



DUNPHY COMBUSTION LTD.

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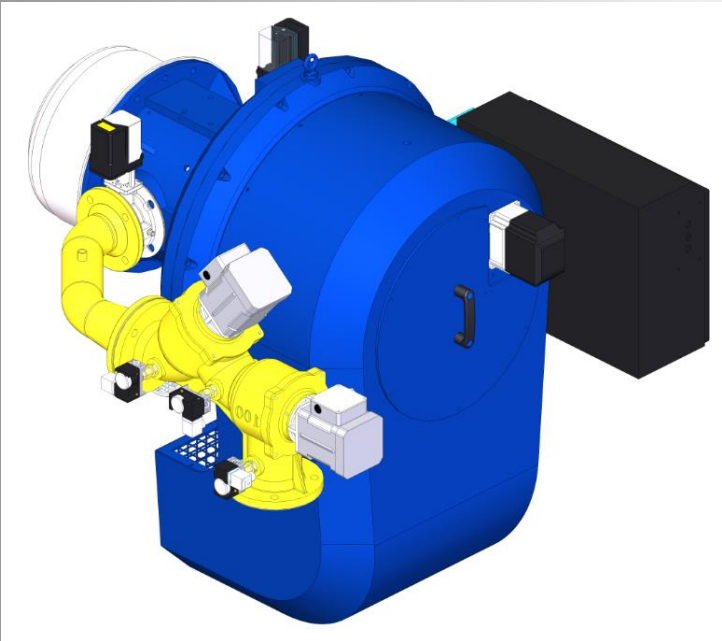
DATA SHEET

Model: TD4

Revision Date: October 2019

Output: 450 – 6200 kW

Revision Number: DS.TD4.21



- ◆ All models approved to current British and European Standards.
- ◆ All burners in the T.D. range are of the fan assisted, nozzle mix type and operation is fully automatic.
- ◆ CE approval numbers for the TD4 Series burners are:
 - ◆ TD4.450/550/650 – CE 679311



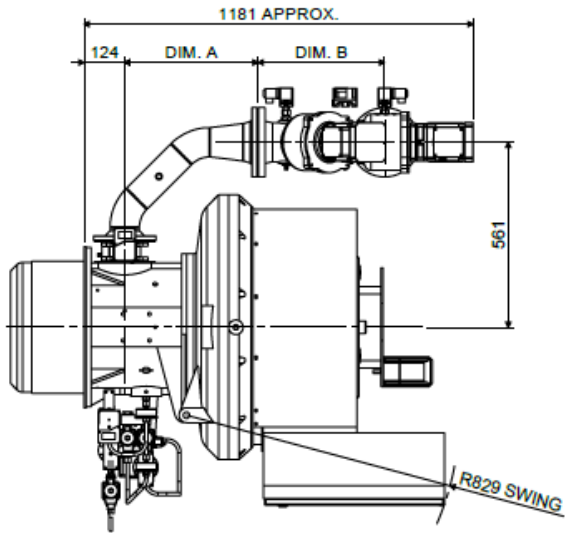
FM 24868

BURNER DIMENSIONS

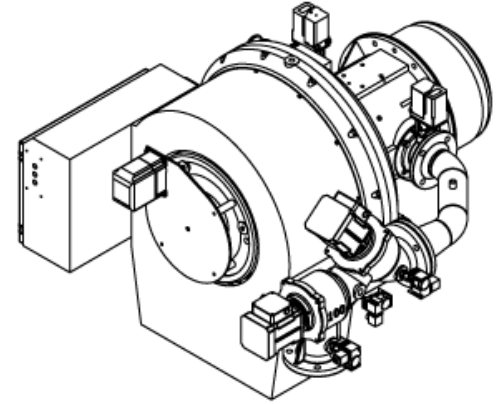
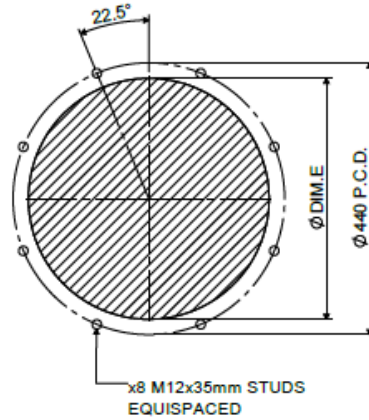
- ◆ Drawings shown on the following pages
- ◆ All dimensions in mm unless otherwise stated.
- ◆ The minimum standard dimension for 'PROJ' is 230mm. However, it can be varied to suit application. Requirements should be stated when unit is ordered.
- ◆ Burners supplied as Left hand hinge or Right hand hinge
- ◆ The swing radius shown is the average; this can vary on non-standard burners.
- ◆ Please check the issue number to ensure validity.

TD4.450-550 LHH ELECTRONIC MODULATION WITH STANDARD SILENCER

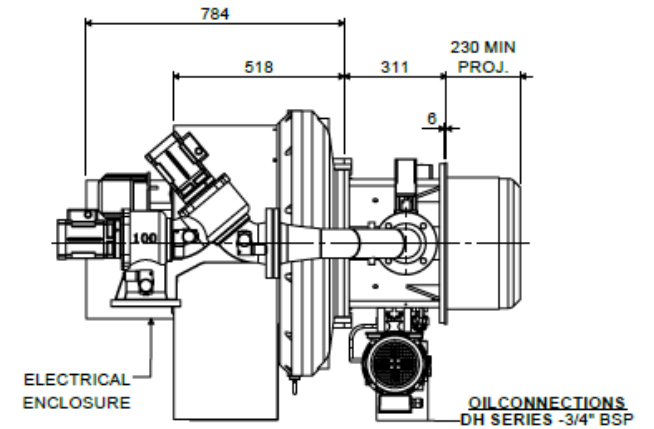
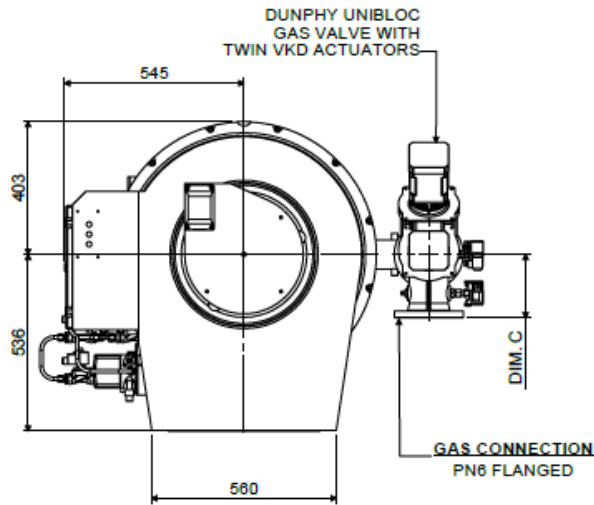
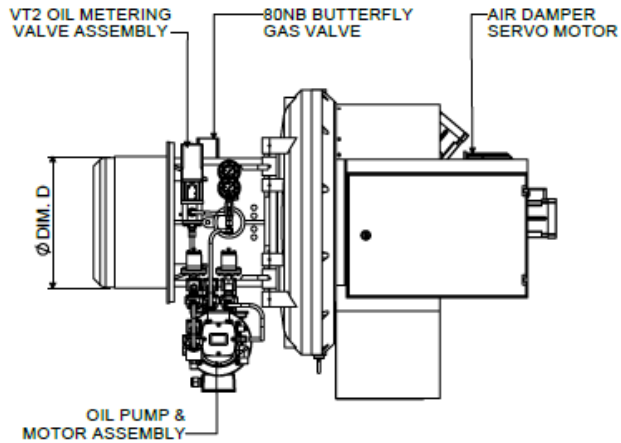
TD4.450-4.550 LHH ELECTRONIC MODULATION BURNER WITH STANDARD SILENCER



BOILER MOUNTING DETAILS

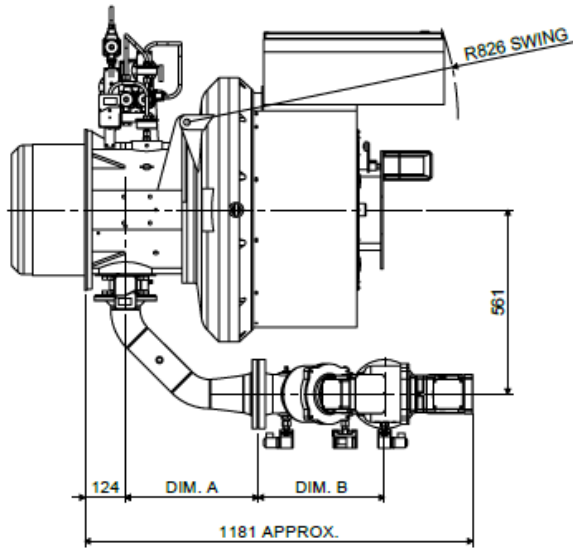


BURNER TYPE	DIM.D	DIM.E	UNIBLOC SIZE	DIM.A	DIM.B	DIM.C
TD 4.450 Z	Ø 354	Ø 362	65 NB	385	294	122
TD 4.550 Y	Ø 400	Ø 410	80 NB	300	290	137
			100 NB	405	383	192

