Burner programmers

Application

The R4341 flame safeguard programmer provides automatic sequencing control of burner motor, pilot valve, ignition and main fuel valve of large industrial and commercial burners using gas, and/or oil. A motor driven cam timer provides precise sequencing which includes the following periods: pre-ignition, pre-purge, pilot stabilization, main flame trial, main flame stabilization, release to modulation, and postpurge. Switching functions use 220 V line voltage. A start interlock can be used to prevent abnormal starts. A combustion air switch for example proves air flow during pre-purge. Interrupted pilot, intermittent pilot to direct ignition of the main burner, may be used. Three different plug-in flame amplifiers are available for use with ultraviolet, rectification and cadmium sulphide sensors.

R4341D is especially for the control of atmospheric gas-burners, for use with R7321 Rectification amplifier. This model can accept 1 or 2 flame rod sensors and has facilities to switch out one detector.

Approvals

The R4341A has 2 and 5 s pilot trial possibilities to meet DIN-requirements.

The R4341B has 5 s or intermittent pilot trial possibilities to meet British Gas Council requirements.

The R4341C has 3 or 5 s pilot trial possibilities to meet Dutch appliance approval requirements.



Specifications

Maximum load ratings:

Blower Motor

Pilot Valve : 125 VA Pilot Duty.

Main Valve Terminal: 250 VA at 10 times in-rush. 400 VA at 2.5 times in-rush.

400 VA at 2.5 times in-rush.3 A at 220 V full load, 9 A locked rotor.

Alarm: 75 VA Pilot Duty.

Ignition Transformer: 540 VA.

Ambient temperature limits: - 10 to + 45°C

Maximum humidity: 93% R.H.

Enclosure: IP40 (splash proof, if panel mounted)

Dimensions (mm): Height 144, width 144, depth 122 (DIN).

Features

- Visual indication of position in the sequence. *
- Plug-in sequencing chassis equipped with quick-connect contacts.
 Mounts on subbase suitable for surface or panel mounting.
- Flame current meter jack permits direct monitoring of the flame signal.
- Two pilot timings available with each basic model, suitable for oil-gas.

A «release-to-modulation» signal is provided which can be used to power a second main valve.

- Two separate terminals for gas or oil pilot valve.
- · Plug-in amplifiers.
- * U.K. Reg. Design 948356.

Accessories

R7321A - Plug-in amplifier (green).
Rectification type.
Flame response 1 s. For use with
C7004B, C7008/9A flame rods;
C7003A, C7010A, C7013A, C7014A
visible light sensors and C7012A/C/G
UV detectors.

R7323A - Piug-in amplifier (purple). UV type. Flame response 1 s. For use with C7027A, C7035A and C7044A sensors.

R7326 - Plug-in contact input amplifier for R4341 in multiburner installations.

Q641A1000 - Subbase, if required. W136A - Microammeter (includes 117053 Plug).

Ordering information

Model Numbers	Supply Voltage (Vac) at 50 Hz	Pre- Purge (s)	Pre- Ignition (s)	Pilot times (s)				Main valve times (s)				Post- Purge	Remarks
				PV1 (gas) trial stab.		PV2 (oil) trial stab.		MV1 (gas) trial stab.		MV2 (oil) trial stab.		time (s)	
R4341A1023	220	38	5	4.5	7.5	4.5	7.5	1.4	6.6	4.4	3.6	12	a, d, e
R4341A1031	115	38	5	4.5	7.5	4.5	7.5	1.4	6.6	4.4	3.6	12	a, d, e
R4341A1049	220	38	5	4.5	7.5	4.5	7.5	1.4	6.6	4.4	3.6	12	a, e
R4341A1056	115	38	5	4.5	7.5	4.5	7.5	1.4	6.6	4.4	3.6	12 ·	a, e
B4341B1088	220	38	5	4.5	7.5	4.5	7.5		nittent	4.4	3.6	12	d, e
R4341B1096	240	38	5	4.5	7.5	4.5	7.5	Interr	nittent	4.4	3.6	12	b, c, d
B4341B1104	115	38	5	4.5	7.5	4.5	7.5		nittent	4.4	3.6	12	b, c, d
R4341B1112	220	38	5	4.5	7.5	4.5	7.5	Interr	nittent	4.4	3.6	12	c, d, e
R4341B1120	220	38	5	4.5	7.5	4.5	7.5	Interr	nittent	4.4	3.6	12	е
R4341B1138	220	38	8	1	.5			2	6			12	e
R4341B1146	240	38	5	4.5	7.5	4.5	7.5	1.4	6.6	4.4	3.6	12	c, e
R4341B1153	115	38	5	4.5	7.5	4:5	7.5	1.4	6.6	4.4	3.6	12	с, е
R4341B1161	220	38	5	4.5	7.5	4.5	7.5	1.4	6.6	4.4	3.6	12	c, e
B4341C1052	220	70	Gas 4.7/Oil 3	2.8	7.5	4.5	7.5	Inter	nittent	4.4	6.6	9	d, e
R4341C1060	240	70	Gas 4.7/Oil 3	2.8	7.5	4.5	7.5	Inter	mittent	4.4	6.6	9	d, e
R4341C1078	115	70	Gas 4.7/Oil 3	2.8	7.5	4.5	7.5	Inter	mittent	4.4	6.6	9	d, e
R4341C1086	220	70	Gas 4.7/Oil 3	2.8	7.5	4.5	7.5	Inter	mittent	4.4	6.6	9	e
B4341C1094	240	70	Gas 4.7/Oil 3	2.8	7.5	4.5	7.5	1	mittent	4.4	6.6	9	e
R4341C1102	115	70	Gas 4.7/Oil 3	2.8	7.5	4.5	7.5	Inter	mittent	4.4	6.6	9	e
R4341D1035	220	38	9.5	Conti	inuous				8			12	е
R4341D1043	220	8	9.5	5	3			8	10			40	e
R4341D1050	240	8	9.5	5	3			8	10			40	е

a DIN approved

b British gas council approved

^C With dynamic air proving

d With remote reset

e Not recommended for use in U.K.