DATA SHEET

T 7512 EN

Type 3423 Pneumatic Controller Module · Type 3426 Control Room Housing
for Type 7311 Air Control System

Application

For PI control loops · For fixed set point, follow-up or cascade control

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The Type 3423-2 Controller Module is a standardized controller. It is designed for input and output signals of 0.2 to 1 bar and for a supply pressure of 1.4 bar.

The Type 3426-5 Control Room Housing is used to house the Type 3423-2 Controller Module and mount it on a panel. It provides pneumatic connection. The Type 3423-2 Controller Module is used in the Type 7311 Air Control System (see ▶ T 3992).

Special features

– Pneumatic controller with PI control action

Type 3423 Controller Module
Type 3423-2 · PI controller ▶ T 7521

Type 3426 Control Room Housing
Type 3426-5 · Control room housing

Fig. 1: *Type 3423-2 Pneumatic Controller Module with Type 3426-5 Control Room Housing*

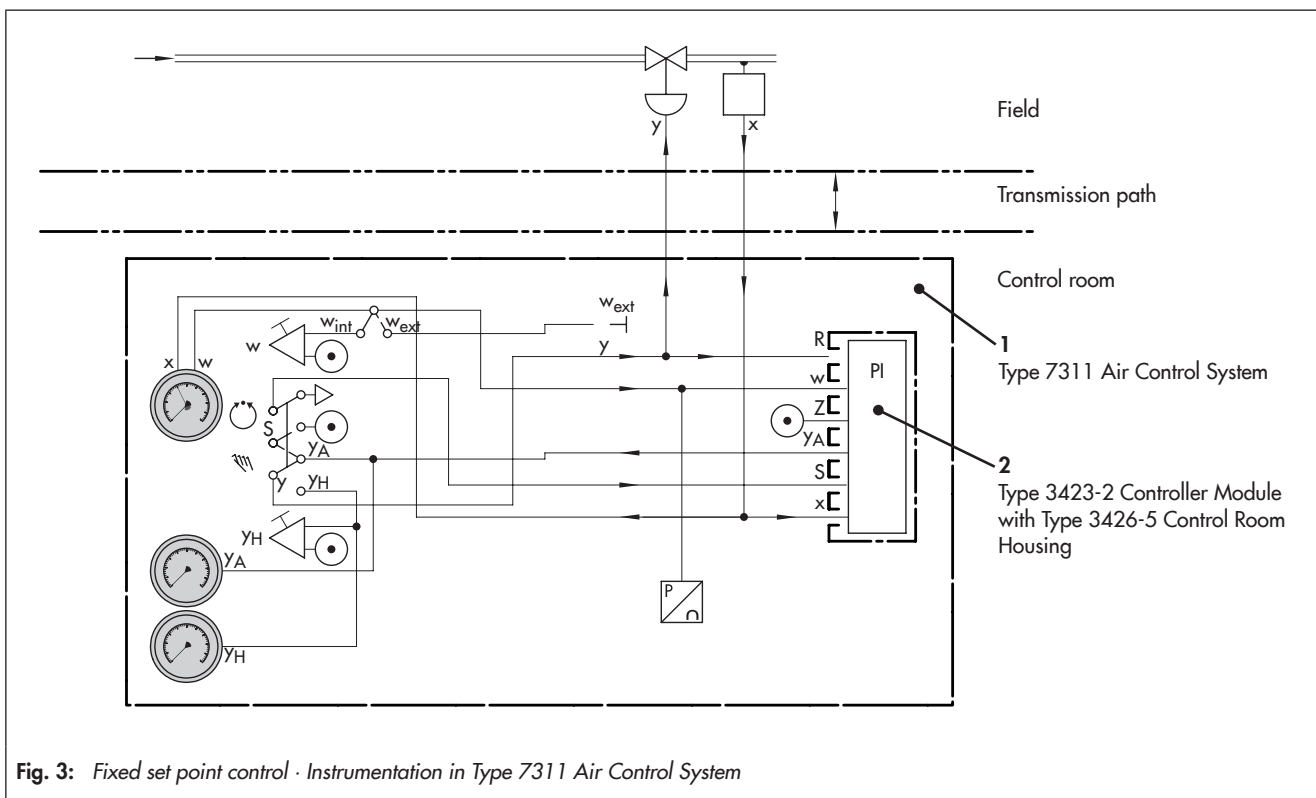**Fig. 2:** *Type 3426-5 Control Room Housing*

