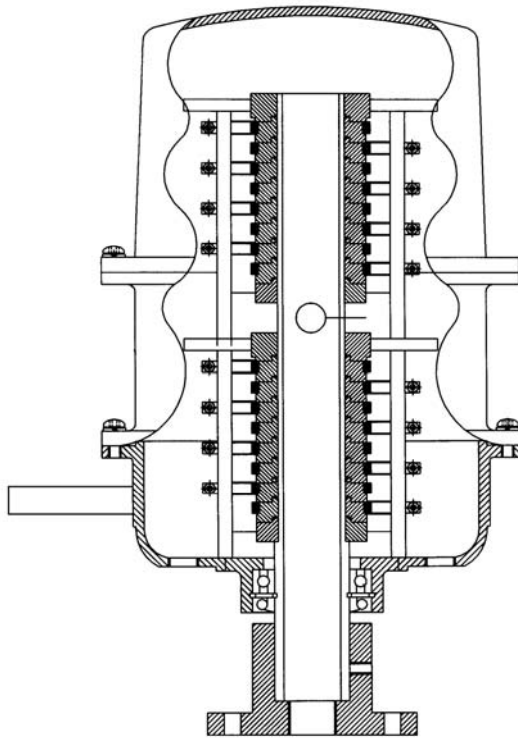
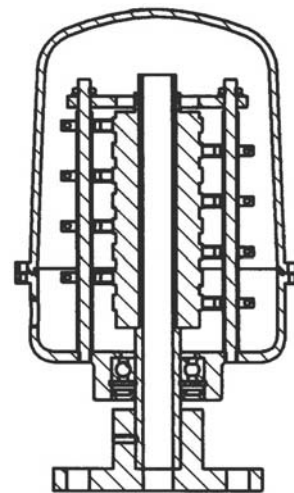


**Installation & maintenance instructions for dust & weatherproof
slip ring collector columns**



SPB01



SPB02

CONTENTS

- P2** - Installation
- P3** - General Maintenance
- P4** - Parts List for SPB01/SPB02 Units
- P5** - General Assembly Drawing
- P6** - Power Transfer Unit – Test Certificate

N.B. Please read these notes in conjunction with BGB drawing E2612

1.00) INSTALLATION

1.10) Mechanical

The cover assembly should be split at the flange closest to the shaft end of the collector column by undoing the captive fasteners (Item 12) approx. 4 turns each. After feeding the centre shaft cables through the slip ring bore, bolt up the drive flange to its mating component. Ensure that there is a degree of freedom between the bridge structure and the torque reaction peg (30) in order to avoid the possibility of excessive side loads being applied to the slip ring bearings.

1.20) Electrical Connections

1.21) Cable Entries

Tapped conduit entries (of size dependent upon the customers' specification) are provided in both the shaft drive flange and the base casting of the unit. Unused conduit entries must be sealed using the plugs provided and correctly tightened. All wiring should be suitably laced to prevent the possibility of cables fouling adjacent components.

1.22) Earth

An M6 stud is provided for external earth bonding, and is connected via a dedicated slip ring / brushgear to the shaft. Unless otherwise specified, the earth ring is always nearest to the shaft drive end of the collector column.

1.23) Anti – Condensation Heater

The heater (where fitted) (item 8) is clipped into position in the base casting of the unit, and is provided with loose tails for connection by the customer of the appropriate slip rings.

Important: The working voltage stamped on the end of the heater should be checked for suitability before connection. Surrounding wiring should be routed to avoid the near vicinity of the heater to avert the danger of thermal damage being occasioned by the cable insulation.

1.24) Connection

Both the slip rings and brushgear are terminated with 6.3mm male (Lucar style) male blade connections. A package containing the appropriate number of female crimp connectors is included for the convenience of the installer.

1.25) Circuit Identification

A self adhesive circuit allocation label is provided, which is intended to be attached to the inside of the cover assembly after completion of the wiring.

