

Control cabinet systems YCCP, for process automation



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Key features

At a glance

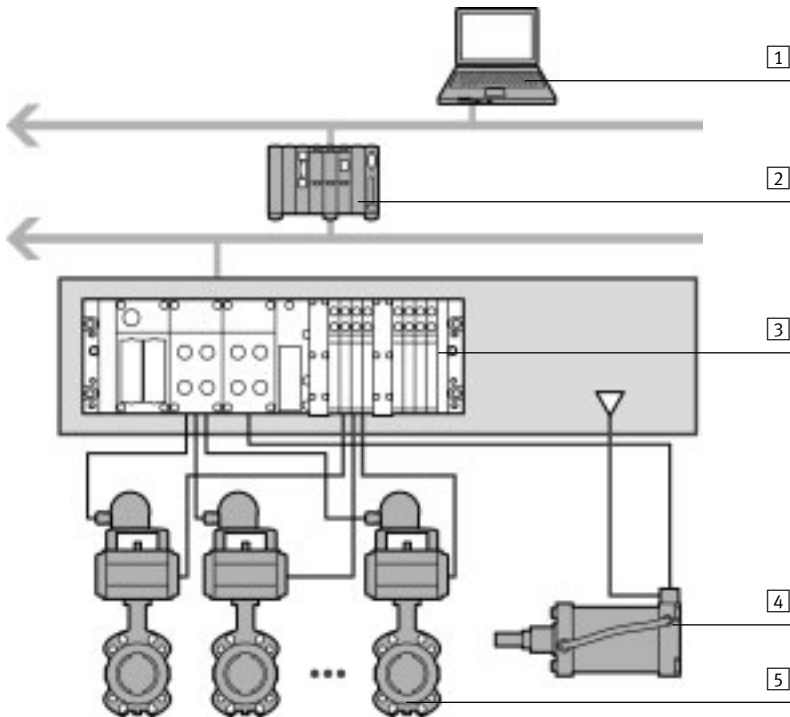
A range of designs is available:

- Control of 4 ... 20 pneumatic process valves
- Indoor and outdoor variants to choose from
- Stainless steel or steel variants
- 760 x 760 x 300 or 800 x 1000 x 300 (W x D x H)

Valve terminal types:

- VTSA-F or MPA, in combination with CPX modules

System overview (example)

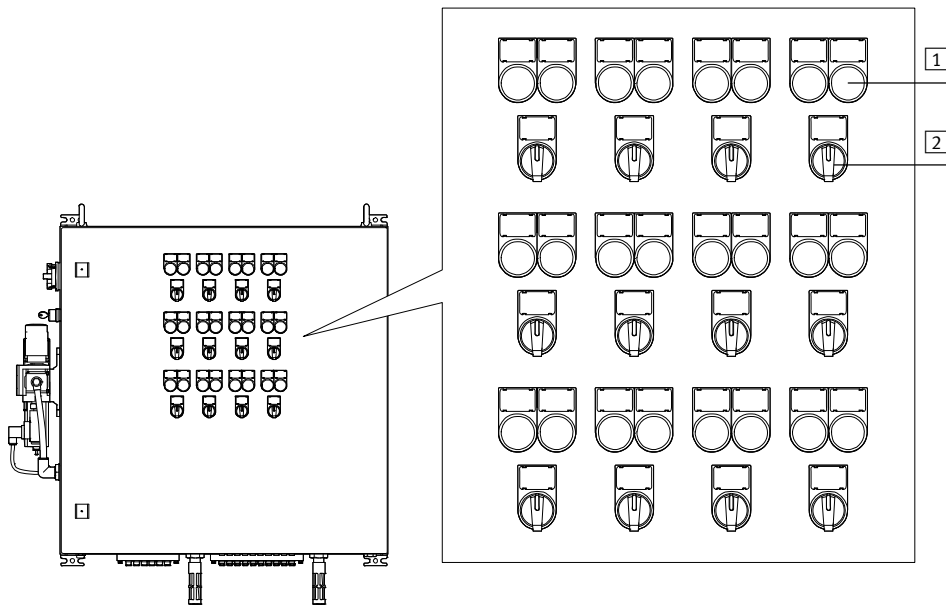



- 1 Controller
- 2 Higher-order controller
- 3 Valve terminal
- 4 Actuator
- 5 Process valves

