

## MODELS

Internal	External	Kw	Model (BTU's)	Burner	Expansion Vessel
DBV26	DBV026	15 to 26	50/90	RDB1/RDB2.2	12L Bracket
DBV36	DBV036	26 to 36	90/120	RDB2.2	12L No Bracket
DBV46	DBV046	36 to 46	120/155	RDB2.2	16L No Bracket

## BURNER COMMISSIONING

- ANALYZER TEST MUST BE CARRIED OUT AND CHECKED AGAINST CO<sup>2</sup> CHART (after 20 minutes run time).
- BURNERS PRETESTED IN FACTORY, RUN CO<sup>2</sup> TEST FIRST BEFORE MAKING ANY ADJUSTMENTS
- THE DATA GIVEN BELOW IS APPROXIMATE ONLY, REFER TO YOUR CO<sup>2</sup> READING FOR FINAL SETTING
- CO<sup>2</sup> % IS THE MAXIMUM, IT CAN BE LOWER

## DIESEL BURNER SETTINGS

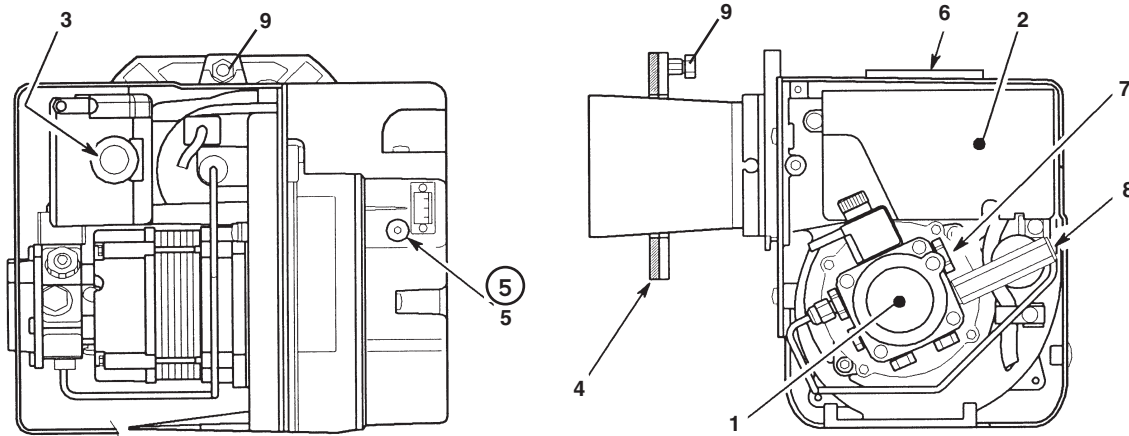
Boiler	Burner			Nozzle	Pump	Head	Head Code	Head Setting	Air box	Air sett.	Air disc	CO <sup>2</sup>
	KW	Model	Based on code		Press	Type						
Vortex 15-26	15	RDB 1 15/26	3748368	0.40/60°S	10.0	T1	3002507	n/a	1	2.0	n/a	12%
Vortex 15-26	20.5	RDB 1 15/26	3748368	0.45/60°S	11.5	T1	3002423	n/a	1	3.2	n/a	12%
<b>Vortex 15-26</b>	<b>26*</b>	<b>RDB 1 15/26</b>	<b>3748368</b>	<b>0.55/60°S</b>	<b>12.5</b>	<b>T2</b>	<b>3002423</b>	<b>n/a</b>	<b>1</b>	<b>2.5</b>	<b>n/a</b>	<b>12%</b>
Vortex 26-36	26	RDB 2.2 26/36	3514501	0.55 80°S	12.8	T2	3002423	n/a	2	1.0	C	12%
Vortex 26-36	31	RDB 2.2 26/36	3514501	0.65 80°S	10.5	T3	3002447	n/a	2	4.3	C	12%
<b>Vortex 26-36</b>	<b>36*</b>	<b>RDB 2.2 26/36</b>	<b>3514501</b>	<b>0.65 80°S</b>	<b>13.5</b>	<b>T5</b>	<b>3002533</b>	<b>n/a</b>	<b>2</b>	<b>4.0</b>	<b>n/a</b>	<b>12%</b>
Vortex 36-46	36	RDB 2.2 36/46	3514501	0.65/80°S	13.5	T3	3002447	n/a	2	1.3	n/a	12%
Vortex 36-46	41	RDB 2.2 36/46	3514501	0.75/80°S	14.5	T3	3002447	n/a	2	2.8	n/a	12%
<b>Vortex 36-46</b>	<b>46*</b>	<b>RDB 2.2 36/46</b>	<b>3514501</b>	<b>1.0/80°ES</b>	<b>11.0</b>	<b>T5</b>	<b>3002533</b>	<b>n/a</b>	<b>2</b>	<b>5.25</b>	<b>n/a</b>	<b>11.5%</b>

\*Factory Supplied

## AIR DAMPER SCREW ADJUSTMENT

- Anti Clockwise closes damper increases CO<sup>2</sup>
- Clockwise opens damper reduces CO<sup>2</sup>

