

RS 25÷200/M BLU SERIES

The RS/M C05 and BLU burners series covers a firing range from 44 to 2400 kW, and it has been designed for use in low or medium temperature hot water boilers, hot air or steam boilers, diathermic oil boilers. Operation can be "two stage progressive" or, alternatively, "modulating" with the installation of a PID logic regulator and respective probes. RS/M BLU burners series guarantees high efficiency levels in all the various applications, thus reducing fuel consumption and running costs. The exclusive design ensures reduced dimensions, simple use and maintenance. Optimisation of sound emissions is guaranteed by the special design of the air suction circuit and by incorporated sound proofing material.

A wide range of accessories guarantees elevated working flexibility.

Guidelines for installation of burners in conformity to EU Regulation:

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

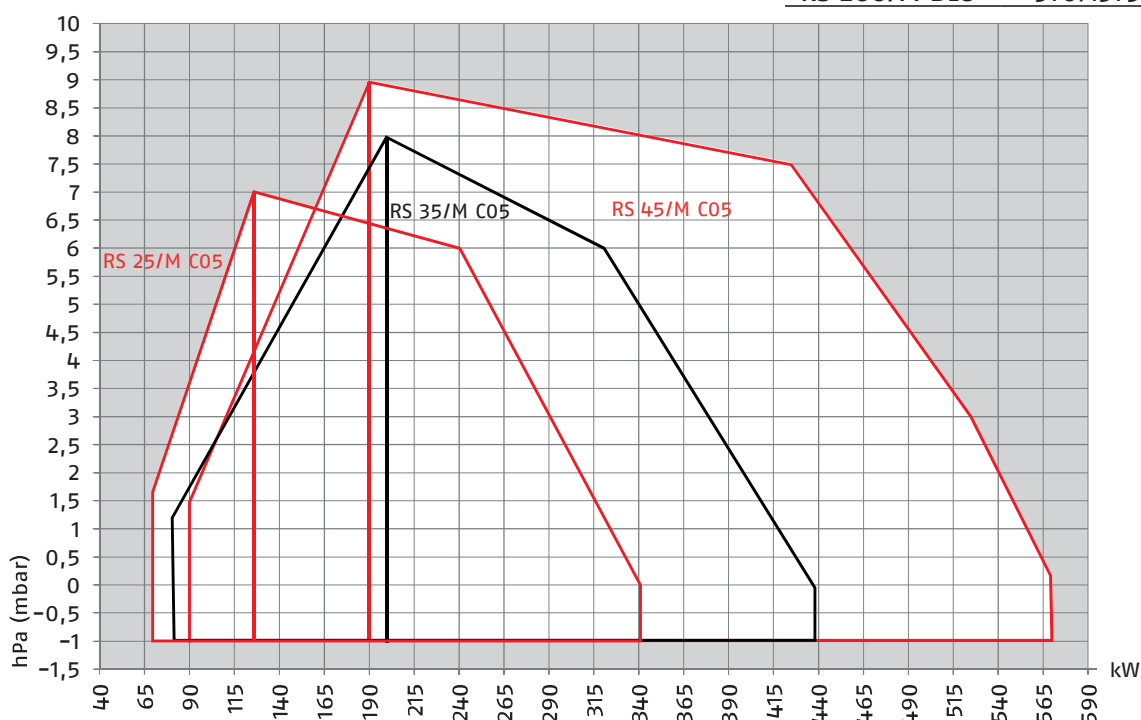
- With boilers (heater housings) already in service in the field, for replacement of identical products, in conformity to Article 1, paragraph 2, point (G) of the EU Regulation No. 813/2013;
- With boilers (heater housings) on a new installation, if they have emissions complying with the requirement of Annex II, paragraph 4 of the EU regulation No. 813/2013.



RS 25/M C05	70/125 ÷	340 kW
RS 35/M C05	82/200 ÷	440 kW
RS 45/M C05	90/190 ÷	570 kW

RS 25/M BLU	45/125 ÷	370 kW
RS 35/M BLU	72/202 ÷	480 kW
RS 45/M BLU	90/190 ÷	550 kW
RS 55/M BLU	100/300 ÷	680 kW
RS 68/M BLU	150/350 ÷	860 kW
RS 120/M BLU	300/600 ÷	1300 kW
RS 160/M BLU	300/930 ÷	1860 kW
RS 200/M BLU	570/1375 ÷	2400 kW

FIRING RATES



□ Useful working field for choosing the burner

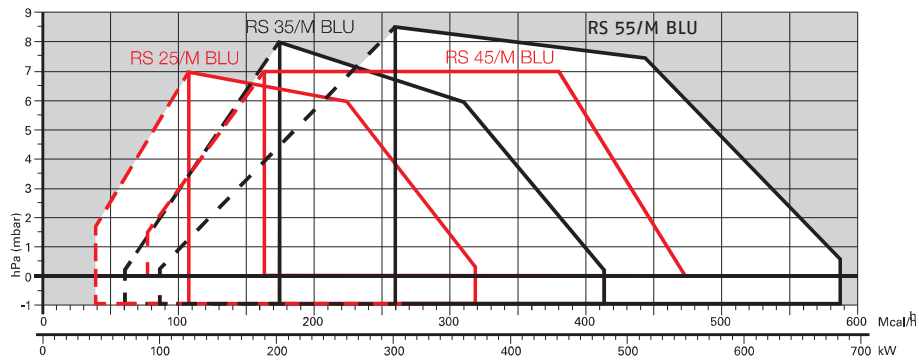
▭ Modulation range

Test conditions conforming to EN676
 Temperature: 20°C
 Pressure: 1013,5 mbar
 Altitude: 0 m a.s.l.

