

List of Components - HK Isolators

Description	Quantities
1. Hand Operating Mechanism..... <i>NB.: The box may contain an auxiliary switch and/or captive key lock(s).</i>	1
2. Vertical Coupling Pipe.....	1
3. Phase Channel Bases.....	3
4. Turntables.....	3
5. Insulator Support Spacers.....	6 (66kV - 24)
6. Insulators.....	9
7. Fixed Contact/Terminal Pads.....	6
8. Moving Contact/Double Blades.....	3
9. Bearing Support Plate.....	1
10. Coupling Assembly and Drive Rod.....	1
11. Inter-phase Coupling Rods.....	2
12. Centre Pivot Assembly.....	1

NB.: Due to development modifications, the details may vary slightly from the drawing.

Unpacking

The isolators are packed in sub-assemblies, one complete isolator per skeleton crate. The 3-phase sub-assemblies consist of Items 3, 5, 6, 7 and 8, mounted on their phase channel bases (3). In addition items 1, 2, 9, 10 and 12 are strapped to the side of the crate.

Inspect and check the existence of all the above parts and advise supplier immediately of any shortages or damage (see addendum for any additional optional parts).

Installation

1. The contact pressure is factory set. Open moving contacts and close again until contacts just touch. Check that the fixed contact blade is positioned in the centre of the two moving contact blades. If not satisfactory, slacken off M8 screw with spring nearest to the centre insulator. Adjust blades up or down to suit and re-tighten the M8 screw.
2. Mount and align each phase sub-assembly in position on the structure (supplied separately or by others) at the phase centres indicated on the drawing and secure.
3. Position the hand operating mechanism (1) on the structure.
4. Position the bearing support plate (9) on the structure.
5. With the isolator phases in the closed position, fit the inter-phase coupling rods (11) between the centre phase centre pivot assembly (12) and the outer phases turntable levers (4). Adjust their length to ensure simultaneous opening and closing of all 3 phases.

