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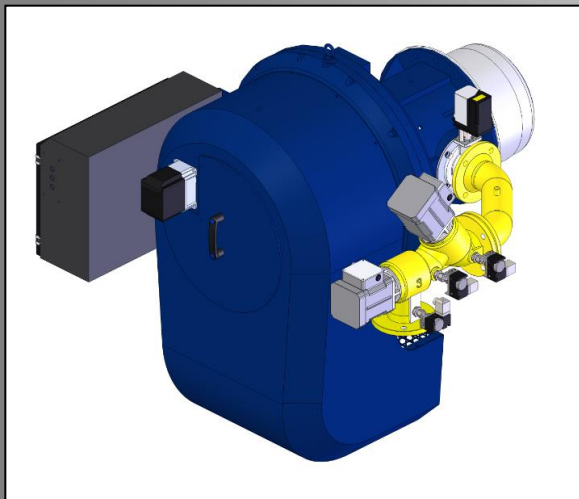
## DATA SHEET

**Model: TG4**

**Revision Date: November 2019**

**Output: 450 – 6500 kW**

**Revision Number: DS.TG4.20**



- ◆ All models approved to current British and European Standards.
- ◆ All burners in the T.G. range are of the fan assisted, nozzle mix type and operation is fully automatic.
- ◆ All models have been independently tested to the European Standard pr EN676 - 'Automatic forced draught burners for gaseous fuels.'
- ◆ CE approval numbers for the TG4 Series burners is:
- ◆ TG4.450/550/650 (TG410/415/420) – CE 679311



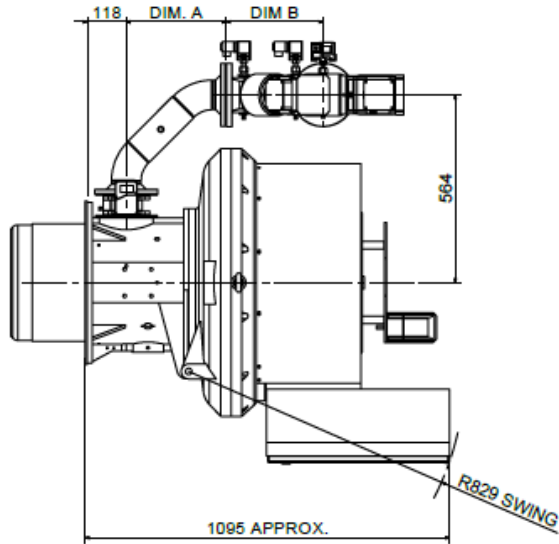
FM 24868

## BURNER DIMENSIONS

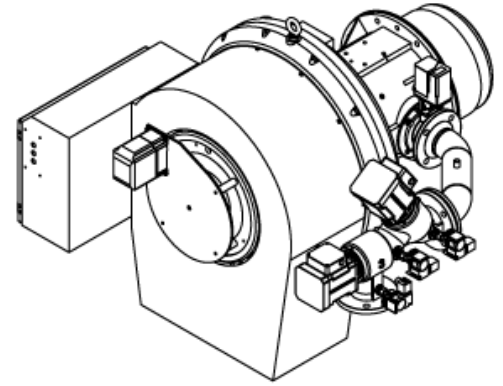
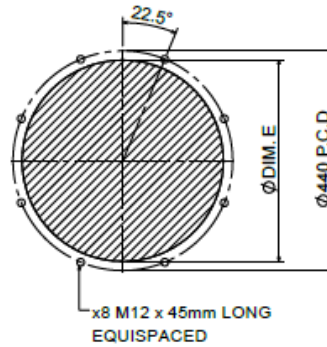
- ◆ Drawings shown on the following pages
- ◆ All dimensions in mm unless otherwise stated.
- ◆ The minimum standard dimension for 'PROJ' is 230mm. However, it can be varied to suit application. Requirements should be stated when unit is ordered.
- ◆ Dimension 'E' is the average swing radius; this can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

# ELECTRONIC MODULATION – TG4.450/550 LHH WITH UNIBLOC GAS VALVE

TG4.450-4.550 LHH MODULATION BURNER

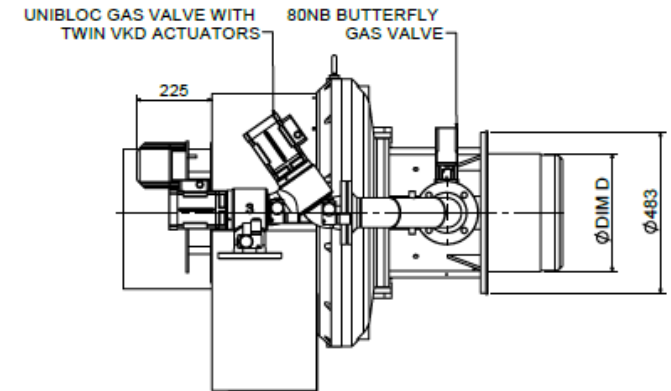
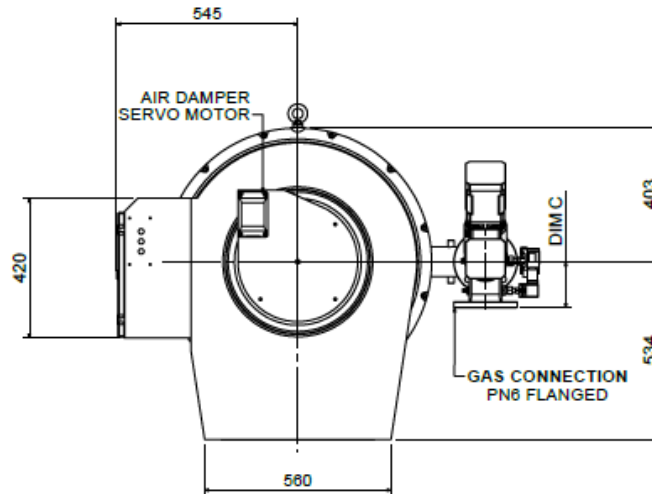
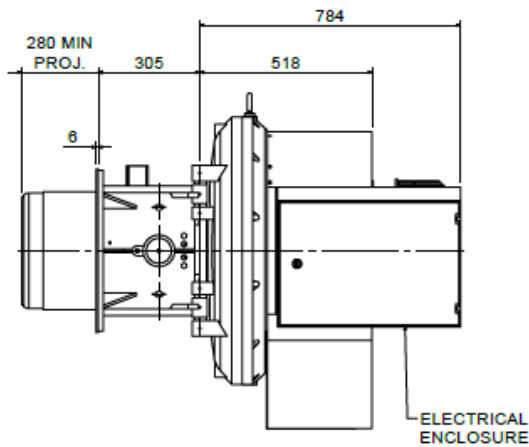