Low NOx Modulating Gas Burners

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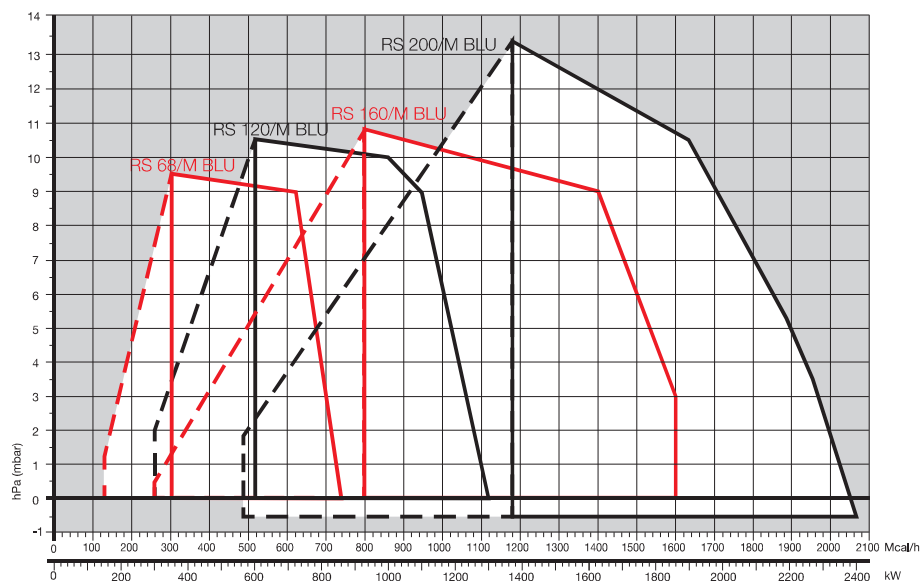
FIRING RATES



□ Useful working field for choosing the burner

--- Modulation range

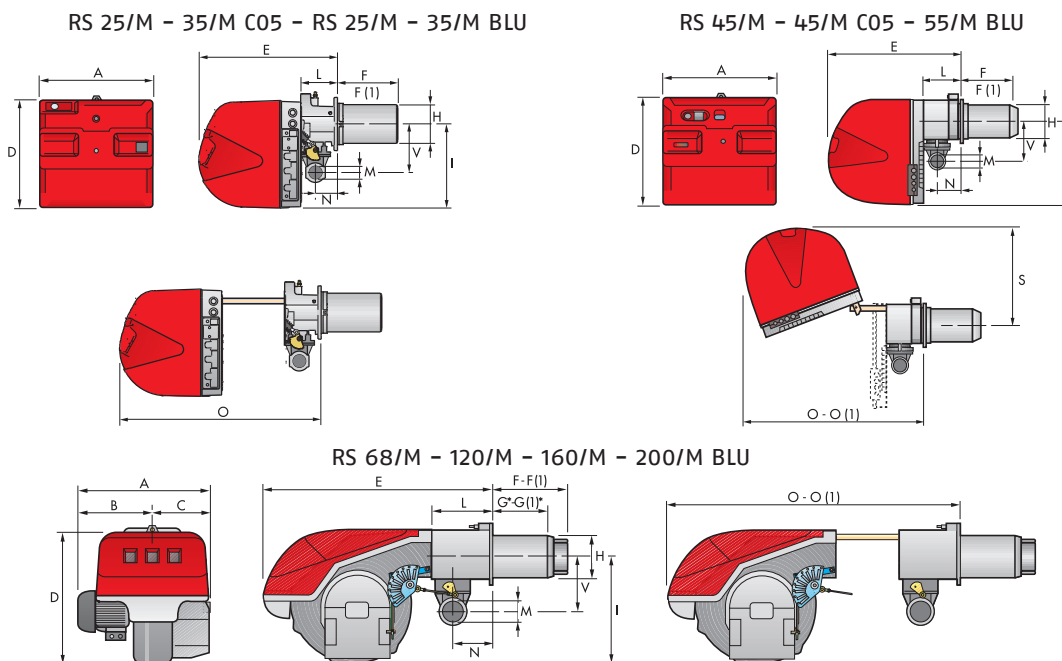
Test conditions conforming to EN676
 Temperature: 20°C
 Pressure: 1013,5 mbar
 Altitude: 0 m a.s.l.



RS 25÷200/M BLU SERIES

Overall dimensions (mm)

