

# **PRESS T/G Series**

Three Stage Light Oil Burners

P 140 T/G	380/830	÷	1660 kW
P 200 T/G	557/1186	÷	2372 kW
P 300 T/G	712/1779	÷	3560 kW
P 450 T/G	890/2670	÷	5340 kW







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The PRESS T/G series of burners covers a firing range from 830 to 5340 kW.

Available in 4 different models, this burners are particularly well suited for matching with pressurized chamber boilers.

For their characteristics, they find application in big civil plants for domestic heating or in industrial applications where thermal load is repetitive and predictable.

An hydraulic ram exclusive system, with 3 adjustable positions, regulates dampers opening, allowing air passage in relation to output required: in this way flame stability is optimized in every working point, with micro-regulation available.

The burners are fitted with a microprocessor-based burner safety control box which supplies indication of operation and diagnosis of fault cause.

A RIELLO burner (Heat Generator), where it is matched with a water-based boiler (Heater Housing) with a nominal output  $\leq$  400 kW, providing heat for heating purposes and heat to deliver sanitary hot water, can be installed:

- With boilers (heater housings) already in service in the field, for replacement, in conformity to Article 1, paragraph 2, point (G) of the EU Regulation No. 813/2013;

- With boilers (heater housings) on a new installation, put on the market after 26th of September 2015;

- With all new boilers (heater housings), where placed on the market before 26th of September 2015.