**BOILER MOUNTING DETAILS**



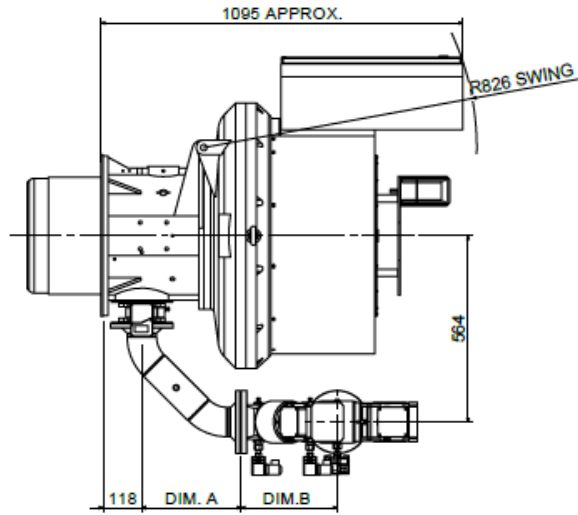
UNIBLOC SIZE	DIM. A	DIM. B	DIM. C
65 NB	385	294	122
80 NB	302	290	137
100 NB	405	385	192

BURNER TYPE	DIM. D	DIM. E
TG4.450 Z	Ø355	Ø362
TG4.550 Y	Ø400	Ø410

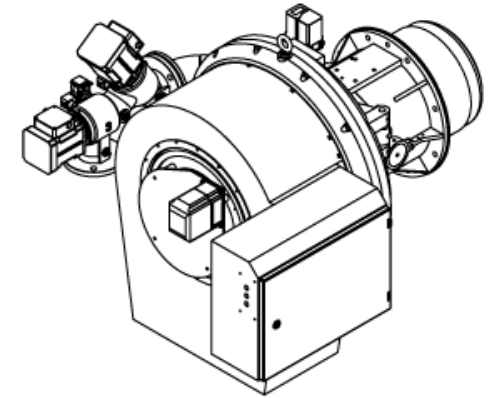
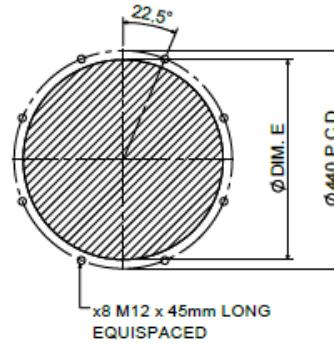


# ELECTRONIC MODULATION – TG4.450/550 RHH WITH UNIBLOC GAS VALVE

## TG4.450-4.550 RHH MODULATION BURNER

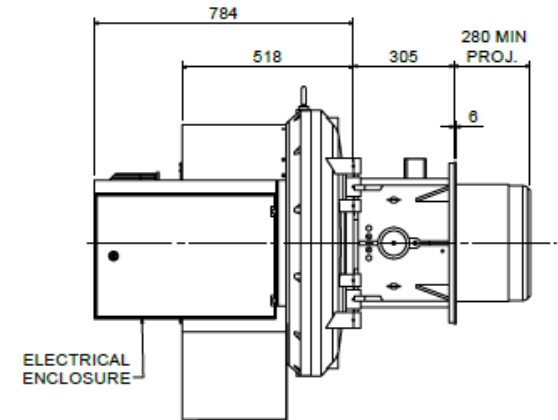
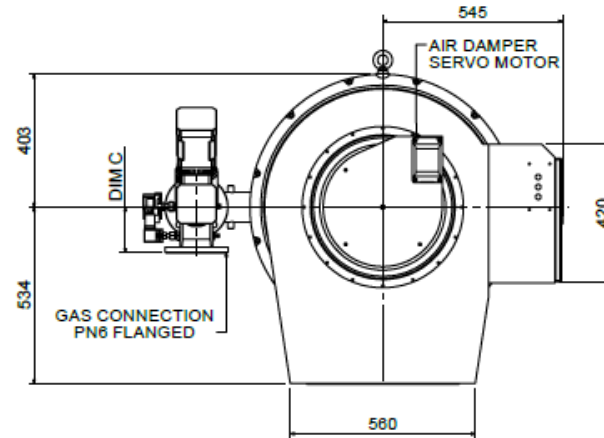
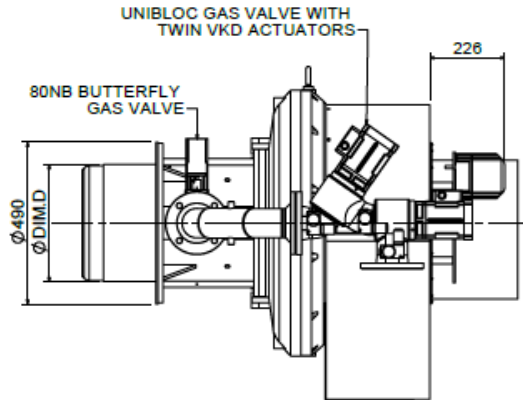