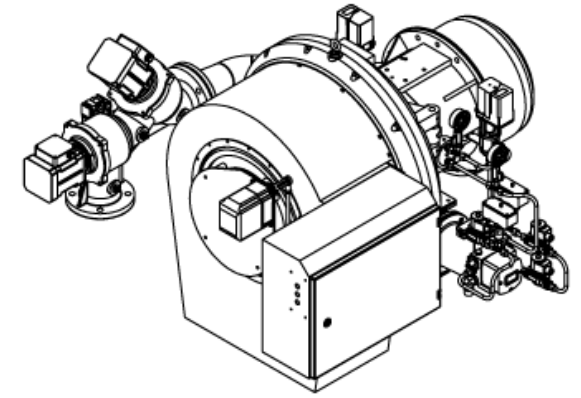
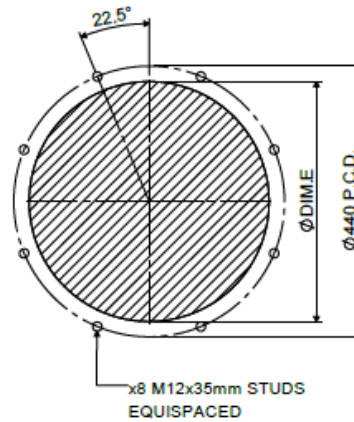


TD4.450-550 RHH ELECTRONIC MODULATION WITH STANDARD SILENCER

TD4.450-4.550 RHH ELECTRONIC MODULATION BURNER WITH STANDARD SILENCER

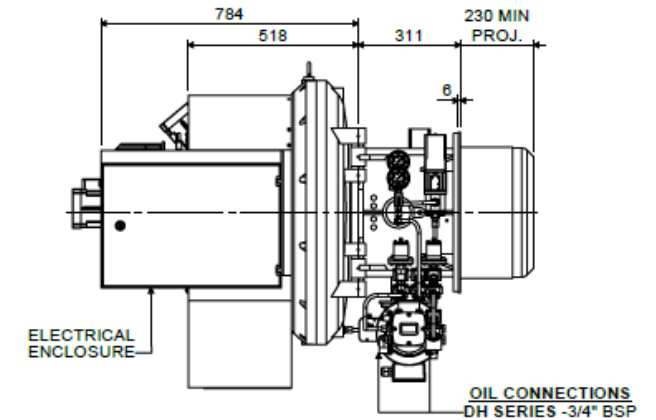
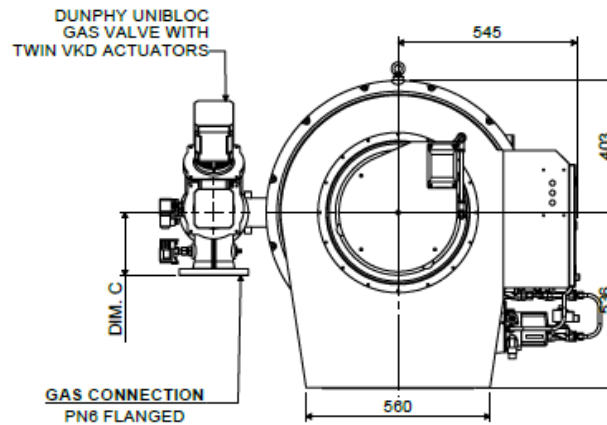
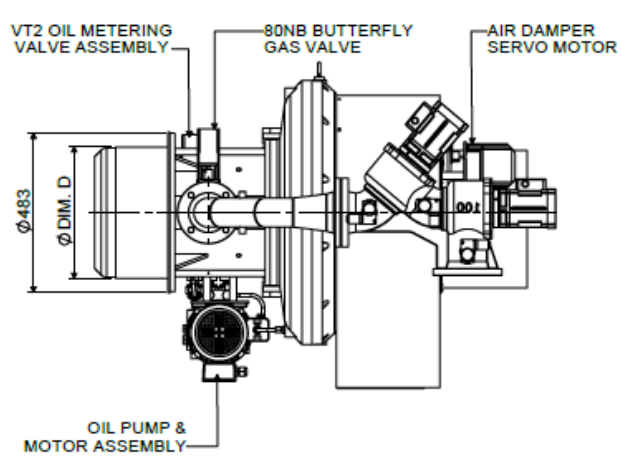


BOILER MOUNTING DETAILS



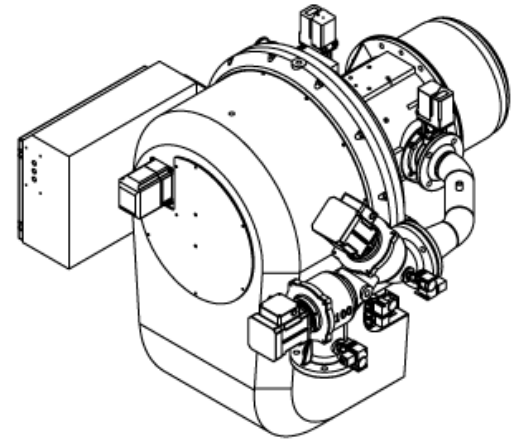
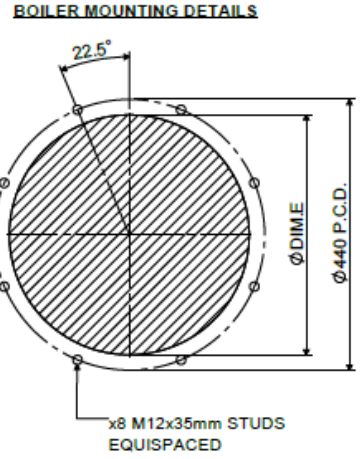
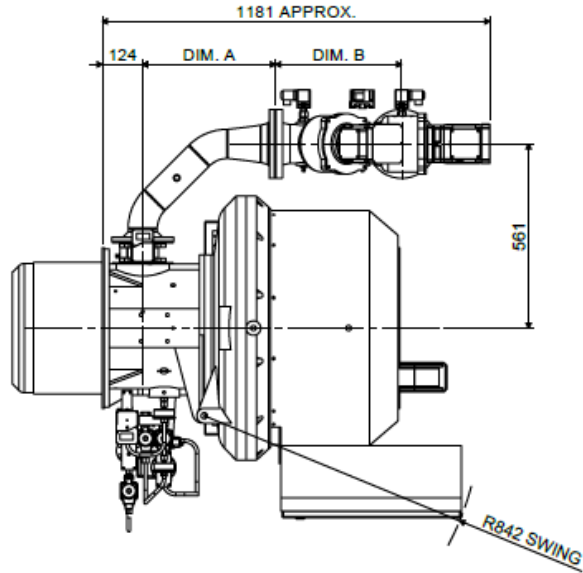
BURNER TYPE	DIM.D	DIM.E
TD 4.450 Z	Ø354	Ø382
TD 4.550 Y	Ø400	Ø410

