

# TIMER CONTROLLED CONDENSATE DRAIN – TD420M

## DESCRIPTION

TD420M timer controlled condensate drain has been developed for reliable removal of condensate or other liquid from high pressure compressed air system<sup>(1)</sup>. Discharge intervals can be set with two adjustment knobs. TD400M drain is available with a kit for easy installation and providing many mounting positions.



## APPLICATIONS<sup>(2)</sup>

- Air Compressor (piston or screw)
- After-cooler
- Cyclone condensate separator
- Pressure vessel/Air tank
- Air dryer
- Air filter

<sup>(1)</sup>For any other technical gas please contact us or your local dealer

<sup>(2)</sup>TD400M can be used in variety of applications. For applications not listed please contact us or your local dealer.

## TECHNICAL SPECIFICATIONS<sup>(3)</sup>

Operating temperature	1,5 - 150 °C	35 - 302 °F
Ambient temperature	1,5 - 65 °C	35 - 149 °F
Operating pressure <sup>(4)</sup>	0 - 420 bar(g)	0 – 6091 psi
Protection class	IP65	
Supply voltage	230V (±10%), AC, 50/60Hz	
Coil power	8W	
Cable dimensions	3 x 0,75mm <sup>2</sup>	
Mass (timer + valve)	0,35kg	
Mass (fittings + needle valve)	0,23kg	
Valve	Direct acting solenoid valve, 2/2, Normally closed	
Connector	DIN EN 175301-803 form A	
Time ON	0,5s - 10s	
Time OFF	0,5min - 45min	
Indicator	LED light	

<sup>(3)</sup>Standard version (TD400M 230V AC)

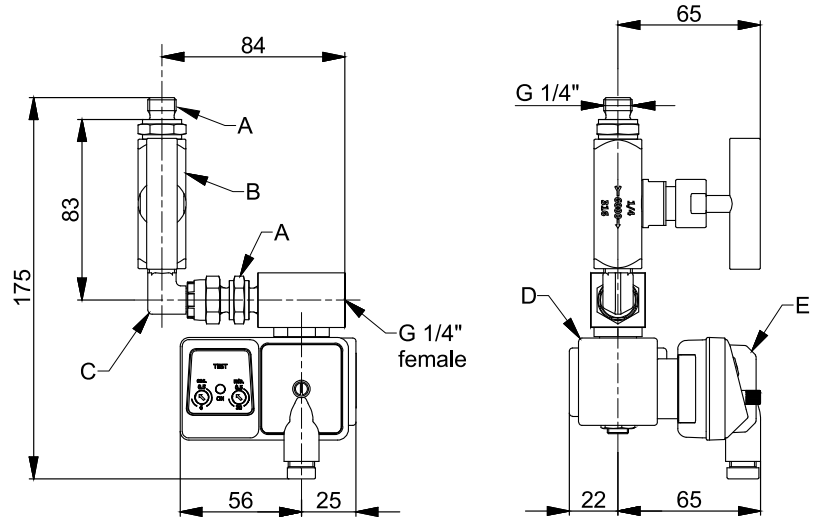
<sup>(4)</sup>Version TD420M 24V DC only up to a pressure 400 bar(g) (5800 psi)

## MATERIALS

Controller housing	PA6 GF30
Screws	Steel-zinc plated
Coil	Epoxi coated
Valves	Stainless steel 1.4305
Valve sealing	PEEK
Fittings	Stainless steel 1.4571
Internal strainer mesh	Stainless steel

**PARTS LIST**

A	Nipple
B	Needle valve
C	Elbow
D	Electromagnetic valve
E	Timer



**TYPES**

Type	Voltage	Power	MAX. Pressure [barg]/[psig]	Medium	Flow coefficient Kvs [l/min]
TD420M 230V AC	230V AC 50/60Hz	8W	420 / 6091	Air, water, oil	0.3
TD420M 24V DC	24V DC	18W	400 / 5800	Air, water, oil	0.3

**APPROXIMATE CALCULATION OF DISCHARGE CAPACITY**

$$Q = Kvs \times \sqrt{\Delta p} \times \left( \frac{\frac{TimeON}{60}}{\frac{TimeON}{60} + Time OFF} \right)$$

Q-Discharge capacity [l/min], Kvs-Flow coefficient, Δp-pressure difference [bar], Time ON and Time OFF are determined by adjustment knobs, the range of each timer is specified in technical specification (page 1).

**MAINTENANCE**

Once per week make a visual check of the fittings and valve with timer controller. Next to a visual check we must do timer and electromagnetic valve test by pressing the test button on timer controller. If necessary disassemble and clean the valve and fittings.

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	<p>Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2008 Reg. number: 200285</p>	
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