Fig. 3: *Fixed set point control · Instrumentation in Type 7311 Air Control System*

Table 1: *Technical data · All pressure stated as gauge pressure in bar*

Controller module type		3423-2
Controller modules	Controller action	PI
	Control parameters	Proportional-action coefficient K_p = 0.2 to 20 Reset time T_n = 0.03 to 50 min.
	Input and output	Input 0.2 to 1.0 bar · Output max. 0.02 to 1.35 bar
Supply	Supply air	1.4 bar
	Air consumption per unit	< 0.15 m_n^3/h
Permissible ambient temperature range		−20 to 60 °C
Weight in kg		0.6

Table 2: *Technical data · All pressure stated as gauge pressure in bar*

Control room housing type	3426-5
Material	Anodized aluminum

Table 2: *Technical data · All pressure stated as gauge pressure in bar*

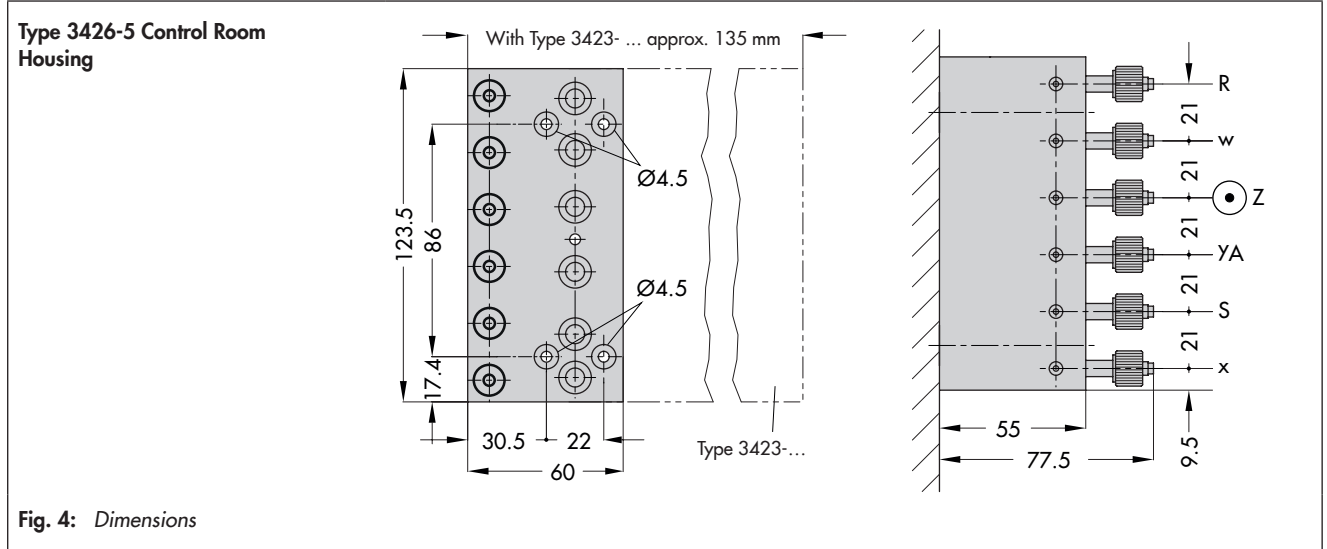| Pneumatic connection	Hose connection for 4 mm inside diameter and 6 mm outside diameter
Weight in kg	1.2

