

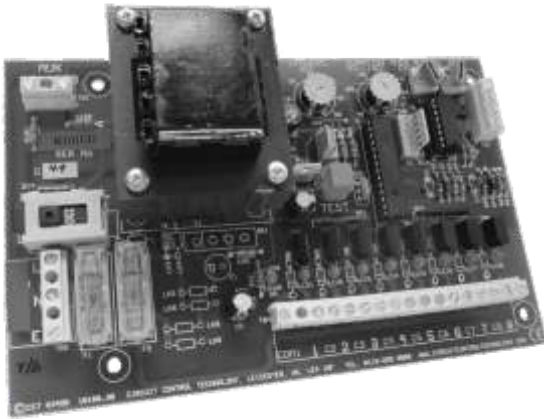


dust filter controls

Product Data Sheet

KX495

1-8 Way Sequence Controller



FEATURES

■ The **KX495 Sequence Controller pcb** is the pulsing heart of our range of tried and tested Reverse Jet Stations. Aimed primarily at Dust Extraction and Air Flow applications, this sequencer has an electronic control system and responds to a simple volt-free open circuit. The unit is fully versatile for input voltage, output voltage, number of ways, pulse length and time between pulses. Each unit has an on-board selector to pulse any number of ways. An 8 way unit covers all the options up to 8 ways. Input and output voltages are available from 24Vdc, or 110Vac to 240Vac - see the table on page 2 for a breakdown. Pulse Duration and Pulse Interval are adjustable as standard on all models. The **KX495** is offered as a naked PCB ASSEMBLY or housed in a robust, IP65 rated, plastic enclosure as a SEQUENCE CONTROLLER or complete with pilot valves (and pipe fittings if required)- also in an IP65 plastic enclosure - as a REVERSE JET STATION.



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Models and Options

The following is a table of models (-G...) available in the KX495 Sequence Controller PCB. The features incorporated with each model are shown as well as a reference drawing number.

MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	FEATURES	REFERENCE DRAWING
-G49	110 / 240 Vac	110Vac	Pressure Switch Control	KX495G49800
			Fan Run Down	
			Cycles of Board	
-G109	24Vdc	24Vdc	Pressure Switch Control	KX495G109800
			Fan Run Down	
			Cycles of Board	
-G1419	110Vac	110Vac	Pressure Switch Control	KX495G1419800
			Fan Run Down	
			Cycles of Board	
-G1519	110 / 240 Vac	24Vdc	Pressure Switch Control	KX495G1519800
			Fan Run Down	
			Cycles of Board	
-G319	110 / 240 Vac	24Vac	Pressure Switch Control	KX495G319800
			Fan Run Down	
			Cycles of Board	
-G339	24Vac	24Vac	Pressure Switch Control	KX495G339800
			Fan Run Down	
			Cycles of Board	

To order by part number, start by stating "8W", then "KX495" followed by the "-G..." number.

Note: The KX495 is only available as an 8 way sequencer but can be programmed down to a 1 way.



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Set-up Procedure

The following is a flow chart of the set-up procedure for the KX495 Sequence Controller PCB.
The options available at each stage are explained in an easy to follow format.

STAGE 1

Power Supply

Wire an isolated power supply into appropriately marked terminals at lower-left hand area of the board.
DO NOT SWITCH ON

Double check that supply is correct for model ("G"no.) and wired into correct terminals.

On 240/110Vac input models ensure that the Selector Switch is set appropriate to the incoming voltage. For safety reasons this link is factory set for 240V.

STAGE 2

Pressure Switch Control

This unit pulses when there is an open circuit across the Pressure Switch Terminals. Connect the volt-free N/C contacts of a pressure switch across these terminals to cause the board to pulse whenever pressure opens the contacts! Of course it doesn't have to be a pressure switch, you can use any volt-free contacts to automate pulsing.

STAGE 3 - applicable to all models

Fan Rundown Control

The Fan Rundown or "Afterclean" facility is available on all models. This functions by recognising a change of mode from closed to open circuit across the fan rundown terminals. Connecting a N/C Volt-Free auxiliary of the Fan contactor to these terminals achieves this.

