## DUNPHY

DUNPHY COMBUSTION LTD.
Queensway Rochdale
England OL11 2SL

+44 (0)1706 649217

+44 (0)1706 655512

www.dunphy.co.uk

## DATA SHEET

Model: TG6
Output: 1200 - 14000 kW

Revision Date: November 2019
Revision Number: DS.TG6.14


- 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 BS EN676 'Automatic forced draught burners for gaseous fuels.'
- CE approval number for the TG6 Series burners are:
- TG6.1200/1400 - CE 679311

C


## BURNER DIMENSIONS

- Drawings show on the following pages
- All dimensions in mm unless otherwise stated.
- The minimum standard dimension for 'PROJ' is 280 mm . 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 - RHH WITH UNIBLOC GAS VALVE

TG6 RHH ELECTRONIC MODULATION BURNER


| UNIBLOC SIZE | DIM. A | DIM. B | DIM. C |
| :---: | :---: | :---: | :---: |
| 100 NB | 448 | 385 | 192 |
| 125 NB | 324 | 515 | 232 |


| BURNER TYPE | DIM. D | DIM. E |
| :---: | :---: | :---: |
| TG6.1200Z | 516 | 525 |
| TG6.1400Y | 566 | 576 |



## ELECTRONIC MODULATION - LHH WITH UNIBLOC GAS VALVE

TG6 LHH ELECTRONIC MODULATION BURNER


| UNIBLOC SIZE | DIM. A | DIM. B | DIM. C |
| :---: | :---: | :---: | :---: |
| 100 NB | 448 | 385 | 192 |
| 125 NB | 324 | 515 | 232 |


| BURNER TYPE | DIM. D | DIM. E |
| :---: | :---: | :---: |
| TG6.1200Z | 516 | 525 |
| TG6.1400Y | 568 | 578 |



UNIbLOC GAS VALVE
WITH VKD ACTUATOR


## ELECTRONIC MODULATION - LHH WITH VGD GAS VALVE

## TG6 LHH ELECTRONIC MODULATION BURNER WITH VGD GAS VALVE




| UNIBLOC SIZE | DIM. A | DIM. B |
| :---: | :---: | :---: |
| 100 NB | 448 | 385 |
| 125 NB | 324 | 515 |


| BURNER TYPE | DIM. C | DIM. D |
| :---: | :---: | :---: |
| TG6.1200Z | $\varnothing 516$ | $\varnothing 525$ |
| TG6.1400Y | $\varnothing 568$ | $\varnothing 576$ |



## ELECTRONIC MODULATION - RHH WITH VGD GAS VALVE

## TG6 RHH ELECTRONIC MODULATION BURNER WITH VGD GAS VALVE



| BURNER TYPE | DIM. C | DIM. D |
| :---: | :---: | :---: |
| TG6.1200 Z | $\varnothing 516$ | $\varnothing 525$ |
| TG8.1400 Y | $\varnothing 566$ | $\varnothing 576$ |



## BURNER RATING GRAPH



## BURNER SCHEMATICS - ELECTRICAL MODULATING

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



| ITEM | LOCATION | DESCRIPTION |
| :---: | :---: | :---: |
| 1 | EXTERNAL | MANUAL GAS ISOLATION VALVE |
| 2 | EXTERNAL | MAIN GOVERNOR |
| 3 | UNIBLOC | TEST POINT |
| 4 | UNIBLOC | INTEGRAL FILTER |
| 5 | UNIBLOC | FIRST MAIN VALVE (VKD) |
| 6 | UNBLOC | SECOND MAIN VALVE (VKDI |
| 7 | UNIBLOC | LOW GAS PRESSURE SWITCH |
| 8 | UNIBLOC | VALVE PROVING PRESSURE SWITCH |
| 9 | BURNER | BUTTERFLY VALVE |
| 10 | BURNER | RATIOTRONIC 6026 SERVO MOTOR |
| 11 | UNIBLOC | TEST IOCK IOPTIONAL) |
| 12 | UNIBLOC | PRESSURE GAUGE (OPTIONAL) |