## Burner Components



### Riello RDB burner components

1. Pump
2. Control box
3. Reset button with lock-out lamp
4. Mounting flange with gasket (do not remove from boiler)

### 5. Air damper adjustment screw

6. Air supply tube connection (balanced flue)
7. Pump pressure adjustment screw
8. Pressure gauge connection
9. Burner fixing nut

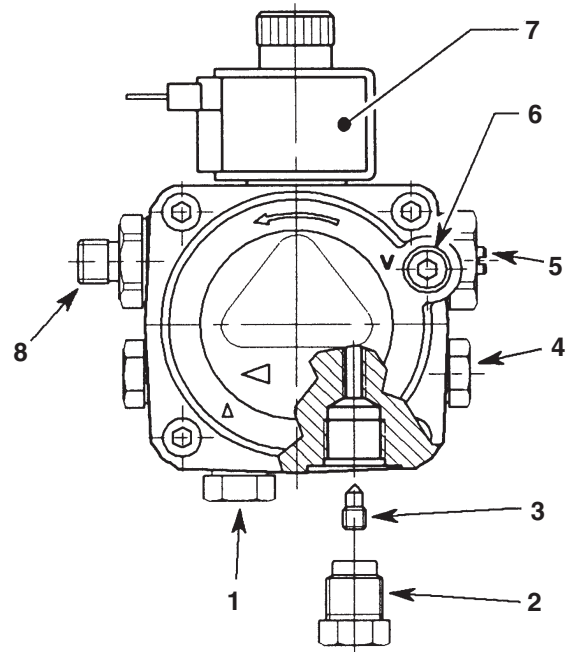
## FUEL PUMP SET UP

### Riello RDB burner

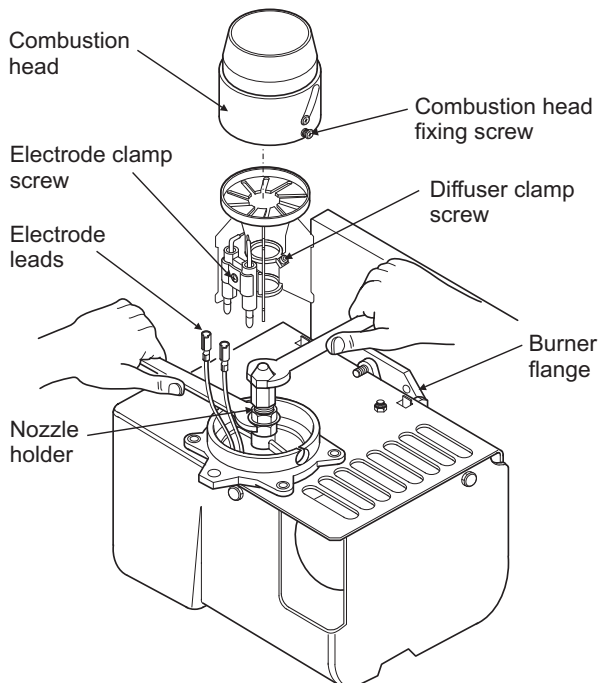
1. The fuel pump is supplied for use with a single pipe fuel supply system. For use on a two pipe system, it is necessary to fit the By-pass screw into the tapping in the return port.
2. The By-pass screw is supplied in the boiler accessory pack.

### Riello RDB pump

1. Oil inlet connection
2. Return connection
3. By-pass screw
4. Pressure gauge connection
5. Pressure adjuster
6. Vacuum gauge connection
7. Solenoid
8. Supply to nozzle



Two pipe configuration (supplied in kit DBVIK)



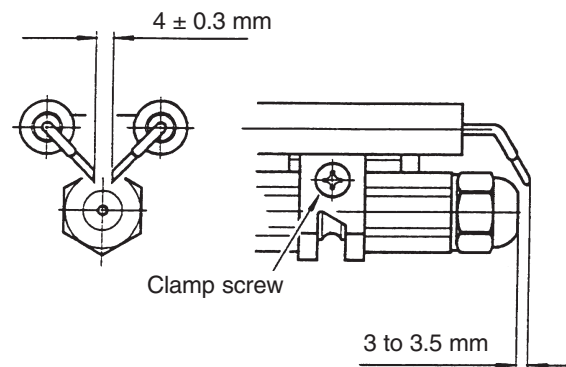
### Nozzle - The nozzle should be replaced on an annual service

- Check that the nozzle size and type are correct, refer to burner settings table on reverse.

With the combustion head removed, loosen the electrode assembly clamp screw and slide the electrodes away from the nozzle.

### **DO NOT ATTEMPT TO CLEAN THE NOZZLE.**

Remove the nozzle using a good fitting spanner (16 mm). The use of an ill-fitting spanner will damage the nozzle and could lead to an incorrect flame pattern. Always check the electrode settings after replacing the nozzle, see FIG. 29 from manual.



**IMPORTANT: The electrode settings given above MUST be observed**

### Service Information

- Pressure relief 2.5 bar old / 3 bar Current
- System water pressure 0.5 bar min /1 bar max
- System bypass recommended
- Full servicing and trouble shooting in back of manual

### Service Requirement

- Co<sup>2</sup> test refer commissioning
- Spiral turbulators and baffles must be removed and cleaned annually
- Expansion vessel pre-charge -1 bar check before filling and during annual service
- Check condensate trap is clean and clear