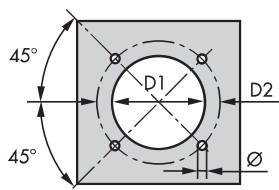
BURNER



MODEL	A	B	C	D	E	F - F (1)	G* - G(1)*	H	I	L	M	N	O - O(1)	S	V
▶ RS 25/M C05	442	-	-	422	508	230 - 365	- -	140	305	138	1 1/2"	84	780 - -	-	177
▶ RS 35/M C05	442	-	-	422	508	198 - 333	- -	152	305	138	1 1/2"	84	780 - -	-	177
▶ RS 45/M C05	476	-	-	474	580	192 - 327	- -	160	352	164	1 1/2"	108	810 - 810	367	168
▶ RS 25/M BLU	442	-	-	422	508	230 - 365	- -	140	305	138	1 1/2"	84	780 - -	-	177
▶ RS 35/M BLU	442	-	-	422	508	230 - 365	- -	152	305	138	1 1/2"	84	780 - -	-	177
▶ RS 45/M BLU	476	-	-	474	580	229 - 354	- -	160	352	164	1 1/2"	108	810 - 810	367	168
▶ RS 55/M BLU	533	300	-	490	640	255 - 390	- -	189	352	222	2"	134	870 - -	-	221
▶ RS 68/M BLU	527	312	215	555	840	255 - 390	200 - 335	189	430	214	2"	134	1161 - 1296	-	221
▶ RS 120/M BLU	553	338	215	555	840	255 - 390	200 - 335	189	430	214	2"	134	1161 - 1296	-	221
▶ RS 160/M BLU	671	366	305	555	863	373 - 503	272 - 402	221	436	237	2"	141	1442 - 1587	-	264
▶ RS 200/M BLU	737	432	305	555	863	373 - 503	272 - 402	221	436	237	2"	141	1442 - 1587	-	264

(1) Length with extended combustion head. * Maximum depth of the boiler door including the depth of the burner flange insulating gasket.

BURNER - BOILER MOUNTING FLANGE



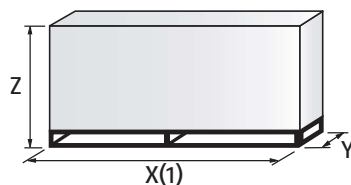
MODEL	D1	D2	Ø
▶ RS 25/M C05	160	224	M8
▶ RS 35/M C05	160	224	M8
▶ RS 45/M C05	165	224	M8
▶ RS 25/M BLU	160	224	M8
▶ RS 35/M BLU	160	224	M8
▶ RS 45/M BLU	165	224	M8
▶ RS 55/M BLU	195	275-325	M12
▶ RS 68/M BLU	195	275-325	M12
▶ RS 120/M BLU	195	275-325	M12
▶ RS 160/M BLU	230	325-368	M16
▶ RS 200/M BLU	230	325-368	M16

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Overall dimensions (mm)

PACKAGING



MODEL	X(1)	Y	Z	kg
▶ RS 25/M C05	1000	485	500	39
▶ RS 35/M C05	1000	485	500	40
▶ RS 45/M C05	1015	500	630	48
▶ RS 25/M BLU	1000	485	500	39
▶ RS 35/M BLU	1000	485	500	40
▶ RS 45/M BLU	1015	500	630	48
▶ RS 55/M BLU	1405	700	660	44
▶ RS 68/M BLU	1405	700	660	78
▶ RS 120/M BLU	1405	700	660	84
▶ RS 160/M BLU	1405-1420	1000	660	89
▶ RS 200/M BLU	1405-1420	1000	660	125

(1) dimension with standard and extended head

RS 25÷200/M BLU SERIES

Specification

DESIGNATION OF SERIES

Series: R

Fuel: S Natural Gas
 L Light oil
 LS Light oil/Natural Gas
 N Heavy oil

Size:

Setting: /1 Single stage
 /B Two stage
 /M Modulating-Mechanical cam
 /E Electronic cam
 /P Proportioning air/gas valve
 /EV Electronic cam predisposed for variable speed (with inverter)
 /EVi Electronic cam with integrated inverter

Emission: ... or C01 Class 1 EN676
 MZ Class 2 EN676
 BLU Class 3 EN676
 MX Class 3 EN676
 C05 Class 5 EN676 (NOx < 56 mg/kWh)

Head length: TC standard head
 TL extended head

Flame control system: FS1 Standard/Intermittent (at least 1 stop every 24 h)
 FS2 Continuous (1 stop every 72 h)

Electrical supply to the system:

1/230/50	1/230V/50Hz
3/230/50	3/230V/50Hz
3/400/50	3N/400V/50Hz
3/230-400/50	3/230V/50Hz - 3N/400V/50Hz
3/220/60	3/220V/60Hz
3/380/60	3N/380V/60Hz
3/220-380/60	3/220/60Hz - 3N/380V/60Hz

Auxiliary voltage: 230/50-60 230V/50-60H
 110/50-60 110V/50-60Hz

R S 120 /M BLU TC FS1 3/230-400/50 230/50-60

BASIC DESIGNATION

EXTENDED DESIGNATION

Specification

STATE OF SUPPLY

Monoblock forced draught Low NOx gas burner, two stage progressive or modulating operation with a kit, made up of:

- Air suction circuit with **sound proofing material**
- Air damper for air flow setting and butterfly valve for regulating fuel output controlled by a servomotor with variable cam
- Low emissions combustion head, that can be set on the basis of required output, fitted with:
 - stainless steel end cone, resistant to corrosion and high temperatures
 - ignition electrodes
 - ionisation probe
 - gas distributor
 - flame stability disk
- Minimum air pressure switch stops the burner in case of insufficient air quantity at the combustion head
- Burner on/off selection switch
- Manual or automatic output increase/decrease switch
- Microprocessor-based burner safety control box, with diagnostic functions
- Flame inspection window
- Slide bars for easier installation and maintenance
- Protection filter against radio interference

RS 25-35/M BLU and C05 models

- High performance fan with forward curve blades
- Starting motor at 2800 rpm, single-phase / 220-230V / 50-60Hz or three-phase / 380-400V / 50-60Hz
- Exclusive patented HCS (Housing Cooling System) with high thermal insulation and air circulation with continuous air volume refresh for an active cooling system and avoid heat transfer to the electrical component housing
- Plug and socket for electrical connections accessible from the external of the cover
- IP 40 electric protection level.

