Motors NZ Ltd
303E/315A, Rosebank Road, Avondale, Auckland, New Zealand

CMG Electric Motors Asia Pacific Pte Ltd
12 Tuas Loop, Singapore 637346

CMG Electric Motors (Israel) Ltd
9, Bareket Street, Zone 23, North Industrial Park, Caesarea 38900, Israel.

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

IEC 61241-0:2004 IEC 61241-1:2004 EN 13463-1:2009 EN 13463-5:2003

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:

II 2 D c
Ex tD A21 IP66 T135°C
Ta -20°C to +50°

Project Number 24707
C. Index 01

C Ellaby
Deputy Certification Manager

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13 DESCRIPTION OF EQUIPMENT

The SGA range of squirrel cage induction motors and the HGA range of high efficiency motors are manufactured from cast iron and comprise a main body with integral cooling ribs with a separate bolt-on terminal box. The motors are designed to operate on 3 phase, 100 V to 800 V, 40 Hz, 50 Hz or 60 Hz power systems. Motors may be supplied with auxiliary terminal boxes as required for the connection of optional anti-condensation heaters, RTDs and thermistors. Motors are available as foot mounted, flange mounted or foot and flange mounted. The bearings have V-ring seals and the main terminal box a nitrile rubber gasket seal on the lid to give the motors an IP rating of IP55. A gamma seal option is available to give the motors an IP66 rating. Electrical connection is via a threaded entry in the main terminal box wall, designed to accommodate either a gland or conduit

The full range of SGA single speed induction motors for Ex tD are listed in Table 1 and the range of two speed motors for Ex tD in Table 2. The equipment may include one or more options detailed in Table 3.

The Ex types of protection Ex tD used in the SGA range of motors is maintained in this new HGA range. The HGA range is similar to the previously certified SGA range with changes to improve efficiency. The changes are to the core length, winding design current density (more copper in windings) and provision of a low loss fan.

Brake motors are included in the HGA Ex tD range of motors for frame sizes 80 to 132. The full range of motors is listed in Table 4. The equipment may include one or more options detailed in Table 5.

Table 1: Range of single speed induction motors SGA 71 to SGA 315 Ex e, Ex nA and Ex tD

2 POLE		4 POLE		6 POLE		8 POLE	
Frame Size	Output (kW)	Frame Size	Output (kW)	Frame Size	Output (kW)	Frame Size	Output (kW)
80A	0.75	71	0.37	80A	0.37	100L	1.1
80B	1.1	80A	0.55	80B	0.55	112M	1.5
90S	1.5	80B	0.75	90S	0.75	132S	2.2
90L	2.2	90S	1,1	90L	1.1	132M	3
100L	3	90L	1.5	100L	1.5	160M	4
112M	4	100L	2.2	112M	2.2	160M	5.5
112M	5.5	100L	3	132S	3	160L	7.5
132S	5.5	112M	4	132M	4	180L	11
132S	7.5	132S	5.5	132M	5.5	200L	15
132M	11	132M	7.5	160M	7.5	225S	18.5
160M	11	132M	11	160L	11	225M	22
160M	15	160M	11	180L	15	250M	30
160L	18.5	160L	15	200L	18.5	280S	37
180M	22	180M	18.5	200L	22	280M	45
200L	30	180L	22	225M	30	315S	55
200L	37	200L	30	250M	37	315M	75
225M	45	225S	37	280S	45	315L	90
250M	55	225M	45	280M	55	315L	110
280S	75	250M	55	315S	75	-	-
280M	90	280S	75	315M	90	-	-
315S	110	280M	90	315L	110	-	-
315M	132	315S	110	315L	132	-	-
315L	160	315M	132	-	-	-	-
315L	200	315L	160	-	-	-	-
-	-	315L	200	-	-	-	-

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Table 2: SGA range of two speed induction motors frame sizes 71-315 Ex nA and Ex tD					
Frame size	Single winding (tapped)			Separate windings	
	kW Output (high/low speed)			kW Output (high/low speed)	
	2/4 POLES	4/8 POLES	6/12 POLES	4/6 POLES	6/8 POLES
80A	0.6/012	0.45/0.10	0.25/0.06	0.37/0.12	0.25/0.06
80B	0.8/0.16	0.6/0.12	0.37/0.08	0.55/0.18	0.37/0.08
90S	1.2/0.24	0.8/0.16	0.55/0.12	0.75/0.25	0.55/0.24
90L	1.7/0.34	1.2/0.24	0.75/0.18	1.1/0.36	0.75/0.32
100L	2.4/0.48	1.7/0.34	1.1/0.25	1.5/0.50	1.1/0.47
100L	-	2.4/0.5	-	2.2/0.75	-
112M	3.3/0.68	3.3/0.7	1.5/0.37	3.0/1.0	1.5/0.65
132S	4.4/0.88	4.4/0.9	2.2/0.45	4.0/1.3	2.2/0.95
132S	6.1/1.2	-	-	-	-
132M	-	6.1/1.2	3/0.6	5.5/1.8	3.0/1.3
132M	-	-	4/0.8	-	4.0/1.7
160M	8.3./1.7	8.3/1.7	5.5/1.1	7.5/2.5	5.5/2.4
160M	12/2.4	-	-	-	-
160L	17/3.4	12/2.4	7.5/1.5	11/3.5	7.5/3.2
180M	20/4.0	17/3.4	-	-	-
180L	-	20/4.0	11/2.2	15/5.0	11/4.7
200L	24/4.8	24/5.0	15/3	18.5/6.1	13/5.5
200L	33/6.6	-	-	22/7.3	-
225S	-	33/6.6	18.5/3.7	-	15/6.5
225M	41/8.2	41/8.2	22/4.4	33/11	21/9.0
250M	50/10	50/10	-	45/15	26/11
280S	61/12	61/12	-	-	30/13
280M	83/17	83/17	-	55/18	37/16
315S	99/20	99/20	-	75/25	53/23
315M	121/24	121/24	-	90/30	65/28
315L	145/29	145/29	-	110/36	80/34
315L	176/35	176/35	-	132/44	92/40

Table 3: Options for SGA 71 to 315 Motors	
1	Left hand terminal box when viewed from drive-end or top terminal box
2	Anti-condensation heaters for frames 112–315. Anti-condensation heaters fitted in accordance to drawing SGA201.
3	Additional sets (3) of PTC thermistors. Fitting of thermistors in accordance to drawing SGA201.
4	Auxiliary terminal box for the termination of the thermistors, RTD's and heaters. Auxiliary box fitted in accordance to drawing SGA203.
5	Winding RTD's - PT100 RTD's fitted into the motor windings; RTD's fitted in accordance to drawing SGA201.
6	Bearing thermistors fitted into the bearing housing with leads sleeved and routed into auxiliary terminal box. Leads shall be covered with Vidaflex fibreglass sleeve or equivalent.
7	Vibration adaptors fitted in tapped blind holes in endshields or as shown on drawing SGA207.
8	Stainless steel fasteners.