UNIBLOC SIZE	DIM.A	DIM.B	DIM.C
65 NB	385	294	122
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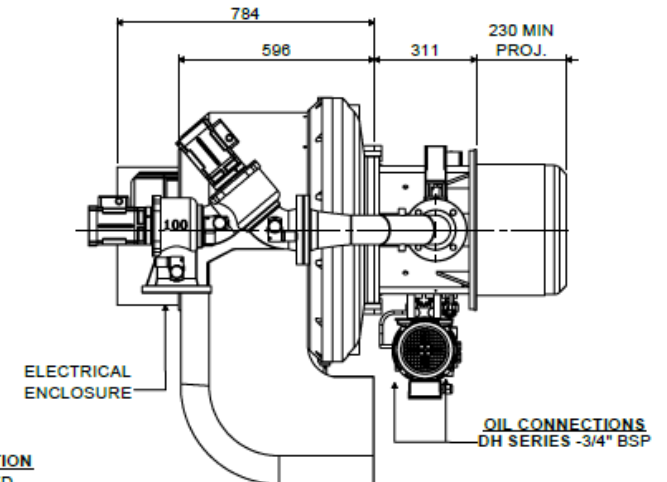
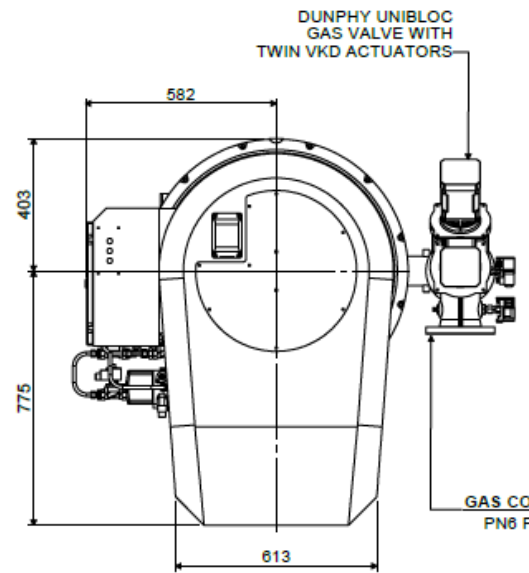
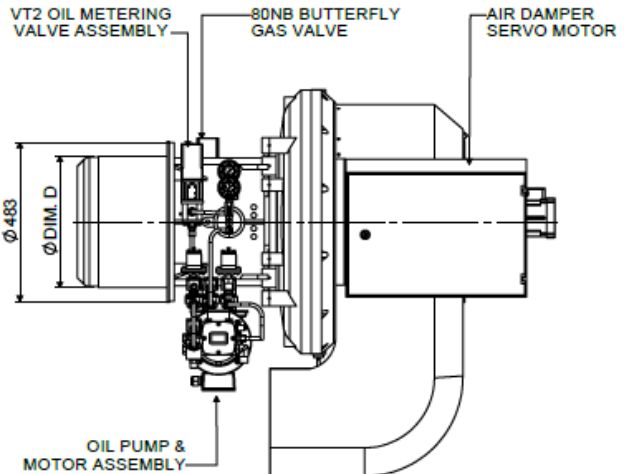


TD4.450-550 LHH ELECTRONIC MODULATION WITH SNORKEL SILENCER

TD4.450-4.550 LHH ELECTRONIC MODULATION BURNER WITH SNORKEL SILENCER

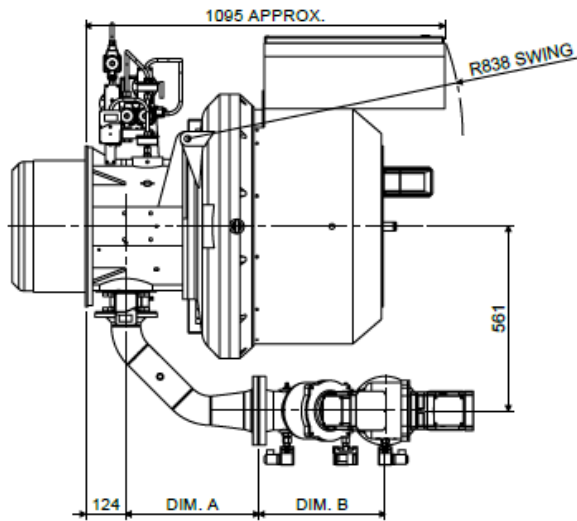


BURNER TYPE	DIM.D	DIM.E	UNIBLOC SIZE	DIM.A	DIM.B	DIM.C
TD 4.450 Z	Ø354	Ø362	65 NB	385	294	122
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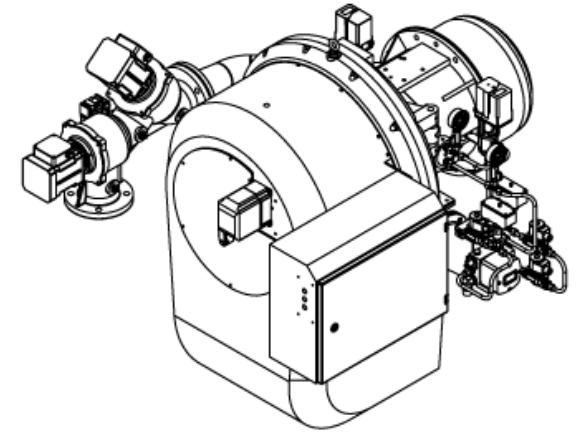
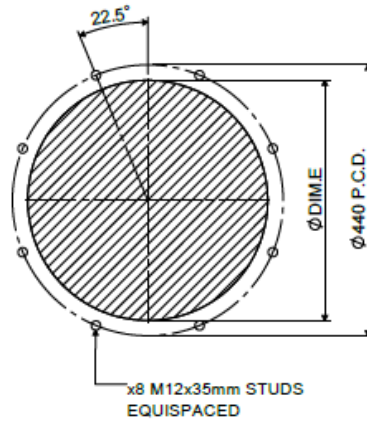


TD4.450-550 RHH ELECTRONIC MODULATION WITH SNORKEL SILENCER

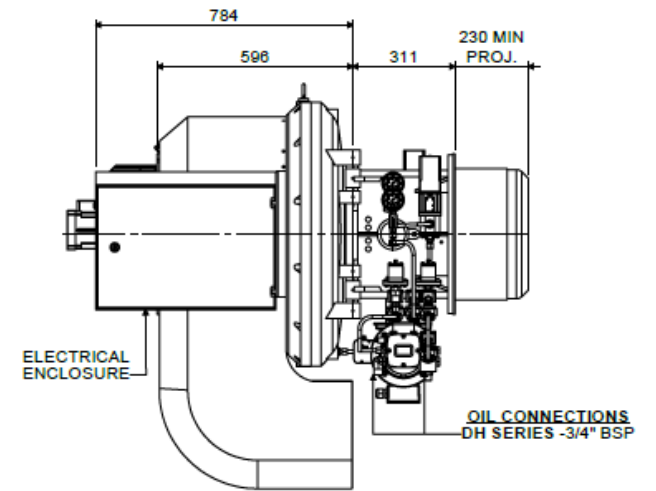
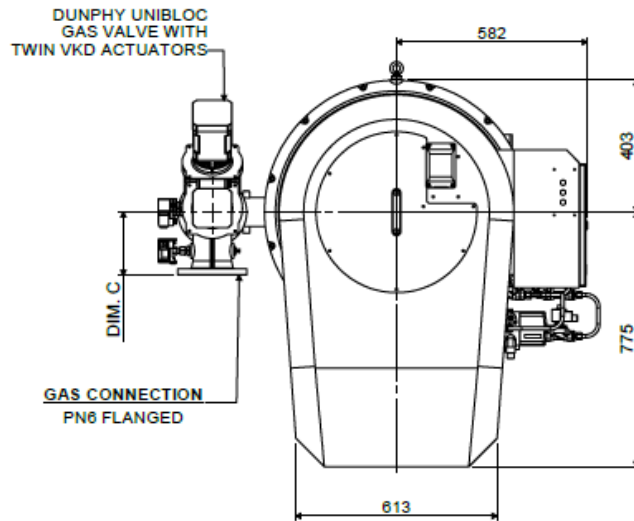
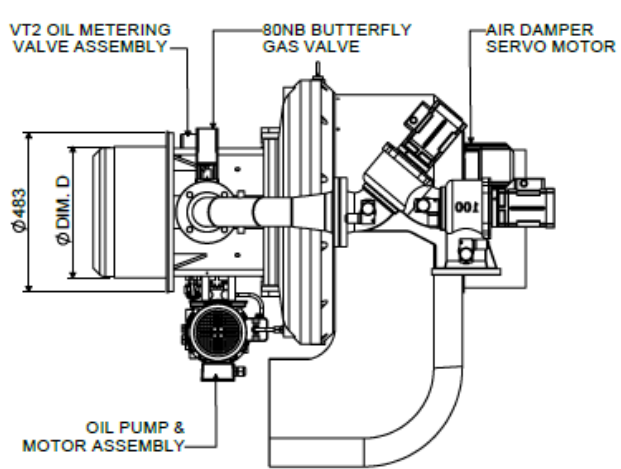
TD4.450-4.550 RHH ELECTRONIC MODULATION BURNER WITH SNORKEL SILENCER