## **Technical Data**

Burner operation mode Three stage Modulation ratio at max, output 3 : 1 Fun time 5	Model			P 140 T/G	P 200 T/G	P 300 T/G	P 450 T/G			
Modulation ratio at max. output         3 : 1           Servomotor            run time         S           Heat output         McGal/h           McGal/h         327/71#+?14/28           McGal/h         71           McGal/h         327/71#+?14/28           McGal/h         71           Mc	Burner operation	n mode		Three stage						
Servomotor         type            run time         s            KW         380/830+1660         557/1186+2372         712/1779+3560         890/2670+5340           Mcal/In         327/714+14,28         479/1020-2040         612/1530-3062         765/2256+4592           Working temperature         °C         min./max.         0/40         75/225+450           Working temperature         °C         min./max.         0/40         75/225+450           PUEUAIR DATA         Net calorific         kWh/kg         11,86         128           Ught oil         Value         kcal/kg         10200         17           Pump         type         J7         J7         TA2         TA3           Atomised pressure         bar         190 (20 bar)         190 (20 bar)         525 (20 bar)           Fuel temperature         max. °C         50         50         10         16           Fuel pre-heater         max. °C         60         60         1216/123/120 - (£10%) A         A150/230 - (£10%) A         A150/230 - (£10%) A         A150/230 - (£10%) A         A150/230 - (£10%) A         A121/20 - (£10%) A	Modulation ratio	at max. output			3	:1				
run time         s            Heat output         KW         380/80+1660         557/186+2372         765/1296+4352           Working temperature         °C min./max.         0/40         60/150+300         75/225+450           Vorking temperature         °C min./max.         0/40         60/150+300         75/225+450           Vurking temperature         °C min./max.         0/40         60/150+300         75/225+450           Vurking temperature         value         kcal/kg         10200         4+6 (at 20°C)         17           Pump         type         J7         J7         TA2         TA3           Atomised pressure         bar         12         12         12           Fuel temperature         max. °C         50         50         12         12           Fuel temperature         max. °C         60         60         12	Servomotor		type		-	-				
kW         380/830+1660         557/1186+2372         712/1779+3560         890/2670+5340           Heat output         Mcai/h         327/714+1428         479/1020+2040         612/15304302         752/2254450           Working temperature $^{\circ}$ C min./max.         0/40         60/150+300         75/2254450           PUEL/AIR DATA         Net calorific         kWh/kg         11,86         12         12           Value         Kcal/kg         10200         12         14         6 (al 20°C)           Pump         dtype         J7         J7         TA2         TA3           Atomised pressure         bar         12         12         Fuel temperature         max. °C         50           Fuel pre-hater         N0         50         Centrifugal with forward curve blades         Air temperature         max. °C         60           Electrical supply         Ph/Hz/V         11/50/400~(±10%) A 3/50/230~(±10%) A         Auxiliary electrical supply         Auxiliary electrical supply         Auxiliary electrical supply         Auxiliary electrical supply         Net Auxiliary electrical supply         Net Auxiliary electrical supply		run time	s		-	_				
Heat output         Mcal/h         327/714+1428         479/1020+2040         612/1530+3062         765/12296+4592           Working temperature $\mathbb{C}$ (mi.nmax.         0/40         60/10-0300         75/225+450           Working temperature $\mathbb{C}$ (mi.nmax.         0/40         60/10-0300         75/225+450           Velkard DATA         Net calorific         kkWh/kg         11,86         10200           Uiscosity         mm²/s (CS1)         4 + 6 (at 20°C)         4         74           Pump         delivery         kg/h         190 (20 bar)         340 (20 bar)         525 (20 bar)           Adomised presure         bar         12         TA3         TA3           Fuel temperature         max. °C         50         525 (20 bar)         Adomised presure         50           Fuel temperature         max. °C         60         ELECTRICAL DATA         Electrical supply         Ph/Hz/V         1/50/230 (±10%) $>$ Auxiliary electrical supply         Ph/Hz/V         1/50/230 (±10%) $>$ Auxiliary electrical power         kW         4,5         5,5         10         18           Auxiliary electrical power         kW         1,5         1,5         2,5         3         Heaters electrical power         kW <td></td> <td></td> <td>kW</td> <td>380/830÷1660</td> <td>557/1186÷2372</td> <td>712/1779÷3560</td> <td>890/2670÷5340</td>			kW	380/830÷1660	557/1186÷2372	712/1779÷3560	890/2670÷5340			
kg/h32/70+14/040/100+20060/150+30075/225+450Working temperature°C min./max.0/4075/225+450Working temperature°C min./max.0/40VIELVAIR DATAVIELVAIR DATAVIELOAIR DATAVIELOAIR DATAVIELOAIR DATAVIELOAIR COLSPANVIELOAIR COLSPANVIELOAIR COLSPANVIELOAIR COLSPANVIELOAIR COLSPANVIELOAIR COLSPANVIELOAIR COLSPANVIELOAIR COLSPANColspan="2">Colspan="2"VIELOAIR Colspan="2"Colspan="2"Colspan="2"VIELOAIR Colspan="2" <th <="" colspan="2" t<="" td=""><td>Heat output</td><td></td><td>Mcal/h</td><td>327/714÷1428</td><td>479/1020÷2040</td><td>612/1530÷3062</td><td>765/2296÷4592</td></th>	<td>Heat output</td> <td></td> <td>Mcal/h</td> <td>327/714÷1428</td> <td>479/1020÷2040</td> <td>612/1530÷3062</td> <td>765/2296÷4592</td>		Heat output		Mcal/h	327/714÷1428	479/1020÷2040	612/1530÷3062	765/2296÷4592	
Working temperature°C min./max.0/40FUELAR DATAViscosityWaluekcal/kg10200Viscositymm²/s (cSt)4 ÷ 6 (at 20°C)PumptypeJ7J7TA2Atomised pressurebar12Fuel temperaturemax. °C50Fuel temperaturemax. °C50Fuel temperaturemax. °C60Electrical supplyPh/Hz/V3N/50/400~(±10%) ∧ 3/50/230~(±10%) △Auxillary electrical supplyPh/Hz/V3N/50/400~(±10%) ∧ 3/50/230~(±10%) △Auxillary electrical supplyPh/Hz/V1/50/230 (±10%) △Total electrical powerkW4,55,510Control boxtypeRM0Total electrical powerkWRedependentProtection levelIP40Pump motor currentPump motor start up currentARedependentPump motor start up currentA9/13,59/51/6,417,51/3Part of trial powerkW347,515Rated fan motor currentA8/13,59/51/6,411,51/329/50,2Fan motor start up currentA8/13,59/51/6,411,51/329/50,2Fan motor start up currentA8/13,59/51/6,411,51/329/50,2Fan motor start up currentA8/13,59/51/6,411,51/329/50,2Fan motor start up currentA8/13,59/51/6,411,51/329/50			kg/h	32/70÷140	47/100÷200	60/150÷300	75/225÷450			
