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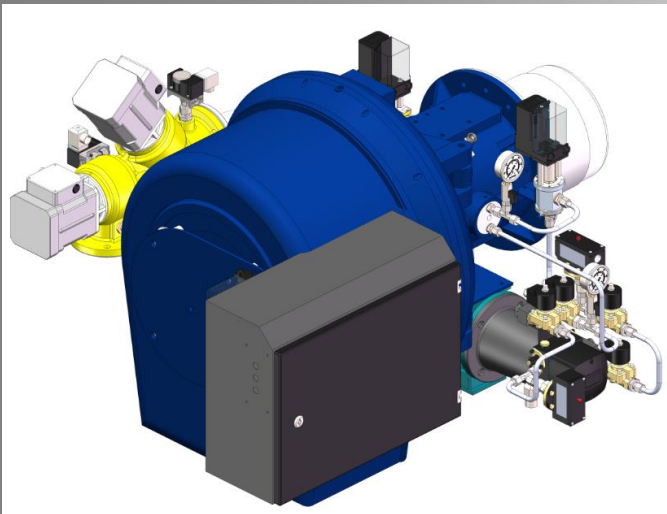
DATA SHEET

Model: TD3

Revision Date: October 2019

Output: 200 – 2950 kW

Revision Number: DS.TD3.22



- ◆ 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 number for TD3 Series burners are
 - ◆ TD3.200/220/290 – CE 679311