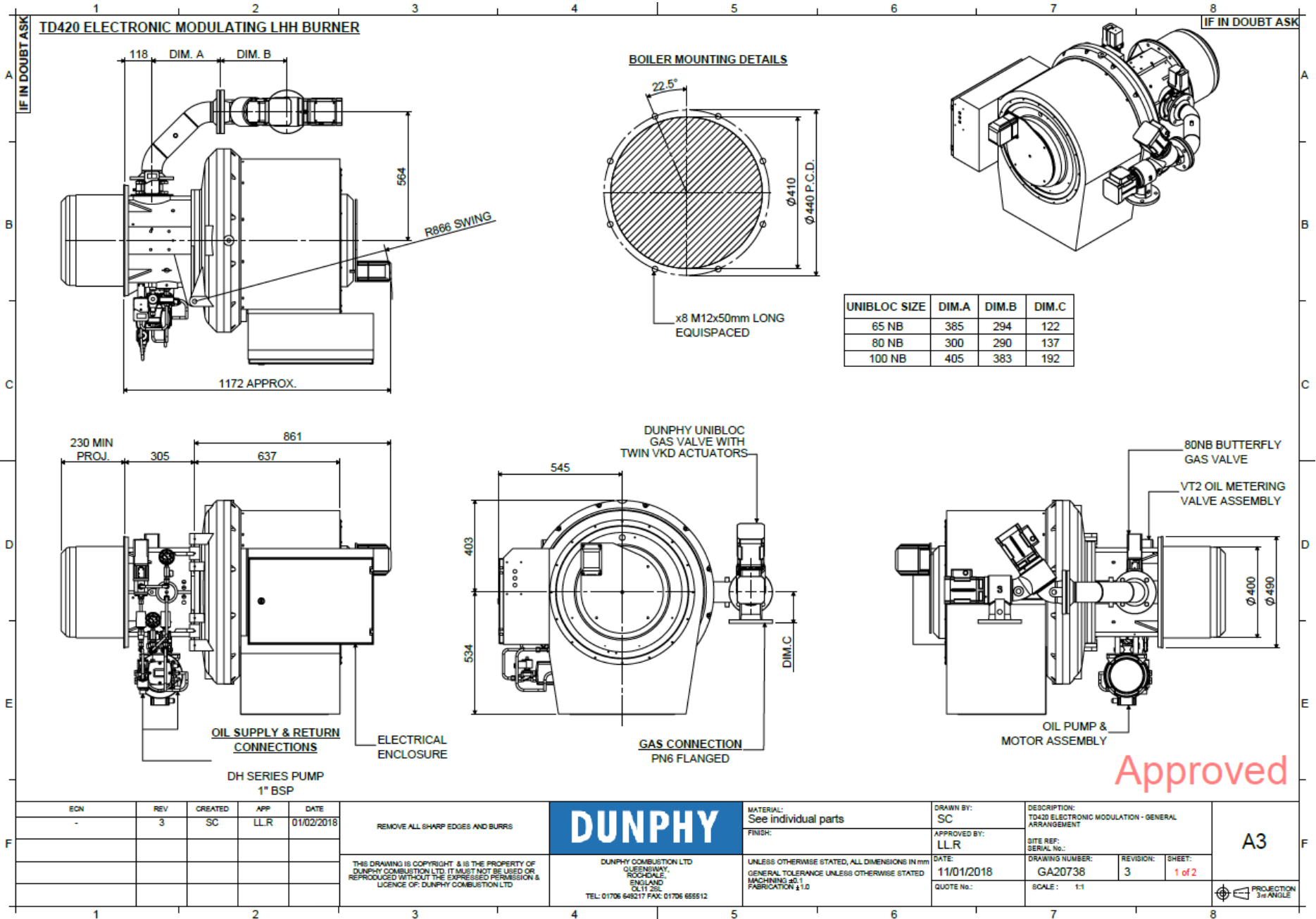
BOILER MOUNTING DETAILS



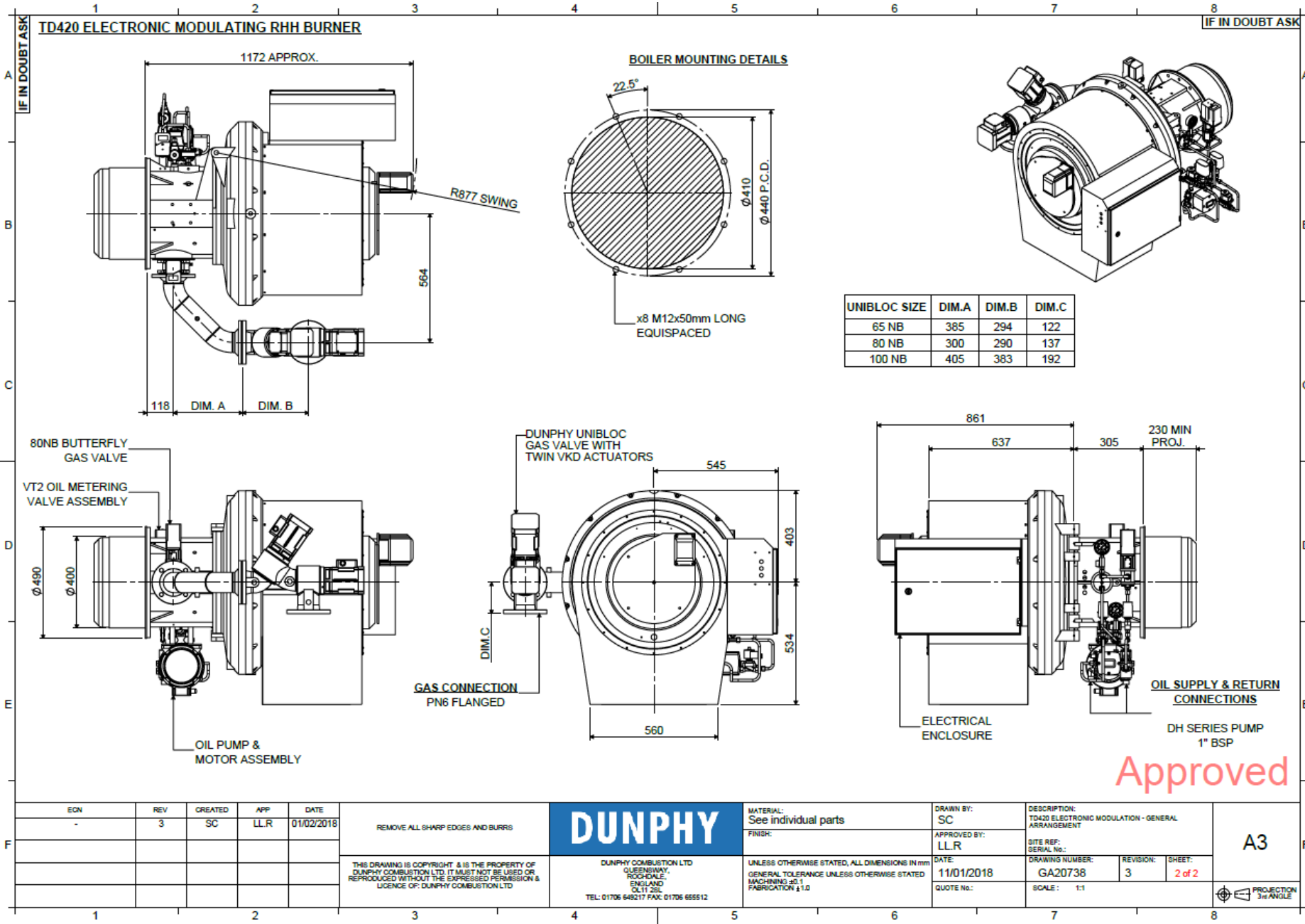
BURNER TYPE	DIM.D	DIM.E	UNIBLOC SIZE	DIM.A	DIM.B	DIM.C