FUELVAIR DATALight oilNet calorifickWh/kg11,86Uscositymm²/s (cst)4 + 6 (at 200)PumptypeJ7J7TA2Atomised pressurebar12Fuel temperaturemax. °C50Fuel temperaturemax. °C60Eterrical supplyPh/Hz/V3N/50/400-(£10%) $\land$ 3/50/230-(±10%) $\land$ Auxiliary electrical supplyPh/Hz/V3N/50/400-(£10%) $\land$ 3/50/230-(±10%) $\land$ Auxiliary electrical powerkW4,55,510Beaters electrical powerkW1,51,52,53Heaters electrical powerkW1,51,52,53Pump motor start up currentAPump motor start up currentAPump motor electrical powerkW347,515Pump motor start up currentA8/13,59,5/16,417,5/3029/50,2Aread powerkW347,5152,5Ignition trasformerVI - V2230 V - 2x6 kV11 - 122,3 A - 35 mAOperationIntermittent (at least one stop every 24 h)EMISIONSSound pressuredBA86,585,589,590Sound pressuredBA86,585,589,590Sound pressuredBA86,585,589,590Sound pressuredBA86,585,589,590Sound pressuredBA86,585,589,590	Working tempera	ature	°C min./max.		0/40					
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Light oilvaluekcal/kg10200Viscositymm²/s (st)4 + 6 (at 20°C)PumptypeJ7J7TA2TA3Atomised pressurebar12340 (20 bar)525 (20 bar)Atomised pressurebar1217TA2TA3Tuel temperaturemax. °C505050Fuel pre-heaterNO605050EteCRICAL DATAEteCrical supplyPh/Hz/V3N/50/400~(±10%) $\land$ 3/50/230~(±10%) $\triangle$ Auxiliary electrical supplyPh/Hz/VN/50/230 (±10%) $\land$ 3/50/230~(±10%) $\triangle$ Control boxtypeRM0Total electrical powerkW4,55,5Total electrical powerkWProtection levelIP40Pump motor electrical powerkWPump motor start up currentAA7,515Rated fan motor currentAS1/86Asted fan motor currentAS1/86Asted fan motor currentAS1/86Asted fan motor currentA51/86Asted fan motor currentA51/86AppenderIntermittent (at least one stop every 24 h)Endor protection levelIP55Fan motor fart up currentAA51/8648/83Intermittent (at least one stop every 24 h)Endor protection levelIP55Fan motor start up currentAAS1/86S5/5So	Net calorific		kWh/kg		11.	86				
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Pumpdeliverykg/h190 (20 bar)190 (20 bar)340 (20 bar)525 (20 bar)Atomised pressurebar12Fuel temperaturemax. °C50Fuel temperaturemax. °C60Electrical supplyPh/Hz/V3N/50/400~(±10%) $\triangle$ 3/50/230~(±10%) $\triangle$ Control boxtypeRMOTotal electrical supplyPh/Hz/V1/50/230 (±10%) $\triangle$ Control boxtypeRMOTotal electrical powerkW4,5Auxiliary electrical powerkW1,5Auxiliary electrical powerkWProtection levelIP40Pump motor start up currentAPump motor start up currentAPump motor start up currentA8/13,5An motor electrical powerkW34Total elestion levelIPPump motor start up currentAPump motor start up currentA8/13,5An motor electrical powerKW34Total valuerIPPan motor electrical powerKW34Pung motor start up currentA8/13,5And the start up currentAPump motor start up currentA55Sound pressuredBA86,585,5Ban motor start up currentAComposition mayIPFan motor start up currentA51/86An motor start up current <td></td> <td>type</td> <td></td> <td>J7</td> <td>J7</td> <td>TA2</td> <td>TA3</td>		type		J7	J7	TA2	TA3			
Atomised pressurebar12Fuel temperaturemax. °C50Fuel pre-heaterNOFantypeCentrifugal with forward curve bladesAir temperaturemax. °C60Electrical supplyPh/Hz/V3N/50/400~(±10%) $\land$ 3/50/230~(±10%) $\land$ Auxiliary electrical supplyPh/Hz/V1/50/230 (±10%)Control boxtypeRhOTotal electrical powerkW4,5KW1,51,52,5Auxiliary electrical powerkWNoProtection levelIP40Pump motor electrical powerkWProtection levelIP40Pump motor rurrentAPump motor start up currentAPump motor currentA8/13,59,5/16,4Pan motor start up currentA8/13,59,5/16,4A S1/8648/83113/195167/291Fan motor start up currentA51/8A S1/8648/83113/195fan motor start up currentA51/8A S1/8685,589,590Sound pressuredBA86,585,589,5Sound pressuredBA86,585,589,590Sound powerWComparisonmg/kWh< 70	Pump	deliverv	kg/h	190 (20 bar)	190 (20 bar)	340 (20 bar)	525 (20 bar)			
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Fuel pre-heaterNOFantypeCentrifugal with forward curve bladesAir temperaturemax. °C60ELCTRICAL DATAElectrical supplyPh/Hz/VBitterrical supplyPh/Hz/V3N/50/400~(±10%) $\land$ 3/50/230~(±10%) $\triangle$ Auxillary electrical supplyPh/Hz/V11/50/230 (±10%)Control boxtypeRMOTotal electrical powerkW4,5State electrical powerkW1,5Auxillary electrical powerkW1,5Protection levelIP40Pump motor electrical powerkWRated pump motor currentARated pump motor start up currentAPump motor protection levelIPFan motor start up currentA51/86A51/8648/83113/195Fan motor start up currentA51/86State fan motor start up currentA51/86GereationV1 - V2230 V - 2x6 kVIn - 122,3 A - 35 mAOperationSound powerWCo emissionmg/kWh<70	Fuel temperatur	e	max. °C		5	0				
FantypeCentrifugal with forward curve bladesAir temperaturemax. $^{\circ}$ C60ELECTRICAL DATA60Electrical supplyPh/Hz/V3N/50/400-(±10%) $\land$ 3/50/230-(±10%) $\triangle$ Auxiliary electrical supplyPh/Hz/V1/50/230 (±10%)Control boxtypeRM0Total electrical powerkW4,5Auxiliary electrical powerkW1,5Ital electrical powerkW1,5Protection levelIP40Pump motor electrical powerkWRated pump motor currentAPump motor start up currentAPump motor start up currentA51/86A51/8648/33113/195Fan motor felectrical powerkW34Total electrical powerkW34Pump motor start up currentAPart electrical powerkW34Pump motor start up currentA51/86A51/8648/83113/195Fan motor feetcricel lowerIP55Equation trasformerV1 - V2230 V - 2x6 kVIgnition trasformerV1 - V2230 V - 2x6 kVIntermittent (at least one stop every 24 h)EMISSIONSSound powerWCo emissionmg/kWh<70	Fuel pre-heater				N	0				
Air temperature max. °C 60 ELECTRICAL DATA Electrical supply Ph/Hz/V 3N/50/400~(±10%) $\land$ 3/50/230~(±10%) $\land$ Auxiliary electrical supply Ph/Hz/V 1/50/230 (±10%) Control box type RM0 Total electrical power kW 4,5 5,5 10 18 Auxiliary electrical power kW 1,5 1,5 2,5 3 Heaters electrical power kW Protection level IP 40 Pump motor electrical power kW Pump motor start up current A Pump motor protection level IP Fan motor electrical power kW 3 4 7,5 15 Rated pump motor current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 71/86 48/83 113/195 167/291 Fan motor start up current A 71/86 48/83 113/195 167/291 Fan motor protection level IP 55 Electrical power V	Fan		type	Ce	ntrifugal with fo	rward curve bla	des			
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Electrical supply Ph/Hz/V 3N/50/400~(±10%) $\land$ 3/50/230~(±10%) $△$ Auxiliary electrical supply Ph/Hz/V 1/50/230 (±10%) Control box type RMO Total electrical power kW 4,5 5,5 10 18 Auxiliary electrical power kW 1,5 1,5 2,5 3 Heaters electrical power kW Protection level IP 40 Pump motor electrical power kW Rated pump motor current A Pump motor protection level IP Fan motor electrical power kW 3 4 7,5 15 Rated fan motor current A 8/13,5 9,5/16,4 17,5/30 29/50,2 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor rotection level IP 55 Itype 1P Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor protection level IP 55 Material Start up current A 51/86 48/33 113/195 167/291 Fan motor protection level IP 55 Material Start up current A 51/86 48/33 113/195 167/291 Fan motor protection level IP 55 Material Start up current A 51/86 48/33 113/195 167/291 Fan motor protection level IP 55 Material Start up current A 51/86 48/33 113/195 167/291 Fan motor protection level IP 55 Material Start up current A 51/86 48/33 113/195 167/291 Fan motor protection level IP 55 Material Start up current A 51/86 48/33 113/195 167/291 Fan motor protection level IP 55 Material Start up current A 51/86 48/33 113/195 167/291 Fan motor protection level IP 55 Material Start up current A 51/86 48/33 113/195 167/291 Fan motor protection level IP 55 Material Start up current A 51/86 48/33 113/195 167/291 Fan motor protection mg/kWh < Co emission mg/kWh < NO & Pacharach <2 CxHy emission mg/kWh <230 <340 APPROVAL Directive 2009/142/EC - 2014/30/UE - 2014/35 UE Conforming to EN 267 Certification CE-0441/B CE-1002/R	ELECTRICAL DATA					-				