BOILER MOUNTING DETAILS

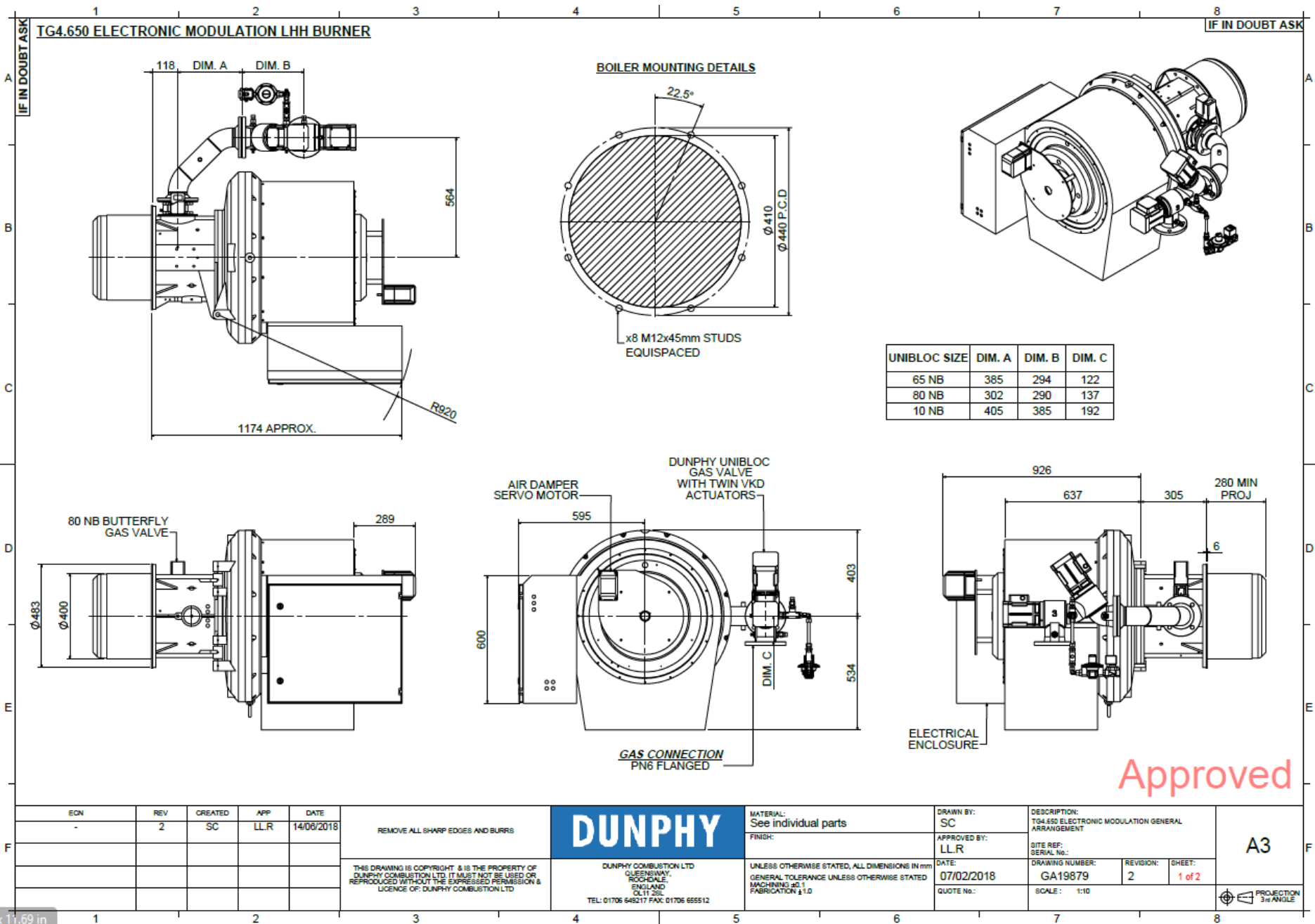


UNIBLOC SIZE	DIM. A	DIM. B	DIM. C
65 NB	385	294	122
80 NB	302	290	137
100 NB	405	385	192

BURNER TYPE	DIM. D	DIM. E
TG4.450 Z	Ø355	Ø362
TG4.550 Y	Ø400	Ø410

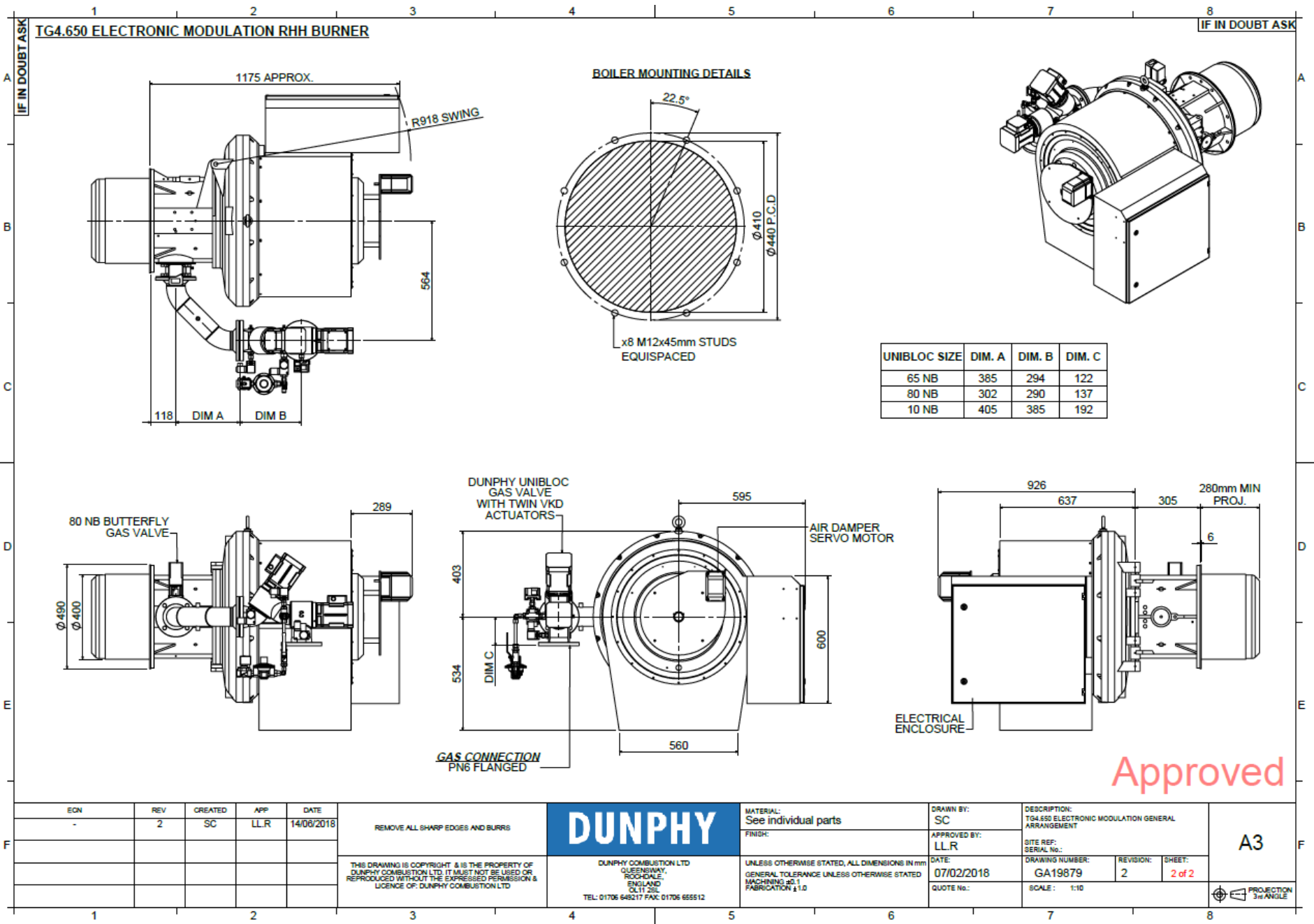


# ELECTRONIC MODULATION – TG4.650 LHH WITH UNIBLOC GAS VALVE

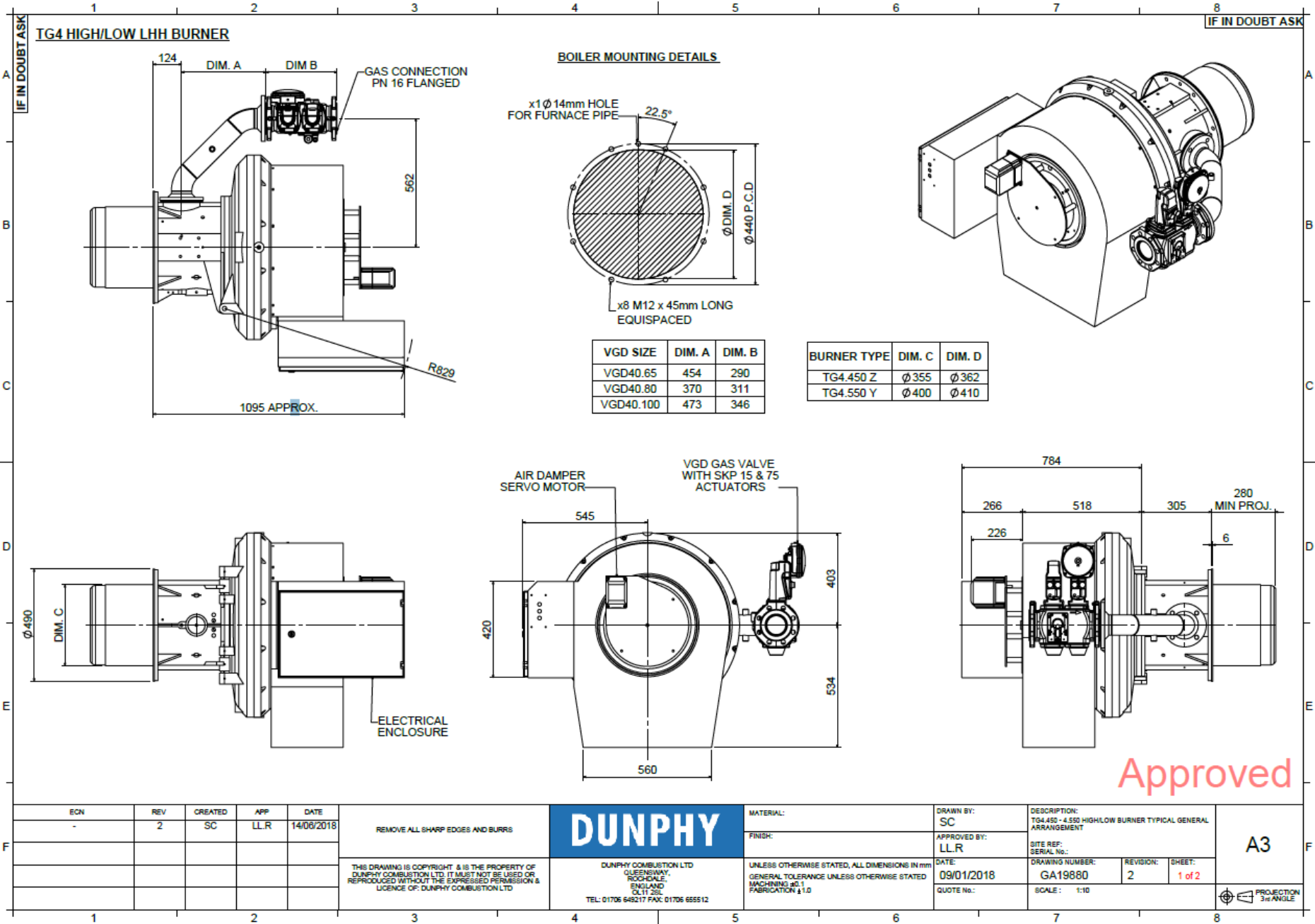


11.69 in

# ELECTRONIC MODULATION – TG4.650 RHH WITH UNIBLOC GAS VALVE



# HIGH / LOW / PNEUMATIC MODULATION – TG4.450 LHH WITH VGD GAS VALVE



ECN	REV	CREATED	APP	DATE
-	2	SC	LLR	14/08/2018

REMOVE ALL SHARP EDGES AND BURRS

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**DUNPHY**

DUNPHY COMBUSTION LTD  
 QUERRINWAY  
 ROOFSDALE  
 ENGLAND  
 GL11 2SL  
 TEL: 01706 648217 FAX: 01706 655512

MATERIAL:

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:  
09/01/2018

QUOTE No.:

DESCRIPTION:  
TG4.450 - 4.550 HIGH/LOW BURNER TYPICAL GENERAL ARRANGEMENT

SITE REF:  
SERIAL No.:

DRAWING NUMBER:  
GA19880

REVISION:  
2

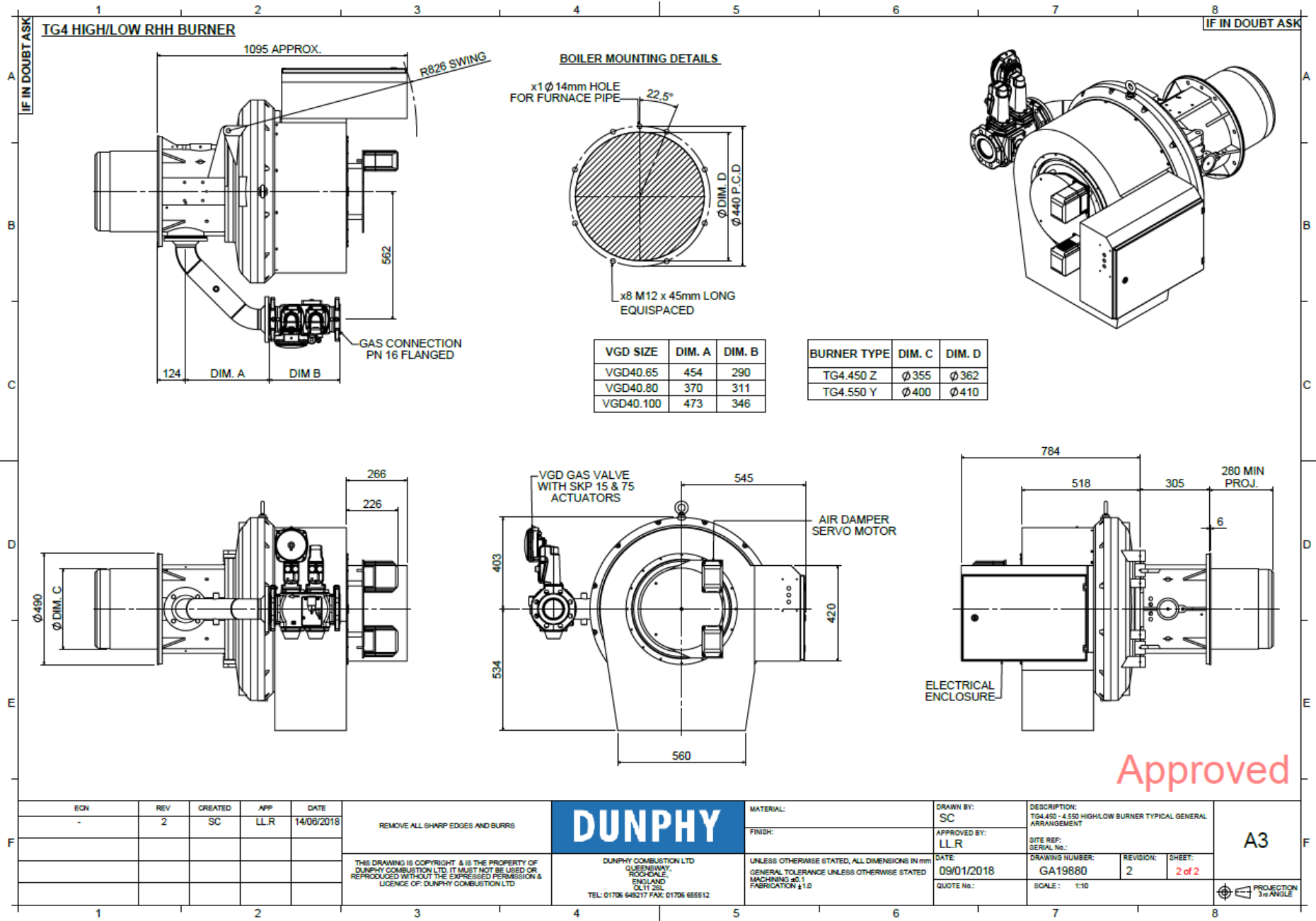
SHEET:  
1 of 2

SCALE:  
1:10

**A3**

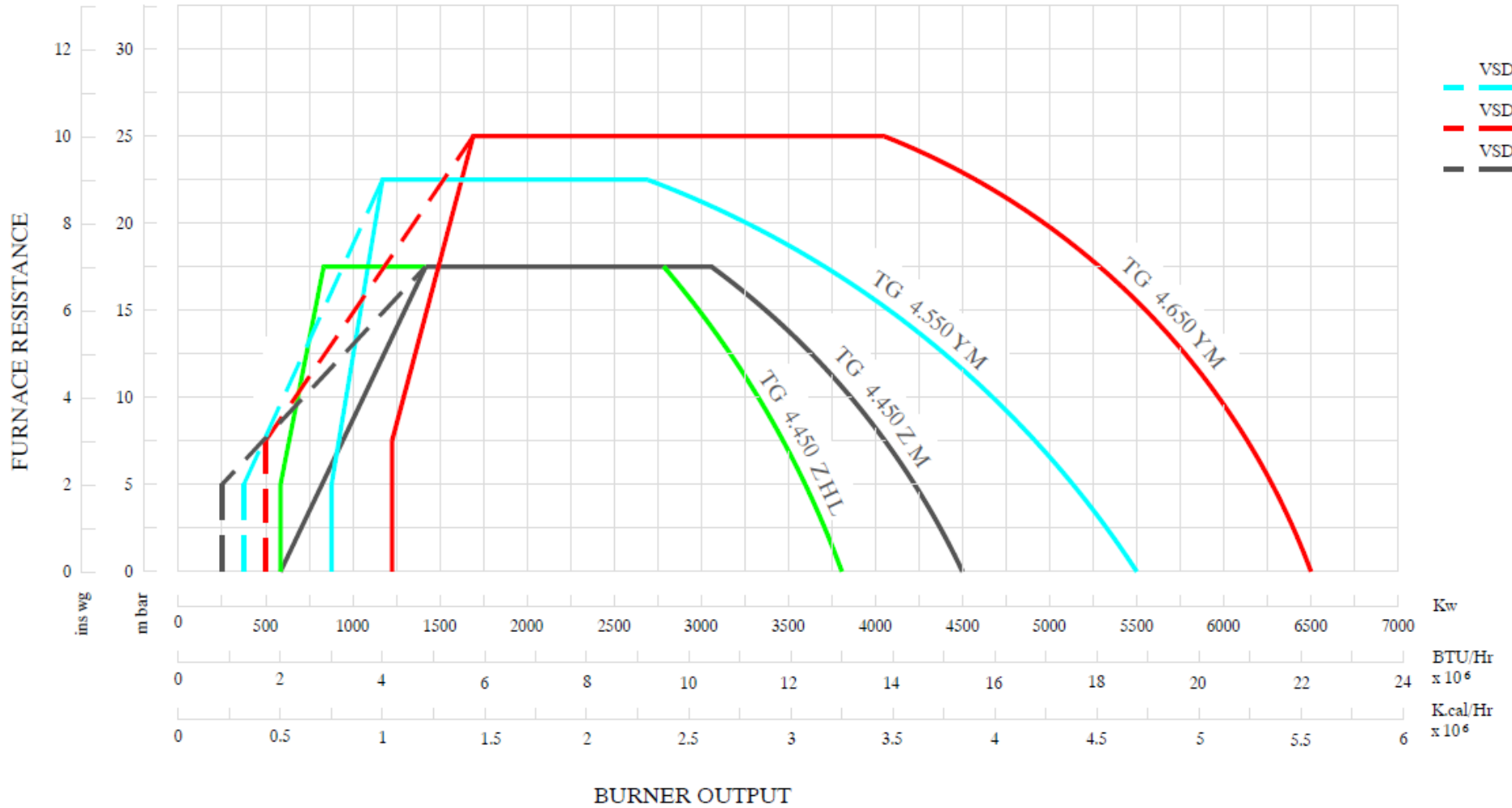
PROJECTION  
3rd ANGLE

# HIGH / LOW / PNEUMATIC MODULATION – TG4.450 RHH WITH VGD GAS VALVE



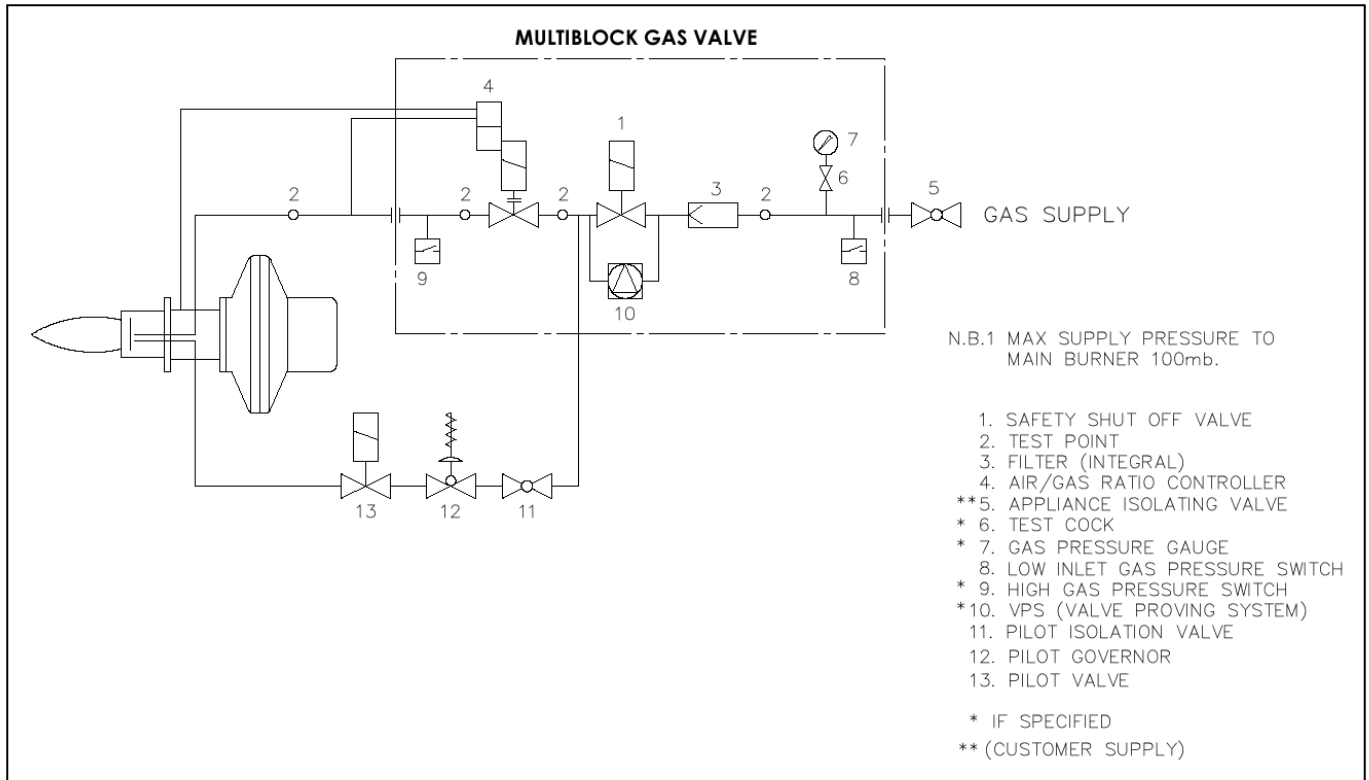


## BURNER RATING GRAPH & SCHEMATICS

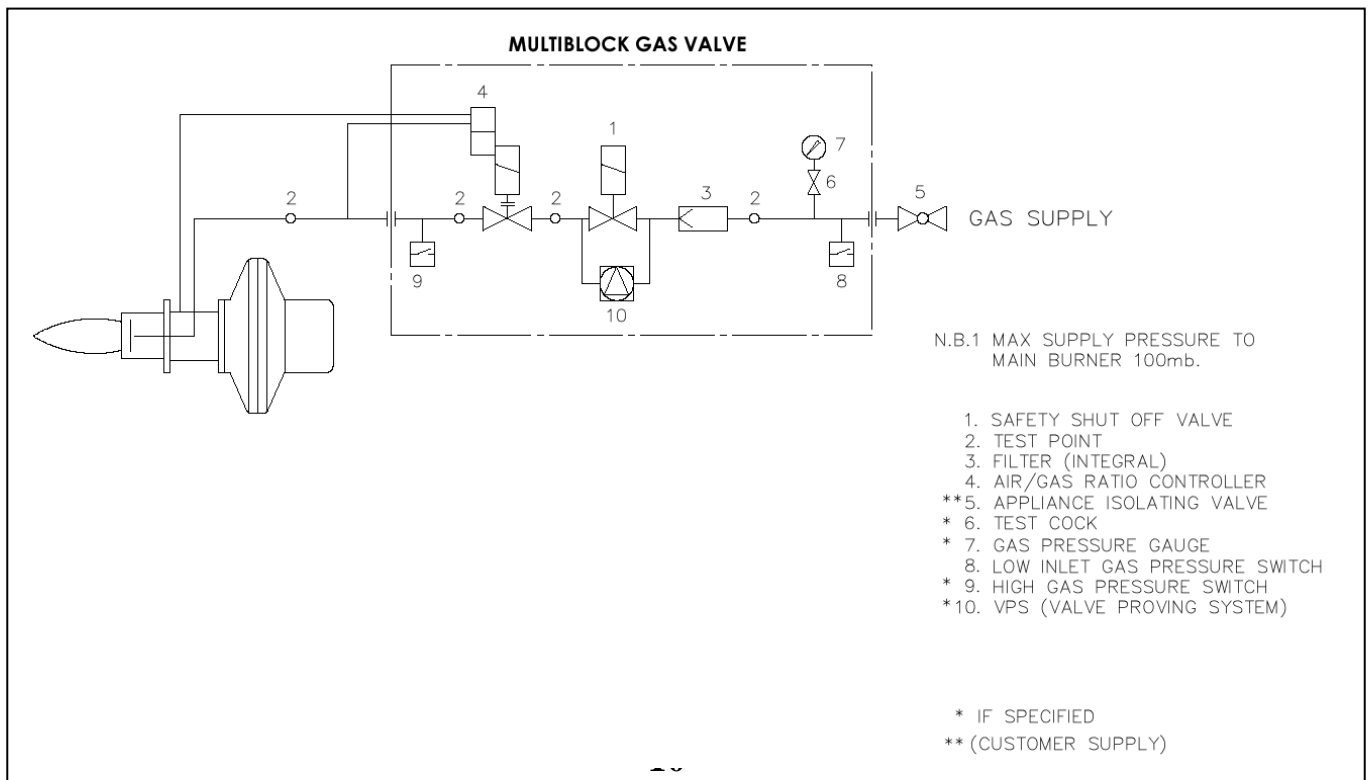


**BURNER SCHEMATICS - HIGH / LOW & PNEUMATIC MODULATING**

**Typical Gas Line Schematic for High / Low & Pneumatic Modulating Burners with Gas Pilot Line**

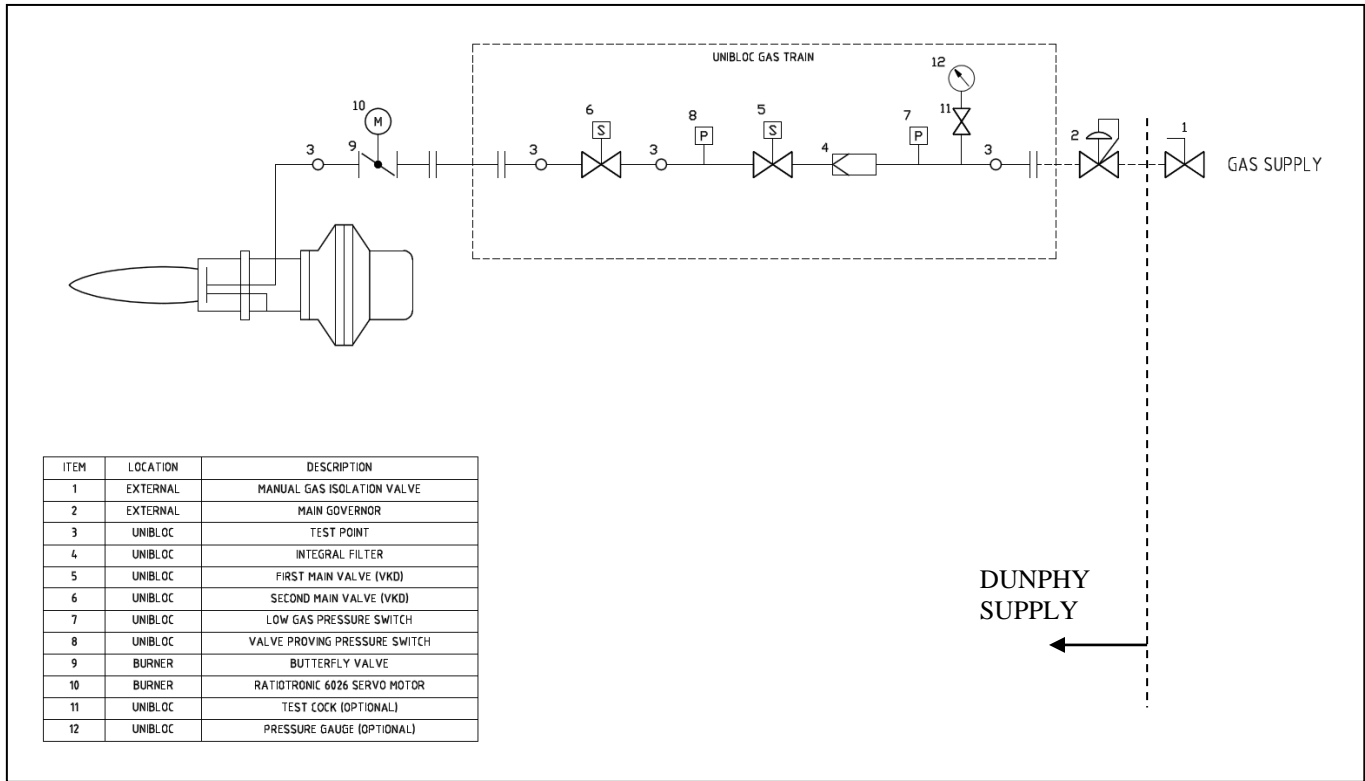