1.26) Sealing

After final inspection, the cover assembly should be replaced ensuring that it is correctly located, and that the "O" ring is properly seated within its groove, before evenly tightening the fasteners.

2.00) GENERAL MAINTENANCE

The unit should require minimal attention in service, however, the following points may be incorporated in a preventative maintenance schedule.

2.10) Inspection

At 6 monthly intervals, remove the cover assembly as described above. Inspect the rings and brushes for excessive wear, contamination, signs of ingress of water or arcing.

Any accumulated carbon dust should be carefully removed with a lint free cloth.

2.20) Brush Replacement

The replacement of brush tips is straightforward.

The arm carrying the affected tip should be pulled away from the ring sufficiently to allow the tip to be extracted from the arm socket. The new tip is simply pushed home into the arm, which is then allowed to return to its operating position. The brush contact profile should then be checked and "bedded" in with fine abrasive paper if required.

2.30) Bearings

Bearings are sealed for life and do not require further greasing. During routine maintenance accumulated dirt should be removed from the bearing housing area.

Parts List for SPB Units

ITEM	PART #	DESCRIPTION	QTY PER
01	E2493	Mounting Flange	1
02	E1223/07	Cup Grub Screw	4
03	R1086	Seal	1
04	R2007	Circlip Internal	1
05	R1085	Ball Race Bearing	1
06	R2615	Blanking Plug Kit	1
07	R2496	Aluminium Base Casting	1
08		Anti-Condensation Heater	If applicable
09	E2613	Mounting Clip Heater	If applicable
10	E2614	Spacer Mounting Cup	If applicable
11	E2386	Brush Post Assembly	4
12	E2566	Captive Fastener	6
13	E2278/1	Aluminium Spacer Casting Captive	1
14	A021	Brushgear Copper	18
15	E2546/1	Bearing Plate	2
16	E1211/01	Standard Fastener	6
17	E2520	Earth Lead Assembly	2
18	E2278/0	Spacer Casting Standard	If applicable
19	E2388/1	O-Ring Seal	2
20	A021/AG	Brushgear Silver	If applicable
21	E2276/0	Aluminium Dome Cover Casting Standard	1
21a	E2276/1	Aluminium Dome Cover Casting Captive	If applicable
22	E1207/36	Full Nut	8
23	E1220/20	Plain Washer	8
24	E2576	Slip ring Assembly	1
25	E2268	Warning Flash Label	1
26	E2270	Warning Isolate Label	1
27	E2269	Manufacturers Serial Label	1
28	E1206/25	Earth Screw	1
29	E2576	Slip ring Assembly	1
30	E2478/2	Stainless Steel Torque Arm	1
31	E1223/01	Cup Grub Screw	2
32	E2519/07	Aluminium Shaft	1
33	R2003	Circlip External	2
34	E2267	Earth Label	1
35	E2387	Earth Stud	1

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Title:

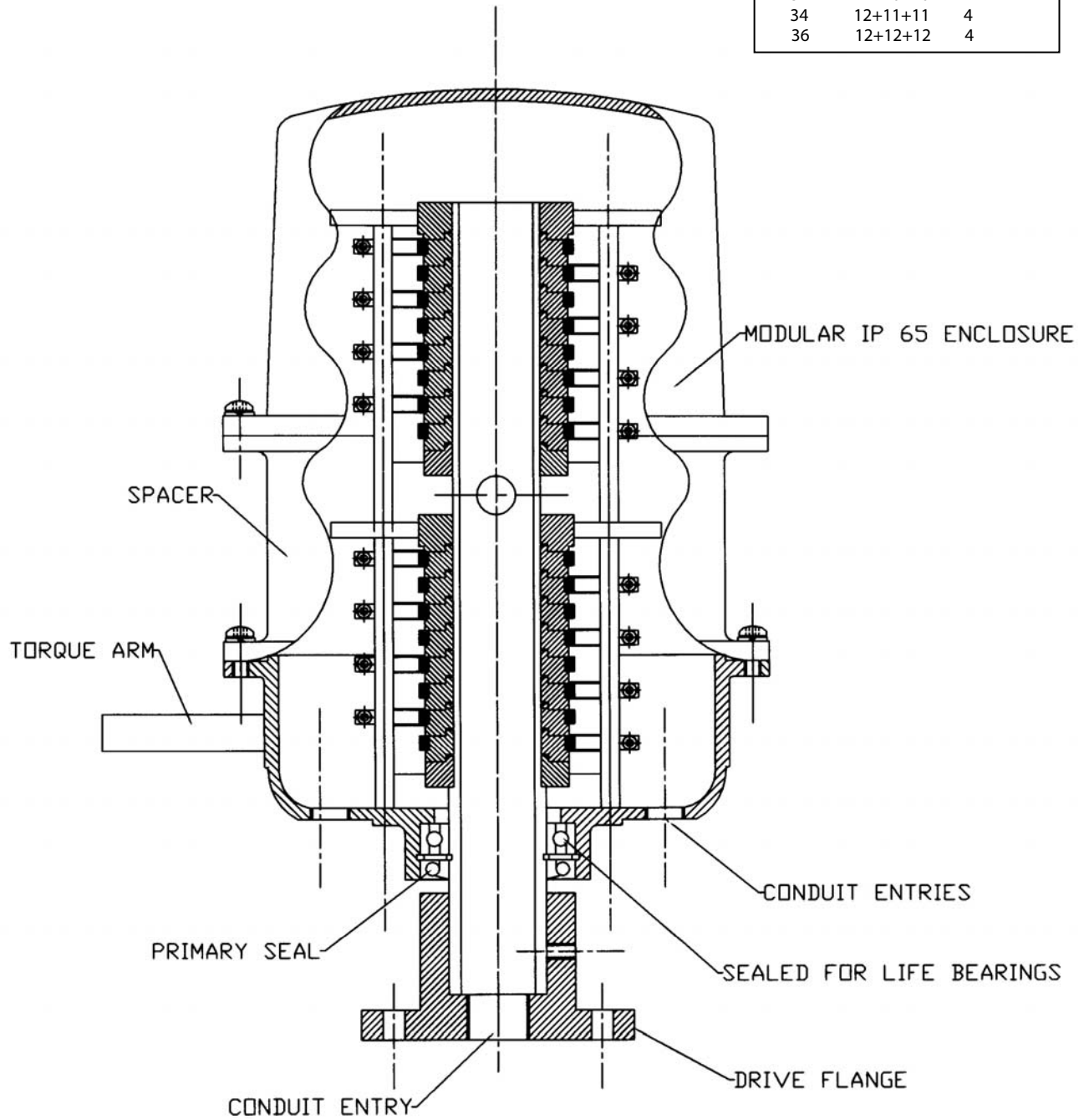
Basic PTU

General Assembly

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Construction of 6 - 36 Way PTUs

No. of Ways	J units	Spacers
6	6	0
8	8	0
10	10	0
12	12	0
14	8+6	1
16	8+8	1
18	9+9	2
20	10+10	2
22	11+11	2
24	12+12	2
26	10+8+8	3
28	10+9+9	3
30	10+10+10	3
32	12+10+10	4
34	12+11+11	4
36	12+12+12	4



Power Transfer Unit – Test Certificate

- () Flash Test at 2500 Volts:
Ring to Ring

- () Check Continuity:
Ring to Terminal

- () Once mounted onto shaft check:
Ease of rotation
Alignment of stack

- () Check anti – condensati on heater voltage if applicable

The above checks are to be carried out in association with BGB Engineering PTU specification sheet QA form 050 rev 4 – (revised February 2011).

Test carried out by: _____

Print Name: _____