Axiliary electrical supply Ph/H2/V 1/50/230 (±10%) Control box type RM0 Total electrical power kW 4,5 5,5 10 18 Axiliary electrical power kW 1,5 1,5 2,5 3 Heaters electrical power kW Protection level IP 40 Pump motor electrical power kW Rated pump motor current A Pump motor start up current A Pump motor protection level IP Fan motor electrical power kW 3 4 7,5 15 Rated fan motor current A 8/13,5 9,5/16,4 17,5/30 29/50,2 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor start up current A 51/86 48/83 113/195 167/291 Fan motor protection level IP 55 Is gritten trasformer VI - V2 230 V - 2x6 kV II - I2 2,3 A - 35 mA Operation Electrical power W C0 emission mg/kWh <70 Grade of smoke indicator NO Bacharach <2 CxHy emission mg/kWh <230 <340 APPROVAL Directive 2009/142/EC - 2014/30/UE - 2014/35 UE Conforming to EN 267 Certification CE-0441/B CE-1002/R	Electrical supply		Ph/Hz/V	3N/	/50/400~(±10%) ノ	3/50/230~(±10%	(6) △			
Control box         type         RMO           Total electrical power         kW         4,5         5,5         10         18           Auxiliary electrical power         kW         1,5         1,5         2,5         3           Heaters electrical power         kW              Protection level         IP         40            Pump motor electrical power         kW             Rated pump motor current         A             Pump motor start up current         A             Fan motor electrical power         kW         3         4         7,5         15           Rated fan motor current         A         8/13,5         9,5/16,4         17,5/30         29/50,2           Fan motor start up current         A         8/13,5         9,5/16,4         17,5/30         29/50,2           Fan motor rotection level         IP              Ignition trasformer         V1 - V2         230 V - 2x6 kV            In - 12         2,3 A - 35 mA             Operation         Intermittent (at least one stop every 24 h)	Auxiliary electric	al supply	Ph/Hz/V	1/50/230 (±10%)						
Draw         Draw         Draw           Total electrical power         kW         4,5         5,5         10         18           Auxiliary electrical power         kW         1,5         1,5         2,5         3           Heaters electrical power         kW             Protection level         IP         40           Pump motor electrical power         kW            Rated pump motor current         A            Pump motor start up current         A            Pump motor protection level         IP            Fan motor current         A         8/13,5         9,5/16,4         17,5/30         29/50,2           Fan motor start up current         A         8/13,5         9,5/16,4         17,5/30         29/50,2           Fan motor start up current         A         51/86         48/83         113/195         167/291           Fan motor start up current         A         51/86         48/83         113/195         167/291           Fan motor protection level         IP         55         50         90         50           Sound pressure         dBA         86,5         85,5         89,5	Control box		type	RMO						
Auxiliary electrical power         kW         1,5         1,5         2,5         3           Heaters electrical power         kW          Protection level         IP         40           Pump motor electrical power         kW          Rated pump motor current         A            Rated pump motor start up current         A           Pump motor start up current         A            Pump motor rotection level         IP           Pump motor start up current         A            Pump motor rotection level         IP           Pump motor current         A         8/13,5         9,5/16,4         17,5/30         29/50,2           Fan motor rotection level         IP          55           Pump motor start up current         A         8/13,5         9,5/16,4         17,5/30         29/50,2         23         Participe 167/291         Fan motor start up current         A         8/13,5         9,5/16,4         17,5/30         29/50,2         Fan motor protection level         IP         55         Sound pression         To         V1 - V2         230 V - 2x6 kV         11 - 12         2,3 A - 35 mA         Operation <td colspan="2">Total electrical power</td> <td>kW</td> <td>4.5</td> <td colspan="3">4.5 5.5 10</td>	Total electrical power		kW	4.5	4.5 5.5 10					
Heaters electrical power       kW          Protection level       IP       40         Pump motor electrical power       kW          Rated pump motor current       A          Pump motor start up current       A          Fan motor electrical power       kW       3       4       7,5       15         Rated fan motor current       A       8/13,5       9,5/16,4       17,5/30       29/50,2         Fan motor start up current       A       8/13,5       9,5/16,4       17,5/30       29/50,2         Fan motor start up current       A       8/13,5       9,5/16,4       17,5/30       29/50,2         Fan motor protection level       IP       55       167/291       167/291         Fan motor protection level       IP       55       167/291         Ignition trasformer       V1 - V2       230 V - 2x6 kV       11 - 12       2,3 A - 35 mA         Operation       Intermittent (at least one stop every 24 h)       11 - 12       2,3 A - 35 mA       09         Sound pressure       dBA       86,5       85,5       89,5       90       50         Sound power       W         C0       Ce mission	Auxiliary electrical power		kW	1,5	1,5	2,5	3			
Protection level         IP         40           Pump motor electrical power         kW            Rated pump motor current         A            Pump motor start up current         A            Pump motor start up current         A            Pump motor start up current         A            Pump motor protection level         IP            Fan motor current         A         8/13,5         9,5/16,4         17,5/30         29/50,2           Fan motor current         A         8/13,5         9,5/16,4         17,5/30         29/50,2           Fan motor start up current         A         51/86         48/83         113/195         167/291           Fan motor protection level         IP         55         50         167/291           Fan motor protection level         IP         230 V - 2x6 kV         11 - 12         2,3 A - 35 mA           Operation         Intermittent (at least one stop every 24 h)         11 - 12         2,3 A - 35 mA           Sound pressure         dBA         86,5         85,5         89,5         90           Sound power         W          C0         C0 emission         mg/kWh         -	Heaters electrica	al power	kW		-	-				