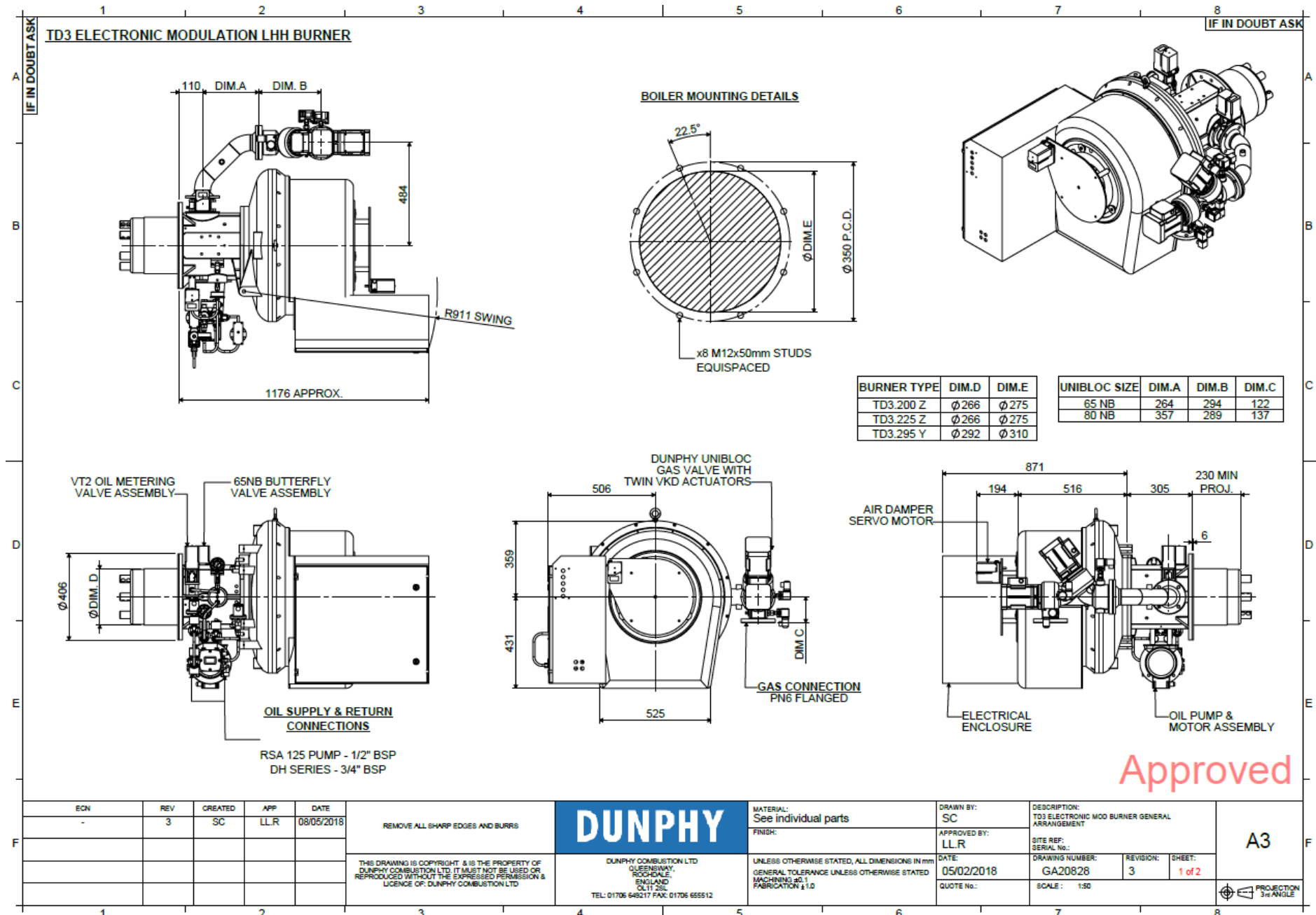


FM 24868

BURNER DIMENSIONS

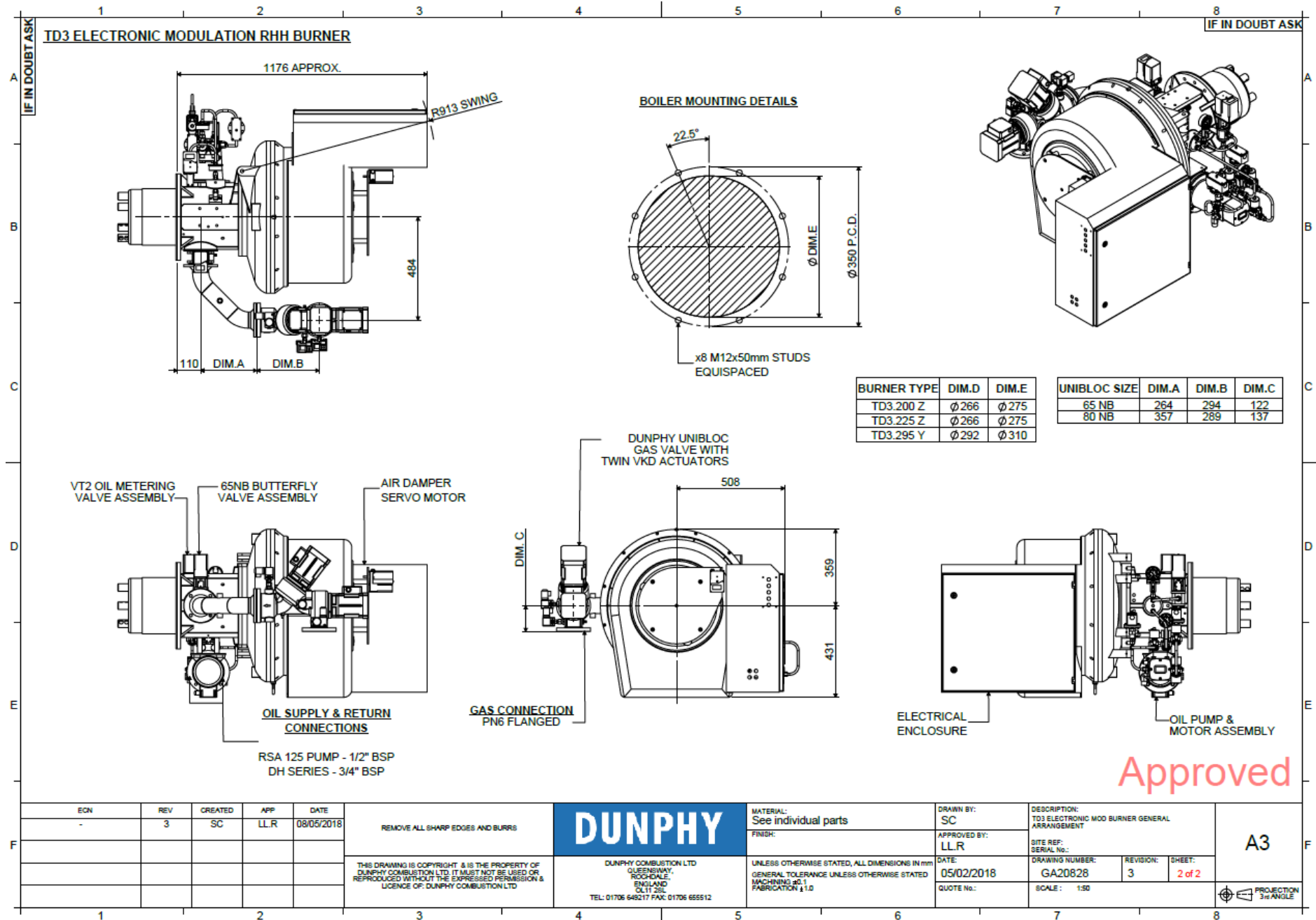
- ◆ Drawings shown on the following pages
- ◆ All dimensions in mm unless otherwise stated.
- ◆ The minimum standard dimension for 'PROJ' is 230mm. However, it can be varied to suit application. Requirements should be stated when unit is ordered.
- ◆ Burners supplied as Left hand hinge or Right hand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

ELECTRONIC MODULATION LHH WITH UNIBLOC GAS VALVE



Approved

ELECTRONIC MODULATION RHH WITH UNIBLOC GAS VALVE



HIGH / LOW LHH WITH VGD GAS VALVE

IF IN DOUBT ASK
1
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3
4
5
6
7
8
IF IN DOUBT ASK

A
B
C
D
E
F

1
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3
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7
8

IF IN DOUBT ASK
TD3 HIGH/LOW LHH BURNER
IF IN DOUBT ASK

GAS SUPPLY CONNECTION
VGD20 - 2" BSP SCREWED THREAD
VGD40 - PN16 FLANGED

BOILER MOUNTING DETAILS

| BURNER TYPE | DIM.D | DIM.E |
|-------------|-------|-------|
| TD3.200 Z | Ø 266 | Ø 275 |
| TD3.225 Z | Ø 266 | Ø 275 |
| TD3.295 Y | Ø 292 | Ø 310 |