**Typical Gas Line Schematic for High / Low & Pneumatic Modulating Burners without Gas Pilot Line**

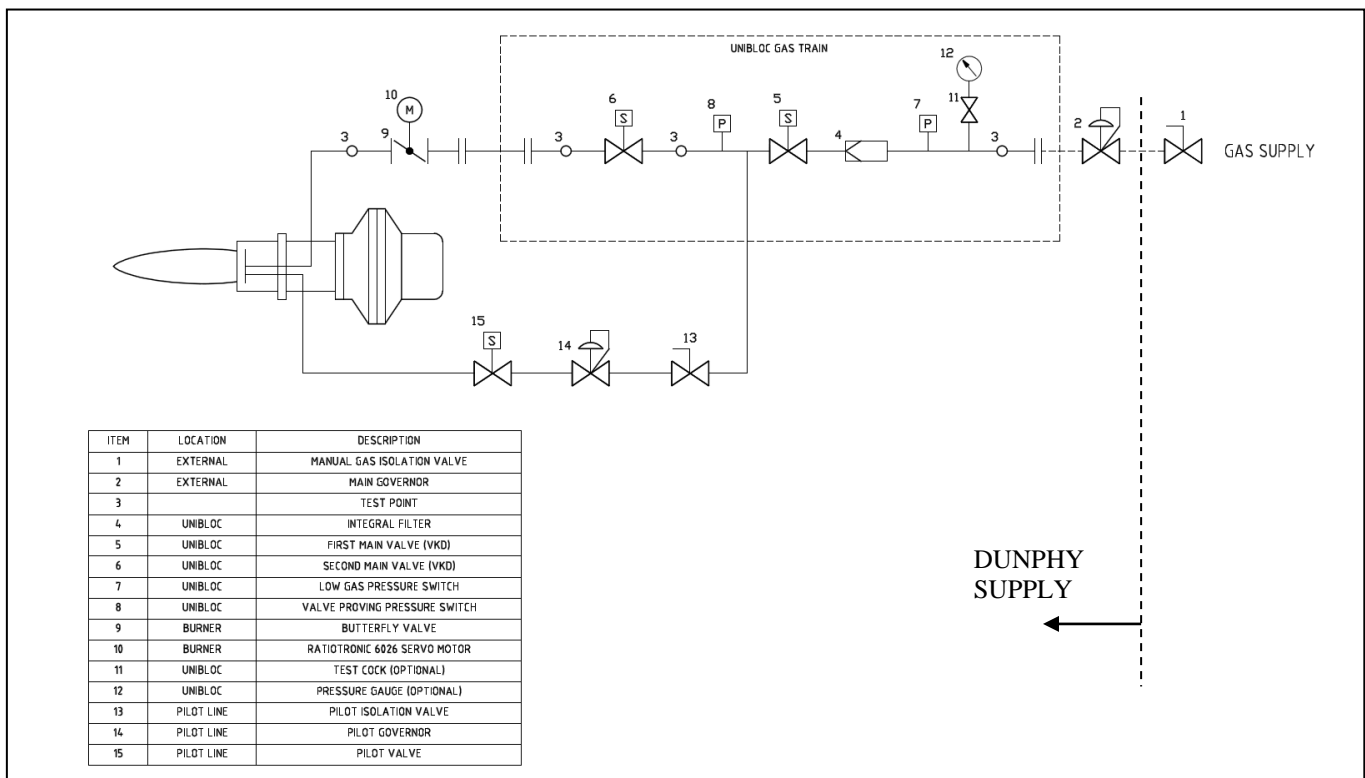


# BURNER SCHEMATICS - ELECTRICAL MODULATING

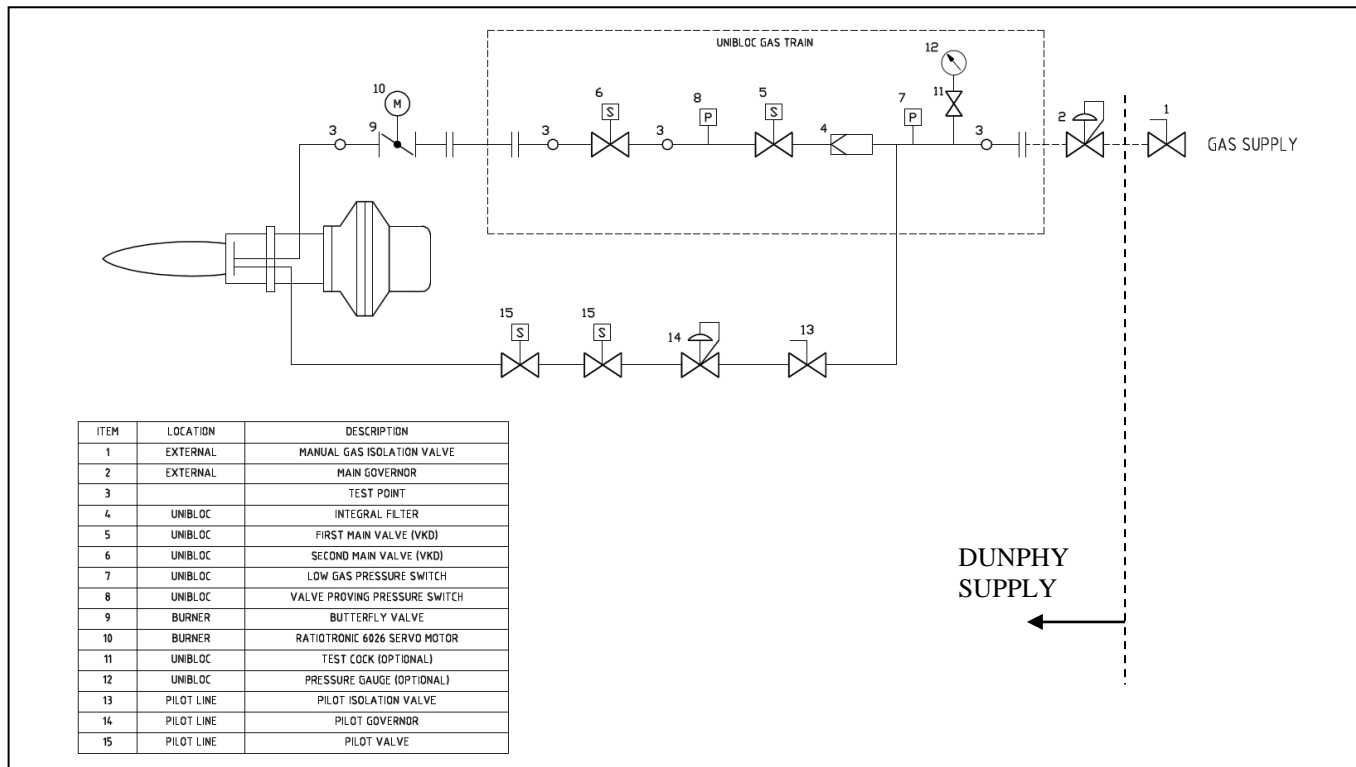
## Typical Gas Line Schematic for Electronic Modulating Burners without Gas Pilot Line



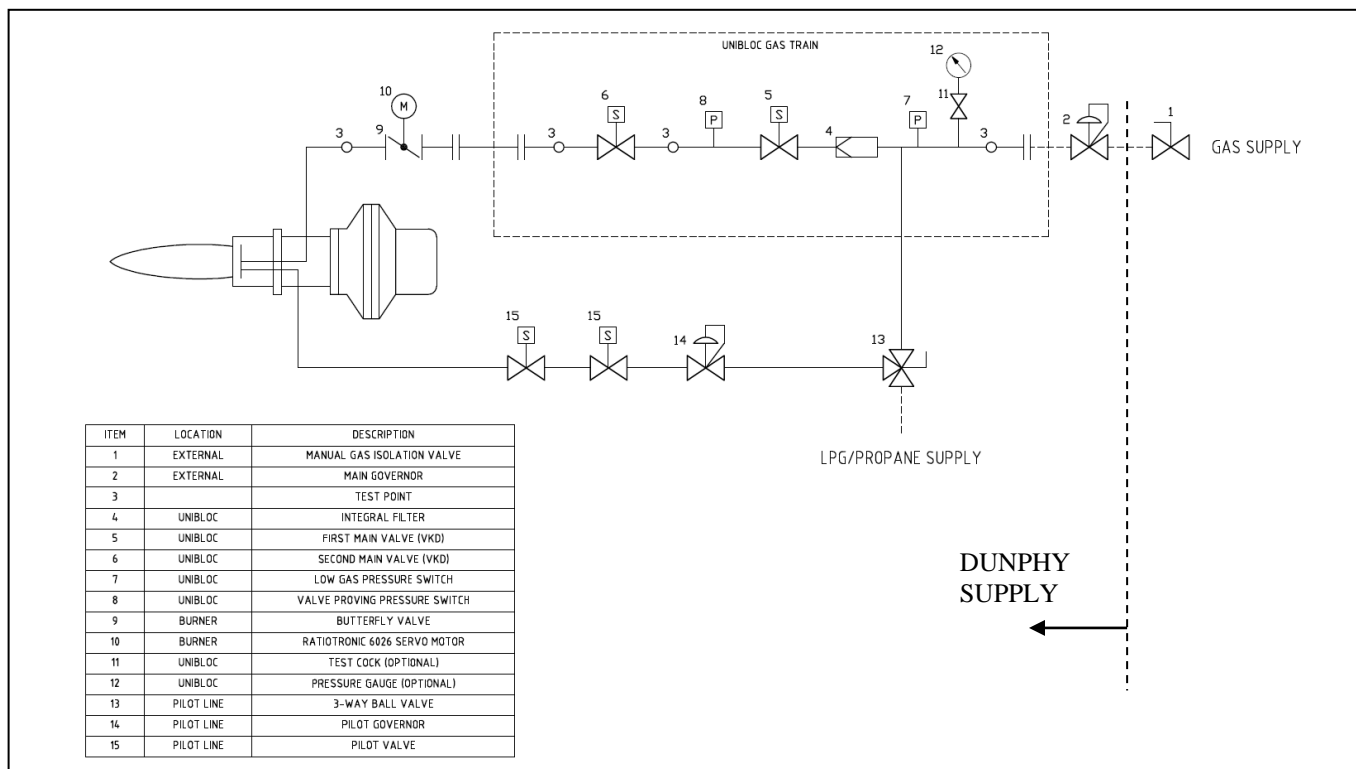
## Typical Gas Line Schematic for Electronic Modulating Burners with Gas Pilot Line (Single Valve)



## Typical Gas Line Schematic for Electronic Modulating Burners with Gas Pilot Line (Twin Valve)



## Typical Gas Line Schematic for Electronic Modulating Burners