Pump motor electrical powerkWRated pump motor currentAPump motor start up currentAPump motor start up currentAFan motor electrical powerkW347,515Rated fan motor currentA8/13,5A8/13,59,5/16,417,5/3029/50,2Fan motor start up currentA51/8648/83113/195167/291Fan motor protection levelIP55Ignition trasformerV1 - V2230 V - 2x6 kVIgnition trasformerIntermittent (at least one stop every 24 h)EMISSIONSSound pressuredBA86,585,5Sound pressureMBA86,585,590Sound powerWC0 emissionmg/kWh< 70	Protection level	•	IP	40						
Rated pump motor currentAPump motor start up currentAPump motor start up currentAFan motor electrical powerkW34Rated fan motor currentA8/13,5Sated fan motor currentA8/13,5Fan motor start up currentA51/86Fan motor protection levelIP55Fan motor protection levelIP55Ignition trasformerV1 - V2230 V - 2x6 kVIntermittent (at least one stop every 24 h)EMISSIONSSound pressuredBA86,585,589,5Sound powerWC0 emissionmg/kWh<70	Pump motor elec	ctrical power	kW							
Pump motor start up currentAPump motor protection levelIPFan motor electrical powerkW347,515Rated fan motor currentA8/13,59,5/16,417,5/3029/50,2Fan motor start up currentA51/8648/83113/195167/291Fan motor protection levelIP55Ignition trasformerUp e55Ignition trasformerV1 - V2230 V - 2x6 kVIn - I22,3 A - 35 mAOperationIntermittent (at least one stop every 24 h)EMISSIONSSound pressuredBA86,585,589,590Sound powerWC0 emissionmg/kWh<70	Rated pump mot	tor current	А							
Pump motor protection levelIPFan motor electrical powerkW347,515Rated fan motor currentA8/13,59,5/16,417,5/3029/50,2Fan motor start up currentA51/8648/83113/19516/7291Fan motor protection levelIP55Ignition trasformerV1 - V2230 V - 2x6 kVIntermittent (at least one stop every 24 h)I1 - 122,3 A - 35 mAOperationIntermittent (at least one stop every 24 h)EMISSIONSSound pressuredBA86,585,589,590Sound powerWC0 emissionmg/kWh< 70	Pump motor sta	rt up current	А							
Fan motor electrical powerkW347,515Rated fan motor currentA8/13,59,5/16,417,5/3029/50,2Fan motor start up currentA51/8648/83113/195167/291Fan motor protection levelIP55Ignition trasformerV1 - V2230 V - 2x6 kVIntermittent (at least one stop every 24 h)Intermittent (at least one stop every 24 h)EMISSIONSSound pressuredBA86,585,589,590Sound powerWCCCCGrade of smoke indicatorNO Bacharach< 2	Pump motor pro	tection level	IP		-	-				
Rated fan motor currentA $8/13,5$ $9,5/16,4$ $17,5/30$ $29/50,2$ Fan motor start up currentA $51/86$ $48/83$ $113/195$ $167/291$ Fan motor protection levelIP $55$ Ignition trasformerV1 - V2 $230$ V - $2x6$ kVI1 - I2 $2,3$ A - $35$ mAOperationIntermittent (at least one stop every $24$ h)EMISSIONSSound pressuredBA $86,5$ $85,5$ $89,5$ $90$ Sound powerWCO emissionmg/kWh $<70$ Grade of smoke indicatorNO Bacharach $< 2$ CXHy emission $mg/kWh$ $<-1$ NOx emissionmg/kWh $< 230$ $< 340$ APPROVALDirective $2009/142/EC - 2014/30/UE - 2014/35$ UECenforming toEN 267CertificationCE-1002/RCE-1002/R	Fan motor electr	rical power	kW	3	4	7,5	15			
Fan motor start up current         A         51/86         48/83         113/195         167/291           Fan motor protection level         IP         55         6         7         7         7         7         7         6         6         6         5         5         5         9         9         5         5         5         9         9         5         5         5         9         9         5         5         5         5         9         9         5         5         5         5         9         5	Rated fan motor	current	А	8/13,5	9,5/16,4	17,5/30	29/50,2			
Fan motor protection level         IP         55           Ignition trasformer         type         230 V - 2x6 kV           Intermittent variable         11 - 12         2,3 A - 35 mA           Operation         Intermittent (at least one stop every 24 h)           EMISSIONS         Intermittent (at least one stop every 24 h)           Sound pressure         dBA         86,5         85,5         89,5         90           Sound power         W          C0 emission         mg/kWh         <70	Fan motor start	up current	А	51/86	48/83	113/195	167/291			
$\begin{array}{c c c c c c c c c } \hline type & & & & & & & & & & & & & & & & & & &$	Fan motor prote	ction level	IP		5	5				
Ignition trasformer         V1 - V2         230 V - 2x6 kV           I1 - I2         2,3 A - 35 mA           Operation         Intermittent (at least one stop every 24 h)           EMISSIONS         EMISSIONS           Sound pressure         dBA         86,5         85,5         89,5         90           Sound power         W           C0 emission         mg/kWh         <70	· · ·		type							
I1 - I22,3 A - 35 mAOperationIntermittent (at least one stop every 24 h)EMISSIONSSound pressuredBA86,585,589,590Sound powerWC0 emissionmg/kWh< 70	Ignition trasform	ner	V1 - V2	230 V - 2x6 kV						
OperationIntermittent (at least one stop every 24 h)EMISSIONSSound pressuredBA86,585,589,590Sound powerWC0 emissionmg/kWh< 70	0		1 -  2		2,3 A -	35 mA				
EMISSIONSSound pressuredBA86,585,589,590Sound powerWCOC0 emissionmg/kWh<70	Operation			Inte	rmittent (at least	one stop every	24 h)			
Sound pressure         dBA         86,5         85,5         89,5         90           Sound power         W  <	EMISSIONS									
Sound powerWC0 emissionmg/kWh< 70	Sound pressure		dBA	86,5	85,5	89,5	90			
C0 emissionmg/kWh< 70Grade of smoke indicatorN0 Bacharach< 2	Sound power		W		-	-				
Grade of smoke indicatorNO Bacharach< 2CxHy emissionmg/kWhN0x emissionmg/kWh< 230	C0 emission		mg/kWh		<	70				
Mg/kWh            N0x emission         mg/kWh         < 230	Grade of smoke indicator		NO Bacharach		<	2				
NOx emission         mg/kWh         < 230         < 340           APPROVAL         2009/142/EC - 2014/30/UE - 2014/35 UE            Directive         2009/142/EC - 2014/30/UE - 2014/35 UE            Conforming to         EN 267            Certification         CE-0441/B         CE-1002/R	CxHy emission		mg/kWh		-	-				
APPROVAL           Directive         2009/142/EC - 2014/30/UE - 2014/35 UE           Conforming to         EN 267           Certification         CE-0441/B         CE-1002/R	NOx emission		mg/kWh		< 230		< 340			
Directive         2009/142/EC - 2014/30/UE - 2014/35 UE           Conforming to         EN 267           Certification         CE-0441/B         CE-1002/R	APPROVAL		-							
Conforming to         EN 267           Certification         CE-0441/B         CE-1002/R	Directive			20	09/142/EC - 2014/	30/UE - 2014/35	UE			
Certification CE-0441/B CE-1002/R	Conforming to				EN	267				
	Certification				CE-0441/B		CE-1002/R			