| VGD | DIM.A | DIM.B |
|--------|-------|-------|
| 40 | 65 NB | 290 |
| | 80 NB | 311 |
| 20.503 | 50 NB | 209 |

OIL SUPPLY & RETURN CONNECTIONS
RSA 125 PUMP - 1/2" BSP
DH SERIES - 3/4" BSP

SIEMENS VGD40 GAS VALVE FITTED WITH SKP 15 & 75 GAS VALVE ACTUATORS

AIR DAMPER SERVO MOTOR

ELECTRICAL ENCLOSURE

OIL PUMP & MOTOR ASSEMBLY

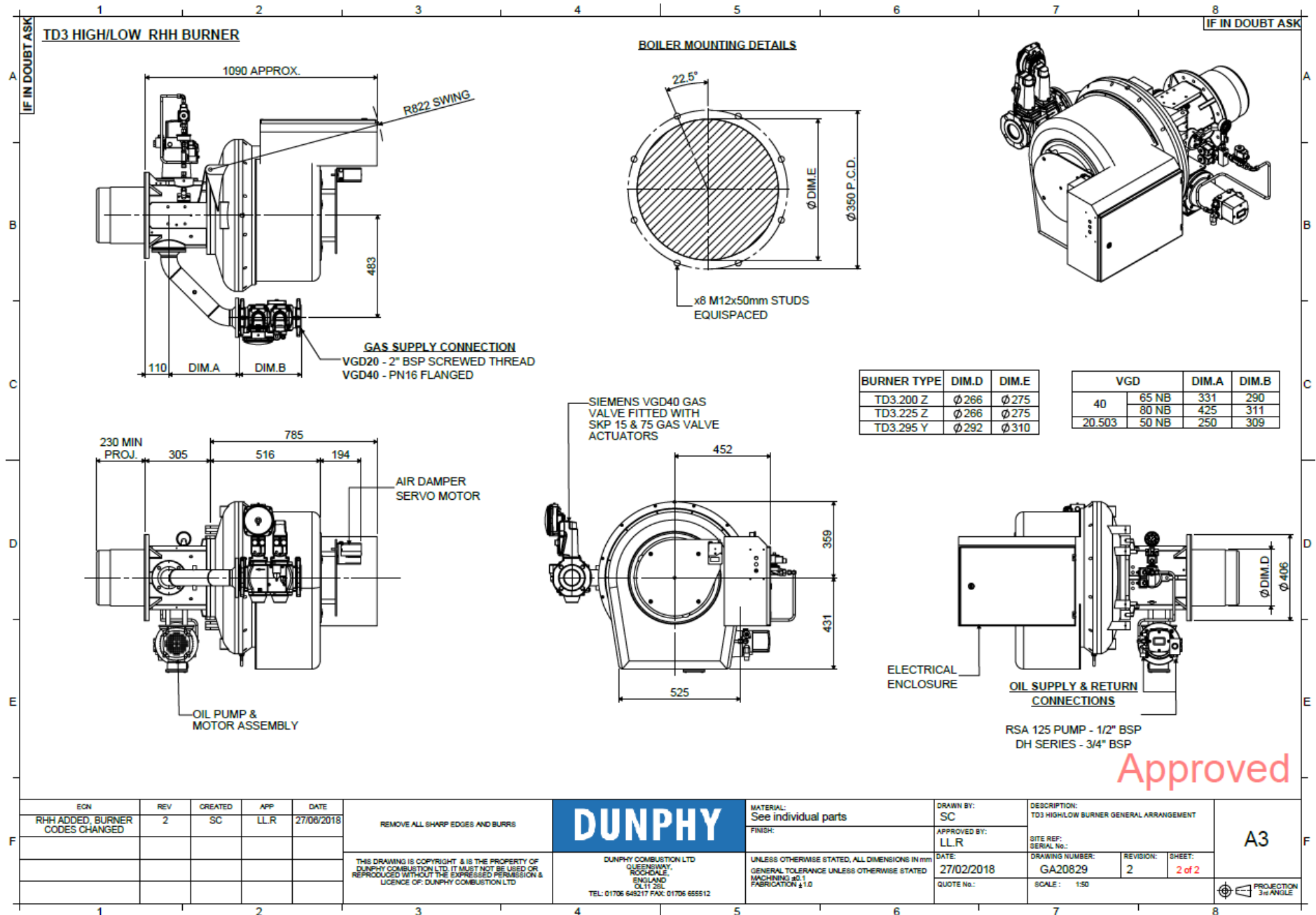
Approved

| | | | | | | | | | |
|---------------------------------|-----|---------|-----|------------|--|--|--|---------------------|---|
| ECN | REV | CREATED | APP | DATE | REMOVE ALL SHARP EDGES AND BURRS | DUNPHY | MATERIAL: See individual parts | DRAWN BY: SC | DESCRIPTION: TD3 HIGH/LOW BURNER GENERAL ARRANGEMENT |
| RHH ADDED, BURNER CODES CHANGED | 2 | SC | LLR | 27/06/2018 | | | FINISH: | APPROVED BY: LLR | SITE REF: SERIAL No.: |
| | | | | | 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, ROCHDALE, ENGLAND OL11 2SL TEL: 01706 645217 FAX: 01706 655512 | UNLESS OTHERWISE STATED, ALL DIMENSIONS IN mm GENERAL TOLERANCE UNLESS OTHERWISE STATED MACHINING ±0.1 FABRICATION ±1.0 | DATE: 27/02/2018 | DRAWING NUMBER: GA20829 |
| | | | | | | | | QUOTE No.: | REVISION: 2 |
| | | | | | | | | | SHEET: 1 of 2 |
| | | | | | | | | | SCALE: 1:50 |
| | | | | | | | | | PROJECTION 3rd ANGLE |