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Table 3: Options for SGA 71 to 315 Motors	
9	Stainless steel shaft. Magnetic grades of stainless steel only for 2 pole motors. Other poles can have magnetic or non-magnetic grades of stainless steel.
10	Alterations to shaft extension diameter and/or length. Shaft diameter shall comply with IEC 60072-1 table 4 “shaft extensions keys and keyway dimensions. Greatest permissible torque on continuous duty for AC motors” Alternatively, shaft design shall meet the requirements of AS 1403-2004: Design of rotating steel shafts.
11	Alternative types of rolling bearings i.e., ball, roller, angular contact. (As per manufacturer’s recommendations).
12	Flange size and type changes external to motor enclosure.
13	Operation on VVVF drives, for Ex tD motors. Motors shall be fitted with a thermistor to limit the surface temperature of the motor.
14	Operation of motors Ex tD with electronic soft starters. Electronic soft starters shall be disconnected from the circuit once the motor is started and supply to motor shall be direct from mains only.
15	Forced ventilation by separately driven cooling fan – the main motor protected by thermistors. The motor driving the fan shall have the same protection as the main motor. The cooling unit shall be fitted as shown on the drawing SGA205. Applicable to motor frame sizes SGA 200 to SGA 315 only.
16	Fan and Fan cover design changes for noise reduction maintaining required clearances and airflow. New fan cover shall be of steel / stainless steel with same thickness or thicker than original fan cover with same fixing.
17	Fan material may be cast iron.
18	Additional eyebolt for vertical lifting
19	Rain canopy for vertical mount (shaft down) motors without reducing airflow over motor. Rain canopy made out of steel / stainless steel – frames 71 to 132 minimum thickness 1.0 mm and minimum thickness 1.5 mm for frames 160 to 315.
20	Sun shields made from steel / stainless steel – frames 71 to 132 minimum thickness 1.0 mm and minimum thickness 1. mm for frames 160 to 315.
21	Extended leads and blanking plate shall be fitted in accordance with drawing SGA204.
22	Brass, aluminium or steel gland plate in place of cast iron. Alloys to contain < 7.5 % in total magnesium and titanium by mass.
23	Larger terminal box - next size up.
24	Larger terminal blocks with larger box.
25	Supply terminals to suit Star-Delta starting with 6 supply leads..
26	Other supply voltages within 100V to 500V for SGA 71 to 132 and 100 V to 800 V for SGA 160 to 315 - 40 Hz, 50 Hz or 60 Hz.
27	Lower kW output rating other than standard. Other rating data for lower kW rating to be declared by test and/or calculation based on test for standard kW rating.
28	Location of drain plug at lowest point for different mounting arrangements.
29	Two speed motors for Ex tD applications.
30	Fitment of brakes to frames 71 and 80 for Ex tD applications. Refer to drawings SGA 115 and SGA 118.
31	Attachment of shaft encoder certified by IEC Ex and ATEX Approved for Ex tD A21, T135°C for Ex tD
32	Refer to procedure EP-GT012 to determine the ambient temperature (if other than standard) or alternative material for V-ring/Gamma seal/Oil seal based on test results.

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Table 4: HGA 80 to 315 range of single speed induction motors				
Frame Size	Output (kW)			
	2 POLE	4 POLE	6 POLE	8 POLE
80A	0.75	-	-	-
80B	1.1	0.75	-	-
90S	1.5	1.1	0.75	-
90L	2.2	1.5	1.1	-
100L	3	-	1.5	-
100LA	-	2.2	-	0.75
100LB	-	3	-	1.1
112M	4	4	2.2	1.5
132S	-	5.5	3	2.2
132SA	5.5	-	-	-
132SB	7.5	-	-	-
132M	-	7.5	-	3
132MA	-	-	4	-
132MB	-	-	5.5	-
160M	-	11	7.5	-
160MA	11	-	-	4
160MB	15	-	-	5.5
160L	18.5	15	11	7.5
180M	22	18.5	-	-
180L	-	22	15	11
200L	-	30	-	15
200LA	30	-	18.5	-
200LB	37	-	22	-
225S	-	37	-	18.5
225M	45	45	30	22
250M	55	55	37	30
280S	75	75	45	37
280M	90	90	55	45
315S	110	110	75	55
315M	132	132	90	75
315LA	160	160	110	90
315LB	-	-	132	110

Table 5: Options for HGA 80 to 315 Motors	
1	Left hand terminal box when viewed from drive-end or top terminal box
2	Anti-condensation heaters for frames 80–315. Anti-condensation heaters fitted in accordance to drawing HGA002.
3	Additional sets (3) of PTC thermistors. Fitting of thermistors in accordance to drawing HGA002.
4	Auxiliary terminal box for the termination of the thermistors, RTD's and heaters. Auxiliary box fitted in accordance to drawing HGA012A, HGA012B & HGA012C.
5	Winding RTD's-PT100 RTD's fitted into motor windings; RTD's fitted in accordance to drawing HGA002.