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Key features

Control and signal elements

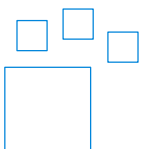


 **Note**
A maximum of 20 knob switches is possible.

1 2 signal lights are always fitted per knob switch as standard, e.g. to indicate the end positions of the process valves. If there is no end-position sensing, the signal lights can be freely programmed for other functions.

2 Manual operation of the valves using knob switches in the control cabinet doors

Ordering data – Product options



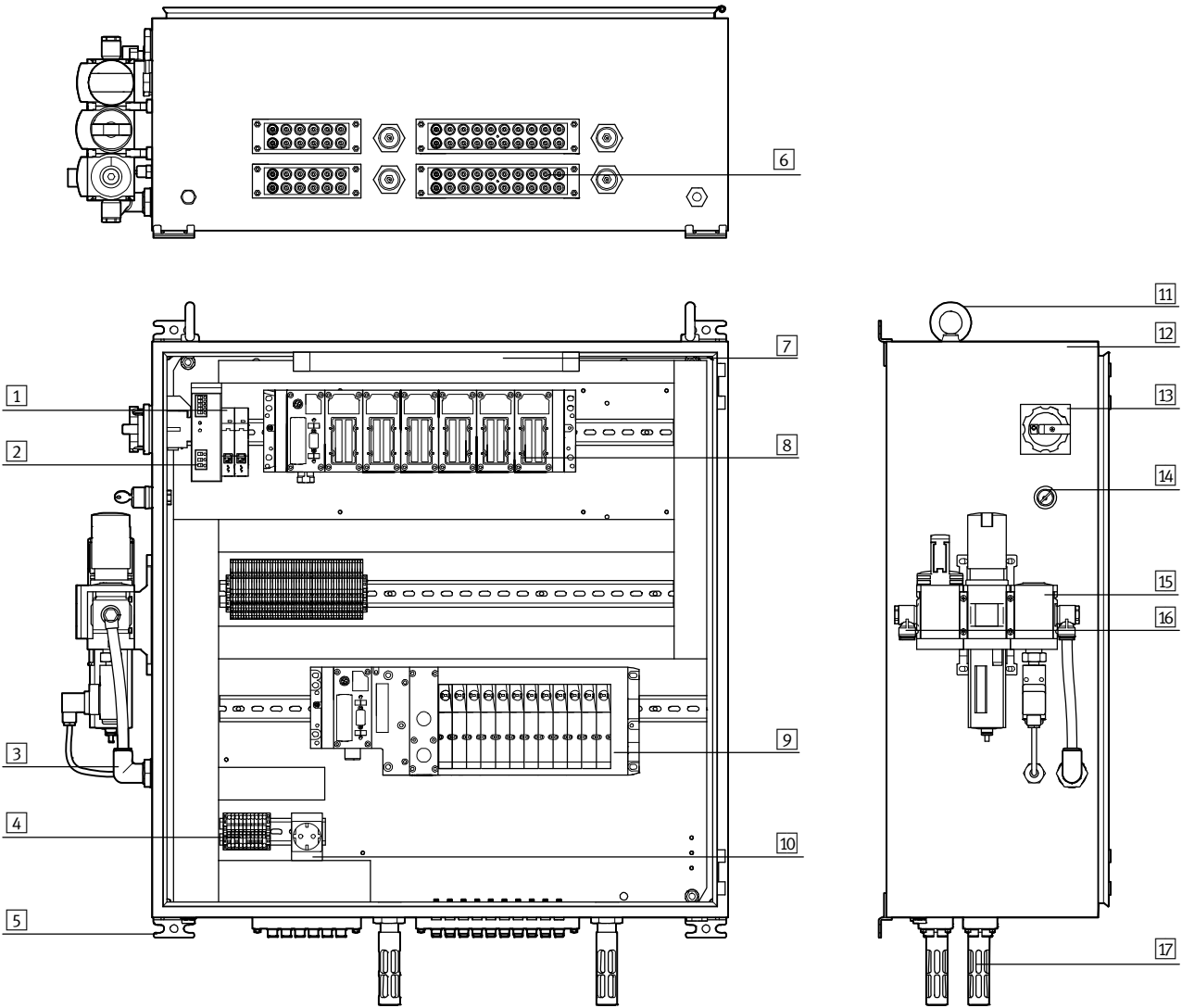
Configurable product
This product and all its product options can be ordered using the configurator.