Reference conditions:

Temperature: 20°C – Pressure: 1013,5 mbar – Altitude: 0 m a.s.l. – Noise measured at a distance of 1 meter. Sound pressure measured in manufacturer's combustion laboratory, with burner operating on test boiler and at maximum rated output. The sound power is measured with the "Free Field" method, as per EN 15036, and according to an "Accuracy: Category 3" measuring accuracy, as set out in EN ISO 3746.

## **Firing Rates**





Useful working field for choosing the burner

Test conditions conforming to EN267 Temperature: 20°C Pressure: 1013,5 mbar Altitude: 0 m a.s.l.



## Fuel Supply

### HYDRAULIC CIRCUIT

The burners are fitted with four valves (a safety valve and three oil delivery valves) and an oil filter along the oil line from the pump to the nozzle. A thermostat, on the basis of required heat, regulates oil delivery valves opening, allowing or not the light oil passage through the valves. Delivery valves opening supplies the three stage hydraulic ram which regulates air delivery in relation to fuel burnt. The pumping group is fitted with a pump, an oil filter and a regulating valve, that adjusts atomised pressure. This value is factory-set at 12 bar but it can be changed by adjusting pressure regulator fitted on the pump.



Example of the hydraulic circuit on PRESS 200 T/G



D	Pump with oil filter and						
P	pressure regulator						
FO	0il filter						
V1 - V2 - V3	Delivery oil valves						
VS	Safety valve						
МТ	3 stage hydraulic ram						
U1 - U2 - U3	Nozzles						
PV	Nozzle holder						
Α	Atomizer						

## **Dimensioning Of The Fuel Supply Lines**

The fuel feed must be completed with the safety devices required by the local norms. The table shows the choice of piping diameter for the various burners, depending on the difference in height between the burner and the tank and their distance.

Н	Difference in height pump-foot valve
0	Internal pipe diameter
Р	Max. height 10 m
V	Height 4 m
1	Burner
2	Burner pump
3	Filter
4	Manual shut off valve
5	Suction pipework
6	Bottom valve
7	Remote controlled rapid manual shut off valve (compulsory in Italy)
8	Type approved shut off solenoid valve (compulsory in Italy)
9	Return pipework
10	Check valve



	MAXIMUM EQUIVALENT LENGTH FOR THE PIPING L[m]								
Model	P 140	D T/G	P 20	P 200 T/G		P 300 T/G		P 450 T/G	
Diameter piping	Ø14mm	Ø16mm	Ø16mm	Ø18mm	Ø16mm	Ø18mm	Ø16mm	Ø18mm	
+H, -H (m)	Lmax (m)	Lmax (m)	L max (m)	L max (m)	L max (m)	Lmax (m)	Lmax (m)	L max (m)	
+2,0	71	118	84	132	57	90	40	60	
+1,5	66	110	78	123	53	83	35	55	
+1,0	61	102	72	114	49	77	32	50	
+0,5	55	94	66	105	44	70	30	48	
0	50	86	60	96	40	64	27	43	
-0,5	45	78	54	87	36	58	18	35	
-1,0	40	69	48	78	31	51	15	30	
-1,5	35	61	42	69	27	45	13	25	
-2,0	29	53	36	60	23	39	10	20	
-3,0	20	38	25	43	15	27	5	10	

With ring distribution oil systems, the feasible drawings and dimensioning are the responsibility of specialised engineering studios, who must check compatibility with the requirements and features of each single installation.

### Ventilation

The ventilation circuit is provided with forward curve blades centrifugal fan, which guarantees high pressure levels at the required air deliveries and permits installation flexibility.

In spite of the remarkable output power and of the very high pressure performances, structures of PRESS models are extremely compact.

A variable profile cam connects fuel and air setting, ensuring fuel efficiency in all firing rates.



Example of three stage hydraulic ram

### **Combustion Head**

Two different lengths of the combustion head can be chosen for the various models of the PRESS T/G series of burners. The choice depends on the thickness of the front panel and the type of the boiler.

Depending on the type of heat generator, it is necessary to check the correct head penetration into the combustion chamber. The internal position of the combustion head can easily be adjusted on the basis of required output. flame dimensions in relation to the burner output.

The length and diameter shown in the diagram below should be employed preliminary check: it is required a more careful investigation if combustion chamber dimensions are much different from the reported values.



Example of a PRESS T/G burner combustion head

#### SUGGESTED COMBUSTION CHAMBER DIMENSIONS





Example: Burner thermal output = 3500 kW; L Combustion Chamber (m) = 3,5 m (medium value); D Combustion Chamber (m) = 1 m (medium value)

## **Operation**

#### BURNER OPERATION MODE

With three stage operation, the PRESS T/G burners can follow the temperature load requested by the system. A ratio between maximum and minimum working output of 3:1 is reached, thank to a three-hydraulic ram system: the air delivery is proportional to required output. On three stage operation, the burner gradually adjusts output to the requested level, by varying between the three pre-set levels (see picture A).

Model	Stage	Max output (kW)	Max delivery (kg/h)
	1 <sup>st</sup>	545	46
P140T/G	2 <sup>nd</sup>	1103	93
	3 <sup>rd</sup>	1660	140
	1 <sup>st</sup>	794	67
P 200T/G	2 <sup>nd</sup>	1576	133
	3 <sup>rd</sup>	2372	200
	1 <sup>st</sup>	1186	100
P 300 T/G	2 <sup>nd</sup>	2372	200
	3 <sup>rd</sup>	3558	300
	1 <sup>st</sup>	1780	150
P 450 T/G	2 <sup>nd</sup>	3560	300
	3 <sup>rd</sup>	5340	450

In the following table, are listed maximum output

and fuel deliveries of the burners.



Three stage operation

All PRESS T/G series burners are fitted with a new microprocessor control panel for the supervision during intermittent operation.

For helping the commissioning and maintenance work, there are two main elements:



The lock-out reset button is the central operating element for resetting the burner control and for activating / deactivating the diagnostic functions.

The multi-color LED is the central indication element for visual diagnosis and interface diagnosis.

Both elements are located under the transparent cover of lock-out reset button, as showed below.





#### There are two diagnostic choices, for indication of operation and diagnosis of fault cause:

- visual diagnosis :



#### - interface diagnosis :



by the interface adapter and a PC with dedicated software or by a predisposed flue gas analyzer (see paragraph accessories).

### Indication of operation:

In normal operation, the various status are indicated in the form of colour codes according to the table below.

The interface diagnosis (with adapter) can be activated by pressing the lock-out button for > 3 seconds.

Color code	Color code table				
Operation status	Color code table				
Stand-by	00000000				
Pre-purging	<b>***</b> ****				
Ignition phase	🌣 o 🌞 o 🔆 o 🌞 o				
Flame OK	*******				
Poor flame	☀О☀О☀О⊯О				
Undervoltage, built-in fuse	<del>ѷ</del> 兼ѷ҅ <del>ҝ</del> ҅ѷ҅ҝ҅				
Fault, alarm	***				
Extraneous light	****				

 $\odot\,\text{LED}$  off

### **Diagnosis of fault causes:**

After lock-out has occurred, the red signal lamp is steady on. In this status, the visual fault diagnosis according to the error code table can be activated by pressing the lock-out reset button for > 3 seconds. The interface diagnosis (with adapter) can be activated by pressing again the lock-out button for > 3 seconds.