with Gas Pilot Line (Twin Valve) and Optional LPG / Propane Connection



## STANDARD SPECIFICATION DATA

BURNER TYPE	Firing Rate kW		GAS VOLUME (m <sup>3</sup> /HR) *1		FIRING MODE OPTIONS			Motor kW	Voltage	Hz	Ph	Running Current (Amp)	Starting Current (Amp) *4
	MIN*3	MAX	MIN*3	MAX	High / Low	Electro / Pneumatic Modulation	Electronic Modulation *2						
TG4.450 Z	450	4500	41.5	415	✓	✓	✓	7.5	380-420	50	3	20	48
TG4.550 Y	550	5500	50.7	507		✓	✓	11.0	380-420	50	3	27	64
TG4.650 Y	650	6500	59.9	599		✓	✓	15.0	380-420	50	3	35	88

\*1 – Based on Nat. Gas C.V 10.84 kW/m<sup>3</sup>

\*2 - Fitted with a Ratiotronic 6000 system

\*3 – Based on 10:1 turn down fitted with VSD

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

### COMBUSTION HEAD

The Dunphy 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<sub>x</sub> BURNERS

All Dunphy T-Series burners are fitted with low NO<sub>x</sub> combustion heads as standard equipment.

As an optional extra all burners in this range can be fitted with an internal flue gas recirculation system to achieve ultra low NO<sub>x</sub> emissions.

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

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