The configurator can be found under Products on the DVD or
→ www.festo.com/catalogue/...

Part No. Type code
8061000 **YCCP**

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Peripherals overview using a sample configuration



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Peripherals overview using a sample configuration

System components		Brief description
1	Circuit breaker	An overcurrent protection device is included in the scope of delivery, to prevent damage caused by a temperature rise as a result of a current that is too high
2	Power supply unit CACN	Power supply for valve terminal, 24 V DC
3	Push-in L-fitting QSL	Inlet for air supply
4	Terminal	For connection to the power supply
5	Wall mounting fixture	For mounting on a profile, frame or for fixing to the wall
6	Multiple connector NPMA	For simple pneumatic connection of the process valves
7	Control cabinet lighting	LED, 24 V DC, for illuminating the working space within the control cabinet; is switched on and off by hand
8	Electrical terminal CPX	I/O modules for connecting sensors, e.g. limit switches
9	Valve terminal	MPA or VTSA, depending on configuration, with up to 20 valves
10	Socket	For plugging in devices needed for servicing, e.g. laptop or measuring devices; available in various versions
11	Transport lugs	For transporting the control cabinets by crane, included fully assembled in scope of delivery; blanking plugs for removal of the transport lugs are enclosed separately
12	Housing	In powder-coated steel sheet or stainless steel versions; suitable for outdoor and indoor areas
13	Power supply	Power supply including mains switch
14	Operating mode switch	For changing over between the operating modes "MANUAL" and "AUTO" using a key switch
15	Service unit combination MSB6	Manually operated on/off valve, filter regulator with pressure gauge, branching module configurable with or without pressure switch, installed in the control cabinet for outdoor variants
16	Push-in L-fitting QSLV-1/2-16	Pneumatic supply to the control cabinet
17	Silencers U-1/2-B	For noise reduction at the exhaust ports of the components
Automatic selection, to match the configured control cabinet		
	Housing size	760 x 760 x 300 mm or 800 x 1000 x 300 mm (W x D x H)
	Heating	With hygrostat, to avoid temperatures that are too low or humidity that is too high within the control cabinet

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System components

Ordering using the configurator

The control cabinet system comprises a number of tried and tested components from Festo. The scope and nature can be adjusted using the configurator on the pages “Basic requirements” “Process valves” and “Options”.

Control cabinet for water technology Solution advisor

 Restart

General information

Basic requirements

Process valves

Options

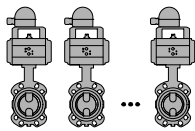
Overview

System components

Description

Technical data

The number of process valves to be activated by the valve terminal



Optional:

- Supply of compressed air to the control valves from the control cabinet
- Reading the end positions

- 4 ... 20 process valves possible

Power supply



Electrical supply to the control cabinet including mains switch; a power supply unit is additionally installed

- 1 AC, 230 V, 50 Hz
- 3 AC, 400 V
- 24 V

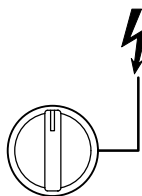
Fieldbus protocol



- The selection of the fieldbus protocol determines the valve terminal types
- PROFIBUS or PROFINET fieldbus protocols¹⁾