The flashes of red LED are a signal with this sequence :

(e.g. signal with n° 3 flashes - faulty air pressure monitor)



	Error code table	
Possible cause of fault		Flash code
No establishment of flame at the end of safety time :	<ul> <li>faulty or soiled fuel valves</li> <li>faulty or soiled flame detector</li> <li>poor adjustment of burner, no fuel</li> <li>faulty ignition equipment</li> </ul>	2 flashes ☀ ☀
Faulty air pressure monitor		3 flashes 兼兼兼
Extraneous light or simulation of flame on burne	r start up	4 flashes <b>兼兼兼兼</b>
Loss of flame during operation :	<ul> <li>faulty or soiled fuel valves</li> <li>faulty or soiled flame detector</li> <li>poor adjustment of burner</li> </ul>	7 flashes *****
Wiring error or internal fault		10 flashes ******



#### **START UP CYCLE**

Start up procedure is referred to a three stage operation

- 0s The burner begins the firing cycle.
- 2s The motor starts: pre-purge phase.
- 3s Ignition electrode sparks.
- 25s Safety valve VS and 1st stage valve VF1 open. 30s The spark goes out.
- 32s 2nd stage valve VF2 opens.
- 39s 3rd stage valve VF3 opens, start up cycle is concluded.



## Emissions



#### The emission data has been measured in the various models at maximum output, according to EN 267 standard.





## **Overall Dimensions (mm)**

#### BURNER



MODEL	А	В	E	F – F (1)	Н		0 - 0 (1)
P 140 T/G	765	365	890	363 - 473	222	467	1250 - 1360
P 200 T/G	796	396	890	391 - 501	250	467	1280 - 1390
P 300 T/G	858	447	1000	444 - 574	295	496	1440 - 1570
P 450 T/G	950	508	1070	476 - 606	336	525	1546 - 1676

(1) Length with extended combustion head.

#### **BURNER – BOILER MOUNTING FLANGE**



MODEL	L	М	Ν	0
P 140 T/G	260	230	M14	225
P 200 T/G	260	-	M16	255
P 300 T/G	260	-	M18	300
P 450 T/G	310	-	M20	340

#### PACKAGING



MODEL	X - X (1)	Y	Z	kg
P 140 T/G	1740	990	950	130
P 200 T/G	1740	990	950	220
P 300 T/G	2040	1180	1125	238
P 450 T/G	2040	1180	1125	300

(1) Length with extended combustion head.



## **Installation Description**

Installation, start-up and maintenance must be carried out by qualified and skilled personnel. All operations must be performed in accordance with the technical handbook supplied to the burner.

#### **BURNER SETTING**

- ▶ All the burners have slide bars, for easier installation and maintenance.
- After removing the cover, the split pin and the pin, the nuts and the screws, dismantle the blast tube from the burner and fix it to the boiler.
- Adjust the combustion head.
- Refit the burner casing to the slide bars.
- Install the nozzles, choosing it on the basis of the maximum boiler output and following the diagrams included in the burner instruction handbook.
- Check the position of the electrodes.
- Close the burner, fasten the screws, the nuts, the split pin and the pin.

#### HYDRAULIC AND ELECTRICAL CONNECTIONS AND START-UP

- ▶ The burners are supplied for connection to two pipes fuel supply system.
- Connect the ends of the flexible pipes to the suction and return pipework using the supplied nipples.
- Make the electrical connections to the burner following the wiring diagrams included in the instruction handbook.
- > Prime the pump by turning the motor (after checking rotation direction).
- On start up, check:
  - Pressure pump and valve unit regulator (to max. and min.)
  - Combustion quality, in terms of unburned substances and excess air.

## **Burner accessories**

### Nozzles



The following list shows the features and codes on the basis of the maximum required fuel output.

NOTE: each burner needs N° 3 nozzles.

	CDU	RATE			
BURNER	GPH	at 10 bar	at 12 bar	at 14 bar	-NUZZLE CODE
P 140 T/G	3,50	13,5	14,8	16,1	3042162
P 140 T/G	4,00	15,4	17	18,4	3042172
P 140 T/G	4,50	17,3	19,1	20,7	3042182
P 140 T/G - P 200 T/G	5,00	19,2	21,2	23	3042192
P 140 T/G - P 200 T/G	5,50	21,1	23,3	25,3	3042202
P 140 T/G - P 200 T/G	6,00	23,1	25,5	27,7	3042212
P 140 T/G - P 200 T/G	6,50	25	27,6	30	3042222
P 140 T/G - P 200 T/G	7,00	26,9	29,7	32,3	3042232
P 140 T/G - P 200 T/G	7,50	28,8	31,8	34,6	3042242
P 140 T/G - P 200 T/G	8,00	30,8	33,9	36,9	3042252
P 140 T/G - P 200 T/G	8,50	32,7	36,1	39,2	3042262
P 140 T/G - P 200 T/G	9,50	36,5	40,3	43,8	3042282
P 140 T/G - P 200 T/G	10,00	38,4	42,4	46,1	3042292
P 140 T/G - P 200 T/G	11,00	42,3	46,7	50,7	3042312
P 200 T/G	12,00	46,1	50,9	55,3	3042322
P 200 T/G	13,00	50	55,1	59,9	3042332
P 200 T/G - P 300 T/G	14,00	53,8	59,4	64,5	3042352
P 200 T/G - P 300 T/G	15,00	57,7	63,6	69,2	3042362
P 300 T/G	16,00	61,5	67,9	73,8	3042382
P 300 T/G	17,00	65,4	72,1	78,4	3042392
P 300 T/G - P 450 T/G	18,00	69,2	76,4	83	3042412
P 300 T/G - P 450 T/G	19,00	73	80,6	87,6	3042422
P 300 T/G - P 450 T/G	20,00	76,9	84,8	92,2	3042442
P 300 T/G - P 450 T/G	22,00	84,6	93,3	101,4	3042462
P 300 T/G - P 450 T/G	24,00	92,2	101,8	110,6	3042472
P 450 T/G	26,00	99,9	110,3	119,9	3042482
P 450 T/G	28,00	107,6	118,8	129,1	20018051
P 450 T/G	30,00	110,4	122	132,4	3042502
P 450 T/G	32,00	117,8	130,1	150,1	3042512
P 450 T/G	35,00	128,8	142,1	154,5	3042522

### **Spacer kit**



If burner head penetration into the combustion chamber needs reducing, varying thickness spacers are available, as given in the following list.