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Table 5: Options for HGA 80 to 315 Motors	
6	Bearing thermistors fitted into the bearing housing with leads sleeved and routed into auxiliary terminal box. Leads shall be covered with Vidaflex fibreglass sleeve or equivalent.
7	Vibration adaptors fitted IN tapped blind holes in endshields or as shown on drawing HGA006.
8	Stainless steel fasteners.
9	Stainless steel shaft. Magnetic grades of stainless steel only for 2 pole motors. Other poles can have magnetic or non-magnetic grades of stainless steel.
10	Alterations to shaft extension diameter and/or length. Shaft diameter shall comply with IEC 60072-1 table 4 “shaft extensions keys and keyway dimensions. Greatest permissible torque on continuous duty for AC motors” Alternatively, shaft design shall meet the requirements of AS 1403-2004: Design of rotating steel shafts.
11	Alternative types of rolling bearings i.e., ball, roller, angular contact. (As per manufacturer’s recommendations).
12	Flange size and type changes external to motor enclosure.
13	Operation on VVVF drives, for Ex tD motors. Ex tD motors shall be fitted with a thermistor to limit the surface temperature of the motor.
14	Operation of motors with electronic soft starters. Electronic soft starters shall be disconnected from the circuit once the motor is started and supply to motor shall be direct from mains only. ’t_E’ times shall be stated as obtained for DOL mains supply, for safety considerations. Refer to drawing HGA010 for ’t_E’ times.
15	Fan and Fan cover design changes for noise reduction maintaining required clearances and airflow. New fan cover shall be of steel / stainless steel with same thickness or thicker than original fan cover with same fixing.
16	Fan material may be cast iron.
17	Additional eyebolt for vertical lifting
18	Rain canopy for vertical mount (shaft down) motors without reducing airflow over motor. Rain canopy made out of steel / stainless steel (minimum thickness 0.8 mm)
19	Sun shields made from steel / stainless steel. Minimum thickness 1.5 mm.
20	Extended leads and blanking plate shall be fitted in accordance with drawing HGA003.
21	Brass, aluminium or steel gland plate in place of cast iron. Alloys to contain < 7.5 % in total magnesium and titanium by mass
22	Larger terminal box - next size up.
23	Larger terminal blocks with larger box.
24	Supply terminals to suit Star-Delta starting with 6 supply leads..
25	Other supply voltages within 100V to 800V, 40 Hz, 50 Hz or 60 Hz.
26	Lower kW output rating other than standard provided I_A/I_N ratio is still inside permissible limits for new rating. Other rating data for lower kW output to be declared by test and/or calculation based on test for standard kW rating.
27	Location of drain plug at lowest point for different mounting arrangements.
28	Attachment of shaft encoder certified by IEC Ex and ATEX Approved for Ex tD A21, T135°C for Ex tD
29	Refer to procedure EP-GT012 to determine the ambient temperature (if other than standard) or alternative material for V-ring/Gamma seal/Oil seal based on test results.
30	Forced ventilation by separately driven cooling fan – the main motor protected by thermistors. The motor driving the fan shall have the same protection as the main motor. The cooling unit shall be fitted as shown on the drawing HGA004A, HGA004B & HGA004C.

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Variation 1 - This variation introduced the following changes:

i. The address of the Singapore site was changed from 21, Tuas South Street 1, Singapore 638032 to 69, Tech Park Crescent, Singapore 638073.
ii. The removal of the Group II Category 3 marked equipment onto a new certificate Sira 09ATEX9059X Issue 4.

Variation 2 - This variation introduced the following changes:

i. The SGA range of squirrel cage induction motors was extended to include frame size 315.
ii. The addition of the HGA range of high efficiency motors to the SGA range of certified motors.
iii. Following appropriate re-assessment to demonstrate compliance with the requirements of the later standard, the following document originally listed EN 13463-1:2001 was replaced by that currently listed and the addition to section 9 to include EN 13463-1:2009 and EN 13463-5:2003, due to a previous omission.

Variation 3 - This variation introduced the following changes:

i. The recognition of a further alternative manufacturing site in Israel was endorsed.
ii. The change of address for the site in Singapore from 69, Tech Park Crescent Singapore 638073 to that currently shown was approved.

Variation 4 - This variation introduced the following changes:

i. The manufacturing site, CMG Electric Motors (UK) Ltd, Unit A, Stafford Park 2, Telford TF3 3AR, UK, was removed from the certificate; the label drawings associated with the site were removed from the certificate.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	4 August 2006	R51F13446A	The release of the prime certificate.
1	22 September 2006	R51F13446A	The prime certificate was re-issued to correct the report reference.
2	6 March 2007	R51E16072A	The prime certificate was re-issued to include the UK facility.
3	8 November 2007	R51A17344A	This Issue covers the following changes: • All previously issued certification was rationalised into a single certificate, Issue 3, Issues 0 to 2 referenced above are only intended to reflect the history of the previous certification and have not been issued as documents in this format. • The inclusion of the facilities in New Zealand and Singapore.
4	6 February 2009	R19643A/00	The introduction of Variation 1.
5	1 October 2010	R22287A/00	The introduction of Variation 2.
6	19 January 2011	R24202A/00	The introduction of Variation 3.
7	08 April 2011	R24707A/00	The introduction of Variation 4.

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15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)

15.1 Supply cables shall be fitted via conduit or appropriately certified cable glands. The installation shall have an IP rating equivalent with the equipment rating. Unused gland entries must be fitted with appropriately certified conduit fittings or plugs.

15.2 When SGA motors are operated from a VVVF drive the thermal protection devices shall be connected into the motor control circuit in such a manner as to disconnect the source of supply in order to prevent the temperature class from being exceeded.

15.3 Motors fitted with brake units shall not have the brake device operated at a frequency greater than 20 times per hour.

16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II** (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed reports listed in Section 14.2.

17 **CONDITIONS OF CERTIFICATION**

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

17.3 The manufacturer shall use the appropriate name and address for the manufacturing location on the approved label affixed to the apparatus.

