

Research-Cottrell

Control Device PT 16 DC 24 V
and
Extension Device PTE 32 DC 24 V

designed for use in dust filter systems

The installation sends impulses to the outputs in a cyclic sequence.

Any desired number of extension devices can be connected to the control device in series. The number of outputs is thus unlimited.

The pulse and pause times are adjustable, and they are isochronous for all outputs.

Once the mains power has been connected the control device begins with a pause at output 1. The repetition is automatic after the pulse cycle sequence has been run through.

The "Start/Stop" pulse cycle input makes it possible to interrupt restart the cycle at any point in the program.

The switching condition of the unit is indicated by status LED's.

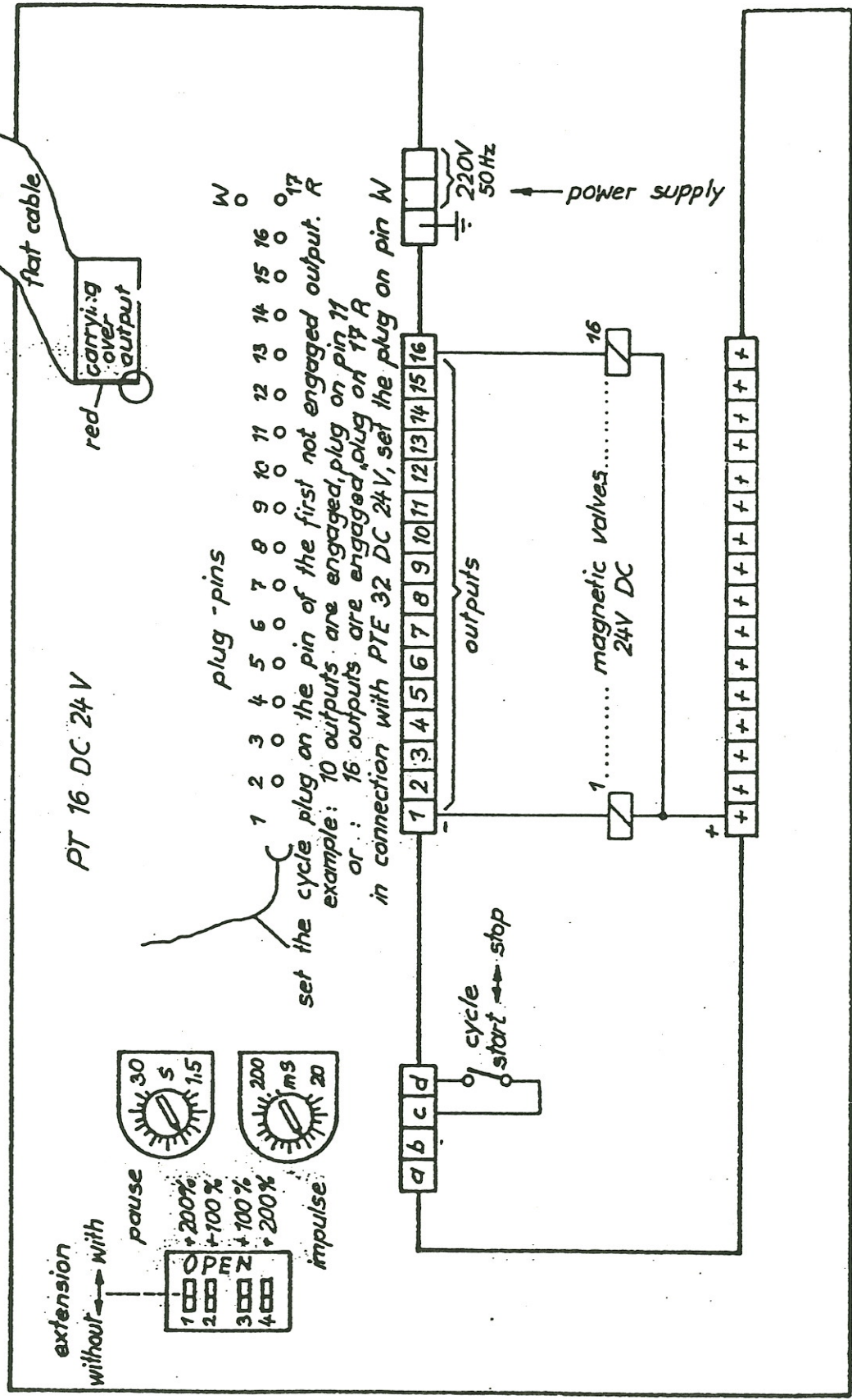
Peripheral equipment, such as differential pressure control devices, auxiliary self-monitoring equipment etc. can also be connected.