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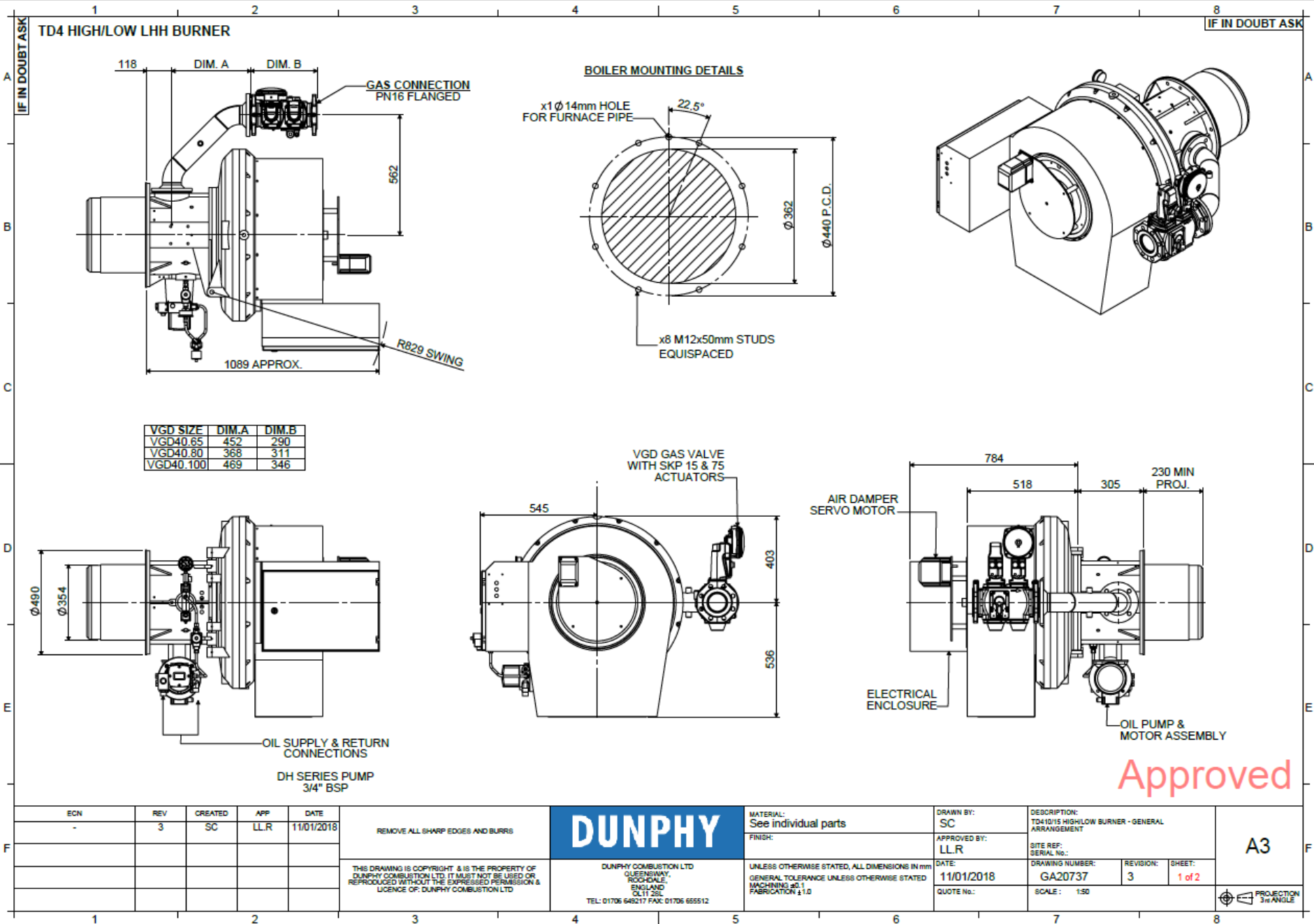
TD4.650 LHH ELECTRONIC MODULATION WITH UNIBLOC GAS VALVE