- VTSA-F or MPA, in combination with CPX modules

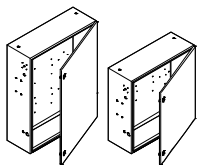
Manual operation



- A key switch enables switching between manual and automatic mode
- The technical implementation must be carried out using the customer's PLC
- In order for manual switching to be effective, the “Manual/Auto” selector switch must be set to “Manual”
- Manual operation of the valves using jack switches in the control cabinet doors

- 2 signal lights are always fitted per knob switch as standard, e.g. to indicate the end positions of the process valves
- A maximum of 20 knob switches is possible

Type of housing



You can choose from the following materials:

- Stainless steel 1.4301 (AISI 304)
- Powder-coated steel sheet






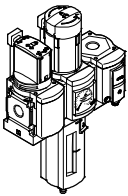
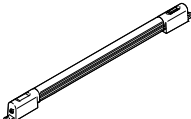
Automatic selection, to match the configured control cabinet [B x D x H]

- 760 x 760 x 300 mm
- 800 x 1000 x 300 mm

1) Other fieldbus protocols on request

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System components

System components	Description	Technical data
Installation site  	<p>Indoors (+5 ... +40°C)</p> <ul style="list-style-type: none"> • The service unit is installed on the outside of the housing • The housing material can be freely selected <p>Outdoors (-20 ... +40°C)</p> <ul style="list-style-type: none"> • The service unit is installed in the control cabinet • Stainless steel housing material • With heating 	
End-position sensing of the process valves	Digital inputs to which the signals can be routed are provided in the control cabinet for each process valve	<ul style="list-style-type: none"> • 2 digital inputs, sensing “open and closed” • 1 digital input, sensing “open or closed”
Wiring for the I/O module	<ul style="list-style-type: none"> • External signals (e.g. limit switches) are connected directly to the electronics module • External signals (e.g. limit switches) are connected to an additional terminal strip in the control cabinet 	
Socket   	Provided for plugging in devices needed for servicing	<ul style="list-style-type: none"> • For plug type F, CEE 7/4 (EU) • For plug type J, SEV 1011 (Switzerland) • For plug type G, BS 1363 (UK)
Service unit components 	<p>Manual on/off valve</p> <ul style="list-style-type: none"> • Rotary knob with detent • The system is vented when it is switched off <p>Filter regulator</p> <ul style="list-style-type: none"> • With pressure gauge • Grade of filtration: 40 µm <p>Pressure switch</p> <ul style="list-style-type: none"> • For sensing a pressure range of 1.5 ... 14 bar 	
External supply option in the event of a pressure failure	A separate port which can be supplied with compressed air in order to achieve a specific state of the process valves	
Control cabinet lighting 	Lighting can optionally be ordered to illuminate the control cabinet; is switched on and off by hand	<ul style="list-style-type: none"> • LED, 24 V DC

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Technical data

- The layout is dependent on the configuration
- Power supply
24 V DC or 230 V AC or 400 V AC
- Select from various fieldbus protocols for communication with the higher-order controller
- Indoor and outdoor variants to choose from
- Optional internal lighting
- Suitable heating



General technical data		
Mains voltage	[V AC]	230 (1L/N/PE) 400 (3L/N/PE)
	[V DC]	24
Mains frequency with V AC	[Hz]	50 ... 60
Electrical connection		Spring-loaded terminal
		Push-in
Degree of protection		IP54
Product weight	[kg]	40 ... 75

Operating and environmental conditions		
Operating pressure	[bar]	4 ... 10
Ambient temperature	[°C]	+5 ... +40 indoors
		-20 ... +40 outdoors
Storage temperature	[°C]	-20 ... +60
Relative humidity		Max. 50% at 40 °C
Nominal altitude of use above sea level	[m]	1000
Note on materials		Contains paint-wetting impairment substances
		RoHS-compliant