A3

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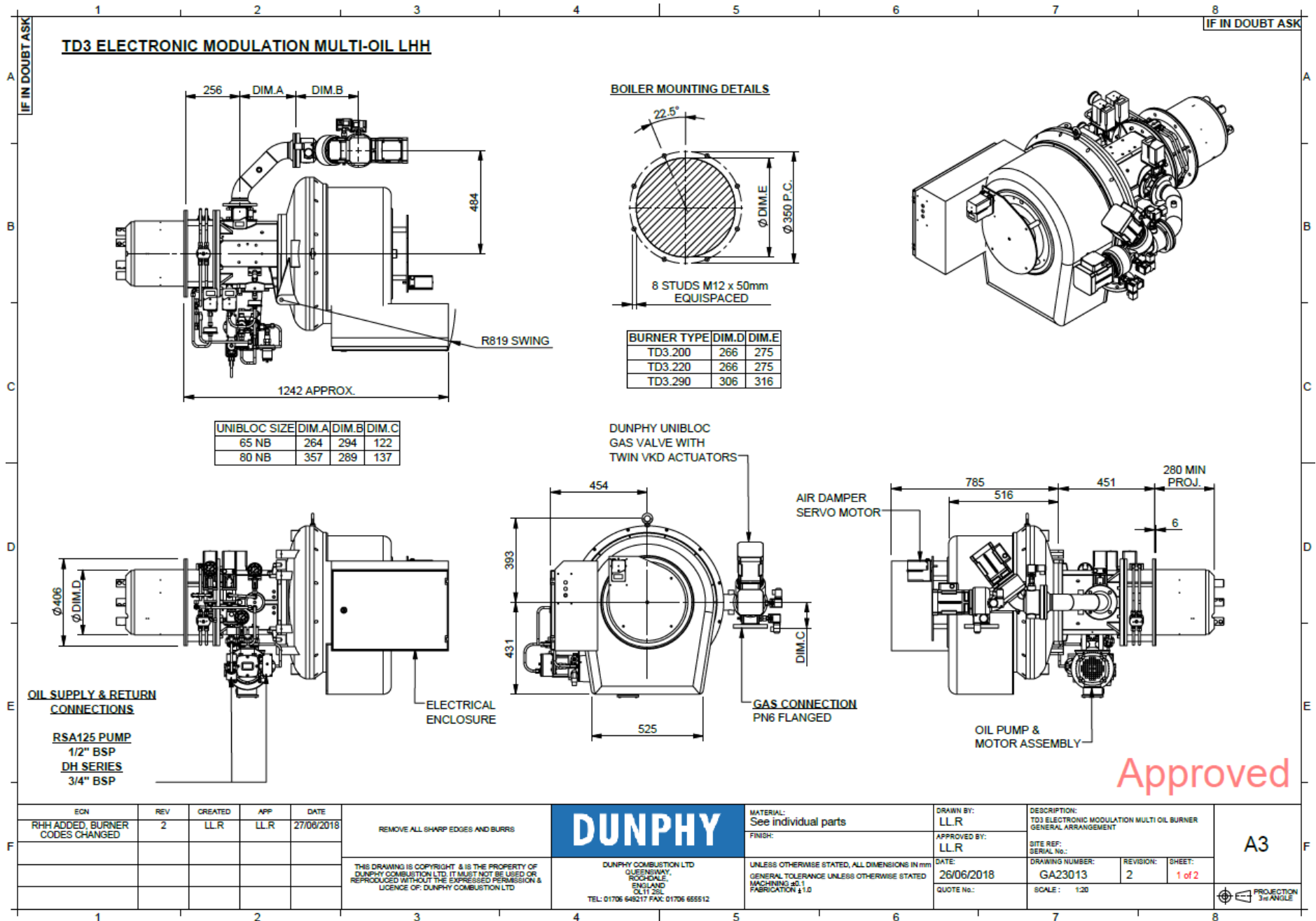
HIGH / LOW RHH WITH VGD GAS VALVE



Approved

| | | | | | | | | | | |
|---------------------------------|-----|---------|-----|------------|---|--|--|---------------------|---|----------------------------|
| EGN | REV | CREATED | APP | DATE | REMOVE ALL SHARP EDGES AND BURRS | DUNPHY | MATERIAL: See individual parts | DRAWN BY: SC | DESCRIPTION: TD3 HIGH/LOW BURNER GENERAL ARRANGEMENT | A3 |
| RHH ADDED, BURNER CODES CHANGED | 2 | SC | LLR | 27/06/2018 | 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 DL11 2SL TEL: 01706 648217 FAX: 01706 655512 | FINISH: | APPROVED BY: LLR | SITE REF: SERIAL No.: | |
| | | | | | | | UNLESS OTHERWISE STATED, ALL DIMENSIONS IN mm GENERAL TOLERANCE UNLESS OTHERWISE STATED MACHINING ±0.1 FABRICATION ±1.0 | DATE: 27/02/2018 | DATE: 27/02/2018 | DRAWING NUMBER: GA20829 |
| | | | | | | | QUOTE No.: | SCALE: 1:50 | | PROJECTION 3rd ANGLE |