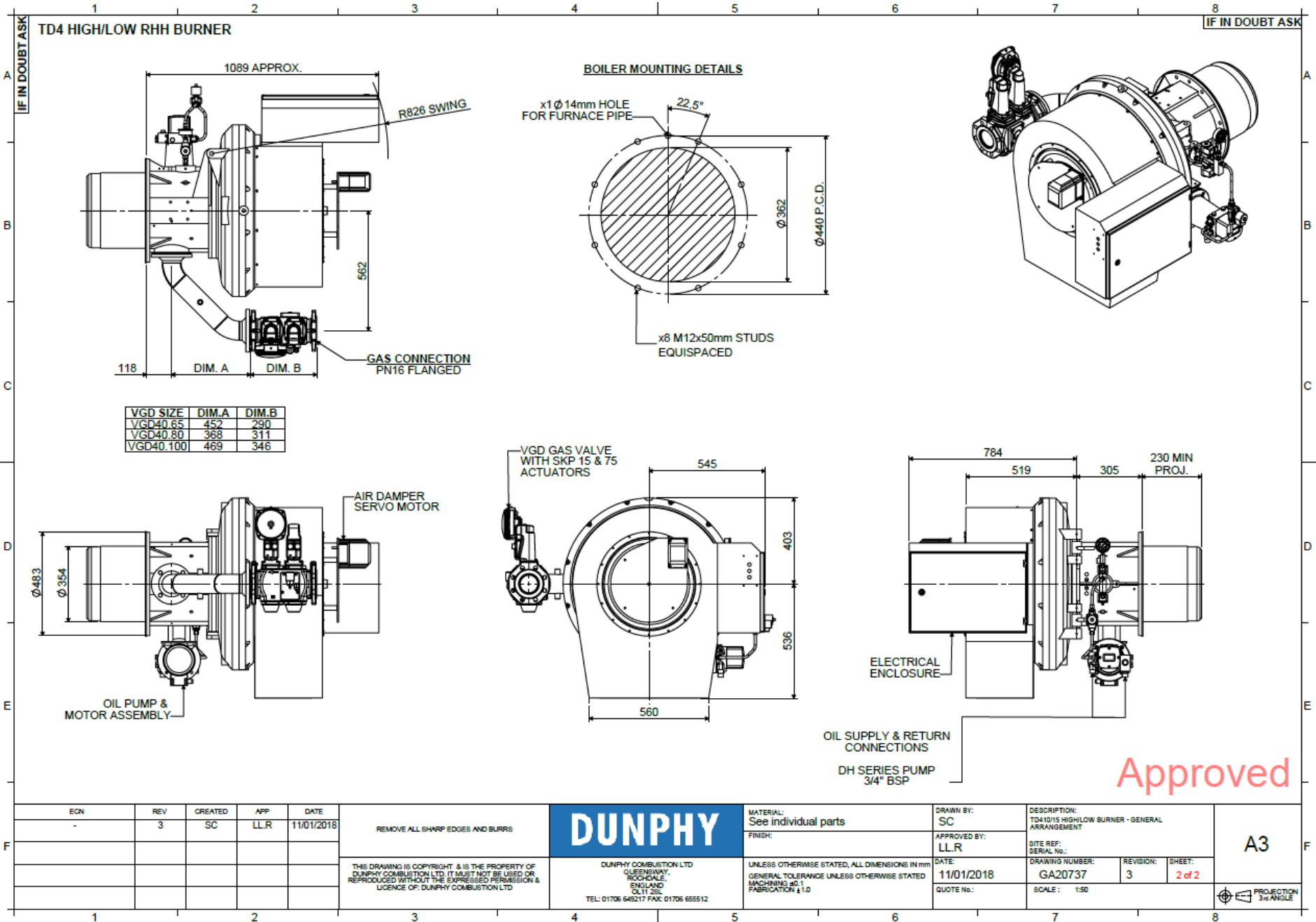
TD4.650 RHH ELECTRONIC MODULATION WITH UNIBLOC GAS VALVE



TD4.450 HIGH/LOW LHH WITH VGD GAS VALVE



TD4.450 HIGH/LOW RHH WITH VGD GAS VALVE

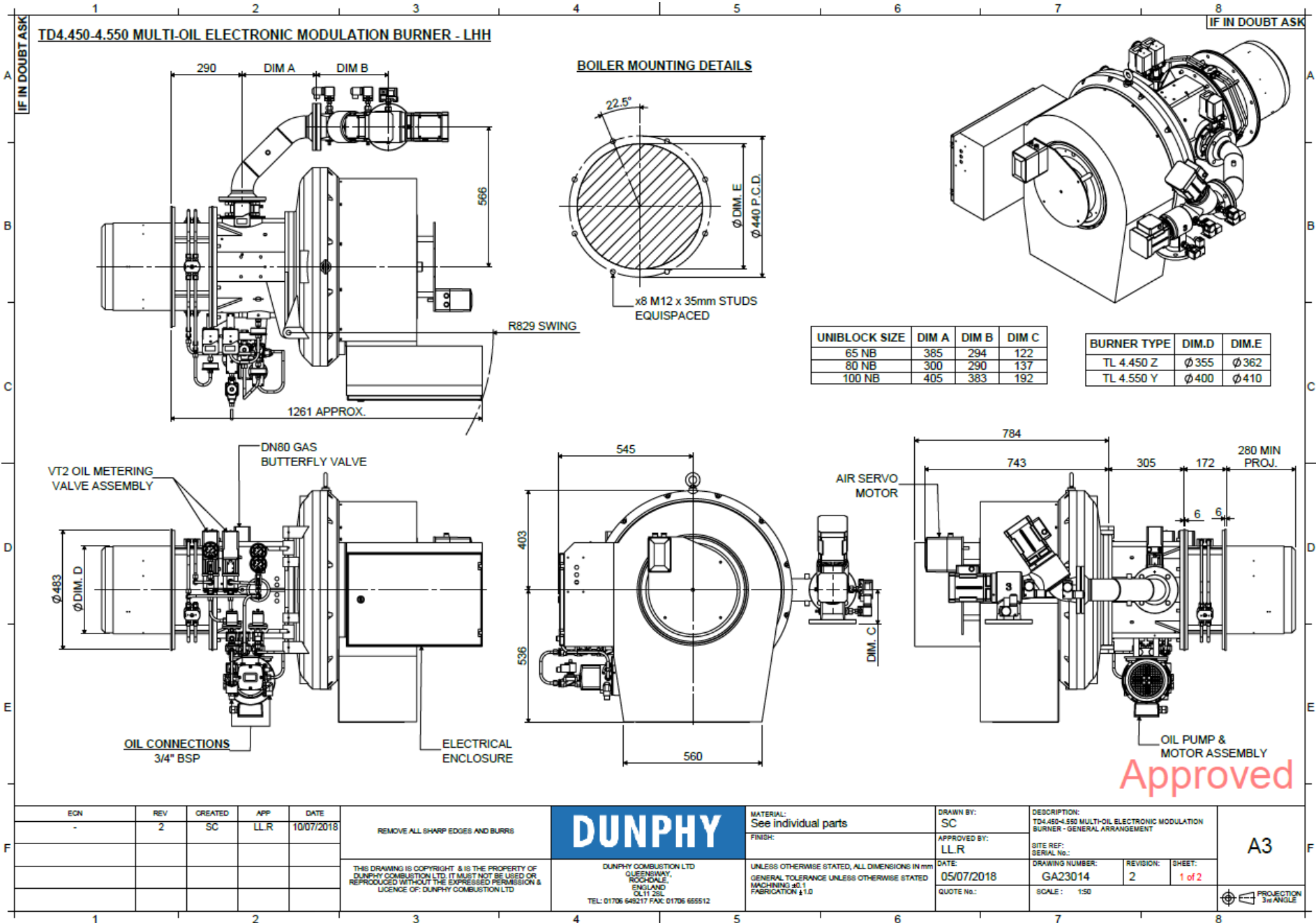


VGD SIZE	DIM.A	DIM.B
VGD40.65	452	290
VGD40.80	368	311
VGD40.100	469	346

Approved

ECN	REV	CREATED	APP	DATE	REMOVE ALL SHARP EDGES AND BURRS		MATERIAL:	DRAWN BY:	DESCRIPTION: TD41015 HIGH/LOW BURNER - GENERAL ARRANGEMENT
-	3	SC	LLR	11/01/2018			FINISH:	SC	
THIS DRAWING IS COPYRIGHT & IS THE PROPERTY OF DUNPHY COMBUSTION LTD. IT MUST NOT BE USED OR REPRODUCED WITHOUT THE EXPRESSED PERMISSION & LICENCE OF DUNPHY COMBUSTION LTD						DUNPHY COMBUSTION LTD QUEENSWAY ROCKDALE ENGLAND OL11 2SL TEL: 01706 648217 FAX: 01706 65512	UNLESS OTHERWISE STATED, ALL DIMENSIONS IN mm GENERAL TOLERANCE UNLESS OTHERWISE STATED MACHINING ±0.1 FABRICATION ±1.0	DATE: 11/01/2018	SITE REF: SERIAL No.:
							GENERAL TOLERANCE UNLESS OTHERWISE STATED MACHINING ±0.1 FABRICATION ±1.0	QUOTE No.:	DRAWING NUMBER: GA20737
									REVISION: 3
									SHEET: 2 of 2
									SCALE: 1:50
									PROJECTION 3rd ANGLE

TD4.450-550 LHH ELECTRONIC MODULATION WITH MULTI OIL



ECN	REV	CREATED	APP	DATE
-	2	SC	LLR	10/07/2018

REMOVE ALL SHARP EDGES AND BURRS

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DUNPHY

DUNPHY COMBUSTION LTD
 QUEENSWAY,
 ROCKDALE,
 ENGLAND
 Q11 2SS
 TEL: 01706 648217 FAX: 01706 655512

MATERIAL:
 See individual parts

FINISH:

UNLESS OTHERWISE STATED, ALL DIMENSIONS IN mm
 GENERAL TOLERANCE UNLESS OTHERWISE STATED
 MACHINING ±0.1
 FABRICATION ±1.0

DRAWN BY:
 SC

APPROVED BY:
 LLR

DATE:
 05/07/2018

QUOTE No.:

DESCRIPTION:
 TD4.450-4.550 MULTI-OIL ELECTRONIC MODULATION BURNER - GENERAL ARRANGEMENT

SITE REF:
 SERIAL No.:

DRAWING NUMBER:
 GA23014

REVISION:
 2

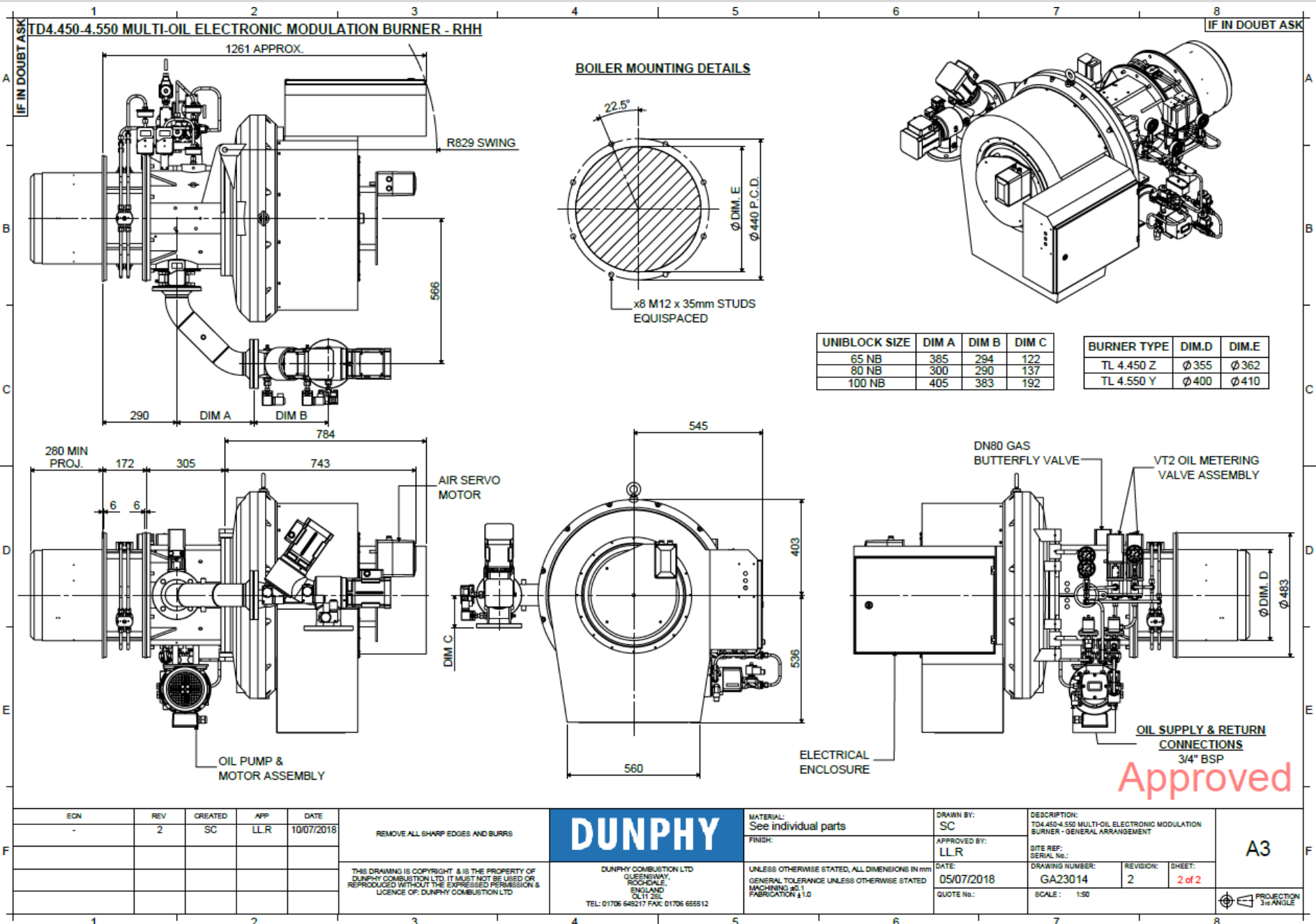
SHEET:
 1 of 2

SCALE: 1:50

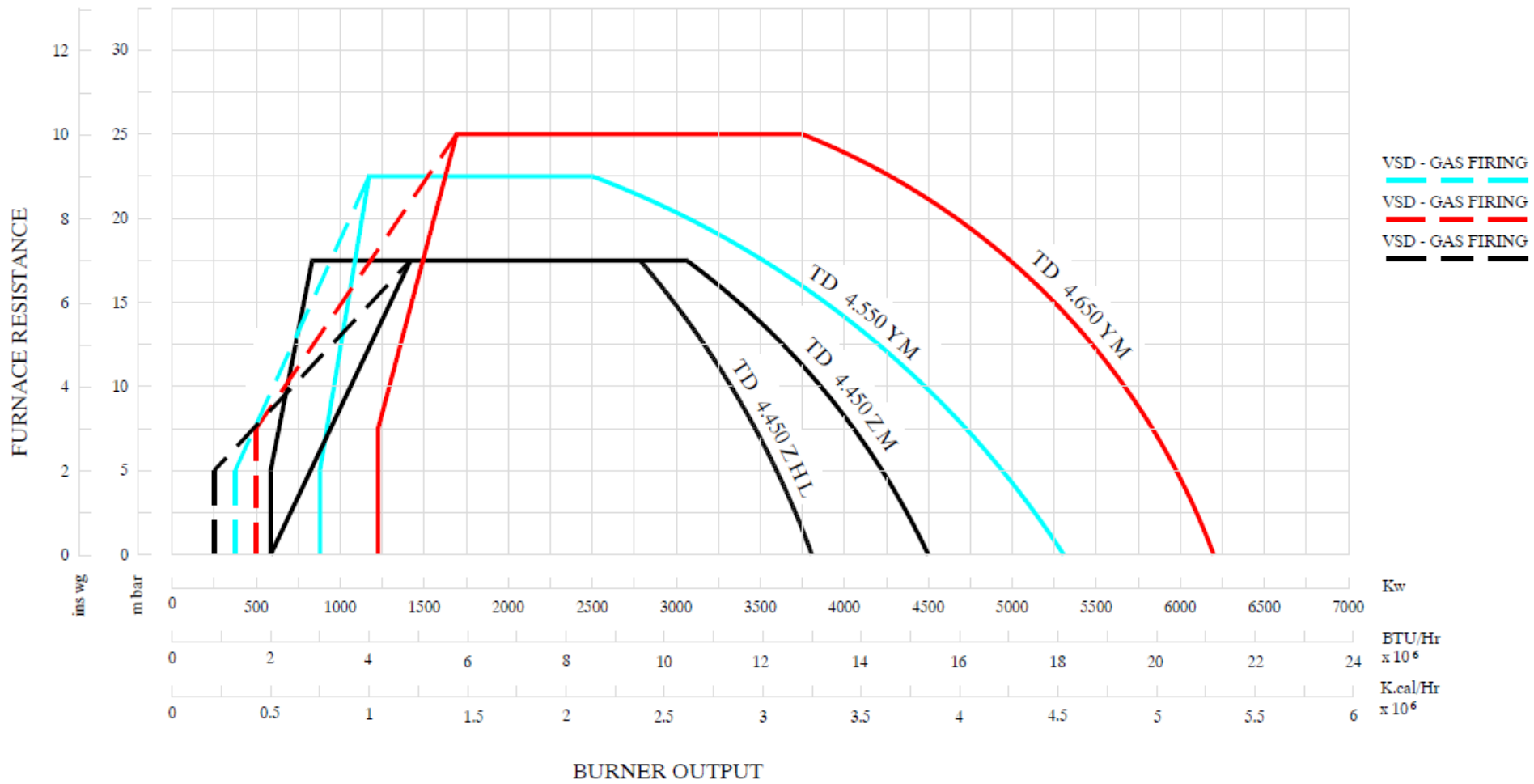
A3

PROJECTION
 3rd ANGLE

TD4.450-550 RHH ELECTRONIC MODULATION WITH MULTI OIL

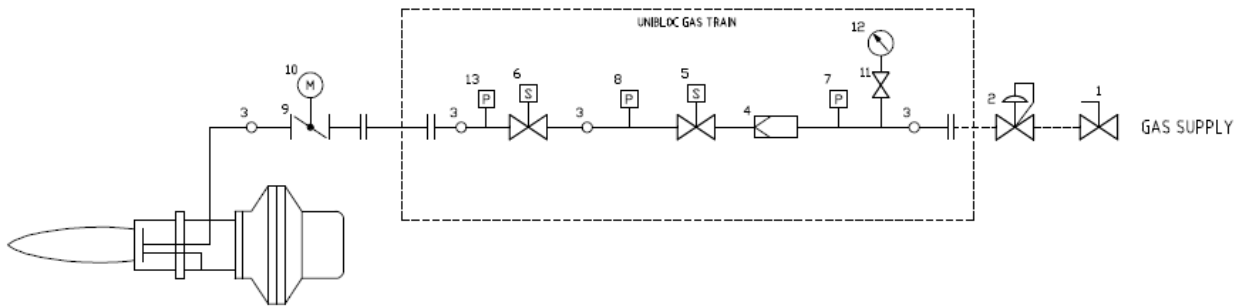


BURNER RATING GRAPH



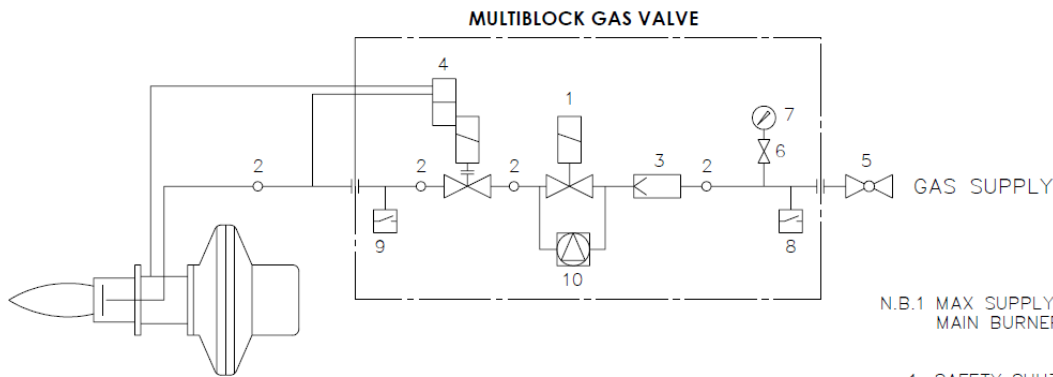
BURNER SCHEMATICS

TYPICAL GAS LINE SCHEMATIC FOR MODULATING BURNERS



ITEM	LOCATION	DESCRIPTION
1	EXTERNAL	MANUAL GAS ISOLATION VALVE
2	EXTERNAL	MAIN GOVERNOR
3		TEST POINT
4	UNIBLOC	INTEGRAL FILTER
5	UNIBLOC	FIRST MAIN VALVE (VKD)
6	UNIBLOC	SECOND MAIN VALVE (VKD)
7	UNIBLOC	LOW GAS PRESSURE SWITCH
8	UNIBLOC	VALVE PROVING PRESSURE SWITCH
9	BURNER	BUTTERFLY VALVE
10	BURNER	RATOTRONIC 6026 SERVO MOTOR
11	UNIBLOC	TEST COCK (OPTIONAL)
12	UNIBLOC	PRESSURE GAUGE (OPTIONAL)
13	UNIBLOC	HIGH GAS PRESSURE SWITCH
14		
15		
16		

