

REFERENCE	: KIRLOSKAR,BLISS 125 kVA	(B) ADJUSTMENT OF PUMP AND GOVERNOR
Edition	:	GUIDE SLEEVE TRAVEL
Replaces (edition)	:	
Test Oil	:	Control lever position :
		Speed - min ⁻¹ (rpm) :
Combination No	: E C006 RL 00 008	Control rack travel in mm :
Injection Pump	:	
Governor	:	1. MAXIMUM SPEED CONTROL (RATED SPEED) (without supplementary idling spring)
Customer	: Kirloskar Electric Company Ltd	Control position :
Engine Model	: KEC BLISS	
Engine Code	:	Speed - min ⁻¹ (rpm) : 750
Application	: 125 kVA	Control rack travel in mm : 12.0
TEST BENCH REQUIREMENTS		
Test Oil Inlet Temperature	: 38° - 42° C	Speed - min ⁻¹ (rpm) : 760-775
Overflow valve	:	Control rack travel in mm : 11.0
Inlet Pressure in bar	: 1.5	Speed - min ⁻¹ (rpm) : 790-800
Test Injector	:	Control rack travel in mm : 4.0
Opening Pressure in bar	: 172 - 176	
High pressure pipe	: 6 X 2 X 600	Speed - min ⁻¹ (rpm) : 930
(OD X ID X length) in mm		Control rack travel in mm : 0.3-1.7
(A) CALIBRATION OF PUMP WITHOUT GOVERNOR ACTION		2.FULL LOAD DELIVERY
Direction of rotation	: Cockwise	Speed - min ⁻¹ (rpm) : 750
Prestroke in mm	: 3.42 - 3.50	Boost pressure in bar :
Control rack position in mm	:	Control rack travel in mm : 12
Cam sequence	: 1-5-3-6-2-4	Delivery quantity (x) : 73.5-74.5
Cam displacement	:	In cm ³ / 500 strokes
Tappet clearance in mm	:	Maximum spread in cm ³ (Δ) :- 1.5(3.5)
		Speed - min ⁻¹ (rpm) :-
		Boost pressure in bar :-
		Control rack travel in mm :-
		Delivery quantity (x) :-
		In cm ³ / 500 strokes
		Maximum spread in cm ³ (Δ) :-
BASIC SETTING		3.TORQUE CONTROL
Speed - min ⁻¹ (rpm)	: 750	Speed - min ⁻¹ (rpm) :
Control rack travel in mm	: 12.0	Control rack travel in mm :
Delivery quantity (x)	: 14.5 - 15.5	
In cm ³ / 100 strokes		Speed - min ⁻¹ (rpm) :
Maximum spread in cm ³ (Δ)	: 0.3(0.7)	Control rack travel in mm :
Speed - min ⁻¹ (rpm)	: 200	Speed - min ⁻¹ (rpm) :
Control rack travel in mm	: 9.0	Control rack travel in mm :
Delivery quantity (x)	: 3.1 - 3.9	
In cm ³ / 100 strokes		Speed - min ⁻¹ (rpm) :
Maximum spread in cm ³ (Δ)	: 0.5 (0.7)	Control rack travel in mm :
		Speed - min ⁻¹ (rpm) :
		Control rack travel in mm :

<p>4. COURSE OF DELIVERY</p> <p>Speed - min⁻¹ (rpm) : - 500 Boost pressure in bar : - Delivery quantity (x) : - 62.0 In cm³ / 500 strokes : - Maximum spread in cm³ (Δ) : - Speed - min⁻¹ (rpm) : - Boost pressure in bar : - Delivery quantity (x) : - In cm³ / 500 strokes : - Maximum spread in cm³ (Δ) : -</p>	<p>7. GOVERNOR CUTTING IN SPEED</p> <p>Speed - min⁻¹ (rpm) : 760 - 755 Control rack travel in mm : Less by 1 mm from full load control rack travel</p> <p>While over checking, if the cutting-in speeds is above the rated speed and if,</p> <p>- the delivery values are within the over checking tolerance - control rack remains at full load position even at 50 min⁻¹ (rpm) less than the rated speed the cutting-in speed should be declared OK</p>
<p>5. IDLING SPEED CONTROL (RATED SPEED)</p> <p>Control Lever position : 44° ± 4°</p> <p>Speed - min⁻¹ (rpm) : 250 Control rack travel in mm : 6.0 Speed - min⁻¹ (rpm) : 100 Control rack travel in mm : 17.0-21.0 Speed - min⁻¹ (rpm) : 250 Control rack travel in mm : 5.8-6.2 Speed - min⁻¹ (rpm) : 425-475 Control rack travel in mm : 2.0</p>	<p>8. DEGREE OF IRREGULARITY</p> <p>Speed - min⁻¹ (rpm) : Control rack travel in mm : No of notches :</p>
<p>6. Maximum Speed Control (Rated Speed) (with supplementary idling spring)</p> <p>Speed - min⁻¹ (rpm) : - Control rack travel in mm : - Speed - min⁻¹ (rpm) : - Control rack travel in mm : -</p>	<p>9. STARTING TRAVEL</p> <p>Speed - min⁻¹ (rpm) : 100 Control rack travel in mm : 13.7-14.3</p> <p>10. STARTING FUEL DELIVERY</p> <p>Speed - min⁻¹ (rpm) : - Control rack travel in mm : - Delivery quantity (x) : - In cm³ / 100 strokes</p>
<p>OTHER INFORMATION</p> <p>Element : Delivery Valve : Flyweight assembly : Governor Spring :</p> <p>Adaption capsule : Nozzle : Opening pressure in bar :</p>	
<p>Note:</p> <p>1. Sl.No. of the operations indicate the sequence of operations. 2. Values given in brackets are overchecking values 3. X : Average of the cylinders</p>	