RS 45/M C05 - RS 45-55-68-120-160-200/M BLU models

- Fan with reverse curve blades (RS 45/M C05 - RS 45-55-68-120/M BLU models) or forward curve blades (RS 160-200/M BLU models)
- Sound-proofing material on air suction circuit
- Starting motor at 2800 rpm, three-phase 400V with neutral, 50Hz (single-phase, 230V, 50Hz for the RS 45/M - 45/M C05 models)
- Maximum gas pressure switch (on RS 55-68-120-160-200/M BLU models)
- IP 44 electric protection level.

Standard equipment

- 1 gas train flange
- 1 flange gasket
- 4 screws for fixing the flange
- 1 thermal screen
- 4 screws for fixing the burner flange to the boiler
- Fairleads for the electrical connection (RS 45/M - 45/M C05)
- 3 plugs for electrical connection (RS 25-35/M C05 single-phase)
- 4 plugs for electrical connection (RS 35/M C05 three-phase)
- 2 slide bar extensions (for extended head models and RS 160-200/M BLU models)
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.

RS 25÷200/M BLU SERIES

Available models

Burners

CODE	MODEL						HEAT OUTPUT		TOTAL ELECTRICAL POWER (kW)	CERTIFICATION	NOTE
							NATURAL GAS				
							(kW)	(Nm ³ /h)			
3910510	RS 25/M BLU	TC	FS1	1/220-230/50-60	220-230/50-60		44/125÷370	4,5/13÷37	0,6	CE-0085BR0379	(1)
3910511	RS 25/M BLU	TL	FS1	1/220-230/50-60	220-230/50-60		44/125÷370	4,5/13÷37	0,6	CE-0085BR0379	(1)
20169244	RS 25/M BLU	TC	FS1/FS2	1/220-230/50-60	220-230/50-60		44/125÷370	4,5/13÷37	0,6	CE-0085BR0379	(1)(3)
20169245	RS 25/M BLU	TL	FS1/FS2	1/220-230/50-60	220-230/50-60		44/125÷370	4,5/13÷37	0,6	CE-0085BR0379	(1)(3)
20159191	RS 25/M C05	TC	FS1	1/220-230/50-60	220-230/50-60		70/125÷340	4,5/12,5÷34	0,6	CE-0123CT1607	(1)
20159192	RS 25/M C05	TL	FS1	1/220-230/50-60	220-230/50-60		70/125÷340	4,5/12,5÷34	0,6	CE-0123CT1607	(1)
3910610	RS 35/M BLU	TC	FS1	1/220-230/50-60	220-230/50-60		70/200÷480	7/20÷48	0,7	CE-0085BR0379	(1)
3910611	RS 35/M BLU	TL	FS1	1/220-230/50-60	220-230/50-60		70/200÷480	7/20÷48	0,7	CE-0085BR0379	(1)
20169247	RS 35/M BLU	TC	FS1/FS2	1/220-230/50-60	220-230/50-60		70/200÷480	7/20÷48	0,7	CE-0085BR0379	(1)(3)
20168390	RS 35/M BLU	TL	FS1/FS2	1/220-230/50-60	220-230/50-60		70/200÷480	7/20÷48	0,7	CE-0085BR0379	(1)(3)
20159193	RS 35/M C05	TC	FS1	1/220-230/50-60	220-230/50-60		82/200÷440	7/20÷48	0,7	CE-0123CT1607	(1)
20159194	RS 35/M C05	TL	FS1	1/220-230/50-60	220-230/50-60		82/200÷440	7/20÷48	0,7	CE-0123CT1607	(1)
3897306	RS 45/M BLU	TC	FS1	1/230/50	230/50-60		90/190-550	9/19-55	0,6	CE-0085BM0104	(1)
3897307	RS 45/M BLU	TL	FS1	1/230/50	230/50-60		90/190-550	9/19-55	0,6	CE-0085BM0104	(1)
3897312	RS 45/M BLU	TC	FS1/FS2	1/230/50	230/50-60		90/190-550	9/19-55	0,6	CE-0085BM0104	(1)
3897313	RS 45/M BLU	TL	FS1/FS2	1/230/50	230/50-60		90/190-550	9/19-55	0,6	CE-0085BM0104	(1)
20159209	RS 45/M C05	TC	FS1	1/230/50	230/50-60		90/190-570	9/19-57	0,6	CE-0123CT1607	(1)
20159210	RS 45/M C05	TL	FS1	1/230/50	230/50-60		90/190-570	9/19-57	0,6	CE-0123CT1607	(1)
20159481	RS 45/M C05	TC	FS1/FS2	1/230/50	230/50-60		90/190-570	9/19-57	0,6	CE-0123CT1607	(1)
20159484	RS 45/M C05	TL	FS1/FS2	1/230/50	230/50-60		90/190-570	9/19-57	0,6	CE-0123CT1607	(1)
20038484	RS 55/M BLU	TC	FS1	3/230-400/50	230/50-60		100/300-680	10/30-68	1,5	CE 0085CM0293	(1)
20038486	RS 55/M BLU	TL	FS1	3/230-400/50	230/50-60		100/300-680	10/30-68	1,5	CE 0085CM0293	(1)
3897406	RS 68/M BLU	TC	FS1	3/230-400/50	230/50-60		150/350-860	15/35-86	1,8	CE 0085 BM0452	(2)
3897407	RS 68/M BLU	TL	FS1	3/230-400/50	230/50-60		150/350-860	15/35-86	1,8	CE 0085 BM0452	(2)
3866211	RS 68/M BLU	TC	FS1	3/230-400/50	230/50-60		150/350-860	15/35-86	1,8	CE 0085 BM0452	(1)
3866212	RS 68/M BLU	TL	FS1	3/230-400/50	230/50-60		150/350-860	15/35-86	1,8	CE 0085 BM0452	(1)
20169249	RS 68/M BLU	TC	FS1/FS2	3/230-400/50	230/50-60		150/350-860	15/35-86	1,8	CE 0085 BM0452	(2)(3)
20169248	RS 68/M BLU	TL	FS1/FS2	3/230-400/50	230/50-60		150/350-860	15/35-86	1,8	CE 0085 BM0452	(2)(3)
3897606	RS 120/M BLU	TC	FS1	3/230-400/50	230/50-60		300/600-1300	30/60-130	2,6	CE 0085 BM0452	(2)
3897607	RS 120/M BLU	TL	FS1	3/230-400/50	230/50-60		300/600-1300	30/60-130	2,6	CE 0085 BM0452	(2)
3866213	RS 120/M BLU	TC	FS1	3/230-400/50	230/50-60		300/600-1300	30/60-130	2,6	CE 0085 BM0452	(1)
(A)	RS 120/M BLU	TL	FS1	3/230-400/50	230/50-60		300/600-1300	30/60-130	2,6	CE 0085 BM0452	(1)
20009506	RS 120/M BLU	TL	FS1	3/220-380/60	230/50-60		300/600-1300	30/60-130	2,6	-	(2)
20169243	RS 120/M BLU	TC	FS1/FS2	3/230-400/50	230/50-60		300/600-1300	30/60-130	2,6	CE 0085 BM0452	(2)(3)
20168391	RS 120/M BLU	TL	FS1/FS2	3/230-400/50	230/50-60		300/600-1300	30/60-130	2,6	CE 0085 BM0452	(2)(3)
3788006	RS 160/M BLU	TC	FS1	3/400/50	230/50-60		300/930-1860	30/93-186	4,8	CE 0085 BM0452	(2)
20011709	RS 160/M BLU	TC	FS1	3/230/50	230/50-60		300/930-1860	30/93-186	4,8	CE 0085 BM0452	(2)