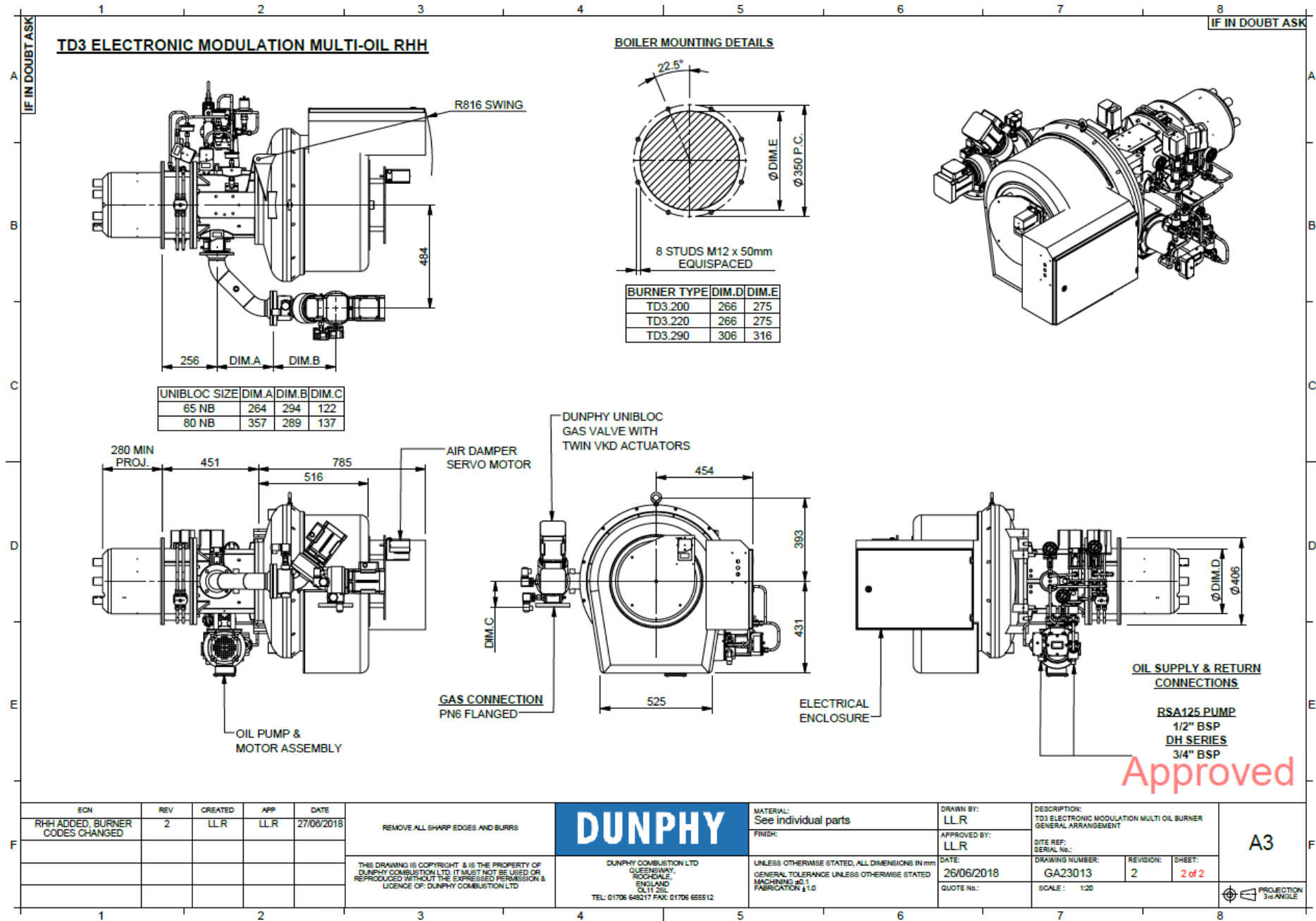
ELECTRONIC MODULATION MULTI-OIL MULTI-GAS LHH



Approved

| | | | | | | | | | | | | |
|---------------------------------|-----|---------|-----|------------|--|--|-----------------------------------|----------------------------|---|----------------|-------------------------|----|
| ECN | REV | CREATED | APP | DATE | REMOVE ALL SHARP EDGES AND BURRS | DUNPHY | MATERIAL: See individual parts | DRAWN BY: LLR | DESCRIPTION: TD3 ELECTRONIC MODULATION MULTI OIL BURNER GENERAL ARRANGEMENT | | | A3 |
| RHH ADDED, BURNER CODES CHANGED | 2 | LLR | LLR | 27/09/2018 | 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. | | FINISH: | APPROVED BY: LLR | SITE REF: SERIAL No.: | REVISION: 2 | SHEET: 1 of 2 | |
| | | | | | DUNPHY COMBUSTION LTD QUEENSWAY, ROCKDALE, ENGLAND DL11 2SL TEL: 01706 648217 FAX: 01706 655512 | UNLESS OTHERWISE STATED, ALL DIMENSIONS IN mm GENERAL TOLERANCE UNLESS OTHERWISE STATED MACHINING ±0.1 FABRICATION ±1.0 | DATE: 26/06/2018 | DRAWING NUMBER: GA23013 | SCALE: 1:20 | | PROJECTION 3rd ANGLE | |

ELECTRONIC MODULATION MULTI-OIL MULTI-GAS RHH



| ECN | REV | CREATED | APP | DATE |
|---------------------------------|-----|---------|-----|------------|
| RHH ADDED, BURNER CODES CHANGED | 2 | LLR | LLR | 27/06/2018 |

REMOVE ALL SHARP EDGES AND BURRS

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DUNPHY

DUNPHY COMBUSTION LTD
 QUEENSWAY
 ROCHDALE
 ENGLAND
 OL11 2SL
 TEL: 01706 648217 FAX: 01706 655512

MATERIAL: See individual parts
 FINISH:
 UNLESS OTHERWISE STATED, ALL DIMENSIONS IN mm
 GENERAL TOLERANCE UNLESS OTHERWISE STATED
 MACHINING: ±1.0
 FABRICATION: ±1.0