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Certificate Annexe

Certificate Number: **Sira 06ATEX9112X**

Equipment: **Range of Type SGA 71 to 315 Motors and HGA range frame 80-315**

Applicant: **CMG Pty Ltd (and Group)**

Issues 0 and 1

Number	Sheet	Rev.	Date	Description
SGA100A	1 of 1	C	16 Jun 06	General Arrangement for SGA 71 frame motor
SGA101A	1 of 1	C	16 Jun 06	General Arrangement for SGA 80-132 frame motor
SGA102	1 of 1	C	17 May 06	Parts list for SGA 71 frame motor
SGA103	1 of 1	C	17 May 06	Parts list for SGA 80 frame motor
SGA104	1 of 1	C	17 May 06	Parts list for SGA 90 frame motor
SGA105	1 of 1	C	17 May 06	Parts list for SGA 100 frame motor
SGA106	1 of 1	C	17 May 06	Parts list for SGA 112 frame motor
SGA107	1 of 1	C	17 May 06	Parts list for SGA 132 frame motor
SGA108	1 of 1	C	12 May 06	Rotor/stator air gaps 71-132 frame motors
SGA111	1 of 1	L	30 Jun 06	Options list 71-132 frame motors
SGA112A	1 of 1	C	17 May 06	Terminal box arrangement Ex e, Ex nA & Ex tD 71-132 500V (Option 1)
SGA112B	1 of 1	D	17 May 06	Terminal box arrangement Ex e, Ex nA &Ex tD 71-132 500V (Option 2)
SGA113	1 of 1	C	17 May 06	Fan clearances 71-132
SGA115	1 of 1	E	16 Jun 06	General Arrangement for 71 - 80 BRAKE MOTORS Ex tD
SGA116	1 of 1	C	17 May 06	Part list 71 brake motors Ex tD
SGA117	1 of 1	C	17 May 06	Part list 80 brake motors Ex tD
SGA118A	1 of 1	E	03 Jul 06	Terminal box arrangement for SGA brake motors (500V) 71-80 Ex tD (Option1)
SGA118B	1 of 1	E	03 Jul 06	Terminal box arrangement for SGA brake motors (500V) 71-80 Ex tD (Option 2)
SGA119A	1 of 1	E	30 Jun 06	Terminal box 2 speed SGA motor frame 71-132 (500 V) Ex nA & Ex tD (Option 1)
SGA119B	1 of 1	E	30 Jun 06	Terminal box 2 speed SGA motor frame 71-132 (500 V) Ex nA & Ex tD (Option 2)
SGA120A	1 of 1	C	17 May 06	Ratings single speed SGA motor frame 71 – 280 Ex e Ex nA & Ex tD protection
SGA120B	1 of 1	C	17 May 06	Ratings 2 speed SGA motor frame 71 – 280 Ex nA & Ex tD protection
SGA121	1 of 1	D	16 Jun 06	Alternative nameplate for SGA motors frame 71 Ex e, Ex nA & Ex tD
SGA122	1 of 1	D	16 Jun 06	Nameplate for SGA motors frame 71 - 112 Ex e, Ex nA & Ex tD
SGA130A	1 of 1	C	16 Jun 06	General Arrangement for SGA160-180 frames
SGA131	1 of 1	C	17 May 06	Parts list for SGA 160 frame motor
SGA132	1 of 1	C	17 May 06	Parts list for SGA 180 frame motor
SGA133	1 of 1	B	17 May 06	Rotor/stator air gaps 160-180 frame motors
SGA135	1 of 1	H	30 Jun 06	Options list 160-180 frame motors
SGA137	1 of 1	F	03 Jul 06	Terminal box arrangement Ex nA & Ex tD 160-180 (800V)
SGA138	1 of 1	C	17 May 06	Fan clearances 160-180
SGA140	1 of 1	F	03 Jul 06	2 speed - terminal box arrangement Ex nA & Ex tD 160-180 (800V)
SGA141	1 of 1	D	16 Jun 06	Nameplate for SGA motors frame 132 - 180 Ex e, ATEX/IEC Ex nA & Ex tD protection
SGA150A	1 of 1	C	16 Jun 06	General Arrangement for 200 - 280

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Certificate Annexe

Certificate Number: **Sira 06ATEX9112X**

Equipment: **Range of Type SGA 71 to 315 Motors and HGA range frame 80-315**

Applicant: **CMG Pty Ltd (and Group)**

Number	Sheet	Rev.	Date	Description
SGA151	1 of 1	C	17 May 06	Parts List for SGA 200 frame motors
SGA152	1 of 1	C	17 May 06	Parts List for SGA 225 frame motors
SGA153	1 of 1	C	17 May 06	Parts List for SGA 250 frame motors
SGA154	1 of 1	C	17 May 06	Parts List for SGA 280 frame motors
SGA155	1 of 1	B	17 May 06	Rotor / stator air gaps 200 - 280
SGA157	1 of 1	G	30 Jun 06	Options list 200 - 280
SGA158	10f 1	E	03 Jul 06	Terminal box arrangement Ex e 200-280 (800 V)
SGA158A	1 of 1	D	03 Jul 06	Terminal box arrangement Ex e 200-280 (800 V) Option 2
SGA159	1 of 1	F	03 Jul 06	Terminal box arrangemenT Ex nA & Ex tD 200 – 280 (800V)
SGA160	1 of 1	C	17 May 06	Fan clearances 200 - 280
SGA162	1 of 1	E	30 Jun 06	2 speed - terminal box arrangement Ex nA & Ex tD 200-280 (800V)
SGA163	1 of 1	D	16 Jun 06	Nameplate for SGA motors frame 200 – 280 ATEX/IEC Ex e, Ex nA & Ex tD protection
SGA200	1 of 1	C	03 Jul 06	Stator internal connections, insulation, testing SGA motor frames 71 – 280 Ex e , Ex nA, & Ex tD protection
SGA201	1 of 2	F	16 Jun 06	Placement of protection devices 71 – 280 frames
SGA201	2 of 2	D	03 Jul 05	Placement of protection devices 71 – 280 frames
SGA202	1 of 1	A	06 Jan 04	Drain plug fitment
SGA203A	1 of 1	C	03 Jul 06	Auxiliary terminal box fitment
SGA203B	1 of 1	C	03 Jul 06	Auxiliary terminal box fitment (Alternative)
SGA203C	1 of 1	B	19 May 06	Auxiliary terminals (For RTDs thermistors & heaters)
SGA204	1 of 1	C	03 Jul 06	Blanking plate & extended leads
SGA205	1 of 1	C	03 Jul 06	Forced ventilation by separately driven cooling fan Exe, Ex nA, & Ex tD protection (200 frame & above)
SGA205A	1 of 1	C	03 Jul 06	Forced ventilation by separately driven cooling fan Option 1 Ex e, Ex nA, & Ex tD protection (200 frame & above)
SGA205B	1 of 1	C	03 Jul 06	Forced ventilation by separately driven cooling fan Option 2 Ex e, Ex nA, & Ex tD protection (200 frame & above)
SGA207	1 of 1	C	19 May 06	Vibration sensor arrangement
SGA210	1 of 1	D	17 May 06	warning labels 71 - 280
SGA211	1 of 1	A	19 May 06	Fan cowl air outlet SGA 71 - 280
SGA212	1 of 1	A	19 May 06	Peripheral fan speeds for SGA motors 71 - 280

Issue 2 All drawings removed, refer to Variation 5 (Issue 7)