Low NOx Modulating Gas Burners

RS 25÷200/M BLU SERIES

Available models

Burners

CODE	MODEL					HEAT OUTPUT		TOTAL ELECTRICAL POWER (kW)	CERTIFICATION	NOTE
						NATURAL GAS				
						(kW)	(Nm ³ /h)			
3788007	RS 160/M BLU	TL	FS1	3/400/50	230/50-60	300/930-1860	30/93-186	4,8	CE 0085 BM0452	(2)
3866214	RS 160/M BLU	TC	FS1	3/400/50	230/50-60	300/930-1860	30/93-186	4,8	CE 0085 BM0452	(1)
(A)	RS 160/M BLU	TL	FS1	3/400/50	230/50-60	300/930-1860	30/93-186	4,8	CE 0085 BM0452	(1)
20006048	RS 160/M BLU	TC	FS1	3/380/60	230/50-60	300/930-1860	30/93-186	4,8	-	(2)
20006069	RS 160/M BLU	TL	FS1	3/380/60	230/50-60	300/930-1860	30/93-186	4,8	-	(2)
20145837	RS 160/M BLU	TC	FS1/FS2	3/400/50	230/50-60	300/930-1860	30/93-186	4,8	CE 0085 BM0452	(2)(3)
20169219	RS 160/M BLU	TL	FS1/FS2	3/400/50	230/50-60	300/930-1860	30/93-186	4,8	CE 0085 BM0452	(2)(3)
3899710	RS 200/M BLU	TC	FS1	3/400/50	230/50-60	570/1375-2400	57/138-240	8,2	CE 0085 BT0414	(2)
3899711	RS 200/M BLU	TL	FS1	3/400/50	230/50-60	570/1375-2400	57/138-240	8,2	CE 0085 BT0414	(2)
3899740	RS 200/M BLU	TC	FS1	3/230/50	230/50-60	570/1375-2400	57/138-240	8,2	CE 0085 BT0414	(2)
20145799	RS 200/M BLU	TC	FS1/FS2	3/400/50	230/50-60	570/1375-2400	57/138-240	8,2	CE 0085 BT0414	(1)(3)
(A)	RS 200/M BLU	TL	FS1/FS2	3/400/50	230/50-60	570/1375-2400	57/138-240	8,2	CE 0085 BT0414	(2)
(A)	RS 200/M BLU	TC	FS1/FS2	3/230/50	230/50-60	570/1375-2400	57/138-240	8,2	CE 0085 BT0414	(2)
(A)	RS 200/M BLU	TL	FS1/FS2	3/230/50	230/50-60	570/1375-2400	57/138-240	8,2	CE 0085 BT0414	(2)

(A) Please contact Riello Burners Commercial and Technical Department, our Application Engineers will be pleased to help you.

Natural gas, net calorific value: 10 kWh/Nm³ - Density: 0,71 kg/Nm³

The burners of RS/M BLU series are in according to 2016/426/EU - 2014/30/EU - 2014/35/EU - 2006/42 EC Directive and EN 676 - LRV 92 Norm.

(1) With plug and socket.

(2) With terminal board.

(3) with RFGO control box

Due to the improvement of the technical specification of some products, some burner codes have been changed. The table below summarizes the correspondence between the previous and the new code.