Technical Specs.	PT 16 DC 24 V	PTE 32 DC 24 V
Number of outputs, programmable with plug-in bridge.	max. 16	max. 32, also available with 8, 16 or 24
Pulse, adjustable on scale extendable via DIP switches	from 20 - approx. 200 ms by 100%, 200% or 300% of the scale range	
Pause, adjustable on scale extendable via DIP switches	from 1.5 - approx. 30 s. by 100%, 200% or 300% of the scale range	
Outputs Output voltage Power handling cap. Spark quenching	two-pole 24 - 28 V DC 1 A with diodes	two-pole 24 - 28 V DC 1 A with diodes
Input for "Start/Stop" cycle	pulse interruption with contact open	
Optical status displays Cycle running Pulse 1 LED per output	unblinking LED middle LED blinks lights upon pulse	lights upon pulse
Ambient temperature	-10 -- +60 ^o C	-10 -- +60 ^o C
Power supply Power consumption	220 V, 50 Hz approx. 45 VA	
Connections	2.5 mm ² screw terminals	2.5 mm ² screw terminals
Dimensions in mm Circuit board or ABS housing IP65 or sheetsteel housing	222x135, height approx 60 mm 250x160x90 dimensions depend	222x135, height approx. 40 mm 250x160x90 on equipment

Operation instructions for control unit PT 16 DC 24 V
and enlargement instrument PTE 32 DC

1. Connections are to be made according to drawing WS 1678 respective WS 1679. Use the supplied DIP-flat cables for the connection of the control unit and enlargement instrument.
Pay attention to the fact that the plugs are set in same direction.
- Help of orientation: the coloured cable marking must be on the same side as the colour-circle on the plate.
2. Set the cycle-plug on the pin of the first not engaged output. If all outputs are engaged, please set the plug of the control unit on pin 17 R (reset) resp. on the pin 33 R at the enlargement unit. For the cycle transmission on the next unit set the plug on the pin W (index). After the running through of one cycle sequence, the next one is coming automatically.
3. Regulate the impulse- and the pause-time at the indicator-scales. Clockwise rotation means: to prolongate the time.
Pause regulation range: approx. 1,5 30 s
Impulse " " : " 20 200 ms
The adjusting times can be changed at the fourfold sliding switch. All 4 switches left: no enlargement.
Switch 1 right : pause enlarged by 200 %, hence extended by approx. 60 s
Switch 2 right : pause " " 100 %, " " " " 30 s
Switch 1 and 2 right: pause " " 300 %, " " " " 90 s
Switch 3 right: impulse " " 100 %, " " " " 200 ms
Switch 4 right: " " " 200 %, " " " " 400 ms
Switch 3 and 4 right: " " " 300 %, " " " " 600 ms
4. After the connection of the power supply, the clock rate begins with a pause at output 1. The cycle can be interrupted at the terminals c - d.
Cycle start (cycle runs) at closed connection c - d .
Cycle-stop (cycle interrupted) at open connection c - d .
A cycle stop is permitted at your pleasure at any spot of the program run. After the cycle start the continuation happens at the interrupted spot, however only after the running down of the adjusted pause-time.
Example: cycle interruption during or after impulse 6, cycle continuation with pause before impulse 7.
The cycle-start / stop-switching is also effective on the enlargement units. At any not interrupted cycle, a light-emitting-diode in the unit gives continuous light.
Instead of the start/stop-switching, you can also connect a periphery-unit with automatic pause-time-regulation to the terminals c - d .
5. The terminals a - b serve for the connection of a self monitoring supplement. This instrument can supervise the electrical functions of the unit, the installation and the magnetic valves.
6. Each output can be loaded with 1 A, the negative pole is switched.
7. Parallel to the light emitting diodes in the outputs, - by the side of the impulse adjuster - , there is still a central light-emitting-diode which lights up at each impulse.
8. Public supply 220 V, 50 Hertz, power consumption approx. 45 VA .
9. Working temperature -10 + 50° Celsius .

