N° **INF08/046 Issue 1** Product **C250 1/4 DIN Process Controller** Manual **IM/C250 Issue 5 onwards**

C250 Custom Configuration

1 Introduction

ABB can supply custom configurations for the C250 Process Controller on request.

Enter the required setting or place a check mark (✔) against the relevant parameters in the following tables and return this document to the Global Sales office at Stonehouse.

2 Basic Hardware and Configuration

2.1 Hardware Assignment and Input Type

Referring to Section 4.3.1 of the User Guide (IM/C250), enter the setting required for each of the following parameters:

Frequency									✔
50 Hz	60 Hz	Relay 1	Relay 2*	Relay 3*	Logic O/P	Analog O/P 1	Analog O/P 2*	Control Type	Required Configuration
1	A	Output 1	Alarm 1	Alarm 2	Output 1	PV	SP	Time Proportioning or On/Off	
2	b	Alarm 1	Alarm 2	None	None	Output 1	PV	Analog Proportioning	
3	C	Output 1	Output 2	Alarm 1	Output 1	PV	SP	Heat – Time Proportioning Cool – Time Proportioning	
4	d	Output 2	Alarm 1	Alarm 2	Output 2	Output 1	PV	Heat – Analog Cool – Proportioning or On/Off	
5	E	Alarm 1	Alarm 2	None	Output 1	PV	SP	Alarm Unit or Logic Output Time Proportioning	
U		Custom	Custom	Custom	Custom	Custom	Custom	Custom	

* Available only if option board is fitted

Continued…

Input Type Configuration (✔ the input type required)

THC Type B	
THC Type E	
THC Type J	
THC Type K	
THC Type N	
THC Type R	
THC Type S	
THC Type T	
PT100 RTD	
0 to 20 mA	
4 to 20 mA	
0 to 5 V	
1 to 5 V	
0 to 50 mV	
4 to 20 mA (Square Root)	
Custom	

Engineering Display Range (enter the values required)

Engineering High	
Engineering Low	

Temperature Units (✔ the units required)

Degrees C	
Degrees F	
No Temperature Units	

Decimal Places (✔ the number of decimal places required)

0	
1	
2	
3	

2.2 Alarms and Set Points

Referring to Section 4.3.2 of the User Guide (IM/C250), enter the setting required for each of the following parameters:

Alarm 1 Type (✔ the alarm type required)

None	
High Process	
Low Process	
High Deviation	
Low Deviation	
Loop Break	

Alarm 1 Trip (enter the Alarm 1 trip point value)

Alarm 2 Type (✔ the alarm type required)

None	
High Process	
Low Process	
High Deviation	
Low Deviation	
Loop Break	

Alarm 2 Trip (enter the Alarm 2 trip point value)

Alarm Hysteresis (enter the Alarm hysteresis value)

Set Point Type (✔ the set point type required)

Local Set Point Only	
Local and Remote (No Remote Set Point Tracking)	
Local and Remote (Remote Set Point Tracking)	
Multiple Fixed Set Points	
Ramp/Soak (time units in minutes)	
Ramp/Soak (time units in hours)	

2.3 Operator Access and Control Action

Referring to Section 4.3.3 of the User Guide (IM/C250), enter the setting required for each of the following parameters:

Power Recovery Mode (✔ the mode required)

Last Mode	
Manual and Last Output	
Manual and 0.0% Output	
Manual and 100% Output	
Auto	
Custom	

Operator Enables (✔ the function required)

Enable Both Functions	
Disable Auto/Manual, Enable Auto-tune	
Enable Auto/Manual, Disable Auto-tune	
Disable Both Functions	

Set Point Enables (✔ the function required)

Enable Both Functions	
Disable Set Point Adjust, Enable Local/Remote	
Enable Set Point Adjust, Disable Local/Remote	
Disable Both Functions	

Control Action (✔ the action required)

Direct	
Reverse	

2.4 Digital Input

Referring to Section 4.3.4 of the User Guide (IM/C250), enter the setting required for each of the following parameters:

Digital Input Functions (✔ the function required)

None	
Auto/Manual	
Local/Remote	
Auto-tune Start	
Ramp/Soak Run/Hold	
Ramp/Soak Run/Stop	
Front Panel Lock-out	
Select Fixed Set Points	

Analog Input Filter (✔ the filter value required)

0 Seconds	
1 Second	
2 Seconds	
5 Seconds	
10 Seconds	
20 Seconds	
40 Seconds	
60 Seconds	

Serial Communication Configuration
(✔ the configuration required)

Off	
2400 Baud, 2-wire	
2400 Baud, 4-wire	
9600 Baud, 2-wire	
9600 Baud, 4-wire	

Serial Communication Parity (✔ the parity required)

None	
Odd	
Even	

2.5 Ranges and Passwords

Referring to Section 4.4 of the User Guide (IM/C250), enter the range required for each of the following parameters:

Engineering Range (enter the values required)

High	
Low	

Retransmission Range – Analog Output 1
(enter the values required)

High	
Low	

Retransmission Range – Analog Output 2
(enter the values required)

High	
Low	

Set Point Limit (enter the values required)

High	
Low	

Fixed Set Point Values (if multiple fixed set point facility required, enter the value required for each fixed set point)

1	
2	
3	
4	

Output 1 (Heat) High Limit (enter the value required)

Output 2 (Cool) High Limit (enter the value required)

Configured Output (enter the value required between –10% [–110% for heat/cool] and 110% or enter Last)

Auto-tune Password
(enter the password required between 0 and 9999)

Set Up Password
(enter the password required between 0 and 9999)

Modbus Address
(enter the address required between 0 and 99)

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