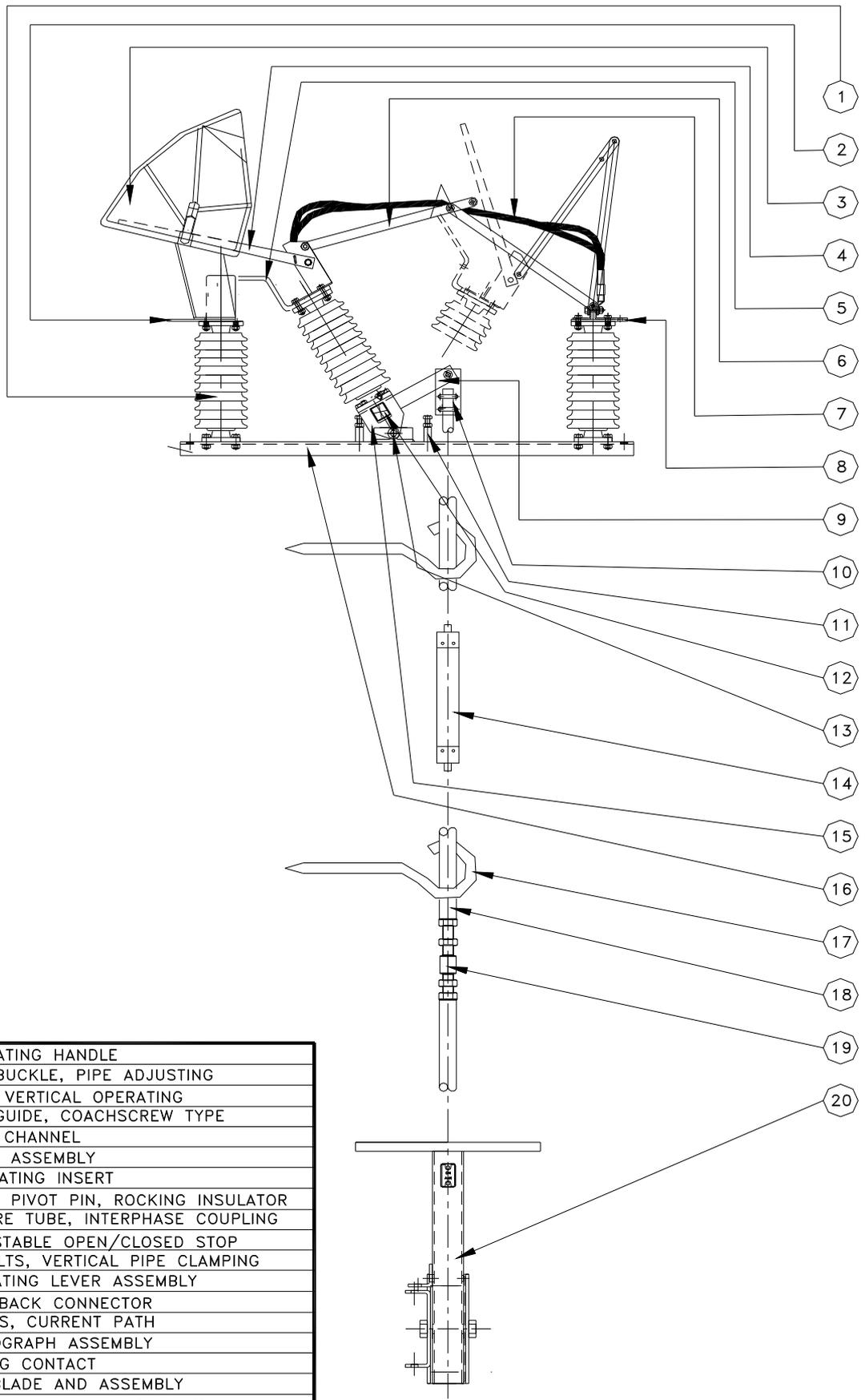
6. Fit the vertical coupling pipe (2) in position through the bearing.
7. Fit the coupling assembly and drive rod (10) between the coupling pipe crank and centre phase lever.
8. With the phase contacts closed and the hand operating mechanism (1) in the CLOSED position, couple the vertical coupling pipe (2) to the hand operating mechanism (1) by means of the M10 set screw and lock in position.
9. Operate the switch and check that the contacts are fully closed with the handle in the fully CLOSED position. If necessary, adjust by slackening the u-bolts on the drive rod (10), adjust length and re-tighten the u-bolts.
10. Open and close isolator a number of times to ensure smooth and correct operation.
11. After the conductors have been secured to the terminal pads, check contact alignment.
12. All contacts will have been cleaned and greased before despatch. Only if necessary, clean contact surfaces and apply recommended contact paste.
13. Check any secondary wiring, terminals and fixing screws for tightness.
14. Note spaces, item 13 to mount items 1 and 9 to the structure as supplied as standard 76 x 38 channel.

Maintenance

These isolators require very little maintenance. However, it is recommended, dependant upon the environmental conditions, to attend to the following, once in 3 to 5 years.

1. Grease all bearing points via nipples provided.
2. Clean main contacts with transformer oil and recoat with recommended contact paste.
3. Operate isolator several times to check smooth operation and operation of auxiliary contacts. Only re-adjust settings if found to be necessary.

INSTALLATION AND OPERATING INSTRUCTIONS
 OUTDOOR, RURAL PATTERN ROCKING LOAD BREAK TYPE ISOLATORS: 11, 22 & 33kV



20	1	OPERATING HANDLE
19	1	TURNBUCKLE, PIPE ADJUSTING
18	3	PIPE, VERTICAL OPERATING
17	1	ROD GUIDE, COACHSCREW TYPE
16	3	BASE CHANNEL
15	3	HINGE ASSEMBLY
14	1	INSULATING INSERT
13	3	HINGE PIVOT PIN, ROCKING INSULATOR
12	1	SQUARE TUBE, INTERPHASE COUPLING
11	6 (2)	ADJUSTABLE OPEN/CLOSED STOP
10	2	U-BOLTS, VERTICAL PIPE CLAMPING
9	1	OPERATING LEVER ASSEMBLY
8	3	PAD, BACK CONNECTOR
7	6	CABLES, CURRENT PATH
6	3	PANTOGRAPH ASSEMBLY
5	3	MOVING CONTACT
4	3	ARC BLADE AND ASSEMBLY
3	3	ARC CHUTE, INTERRUPTER ASSEMBLY
2	3	PAD, FRONT CONNECTOR
1	9	PORCELAIN INSULATOR
ITEM	QTY	DESCRIPTION