Issue 3

Singapore

Number	Sheet	Rev.	Date	Description
SGA121SG	1 of 1	A	09 Aug 07	Alternative nameplate for SGA (SG) motors frame 71 ATEX/IEC Ex e, Ex nA & Ex tD protection
SGA122SG	1 of 1	A	09 Aug 07	Nameplate for SGA (SG) motors frame 71-112 ATEX/IEC Ex e, Ex nA & Ex tD PROTECTION
SGA141SG	1 of 1	A	09 Aug 07	Nameplate for SGA (SG) motors frame 132-180 ATEX/IEC Ex e, Ex nA & Ex tD protection
SGA163SG	1 of 1	A	09 Aug 07	Nameplate for SGA (SG) motors frame 200-225 ATEX/IEC Ex e, Ex nA & Ex tD protection

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Number	Sheet	Rev.	Date	Description
SGA164SG	1 of 1	A	09 Aug 07	Nameplate for SGA (SG) motors frame 250-315 ATEX/IEC Ex e, Ex nA & Ex tD protection

New Zealand

Number	Sheet	Rev.	Date	Description
SGA121NZ	1 of 1	A	09 Aug 07	Alternative nameplate for SGA (SG) motors frame 71 ATEX/IEC Ex e, Ex nA & Ex tD protection
SGA122NZ	1 of 1	A	09 Aug 07	Nameplate for SGA (SG) motors frame 71-112 ATEX/IEC Ex e, Ex nA & Ex tD PROTECTION
SGA141NZ	1 of 1	A	09 Aug 07	Nameplate for SGA (SG) motors frame 132-180 ATEX/IEC Ex e, Ex nA & Ex tD protection
SGA163NZ	1 of 1	A	09 Aug 07	Nameplate for SGA (SG) motors frame 200-225 ATEX/IEC Ex e, Ex nA & Ex tD protection
SGA164NZ	1 of 1	A	09 Aug 07	Nameplate for SGA (SG) motors frame 250-315 ATEX/IEC Ex e, Ex nA & Ex tD protection

Issue 4

Number	Sheets	Rev.	Date (Sira stamp)	Description
SGA121SG	1 of 1	B	06 Feb 09	Alternative nameplate for SGA (SG) motors frame 71 ATEX/IEC Ex e, Ex nA & Ex tD protection
SGA122SG	1 of 1	B	06 Feb 09	Nameplate for SGA (SG) motors frame 71-112 ATEX/IEC Ex e, Ex nA & Ex tD protection
SGA141SG	1 of 1	B	06 Feb 09	Nameplate for SGA (SG) motors frame 132-180 ATEX/IEC Ex e, Ex nA & Ex tD protection
SGA163SG	1 of 1	B	06 Feb 09	Nameplate for SGA (SG) motors frame 200-225 ATEX/IEC Ex e, Ex nA & Ex tD protection
SGA164SG	1 of 1	B	06 Feb 09	Nameplate for SGA (SG) motors frame 250-315 ATEX/IEC Ex e, Ex nA & Ex tD protection

Issue 5 Some drawings removed, refer to Variation 5 (Issue 7)

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
SGA100A	1 of 1	D	14 Sep 10	GENERAL ARRANGEMENT FOR SGA 71 FRAME MOTOR Ex e, EnA & Ex tD PROTECTION
SGA101A	1 of 1	D	14 Sep 10	GENERAL ARRANGEMENT FOR SGA MOTOR FRAMES 80–132 Ex e, EnA & Ex tD PROTECTION
SGA101A-AU	1 of 1	A	14 Sep 10	GENERAL ARRANGEMENT FOR SGA MOTOR FRAMES 71–132 Ex e, EnA & Ex tD PROTECTION
SGA111	1 of 1	M	14 Sep 10	OPTIONS FOR SGA 71-132 Ex e, EnA & Ex tD MOTORS
SGA112A-AU	1 of 1	B	14 Sep 10	TERMINAL BOX/GASKET DETAILS SGA MOTOR FRAMES 71-132 Ex e, EnA & Ex tD PROTECTION
SGA120A	1 of 1	D	14 Sep 10	RATINGS SINGLE SPEED SGA MOTOR FRAMES 71-315 Ex e, EnA & Ex tD PROTECTION
SGA130A	1 of 1	E	14 Sep 10	GENERAL ARRANGEMENT FOR SGA MOTORS FRAMES 160–180 Ex e, EnA & Ex tD PROTECTION
SGA130A-AU	1 of 1	A	14 Sep 10	GENERAL ARRANGEMENT FOR SGA MOTORS FRAMES 160–180 Ex e, EnA & Ex tD PROTECTION