A delay of about 1 minute occurs between the Fan being switched off and aftercleaning commencing. This allows the Fan and any particles in the system to stabilise.

N.B. Aftercleaning does not require a Pressure Switch "HIGH" signal (open circuit at the Pressure Switch Terminals) for the board to pulse.

STAGE 4 - applicable to all models

Cycles of Board

This facility is available on all models - see table on page 2. It runs the pulsing of the board for up to 9 complete cycles every time cycling is initiated, whether by Pressure Switch or Fan Rundown.

Set the Over Run Cycle Switch to the number of cycles you require.

STAGE 5

Number of Ways

Sets the number of outlets to be pulsed in one cleaning cycle. Simply "SET" the No. of valves selector switch on the PCB onto the appropriately marked number e.g. "2" for 2 ways, "3" for 3 ways etc.

STAGE 6

Moment of Truth

This is the time you find out if you've got the power supply connected correctly. For your own peace of mind and personal safety - check it again.

TURN THE POWER ON!!

Depress the yellow test button - control will run cycles (as stage 4 - Over Run Cycle Switch). This will override the pressure switch / fan rundown external connections.

No.1 output will pulse, then No.2, No.3 and so on. Red Red LED's adjacent to each output will flash in turn to indicate which one is pulsing.

STAGE 7

Set Interval and Duration

The "INTERVAL" potentiometer (RV1) controls the time delay between successive output pulses.

This is adjustable over a range of 4 to 60 seconds (turn clockwise to increase).

The "DURATION" potentiometer (RV2) controls the length or "time on" of each pulse.

This is adjustable over a range of 40 to 300 milliseconds (turn clockwise to increase).