MODEL					NEW CODE	OLD CODE
RS 68/M BLU	TC	FS1/FS2	3/230-400/50		20169249 (3)	3897420
RS 68/M BLU	TL	FS1/FS2	3/230-400/50		20168248 (3)	3897421
RS 120/M BLU	TC	FS1/FS2	3/230-400/50		20169243 (3)	3897620
RS 120/M BLU	TL	FS1/FS2	3/230-400/50		20168391 (3)	3897621
RS 160/M BLU	TC	FS1/FS2	3/400/50		20145837 (3)	3788011
RS 160/M BLU	TL	FS1/FS2	3/400/50		20169219 (3)	3788012

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Available models

Gas Trains

CODE	GAS TRAIN				VPS Code	ADAPTER CODE						
	MODEL	∅	C.T.			RS 25	RS 35 RS 45	RS 55	RS 68	RS 120	RS 160	RS 200
3970500*	MB 405/1 - RT 20	Rp 3/4"	-	3010123				●	●	●	●	●
3970553*	MB 407/1 - RT 20	Rp 3/4"	-	3010123				●	●	●	●	●
3970599*	MB 407/1 - RT 52	Rp 3/4"	-	3010123				●	●	●	●	●
3970229*	MB 407/1 - RSM 20	Rp 3/4"	-	3010123				●	●	●	●	●
3970258*	MB 410/1 - RT 52	Rp 1" 1/4	-	3010123				●	●	●	●	●
3970554*	MB 410/1 - RT 20	Rp 3/4"	-	3010123				●	●	●	●	●
3970600*	MB 410/1 - RT 52	Rp 3/4"	-	3010123				●	●	●	●	●
3970230*	MB 410/1 - RSM 20	Rp 3/4"	-	3010123				●	●	●	●	●
3970256*	MB 412/1 - RT 52	Rp 1" 1/2	-	3010123				●	●	●	●	●
3970144*	MB 412/1 - RT 20	Rp 1" 1/2	-	3010123				●	●	●	●	●
3970197**	MB 412/1 CT RT 20	Rp 1" 1/2	◆	◆				●	●	●	●	●
3970231*	MB 412/1 - RSM 20	Rp 1" 1/2	-	3010123				●	●	●	●	●
3970180*	MB 415/1 - RT 30	Rp 1" 1/2	-	3010123				●	●	●	●	●
3970198**	MB 415/1 CT RT 30	Rp 1" 1/2	◆	◆				●	●	●	●	●
3970250*	MB 415/1 - RT 52	Rp 1" 1/2	-	3010123				●	●	●	●	●
3970253**	MB 415/1 CT RT 52	Rp 1" 1/2	◆	◆				●	●	●	●	●
3970232*	MB 415/1 - RSM 30	Rp 1" 1/2	-	3010123				●	●	●	●	●
3970181*	MB 420/1 - RT 30	Rp 2"	-	3010123				□	□	□	□	□
3970182**	MB 420/1 CT RT 30	Rp 2"	◆	◆				□	□	□	□	□
3970257*	MB 420/1 - RT 52	Rp 2"	-	3010123				□	□	□	□	□
3970252**	MB 420/1 CT RT 52	Rp 2"	◆	◆				□	□	□	□	□
3970233*	MB 420/1 - RSM 30	Rp 2"	-	3010123				□	□	□	□	□
3970234**	MB 420/1 CT RSM 30	Rp 2"	◆	◆				□	□	□	□	□
20137718*	VGD 50/1 - RT 122	Rp 2"	-	3010123+ 20186306				□	□	□	□	□
20169190**	VGD 50/1 CT RT 122	Rp 2"	◆	◆				□	□	□	□	□
20140762*	VGD 65/1 - FT 122	DN 65 (1)	-	3010123		●	●	●	●	●	●	●
20169191**	VGD 65/1 CT FT 122	DN 65 (1)	◆	◆		●	●	●	●	●	●	●
20140763*	VGD 80/1 - FT 122	DN 80	-	3010123		●	●	●	●	●	●	●
20169192**	VGD 80/1 CT FT 122	DN 80	◆	◆		●	●	●	●	●	●	●
20169193*	VGD 100/1 - FT 122	DN 100	-	3010123		●	●	●	●	●	●	●
20169194**	VGD 100/1 CT FT 122	DN 100	◆	◆		●	●	●	●	●	●	●
20169195*	VGD 125/1 - FT 122	DN125	-	3010123		●	●	●	●	●	●	●
20169196**	VGD 125/1 CT FT 122	DN125	◆	◆		●	●	●	●	●	●	●

Please see designation of Gas Train Series in the page before the Catalogue index.

* 230V/50Hz - 220V/60Hz electrical supply.

** 230V/50Hz electrical supply.

The valve seal control device is compulsory (conforming to EN 676) on gas trains to burners with a maximum output over 1200 kW.

To select the gas train please refer to the technical data leaflet and/or instruction manual.

C.T. Gas valve leak detection control device:

- gas train not equipped with leak detection control device; this device can be ordered separately - see VPS column - and installed later.

◆ gas train equipped with leak detection control device.

VPS Valve leak detection control device. Supplied separately from the gas train (please see Gas train accessories paragraph for both 50 Hz and 60 Hz codes).

● Not available.

□ Additional adapter not necessary, the gas train may be connected directly to the burner.

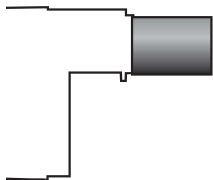
(1) ∅in = DN 65, ∅out = DN 80

Low NOx Modulating Gas Burners

RS 25÷200/M BLU SERIES

Burner accessories

Extended head kit



“Standard head” burners can be transformed into “extended head” versions, by using the special kit. The KITS available for the various burners, giving the original and the extended lengths, are listed below.