Installation

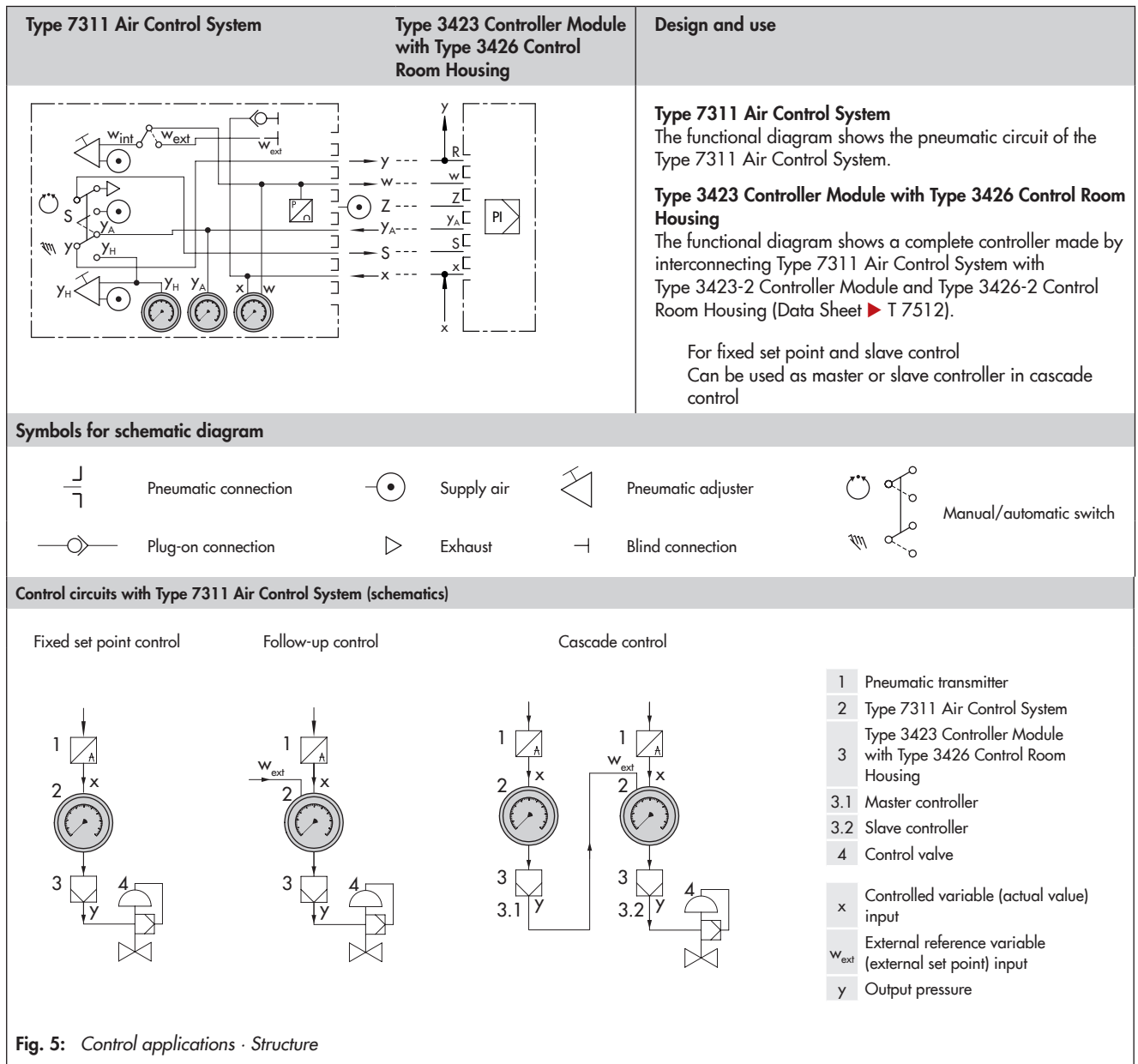Insert the controller module into the self-sealing push-on fittings of the control room housing and screw it tight.

Pneumatic connections

Type 3426-5: hose connection with 4 mm inside diameter and 6 mm outside diameter

Dimensions

Type 3426-5 Control Room Housing	

Fig. 4: *Dimensions*

Type 7311 Air Control System	Type 3423 Controller Module with Type 3426 Control Room Housing	Design and use

Type 7311 Air Control System
The functional diagram shows the pneumatic circuit of the Type 7311 Air Control System.

Type 3423 Controller Module with Type 3426 Control Room Housing
The functional diagram shows a complete controller made by interconnecting Type 7311 Air Control System with Type 3423-2 Controller Module and Type 3426-2 Control Room Housing (Data Sheet ▶ T 7512).

For fixed set point and slave control
Can be used as master or slave controller in cascade control

Symbols for schematic diagram

Pneumatic connection	Supply air	Pneumatic adjuster	Manual/automatic switch
Plug-on connection	Exhaust	Blind connection	

Control circuits with Type 7311 Air Control System (schematics)

Fixed set point control   Follow-up control   Cascade control

1	Pneumatic transmitter
2	Type 7311 Air Control System
3	Type 3423 Controller Module with Type 3426 Control Room Housing
3.1	Master controller
3.2	Slave controller
4	Control valve
x	Controlled variable (actual value) input
w_{ext}	External reference variable (external set point) input
y	Output pressure

Fig. 5: *Control applications · Structure*