LEAVE IT SAFE

Turn off the power

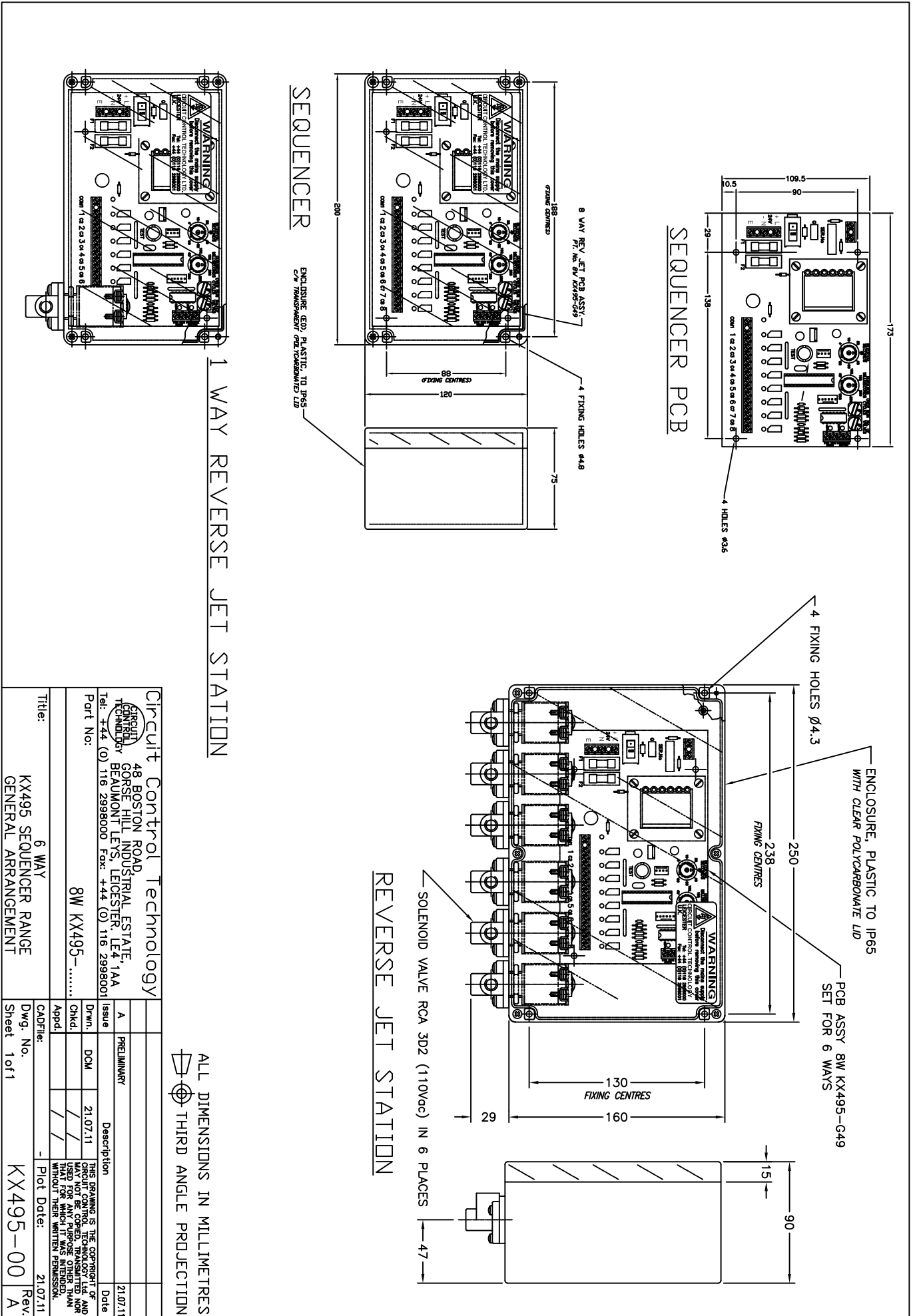


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Technical Specifications

UNIT:	Part Number KX495
INPUT SUPPLY/ POWER CONSUMPTION:	Volts:-refer to table on page 2. Amps:- less than 500mA
INPUT FUSE:	Depending on Model Number.
OUTPUT FUSE:	Depending on Model Number.
MAINS FAILURE:	In the event of power interruption, the unit will operate to specification when the supply voltage is re-instated..
START UP SEQUENCE:	The unit is arranged so that pulsing will start as soon as an open circuit has been established across the Pressure Switch Terminals for a few seconds, or Fan Rundown Terminals are closed (NC).
INDICATION:	Red LED indicates “Power On”, others light up to show which output is pulsing during cycling.
AMBIENT TEMPERATURE AT BOARD SURFACE:	-10 to +45 deg.C.
STORAGE TEMPERATURE:	-20 to + 70 deg.C.
SEQUENCE CONTROLLER:	The KX495 is also available enclosed within an IP65 rated plastic .box. Just add “/E0” to the Part Number immediately after the model (-G...) number. Non-standard enclosures are also possible, or we can mount your KX495 integrally with other equipments (e.g. Pressure Switch) on request. Please consult Circuit Control’s sales department for more information.
REVERSE JET STATION:	The KX495 can be used to drive any normally configured pilot valve, and we offer a variety of commercially available solenoid valves as standard in our Rev. Jet Stations - with or without rapid-fit or compression pipe fittings. Please consult Circuit Control’s sales department for availability of specific combinations of board, box and valves to suit your requirements.
EXTERNAL SIGNALS:	The KX495 conforms to current regulations regarding proper operation within zones of electrical interference. Nevertheless we recommend that connections to external equipments are kept as short as possible, made with screened cable earthed at one end and/or via an interposing relay.
MAINS (ac) SUPPLIES:	To ensure the reliable operation and longevity of your KX495, any mains supply should not be a branch off a line carrying power to equipment containing rectifiers and/or thyristors (e.g. welders, variable speed drives, battery chargers etc.). Keep supply cables away from other power carrying conductors. A free-standing mains filter is available if needed.

General Arrangement Drawing



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Part No:	8W KX495-.....
Title:	6 WAY KX495 SEQUENCER RANGE GENERAL ARRANGEMENT
Dwg. No.	KX495-00
Sheet	1 of 1
Rev.	A

ALL DIMENSIONS IN MILLIMETRES
 THIRD ANGLE PROJECTION