BURNER	STANDARD HEAD LENGTH (mm)	EXTENDED HEAD LENGTH (mm)	KIT CODE
▶ RS 25/M BLU	230	365	3010430
▶ RS 25/M C05	230	365	20177160
▶ RS 35/M BLU	230	365	3010431
▶ RS 35/M C05	192	327	20177164
▶ RS 45/M BLU	229	354	3010240
▶ RS 45/M C05	192	327	20177165
▶ RS 55/M BLU	255	390	20040373
▶ RS 68/M - 120/M BLU	255	390	3010177
▶ RS 160/M BLU	373	503	3010442 *
▶ RS 200/M BLU	373	503	3010474

* Kit to be used on burners recognizable by a serial number that is over or equal to 02426XXXXXX, for burners with a serial number that is under or equal to 02416XXXXXX please use the Kit coded 3010193

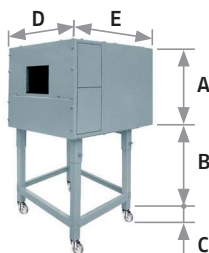
Continuous ventilation kit



If the burner requires continuous ventilation in the stages without flame, a special kit is available as given in the following table.

BURNER	KIT CODE
▶ RS 25/M - 35/M BLU - C05	3010449
▶ RS 45/M BLU - C05	3010094
▶ RS 55/M - 68/M - 120/M - 160/M - 200/M BLU	

Sound proofing box



If noise emission needs reducing even further, sound-proofing boxes are available. When a lower “B” dimension is required, it is available the Box Support Kit code 20065135 which allows to reduce it at the fixed dimension of 55 mm. The sound-proofing boxes are not suitable for outdoor use.

BURNER	BOX TYPE	A (mm)	B (mm) min-max	C (mm)	D (mm)	E (mm)	[dB(A)] (*)	BOX CODE
RS 25/M - 35/M BLU - C05								
▶ RS 45/M BLU - C05	C1/3	650	372 - 980	110	690	770	10	3010403
RS 55/M BLU								
▶ RS 68/M - 120/M BLU	C4/5	850	160 - 980	110	980	930	10	3010404
▶ RS 160/M - 200/M BLU								

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

RS 25÷200/M BLU SERIES

Burner accessories

Accessories for modulating operation



To obtain modulating operation, the RS/M BLU series of burners requires a regulator with three point outlet controls. On RS 25/M - 35/M BLU the regulator is connected to the burner electrical wiring by plug-in system in order to make the connection easier and faster.

The following table lists the accessories for modulating operation with their application range.

For remote setpoint use RWF 55.

BURNER	REGULATOR TYPE	REGULATOR CODE
▶ RS 25/M - 35/M BLU - C05	RWF 50.2	20083339
	RWF 55.5	20098541
▶ RS 45/M BLU - C05 RS 55/M - 68/M - 120/M BLU	RWF 50.2	20082208
	RWF 55.5	20099657
▶ RS 160/M - 200/M BLU	RWF 50.2	20099869
	RWF 55.5	20099905



The relative temperature or pressure probes fitted to the regulator, must be chosen on the basis of the application.

BURNER	PROBE TYPE	RANGE (°C) (bar)	PROBE CODE
▶ All models	Temperature PT 100	-100 ÷ 500°C	3010110
	Pressure 4 ÷ 20 mA	0 ÷ 2,5 bar	3010213
	Pressure 4 ÷ 20 mA	0 ÷ 16 bar	3010214
	Pressure 4 ÷ 20 mA	0 ÷ 25 bar	3090873



Modulating operation can also be obtained with an analog control signal converter and a feedback three-pole potentiometer.

Alternatively, the potentiometer can be used to check the servomotor position.

BURNER	TYPE (INPUT SIGNAL)	KIT CODE
▶ RS 25/M - 35/M BLU - C05	0/2 - 10 V (impedance 200 KΩ)	3010410
	0/4 - 20 mA (impedance 250 Ω)	
▶ RS 45/M BLU - C05 RS 55/M BLU	0/2 - 10 V (impedance 200 KΩ)	3010390
	0/4 - 20 mA (impedance 250 Ω)	
▶ RS 68/M - 120/M - 160/M - 200/M BLU	0/2 - 10 V (impedance 200 KΩ)	3010415
	0/4 - 20 mA (impedance 250 Ω)	

Low NOx Modulating Gas Burners

RS 25÷200/M BLU SERIES

Burner accessories



Depending on the servomotor fitted to the burner, a three-pole potentiometer (1000 Ω) can be installed to check the position of the servomotor. The KITS available for the various burners are listed below.

BURNER	POTENTIOMETER KIT CODE
▶ RS 25/M - 35/M BLU - C05	3010420
▶ RS 45/M BLU - C05 - RS 55/M BLU	3010109
▶ RS 68/M - 120/M - 160/M - 200/M BLU	3010416

Head kit for “reverse flame chamber”



In certain cases, the use of the burner on reverse flame boilers can be improved by using an additional Pipes Kit.

BURNER	KIT CODE (*)
▶ RS 68/M BLU	3010247
▶ RS 120/M BLU	3010248
▶ RS 160/M BLU	3010249
▶ RS 200/M BLU	20035848

(*) CE approval on field is required

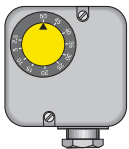
Ground fault interrupter kit



A “Ground fault interrupter kit” is available as a safety device in case of electrical system fault.