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



| ITEM | LOCATION | DESCRIPTION |
| :---: | :---: | :---: |
| 1 | EXTERNAL | MANUAL GAS ISOLATION VALVE |
| 2 | EXTERNAL | MAIN GOVERNOR |
| 3 |  | TEST POINT |
| 4 | UNBLOC | INTEGRAL FLLTER |
| 5 | UNIBLOC | FIRST MAIN VALVE (VKDI |
| 6 | UNBLOC | SECOND MAIN VALVE IVKD) |
| 7 | UNBLOC | LOW GAS PRESSURE SWITCH |
| 8 | UNIBLOC | VALVE PROVING PRESSURE SWITTH |
| 9 | BURNER | BUTTERFLY VALVE |
| 10 | BURNER | RATIOTRONIC 6O26 SERVO MOTOR |
| 11 | UNBBLOC | TEST COCK (OPTIONAL) |
| 12 | UNBLOC | PRESSURE GAUGE (OPTIONAL) |
| 13 | PILOT LINE | PILOT ISOLATION VALVE |
| 14 | PILOT LINE | PILOT GOVERNOR |
| 15 | PILOT LINE | PILOT VALVE |

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



| ITEM | LOCATION | DESCRIPTION |
| :---: | :---: | :---: |
| 1 | EXTERNAL | MANUAL GAS ISOLATION VALVE |
| 2 | EXTERNAL | MAIN GOVERNOR |
| 3 |  | TEST POINT |
| 4 | UNIBLOC | INTEGRAL FILTER |
| 5 | UNBLOC | FIRST MAIN VALVE (VKD) |
| 6 | UNBLOC | SECOND MAIN VALVE (VKD) |
| 7 | UNIBLOC | LOW GAS PRESSURE SWITCH |
| 8 | UNIBLOC | VALVE PROVING PRESSURE SWITCH |
| 9 | BURNER | BUTTERFLY VALVE |
| 10 | BURNER | RATIOTRONIC 6O26 SERVO MOTOR |
| 11 | UNIBLOC | TEST COCK IOPTIONAL) |
| 12 | UNBLLOC | PRESSURE GAUGE (OPTIONAL) |
| 13 | PILOT LINE | PILOT ISOLATION VALVE |
| 14 | PILOT LINE | PILOT GOVERNOR |
| 15 | PILOT LINE | PILOT VALVE |

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



| ITEM | LOCATION | DESCRIPTION |
| :---: | :---: | :---: |
| 1 | EXTERNAL | MANUAL GAS ISOLATION VALVE |
| 2 | EXTERNAL | MAIN GOVERNOR |
| 3 |  | TEST POINT |
| 4 | UNBLLOC | INTEGRAL FILTER |
| 5 | UNBLOC | FIRST MAIN VALVE (VKD) |
| 6 | UNBLOC | SECOND MAIN VALVE (VKDI |
| 7 | UNBLLOC | LOW GAS PRESSURE SWITCH |
| 8 | UNBLOC | VALVE PROVING PRESSURE SWITCH |
| 9 | BURNER | BUTTERFLY VALVE |
| 10 | BURNER | RATIOTRONIC 6O26 SERVO MOTOR |
| 11 | UNBLLOC | TEST COCK (OPTIONAL) |
| 12 | UNBLOC | PRESSURE GAUGE (OPTIONAL) |
| 13 | PILOT LINE | 3-WAY BALL VALVE |
| 14 | PILOT LINE | PILOT GOVERNOR |
| 15 | PILOT LINE | PILOT VALVE |

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



## STANDARD SPECIFICATION DATA

| BURNER TYPE | Firing Rate kW |  | GAS VOLUME (m3/HR) *1 |  | FIRING MODE OPTIONS | Motor kW | Motor Current | Voltage | Hz | Ph | Running Current | Weight (Kg) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MIN*3 | MAX | MIN | MAX | Electronic Modulation *2 |  |  |  |  |  |  |  |
| TG6.1200Z | 1200 | 12000 | 96 | 1107 | $\checkmark$ | 28.5 | 52 Amp | 400 | 50 | 3 | 56 Amp | 660 |
| TG6.1400Y | 1400 | 14000 | 129 | 1291 | / | 37 | 64 Amp | 400 | 50 | 3 | 68 Amp | 680 |

*1 - Based on Nat. Gas C.V 10.84 kW/m3
*2 - Fitted with a Ratiotronic 6000 system
*3 - Based on 10:1 turn down fitted with VSD

## COMBUSTION HEAD

The Dunphy gas combustion head incorporates a twostage 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 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 an internal recirculation system to achieve ultralow NOx emissions.

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