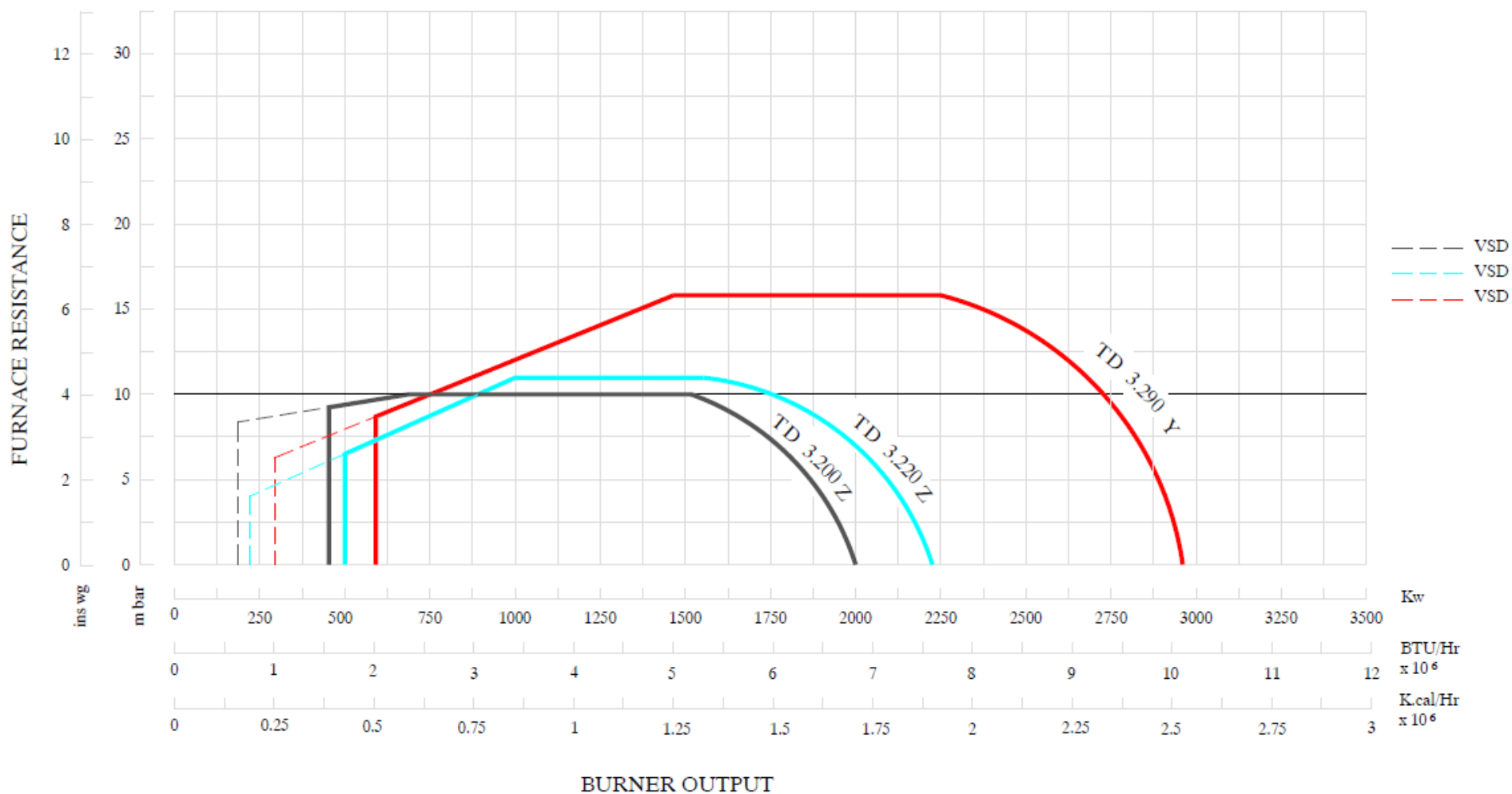
DRAWN BY: LLR
 APPROVED BY: LLR
 DATE: 26/06/2018
 QUOTE No.:

DESCRIPTION: TD3 ELECTRONIC MODULATION MULTI OIL BURNER GENERAL ARRANGEMENT
 SITE REF:
 SERIAL No.:
 DRAWING NUMBER: GA23013
 REVISION: 2
 SHEET: 2 of 2
 SCALE: 1:20