Burner	Spacer thickness S (mm)	Kit code
P 140 T/G	102	3000722
P 200 T/G	102	3000722
P 300 T/G	130	3000723
P 450 T/G	130	3000751

### Sound proofing box



If noise emission needs reducing even further, sound-proofing boxes are available. In case of generator heights, where a lower dimension "B" is required, ask for the Box Support Kit code 20065135. The useful dimensions are 40 mm less than the total dimensions indicated in the table (A, D, E). Not suitable for outdoor use.

Burner	Box	А	B (mm)	С	D	E	[dB(A)]	Box code
	type	(mm)	min-max	(mm)	(mm)	(mm)	(*)	
P 140 T/G P 200 T/G	C4/5	850	160 <b>-</b> 980	110	980	930	10	3010404
P 300 T/G P 450 T/G	С7	1255	160 - 980	110	1140	1345	10	3010376

(\*) Average noise reduction according to EN 15036-1 standard

### **Burner support**



For easier maintenance, a mobile burner support has been designed, which means the burner can be dismantled without the need of forklift trucks.

Burner	Support code
P 300 T/G – P 450 T/G	3000731

### PC Interface kit



To connect the control box to a personal computer for the transmission of operation, fault signals and detailed service information, an interface adapter with PC software are available.

BURNER	KIT CODE
P 140 T/G - P 200 T/G - P 300 T/G - P 450 T/G	3002719

### **Protection kit (electromagnetic interferences)**

When the burner is installed in a room particularly subject to electromagnetic interference (signals emitted over 10 V/m) due for example to INVERTER presence or in systems where the lengths of the thermostat connections is over 20 meters, this specific protection kit is available as an interface between the thermostatic controls and the burner.

BURNER	KIT CODE
All models	3010386

## Specification

#### **DESIGNATION OF SERIES**





#### AVAILABLE MODELS

PRESS 140 T/G	TC	FS1	3/230-400/50	230/50
PRESS 140 T/G	TL	FS1	3/230-400/50	230/50
PRESS 140 T/G	ТС	FS1	3/220-380/60	220/60
PRESS 140 T/G	TL	FS1	3/220-380/60	220/60
PRESS 200 T/G	TC	FS1	3/230-400/50	230/50
PRESS 200 T/G	TL	FS1	3/230-400/50	230/50
PRESS 200 T/G	TC	FS1	3/220-380/60	220/60
PRESS 200 T/G	TL	FS1	3/220-380/60	220/60
PRESS 300 T/G	TC	FS1	3/230-400/50	230/50
PRESS 300 T/G	TL	FS1	3/230-400/50	230/50
PRESS 300 T/G	TC	FS1	3/230/50	230/50
PRESS 300 T/G	TL	FS1	3/230/50	230/50
PRESS 300 T/G	TC	FS1	3/400/50	230/50
PRESS 300 T/G	TL	FS1	3/400/50	230/50
PRESS 300 T/G	TC	FS1	3/220-380/60	220/60
PRESS 300 T/G	TL	FS1	3/220-380/60	220/60
PRESS 450 T/G	TC	FS1	3/230/50	230/50
PRESS 450 T/G	TL	FS1	3/230/50	230/50
PRESS 450 T/G	TC	FS1	3/400/50	230/50
PRESS 450 T/G	TL	FS1	3/400/50	230/50

#### STATE OF SUPPLY

Monoblock forced draught oil burner with three stage operation, fully automatic, made up of: - Air suction circuit lined with sound-proofing material

- Fan with forward curved blades high performance pressure levels
- Air dampers for air setting controlled by a three stage hydraulic ram
- Starting motor at 2850 rpm, three-phase 400 V with neutral, 50 Hz
- Combustion head, that can be set on the basis of the combustion output, fitted with:
  - stainless steel end cone, resistant to corrosion and high temperatures
    - ignition electrodes
    - flame stability disk
- Gears pump for high pressure fuel supply, fitted with:
  - filter
    - pressure regulator
    - connections for installing a pressure gauge and vacuometer
    - internal by-pass for single pipe installation
- Valve unit with a oil safety valve and three oil delivery valves on the output circuit;
- Photocell for flame detection
- Microprocessor based burner safety control box, with diagnostic function
- Burner on/off switch
- Flame inspection window
- Slide bars for easier installation and maintenance
- Protection filter against radio interference
- IP XOD (IP 40) electric protection level.

#### Standard equipment:

- 2 flexible pipes for connection to the oil supply network
- 2 nipples for the connection to the pump
- 4 wiring looms fittings for electrical connections
- 4 screws for fixing the burner flange to the boiler
- 2 slide bar extensions (for the extended model of P 300 T/G and P 450 T/G)
- Gasket for flange
- 1 Star Delta starter (On models where provided)
- Diffuser disk (P 450 T/G)
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.



### NOTES

### Riello Burners a world of experience in every burner we sell.



[2]

[1] BURNERS PRODUCTION PLANT S. PIETRO, LEGNAGO (VERONA) - ITALIA

[2] HEADQUARTER BURNERS DIVISION S. PIETRO, LEGNAGO (VERONA) - ITALIA Across the world, Riello sets the standard in reliable and high efficiency burner technology.

With burner capacity from 5 kW to 48 MW, Riello gas, oil, dual fuel and Low Nox burners deliver unbeatable performance across the full range of residential and commercial heating applications, as well as in industrial processes.

With headquarter in Legnago, Italy, Riello has been manufacturing premium quality burners for over 90 year. The manufacturing plant is equipped with the most innovative systems of assembling lines and modern manufacturing cells for a quick and flexible response to the market.

Besides, the Riello Combustion Research Centre, located in Angiari, Italy, represents one of the most modern facility in Europe and one of the most advanced in the world for the development of the combustion technology.

Today, the company's presence on worldwide markets is distinguished by a well-constructed and efficient sales network, alongside many important Training Centres located in various countries to meet its customers' needs. Riello has 13 operational branches abroad (in Europe, America and Asia), with customers in over 60 countries.

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