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Certificate Annexe

Certificate Number: **Sira 06ATEX9112X**

Equipment: **Range of Type SGA 71 to 315 Motors and HGA range frame 80-315**

Applicant: **CMG Pty Ltd (and Group)**

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
SGA135	1 of 1	J	14 Sep 10	OPTIONS FOR SGA 160-180 Ex e, EnA & Ex tD MOTORS
SGA136-AU	1 of 1	B	14 Sep 10	TERMINAL BOX/GASKET DETAILS SGA MOTOR FRAMES 160-180 Ex e, EnA & Ex tD PROTECTION
SGA150A	1 of 1	E	14 Sep 10	GENERAL ARRANGEMENT FOR SGA MOTORS FRAMES 200–315 Ex e, EnA & Ex tD PROTECTION
SGA150A-AU	1 of 1	A	14 Sep 10	GENERAL ARRANGEMENT FOR SGA MOTORS FRAMES 200–315 Ex e, EnA & Ex tD PROTECTION
SGA155A	1 of 1	A	14 Sep 10	ROTOR/STATOR AIR GAPS – SGA (F8) MOTOR FRAMES 200-280 Ex e, EnA & Ex tD PROTECTION
SGA155B	1 of 1	A	14 Sep 10	ROTOR/STATOR AIR GAPS – SGA (F8) MOTOR FRAME 315 Ex e, EnA & Ex tD PROTECTION
SGA157	1 of 1	J	14 Sep 10	OPTIONS FOR SGA 200-315 Ex e, EnA & Ex tD MOTORS
SGA158-AU	1 of 1	B	14 Sep 10	TERMINAL BOX/GASKET DETAILS SGA MOTOR FRAMES 200-280 Ex e, EnA & Ex tD PROTECTION
SGA160	1 of 1	D	14 Sep 10	FAN CLEARANCES SGA MOTOR FRAMES 200-315 Ex e, EnA & Ex tD PROTECTION
SGA163	1 of 1	F	14 Sep 10	NAMEPLATE FOR SGA MOTR FRAMES 200-315 ATEX/IEC Ex e, Ex nA & Ex tD PROTECTION
SGA165	1 of 1	A	14 Sep 10	PARTS LIST FOR SGA MOTOR FRAME 315 Ex nA & Ex tD PROTECTION
SGA200	1 of 1	D	14 Sep 10	STATOR INTERNAL CONNECTIONS, INSULATION, TESTING SGA MOTOR FRAMES 71-315 Ex e, EnA & Ex tD PROTECTION
SGA201	1 of 2	G	14 Sep 10	PLACEMENT OF PROTECTION DEVICES (71-315 FRAMES)
SGA201	2 of 2	E	14 Sep 10	PLACEMENT OF PROTECTION DEVICES (71-315 FRAMES)
SGA202	1 of 1	C	14 Sep 10	DRAIN PLUG FITMENT
SGA203A	1 of 1	E	14 Sep 10	AUXILIARY T/BOX FITTING ARRANGEMENTS (FOR RTD's/THERMISTORS/HEATERS)
SGA203B	1 of 1	E	14 Sep 10	AUXILIARY T/BOX FITTING ARRANGEMENTS – SUPPLEMENTARY DETAILS
SGA203C	1 of 1	C	14 Sep 10	AUXILIARY TERMINAL (FOR RTD's/THERMISTORS/HEATERS)
SGA204	1 of 1	D	14 Sep 10	BLANKING PLATE & EXTENDED LEADS Ex e, Ex nA & Ex tD PROTECTION
SGA210	1 of 1	E	14 Sep 10	WARNING LABEL DETAILS FOR SGA 71-315 Ex e, Ex nA & Ex tD PROTECTION
SGA211	1 of 1	B	14 Sep 10	FAN COWL AIR OUTLET FOR SGA 71-315 Ex e, Ex nA & Ex tD PROTECTION
SGA120B	1 of 1	D	14 Sep 10	RATINGS 2 SPEED SGA MOTOR FRAMES 80-315 Ex nA & Ex tD PROTECTION
SGA166	1 of 1	B	14 Sep 10	TERMINAL BOX SGA MOTOR FRAME 315 (800 V) Ex nA & Ex tD PROTECTION
SGA166-AU	1 of 1	B	14 Sep 10	TERMINAL BOX/GASKET DETAILS SGA MOTOR FRAME 315 EnA & Ex tD PROTECTION
SGA167	1 of 1	B	14 Sep 10	2 SPEED TERMINAL BOX SGA MOTOR FRAME 315 (800 V) Ex nA & Ex tD PROTECTION
SGA118A	1 of 1	D	14 Sep 10	BRAKE TERMINAL BOX ARRANGEMENT SGA 71 & 80 (500 V) Ex tD PROTECTION

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Certificate Annexe

Certificate Number: **Sira 06ATEX9112X**

Equipment: **Range of Type SGA 71 to 315 Motors and HGA range frame 80-315**

Applicant: **CMG Pty Ltd (and Group)**

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
SGA121SG	1 of 1	B	14 Sep 10	ALTERNATIVE NAMEPLATE FOR SGA (SG) MOTORS FRAME 71 ATEX/IEC Ex e, Ex nA & Ex tD PROTECTION
SGA122SG	1 of 1	B	14 Sep 10	NAMEPLATE FOR SGA (SG) MOTORS FRAME 71-112 ATEX/IEC Ex e, Ex nA & Ex tD PROTECTION
SGA141SG	1 of 1	B	14 Sep 10	NAMEPLATE FOR SGA (SG) MOTORS FRAME 132-180 ATEX/IEC Ex e, Ex nA & Ex tD PROTECTION
SGA163SG	1 of 1	B	14 Sep 10	NAMEPLATE FOR SGA (SG) MOTORS FRAME 200-225 ATEX/IEC Ex e, Ex nA & Ex tD PROTECTION
SGA164SG	1 of 1	B	14 Sep 10	NAMEPLATE FOR SGA (SG) MOTORS FRAME 250-315 ATEX/IEC Ex e, Ex nA & Ex tD PROTECTION
HGA001	1 of 1	A	14 Sep 10	OPTIONS FOR HGA 80-315 Ex e, Ex nA & Ex tD MOTORS
HGA002-S1	1 of 2	A	14 Sep 10	PLACEMENT OF PROTECTION DEVICES (80-315 FRAMES)
HGA002-S2	2 of 2	A	14 Sep 10	PLACEMENT OF PROTECTION DEVICES (80-315 FRAMES)
HGA003	1 of 1	A	14 Sep 10	BLANKING PLATE AND EXTENDED LEADS Ex e, Ex nA & Ex tD PROTECTION
HGA004A	1 of 1	A	14 Sep 10	FORCED VENTILATION BY SEPARATELY DRIVEN COOLING FAN - OPTION 1 Ex e, Ex nA & Ex tD MOTORS 200-315 FRAMES
HGA004B	1 of 1	A	14 Sep 10	FORCED VENTILATION BY SEPARATELY DRIVEN COOLING FAN - OPTION 2 Ex e, Ex nA & Ex tD MOTORS 200-315 FRAMES
HGA004C	1 of 1	A	14 Sep 10	FORCED VENTILATION BY SEPARATELY DRIVEN COOLING FAN - OPTION 3 Ex e, Ex nA & Ex tD MOTORS 200-315 FRAMES
HGA005	1 of 1	A	14 Sep 10	DRAIN PLUG FITMENT
HGA006	1 of 1	A	14 Sep 10	ADAPTOR FOR VIBRATION SENSOR
HGA008	1 of 1	A	14 Sep 10	STATOR INTERNAL CONNECTION, INSULATION, TESTING HGA 80-315 Ex e, Ex nA & Ex tD PROTECTION
HGA009	1 of 1	A	14 Sep 10	WARNING LABEL DETAILS FOR HGA 80-315 Ex e, Ex nA & Ex tD PROTECTION
HGA012A	1 of 1	A	14 Sep 10	AUXILIARY TERMINAL BOX FITTING ARRANGEMENTS (FOR RTD's/THERMISTORS/HEATERS) FRAMES 80-315
HGA012B	1 of 1	A	14 Sep 10	AUXILIARY TERMINAL BOX FITTING ARRANGEMENTS (FOR RTD's/THERMISTORS/HEATERS) FRAMES 80-315
HGA012C	1 of 1	A	14 Sep 10	AUXILIARY TERMINAL (FOR RTD's/THERMISTORS/HEATERS)
HGA0801	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 80 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA0802	1 of 1	A	14 Sep 10	DETAIL VIEWS FOR HGA 80 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA0803	1 of 1	B	14 Sep 10	PARTS LIST FOR HGA 80 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA0813TB1	1 of 1	B	14 Sep 10	TERMINAL BOX HGA MOTOR FRAMES 80 - 132 Ex e, Ex nA & Ex tD PROTECTION
HGA0813TBG	1 of 1	A	14 Sep 10	TERMINAL BOX GASKETS HGA MOTOR FRAMES 80-132 Ex e, Ex nA & Ex tD
HGA0901	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 90 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA0902	1 of 1	A	14 Sep 10	DETAIL VIEWS FOR HGA 90 MOTORS Ex e, Ex nA & Ex tD PROTECTION