BURNER	KIT CODE
▶ RS 25/M - 35/M BLU - C05	3010448
▶ RS 45/M BLU - C05	3010329
▶ RS 55/M - 68/M - 120/M - 160/M - 200/M BLU	

Gas max pressure switch



If necessary a Gas max pressure Switch kit is available and connectable to the burner electrical wiring trough Plugs & Sockets system.

BURNER	KIT CODE
▶ RS 25/M - 35/M BLU - C05	3010418

Volt free contact kit

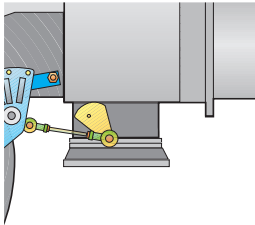


A volt free contact kit is available for installation onto the burner. It can be used for a remote interface between burner operating signals. Every burner can be equipped with a single kit for a remote check of the flame presence signal and the burner lock-out indication.

BURNER	KIT CODE
▶ RS 25/M - 35/M- BLU - C05 - RS 55/M BLU	3010419

Burner accessories

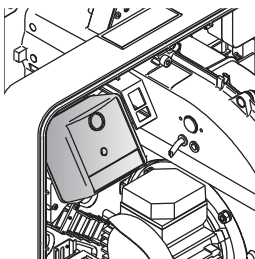
DN80 gas flange kit



To modify the standard 2" burner gas input connection in to DN80 connection, a specific gas flange is available.

BURNER	KIT CODE
▶ RS 68/M - 120/M - 160/M - 200/M BLU	3010439

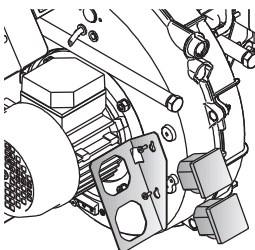
Post-ventilation kit



To have 20 s ventilation after opening of thermostats chain, a special kit is available.

BURNER	KIT CODE
▶ RS 25/M - 35/M BLU - C05	3010451

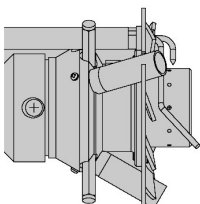
Hours counter kit



To measure the burner working time a hours counter kit is available.

BURNER	KIT CODE
▶ RS 25/M - 35/M BLU - C05	3010450

LPG kit



For burning LPG gas, a special kit is available to be fitted to the combustion head on the burner, as given in the following table.

BURNER	KIT CODE FOR STANDARD HEAD	KIT CODE FOR EXTENDED HEAD
▶ RS 25/M BLU	3010423	3010423
▶ RS 25/M C05	(1)	(1)
▶ RS 35/M BLU	3010424	3010424
▶ RS 35/M C05	(1)	(1)
▶ RS 45/M BLU	3010432 *	3010432 *
▶ RS 45/M C05	(1)	(1)
▶ RS 55/M BLU	20144368 *	20161511 *
▶ RS 68/M BLU	3010433 *	20092589 *
▶ RS 120/M BLU	20085367 *	20085367 *
▶ RS 160/M BLU	20008971 *	20008971 *
▶ RS 200/M BLU	3010491	3010491

(*) CE approval on field is required.
(1) Not available

Low NOx Modulating Gas Burners

RS 25÷200/M BLU SERIES

Burner accessories

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

PC Interface kit



To connect the RMG 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
► All models	3002719

Uv Flame sensor



UV90L flame sensor can be used only with the RFG0 control box and when the LFL control box with UV flame sensor type QRA2 must be replaced.

BURNER	KIT CODE
► All RS/M models (*)	On demand

(*) Only with RFG0 control box.

Spacer kit





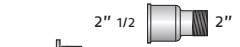





If burner head penetration into the combustion chamber needs reducing, varying thickness spacers are available, as given in the following list.

BURNER	SPACER THICKNESS S (mm)	KIT CODE
► RS 25/M - 35/M BLU - C05 RS 45/M BLU - C05	110	3010095
► RS 55/M - 68/M - 120/M BLU	135	3010129
► RS 160/M - 200/M BLU	102	3000722

Gas train accessories

Adapters

When the diameter of the gas train is different from the set diameter of the burners, an adapter must be fitted between the gas train and the burner. Below are given the available adapters; please see on the Gas Train list the correct adapter codes to select.

ADAPTER	LENGTH mm	ADAPTER CODE
 2" 1" 1/2	70	3000822
 3/4" 1" 1/2	31	3000824
 DN 65 2" 1/2 2"	300	3000825
 DN 65 2" 1/2 1" 1/2	300	3000826
 DN 80 2" 1/2 2"	300	3000826
 1" 1/2 2"	35	3000843
 1" 1/4 1" 1/2	35	3010124
 1" 1/4 2"	35	3010126

Seal control kit



To test the valve seals on the gas train, a special "seal control kit" is available. The valve seal control device is compulsory (EN 676) on gas trains to burners with a maximum output over 1200 kW. The seal control is type VPS 504.

GAS TRAIN	KIT CODE for 50 Hz operation	KIT CODE for 60 Hz operation
► VGD 50/1	3010123+20186306	20050030+20186306
► VGD 65/1 - 80/1 - 100/1 - 125/1	3010123	20050030

Stabiliser spring



To vary the pressure range of the gas train stabilisers, accessory springs are available. The following table shows these accessories with their application range. Please refer to the technical manual for the correct choice of spring.

GAS TRAIN	SPRING COLOUR	SPRING PRESSURE RANGE mbar	SPRING CODE
► VGD/1 series	Neutral	0 - 22	20181839
	Yellow	15 - 120	20141900
	Red	100 - 250	20141901