A3

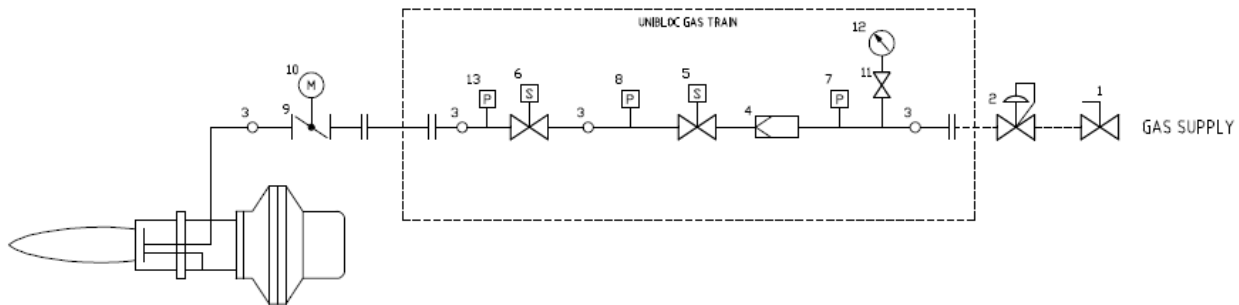
PROJECTION 3rd ANGLE

BURNER RATING GRAPH



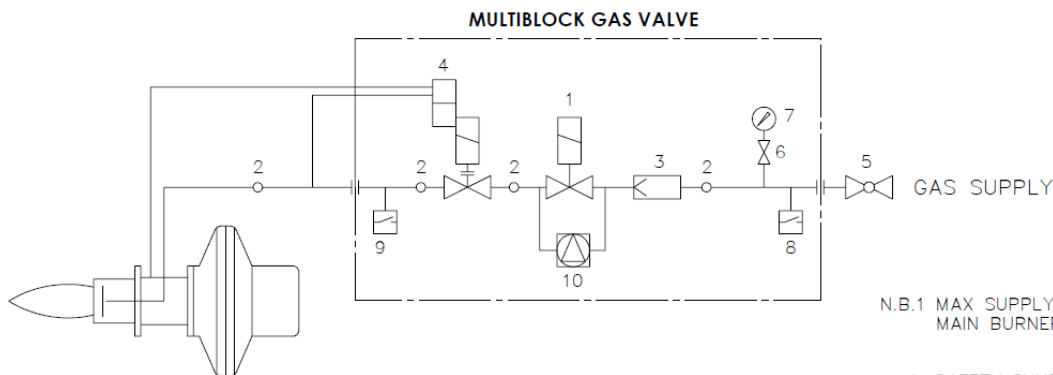
BURNER SCHEMATICS

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



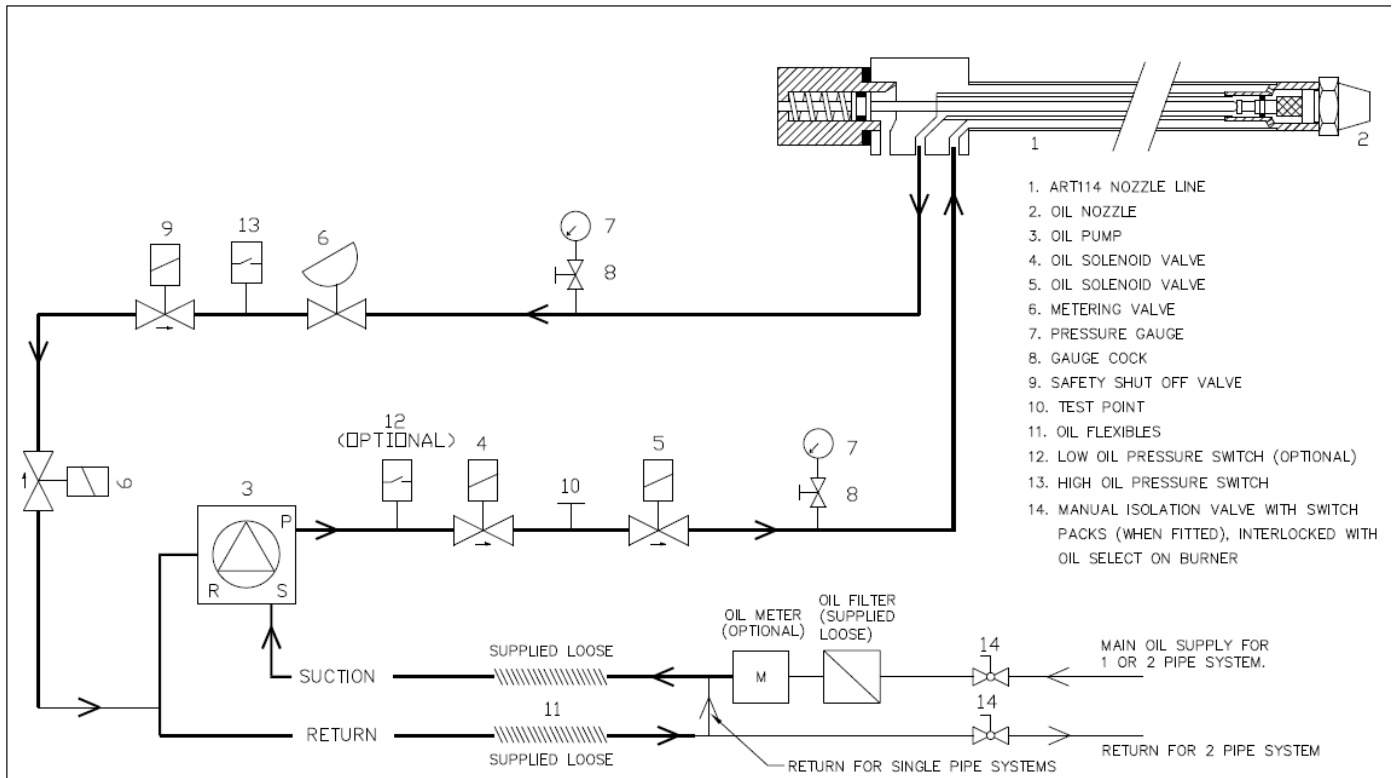
N.B.1 MAX SUPPLY PRESSURE TO MAIN BURNER 100mb.