to the extension instrument
PTE 32 DC 24V carrying over



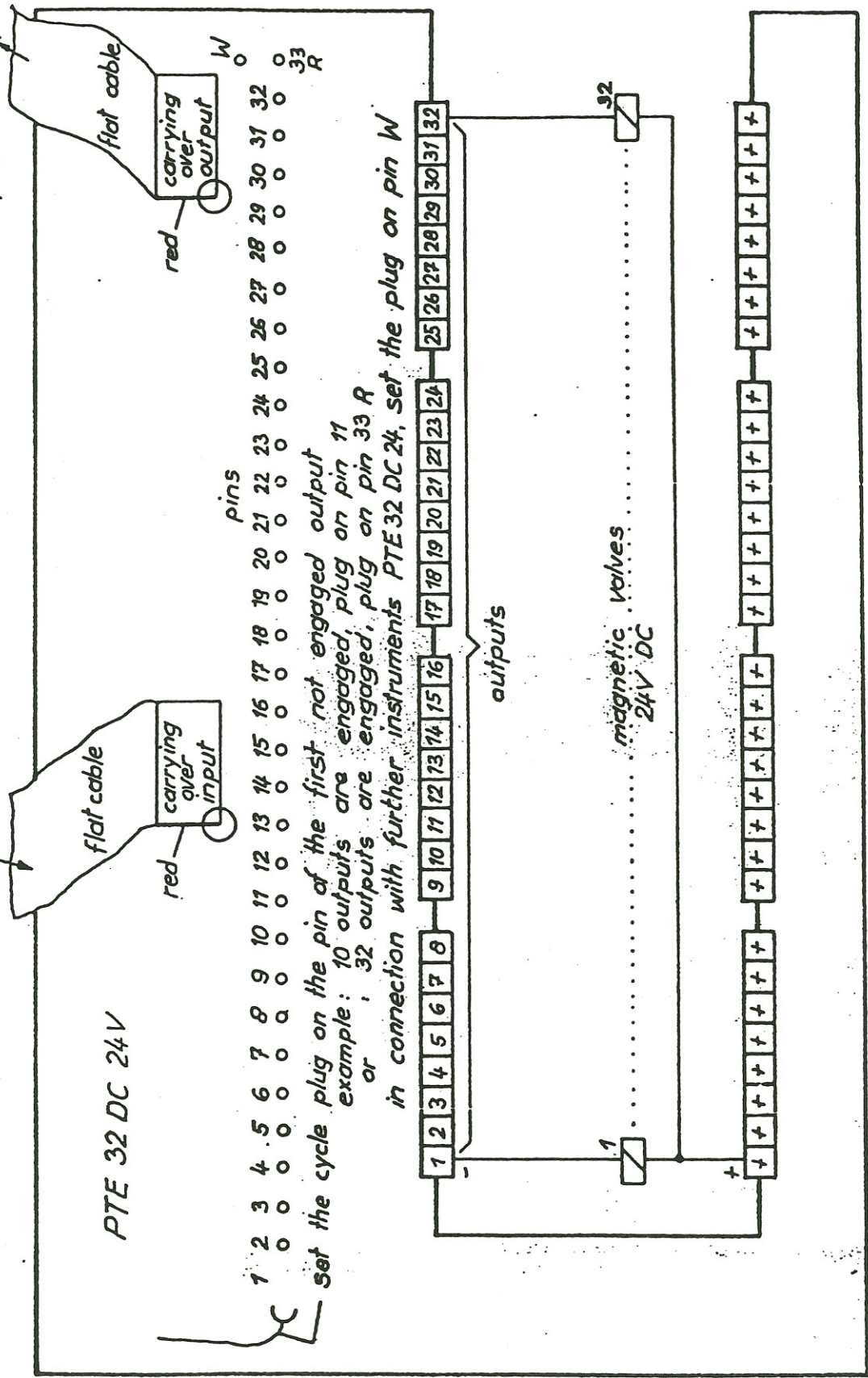
Research-Cottrell
Deutschland GmbH

Connection Diagram
PT 16 DC 24V

Tag 4.4.84. Fo Pi
Nr. WS 1678 E

to the next instrument PTE32 DC 24V carrying over input

from the preceding instrument carrying over output



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Connection Diagram
PTE 32 DC 24V

Tag 4.4.84. Fö ^{Nr. 19} Pi

Nr. WS 1679 E