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Certificate Annexe

Certificate Number: **Sira 06ATEX9112X**

Equipment: **Range of Type SGA 71 to 315 Motors and HGA range frame 80-315**

Applicant: **CMG Pty Ltd (and Group)**

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
HGA0903	1 of 1	B	14 Sep 10	PARTS LIST FOR HGA 90 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1001	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 100 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1002	1 of 1	A	14 Sep 10	DETAIL VIEWS FOR HGA 100 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1003	1 of 1	B	14 Sep 10	PARTS LIST FOR HGA 100 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1121	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 112 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1122	1 of 1	A	14 Sep 10	DETAIL VIEWS FOR HGA 112 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1123	1 of 1	B	14 Sep 10	PARTS LIST FOR HGA 112 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1321	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 132 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1322	1 of 1	A	14 Sep 10	DETAIL VIEWS FOR HGA 132 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1323	1 of 1	B	14 Sep 10	PARTS LIST FOR HGA 132 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1601	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 160 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1602	1 of 1	A	14 Sep 10	DETAIL VIEWS FOR HGA 160 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1603	1 of 1	B	14 Sep 10	PARTS LIST FOR HGA 160 MOTOR Ex e, Ex nA & Ex tD PROTECTION
HGA1618TBG	1 of 1	A	14 Sep 10	TERMINAL BOX GASKETS HGA MOTOR FRAME 160-180 Ex e, Ex nA & Ex tD PROTECTION
HGA1801	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 180 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1802	1 of 1	A	14 Sep 10	DETAIL VIEWS FOR HGA180 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1803	1 of 1	B	14 Sep 10	PARTS LIST FOR HGA 180 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA2001	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 200 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA2002	1 of 1	A	14 Sep 10	DETAIL VIEWS FOR HGA 200 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA2003	1 of 1	C	14 Sep 10	PARTS LIST FOR HGA 200 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA2022TBG	1 of 1	A	14 Sep 10	TERMINAL BOX GASKETS HGA MOTOR FRAMES 200-225 Ex e, Ex nA & Ex tD PROTECTION
HGA2251	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 225 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA2252	1 of 1	A	14 Sep 10	DETAIL VIEWS FOR HGA 225 MOTORS Ex e, Ex nA & Ex tD PROTECTION

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Certificate Annexe

Certificate Number: **Sira 06ATEX9112X**

Equipment: **Range of Type SGA 71 to 315 Motors and HGA range frame 80-315**

Applicant: **CMG Pty Ltd (and Group)**

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
HGA2253	1 of 1	B	14 Sep 10	PARTS LIST FOR HGA 225 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA2501	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 250 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA2502	1 of 1	A	14 Sep 10	DETAIL VIEWS FOR HGA 250 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA2503	1 of 1	B	14 Sep 10	PARTS LIST FOR HGA 250 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA2528TBG	1 of 1	A	14 Sep 10	TERMINAL BOX GASKETS HGA MOTOR FRAMES 250-280 Ex e, Ex nA & Ex tD PROTECTION
HGA2801	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 280 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA2802	1 of 1	B	14 Sep 10	DETAIL VIEWS FOR HGA 280 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA2803	1 of 1	B	14 Sep 10	PARTS LIST FOR HGA 280 MOTORS Ex e, Ex nA & Ex tD PROTECTION
HGA1618TB2	1 of 1	B	14 Sep 10	TERMINAL BOX HGA MOTOR FRAMES 160-180 Ex nA & Ex tD PROTECTION 800 V MAX
HGA2022TB2	1 of 1	B	14 Sep 10	TERMINAL BOX HGA MOTOR FRAMES 200-225 Ex nA & Ex tD PROTECTION 800 V MAX
HGA2528TB2	1 of 1	B	14 Sep 10	TERMINAL BOX HGA MOTOR FRAME 250-280 Ex nA & Ex tD PROTECTION 800 V MAX
HGA3151	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT FOR HGA 315 MOTORS Ex nA & Ex tD PROTECTION
HGA3152	1 of 1	A	14 Sep 10	DETAIL VIEWS FOR HGA 315 MOTORS Ex nA & Ex tD PROTECTION
HGA3153	1 of 1	B	14 Sep 10	PARTS LIST FOR HGA 315 MOTORS Ex nA & Ex tD PROTECTION
HGA315TB	1 of 1	B	14 Sep 10	TERMINAL BOX HGA MOTOR FRAME 315 Ex nA & Ex tD PROTECTION
HGA315TBG	1 of 1	A	14 Sep 10	TERMINAL BOX GASKETS HGA MOTOR FRAME 315 Ex nA & Ex tD PROTECTION
HGA0804	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT GOR HGA 80 BRAKE MOTOR Ex tD PROTECTION
HGA0805	1 of 1	A	14 Sep 10	BRAKE PARTS LIST FOR HGA 80 BRAKE MOTOR Ex tD PROTECTION
HGA0813TBB	1 of 1	B	14 Sep 10	TERMINAL BOX HGA BRAKE MOTOR FRAMES 80-132 Ex tD PROTECTION (RECTIFIER IN MAIN BOX)
HGA0813TBB1	1 of 1	B	14 Sep 10	TERMINAL BOX HGA BRAKE MOTOR FRAMES 80-132 Ex tD PROTECTION (SEALED RECTIFIER – MOTOR SUPPLY)
HGA0813TBB2	1 of 1	B	14 Sep 10	TERMINAL BOX HGA BRAKE MOTOR FRAMES 80-132 Ex tD PROTECTION (SEALED RECTIFIER – INDEPENDENT SUPPLY)
HGA0813TBB3	1 of 1	B	14 Sep 10	TERMINAL BOX HGA BRAKE MOTOR FRAMES 80-132 Ex tD PROTECTION (RECTIFIER PACK – MOTOR SUPPLY)
HGA0813TBB4	1 of 1	B	14 Sep 10	TERMINAL BOX HGA BRAKE MOTOR FRAMES 80-132 Ex tD PROTECTION (RECTIFIER PACK – INDEPENDENT SUPPLY)
HGA0904	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT GOR HGA B90 MOTOR Ex tD PROTECTION
HGA0905	1 of 1	A	14 Sep 10	BRAKE PARTS LIST FOR HGA B90 MOTOR Ex tD PROTECTION