- 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)

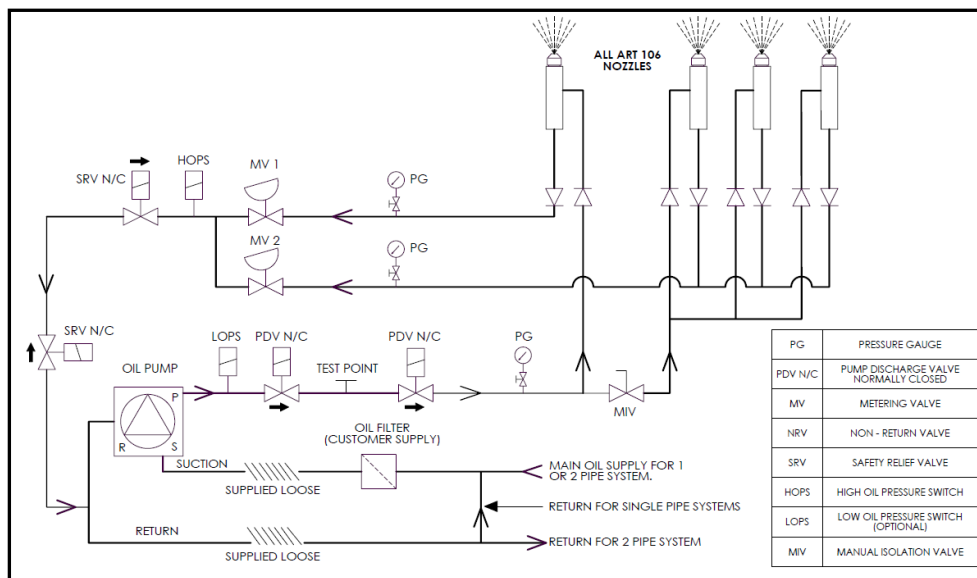
* IF SPECIFIED

** (CUSTOMER SUPPLY)

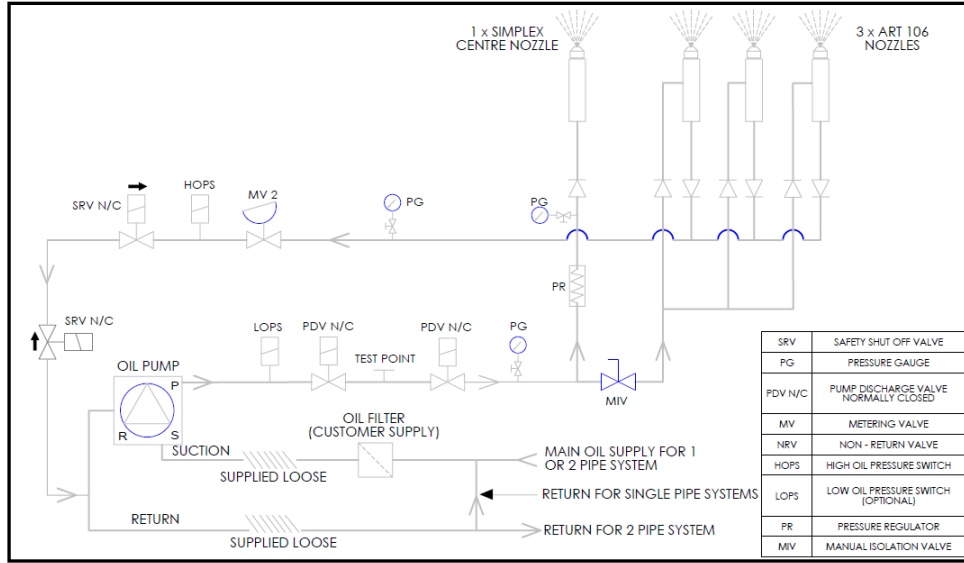
TYPICAL OIL LINE SCHEMATIC FOR LIGHT OIL DUAL FUEL BURNERS MODULATING WITH ART 1400 NOZZLE



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 (m3/HR) *1 | | FIRING MODE OPTIONS | | | | Fan Motor kW | Pump Motor kW | Voltage | Hz | Ph | Running Current (Amp) | Starting Current (Amp) *4 | Weight (kg) |
|------------------|----------------|------|-----------------------|-----|------------------------|------------|-------------------------|--------------------------------|--------------|---------------|---------|----|----|-----------------------|---------------------------|-------------|
| | MIN *3 | MAX | MIN *3 | MAX | Mod Gas High / Low Oil | High / Low | Electronic Modulation*2 | Electronic Modulation with VSD | | | | | | | | |
| TD3.200 Z | 200 | 2000 | 18.4 | 184 | ✓ | ✓ | ✓ | ✓ | 3.0 | 1.1 | 380-420 | 50 | 3 | 11 | 53 | 320 |
| TD3.225 Z | 220 | 2200 | 20 | 203 | ✓ | ✓ | ✓ | ✓ | 4.0 | 1.1 | 380-420 | 50 | 3 | 12 | 79 | 330 |
| TD3.295 Y | 295 | 2950 | 27 | 272 | ✓ | ✓ | ✓ | ✓ | 5.5 | 1.1 | 380-420 | 50 | 3 | 17 | 36 | 340 |

*1 – Based on Nat. Gas C.V 10.84 kWh/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 makes Dunphy combustion equipment the most sensible choice for all heating and process applications.

ULTRA LOW NOx BURNERS

All Dunphy T-Series burners are fitted with low NOx 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 NOx 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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