TYPICAL GAS LINE SCHEMATIC FOR HIGH/LOW BURNERS

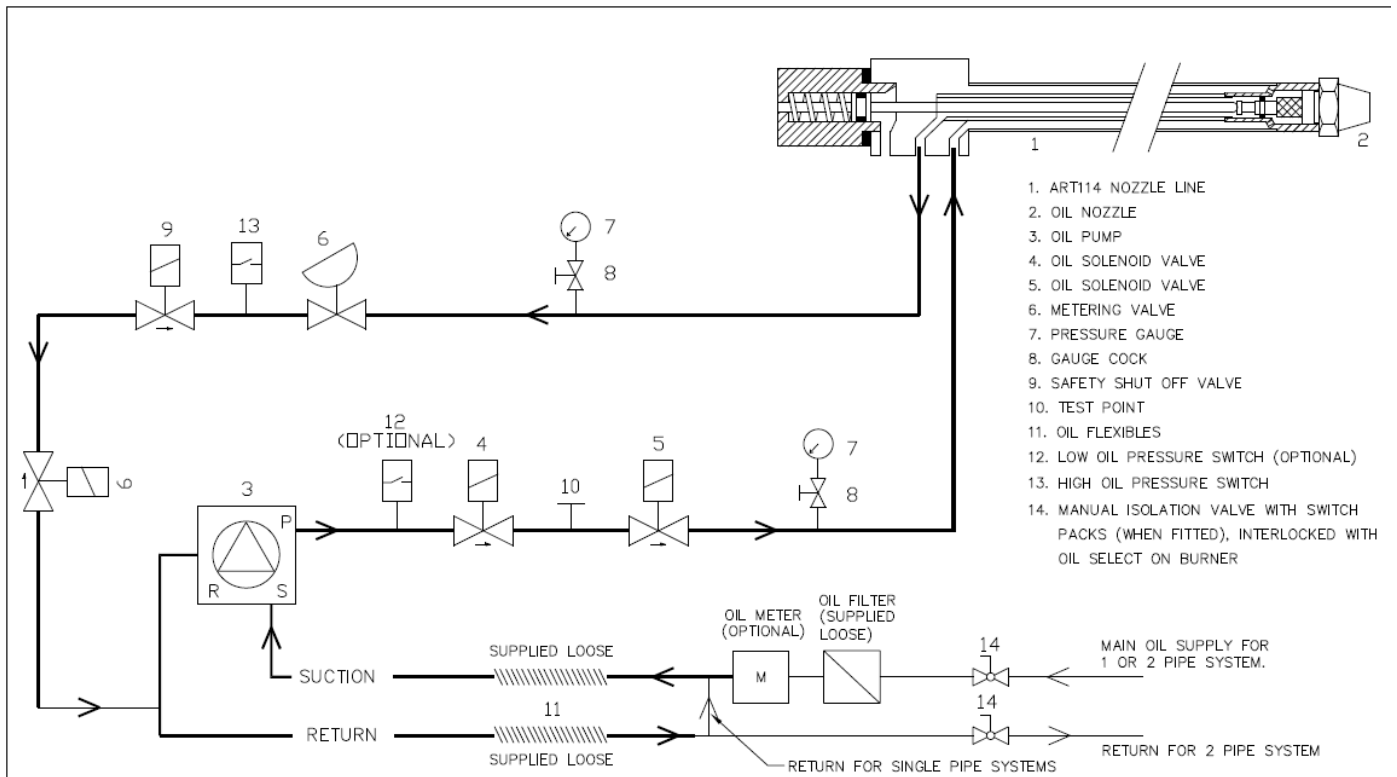


N.B.1 MAX SUPPLY PRESSURE TO MAIN BURNER 100mb.

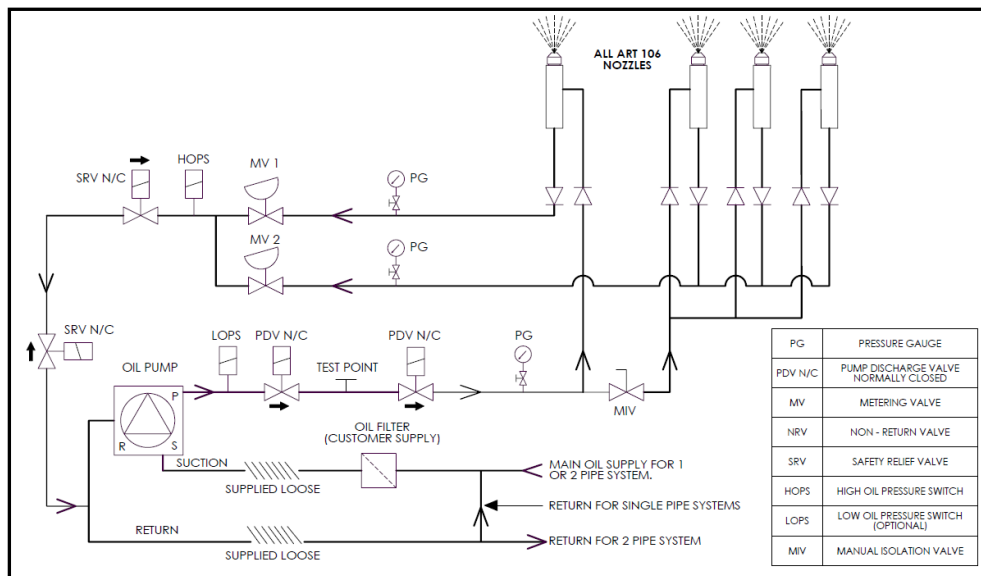
- 1. SAFETY SHUT OFF VALVE
- 2. TEST POINT
- 3. FILTER (INTEGRAL)
- 4. AIR/GAS RATIO CONTROLLER
- *5. APPLIANCE ISOLATING VALVE
- * 6. TEST COCK
- * 7. GAS PRESSURE GAUGE
- * 8. LOW INLET GAS PRESSURE SWITCH
- * 9. HIGH GAS PRESSURE SWITCH
- *10. VPS (VALVE PROVING SYSTEM)

* IF SPECIFIED
 ** (CUSTOMER SUPPLY)

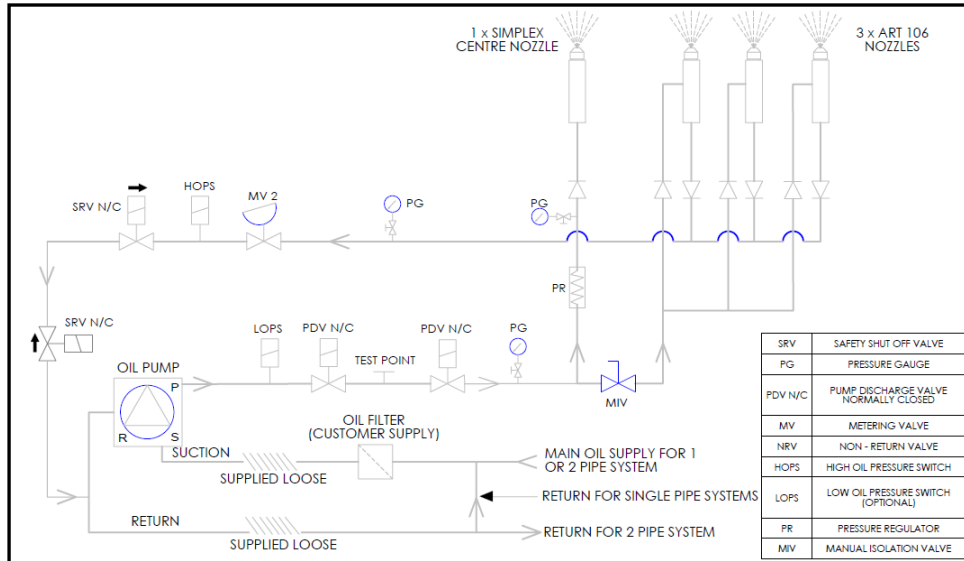
TYPICAL OIL LINE SCHEMATIC FOR LIGHT OIL DUAL FUEL BURNERS MODULATING WITH ART 1400 NOZZLE



TYPICAL SCHEMATIC FOR MULTI NOZZLE SYSTEM BURNER (WITH SRV & LOPS & HOPS)



TYPICAL SCHEMATIC FOR MULTI NOZZLE SYSTEM BURNER FIXED CENTRAL NOZZLE



STANDARD SPECIFICATION DATA

BURNER TYPE	Firing Rate kW		GAS VOLUME (m ³ /HR) *1		FIRING MODE OPTIONS				Fan Motor kW	Pump Motor kW	Voltage	Hz	Ph	Running Current	Starting Current *4
	MIN*3	MAX	MIN*3	MAX	Mod Gas High / Low Oil	High / Low	Electronic Modulation *2	Electronic Modulation with VSD							
TD4.450 Z	450	4500	43	433	✓	✓	✓	✓	7.5	2.2	380-420	50	3	23 Amp	48 Amp
TD4.550 Y	530	5300	50	510			✓	✓	11.0	2.2	380-420	50	3	32 Amp	64 Amp
TD4.650 Y	620	6200	59	596			✓	✓	15.0	2.2	380-420	50	3	39 Amp	88 Amp

*1 – Based on Nat. Gas C.V 10.4 kW/m³

*2 - Fitted with a Ratiotronic 6000 system

*3 – Based on 10:1 turn down fitted with VSD when firing on Natural Gas

*4 - When fitted with VSD the starting current is 0 Amps

COMBUSTION HEAD

The Dunphy dual fuel combustion head incorporates a two-stage fuel/air mixing system which eliminates low frequency resonance and allows maximum combustion efficiency with minimum emission levels.

This system combined with smooth ignition and extreme reliability make Dunphy combustion equipment the most sensible choice for all heating and process applications.

ULTRA LOW NO_x BURNERS

All Dunphy T-Series burners are fitted with low NO_x combustion heads as standard equipment.

As an optional extra all burners in this range can be fitted with a flue gas recirculation system to achieve ultra low NO_x emissions.

Dunphy Combustion Ltd has a policy of continuous development and reserve the right to change prices and specifications without prior notice.

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