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Certificate Annexe

Certificate Number: **Sira 06ATEX9112X**

Equipment: **Range of Type SGA 71 to 315 Motors and HGA range frame 80-315**

Applicant: **CMG Pty Ltd (and Group)**

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
HGA1004	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT GOR HGA 100 BRAKE MOTOR Ex tD PROTECTION
HGA1005	1 of 1	A	14 Sep 10	BRAKE PARTS LIST FOR HGA B100 MOTOR Ex tD PROTECTION
HGA1124	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT GOR HGA 112 BRAKE MOTOR Ex tD PROTECTION
HGA1125	1 of 1	A	14 Sep 10	BRAKE PARTS LIST FOR HGA 112 BRAKE MOTOR Ex tD PROTECTION
HGA1324	1 of 1	B	14 Sep 10	GENERAL ARRANGEMENT GOR HGA 132 BRAKE MOTOR Ex tD PROTECTION
HGA1325	1 of 1	A	14 Sep 10	BRAKE PARTS LIST FOR HGA 132 BRAKE MOTOR Ex tD PROTECTION
HGA0811NPA	1 of 1	A	14 Sep 10	NAMEPLATE FOR HGA MOTORS FRAMES 80 - 112 (IEC/ATEX)
HGA1318NPA	1 of 1	A	14 Sep 10	NAMEPLATE FOR HGA MOTORS FRAMES 132 - 180 (IEC/ATEX)
HGA2022NPA	1 of 1	A	14 Sep 10	NAMEPLATE FOR HGA MOTORS FRAMES 200 - 225 (IEC/ATEX)
HGA2531NPA	1 of 1	A	14 Sep 10	NAMEPLATE FOR HGA MOTORS FRAMES 250 - 315 (IEC/ATEX)
HGA0811NPA-SG	1 of 1	A	14 Sep 10	NAMEPLATE (SG) FOR HGA MOTORS FRAMES 80 - 112 (IEC/ATEX)
HGA1318NPA-SG	1 of 1	A	14 Sep 10	NAMEPLATE (SG) FOR HGA MOTORS FRAMES 132 - 180 (IEC/ATEX)
HGA2022NPA-SG	1 of 1	A	14 Sep 10	NAMEPLATE (SG) FOR HGA MOTORS FRAMES 200 - 225 (IEC/ATEX)
HGA2531NPA-SG	1 of 1	A	14 Sep 10	NAMEPLATE (SG) FOR HGA MOTORS FRAMES 250 - 315 (IEC/ATEX)
HGA0811NPA-NZ	1 of 1	A	14 Sep 10	NAMEPLATE (NZ) FOR HGA MOTORS FRAMES 80 - 112 (IEC/ATEX)
HGA1318NPA-NZ	1 of 1	A	14 Sep 10	NAMEPLATE (NZ) FOR HGA MOTORS FRAMES 132 - 180 (IEC/ATEX)
HGA2022NPA-NZ	1 of 1	A	14 Sep 10	NAMEPLATE (NZ) FOR HGA MOTORS FRAMES 200 - 225 (IEC/ATEX)
HGA2531NPA-NZ	1 of 1	A	14 Sep 10	NAMEPLATE (NZ) FOR HGA MOTORS FRAMES 250 - 315 (IEC/ATEX)

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Certificate Annexe

Certificate Number: **Sira 06ATEX9112X**

Equipment: **Range of Type SGA 71 to 315 Motors and HGA range frame 80-315**

Applicant: **CMG Pty Ltd (and Group)**

Issue 6

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Title
HGA0811NPA-IL	1 of 1	A	19 Jan 11	Nameplate for HGA Motors Frames 80 – 112
HGA0811NPA-SG	1 of 1	B	19 Jan 11	Nameplate for HGA Motors Frames 80 – 112
HGA1318NPA-IL	1 of 1	A	19 Jan 11	Nameplate for HGA Motors Frames 132 – 180
HGA1318NPA-SG	1 of 1	B	19 Jan 11	Nameplate for HGA Motors Frames 132 – 180
HGA2022NPA-IL	1 of 1	A	19 Jan 11	Nameplate for HGA Motors Frames 200 – 225
HGA2022NPA-SG	1 of 1	B	19 Jan 11	Nameplate for HGA Motors Frames 200 – 225
HGA2531-1NPA-IL	1 of 1	A	19 Jan 11	Nameplate for HGA Motors Frames 250 – 315
HGA2531-1NPA-SG	1 of 1	B	19 Jan 11	Nameplate for HGA Motors Frames 250 – 315
SGA 121IL	1 of 1	A	19 Jan 11	Alternative Nameplate for SGA Motors Frame 71
SGA 121SG	1 of 1	C	19 Jan 11	Alternative Nameplate for SGA Motors Frame 71
SGA 122IL	1 of 1	A	19 Jan 11	Nameplate for SGA Motors Frames 71 – 112
SGA 122SG	1 of 1	C	19 Jan 11	Nameplate for SGA Motors Frames 71 – 112
SGA141IL	1 of 1	A	19 Jan 11	Nameplate for SGA Motors Frames 132 – 180
SGA141SG	1 of 1	C	19 Jan 11	Nameplate for SGA Motors Frames 132 – 180
SGA163IL	1 of 1	A	19 Jan 11	Nameplate for SGA Motors Frames 200 – 225
SGA163SG	1 of 1	C	19 Jan 11	Nameplate for SGA Motors Frames 200 – 225
SGA164DIL	1 of 1	A	19 Jan 11	Nameplate for SGA Motors Frames 250 – 280
SGA164IL	1 of 1	A	19 Jan 11	Nameplate for SGA Motors Frames 250 – 315
SGA164SG	1 of 1	C	19 Jan 11	Nameplate for SGA Motors Frames 250 – 315

Issue 7 No new drawings were introduced.

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